

“The sick note” – An exploratory study examining General
Practitioner perspectives on sickness certification in the Republic
of Ireland

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“The sick note” An exploratory study examining General Practitioner perspectives of sickness certification in the Republic of Ireland.

6th May 2014

The increase in certified sickness absence recorded in most European countries during the last decade is of increasing concern to public health agencies (1, 2). While sickness absence can promote rest and recovery from illness, it may also have negative consequences, including increased risks of inactivity and isolation, poorer quality of life and increased uptake of health services (3-5). In the Republic of Ireland (ROI) sickness certification is part of General Practitioners’ (GPs’) contractual service to the Department of Social Protection (DSP). Sickness certificates are also issued to patients as evidence of illness for employment purposes. There is limited research exploring GPs certifying practices in the Republic of Ireland. The aim of the thesis was to explore perspectives on sickness certification in general practice in Ireland.

The data collection consisted of three stages. Study 1 consisted of in depth individual interviews with 14 GPs across 11 primary care practices in Ireland. Study 2 was based on an on-line questionnaire survey using a number of vignettes with 62 GPs working in primary healthcare. Finally, study 3 consisted of a focus group conducted with eight GPs in a large urban practice in Ireland. Qualitative analysis was conducted in NVivo eight using content and simple thematic analysis techniques. Quantitative data was analysed by descriptive and inferential statistics using PASW version 18 statistical software.

Combined results indicate that GPs can find their role as certifiers’ problematic and a source of conflict during the consultation process with patients. GPs concerns are with breaching patient confidentiality and in particular disclosing illness to employers. They reported feeling inadequate in dealing with some cases requesting sickness leave, including certification for adverse social circumstances and they felt a need for better communication between themselves, employers and relevant government departments. Willingness to issue a sickness cert may be influenced by the nature of the patient’s presenting problem. A psychological problem generated greater belief that patients were unfit for work, and GPs were more sympathetic and showed greater satisfaction with the decision they had made to certify these patient in comparison to patients with a physical problem. Average sickness certification periods were longer in cases of psychological nature (1-2 weeks) in comparison to the physical complaint (4-7days). Overall GPs displayed a negative feeling towards prescribing sickness leave and there was a perception that sickness certificates were being used by employers as a management tool in controlling absenteeism. GPs also mentioned cultural factors in work place absenteeism and lack of rehabilitative pathway as impacting on sickness certification practices in Ireland.

Issuing a sickness certificate appears influenced by medical and non-medical factors. Potential exists for improving the system, but requires significant engagement with other stakeholders such as employers and social benefit agencies. Focus should be placed on referral and rehabilitative pathways for patients to ensure appropriate certification and early return to work.

Declaration

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List of publications

1. Foley M., Thorley K., Denny M. “*The Sick Note*” A Qualitative study of General Practitioners in the Republic of Ireland. *European Journal of General Practice*, 2012; 18 (2):92-99
2. Foley M., Thorley K., Van Hout MC. (2013). Assessing fitness for Work, GP judgement making. *European Journal of General practice*, 2013, 19(4):230-236
3. Foley M., Thorley K., Van Hout MC. (2013) Sickness certification difficulties in Ireland – A GP focus group study. *Journal of Occupational Medicine (Lond)*, 2013, 63(5):369-372

Dedication

This thesis is dedicated to two special people who sadly passed away while I was working on this project.

Firstly, my dearest cousin Martina Caruso (1964-2012), a generous and kind lady with a great sense of humour who sadly passed away after her long battle with breast cancer. In spite of all her suffering I never heard her once complain. She was always interested in my work and she would have loved to see it completed and most of all would have loved to have celebrated my achievement with me.

Secondly, my work colleague and friend Brian Harty (1977-2010) who died very suddenly at the young age of 33. He was one of a kind, an excellent musician and lived life to the full. He said I was a little bit mad doing a PhD, I think he might have been right! The workplace is just not the same without him and he is sadly missed by all.

I miss you both very much and thanks for all the happy memories.

“Suaimhneas síoraí ar a n-amamacha”

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Glossary of terms

<i>'Cert'</i>	Abbreviated term used to describe a sickness certificate or sick note. Commonly used phrase in Ireland
<i>Disability benefit</i>	A permanent disability pension granted to a person with permanent or prolonged reduction in work capacity
<i>DSFA</i>	Department of Social and Family Affairs (now DSP)
<i>DSP</i>	Department of Social Protection. Formerly the Department of Social and Family Affairs (DSFA)
<i>FÁS</i>	Foras Aiseanna Saothair – The Training and Employment Authority Ireland
<i>HSE</i>	Health Service Executive – government body responsible for health services in Ireland
<i>Illness benefit</i>	An allowance of cash benefit granted as stipulated by the social insurance fund when a person cannot work due to illness. Other terms used in the literature include sick pay and sickness compensation
<i>ILM</i>	Intermittent low mood
<i>LBP</i>	Low back pain
<i>PRSI</i>	Pay related social insurance fund. Payments made by employees and employers based on income
<i>PRSI 'credit'</i>	Weekly contribution paid to the PRSI social insurance fund.
<i>Sickness certificate</i>	A certificate issued by a GP to ascertain that a person is unfit for work. Other names include sick note, medical certificate
<i>Sickness certification</i>	The process of filling out a sickness certificate. Synonymous with prescribing sickness leave.
<i>THOR</i>	The Health and Occupational research network – UK national occupational health surveillance system administered by The University of Manchester

“All scientific work is incomplete-whether it be observational or experimental.

All scientific work is liable to be upset or modified by advancing knowledge

That does not confer upon us the freedom to ignore the knowledge we already have, or to

postpone the action that it appears to demand at a given time”

Sir Austin Bradford Hill

President’s address Royal Society of Medicine, January 14, 1965

Chapter 1

1. Introduction

The idea for this research originated from a period in my career when I worked in a sector with high rates of absenteeism due to certified illness. During my work in an industrial setting I became aware of the perception of management that General Practitioners (GPs) contributed to the high rates of sickness absence because of their willingness to issue sickness certificates. Over recent years sickness certification has drawn much publicity and media attention in the Irish Republic. The media have portrayed GPs as having a 'laissez faire' attitude to certification in spite of limited published research to demonstrate this assertion (6). The lack of research in the area of sickness certification, particularly from the GP perspective has prompted me to explore these original thoughts which have ultimately grown into this research thesis.

The aim of this thesis was to explore GP perspectives on sickness certification in general practice in the Republic of Ireland. In doing so the research was conducted in three sequential phases, namely; a qualitative study using 14 individual interviews with GPs, a quantitative study using a questionnaire based on case vignettes, and finally a focus group study of eight GPs working in an urban primary healthcare centre.

The thesis is presented in five chapters. Chapter one, sets the thesis into context by giving a short account of the political, social and economic aspects of Ireland followed by a description of the healthcare system and rationale for the research. Chapter two presents a review of the literature on sickness certification. Chapter three outlines the

methodology adopted in the study. Chapter four presents the results of the three phases of the research and finally, chapter five and six present the discussion of results, implications for practice and conclusion of this thesis.

1.1 Current status of the Irish Republic

1.1.1 Geography and history

Ireland is a small island located in Western Europe. The use of the term Republic of Ireland (ROI) (or *Poblacht na hÉireann* in Irish) is the description of the State, occupying 26 of the 32 counties. The ROI extends over an area of approximately five-sixths of the 84,421 square kilometres of land, with Northern Ireland constituting the remainder. The population currently stands at 4.5 million, with almost half under the age of 35 years (7). Ireland and the Republic of Ireland are frequently used as interchangeable terms and for the purpose of this research the term Ireland is used exclusively to describe the ROI.

Ireland has a colourful political history and was once part of the United Kingdom of Great Britain and Ireland from the Act of Union on 1st January 1801 until 6th December 1922 when it officially became a Republic. Ireland became a member of the United Nations in December 1955 and the European Union in 1973 and since then has experienced significant political, economic and social progress (8, 9). The guiding principles of the country encompass the concept of Nationalism and democracy. Ireland's social policy, based on government strategy, is aimed at improving human welfare and meeting the needs of all in society in respect of education, health, housing and social security (10).

1.1.2 Government

Ireland is a constitutional republic with a parliamentary system of government. The President serves as head of state, and is elected for a seven-year term and may be re-

elected only once. The President is primarily a figurehead, but is assigned with certain constitutional powers but may only be exercised on the advice of the government. The Taoiseach (Prime Minister) serves as the head of government and is appointed by the President upon the nomination of the Dáil (Parliament). The majority of '*Taoisigh*' have served as the leader of the political party that gains the most seats in national elections. It has become customary for coalitions to form a government. There has not been a single-party government appointed in Ireland since 1989. The Government is constitutionally limited to fifteen members. No more than two members can be selected from the Seanad (Senate), and the Taoiseach, Tánaiste (Deputy Prime Minister) and Minister for Finance must be members of the Dáil. The Dáil must be dissolved within five years after its first meeting following the previous election. The Department of Health has responsibility for health related policy; while the Department of Social Protection (DSP) (formerly the Department of Social and Family Affairs (DSFA)) has responsibility for income support should a person become unemployed, sick or incapacitated. Occupational health and managing absenteeism in the workplace does not come under the remit of any current government department.

1.1.3 Economy

The Irish economy has transformed since the 1980s from being predominantly agricultural to a modern knowledge economy focused on high technology industries and services. Ireland adopted the euro currency in 2002 along with eleven other EU member states. The country is heavily reliant on Foreign Direct Investment and has attracted several multinational corporations due to a highly educated workforce and a low corporation tax rate.

Beginning in the early 1990s, the country experienced unprecedented economic growth fuelled by a dramatic rise in construction, investment and consumer spending. This period of economic growth is famously known as the ‘Celtic Tiger’. In 2007, the pace of growth slowed resulting in an economic downturn resulting in the dramatic fall in property prices and over-exposure of the economy to construction. A banking crisis soon followed and in 2008, at the time this thesis began, Ireland officially entered a recession and has continued to follow consecutive months of economic contraction into the present day. Unemployment in June 2012 was recorded at 14.9%, the highest seen for over three decades (11).

Co-existing with rapid economic and social development, there has also been a significant improvement in public health during recent decades in Ireland. Life expectancy for males and females in the 1970’s were 68.8 and 71.9 years respectively. The corresponding figures in 2011 were 79.2 and 81.6 years, and in line with other OECD countries. Birth rate is currently over double the death rate with an average of 16.8 births per 1000 inhabitants compared with 10.7 in the rest of the EU. Infant mortality is also very low with just 3.5 deaths per 1000 live births (12).

1.1.4 Taxation

While taxation is a feature and requirement in a modern economy, income and taxation in Ireland has implications for the entitlement to a range of social welfare benefits, including illness benefit. Of particular interest in this thesis is that most of those who contribute to the economy in taxation have the least amount of entitlement to free healthcare. In fact, free GP, optical and dental care is only available to those in

receipt of social welfare payments or those on lower income. This makes a large portion of the working population a paying consumer of GP services, which may have particular relevance in the way sickness certification may be handled by the GP or perceived as an entitlement by the paying patient.

In Ireland, employees pay taxes (pay as you earn) based on their income less certain allowances such as tax credits which depend on various factors such as marital status and tax reliefs (medical insurance and expenses, services charges etc.). The taxation of earnings is progressive with little or no tax paid by those in the lowest income brackets (20% where tax applies) to high rate of taxation (41%) for those earning above the set threshold of just under €33,000 (13).

Pay related social insurance (PRSI) is a second form of taxation paid by employees, self-employed persons and the employer. It includes social insurance and up until changes in 2011, a health contribution. PRSI contributes to social welfare payments and pensions. Each week of contribution is referred to as a “credit” and in order to meet eligibility for certain welfare payment such as illness benefit, an employee must accumulate 104 credits since first starting work and in addition 39 weeks of paid or credited contributions over the second last completed tax year preceding the year in which the claim for illness benefit is made. There are 11 various classes of PRSI contributions and the social insurance payment which you become entitled depends on the PRSI class you are in. Currently classes A, E, H and P have entitlement to claim for illness benefits. In fact, the majority of the Irish population fall into category A (industrial, commercial, service, civic and public servants), in that they earn greater than €38 per week.

Table 1 shows the classification and sub-scales of PRSI contribution paid by both the employer and employee.

The universal social charge came into effect in 2011 for those whose income exceeds €10,036 per annum and replaces both the income levy (a tax implemented at the economic downturn) and the health contribution. The rate of payment of 4% is paid on income of up to €16,016 and 7% thereafter. While the health contribution portion of the social charge pays for the running of the healthcare service, and as mentioned previously those who make the contribution are not automatically entitled to free treatment or services such as visits to their primary care physicians, accident and emergency departments of public hospitals, dental care or physiotherapy (14). In 2010, Health expenditure as a percentage of Gross Domestic Product (GDP) was recorded at 9.2 %.(15). This is lower than the OECD average of 9.5%, while current public spending (69.5%) on health is also lower than the OECD average of 72% (16).

1.1.5 Social welfare and illness related benefits

Industrialisation and increases in education attainment have resulted in an increase in expectation with respect to social services. Social welfare services in Ireland consist of social welfare benefits, pensions and a range of allowances. Table 2 below shows some of the main social welfare benefit schemes, including payments for illness and disability. Expressed as a percentage of gross government expenditure, social protection expenditure has grown from 27.3% in 1989 to 33.44% in 2008 and to 40% in 2012. However, some of the increase in expenditure may be attributed to the levels of unemployment due to the current economic recession

Table 1 PRSI scale, weekly pay band and employee and employer contributions.

Classification PRSI Scale and subscale (class A)	Weekly pay band	Contribution of weekly pay	Employee Contribution (all income)	Employer contribution (all income)
AO	€38-€352	All	Nil	8.5%
AX	€352.01-€356	First €127	Nil	10.75%
		Balance	4%	10.75%
AL	€356-€500	First €127	Nil	10.75%
		Balance	4%	10.75%
A1	>€500	First €127	Nil	10.75%
		Balance	4%	10.75%
E – Ministers of Religion Church of Ireland	Up to €352	All	Nil	6.87%
	>€352	All	3.33%	6.87%
H –Non- commissioned officer (NCO) and enlisted members of the defense forces	Up to €352	All	Nil	10.05%
	€352.01-€500	All	3.90%	10.05%
	>€500	All	3.90%	10.05%
P –fishermen /women already paying class S (i.e. self-employed limited illness benefit only)	First 2,500 per annum	Nil		
	Balance	All	4%	

Source: Department of Social protection rates of payment (SW19) www.welfare.ie (Accessed on 12/3/2013)

Table 2 The main social welfare benefit payments, eligibility, duration and rate

Support	Eligibility	Duration of payment	Rate	Extra benefit ¹
Jobseekers benefit	18-66years, - Unemployed 39 weeks of PRSI contributions	12 months	€196 per week	Yes
Jobseeker allowance	18-66 - Unemployed Mean tested (reduced rates apply under 24 years)	Until aged 66	€188 per week	Yes
One parent family payment	Be a parent, not living with spouse or cohabiting	Until child reaches 12 years	€188 per week plus €29.80 per child dependant	Yes
State pension	Over 66 years	Until death	Average payment €230	Yes
Illness benefit²	104 credits i.e. PRSI contributions 39 in relevant tax year and 26 in year prior to relevant tax year (not subject to means test) 4 day of illness	Until 66 years	€188 per week	Yes
Occupational/injury benefit	PRSI class A,D,J, M FAS trainees Over 66 in employment	26 weeks after accident	€188 per week	Yes
Disability allowance	16-66 years Injury, disease or physical or mental disability Means tested	Until 66 years	€188 per week	Yes
Invalidity pension	Long term illness or disability 12 months or more 260 paid PRSI contributions 48 paid in previous tax year before claim was made	Until death	€193.50 under 65 €230.30 over 65	Yes

Source: Social welfare payments www.citizensinformation.ie (Accessed 15.12.2012)

¹ Extra benefits may include clothing and footwear, utility (telephone, electricity etc.) healthcare (GP and hospital), mortgage interest allowance, rent allowance

² Since 2012 individual may be transferred to invalidly pension or disability benefit after 2 years of continued sickness leave

1.1.6 Sickness absence trends in Ireland

Although sickness certification data is often used as a method to determine sickness absence trends for illness/injury its accuracy in doing so is somewhat questionable. Conclusion from a critical review of international literature related to reasons for workplace absence implies that illness constitutes only 60-70% of all absenteeism from work, while injury accounts for between 7-20% of workplace absences (17). Based on these figures, the proportion of workers who stay away from work with or without permission when they are in fact not ill could range from 10-23%. It is reasonable to assume that a proportion of these workers will become certified when in fact they may be fit for work. Reasons for this are thought to be related to certification of older persons due to labour conditions rather than illness, misdiagnosis and assumptions of impairment, or fraud committed by either the patient or doctor (17, 18).

The actual extent of sickness absence in Ireland is unknown and thought to be under-reported (19). Statistics on work related absence are collected through a variety of sources. Firstly employers are legally required under the Health and Safety Act (2005) to report workplace accidents/injuries to the Health and Safety Authority (HSA) following a period of absence of an employee for more than four days. Illness is not reported to this body. Secondly, The Quarterly National Household Survey (QNHS), a self-reported questionnaire records periods of self-reported injury and illness. Statistics from the Department of Social Protection (DSP) are also used to measure rates of sickness absence in Ireland for those claiming sickness related benefits. Reporting of occupational related illness (HSE employees only) is conducted through THOR-Ireland (The Health and Occupational Reporting System) which is administered centrally in the School of Medicine at the University of Manchester.

This type of reporting in Ireland is conducted only by specialist Occupational Physicians.

At the time this thesis began (2008), the equivalent of 10% of the total labour force of 2.24 million were claiming illness related benefits; 73,609 people received illness benefit, 53,725 received invalidity benefit and 95,752 disability benefit (20). Although entitlement rules differ across the European Union (EU), these figures compare to working age population sickness-related benefits claims of 9% in Sweden, 7% in Denmark and 7% in the United Kingdom(UK) (21). In the same year the estimated cost of illness related benefits to the Irish tax payer was in excess of €2.5billion. This figure excludes subsequent payments made by employers and the impact of lost revenue as a result of absenteeism. In 2006, Ireland's total social protection expenditure in paid sickness leave and medical costs accounted for 41% of total social benefits and was 11% higher than the EU average (22) .

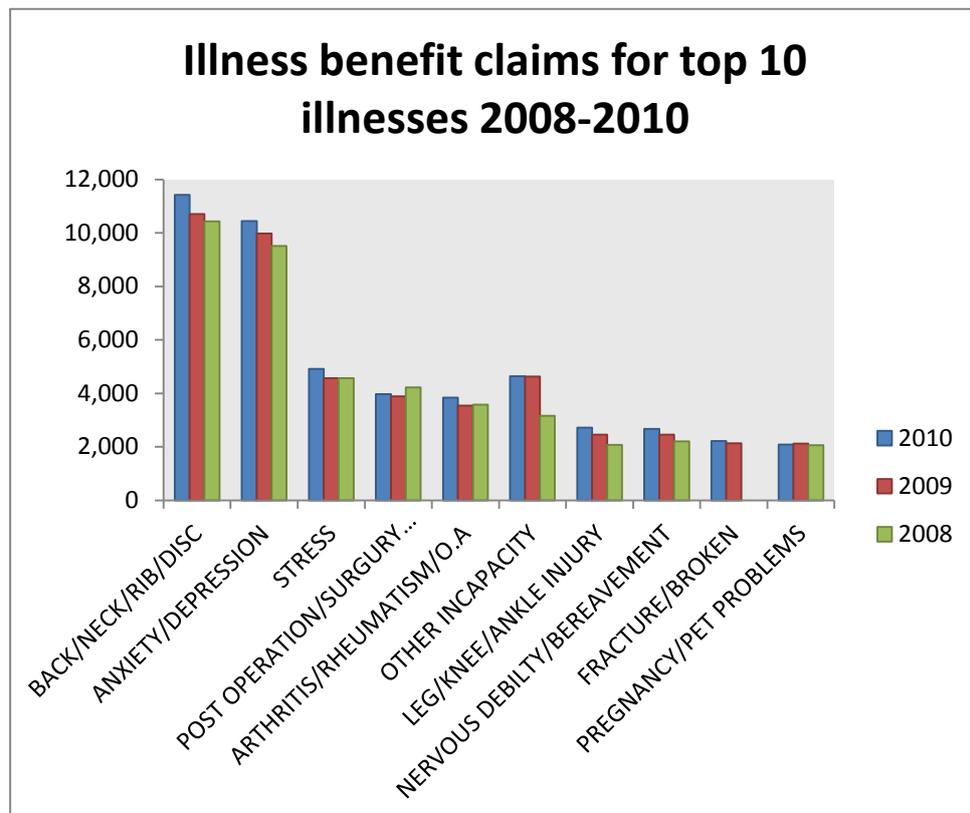
Statistics from recipients of illness benefit show that psychological problems and musculoskeletal conditions are the most frequent causes of illness related absenteeism in the Irish workforce (23). Data presented in Figure 1 are based on the classification of illness³ outlined in the state sickness certificate scheme and shows the top ten reported illness resulting in certification for 2008, 2009 and 2010. The proportion of female patients claiming illness benefit as a result of being certified as unfit for work is higher than that of males. Figure 2 below shows the proportion of males and females with an episode of sickness absence for greater than 4 days in 2008, 2009 and 2010.

³ Illness reporting is not coded by the international disease classification codes (ICD). Codes are unique to the Department of Social Protection (formerly the DSFA) illness benefit section. GPs can also hand write the illness if preferred by choosing the option of medical condition 'other'. Incapacity details may or may not be disclosed under this heading

Injury benefit claims show the opposite trend. Male workers claim injury benefit at a ratio of 2:1 in comparison to female workers.

Illness benefit claims show that rates of sickness absence are progressive for male workers based on age. Female trends are not progressive and peak at 35-39 years. In 2010, female patients were almost two and a half times more likely to be absent from work and claiming benefit compared to males in the same age group. Figure 3 shows illness benefit claims by gender and age group for 2010 (last published year of claims). It is possible that the higher proportions of females seeking and obtaining sickness certification relates to issues in managing their domestic duties such as childcare alongside their working role (17, 24).

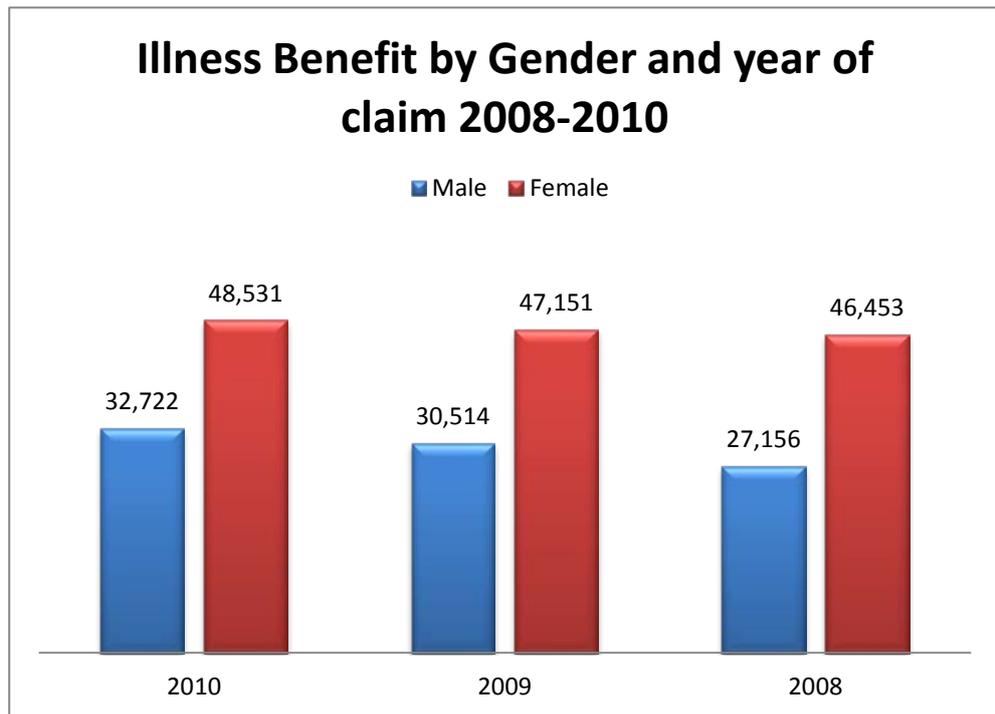
Figure 1 This graph⁴ shows the top ten illness types which resulted in a benefit claim.



Source: Department of Social protection, statistical unit, 2012

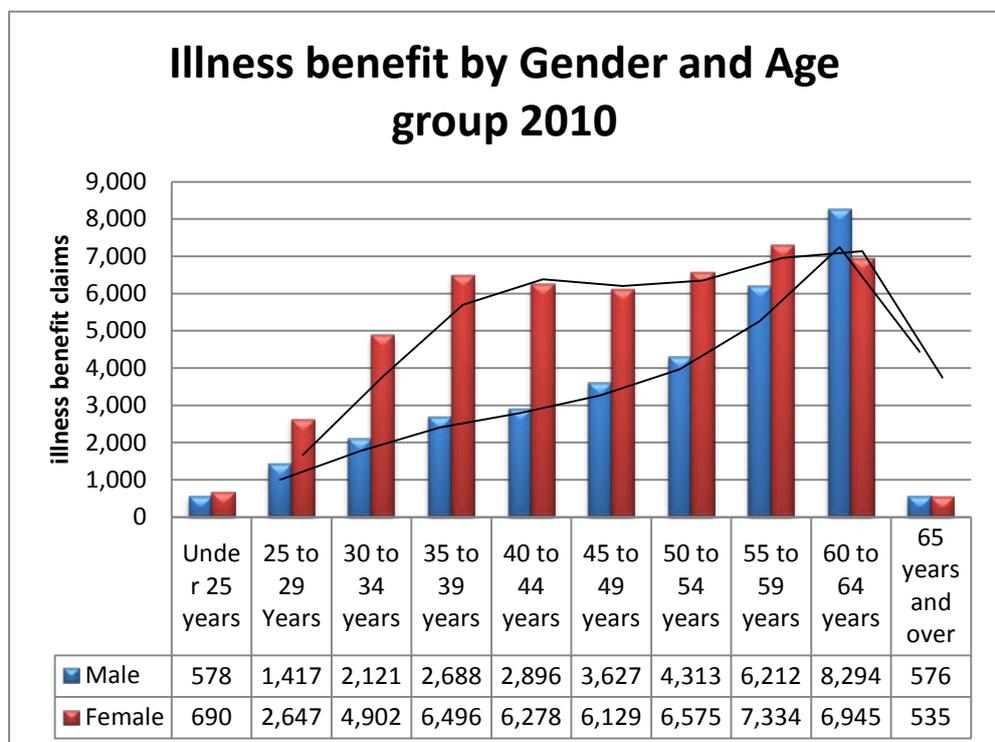
⁴ Abbreviated terms in graph OA (Osteoarthritis) PET (Preeclamptic toxemia), other incapacity related to undisclosed illness on sickness certificate

Figure 2 This graph shows claims for sickness benefit by gender for 2008-2010



Source: Department of Social protection, statistical unit, 2012

Figure 3 This graph shows illness benefit claims by gender for the period of 2010



Source: Department of Social protection, statistical unit, 2012

1.2 Healthcare organisation and delivery system

1.2.1 Historical overview

The Irish healthcare system began to evolve prior to the 1921 Act of Union. The Beveridge report was highly influential in the foundation of the 'Welfare State' and provided a blueprint for reform for medical care (25). The United Kingdom introduced a comprehensive free medical service covering General Practitioner (GP) services. The Irish followed suit, however the free GP service was revoked because of objections from the medical profession and at that time the highly influential Catholic hierarchy (26). The introduction of a free Primary Care Scheme for mothers and children in the 1950's was met with opposition, resulting in the resignation of the Minister of Health Dr. Noel Browne. The Catholic hierarchy feared interference with the concept of the family planning, and the medical profession feared a loss of independence and income should the practice of general medicine become a state run service (26). The 1960's White Paper on Health Service showed the Government's position on the provision of health services, which has ultimately shaped today's practice of primary care in Ireland:

'the government did not accept that the state had a duty to provide access to medical, dental and other services free of cost for everyone, without regards to individual need and circumstances' (27)

Although there was no desire to offer free healthcare this has gradually been eroded so that now certain proportions of the Irish population receives free GP care, with the state directly reimbursing the GP through a yearly capitation fee. Throughout the late twentieth century the role of the state has become more prominent in the provision of free primary health care services to the public through schemes like the GP visit

card⁵. The dispensary service (a service for the poor) continued up until 1972 which then saw the introduction of the General Medical Scheme (GMS). The GMS system currently in operation places the population into one of two categories. Category 1, or GMS patients, are entitled to free health service including GP care and Category 2, or non GMS patients, are liable for general practitioner fees and fixed fees for hospital care (28). In 2009, GMS patients represented 33% of the Irish population (29). Table 3 shows the eligibility for GMS and free GP care visits only. It provides a comparative breakdown of eligibility for type of free GP care based on net income and family circumstances.

⁵ GP visit card entitles free GP care only and was introduced in October 2005.

Table 3 GMS requirements by income and personal circumstances (including GP visit card)

Personal circumstances	GMS ⁶ –Net weekly income	GP visit only ⁷ Net weekly income-
Single person living alone		
Up to 65 years		€276.00
65-70 years	€201.50	€302.00
Single person living with family		
Up to 65 years	€164.00	€246.00
65-70 years	€173.50	€260.00
Married/One Parent Family with dependents		
Allowance for married couple	€266.50	€400
Allowance for first 2 dependent children under 16years	€38	€57
Allowance for 3 rd dependent child under 16	€41	€61.50
Allowance for first 2 dependent children over 16years	€39	€58.50
Allowance for 3 rd dependent child over 16years	€42.50	€64.00
Allowance for dependent over 18 years in third level education and not grant aided	€78	€117.00

Source: Medical card and GP visit card income guidelines www.hse.ie (Accessed 14-1-2013)

⁶ Full GP care includes prescription charges, certain optical and dental care, free public hospital care

⁷ GP visits only; excludes prescription charges, dental and optical care and free in-patient and out-patient hospital care

1.2.2 Primary Healthcare in Ireland

Ireland's current model of healthcare straddles somewhere between the Bismarkian, Beveridge and Private Insurance models of healthcare by virtue of its funding system (30). The current system of healthcare provision is a publicly funded entity extended to all citizens and is governed by the Health Act 2004. The Health Service Executive (HSE) is the body responsible for providing health and personal social services. Compulsory social insurance payments contribute to the healthcare system (up to 2011, now replaced with universal social charge) as well as both private and subsidy related payments⁸. The Private insurance model operates in relation to primary healthcare as GPs do not work directly under the HSE and operate as a private enterprise. Ireland is unique within the EU-15 in the extent to which individuals must pay for GP care, the only other country that excludes significant portions of the population is the Netherlands. However, in the Netherlands a statutory insurance model operates which covers the whole population and offers various choices of medical cover (31). In Ireland provision for GP care is provided by the HSE for those who are unable to pay for this service (unemployed, low paid workers) or have long term or specific chronic illness through the General Medical Scheme (GMS).

Primary healthcare doctors are contracted by the Department of Health for provision of care to those eligible for the GMS scheme and the Department of Social protection (Formally the Department of Social and Family Affairs (DSFA)) for provision of sickness certification. GPs may certify both GMS and private patients for the purpose of illness and disability related state benefits.

⁸ Private and subsidy payments are payments made to the health service from private health insurance companies to fund the public system. Public-private partnerships are in operation in some primary healthcare centres.

GPs receive remuneration in the form of a capitation fee for each GMS patient from the national state budget. In 2008 the average payment per GMS-contract was €220,000. This figure represents the average income derived by the practice under the GMS scheme. Many contracted GPs employ other GPs within their practices but it is only the principal GP (practice owner, who holds the GMS contract) that is reimbursed for GMS patients on their list, regardless of which GP within the practice treats them. Like any other business, they must pay staff costs (including the cost of GP employees) out of their total business income.

The GMS patient is required to register at one GP practice within a ten mile radius of the patient's residence. Some GPs offer a private medical scheme as an annual flat fee and include general visits to the GP and practice nurse. Some of these schemes are often subsidised by employers, and include the benefit of unlimited access to GP services. In some cases, provision is made by the employer for a weekly or monthly deduction from an employee's salary. Fee paying patients are free to choose their general practitioner and choice of doctor depends on the patient's preference. Private patients do not have to register with an individual GP and therefore can attend any GP practice once they secure an appointment, and are willing to pay the consultation fee. GP charges are not fixed in legislation and consultations can range between €45 and €60 for an average 15 minute visit (32).

1.2.3 Sickness certification and the illness benefit structure in Ireland

GPs in Ireland provide sickness certification in two ways, firstly a regulated sickness certificate for the purpose of access to state benefits (state certification) and secondly, an unregulated sickness certificate (non-state certification) as proof to an employer that the absence from work is illness related. A summary of sickness certification, patient type and remuneration is presented in table 4

Employers in Ireland are not required to pay statutory sickness benefit, although in some sectors such as the public sector, payment for illness related absence from work may be contained within the employee's contract of employment. However, employers make pay related social insurance (PRSI) contributions to the state for the purpose of social benefits for each contracted employee (see table 1). Employers are free to set their own protocols on sickness related absence. For example, a non-state sickness certificate may be requested on the first day of an employee's illness while other employers may request one after the second, third or subsequent day (33). Finally, GPs may be contracted privately in a consultative role by employers to advise on fitness for work. They may, however, continue to provide medical care to patients within the contractor organisation.

Table 4 Showing patient type, remuneration and sickness certification requirements

Patient type	Fee for service GP services	State Certification for access to benefits	Certification (non-state) for employment purposes	
GMS patient	Free	<ul style="list-style-type: none"> • Must be claiming job seekers allowance or benefit and be unavailable for work due to illness • Can move from unemployment benefits to illness/sickness benefits • Proportion of payment may change based on the level of PRSI paid in the previous working year before unemployment period began 	Not applicable	
GP visit card holder	GP Free (means tested) Patient must pay full charge of prescription and dispensing fee	<ul style="list-style-type: none"> • Required for illness benefit claims under the PRSI scheme • Patient is likely to be in paid employment where sickness certification is required. • Those not in the workforce may be eligible for sickness related payments if they satisfy the PRSI requirement and require certification. Payment is based on PRSI contributions made in previous tax year prior to the illness • Those claiming for tax credits may require state certification to satisfy their PRSI contributions but will not receive payment. • State certification given on the 4 day of illness and is completed and sent by the patient directly to the DSP. • The employer does not receive or have access to the state certificate unless the patient is absent due to an accident at work where an employer signature may be required to confirm workplace accident • Where an employer pays sickness pay the sickness benefit remuneration is usually deducted from the normal salary payment by declaration of the payment to the employer by the employee 	Public sector worker⁹ Statutory obligation to pay employee. Rules apply - full pay for first 3 month and half pay up to six months of consecutive leave (1 period of long term sickness payment allowable in a 5 year period)	Private sector worker No statutory obligation to pay employee sickness pay Must usually provide evidence to the employer in the form of a GP non state certificate
Private Group scheme member	Average cost of €350 per year or 6-7 visits paid on an a weekly, monthly or annual basis Generally unlimited access to GP once subscriptions are up to date Subsidised by employers in some cases or provided as part of their working arrangement Not all GPs offer this service		Must usually provide evidence to the employer in the form of a GP non state certificate Public sector varies by professional body and sector but generally following 3 consecutive days of illness 7 days of un certified absence allowable in a 2 year period but must be under the rules of consecutive days	Varies with employer rules; generally after 1 st or 2 nd or 3 rd day of illness Private sickness benefit schemes are sometimes operated by employee groups and separate rules apply, but usually require evidence from the GP to confirm absence is illness related
Private patient	Pay per consultation average cost €45-€60 per visit. Referral for same illness within a week - €25-€35 euro.			

⁹ Changes proposed to the public sector schemes in 2013 are currently under labour court recommendations

Guidelines for state certification (involving access to benefits) are issued to GPs by the DSP in respect of their duties as certifiers and they must be a member of a recognised state panel. Each GP is expected to examine and certify the patient on a weekly basis during their spell of illness, unless specified by the DSP medical advisors (34). Claims for illness benefit can then be made by the patient after the third consecutive day of illness. Workers must satisfy the conditions outlined by the PRSI scheme or they are not entitled to any illness benefit. GPs are reimbursed by the state for all sickness certificates issued to patients. At the time of this thesis GPs were reimbursed at the rate of €8.25 per sickness certificate issued. There is a requirement that state sickness certification is only issued by the patient's own GP. However in practice the confirmation that the certificate has been issued by the patient's own GP can only be verified for patients registered on the GMS or GP visit only schemes.

The Medical Review System (MRS) in Ireland is the principal control mechanism for sickness certification (state) and the platform for subsequent invalidity and disability schemes following an extended period of sickness certification. This system can be used when a second opinion is sought by the GP. The MRS may request to carry out medical assessments or review case notes on the medical evidence provided by the practitioner. The DSP may call individuals in receipt of illness related benefits to attend the review board for examination with the medical assessors. At the time of writing this thesis, 19 medical assessors were working in the ROI (34). There is no published data on the number of GP referrals to the MRS or numbers of rejected benefit claims. However, there is some evidence that when the MRS reviews cases of certified sickness leave that the levels of claims drops significantly (35). It is also

unclear as to what level of auditing takes place between the DSP and GPs in relation to illness benefit claims.

1.3 Rationale for the current research

The main justification for this research is the lack of empirical research on the prescribing of sickness leave by GPs in Ireland. Research from other countries has identified that the process of certification is a complicated task for GPs and is influenced by a multiplicity of factors related to the GP, patient and additional societal factors (see figure 4). There is also evidence to suggest that the prescribing of sickness leave requires a GP to fulfill multiple roles causing difficulties and conflict (36). How doctors arrive at the decision on sickness certificate is not widely researched, however several authors suggest that GPs approach this task in a variety of ways to deal with the inherent and external conflict they experience on an on-going basis (37-39). In view of the responsibilities of GPs in the prescribing of sickness leave, I assumed that GPs in Ireland may be experiencing similar difficulties in the sickness certification process and therefore was an important and justified topic to investigate.

Emerging evidence from other countries is that common occupationally related conditions, such as musculoskeletal and mental health related problems are thought to pose particular difficulties for certifying GPs. (40, 41). Mental health related problems and musculoskeletal conditions are amongst the top reasons for prescribed sickness leave in Ireland. Research suggests that GPs must often rely on the patient's own assessment of functional capacity to work (42, 43). Indeed, concerns have been raised by UK researchers in relation to the skills of doctors in managing fitness for work, their knowledge of a patient's working tasks, and their understanding of the

certification system (24). It is thought that GPs may learn about patient's occupational tasks through second hand knowledge and the process of sickness certification is learned through a system of trial and error (17, 41). Some GPs in the United Kingdom (UK) have stated that they would like to remove the task of sickness certification from their practicing role altogether (38). The negative feeling towards the task of prescribing sickness leave and problems identifying fitness for work was considered to be an important factor in influencing the way in which sickness certification is administered. I felt this was an area that needed to be explored with GPs in detail as they were at the forefront of the criticism of allowing patients enter the sick role far too easily.

A large proportion of patients pay for the consultation and being a paying consumer may create problems for certifying doctors in Ireland. Consumer forces placed on doctors may present an additional pressure to meet patient's expectations. Remuneration from the contractual arrangement with the DSP for issuing certificates forms a part of the doctors' income and may be an incentive for doctors to continue to certify patients. Failure to issue a certificate may result in the patient moving to another practice with consequent financial disadvantage for the doctor and the organisation. The prescribing of sickness leave is considered to causes less concern for doctors when patients are required to register with a regular general practitioner and are not given the opportunity to move from doctor to doctor (43). Furthermore, the ability of a patient to move between doctors is considered to lead to a '*decline in doctor motivation*' to arbitrate in sickness certification practices (44). I envisaged that a fee for service could present as an additional stressor for Irish GPs and the potential consequence of a patient as a consumer was that the doctor was under additional pressure to please the patient when matters of sickness certification arose.

The influence of the patient on the prescribing process is important and several factors are thought to be responsible for the patient opting for or being recommended for sickness leave when there may be alternative options. One perception is that unless a worker is 100% fit for work they should refrain from duties. The reasons for this are thought to be associated with the interruption of healing or that working may cause further prolonged illness, or represent a risk to other employees (17, 24). There is also some suggestion that 'unfit' workers pose an insurance issue and employers do not wish to have them in the workplace (5). Other contributory factors in patients' opting for prescribed sickness leave are thought to be related to the environmental and working conditions, including stressors like job demands, poor job control, job satisfaction, poor leadership and policies on absenteeism within the workplace (17, 45-47). Studies have indicated that short term absences from the workplace are most likely at either the beginning or end of the working week, or when there is little perceived loss of income or where benefits are generous (48-50).

The arrangements under which patients are remunerated for periods of sickness leave in Ireland are varied. Patients working in the public sector are remunerated in full for certain periods of sickness leave and at the time this research first commenced, for periods of up to 6 months of continuous leave. Patients in the private sector may or may not be remunerated depending on their contractual arrangements and the availability of private sickness pay schemes. However, the contractual arrangements under which patients work may not be disclosed or known by the GP at the time of certification, and claims for social welfare benefits are made directly by the patient once the certificate is authorised by the doctor. There have been some criticisms relating to the numbers of public sector workers who are certified and the cost to the

public service, therefore it was envisaged that disparity between public and private sector employees may become a feature of the additional complication specific to the Irish system.

External social and personal factors also contribute to work related absences (51, 52). In light of the increased female participation in the workforce over the last decades, the female family role is implicated in sickness absence behaviour, in particular where there is no ability to take time off to care for sick children (17). This may explain some of the high levels of sickness certification seen in the female population in Ireland. As mentioned previously there is some evidence that a number of patients opt out of being assessed by the DSP when called for examination. In 2007, 31% of patients called for a medical review chose not to attend. Explanations for such behaviour may include the use of sickness certification for non-medical reasons such as social or domestic problems. The perception of the patient may be that they are unable to substantiate their problem to the medical assessor as a genuine reason to be on sickness leave.

It is unclear as to what strategies GPs in Ireland use when they are faced with matters directly relating to patients' adverse social circumstances such as prescribing sickness leave to care for sick family members. I was aware of the lack of legislation on sickness absence in the workplace and I had some first-hand experience in the use of the 'sick cert' as a means for employers to control absenteeism levels in the workplace especially those that were short-term in nature. Therefore, I thought it was important to investigate GP perceptions of employers and workplace factors that commonly contributed to both short and longer term periods of sickness leave in Ireland.

Sickness certification figures demonstrate an endemic problem in Irish society that continues to grow year on year (53). While illness benefits claims have increased, statistics show that illness benefit case referrals to medical assessors dropped by 45% between the period of 1998 and 2007 (54). There is no explanation for this drop in referrals but it does suggest a certain level of disconnection between GPs and the DSP that required further investigation. Equally it could be related to the current structure of the reimbursement scheme operated within the Irish system.

It may therefore be concluded that sickness certification is a complicated process often extending beyond the patient's underlying medical condition. There is some anecdotal evidence to suggest that the task of sickness certification causes considerable problems for doctors working in Ireland, however, there is no empirical evidence to back up this claim. For this reason the current study aims to bridge the gap by investigating GP perspectives and potential influences in the sickness certification process in an Irish context.

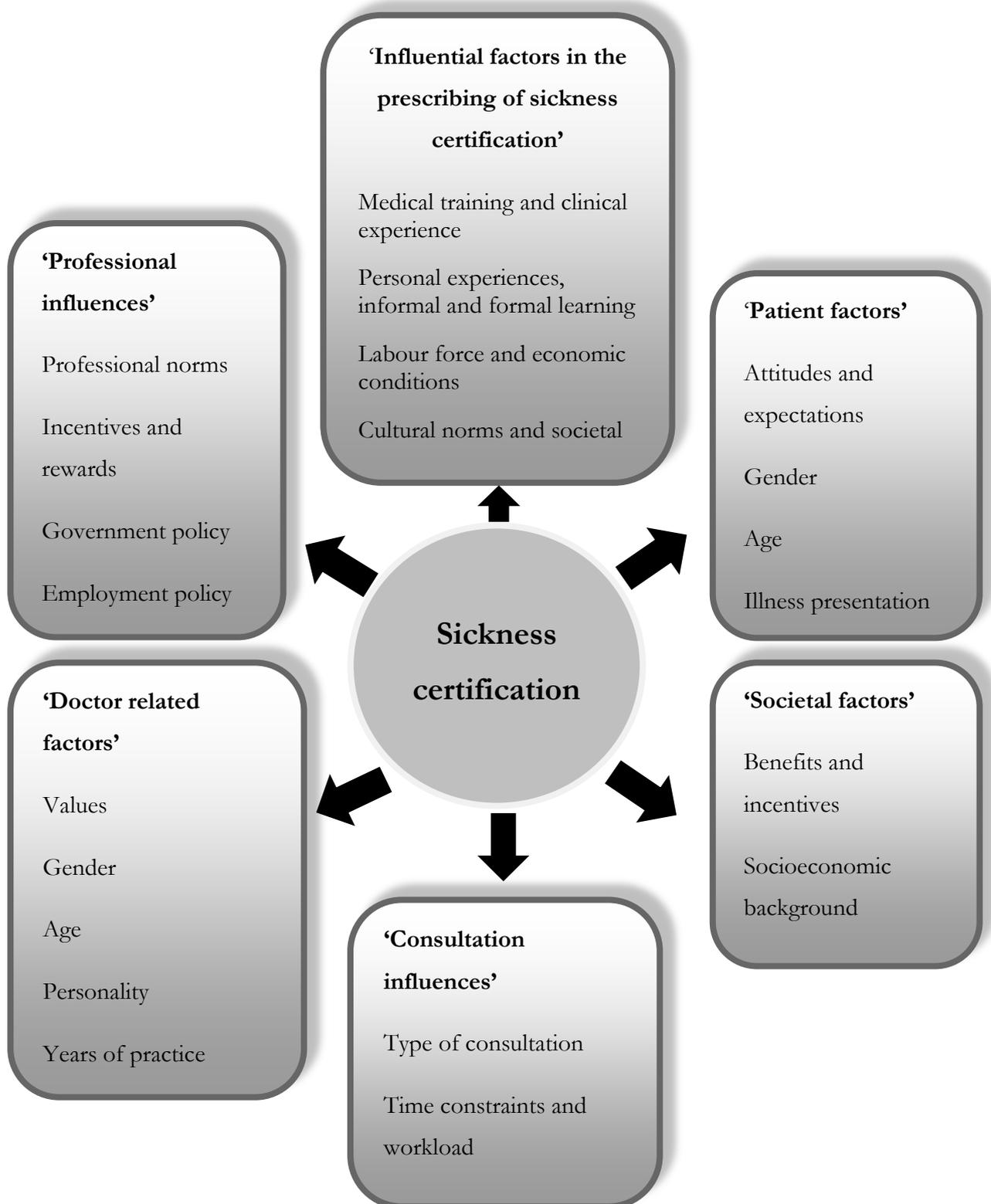
1.4 Research Aims

The aim of this thesis was to explore GP perspectives on sickness certification in general practice in the Republic of Ireland. The specific aims of the study were as follows:

- To describe and analyse GPs' opinion about sickness certification and the strategies they use during the fitness for work consultation. (Study 1)
- To describe the factors that impact on GPs' decision making in sickness certification. (Study 2)
- To conduct a respondent validation of study 1 through description of the findings of a GP focus group (Study 3)

Figure 4 Conceptual model

This diagram shows the possible influencing factors in the prescribing of sickness certification identified from the initial search of the literature. This conceptual model acted as a key guide in the developmental stages of the research. It was also used to further guide the literature searching outlined in chapter 2.



Chapter 2

2. Literature review

The current literature suggests that sickness certification and the health of working populations are of growing interest to those developing social policy. Furthermore, governments are increasingly committed to improving the health of working population and reduce the amount of claims for sickness and disability benefits (55-58). The purpose of this chapter is to guide the reader through the literature on sickness certification and more specifically in relation to GPs perceptions of their role, and the characteristics and influences that impact on the certification process. Finally, the chapter will conclude by presenting the gaps in the current literature.

2.1 Search Strategy

Searches were undertaken using a wide range of on-line bibliographic databases including Blackwell synergy, Science direct, Informa world, Interscience, Pubmed, EBcohost, and Medline. The key search terms included 'sickness certification', 'medical certification', 'sick listing', 'sick note' 'general practitioner' 'general practice' 'absenteeism' 'occupational illness' 'consultation' 'doctor-patient relationship'. Literature pertaining to the 'occupational physician' was also included where relevant to general practice. I searched the literature of international journals (e.g. British Medical Journal, Scandinavian Journal of Public Health, and European Journal of Occupational Medicine), books, reports and Government publications. Follow up search strategies included manual searching, of public health, medical practitioner websites and related websites, and contacting key organisations such as the World

Health Organisation (WHO), Eurostat, Department of Social Protection (DSP), and the Health and Safety Authority Ireland (HSA). Additional references were located in reference lists found in published peer reviewed studies and were reviewed and used to search other relevant literature in the area. Material was also sought that would reflect theories relating to health and illness, the consultation and absenteeism. ‘Grey literature’ in particular that which focused on policy and practice in healthcare and unpublished dissertations were searched in library archives at Waterford Institute of Technology and the University of Manchester. The majority of the literature in relation to sickness certification emanated from Scandinavian countries and to a lesser extent from the United Kingdom. The search revealed that there is a limited amount of literature on sickness certification but there has been an increase in the number of published studies in the last decade. Inclusion and exclusion criteria were used to focus and narrow the research field.

2.1.1 Inclusion criteria

- Published peer reviewed research papers and literature reviews, published books, government reports, discussion papers, editorials and conference proceedings written in the English language.
- Research papers with a specific focus on sickness certification and the practice of general medicine in adult working populations.
- Research papers that reported a measure of sickness certification practices in GP populations.

- Report and research papers with details of specifics pertaining to methodological approach in studying sickness certification and working populations.

2.1.2 Exclusion criteria

- Published peer reviewed research papers and literature reviews, published books, government reports, discussion papers, editorials and conference proceedings not published in the English language and subject to English translation
- Non peer-reviewed research paper and literature reviews, where authors or institutions were not identified

Papers that did not focus on any aspects of sickness certification, the sick role, absenteeism, fitness to work, or healthcare related factors with GP populations.

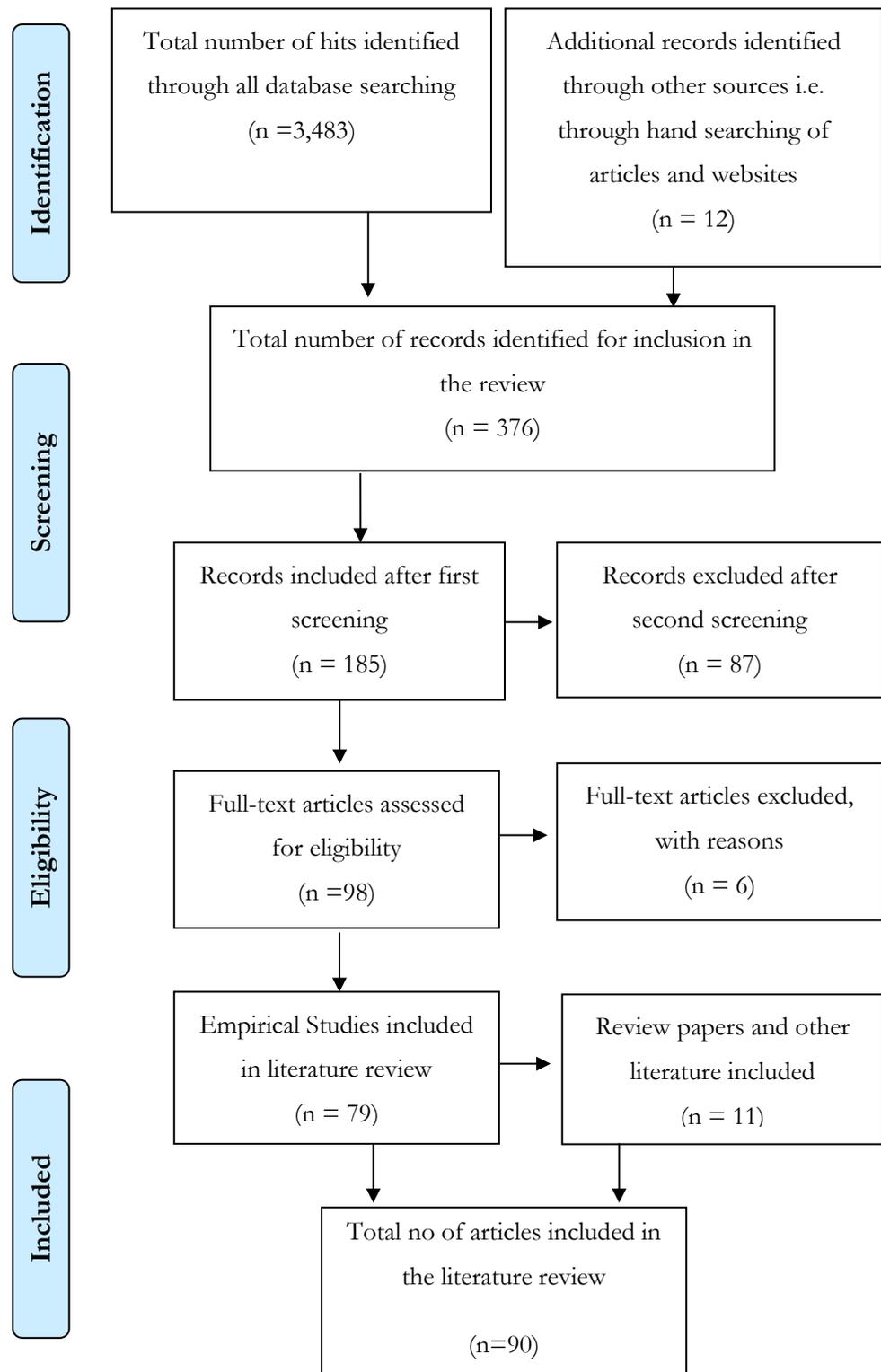
Due to the lack of literature pertaining to sickness certification both nationally and internationally the literature review adopted the methodology of a scoping study. Scoping study methods are increasingly common and used for broad searching of literature on a specific topic (59, 60). The review was intended to map the key concepts underpinning the area of sickness certification with particular reference to GPs' behaviour and experiences in the process of prescribing sickness leave. The first step in the process was to identify the relevant studies as comprehensively as possible using the defined inclusion and exclusion criteria. Initial search revealed 3483 articles.

The titles and subsequent abstracts of each of the studies identified from the search strategy were screened and those not clearly meeting the criteria at this stage were excluded (see table 5 and figure 5). The full text version of each of the identified articles was downloaded and then uploaded into a citation reference manager (Endnote®). This software assisted in the recording and organisation of the relevant literature and cross checking of data records, removal of duplicates and the charting of results. A second screening of the articles involved reading the full-text and checking its consistency with the inclusion and exclusion criteria. Articles not adhering to this criterion were then excluded. Critical appraisal of the literature was undertaken and initially guided by the PRISMA guidelines on systematic review, however the nature of the literature on sickness certification was identified as not being suited to meta-analysis. It was considered important to include all relevant literature on sickness certification regardless of the study design or issues relating to the quality of the research(60). Instead a simpler narrative review was adopted. The first stage of the work involved charting of the key items of information from each of the included studies. In doing so the authors, year of publication and country of origin, principal aim, study design, participants, data collection method, outcome measure and results were extracted. Studies were then grouped under broad themes and data was then synthesised descriptively to map the different aspects revealed in the literature.

Table 5 This table shows the search terms used and electronic database hits

Search terms and method	Electronic Databases
<i>Key Search Terms</i>	Pubmed 626 hits
Sickness certification	EBcoHost 352 hits
Medical certification	
Sick note	Emerald hits 201
Sick listing	
General Practitioner	Wiley -Blackwell 1027 hits
General Practice	Informaworld 1179 hits
Primary Healthcare	Science Direct 98 hits
Absenteeism	
Doctor-Patient Relationship	
Consultation	
Occupational illness	
Occupational Physician	
Sick Role	
Sickness Behaviour	
Work-related illness	
Inclusion Criteria: English language data on sickness certification, published research reports, government papers, discussion papers, empirical studies.	Exclusion Criteria: Non English language publications Non peer reviewed studies

Figure 5 Showing articles chosen and used in reviewing the literature



Adapted from Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(6): e1000097. doi:10.1371/journal.pmed1000097

2.2 GPs as prescribers of sickness leave

Generally speaking the role of GP is to provide healthcare to individuals seeking medical care. The duties are vast, encompassing a broad range of tasks including preventative health, screening, education and provision of comprehensive care to patients during spells of illness. In addition, the GP role is one of advocacy, supporting and representing a patient's best interests to ensure they receive the best and most appropriate care possible. In consultations resulting in sickness certification the GP can become an important advocate between the patient and the employer, often changing the advocacy role of doctor to that of 'gatekeeper'.

The role of the GP to act as 'gatekeeper' in sickness leave, underscores three main objectives; a need to legitimise the illness, the need to ensure adequate treatment and rehabilitation for the patient and finally to control the distribution of benefits (61). Within the wider context the duties of the GP as medical certifier are as follows: (62).

- Determine the legitimacy of the illness/condition
- Determine if the illness/condition impairs the ability to work in a full or reduced capacity.
- Discuss the advantages and disadvantages of sickness leave.
- Discuss treatment options and the active role and responsibility of the patient to ensure full health is restored.

- Assess the duration of sickness leave required.
- Determine if alternative treatment is appropriate and refer to specialist care.
- Provide documentation in the form of a sickness certificate to inform the employer and other agencies for access to sickness benefit.

It is generally accepted in most industrialised societies that GPs are well placed to determine when a patient should abstain and when they should safely return to work, but in reality it is often not straight forward. The GP becomes the decision maker and must balance the patient's needs and expectations with the GPs' perceived probability of risk should the patient attend work, plus the financial benefit or loss for the doctor and organisation, in combination with the risk and cost for society at large (57, 62, 63).

2.3 Cost of sickness leave

Several countries across the EU have declared that the cost of sickness absence is untenable and are seeking reforms to reduce these costs (54). Sickness certification benefit schemes across Europe have some elements in common but differ in the level of benefit, length of self-certification period and who can issue the certificate. For example, in the Nordic countries certificates can be issued by various physicians, self-certification periods are seven days in Sweden and six working days in the UK. Recent changes in the UK have also included the development of 'fit notes' based in theory on the patient's ability rather than disability (64, 65). In Denmark, a family policy exists providing sickness benefit for workers who are themselves not sick, but who's responsibility is to care for a sick child (66). While differences exist from

country to country, the cost of sickness related absence on society has generated much debate. GPs have been accused of acting irresponsibly and their ability to ‘gatekeep’ for benefit agencies has come into question (62, 63, 67).

In Ireland, the cost of sickness absence as a result of being certified by a GP has increased year on year over the last decade. In 2008, the cost of sickness benefit (excludes long term benefits such as disability and invalidity payments) resulting from workers furnished with sickness certificates from their GP was in excess of €852m. This had risen to over €919m in 2009 and to just under €942m in 2010. Meanwhile injury related benefit had decreased during this period, dropping from just above €19m to €17.8m. During the same period of 2008-2010, the total workforces reduced by 12.5%, while the total number of those claiming sickness benefit increased by 9.6% claimant. This may suggest that some workers may have become certified due to labour conditions rather than actual illness (17, 24, 68). While reforms are proposed to reduce these costs, government proposals to review the prescribing of sickness leave by GPs largely remains unexplored.

2.4 Sickness certification and the reimbursement system.

GPs in Ireland rely on patients fees to maintain a level of business viability. Irish GPs are reimbursed for each state sickness certificate issued to patients in addition to their consulting fee. It is possible that a system where GPs are remunerated for certification and additionally for the consultation could influence GP behaviour. Between 2008 and 2012 GPs were remunerated to the amount of €146m for providing this service to the DSP (Personal communication via e-mail with Ms Niamh Kenny, Higher Executive Officer, Department of Social welfare, 29-10-13). This equates to

approximately €11,000 per GP per annum. Private consultations are considered to add an additional burden in the prescribing of sickness leave as a patient who requests a “cert” and does not obtain one is likely to find the GP unsatisfactory and then may choose to consult another doctor (69). There is however, limited evidence of an association between financial incentives for GPs and their willingness to provide sickness certificates in Ireland. A comparative study of sickness certification conducted by Winde et al. found that 18% of GPs in Norway compared with 7% in Sweden worried about patients permanently switching to another GP if they did not receive a sickness certificate. Unlike Sweden, the Norwegian system is based on economic incentives for the GP and thus may be responsible for influencing GPs’ certification practice (65).

While the evidence remains sparse in relation to remuneration for provision of sickness certificates, it is possible that GPs might take advantage of opportunities to increase their incomes through special schemes and payment mechanisms including certification. Other types of incentivised payment systems in primary healthcare have been implicated in influencing GPs’ behaviour. These include reimbursement in fundholding schemes, prescribing practices and incentives in immunisation uptake programs (29, 70, 71). In one study primary care physicians receiving a payment for influenza vaccination showed a 5.9% increase in the uptake when compared to a GP control group. In a second study Richie reported an improvement in primary and pre-school immunisation rates following the introduction of a fee for service. Improvements reported in immunisation uptake were as much as 50% in the primary school cohort and 42% in pre-school children (72). Krasnik and colleagues in a case-controlled study examining the introduction of a partial fee for service in Copenhagen implied that the provision of services by GPs resulted in reduced referral rates to

secondary care. Results also showed that rates of examinations and treatments that attracted specific additional remuneration rose significantly compared with those before the introduction of a fee for service. Diagnostic services increased from 138.1 per 1000 patients compared to 105.3 per 1000 for the control group when they became incentivised (73).

Although research shows that incentivisation can influence GP behaviour, the effects of remuneration are difficult to evaluate unless remuneration systems are changing or different methods of remuneration exist in the same setting. Furthermore, more rigorous designs such as randomised and controlled trials used to evaluate remuneration are often not feasible in practice. The other important factors related to remuneration is whether changes in practice patterns are 'better' or 'worse' in terms of their effects on patient welfare. A recent study examining the effect of withdrawing incentives on recorded quality of care, in the context of the UK Quality and Outcomes Framework, pay for performance scheme across 644 GP practices between 2004-2102 found that when incentives were removed levels of performance across a range of clinical activities generally remained stable and removal made very little difference in practice (74). This study examined the removal of financial incentives for aspects of care for patients with asthma, coronary heart disease, diabetes, stroke, and psychosis and is not specific to sickness certification.

2.5 What are GPs views on their role in the provision of sickness certification?

GP views on sickness certification encompass three main perspectives. Firstly, some hold the view that they do not want any part in the role of providing sickness certification. GPs acknowledged that advising patients on fitness for work was not

part of their role as doctor nor were they trained to conduct fitness for work assessments (38, 75, 76). Other reasons for wanting to abdicate the certification role were related to dilemmas and difficulties with patients (17, 38). Those wishing to give up the role of certifying patients felt sickness certification was not the best use of GPs' time. A second viewpoint among GPs is that they valued the role of providing sickness certification and wish to retain it (24, 77). This group of GPs believes that assessing fitness for work was an integral part of the management of a patient during a spell of illness and it provides the patient with a level of protection from employers when they could not attend work for genuine medical reasons. The third viewpoint of GPs is that the role of prescribing sickness leave is valuable and an important role but needs some level of modification (36, 38, 77, 78). This group of GPs sense that greater contact with other stakeholders such as employers, other medical specialists and benefit agencies could greatly improve the system (36).

In summary, the majority of the studies examining the GP's role reported some level of difficulty such as the conflict between acting as patient advocate and medical expert. Both literature reviews examining GPs' role revealed the conflicting roles of GPs in medical certification (17, 36). Several of the studies examining GPs' role in sickness certification were qualitative in nature and there are potential issues with interpretation, however four were specific to the UK system and therefore showed some level of consistency. There are strengths and limitations to all the studies reviewed. The study conducted by Hussey used 11 focus groups and 67 GPs which in qualitative terms could be considered to be quite substantial and the use of coded themes generated rigour in the analysis (38). In contrast, Cohen used only seven GPs and although interviews contained 6 hours of narratives it raises questions in relation to the representativeness of the participants (75). Both studies conducted by Hiscock

and Ritchie (24) and Money et al (77) did, as far as possible, try to control for potential bias by not concentrating on GPs from a single geographical area. Nevertheless, of all the studies identified, none were able to answer the specific question of how GPs working in the Irish system view their certification role.

GPs views on their certification role and how they act in the process is difficult to measure. How GPs' feel about prescribing sickness leave should incorporate an appreciation of doctors as a diverse group with individual abilities, tolerance levels, values and approaches to the task. There is some suggestion that a pessimistic view about conducting sickness certification may alter the prescribing of sickness leave (79) and scepticism about the certification system may negatively impact on the way it is operated (64). A study conducted by Watson et al. examining certification practices for low back pain over a one year period in Jersey revealed that sickness certification is predicted by the GPs' attitude to the task, rather than belief about the patient's fitness for work (79). However, research by Tellnes et al. conflicts with these findings. Their study examining the influence of doctor related factors on sickness certification in Norway found no association between the duration of episodes of sickness absence and the doctor's feeling towards the task (4). A UK study conducted by Campbell and Ogden also suggested that the decision to certify is based on the doctor's belief about the patient's ability to work (37). In reality, this area is insufficiently researched and further research is needed to extend the understanding of the impact of GPs views on their certification behaviour.

2.6 Who initiates the discussion on the need for sickness leave?

For the majority of patients attending the GP, the decision to attend the surgery will not have been made by the doctor. Patients may decide to attend for the purpose of obtaining a sickness certification or sickness certification may result as one of the outcomes of the consultation process. Which party initiates the discussion on the need for sickness leave and whether or not it influences the issuing of a sickness certificate is not widely researched. However, GPs have been shown to refrain from initiating the conversation on the need for sickness leave with patients. In the UK, Wynne-Jones et al reported that very few GPs' initiated the discussion on sickness certification and this was usually initiated by the patient (80).

Larsen et al. in a study of 38 GPs and 328 patient consultations in Norway, found that certification was issued in 95% of cases when the patient initiates the request, versus 84% if physician initiated (81). Where no objective signs and symptoms were present, 85% of patients took the first initiative, while men took the initiative more often than women (70% versus 66%). A study conducted by Himmel et al. in Germany from 14 general practices and 469 patient consultations, found an 80% probability of certification if the issue was raised by either party. However, doctors in the German study were more likely to initiate the process of certification, 31% of patients initiated the request, while 69% were initiated by the doctor (82).

There are notable differences in the rules of sickness certification between these countries which may explain the difference in findings. For example, in the UK employers pay for the first 28 weeks of incapacity and patients can self-certify for the first 5 working days, while in Norway the employer pays the first 16 days and are

entitled to set criteria on self-certification days. German workers require a sickness certificate on the third day of illness for access to sickness benefits. The Larsen study is self-reported and it is possible that GPs may have over reported the patient as an initiator of sickness leave to make the appearance of their own situation better. There is insufficient evidence and too few studies to conclude who usually initiates the process of sickness certification. Replication would be required to validate these findings. Sickness certification rates were, however, similar (82% and 85%) when the doctor initiated the discussion on the need for certifiable sickness leave.

In Ireland, state certification is required for access to benefits after the third day of illness, and non-state certification is used as evidence of illness for employers and in some instances after just one day of workplace absence. It is therefore highly likely that patients will initiate the conversation on sickness certification if the doctor fails to do so. At what point in the consultation this takes place may be crucial in determining the progression and subsequent management of the patient's sickness leave period.

2.7 Do patients and doctors agree on the need for sickness leave?

An interesting concept in sickness certification is whether or not doctors and patients agree on the need for sickness leave. In Norway, Brage and colleagues used case histories to compare views on sickness certification between GPs and lay people. In cases scenario related to musculoskeletal conditions, 66.8% of lay people recommended certification compared with 49.4% for GPs. Similarly, recommendation for sickness certification for mental health related problems was 40.4% (lay person) compared to 36.3% (GP). Respiratory conditions were the only illness where GPs recommendation for certification was higher than that anticipated by the lay person

(83). In a later Norwegian study conducted by Reiso and colleagues, patient and doctor agreement on the requirement for sickness leave was found in only 40% of cases resulting in a new episode of sickness leave. The expectation for sickness certification was greater among patients when they presented with musculoskeletal and mental health related conditions (42). In a Swedish study GPs believed that 69% of patients had the ability to work at least in a part-time capacity following the examination of 52 immigrants aged 16-45 years on long term sickness leave. However, only 21% of these patients agreed with the doctor's prognosis (84).

The three studies presented use different methods in the assessment of agreement between doctor and patient. The study conducted by Brage suffered from a low response rate with only 44% and 54% for the medical professional respondents (83). The use of case histories examines what the doctor would do with respect to certification rather than what was actually done. The Resio study appeared more robust with both the doctor and patient reporting independently on the same case (42). Overall, these studies are too few and lack scientific evidence and therefore it is not possible to draw any definite conclusions. However, the above studies show that there is some disparity in opinion between doctors and their patients in relation to the requirement for sickness leave. The questions remain as to whether or not disagreement may result because of the difference in views on requirement for certifiable sickness leave and subsequently if it has the potential to result in conflict between the doctor and patient.

2.8 Does the doctor experience conflict in sickness certification?

Maintaining a good-doctor relationship is central to the practice of healthcare. It is important for the doctor to develop a good rapport and gain the patient's trust,

essentially so they return in the future (85). However, the doctor-patient relationship may become strained when there is a difference of opinion between both parties on the need for sickness leave (24, 38). Conflict in the prescribing of sickness leave was a theme reported in several research studies and related to conflict between GP and patient and to a lesser extent between GPs and other stakeholders (24, 38, 40, 68, 78, 86-89). Conflict with patients was reported by GPs as difficult to handle, occurred frequently and experienced on a weekly basis (38, 40, 86). Furthermore, doctors felt their position threatened if sickness certificate was denied on a patient's request. As a result of this conflict, GPs' expressed the view that they would like to remove the task of certifying patients from their role as doctors. Hiscock and Ritchie found that in the UK, GPs' preference was to terminate their role as certifiers because of disagreement with patients on the need for sickness leave and the fear of litigation against them (24). It is also suggested by Gerner and Alexanderson that conflict arises as a direct result of the 'double role' of trying to be a patient 'advocate' and 'judge' in fitness for work (78).

Several incidences of conflict were described between doctors and other stakeholders, such as regulatory bodies, government agencies, employers and sometimes other colleagues (38, 78, 86, 88-91). Conflict or more importantly 'avoiding conflict' was described as an important and interrelated factor in the prescribing of sickness leave and research findings revealed GPs' anxiety in their daily task of care giver, advocate and gatekeeper (24, 38, 40, 87, 92).

Measuring conflict is quite subjective, as people may experience it on different levels or deal with it in different ways. Seven of the above studies identifying conflict in the sickness certification process were qualitative in nature and confined to the UK and

Scandinavia. These studies focused specifically on problematic experiences so it is likely that at some point GPs would experience certain levels of conflict during the consultation. Two of the studies were quantitative but used a single closed ended question to measure the doctor's experience of conflict. There was no literature identified with particular reference to conflict in the certification process experienced by GPs working in Irish primary healthcare, a system that is consumer driven. Paying for the consultation may add an additional sense of entailment for a sickness certificate if one is required by the patient and denying it has the potential to result in conflict. Additionally, GPs may fear the loss of patients from the practice if conflict arises in relation to the requirement for certifiable sickness leave.

2.9 What are the procedural issues in sickness certification?

Sickness certificates are legal documents and complaints are often made to medical boards from patients, employers and insurers about their accuracy (18, 55). The quality of the certificate is important to ensure that claiming for sickness benefit and rehabilitation options are appropriate. In the UK, GPs admitted to not using the guidelines set out by the Department of Work and Pension (DWP) (93). Doctors in Scotland have used vague diagnoses on certificates, using terminology such as 'TALIOA' (there is a lot of it about), 'malaise' and 'debility' (38). In Sweden, Nilsing et al, in a study on a content analysis of 475 sickness certificates, showed that information recorded relating to the patient's functional ability was sparse and when present it was mainly concerned with physical disability (94). In Denmark, Wahlstrom and Alexanderson found that the main reasons for not filling in sickness certificates correctly were that the course of the illness was uncertain and the certifying doctors did not know how the information would be interpreted by the receiver (18).

Maintaining patient confidentiality in sickness certification is a matter of concern for GPs (38).

Guidelines to support the issuing of sickness certification may be useful. The national sickness certification guidelines described by Skaner et al and implemented in Sweden in 2011 were found to be widely used by GPs and considered useful in several respects. For example, 33.5% of GPs reported finding the guidelines had improved their quality in managing sickness certification case while 31.5% said it had helped to develop their competence in sickness certification (95). However, the above study is self-reported and may entail an element of bias. Moreover, it is unclear which elements of the guidelines were considered most useful and precisely how they helped in managing cases of sickness leave. However, when discrepancies exist in GPs' understanding of the sickness certification system and insurance legislation for access to illness benefits, sickness certification decision making may become affected (38, 90, 96). In Finland for example, doctors do not have specific guidelines on prescribing of sickness leave and sickness leave decisions are thought to depend on the doctors' impression and customs (67). Lack of guidelines may result in doctors' practice following societal rather than medical norms especially with regard to local sickness absence behaviour (62, 87).

While the Department of Social Protection in Ireland provides guidelines to doctors about issuing sickness certification, there is no evidence relating to the effectiveness of such guidelines and their use by doctors. The guidelines are mainly prescriptive and are concerned with administrative aspects rather than practical advice in the management of sickness certification. The non-state certificate is unregulated and this type of certification is based on local arrangements in the primary healthcare practice.

2.10 Factor influencing the process of sickness certification

2.10.1 Introduction

Many different and interacting factors influence the way in which a doctor will practice. Some parallels have been drawn between the prescribing of drugs and prescribing of sickness leave, one of the most important being the patient's expectations. (29, 97, 98). Numerous GP related variables, such as working part-time, experience and training in occupational medicine, and GPs own personal attributes are seen to influence the prescribing of sickness leave (4, 24, 37-39, 62, 69, 90, 96, 99-102). Uncertainty in the sickness certification process is also considered to influence the doctor prescribing behaviour. This type of uncertainty is often associated with lack of information on the patient and their working arrangements (17, 24, 38, 62, 69, 90, 103).

Equally, a range of causes are identified as influencing patients to opt for sickness leave. Factors that discourage a person from returning to work are largely associated with the workplace setting, including poor working conditions, poor leadership, and issues with fellow colleagues, workplace stressors and poor job control (3, 47, 104-109). However, the patient's self-perception of their own fitness for work cannot be ruled out in their decision to refrain from duties (83). Remuneration received while on sickness leave, and other personal responsibilities may also present potential barriers in returning to work (24, 57). Meanwhile, patient related characteristics thought to influence the certification process are associated with the presenting illness, social circumstances, and other personal attributes such as gender and age (57, 62).

2.11 GP related factors influencing the process of sickness certification

2.11.1 GPs' working arrangements and prescribing of sickness leave

GP working arrangements may affect their practice of sickness certification. A study conducted by Norrmen and colleagues identified that in Sweden, the rate of certification increased five-fold if the patient met a part time GP (101). It is difficult to find a full explanation for these findings but they may be explained by the case-mix of patients reported on by these particular doctors. The study of patients is only taken at one specific point in time and is limited to approximately ten patients per doctor. Although the study incorporated a total of 65 doctors, only twelve were working part time. Therefore the validity of the statistical testing may not be robust. The patients' occupational information was not given and it was also unclear what, if any, influential factors patients had on the certification process. A Norwegian study aimed at identifying experience and management of sickness certification found conflicting evidence and suggests that no difference exists between GP working hours and sickness certification rates. However the authors in this study found that all GPs experienced some level of difficulty with aspects of the certification process (110).

In a Swedish study conducted by Von Knorring et al, involving six GP focus groups, the doctors working situation such as working long hours, staff shortages and lack of leadership was considered to impact on their role as certifiers (89). Rutle and Forsen found that in Norway, working in a single or joint practice was not seen to directly influence GPs' sickness certification behaviour, however, heavier workloads produced higher rates of consultations resulting in certification (111). An examination of the

working environment conducted by Ljungquist et al., of doctors who prescribe sickness leave in Sweden suggested that problems related to sickness certification were caused because not enough time was allocated for doctors to effectively manage the task within the normal working day (112). Research has also shown that an inability to extend consultation times when handling problematic cases lead to an increase in the number of sickness certificates issued (78, 113).

In Ireland, GPs work under different contractual arrangements and in different settings. Single handed GP practices are often found in rural and remote areas, while urban and sub urban regions are serviced by a mixture of primary healthcare centres¹⁰, small and medium practices and out of hours GP services. As mentioned previously, GPs in Ireland need to maintain profitability to ensure viability and will have various degrees of workload and differences in case-mix of GMS and non GMS patients. Nonetheless, to date no research was identified that explored the impact of GPs' working arrangements in the certification process in an Irish context.

2.11.2 GP experience and specialism in occupational medicine

There is some suggestion that prescribing of sickness leave is greater, can create additional stress and is more time consuming when a GP is less experienced (114). A doctor trained and working in occupational medicine may have a better knowledge of the patient's job, workplace environment and rehabilitation possibilities. The effect of doctors' experience examined by Norrmen et al., has shown that in Sweden, the odds of being certified increased by 14% per year of doctors experience (101). However, in

¹⁰ Primary healthcare centres are run on a public-private partnership agreement and comprise of a range of multidisciplinary services such as GP care, pharmacy, physiotherapy, antenatal care, counselling, education and research

the Norrmen study it is hard to distinguish between doctors' experience and years of practice, it is possible that as the GP grows older and knows their patients better they are able to be less objective and more subjective in their decision making.

Additional qualifications and specialism in occupational medicine and its impact in the prescribing of sickness leave remains ambiguous. Doctors with specific training have been shown to prescribe shorter periods of sickness leave (4, 100, 111), while others have found no differences (115) or in fact have found the opposite (116). A higher level of postgraduate training in occupational medicine has shown to result in lower rates of certification. Tellnes et al. found that GPs in Norway, working in a part time capacity as industrial medical officers, in addition to their GP role issued lower durations of certified sickness absence (4). While this finding may be related to training in occupational medicine, it is feasible that working as an industrial medical officer provides the doctor with greater autonomy to decide on fitness for work and allows the doctor to detach from the advocacy role of 'family doctor'.

However, several educational and training activities including organised lectures and training on the issuing of sickness certificates examined by Kiessling and Arrelov in Sweden did not appear to reduce the challenges of sickness certification such as assessing working capacity (117). A retrospective study conducted by Lofgren et al. examining questionnaire data from doctors in Sweden showed that few formal learning situations had contributed to their competence in assessment of fitness for work and doctors gained their competence in sickness certification by day to day clinical practice and contacts with colleagues (118).

Opportunities for postgraduate training in occupational medicine in Ireland are available. Moreover, state sickness certification is administered by DSP approved GPs, but training in occupational medicine is not a requirement to become a state certifier. Equally, there is no formal training program or measures to assess GPs' competency as a state certifier. An interesting aspect to improve our understanding of this area would be to examine and compare the views of sickness certification from the perspective of Irish working doctors both trained and untrained in occupational medicine.

2.11.3 Assessing fitness for work

A number of researchers have described how GPs are at a disadvantage in judging incapacity for work as they rarely have all the information required to make such an assessment (17, 24, 38, 62, 69, 78, 79, 90, 103). The extent of this lack of information heightened GP dependence on the patient's own assessment of functional ability to work (68, 90, 96). Opinions on fitness for work are also thought to be formed as a direct result of doctors' perceptions of patients' workplaces (91). The result of four Norwegian GP focus groups conducted by Krohne and Brage inferred that assessment of patient physical functioning was considered to be straightforward, apart from instances where pathology proved difficult to locate, while the impact of psychological functioning in the workplace was much more difficult to assess (119).

Engblom and colleagues looking at the frequency and severity of problems that general practitioners experience regarding sickness certification in Sweden found that assessing capacity for work was very problematic for doctors in 34% of cases. Problematic experiences in assessing the optimum time, duration and degree of sickness absence was also found by 23% of these doctors (120). Ljungquist and

colleagues in a study of 1,554 doctors in Norway found that almost half of them found it difficult to assess the level of work incapacity of patients and this was coupled with problems in becoming the 'medical expert' for sickness related benefit claims (112). In a separate Swedish study conducted by Lofgren et al., 44% of doctors stated they needed more knowledge and skills in handling sickness certification, such as how to assess working capacity, while 50% of the participants needed help with determining optimal length and degree of sickness absence (121).

Lindholm and colleagues found that doctors involved in several clinical settings, e.g. in rheumatology, neurology, psychiatry, and orthopaedic clinics and primary healthcare in Sweden, were often involved in sickness certification consultations and many of them also found it problematic to assess patients' working capacity and to provide a prognosis regarding the duration of working incapacity regardless of their specialism (76). Assessment of ability to work is considered to be a task that requires co-operation with several different professionals in order to identify individual requirements for rehabilitation and accurate sickness certification (78, 122).

2.11.4 Can sickness certification practices be influenced by the GP's age?

GP age has been found to influence their certification practice. Tellnes, Sandvik and Mourn identified that in Norway, duration of episodes of sickness leave were significantly longer in patients certified from the oldest doctors (4). In a separate study, conducted by Reiso and colleagues, Norwegian GPs assessing new cases requiring sickness certification were found to assess patients' ability to work as being more reduced the older they were (42). Condren et al. found that GP age influenced the decision to certify in an Irish study (102). However, both a Swedish and

Norwegian study have not reported this difference (62, 123). The explanation for greater levels of sickness certification from an older doctor could be explained by the fact that they will have worked and certified over a longer period and thus clinical experience may have a bearing on the likelihood that the doctor will issue a certificate. It is also possible that an older doctor may be more aware of the personal experiences of the patient such as the past experiences and the patient's own health beliefs, or may know the patient for longer periods than younger doctors and thus will not want to compromise the doctor-patient relationship. In a study by Hjortdahl and Borchgrevnick good knowledge of a patient was found to increase the odds of certification by 53 times for a new medical problem (99).

2.11.5 Does the GPs' gender influence sickness certification?

The gender of the doctor is thought to play a role in the prescribing of sickness leave according to results of a Norwegian and a Swedish study. In the Norwegian study, Brage and Reiso reported that male doctors found that more men than women patients (35% versus 19%) had a major impairment resulting in an inability to work, which was different to that found by female doctors (123). The Swedish study by Englund and colleagues, using case simulations (i.e. vignettes) found that female doctors were more likely to certify a patient (100). Shiels, Gabby and Ford in their use of retrospective sickness certification data showed that certification of male patients by male GPs was significantly associated with increased prevalence of intermediate certified sickness leave (6-28 weeks) compared with females certified by female GPs (OR 1.38, $p=0.009$) (124). The results of these studies may be interpreted to suggest that female and male GPs assess the need for sick leave differently. However, research investigating the relationship between the gender of the GP and rates of

sickness certification has shown conflicting evidence. A separate Norwegian study conducted by Norrmen et al. found no impact on certification rates based on the practitioner's gender (101), while a study of inter-doctor variation conducted by Tellnes et al. also found no difference in certification rates for doctor of different genders (4). While it is possible that some GP characteristics, such as gender may predict the outcome sickness certification, the paucity of studies means that the research evidence is contested.

2.12 Patient related factors influencing the process of sickness certification

2.12.1 Can the patient's characteristics influence sickness certification?

Our understanding of what it means to be a patient has changed since the 1950s when the American sociologist Talcott Parsons defined the 'sick role' as involving exemption from normal social duties, and the obligation to seek specialist advice and follow it. Once the person enters the sick role the factor thought to most affect the likelihood of a patient returning to work is their own intent to do so (125, 126). If the patient is convinced that his or her limitations are the result of a somatic disease with restrictions that will last until the disease has been treated adequately, then they may be inclined to stay away from work (127). The influence of patient related factors in sickness certification is shown to be extensive, often incorporating the patient's personal and social circumstances (69, 102). Nilsen et al. also shows that in addition to the medical problem, the way in which the patient presents their problem also influences GP certification behaviour (128). Not surprisingly, patients showing a desire to be certified are sick-listed more often than patients who appeared reluctant (100).

2.12.2 Can the patient's presenting problem influence sickness certification?

Sickness certification is viewed as a powerful intervention in managing aspects of a patient's illness. It is feasible that doctors are influenced by the patient's presenting problem, especially if it is difficult to predict how a patient might cope with work while experiencing symptoms (63). Managing cases of depression is one such illness that presents distinct challenges and research has shown that having a mental health related problem increases the odds of certification (37, 39, 129). A vignette study conducted by Campbell and Ogden in the UK found that the doctors' decision to certify those with a psychological problem were due to the fact that they considered the patient to be more ill and less able to work than a person with a physical illness (37). While sickness certification trends reveal that mental health problems are the most likely cause of sickness absence (130), there is little evidence to support the therapeutic role of abstaining from work for those with mental health problems (63).

Patients presenting with musculoskeletal conditions are also likely to be managed with prescribed sickness leave (20, 39, 41, 56, 80, 131). In the UK, Wynne-Jones and colleagues found that back pain is one of the commonest reasons for issuing a sickness certificate (132.9 certificates per 1000 musculoskeletal consultations in men and 88.3 per 1000 consultations in women) (56). Coole et al in a study of patients referred for back pain rehabilitation in the UK suggest that sickness certification was the main method used in managing patients' work problems (132). It is also possible that sickness certification is provided because GPs are pessimistic about the recovery of patients with musculoskeletal condition. Chew-Graham and May in their study on chronic low back pain consultations showed that indeed GPs had pessimistic views on the outcome of patients with such problems (133).

When a GP does not have hard evidence of illness and loss of function, trust in the patient's own story and self-judgement may be crucial in assessing fitness for work. The patient's ability to tell their 'story' may generate considerable sympathy from the GP and their social circumstances may play a critical role in the decision making process. Haldorsen et al. has shown that a reluctance to accept social problems as reason for sickness leave results in lower rates of certification rates (134), while the presence of adverse social circumstances has the opposite effect of increasing the rate of certification (102). In Sweden, Lofvander et al. found that social distress experienced by patients appeared to play a part in the GP's decision to continue certification of young immigrants on long term sickness leave (84). Higher certification rates in Finland were also found by Piha and colleagues in patients of lower socioeconomic status (135). In contrast, in the Netherlands, Meershoek and colleagues reported that GPs admitted to taking the personal circumstances of the patient into consideration when prescribing sickness leave (69). However, according to one study conducted by Gulbrandsen and Brage in Norway, social reason were rarely the only reason for their issuing of a sickness certificate (136).

It would be unrealistic to suggest that the doctors can detach themselves from the physical, psychological and social factors that impact on patients, in their decision to prescribe sickness leave. The studies highlighted above show that many GPs appear to be influenced by the way the patient presents their problems at the surgery. However, these studies provide only a limited contribution to our understanding of the problem and further research is required to provide evidence on the impact of patients' factors, social or other extenuating circumstances on the decisions of GPs to provide sickness certification.

2.12.3 Can the GP become influenced by the patient's request to be certified?

There are only a few studies identified that examine the influence of the patient request to be certified and the GP's decision to provide one. Two case-simulation studies show conflicting evidence. In the Swedish study Englund et al., found that patients who desired sickness leave were certified more often than patients who appeared reluctant (100). However, in the Campbell and Ogden study, researchers found that the doctor's decision was influenced by the patient's presenting problem rather than the request to be certified (37). There are certain limitations to consider in the use of case-simulation studies as GPs are presented with a hypothetical patient scenario and thus may not reflect what they may actually do in a similar situation. The patient may also request with varying degrees of aggression and as mentioned previously sickness certification may be given in response to fear of upsetting the Doctor-Patient relationship, to avoid conflict or to deal with an adverse social or domestic problem.

2.12.4 Can the patient's age or gender influence sickness certification?

The age of the patient is shown to have an influence on GP certification behaviour. It is not surprising as older persons are generally considered to have reduced prospects for employment, less capacity to work and poorer rehabilitation outcomes. Reiso and colleagues, based on the results of a survey in Norway, found that patients over the age of fifty were associated with longer spells of being certified as unfit for work (129). Shiels and Gabby found that in the UK, age accounted for greater levels of sickness certification following the examination of patient consultations (39).

A study conducted by Winde et al. of GP characteristic and sickness absence in Norway shows that patients' gender is an important variable in predicting sickness absence. Women were twice as likely to have an episode of sickness compared to men. The mean annual sick leave days are also double for women, at 12.1 days for women compared with 6.4 for men (65). An analysis of medical certificates from a separate Norwegian study showed that sick leave in females lasted a mean of 105.1 days, compared to 94.6 days in men (medians 55 and 43 days, respectively). The mean length among persons with musculoskeletal disorders was higher for females but for psychological disorders the mean length of absence was higher for males (137). Higher rates of female absences may be explained by the fact that females are more likely to take part in the family role of caregiver. Corden et al. described the issuing of medical certificates in the UK by GPs for reasons of grief to a parent whose child was terminally ill or has recently died. In fact GPs encouraged the parent to take sickness leave. Brage and Resio cited distress in patients when they were required to care for a family member and certification in such circumstances was often described medically as stress or anxiety (123).

In Ireland, sickness certification rates for age are progressive for men, but for females the same trend is not observed. However, females are three times more likely to be claiming sickness benefit compared to males in their thirties (see chapter 1). There is no entitlement for parents to take certified sickness leave where they may have extenuating circumstances. It is also unclear as to what extent GPs encounter such problems with parents and what strategy they use to deal with this situation when it presents.

2.13 Methodological considerations

Every effort was used to maximize the number of studies used in this review which included using the search terms frequently used by other countries, such as sick-listing, medical certification, sick note and sickness leave. The studies examining sickness certification have appeared in the last decade so clearly the research area is in the development phase. The majority of the studies emanated from the Scandinavian countries and to a lesser extent originated in the United Kingdom. It was also recognised that a proportion of studies were excluded because they were written in the language of origin (mainly Norwegian and Danish origin).

Only one study was found with particular reference to Ireland (102). This study conducted by Condren et al., using case vignettes is quite dated and of low quality. These authors conclude that the patients' social situations can influence certification practices. However, the authors' conclusions need to be approached with caution due to lack of clarity in design and methodology utilized in the research. There is limited detail on how the authors validated the vignettes and factors such as the recruitment of participants are not addressed. The questionnaire presented a number of simple case scenarios and then asked the GP to indicate if they would or would not issue a sickness certificate. The patient scenarios contained limited information on the patient's condition and limited information on patients' social factors or working situation and so fails to fully explore the influence of such factors on the doctors' decision making process. The participants were not presented with an opportunity to comment on the information they would require to make an informed decision in relation to assessment of patients' working ability.

Since the sickness benefit systems and the amount of self-certifying days differ between countries and over time, the results of the various studies are not always comparable. The role of the GP in sickness varies across different countries as does the opportunities for referrals or rehabilitation making comparisons difficult. There is some concordance between studies in sickness certification which underscore the multiplicity of problems encountered by GPs. Recurrent themes identified problems in sickness certification such as conflict, role responsibility and obstacles and barriers that presented in practice such as organisation of healthcare, structure of the benefit/social insurance systems, and assessment of patients workability. However each individual research study used a range of methods and research designs making it impossible to draw reliable and generalizable conclusions.

The quality of the studies also needs to be questioned as the studies did not always use validated and reliable tools. A large amount of studies were cross-sectional, retrospective and self-reported and while such studies are useful for raising the question of the presence of an association between variables they are not so good at testing actual hypotheses. It is also not possible to ascertain if these studies are subject to external confounding as many involve the relationship of multiple factors. Many of the studies reported qualitative data and there are potential issues and bias in the interpretation of such data.

There are several case simulated studies used and while these are merited with the ability to describe practice variations in healthcare, which may not be otherwise easy to identify, some caution should be exercised as hypothetical scenarios can produce a situation where the GP may report on what they would like to do in a situation rather

than what they may do if presented with a real patient in practice. Therefore the interpretation of case simulation studies results should be viewed in that context.

2.14 Gaps in the literature

The most obvious gap in the literature is the lack of research examining sickness certification in an Irish context. Within an Irish context, only one study examining sickness certification was found and was conducted in 1984. The central theme in the literature on sickness certification and the prescribing of sickness leave is that sickness certification is a complex and complicated task for doctors. The literature indicates problems in GP knowledge and skills in the prescribing of sickness leave. GPs appear to demonstrate certain behaviours or attitudes that predispose them to respond or behave in a certain manner during the fitness for work consultation. Equally, what happens in practice, coupled with external factors appears to influence the way sickness certification is handled.

In general terms the knowledge base of sickness certification is limited. We need more studies that are methodologically stronger in order to increase our knowledge of the factors that may influence GPs' decision making when prescribing sickness leave. Important aspects include GPs' perspective on sickness leave, problems encountered, conflict, role responsibility and the scope for improvement with particular reference to the Irish system. Other important aspects include the influence of patient related factors such as social and other extenuating circumstances; the patient's presenting illness and request to be certified, especially in a system that is consumer driven. Without this understanding, impending improvements to the system will not be evidence based.

2.15 Conclusion

In this chapter I reviewed the literature relevant to sickness certification and identified the views and experiences of GPs in their role as certifiers. I also outlined some of the potential influences that contribute to GP sickness certification decision making. This review has broadened the understanding of the area and identified the lack of culture and county specific literature in the area of sickness certification. The next chapter will describe the methods adopted to examine the three phases of my research.

Chapter 3

3. Material and Methods

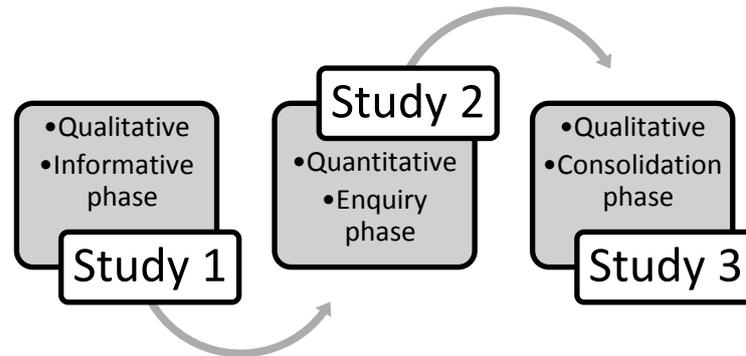
3.1 Introduction

This chapter begins with a rationale for the use of mixed methods research to achieve the aims of the study. Thereafter, a presentation of descriptions of where, when, and how the data was collected is illustrated for each of the three research phases in turn.

3.2 Mixed methods – Theoretical frame work

An increasing number of researchers advocate the use of combining qualitative and quantitative approaches in the study of social phenomenon (138-142). As a research concept mixed methods represents a distinct paradigm that distinguishes it from other common stand-alone research designs. The basic tenets of mixed method studies are the combination of qualitative and quantitative research phases. Although several approaches to mixed method design have been discussed in the literature, ultimately the researcher's decision is twofold; (a) whether the researcher wants to operate within one dominant paradigm or not and (b) whether the research is completed concurrently or sequentially (138, 139, 143). The mixed method approach adopted in the current study was a 50:50 sequential study adapted from the model presented by Collins et al. (139) and is illustrated below in figure 6;

Figure 6 Mixed method model used to guide the study



3.3 Rationale for research design

There is much debate on whether both qualitative and quantitative methods can be combined effectively or at all. It has been argued that they differ in philosophical and methodological considerations to such an extent that this can cause difficulty for the researcher. Brannen indicates that the multi method approach creates *'tensions between different theoretical perspectives'* (144). Several authors have indicated the merits and strengths of combining both methods and in particular to research that is used to inform larger quantitative inquiry (144, 145). Hammersely signifies the irrationality in trying to distinguish between qualitative and quantitative measures in research:

'our decision about what level of precision is appropriate in relation to any particular claim should depend on the nature of what we are trying to describe...not on the ideological commitment to one methodological paradigm or another' (146).

Parahoo indicates that the combinations of methods are to achieve *'complementarily'*, *'completeness'* and *'confirmation'* in research (147). In the present study I adopted a mixed method approach to fulfil the following objectives:

- To explore the nature of the phenomenon, i.e. sickness certification
(completeness)
- To gain an in-depth understanding of the phenomena under investigation
(confirmation)
- To develop a questionnaire and validate the same instrument
(complementarily)
- To further explore the research findings through a focus group discussion
(confirmation)

As one of the main objectives of the study was to describe and analyse GPs' opinions about sickness certification, a qualitative approach was considered to be the most reasonable and appropriate method to gain an initial insight into the area of sickness certification so as to identify key information that could be used further to inform and guide questionnaire development for the quantitative study (148). Therefore the research began by using qualitative individual semi-structured interviews with GPs working in Ireland. This information was then used to construct the vignette designed questionnaire and finally a qualitative focus group was conducted with GPs in order to consolidate the findings of previous phases.

3.4 Ethical considerations

In conducting this research, potential risks to the participating GPs required consideration. Sickness certification can be a sensitive issue for GPs and this research would constitute some intrusion into the personal experiences of participating doctors. It was important that all information collected over the course of the three phases was held in the strictest of confidence and that anonymity of all participating GPs was protected at all times. The participants were safeguarded in both the qualitative and quantitative studies, which included the coding of all questionnaires, password protection on computer files and locked storage of any additional materials or backup data. Information leaflets describing each study were presented to the participating GPs and consent was obtained at each of the relevant stages of the studies (written consent study 1 and study 2 and verbal consent study 3). Where doctors were audio recorded, digital files on recording devices were deleted once uploaded to the computer. Transcription was conducted in NVivo and password protected. Ethical approval for the study was granted by Waterford Institute of Technology and the University of Manchester Research Ethics Committees (see appendix 1).

3.5 Overview of the three studies

Table 6 below illustrates the aim, study, design and outcome measures for each of three phases of the research.

Table 6 This table shows an overview of each of the studies conducted during the research.

	Study 1	Study 2	Study 3
Aim	To describe and analyse GPs' opinions about sickness certification and the strategies they use during the fitness for work consultation.	To describe the factors that impact on GPs' decision making in sickness certification.	To further explore the findings of study 1 and study 2 by description of the finding of a GP focus group
Study population	GPs working in primary healthcare (n=14)	GPs working in primary health care (n=62)	GPs working in primary healthcare (n=8)
Year of Study	2009	2011	2012
Study group/materials	Individual in-depth interviews	Questionnaire based on clinical vignette	Focus group interview
Main outcome	Key themes in sickness certification practice	Influential factors in sickness certification Rates and duration of sickness certification	Key themes in sickness certification
Design	Purposive	Randomised	Convenience
Analysis	Simple thematic analysis using NVivo qualitative software	Quantitative, descriptive and inferential statistics using PASW 17	Qualitative content and thematic analysis using NVivo qualitative software

3.6 Study 1 – Method

3.6.1 Introduction

This section describes the method adopted in the first phase of the study. It details the development of the qualitative guide used in the semi-structured individual interviews, the recruitment and interview phase and finally it discusses the data analysis conducted in this phase of the research.

3.6.2 Research Aim

The research aim of study 1 was to describe and analyse GPs' opinions about sickness certification and the strategies they use during the fitness for work consultation.

3.6.3 Development of the qualitative interview guide

The main objective of study 1 was to gain an understanding of GP experiences and perceptions of sickness certification in general practice. A qualitative semi-structured interview guide was developed by analysing the central contributory factors from the literature relating to sickness certification, dimensions of the consultation and experiences GPs were having across Europe, (see appendix 2). Once the emerging themes were identified they were developed into questions to form the main content of the interview guide. Initially a comprehensive list of short questions was developed in response to the emerging themes. These questions were then reviewed in turn with the objective of developing a set of broad questions that would cover the various aspects of GPs' sickness certification experiences and practices in the allocated predicted time of 30 minutes per interview. Concepts relating to the specific questions

were developed as prompts. The wording of the questions was kept as open ended as possible to allow freedom to explore aspects of interest and GPs' experiences but structured to ensure that the same questions were asked of each of the other participants. Therefore the interview schedule was flexible allowing changes to the wording but not the overall content of the questions. Additional demographic information was added to the interview guide to provide detail on the GP's gender, location, size of practice and specialist training in occupational medicine. The guide was then examined by a qualitative expert working in the school of Occupational and Translational Medicine at the University of Manchester for face and content validity (wording, phrases etc.).

A pilot study was conducted with two GPs working at an academic institute prior to recruitment of participants to check for meaning and interpretation of the questions. Minor changes were made to the phrasing of questions and finally the content of the interview guide was agreed with the main supervisors (see appendix 3). This guide was then used during the interview process as a constant reminder to probe participants about the topics of concern.

3.6.4 Participants and recruitment to the study

The study was conducted in eleven Primary Care practices in the Republic of Ireland between February and June, 2009. Initially, the sample population was drawn purposively from the Medical Directory of Healthcare Professionals, however as the research progressed it became more of a convenience sample due to the reluctance of GPs to participate. GPs who participated in the early interviews suggested others who might be willing to participate and this resulted in the recruitment of a higher number

of general practitioners with occupational health experience. The initial selection process was based on the year of graduation, gender and geographical location (Urban/ Rural) of the GP with the idea of gaining as many perspectives as possible. A letter detailing the study was sent to thirty GPs as an invitation to participate in the study followed by a telephone call (see appendix 4). Six of the thirty GPs agreed to participate, seven refused and seventeen did not respond. Four more were recruited following an article in a national newspaper and a further two as a result of a conference. A further four GPs were contacted by letter following suggestions from other GPs participants , three accepted but one was unable to participate because of a patient emergency. Therefore, fourteen GPs took part in the qualitative interviews. Two were still on the registrar program and still in training but were not excluded as they were working and certifying in general practice. As soon as 'theoretical saturation' was reached no further recruitment of GPs was required (149). Table 7 below shows the demographic information of the GPs who participated in the interviews.

Table 7 GPs demographic information

<i>Gender</i>	Male n=9		Female n=5	
<i>Training in occupational medicine</i>	6		1	
<i>Years of practice as a GP</i>				
Registrar programme	0		2	
1-5 years	0		0	
6-10 years	2		0	
11-15 years	1		1	
16-20 years	2		2	
Greater than 20 years	4		0	
<i>Contact hours</i>				
Full time	8		3	
Part-time	1		2	
<i>Practice size</i>	Small >2,000 n=2	Medium 2000-8000 n=8	Large <8000 n=4	
<i>Location</i>	Type	Number (n)		
	Urban	5		
	Suburban	4		
	Mixed	4		
	Rural	1		

3.6.5 Interviews

The participating GPs were interviewed using the developed interview guide at an arranged time in the interviewees' own place of work. Written consent was obtained along with demographic information before each interview began and discussions were audio digitally recorded (see appendix 5). Each interview began by asking the GP to give their initial thoughts about sickness certification and topics were then raised in turn following the interview guide. Aspects of sickness certification brought up by the participant were probed in more depth by the researcher during the course

of each interview. At the conclusion GPs were asked to reflect and add any further comments in relation to sickness certification. Interviews lasted between 25-40 minutes.

3.6.6 Data analysis

Analysis was conducted using NVivo 8 qualitative software. Interviews were transcribed throughout the process of the data collection. Table 8 outlines the process steps used in the quantitative analysis. Firstly each transcript was read and re-read to obtain an overview of the data and to identify any further points of interest that required exploration in the subsequent interviews. On completion of all interviews, each interview was coded into the main categories from the interview guide. Keywords were searched and phrases, narratives and ideas were subsequently formulated into categories by situating the identified concepts into sub topics and by choosing the most prevalent and illustrative narratives for each category. The content of each of these categories was then re-coded into broad themes using the process of simple thematic analysis (150). Patterns and interpretation of themes were discussed with one member of the supervisory team over a number of face to face meetings and key illustrative narrative was chosen to represent each of the major themes identified in the thematic analysis. Deviations from the main theme and possibilities as to why this may have occurred were also discussed. On completion of the data coding of all 14 transcripts, sections of the narrative accounts of perspectives and experiences of GPs were presented to second members of the supervisory team to independently check for levels of agreement with the broad themes generated. Further discussion took place resulting in the deletion of some dimensions, the rephrasing of others and the addition of a new theme. This resulted in two principal changes to the thematic

categories. Theme two was changed from 'patient confidentiality' to 'patients and disclosure' to capture the broader concept of issues around disclosing certain illness such as psychological problems to employers. The original theme 'patient motivation to be certified' was changed to incorporate a much wider scope, reflecting GPs' 'strategies for issuing sickness certificates' rather than their account of patients' desire to become certified. Transcript content was then reviewed to ensure that coded narratives were relevant under the new thematic headings. Final discussion took place using the summarised interpretation and key illustrated narratives and agreed with the main supervisory team. In total eight major themes were identified from the data (see results chapter study 1).

Table 8 Showing the process step used in the qualitative analysis of interviews

Level of analysis	Process step
Familiarisation	Listening to audio, reviewing transcripts, broad coding under question headings.
Gaining insight/interpretation	Immersion in the data and sense making. Identification of potentially significant narrative. Initial coding of accounts under thematic heading.
Categorisation	Searching data for emergent themes, Clustering units of relevant meaning under the main thematic heading for each transcript.
Pattern recognition	Reviewing each category under the main thematic headings and explaining similarities, shared ideas and experiences and differences thereby creating links between each transcript.
Interpretation	Formal process of analysis, writing up of narrative account of the interplay between the interpretive activity of the researcher and participants' account of perspectives and experiences in their own words.
Validation	Process of checking and reviewing researcher's interpretation of key emergent themes with supervisory team.

3.7 Study 2 - Method

3.7.1 Introduction

This following section describes the method adopted for phase two of the study. A randomised approach was adopted to ensure a balanced design, eliminate selection bias and allow for generalisability of the results to the GP population in Ireland. This section describes the development of the vignette designed questionnaire, pilot study, sampling strategy, recruitment procedures, administration, and finally the analysis of data and reliability testing of the questionnaire.

3.7.2 Research aims

The second objective of the research was to describe the factors that impact on GPs' decision making in sickness certification. Four key questions were identified as the main research aims for study two. These are listed below:

1. Does agreement exist between doctors in the decision to provide a sickness certificate?
2. Does the presenting problem affect the GP's decision to prescribe sickness leave?
3. Does the request for sickness certification increase a patient's chance of receiving one?
4. Can the patient's social circumstances influence the GP's decision to certify?

3.7.3 Rationale for use of case vignettes in questionnaire design

It is frequently argued that the use of questionnaires is not appropriate when measuring human attitudes and behaviour because they extract unreliable and biased self-reports. Therefore, it was decided that a vignette (patient scenario) designed questionnaire was the best method to extract information on GPs' decision making processes. This method presented a real-life decision making scenario (151-153) and by presenting the same vignette to groups of GPs, it was possible to measure within and between variation while holding certain patient variables constant (154). Similarly, the choice of design minimised the need for several different vignette versions (151). The questionnaire could be designed to examine several constructs associated with a GP's decision to prescribe sickness certification.

3.7.4 Development of the vignette (patient scenario)

The first phase of the research offered several insights into the complexity of sickness certificates experienced by GPs working in Ireland. Each of the major themes of study one was reviewed for content relating to the factors that may alter or influence the decision to prescribe sickness leave. Three independent factors were identified as the potential influential variables in the decision to prescribe sickness leave; patients' presenting condition; the patients' social circumstances; and the patients request to be certified.

The choice of presenting illnesses for inclusion in the vignette was influenced by the highest frequency of sickness related absence outlined by the Department of Social

and Family affairs (Ireland) and THOR-GP (UK) (155, 156). Variables were manipulated to include the presence or absence of an adverse social situation and the request or reluctance of the patient to be certified in order to investigate the influence of these variables on GPs' processes when issuing sickness certificates. Eight hypothetical scenarios resulted, four of a psychological nature (see figure 7) and four of a physical nature (see figure 8).

Each scenario was reviewed by a number of individuals to check for face and content validity and its relevance to clinical practice. The reviewers included a Psychologist, a GP trainer, three GPs trained in occupational medicine, five GPs working in primary healthcare, and two faculty members of an academic institution. The final vignettes were agreed with both supervisors and organised into three principal sections: work and family history, nature of the condition and treatment plan, and the current reason for the visit to the surgery.

Figure 7 Showing vignette and variable type used for the psychological problem

Vignette (1-4) - **Variable type Psychological problem (+)**

Mr X¹¹ is a 38 year old office manager who has been with the company for the last five years. The company is a large multinational company specialising in pharmaceuticals. Mr Flynn supervises a team of ten administrators. The job involves accounts, personnel and general administrative work. There are occasional visits to sister plants but mainly the job is office based.

Variable type (+) = Mr X is married with three children. Mr X partner works as a nurse in the local hospital; this often involves her working at night and at weekends.

Variable type (-) = Mr X is single

Your notes indicate that Mr X is experiencing intermittent low mood and tearfulness over the past two years. This has resulted in Mr X taking occasional days off work. A month ago he came to you and reported that he had experienced persistently low mood and tearfulness. Mr X also indicated that he is having problems with concentration and sleeping. You gave Mr X a sickness certificate for two weeks and prescribed an antidepressant.

At the end of the certification period Mr X returned to work for a four week period, but is now back at the surgery and states that the symptoms have 'gotten worse' and he is now having anxiety attacks and feels he just can't cope .

Variable type (+) =Mr X asks if you can provide another sickness certificate. He feels that an extended period of recovery will help to alleviate some of the symptoms.

Variable type (-) =Mr X states that he can't really afford to take more time off from work.

¹¹ Mr X was given the name Mr Flynn in the psychological problem scenario

Figure 8 Showing vignette and variable type used for the physical problem

Vignette (5-8) - **Variable type Physical problem (+)**

Mr X¹² is 41 years old. He has been a machine operator for the past five years. It is a local company that provides components to the medical devices industry. The job involves machine set-up, machining and measuring of component parts. The job also requires some lifting which is assisted using hoist equipment.

Variable type (+) = Mr X is married with three children. Mr X partner works as a nurse in the local hospital; this often involves her working at night and at weekends.

Variable type (-) = Mr X is single

Mr X records show that he is experiencing occasional lower back pain over the past three years, which has led to the occasional day or two off from work. He has been treated with pain killers on these occasions and you also recommended that he takes regular exercise. Two weeks ago Mr X came to you experiencing a dull ache in his lower back, which he explains has gotten progressively worse over the previous four months. Mr X describes that he is very stiff first thing in the morning.

You provide Mr X with a sickness certificate for a period of one week. Mr X went back to work for one week, but he is now back at the surgery complaining of pain when bending down and reaching forward.

Variable type (+) =Mr X asks if you can provide another sickness certificate. He feels that an extended period of recovery will help to alleviate some of the symptoms.

Variable type (-) =Mr X states that he can't really afford to take more time off from work.

¹² Mr X was given the name Mr Walsh in the physical problem scenario

3.7.5 Questionnaire development

A questionnaire was developed to measure the aims of study 2. Careful consideration was given to the wording of the statements to ensure construct validity of the questionnaire (157). It was also important that the questions were objective and designed to measure the main constructs (fitness for work, total sympathy, satisfaction with decision making and positive or negative feeling about the task) (157, 158). The questionnaire was constructed so that it would progress from the demographic section to the patient scenario and then onto the specific items in the questionnaire.

The first section of the questionnaire was developed for the purpose of establishing the representativeness of the participating GPs. Information on personal and practice characteristics of the participants were gathered so that this information could also be utilised in the explanation of any variation due to GP attributes such as age, gender and year of practice during the analysis.

In order to engage the participants with the cognitive process of prescribing sickness certification three open-ended questions were developed relating to information seeking in the consultation and were based on the patient's social circumstances, working history and additional information GPs may require for such decision making. These narratives were then used to evaluate what each participant would choose to do if faced with a similar situation in clinical practice.

A series of statements were devised to examine the GP's decision to provide a sickness certificate, the recommended period of sickness leave and the perceived impact of the condition on the patient's quality of living. The statements were also

devised to examine four main constructs: belief of patient's fitness for work, confidence in decision making, sympathy for the patient and positive or negative feeling to the task of prescribing sickness leave. The questionnaire was also designed in such a way that questions were asked based on whether or not the participant decided to prescribe sickness leave. The participants then proceeded to answer the relevant section based on this decision.

The questions were organised so that each participant was asked to rate their level of agreement with a number of statements. The questions were organised into a four point Likert scale so that the participants would not be overwhelmed by the number of choices provided. The use of a neutral choice was eliminated from the scale as it was felt that it may produce an option that would prevent the participant from engaging fully in the decision making process.

Once items for the questionnaire were written, I progressed through a series of steps to ensure that each item was clear, unambiguous and appropriate to measure the key construct. This included lengthy discussions with the main supervisors to assess how well the item was associated with the research aims and proposed constructs. The readability of each item was then assessed and where possible words, sentence length and phrasing were changed to simplify language.

3.7.6 Pilot study

A pilot study was used as a method to check for internal validity before the start of study 2. The purpose of the pilot study was to test the protocols, the data collection instrument and the sample recruitment strategies (159). Careful pilot work aimed to

reduce errors such as contextual bias to ensure appropriate arrangement of the questions. The questionnaire was tested in a small representative sample of eight GPs and each reviewer was asked to check applicability, misunderstanding and ambiguities concerning the instruction, vignettes, questionnaire and the length of time to complete. Recommendations arising from the pilot study included:

1. An indication of the number of pages that the respondents needed to complete in the questionnaire;
2. An indication of the time for completion;
3. Clarity on GPs undergraduate medical and GP training;
4. Removal of rating scale for assessing severity of illness and replacement with string variable;
5. Addition of a 1-2 week option in the time of certification;
6. Replacement of the question on training in occupational medicine;
7. Typographical errors on question 26-001, 27-002, 13-002.

No major ambiguities were found in the contextual arrangement of the statements and through a process of discussion; the final questionnaire was agreed with the supervisors (see appendix 6).

3.7.7 Sample size

It is important that the number and range of participants reflect with reasonable accuracy, the population from which it is drawn (158, 160-162). For the purpose of this research it was important that the sample size was representative of the GP population in Ireland. There is limited published research into sickness certification and therefore few existing data on which to base sample size estimates. A similar study conducted by Campbell and Ogden used the entire population from one area in the UK (37). This method of sampling was not my chosen method as I wished to generalise my findings to the entire population of GPs in Ireland.

The sample size calculation was discussed in length with a Biostatistician based at the University of Manchester. Rates of consultations resulting in sickness leave were unknown in Ireland, so it was decided that the most appropriate way to calculate sample size was to use data from the THOR-GP database. Sickness certification rates for psychological and musculoskeletal conditions were obtained for the period of 2009. 79% of patients with psychological problems and 41% of patients with musculoskeletal conditions who consulted a GP obtained a sickness certificate in that year (131). It was important to have enough statistical power so that the null hypothesis could be rejected when some given hypothesis is true and based on the work of Cohen, α was set at 5% and the study power at 0.80. (163, 164)

The proportions obtained from the THOR database (79%, 41%) were entered in STATA statistical software package sample size calculator. To detect a mean change between these two proportions (psychological versus musculoskeletal certification rates) with a power of 80% at the 5% significance level required a sample size of 30

participants in each group. However, it was recognised that there were two additional factors being investigated (social circumstances and request/reluctance to be certified) and such a small sample size could hinder the analysis and interpretation of the study. Therefore this sample was increased to 200 participants (25 in each vignette version) to allow for the statistical testing of each of the independent variables.

3.7.7.1 Reflections on the sample size calculation

A more robust power calculation may have resulted in a larger sample and this point is discussed further in the section on limitations of the study design (chapter 5, page 180). The study went on to look at within subject and between subject variables and if the study were to be replicated, sample size should be considered carefully.

Firstly this was the first study of this type and the variability of the variables was unknown and an argument exists that it was impossible to calculate an accurate sample size without first conducting a larger pilot study (159, 162). One method for calculating the sample size could have considered the response distribution. Assuming a margin of error of 5%, a confidence interval of 95%, a total population of 2505 GPs available for participation and setting the response distribution to 50%, (i.e. the most conservative assumption) then the following sample is recommended based on the calculation below (normal distribution);

$$SS = Z^2 * (p) * (1-p) / c^2$$

Where: Z = Z value (1.96 for 95% Confidence Interval)

P=percentage picking a choice based on a decimal (50%)

C=confidence interval expressed as a decimal 5% (0.05)

Therefore it follows; $1.96^2 \times (0.5) \times (1-0.5) / (0.05)^2 = 385$

385 participants could therefore be a more desirable sample size required to complete the questionnaire based on the normal distribution.

However, the study investigated multiple differences and interaction effects and potential differences between certifiers. One of the main objectives of the vignette studies was to examine differences between those who certified and those who did not. Instead the analysis looked at the potential difference between the 3 main factors (presenting illness, social circumstances absent/present, and request/reluctance) and the 4 main constructs (fitness for work, patient sympathy, satisfaction with decision making and positive or negative feeling). Different authors tend to give different guidelines concerning the number of cases required when exploring relationships among variables. Stevens recommended at least 15 subjects per predictor variable (165), while Tabachnick and Fidell suggest that sample size requirements should take into account the number of independent variables that you wish to use: $N > 50 + 8(m)$ where m = number of independent variables (166). So for 6 independent variables the minimum number of cases required is 98. More cases are required if the dependant variable is skewed and it is suggested that a ratio of 40 cases for every independent variable used.

In my study small differences in mean scores were observed in many of the constructs and it is important to note that with a large enough sample small differences could become statistically significant even if the difference between groups is of little practical importance. So the question remains as to what differences would be considered to be of clinical importance. The complexity of multiple variable testing ($n=6$) is that fixing the risk factor of all tests at 5% still results in an overall 30% chance of making a type 1 error. Data examined from my study showed the largest mean differences in the fitness for work dimension based on physiological versus

physical illness and was statistically significant ($p=0.009$). Equally, in the qualitative studies significant dialogue was centred on certification of psychological related conditions and based on the results of my study and other identified literature it is likely that GPs' decision making in sickness certification can be predicted by the presenting illness of the patient. Essentially, there must be some estimation of the effect size considered to be of clinical importance and the risk of error of multiple testing based on some known hypothesis.

Calculation of a sample size for fixed effects, special main effects and interaction effect is possible if the following values are known;

f (effect size) = $\sqrt{\eta^2 / (1 - \eta^2)}$ where η = Eta squared

α probability error

Power ($1 - \beta$)

Numerator (degree of freedom)

Number of groups

Calculation of the Eta squared in my study showed a large effect size of 0.16 in the fitness for work category for illness type and could therefore be of practical importance and was used in the calculation of an f value. Figures were calculated for f (0.44) and entered in G Power® sample size calculator for multifactorial designs based on the total number of groups ($n=8$), power of 80% and degrees of freedom (numerator = 1). For each of the separate constructs the overall α value of making an error in at least one of the results is 5% on each of the 4 main constructs, giving an overall chance of error of 20%. Over the 4 constructs and 3 variable types, 24 possible interactions exist. Therefore to control for error across each of the 4 construct and possible interactions at the 5% level, α was divided by 24 ($\alpha = 5/24 = 0.002$: (Bonferroni correction)).

A sample size using the shown figures produced a sample of 84 participants. However, more moderate effect sizes may also be important and equally a better assumption for some outcome measures, therefore a calculation was also completed using a medium effect size of 0.25. Results showed 253 participants as the desired sample size. (See appendix 11)

The assumption made in these calculations is that the variables are all independent of each other, however it is likely that they are highly correlated and while concentrating on reducing type 1 error, the risk of making a type 2 error is increased. There is also a further consideration relating to the interaction of participants characteristics (i.e. age, gender, years of experience etc.) and having sufficient power to conduct subgroup analysis. On review of the Campbell and Ogden study 489 respondents were inadequate to conduct such an analysis. Whilst acknowledging all the possible ways of predicting an appropriate sample size for a study of this nature, it is arguably better to have a larger sample than a smaller one. I therefore sought to obtain a sample of 759 (3 x 253) with the aim of acquiring at least 96 participants for each vignette version. However, based on my experience related to recruitment, it is advisable that further work is conducted on redesigned vignette versions and outcome variables to assess what is of clinical importance. In recognition of predicted and actual response rates obtained in this study and observations of response rates from several research studies conducted with GP participants, it is extremely important that any target sample is increased 3 fold to ensure that the sample size criteria is met. However, applying this to the Irish context may be problematic because such a sample would constitute 90% of the total population of GPs practicing in Ireland and realistically may not be achievable.

3.7.8 Administration of the questionnaire

The use of a computer administered survey in this research was considered advantageous as I was confined by certain constraints such as the cost of a postal questionnaire (147, 162, 167). This method of administration also made it possible to distribute and obtain the information electronically, thus improving the quality of presentation and reducing data entry, saving time and improving the accuracy of the data (168). The questionnaire was designed in such a way that participants were required to complete each of the questions, minimising missing answers often found in paper formats. In Ireland, GPs are required to use the internet for work purposes such as the Primary Care Reimbursement Service (PCRS) and other essential GP supports. Therefore, it was reasonable to assume that the GP population could be targeted effectively using a computer administered on-line approach. Survey Monkey® was chosen as the on- line survey tool.

3.7.9 Accessing and recruitment of the GP population

I considered that accessing the GP populations for this research might prove to be difficult because of its sensitive and somewhat controversial nature (169). Recruitment of a representative sample of GPs was considered essential to ensure the results could be generalised to the entire GP population. The feasibility of accessing the GP population for study 2 was discussed during the course of study 1, because GPs are frequently targeted for research purposes. It was recommended by a number of GPs that an association was made with The Irish College of General Practitioners (ICGP) in order to maximise the response rate of the survey. An application for

access to the GP population was made formally to the ICGP in January 2011 (see appendix 7). The application was reviewed by the research committee of the ICGP and access was granted based on a number of recommendations including the recruitment of a local GP to oversee the process. The policy of the ICGP is to maintain anonymity and confidentiality for all GPs who participate in research, therefore the questionnaire was administered by the ICGP research administrator in April 2011.

In order to eliminate unanticipated extraneous variables, the questionnaire was assigned to participants at random so that each had an equal chance of receiving any of the eight vignette versions. The questionnaire was distributed using random selection from the ICGP GP database. To allow for non-responses three hundred randomly selected GPs received an e-mail invitation detailing the study, confidentiality procedures, rights to withdraw, plus one of eight links corresponding to the vignette version (see appendix 8). A reminder to complete the questionnaire followed 14 days later. Because of the poor response rate, a further application was made to the ICGP to facilitate a second e-mail reminder. This request was reviewed by the research committee and a second reminder to complete the questionnaire was distributed to the selected participants in June 2011 (see appendix 9).

3.7.10 Analysis of the questionnaire

Data was downloaded directly from Survey Monkey into the Predictive analytical Statistical Software (PASW) version 18. At univariate level, frequency distributions were used to examine the personal and practice characteristics of the respondents. Combined mean scores based on illness type were used to summarise scores for each

of the statements and individual means scores based on vignette type for each of the developed scale items. The impact of the three independent variables (presenting problem, patients' social circumstance and patient request) on both the doctors' beliefs about the patient and their feeling to the task sickness certification (i.e. 4 main constructs) was examined using a three-way analysis of variance (ANOVA). Alpha level was set at 0.01 to correctly adjust for multiple testing. One-way analysis of variance was conducted to test for statistical significance between groups based on a single variable. Where string variable were used in the questionnaire, narratives were analysed using content analysis techniques.

3.7.11 Reliability of the questionnaire

In the broadest sense, reliability is an indication of consistency between two or more measures of the same thing (159). In this research, Cronbach's alpha coefficient was used to calculate internal consistency and to check that the items in the scale were measuring the underlying construct, i.e. fitness for work, total patient sympathy, satisfaction with decision making and positive or negative feeling to sickness certification. Recoding of the items was conducted where applicable to ensure that all items were scored in the same direction (i.e. positive or negative) and therefore all positively correlated. The impact of removing each item from the scale was examined by comparing each of the values to the final alpha value. On examination, the scale 'Fitness for work' achieved a slightly lower alpha level of 0.685. Decision making scale, total patient sympathy scale and positive or negative feeling towards sickness certification scale all achieved above the desired level of 0.7 for Cronbach's alpha (170). Removing any of the items did not impact on improving the alpha value and

therefore all items remained within the scale in the final calculation of the value (see tables 9-12 below).

Table 9 Showing fitness for work scale items and Cronbach's alpha score

Scale: Fitness for Work (4 Items)	Cronbach's Alpha
Mr Flynn is fit for work	
Going to work may harm Mr X recovery	
Abstaining from work will help Mr X in his recovery	
Not providing a certificate to Mr X may be harmful to him	
	0.685

Table 10 Showing total patient sympathy scale items and Cronbach's alpha score

Scale: Total patient sympathy (3 Items)	Cronbach's Alpha
He deserves to have a certificate	
I have sympathy for Mr X situation	
Mr X is in a difficult position	
	0.761

Table 11 Showing satisfaction with decision making scale items and Cronbach's alpha score

Scale: Satisfaction with decision making (7 items)	Cronbach's Alpha
The decision to give a sickness certificate to Mr X was easy for me to make	
I am satisfied with my decision to provide Mr X with a sickness certificate	
I chose this decision without pressure from others	
It was the right decision for me to make	
The decision is based on the limited options I have to help Mr X	
If I had other options my decision would be different	
The decision to give Mr X a sickness certificate was difficult to make	
	0.705

Table 12 Showing positive or negative feeling towards sickness certification scale items and Cronbach's alpha score

Scale: Positive or negative feeling towards sickness certification (6 Items)	Cronbach's Alpha
Sickness certification is one of the tasks that I dislike in General practice	
Sickness certification is too restrictive and should be allowed in circumstances other than the patient's illness	
Sickness Certification is a burden for GPs	
The GP is often torn between their role as advocate and judge	
If I could give up writing sickness certificates I would	
Employers use the sickness certificate to manage absenteeism in their organisation	
	0.767

3.8 Study 3 – Method

3.8.1 Introduction

This section describes the method used in phase 3 of the study. It then outlines the recruitment, data collection and data analysis methods adopted for the focus group study.

3.8.2 Research aim

I considered that a focus group could present an opportunity to further discuss aspects of the sickness certification process in Ireland and additionally to act as a respondent validation of study 1 (157, 171). This focus group was conducted 3 years after the research first commenced and since that time significant changes had occurred in Ireland's economic circumstances and in my own level of understanding of the sickness certification system. The focus group presented an opportunity to explore the main research questions and additionally to explore new themes identified over the course of the research, including proposals for legislative changes in sickness certification in Ireland. The focus group presented a better way of gathering further information rather than trying to repeat parts of the questionnaire.

3.8.3 Data collection

The sample size and recruitment of GPs was the first consideration in the planning of the focus group (147). I envisaged that recruitment of GPs to a focus group may be problematic because of their working commitments. A single focus group was the chosen method to generate GP dialogue around study 1 and 2. The focus group was

unstructured to allow flexibility and specific questions were only asked when topics were exhausted or to refocus a specific interest. An Irish GP agreed to oversee the process of recruitment in an advisory role, a requirement stipulated by the ICGP. The GP assisted in the recruitment of the focus group, but was not present in the group session. Eight GPs (four male and four female) agreed to take part in the focus group and were all working in the same practice on a contractual or locum basis. Participants were provided with key information pertaining to current sickness certification statistics, and key findings from the previous research phases (study 1 and study 2) before the start of the focus group session using a powerpoint® presentation (see appendix 10). Having explained the purpose of the focus group, verbal consent was confirmed and the discussion was digitally audio recorded. The focus group was conducted in a meeting room of a GP practice in a large urban area. In order to protect the anonymity of the GPs who participated, more specific details of the practice were withheld.

3.8.4 Data analysis

Following transcription, a content and thematic analysis of the discussion was conducted using the qualitative software NVivo 8. This involved generating a list of key words, phrases and verbatim quotes and using them to formulate categories. These categories were discussed in length with the third supervisor and units of meaning were then identified and coded as this progressed. The meaning of the coded groups was condensed into the major emergent themes. A certain level of synchronic reliability was achieved whereby two or more perspectives between narratives were in agreement. The analysis mapped the narratives relating to 3 key areas, these included 'Perception of the sickness certification' system, 'Organisation of

healthcare' and 'Cultural factors in sickness absence behaviour'. The key narratives and key areas were further examined by the main supervisor and then agreed. The results of the focus group are presented in chapter 4.

3.9 Summary

In this chapter I presented each of the methods adopted during the three phases of the research. I showed the steps used to construct the qualitative guide, recruitment of participants and analysis the approach used in study 1. I outlined the construction and validation of the vignette designed questionnaire, recruitment strategies and analysis in study 2. The procedure of the final phase was subsequently described. In the next chapter the results of each of the research phases will be presented in turn.

Chapter 4

4. Results

4.1 Introduction

In this chapter each of the studies will be reported on in turn starting with study 1. Study 1 will describe the results of the in-depth qualitative interviews conducted with 14 individual GPs. Study 2 will describe the results of the vignette study conducted with 62 GPs and finally study 3 will describe the results of the focus group study conducted with 8 GPs.

4.2 Study 1 Results

Eight major themes resulted from analysis of narratives in the interview study, see table 13 below.

Table 13 Emergent themes from the individual interviews

1.	GPs' role in sickness certification
2.	Conflict in sickness certification
3.	Patients and disclosure
4.	Supports for GPs in practice
5.	Training and education in sickness certification
6.	Strategies for issuing sickness certificates
7.	Scope for change
8.	Employers, attitudes and practice

4.2.1 Theme one – GPs' role in sickness certification

The question of how GPs viewed their role in the issuing of sickness certificates was raised during the interviews. All 14 participants agreed that the role of a GP in sickness certification is to act as an advocate for the patient. GPs were keen to acknowledge that their role was primarily to help the patient achieve a full recovery and not a policing role for employers or to act as gatekeepers for patients in receipt of social welfare illness related benefits.

"As a GP you are primarily an advocate for the patient, that's where your primary interest and where your responsibility lie" (GP6, Female, urban, medium practice size, working part time)

“you are acting as a patients advocate, so if they tell you they are not well you are their doctor and you need to help them get better”(GP4, Female , suburban, medium practice size, Registrar programme)

“our role is to establish if indeed somebody is ill and to try and help the patient to recuperate from that illness and try and get back to work as quickly as they can, I do think really we are the patients advocate” (GP14, Female, trained in occupational medicine, medium practice size, urban, working full-time)

Narratives from the participants offer some further insight into how GPs perceived their role in sickness certification:

“your role is advocate and also as a facilitator...eh trying to balance the needs of the patient and getting the patient better”(GP3, Male, trained in occupational medicine, suburban, medium practice size, working full-time)

“role mmm I think we are stuck in the middle” There is pressure on GPs by big companies or different people I suppose like directors to be the police” (GP4 Female, suburban, medium practice size, Registrar programme)

One GP was keen to point out what the role was not:

“We are doctors, we are there to get people better, we are not policemen for the state or department of social welfare and we are not there to police.” (GP2, Male, trained in occupational medicine, small practice size, suburban, working full time)

4.2.2 Theme two – Conflict in sickness certification

GPs believed that the vast majority of patients who required certification appeared genuine. However, conflict in sickness certification was indicated by all participants over the course of the interview. Many of the participants agreed that sickness certification conflicted with the traditional aspects of the job, and that there were pressures from all sides, the patient, employers and the DSFA and they were often caught in the middle. Conflict was described when GPs’ felt they were under pressure

to provide sickness certificates when they were not entirely comfortable to do so. This type of sickness certification was most commonly associated with a patient's adverse social circumstances for example caring for a sick child or other family member, especially when they had a good relationship with the patient. Several of the GPs illustrated this point by presenting stories of recent patients that had come to the surgery looking for certification.

“one particular issue which I had was a case there lately, where the sister of the patient because very acutely unwell and terminally ill, the patient wanted a sick note for herself. In a situation like this the patient was very distressed and was providing a lot of the care, she was serving a role of looking after the sister, that was a bit of a dilemma, what I said to the patient was that she could not be given an open ended sick note to look after the sister,... she did find it a very distressing situation and she said that her employer was willing to allow her to go off sick” (GP2, Male, trained in occupational medicine, small practice size, suburban, working full time)

“ok I have a lady who is pregnant mmm who's son just had an operation, her son is three years of age, she works in a public service type of job and employer would not except her being sick or did not want to offer compasonate leave ... She needed to be given a way out of the problem, so the probelm generated on the cert was a stress related condition. ... it seems to be a genuine reason to be off work in my opinion. Work for that mother and the protocol around work and medical certification that generatated the problem” (GP1, Male, trained in occupational medicine, medium practice size, mixed, working full time).

“Well there is this patient who wants to be certified as sick, he used to drive a bus but now he has a problem with vision in one of his eyes, so he can't do that anymore. He can still drive a car but simply does not want to work; it suits him at the moment to stay at home. I feel somewhat under pressure to certify him but uncomfortable not too, he is a patient for a very long time...all his family are patients...” (GP15, Male, rural, small practice size, working full-time)

Several of the GPs spoke of the structure of primary healthcare in Ireland as impacting on their certification practice. They discussed the system in Ireland as 'consumer driven' and paying a fee for service generated certain expectations. Two of the GPs were more explicit and implied that they were often torn between business pressures and certification practices and as a result were more cautious in their approach as it could impact negatively on their practice. Other GPs described the

avoidance of conflict with patients during the consultation and said if they were too rigorous in certifying a patient they were concerned it would affect the doctor-patient relationship and that patients may move to a different practice.

“you are often between a rock and a hard place, you have a duty to society, it is not good for all these people to be out sick and you have a duty to the economy, and you are also trying to run a business, like if I was too hard on certs they would just go down the road to the competition, we are mindful of that and we try and do a balancing act...” (GP3, Male, trained in occupational medicine, suburban, medium practice size, working full-time)

“We are a business as well as a practice we have to be mindful of that. I suppose this is to be expected with the structure of primary healthcare in Ireland” (GP 12, Female, urban, large practice size, working part-time)

Some divergence in views was noted between GPs of different years of experience in practice. Two GPs in practice for over 20 years showed less concern surrounding their decision to refuse a sickness certificate. Their less anxious attitude may result from two factors, firstly that they are more confident in their decision making or secondly they are under less financial pressure than their younger counterparts.

“I have absolutely not doubt that if I refuse a sick note that they would go elsewhere, by in large if I have reached a decision I would not be unduly concerned if they went elsewhere” (GP2, Male, trained in occupational medicine, small practice size, suburban, working full time, >20years experience)

“do you see that (points to his professional qualification on the wall) I point to that and say to the patient I’m not risking that for anybody” (GP10, Male, large practice, urban, working full-time, >20 years’ experience)

All GPs spoke of the internal conflict they felt when sickness certification was required for a problem that had limited measurable or demonstrable pathology and this type of certification was often based on the patients’ description of their symptoms and own belief of working ability. Such a view was more pronounced when the GP had specialist occupational training.

“well People with chronic illness like depression, they feel that they are not fit for work, it is very difficult in those situations, stress cannot be measured”. (GP5, Male, trained in occupational medicine, large practice, mixed, working full-time)

“what is difficult is some illness like musculoskeletal, is to get objective evidence, on the one hand somebody says that they are unwell to work because of back pain or neck pain and they are out for a number of weeks, the next day they might come in and say they want a cert to say they are fit to work and equally you had no information of them being unfit to work, equally we have no information about them being fit to work apart from taking their word for it...(GP14, Female, trained in occupational medicine, medium practice size, urban, working full-time)

“Back pain mmm that is difficult to assess, unless you have physical evidence such as an MRI scan, but then again they might say that they can't work but they go home and lift the 5 stone bag of potatoes out of the car. In this type of situation you often have to take the patient on their word” (GP1, Male, trained in occupational medicine, medium practice size, mixed, working full time).

Further conflict in roles was described by three of the GPs in relation to the structure and level of sickness absence payments for patients and mentioned that some anomalies existed in respect to remuneration for public service employees.

“Well public service employees they are paid in full for sick leave so they might not be in any hurry to go back to work” (GP6, Female, medium practice size, urban, working part time)

“Take for example a self-employed person; they are back in work straight away because they are not entitled to any sick pay” (GP5, Male, trained in occupational medicine, large practice, mixed, working full-time)

One GP implied conflict when a patient preferred to be labelled as sick rather than unemployed but equally there may be a conflict of interest for the GP as financial incentives were being received in continuing to certify these patients as unfit for work.

“this state certification is another area where somebody is out of work because of a particular condition and entitled to social welfare, it's how to get them off that band wagon afterward can be difficult – ‘oh my back is very bad I couldn't go in’, you examine it, you can't verify it - you give them the benefit of the doubt and eventually the medical referee will see them and may certify them fit for work and they then go off certs onto the dole and his figures are going down. – ‘similarly people on the dole don't like queuing so they come in saying I've got this kind of condition. There may well be an incentive for GP to continue certifying for the state because there is a fee each time. There may be people on low income that may not be paying the doctor otherwise and now you can collect the fee each week with minimal effort” (GP10, Male, large practice, urban, working full-time)

4.2.3 Theme three – Patients and disclosure

The issue of patient confidentiality was an important concern. For state sickness certification a large amount of data was collected on the patient as well as the medical reason for absence which was kept at the DSFA. For evidence to the employer, the non-state sickness certification form had a place to write a diagnosis and all GPs indicated this was at the discretion of the patient. However in some cases the GP felt the employer did need to know the situation that presented, as it had the potential to lead to action from the employer especially if the illness was work related. The opinions of the participants were mixed with regard to the disclosure of an illness to an employer. Three GPs claimed they took a conservative approach and said they would never disclose an illness.

“I would take a traditional point of view that the only thing that needs to be written on the cert is a comment in relation to the person’s fitness” (GP8, Male, mixed, large practice size, working part-time)

“I generally write medical complaint because it is confidential, that’s between the patient and the doctor not the doctor and the employer” (GP5, Male, trained in occupational medicine, large practice, mixed, working full-time)

“it’s the patient’s business and it should be kept that way really” (GP 12, Female, urban, large practice size, working part-time)

The remaining participants felt it was important in some cases to inform the employer of the nature of the illness. However, all GPs showed some concern about breaching patient confidentiality and who might have access to the information on the certificate. Five GPs highlighted concern about disclosing illness of a psychiatric nature to an employer and worried what effect this type of illness could have on a patient in the workplace. The narratives show a range of views relating to the

disclosure of an illness to an employer. Little disparity existed in GP opinions when narratives were examined in respect of GPs' specialist training or gender.

“I think the diagnosis should be on the certificate. I had a case of somebody who did not want me to write down work related stress, she wanted me to write down gastritis. I had to work on her and eventually she did allow me to write work related stress and everything came to a head and things got sorted out, it can be better in the long run..... a lot of the time people are worried about their intimate details being broadcast, you would hope that only one person gets to see it and it not passed from desk to desk and up the chain. People ultimately worry about who is going to be reading the cert?” (GP3, Male, trained in occupational medicine, suburban, medium practice size, working full-time)

“employers can get upset if we write work related stress because that puts the onus back onto them and then they are the problem and not the patient and they don't like that, I have had a couple of calls about that, saying that they have been left in a quandary because this person has been stressed at work” (GP7, Male, medium practice size, urban, working full-time)

“patients privilege, they should inform employer at some stage, ...very confidential or sensitive issues, some employers are going to look twice at a cert that is stress, depression, and I tend to avoid that and write down medical illness, however, it is useful to write down things such as bullying as it tends to get action” (GP1, Male, trained in occupational medicine, medium practice size, mixed, working full time)

“Most of the time I will write it down , if it's a physical illness, if it's a psychiatric illness I would not write that, if it was work related stress I would write that with the patient's permission” (GP5, Male, trained in occupational medicine, large practice, mixed, working full-time)

Overall it was felt that any information on the patient ultimately belonged to the patient and disclosure without consent did breach the core concept of patient confidentiality. One GP made particular reference to the non-state system:

“the short term pieces of paper (non-state)... well that system is nuts because we are sending out letters to people that are not medical and there is a huge confidentiality issue, at the end of the day the patient's confidentiality comes first”. (GP14, Female, trained in occupational medicine, medium practice size, urban, working full-time)

4.2.4 Theme four – Supports for GPs in practice

GPs described several stakeholders in the sickness certification system including patients, employers, DSFA, medical assessors, specialists and other colleagues who were certifying in an occupational capacity as independent company assessors. All GPs expressed a level of dissatisfaction with support provided to help in fitness for work cases and mentioned the lack of resources in prevention and rehabilitation services.

The majority of GPs described the DSFA as “non-existent.” There was one exception and this GP felt the relationship did not need to be anything more than it currently was a ‘*contractual agreement*’. This GP was working on a part-time basis and primarily in the out of hours service and while he had a lot of experience working as a GP (>20 years), patients attending out of hours are usually acutely unwell and are then required to attend their usual GP if further certification is required .

Although guidelines were presented by the DSFA and a medical review system was in place, the majority of GPs stated that they never had any contact with the DSFA or the medical assessors and only received information when they had requested a case to be reviewed. One GP described the DSFA as follows:

“DSFA..., updates, nothing, no feedback, no dialogue whatsoever ...and the only link is the medical referee in the middle... we never hear, see, know what they look like, know what they are thinking” (GP10, Male, large practice, urban, working full-time, >20 years’ experience)

while a second described himself as just a number:

“I am just a number...I have had no contact with DSFA over seven years, there have been minor changes in certs which is just colour basically.(GP1, Male trained in occupational medicine, medium practice size, mixed, working full time)

a third emphasised the lack of feedback and metrics:

“DSFA- No real link in the sense..... we don't get in any feedback from them, I don't know if they know what percentage of our patients are on social welfare certs, they could give us crude numbers. They don't give us any information” (GP5, Male, trained in occupational medicine, large practice, mixed, working full-time)

Four GPs seemed unsure of the actual process in referring a patient to the medical review system for a second opinion or how they operated in their review of long term certified patients. These GPs were in practice for periods of over 10 years and certifying in practice for that duration. However, these GPs were not trained in occupational medicine. It is likely that referrals for problematic patients come under the remit of the doctor with specialist occupational training within the practice which may explain these findings.

“It's kind of vague alright, there are examinations to make certain decisions and check the genuineness of it. I am not really clear on whether I initiate that or whether the social welfare board call them” (GP 12, Female, urban, large practice size, working part-time)

“I'm not too sure what happens when I refer a patient to the medical assessors, sometimes you might get a letter other times you hear nothing” (GP7, Male, medium practice size, urban, working full-time)

Limited support for patients outside of general practice was also described by all the participants. GPs acknowledged that referral to specialist occupational physicians was an option available to them but that if the public system was used there was frequently a long wait which they feared may lead to a more chronic patient sick role. One GP with a qualification in occupational medicine described the consequence for patients when there was a long waiting time to see a specialist doctor.

“referral routes”, it can depend on if they have health insurance and can they go privately....They can get caught up in the system if waiting eighteen months to see a specialist. An illness role has developed and their life has adjusted, they have also reconditioned the routine of getting up in the morning and their chances of ever returning to work” (GP3, Male, trained in occupational medicine, suburban, medium practice size, working full-time)

There was unanimous agreement that the main support for GPs in sickness certification was through interaction with other GPs. This was often facilitated through the Continued Medical Education (CME) network.

“In our continuing education forum we have the ability to discuss difficult cases, one time we found that a guy went to one doctor looking for a cert and he didn’t get it, it turned out that he had gone to two or three in the group until eventually he got one” (GP3, Male, trained in occupational medicine, suburban, medium practice size, working full-time)

“Our CME forums give us an opportunity to discuss problems like sickness certification with other colleagues” (GP6, Female, medium practice size, urban, working part time)

4.2.5 Theme five – Training and education in sickness certification

Training in sickness certification was considered sparse. Several GPs highlighted the lack of occupational training at undergraduate and postgraduate level. The seven GPs trained in occupational medicine were keen to point out that occupational medicine training had given them a good insight into the area of sickness certification.

“Training in occupation medicine allows different perspective and process involved in medical certification” (GP1, Male trained in occupational medicine, medium practice size, mixed, working full time).

One GP stated that patients who were not genuine were more likely to stay away as a result of them being ‘*trained in occupational medicine*’ (that is, the patient perceived that a GP’s training in occupational medicine might render them less likely to issue a certificate). It was noted however that apart from guidelines, training and supports it was still not always possible to tell if a patient was telling the truth.

“there are guidelines from the DSEFA, and it’s helpful, but that doesn’t get over the issue if somebody is genuine or not” (GP2, Male, trained in occupational medicine, small practice size, suburban, working full time)

One GP who was involved in GP training commented that training in occupation medicine was something that could be improved but this was ‘*complex*’ and other factors required consideration such as the congestion in the GP training curriculum and the structure of primary healthcare. Both participants on the GP registration programme felt ill prepared to issue sickness certificates and one stated that there was no emphasis on certification in training.

“no emphasis on certification, never taught how to fill out certs or under what circumstances to give them, we were not taught which is the blue or the yellow, that’s practical stuff that you don’t really get taught in medical school”. (GP4 Female, suburban, medium practice, Registrar programme)

“you just have to learn as you go along , I’m not that confident about it to be honest” (GP 9, Female, large practice size, urban, registrar programme)

4.2.6 Theme six – Strategies for issuing sickness certificates

All GPs in this study felt that the sickness certification system was patient driven and that the patient usually initiated the conversation. The responses from GPs suggested the strategy for issuing a sickness certificate was dictated by the patient’s request to be certified. The responses from the participants suggest that GPs are reluctant to initiate conversations on the requirement for sick leave. Those with occupational training did not appear to mention alternative strategies to incorporate fitness for work at an earlier stage in the consultation.

“I will almost always wait until they ask, I mean there might be an obvious situation like an accident at work...mmm... generally wait till they ask” (GP5, Male, trained in occupational medicine, large practice, mixed, working full-time)

“Usually the patient (asks for a cert), sometimes I would ask if they needed one” (GP2, Male, trained in occupational medicine, small practice size, suburban, working full time)

“I do think it’s a bit of both, people come in and it’s their agenda and they do need a cert and that is what the whole consultation is about, and there are some people that don’t want to take time off work even though they are sick. It’s more often generated by the patient as they need them now for employment reasons” (GP14, Female, trained in occupational medicine, medium practice size, urban, working full-time)

Other strategies included giving the patient the benefit of the doubt when they presented with limited measurable pathology. Two of the GPs stated that while they had to take the patient on their word and give them the benefit of the doubt, they were not prepared to “write lies”. These comments came from one GP with a large amount of experience (greater than 20years) and another on the registrar programme.

“I don’t think we should write lies “How to cod the landlord syndrome, that a relic of the past, it’s a societal problem, it’s like the pill (referring to contraceptive pill)- you can have it for a regular bleed but you can’t have it for contraception , let’s be transparent and honest and call a spade a spade” (GP10, Male, large practice, urban, working full-time)

“I am not about to write on a cert something that is incorrect because at the end of the day it is my neck that is on the line for them to have an extra day or two off” (GP4, Female, suburban, medium practice size, Registrar programme)

GPs used various strategies to cope with extenuating social circumstances and would often certify a person as ‘stressed’ when they had to care for a sick relative. One GP illustrated his point by saying that he would attribute a child’s illness to the parent and certify the parent as suffering from the child’s ailment.

“It varies, but the longer I am in practice the more likely I am to say that they are suffering and I put down whatever the child is suffering from, if the child has an ear ache I will put down that the patient is suffering from an ear infection, because they are (laugh). If you think about it, by extension they are suffering” (GP11, Male, medium practice size, mixed, working full-time)

4.2.7 Theme seven – Scope for change

All GPs acknowledged that there was a need for change and a review of the current system. One GP commented on the need to be reminded of the ‘implication of certification’.

“a lot of employers allow leave without certification for a limited number of days during the year. I have no strong views on it because if you were to make that the norm then I think you are giving license to people to self-certify, you are putting it in the public domain - I think we as a medical profession do need to be reminded of the implication or certification because we can become complacent and thoughtless about it” (GP10, Male, large practice, urban, working full-time)

A number of suggestions were put forward to improve the current system including a regulated self-certification period similar to that in the UK and other European countries and the facility for other professions to certify in shorter term illness. Participants with the strongest views towards reform of the system and to suggest an option for self-certification were largely trained in occupational medicine. All seven GPs with occupational training made reference to change the requirement for short term illness. Comments are illustrated below;

“alternative to sick note - occupational nurse should be used or self-certification”
(GP1, Male, trained in occupational medicine, medium practice size, mixed, working full time)

“I would be keen on a patient as going back to work to do light or alternative duties, I think that could be a helpful thing”(GP 2, Male, trained in occupational medicine, suburban, working full-time)

“the challenge is probably to look at people being able to self-certify themselves for self-limiting illness, I think it’s a great idea, I am all for giving people autonomy and responsibility”. (GP5, Male, trained in occupational medicine, large practice, suburban, working full-time)

“self-certification especially for an illness where the person only has to come to the doctor for a cert (GP 12, Female, urban, large practice size, working part-time)

Two GPs raised concerns about changing the current system and made reference to the cultural aspects of Irish society.

“I am a great believer and I think that if you can generate honesty transparency and trust of an employee for a company then self-certification has to be the way to go, medical certification in my opinion is somewhat abused in Ireland...I don't know about the Irish mentality though, the Irish love something for free and while there is no evidence to back this up that is my personal opinion not a professional one” (GP1, Male Trained in occupational medicine, medium practice size, mixed, working full time)

“Self-certification I don't know, not in the Irish society we live in at the moment (laugh), the question is who the self-certification thing would go to and who is going to judge that. I think it would be very problematic” (GP14, Female, trained in occupational medicine, medium practice size, urban, working full-time)

GPs were asked if the sickness certification process could be improved if patients were required to register at only one practice and did not have the freedom to shop around. They all replied positively and that all patients should have ‘their usual doctor’.

Some of the comments suggested the need for change in the state sickness certification system. The changes deemed necessary were to the administrative aspects of sickness certification, to guidelines concerning examination rules, fitness for work criteria and certification periods.

“Again, a number of people on long term disability, they probably couldn't go back to the work that they are doing, but I wouldn't see them never working again and I think that it's a real shame, so what you are getting at is are they fit to work or unfit to work... yes that needs to be changed” (GP7, Male, medium practice size, urban, working full-time)

“I mean if somebody is out and they have broken their leg then why would you bring them in every week and review them, clearly it going to take six weeks to heal, so that is a change yes... it is silly a waste of resources” (GP14, Female, trained in occupational medicine, medium practice size, urban, working full-time)

One GP described the situation of a current patient who was being certified, and highlighted how the state system’s terminology “unfit for work” was based on the

GP's interpretation he also hinted at possible adaptations that would facilitate a return to work:

“I have a girl who is off for stress at the moment... she just can't work in that job... in my view she could work in a less stressful one. She lives at home and has no real expenses so it suits her not to work at the moment, you might ask why certify her then, what can you do? She is unfit in her current role and that's about the size of it. (GP 15, Male, small practice size, rural, working full-time)

While another stated:

“Again, a number of people on long term disability, they probably couldn't go back to the work that they are doing, but I wouldn't see them never working again and I think that it's a real shame, so are they fit to work or unfit to work is the question?”(GP7, Male, medium practice size, urban, working full-time).

4.2.8 Theme eight – Employers, attitudes and practice

When asked about the type of occupational illnesses that GPs most frequently deal with in primary healthcare, musculoskeletal and psychological problems were the two types of condition that were most frequently mentioned.

“Occupational related stress is most common, depending on industry a lot of musculoskeletal injury in construction. Bullying is also a big problem” (GP1, Male, trained in occupational medicine, medium practice size, mixed, working full time)

“Things that occur as a result of workplace or are aggravated by the work place, hazards, most common, musculoskeletal and soft tissue issues. Occupational stress is something that we are seeing a bit of...” (GP5, Male, trained in occupational medicine, large practice, mixed, working full-time)

“The usual stuff, musculoskeletal pain and stress, yes a lot of stress” (GP6, Female, medium practice size, urban, working part time)

GPs spent a proportion of the interview discussing their views of employers. While it was felt that GPs have a certain amount of responsibility to the employer, several of the participants expressed the opinion that employers were responsible for some

sickness absence because of the policies and practices that operated in their workplaces.

“The other side of it is that many employers have a situation set up like a sick pay scheme where somebody has to produce a piece of paper justifying “their absence or I have seen in some situations where somebody has to be out for 3 days before they get something on the sick pay scheme” (GP5, Male, trained in occupational medicine, large practice, mixed, working full-time)

“parents seeking sick notes when children are sick, this should be better facilitated by employers, some employers are blinkered” (GP1, Male, trained in occupational medicine, medium practice size, mixed, working full time)

Another participant highlighted that the whole system had emerged over time and employers may be using the system to control absenteeism.

“well the whole system of doctors giving these certs to employers; that whole system has emerged over time. We need a societal change on the whole idea of certs - this idea of employers allowing sick days, oh you can take X number of sick days per year...well I mean of course it is going to be abused, people see it as an extension of their holidays. If the patient is telling the lie about their fitness, that is a societal problem why are patients telling the lies ... is it the ethos of the job? So why then use the doctor to tell the employer, yes she was sick. I suppose we are in some way seen as a gatekeeper to control absence levels” (GP11, Male, medium practice size, mixed, working full-time)

In some cases parents of sick children asked the GP to certify them as the sick person as they were unable to take uncertified time from work to provide care. GPs thought that such a system was inflexible and did not offer alternatives to employees who were unable to attend work for reasons other than sickness. One GP commented that such situations should be “better facilitated by employers”. Other GPs suggested that happy employees resulted in healthier employees. Comments reflected the opinions of some GPs that the links between them and employers could be improved in the interest of patients.

“Communication could be an awful lot better, typically what happens is a person might come in off their own bat or they may be referred, typically the GP does not get any background or information on the person’s job description or how they are managing at work, recent changes, how often they have been out of work... you

need as much background as possible to be as helpful as possible. Where an employer sends a patient in with no written information and expects you to figure it out from what the patient is telling you...The better the communication the better the outcome” (GP6, Female, medium practice size, urban, working part time)

In contrast one GP thought that it was not the function of GPs to engage with employers. This GP was working out of hours perhaps did not appear to have the same experiences as the other participants and thus may explain the divergent view.

“If there is a company medical advisor in place, I think the two doctors can control the volume of communication... I think if you bring the employer in, the employer’s skill set is centrally associated with the work process in a lot of respects is not skilled or effective in meaningful communication with doctors” (GP8, Male, mixed, large practice size, working part-time)

Another felt that communication with employers could be beneficial but could prove to be difficult:

“That is debatable, the primary relationship is between the GP and the patient, sometimes you can have the employer ringing the GP without the patient’s knowledge requesting information about the issuing of certs, that can be difficult, with the risk of breaching patient confidentiality. I think it could be something that could conceivably be worked on” (GP2, Male, trained in occupational medicine, suburban, small practice, working full-time)

Some of the comments raised concerns about the limited knowledge they and other GPs had in relation to the tasks patients were conducting in the workplace. Such deficiencies rendered the decision about fitness for work more difficult. It was acknowledged that larger organisations were proactive in occupational issues and usually employed an occupational doctor to assess fitness for work. Comments reflected a view that such a system should become a requirement of all organisations.

“I think that every company by law should have a company doctor... If you are really serious about cutting down on absenteeism and improving the general health of your workers that would be the way to go” (GP3, Male, trained in

occupational medicine, suburban, medium practice size, working full-time)

It was suggested that fear of litigation could influence employers negatively and the majority of the participants felt that the fear among employers had an impact on the certification process. GPs thought that some employers might not wish to allow a claimant into the workplace while compensation procedures continued.

“That’s a huge issue ...when litigation is complete; when the process is complete, often back pain will improve...I suppose if you focus on neck and back pain it’s going to be worse.... I think it would be wonderful to have a staged return to work; some employers are less understanding and won’t give somebody a less physical task” (GP7, Male, medium practice size, urban, working full-time)

4.2.9 Summary of results for study 1

GPs acknowledged their role as advocate and their professional responsibilities in the provision of sickness certification. While they expressed the view that a high proportion of sickness certification was genuine and did not present difficulties for them, they were concerned with aspects of the current system. Some of the concerns seemed specific to the structure of general practice in Ireland and the requirement to maintain business viability by retaining and keeping patients happy. Conflict in sickness certification was a strong theme and predominantly related to the refusal of a sick note when patients experienced events which did not necessarily deem them ‘unfit for work’. Some divergence in views became obvious for GPs of different years of practice with older GPs having less anxious attitudes. It is feasible that younger GPs may experience more internal and external business pressures which become lessened over time, these could include mortgage payments for surgeries and high start-up costs of medical equipment. Outside of general practice younger GPs are more likely to have additional family commitments which may add to their financial pressures. Other themes identified over the course of the interviews were GPs’ difficulties in assessing

fitness for work. Interestingly this was present regardless of the doctor training in occupational medicine. However, those with occupational training were more likely to highlight the role of the employer and practical solutions such as phased return to work and self-certification for short term illness and appeared to have a greater understanding of the DSFA (now DSP) referral system. Lack of resources in prevention and rehabilitation, lack of training in occupational medicine, problems with employers and employment practices were other cited reasons for difficulties in sickness certification and this was apparent regardless of GPs' characteristics. Lack of contact with the DSFA was noted by 13 of the 14 GPs. The main divergent view was from a part-time doctor working in an out of hour's service. It is likely that this opposing view is due to the fact that GPs working in this environment are more exposed to those suffering from acute illness requiring immediate treatment and less likely to encounter longer term illness requiring on-going certification. Similar opposing views in relation to the lack of contact with the DSFA were not apparent from other GPs working in a part-time capacity. All of the participants were concerned with lack of flexibility in the system and concerns about possible breaches of patient confidentiality in reporting of illness to employers. GPs noted the various strategies for dealing with sickness certification, including waiting for a patient to ask before offering a sickness certificate, certifying a person as unfit for work when in fact somebody else was sick and giving the patient the benefit of the doubt in the absence of measurable pathology and this did not appear to follow any distinct pattern based on GPs characteristics. However, GPs with greater years of experience appeared more confident in their certification strategy and often made some comment to their years in practice in their decision making process. Regardless of the GPs' gender, age, practice size, location and years of experience all agreed that scope for change exists in the current system in Ireland.

4.3 Study 2 Results

4.3.1 Introduction

I will first describe the response rate and assess the representativeness of the participants who participated in the quantitative study. Personal, practice and educational characteristics of the participants are also described.

Descriptive statistics are used to describe the results of the vignettes versions. Mean scores used as a continuous variable were used to summarise the results across each version and for each of the four main dimension items in the questionnaire i.e. perceived fitness for work, total sympathy, satisfaction with decision making and positive or negative feeling to sickness certification. Because of the small sample size obtained in some of the vignette versions, statistical testing of means was not considered appropriate to check for statistical significance.

Pooling of the data created a larger sample size (i.e. n=31 psychological, n=26 physical) in each group and a series of 1, 2 and 3-way ANOVAs were conducted to show how the main effect and interaction effects could be examined for each independent variable (presenting illness, presence and absence of adverse social circumstances and patient request or reluctance to be certified) and their relationship with the four main constructs (fitness for work, satisfaction with decision making, total sympathy and positive or negative feeling towards sickness certification). It was important to look at the results not only in terms of statistical significance but in terms of their clinical importance and potential interaction effects and considerations for future studies.

4.3.2 Response rate

Table 15 below gives the details on the responses to the questionnaire, the response rate being 47% but with a useable rate of 31%. Of the 62 replies 25(40.3%) were male and 37(59.7%) were female. The majority of GPs were Irish trained, 51(82.2%) and were spread across arrange of GP practice locations each of which was well represented. Group practices of greater than five GPs may have been somewhat under represented with only 10(16.1%) of the total participants. The majority of the GPs worked in medium size practices 44(71%) and 46(74.2%) were listed as a state medical certifier. 59 of the respondent or 95% of the sample had no formal postgraduate training in occupational medicine.

Characteristics of the participants were firstly compared to the non-participants and then to the general GP population in respect of gender and age group to check for representativeness of the sample. This normative data included gender and age of GPs working in Ireland (including the number of GPs over 60 years), and percentage of GPs who undertook their vocational training in Ireland (see table 14). Female respondents were slightly higher than the general female GP population at 59.7% (respondent) versus 44% (normative), while male participants were slightly lower (49.8% (respondent) versus 54% (normative)). The mean GP age was similar at 47.8 years (normative) and 46 years (respondent). Eighty-four percent of the GP population were indicated as completing their vocational training in Ireland and this compared to 82% completing the questionnaire.

Table 14 Comparison of normative and respondent data

	Normative data¹³	Respondent data
Mean age	47.8 years	46 years
<i>Proportion of GPs greater than 60 years</i>	15%	<i>Greater than 50years (33%)</i>
Sex		
Male	56%	40.3%
Female	44%	59.7%
Vocational training in Ireland	84%	82.2%

Normative data based on workforce planning conducted by Teljuer et al (2010)

¹³ Normative data is based on work conducted by Conor Teljuer et al. (2010) examining General Practitioner work force planning in Ireland

Table 15 Showing GP characteristics by frequency and percentage for total group who agreed to participate (N=94) and those who fully took part in the questionnaire (n=62)

N = (94)	Total no. of responding GPs % (total)		No of participating GPs (n=62) %	
Age				
25-30 years	2	2.1%	1	1.6%
31-40years	38	40.4%	23	37.1%
41-50years	22	23.4%	17	27.4%
Older than 50years	32	31.7%	21	33.9%
Gender				
Male	36	38.3%	25	40.3%
Female	58	61.7%	37	59.7%
Undergraduate training				
Ireland	89	94.7%	59	94.2%
UK	3	3.2%	2	3.2%
Other EU	2	2.1%	1	1.6%
GP training				
Ireland	75	80.0%	51	82.2%
UK	16	17.0%	9	14.5%
EU other	1	1.5%	1	1.6%
USA	1	1.5%	1	1.6%
Postgraduate training in Occupational medicine				
Yes	4	4.3%	3	4.8%
No	90	95.7%	59	95.2%
Practice location				
Urban	38	40.4%	19	30.6%
Suburban	17	18.1%	14	22.6%
Suburban near large urban centre	16	17.0%	12	19.4%
Rural	21	22.3%	16	25.8%
Remote	2	2.1%	1	1.6%
Practice size				
Small (less than 2,000)	14	14.9%	11	17.7%
Medium (2,000-8,000)	64	68.1%	41	66.1%
Large (greater than 8,000)	8	17.0%	10	16.1%
Practice type				
Single handed GP	18	19.1%	11	17.7%
Small group (1-4GPs)	66	70.2%	44	71.0%
Group (5GPs or more)	10	10.6%	7	11.3%
Patient profile				
Mixed (GMS and non GMS)	92	97.9%	60	96.8%
Private	2	2.1%	2	3.2%
Years of practice in current location				
Less than 1 year				
1-5 years	26	11.7%	7	11.3%
6-10years	11	27.7%	16	25.8%
10-15 years	10	11.7%	9	14.5%
Greater than 15 years	36	38.3%	26	
State medical certifier				
Yes	72	76.6%	46	74.2%
No	22	23.4%	16	25.8%

4.3.3 Content analysis of the open ended questions contained in the vignette

After reading the vignette, each of the participants were asked to electronically enter their typical responses to three open-ended questions relating to the specific fitness for work consultation to a maximum of 200 words. The vignette type and variable key is shown in table 16 below and responses are shown thematically in table 17.

1. What specific information would you search for related to the patient's social/family circumstances

2. What specific information would you search for in the patient history related to the workplace

3. What additional information would you require in order to assess the severity of the condition

Table 16 Showing the vignette type and variable key

Vignette Number	Vignette Type	Variable key
1	Psychological problem, social circumstances present, request a sickness certificate	+++ (Psychological)
2	Psychological problem, social circumstances present, reluctant patient	++- (Psychological)
3	Psychological problem, social circumstances absent, request a sickness certificate	+-- (Psychological)
4	Psychological problem, social circumstances absent, reluctant patient	+-- (Psychological)
5	Physical problem, social circumstances present, request a sickness certificate	+++ (Physical)
6	Physical problem, social circumstances present, reluctant patient	++- (Physical)
7	Physical problem, social circumstances absent, request a sickness certificate	+-- (Physical)
8	Physical problem, social circumstances absent, reluctant patient	+-- (Physical)

Table 17 Showing main thematic categories and number of references to each item

Vignette version	PSY+++ n=7	PSY++- n=9	PSY+- n=8	PSY+-- n=7	PHY+++ n=5	PHY++- n=7	PHY+-+ n=7	PHY+-- n=12
Question 1								
Information seeking related to the patients social/family circumstances								
Thematic category	(f)	(f)	(f)	(f)	(f)	(f)	(f)	(f)
Interpersonal stress	4	3	2	2	2	3	1	3
Support structure (Spouse, family, childcare, friends)	5	7	6	3	0	6	1	3
Relationship Health	4	6	5	1	2	1	1	2
Financial situation	1	3	1	5	1	2	3	2
Substance misuse	1	4	4	3	0	1	1	4
Family history of illness	0	1	1	3	1	0	1	0
Social Isolation/ living conditions	0	0	5	2	0	0	1	4
Physical activity and other interests	0	3	4	1	1	0	0	4
Question 2								
Information seeking related to the patient's workplace								
Thematic category	(f)	(f)	(f)	(f)	(f)	(f)	(f)	(f)
Work-related stress	1	2	3	2	1	0	0	0
Work load	1	5	5	3	0	2	0	1
Bullying at work	4	3	5	3	2	0	1	0
Inter staff relationships and employee supports	4	5	3	3	1	0	1	4
Working tasks	4	2	3	0	4	5	3	8
Working conditions	0	2	3	5	2	6	2	10
Job satisfaction	2	0	0	0	2	0	1	1
Job security	2	0	2	1	1	0	1	1
Question 3								
Additional information needed to assess severity of patient's condition								
Thematic category	(f)	(f)	(f)	(f)	(f)	(f)	(f)	(f)
Suicidal ideation	1	6	4	6	0	0	0	0
Physical and psychological signs and symptoms (mood, sleep appetite changes)	3	5	6	3	2	4	3	9
Physical medical evidence (x-ray, MRI etc.)	0	0	0	0	2	3	5	8
Consultant's report	1	1	0	0	0	0	2	0
Family history	3	2	3	0	0	1	0	2
Medication history	2	1	0	0	0	2	1	2

4.3.4 Summary of results from open ended questions

4.3.4.1 Social circumstances and psychological problems

Support structures, relationship health, interpersonal and financial circumstance were dominant themes across all vignette versions. Overall, GPs wanted to know more about the patient's social circumstances when presented with a psychological problem. The mode of presentation may trigger specific information seeking during the consultation process. The presence of a psychological problem prompted greater inquiry into family support structures, the presence or absence of problems in the patient's relationships, and financial worries when compared to a patient having a physical problem. Having a psychological problem was associated with increased concern from the GP about addiction and substance misuse. The presence of adverse social circumstances did not appear to impact greatly on the information seeking process; however, social isolation and poor living conditions were mentioned in the case of the single patient and were given greater importance by the GP when the patient had a psychological condition. The GPs' concern about suicide appeared more marked when the patient was reluctant to take additional time off from work.

4.3.4.2 Workplace factors

Information seeking on patients' workplace was consistent with known reasons for workplace sickness leave but there were differences based on the type of presenting problem. Taking history of the workplace included working conditions, workload, work ethic, job satisfaction, job security, and inter-staff relationships and employee

support mechanisms. GPs considered the working tasks of patients more often when presented with the physical condition and seemed to engage in more detailed inquiry when the patient was reluctant to take additional time off from work; whereas in the case of the patient with the psychological problem GPs were more concerned with workload and with social networks and relationships with employers and fellow employees.

4.3.4.3 Medical aspects

Additional information needed to assess the severity of the condition was largely associated with clinical diagnostics and included medical assessments, medical history, medication and results from previous diagnostic examinations. Corroborating medical evidence required to assess the severity of the condition was evident for the patient with a physical problem (X-ray, MRI) but not sought for the patient with the psychological problem (i.e. psychiatric assessment, psychiatrist report). Suicidal ideation was most frequently requested to assess the severity of the psychological condition while assessing evidence in the physical complaint was mostly related to obtaining the results of MRI and X-ray procedures.

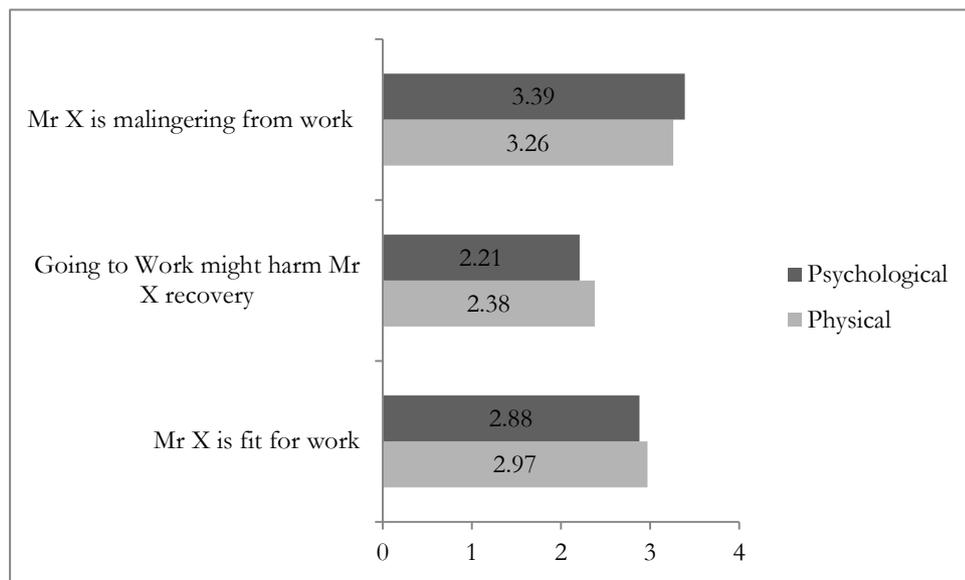
4.3.5 Questionnaire results

4.3.5.1 Description of patient fitness for work

Figure 9 shows the combined mean scores based on illness type (psychological problem (ILM) (n=31) versus physical problem (LBP) (n=26)). After reading the vignette participants were asked to rate the patient fitness for work on a four point

Likert scale (agree strongly = 1, agree = 2, disagree = 3 and disagree strongly = 4). Lower mean scores indicated stronger agreement with each of the statements. There is strong indication that GPs consider all presenting patients as unfit for work. Small differences were observed in mean scores across each of the vignette versions. GPs did not consider any of the patients as malingering from work. Social circumstances or the request for certificate did not appear to impact on scores of GPs' descriptions of perceived fitness for work following examination of individual mean score values.

Figure 9 This figure show a summary of combined mean scores based on illness type psychological (vignette 1-4), and physical (vignette 5-8), in relation to question 1 “How would you describe Mr X fitness for work?”

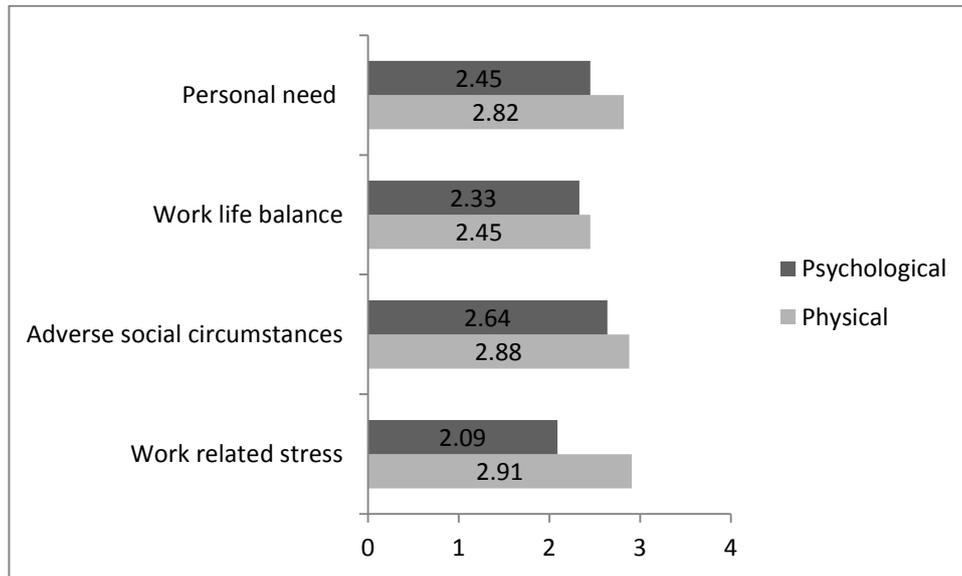


Mean scores by combining score for ILM (vignette1-4) and LBP (vignette 5-8)
Mean scores below the midpoint of 2 show agreement with each of the statement, while score above the midpoint of 2 show disagreement with the statements shown for A, B, and C.

4.3.5.2 Perceived contributory causes

Question 2 was concerned with perceived contributory causes to both presenting condition of ILM (n=31) and LBP (n=26). The participants were asked to rate their level of agreement with each of the four statements (to a large extent = 1, to a moderate extent = 2, to some extent = 3 and to no extent = 4). Figure 10 shows the combined mean scores based on illness type (ILM versus LBP). Lower mean scores indicated stronger agreement with the statement. When presenting condition is examined, work related stress is shown to be a contributory cause in the patient fitness for work to a greater extent in patients with the psychological condition. The presence of social circumstances did not appear to impact greatly on the perceived contributory cause in the patient's fitness for work; however when the patient was reluctant to take sickness leave combined mean scores were higher (2.90 versus 2.50) and showed less agreement that adverse social circumstances were a contributory cause in the patient's condition. The request to be certified generated a greater belief that work-life balance is a contributory cause in patients reluctant to opt for sickness leave and to a greater extent in patients with a psychological condition (mean 2.06 versus 2.58).

Figure 10 This figure show a summary of combined means scores for illness type psychological (vignette 1-4 (ILM), and physical (vignettes 5-8 (LBP)), for question 2 “How would you describe Mr X fitness for work?”



Mean scores are combined totals based on illness type (vignette 1-4 (ILM), vignette 5-8 (LBP)) Lower mean scores indicate a stronger agreement that A, B, C or D has contributed to Mr X overall fitness for work.

4.3.5.3 Issuing a sickness certificate

Question 3 asked participating GPs to indicate if they would issue the patient presented in the vignette with a sickness certificate. All participants (100%) of GPs presented with the psychological scenario agreed that certification was warranted. For the physical condition of LBP, 84% or 26 of the 31 responding GPs opted to certify the patient. The refusal by the GP to certify was spread across the LBP vignette versions (5-8) (version 5 (n=1), version 6 (n=1), version 7 (n=2), version 8 (n=1)).

The certifying participants were asked to indicate the recommended period of certification. Certification duration periods were longer for the psychological condition, showing an average time of 1 - 2 weeks while the patient with a physical complaint recorded an average time of 4 – 7 days. The presence of social circumstances or the request to be certified did not appear to influence the duration of

certified absence granted. The average certification period for each vignette version is also shown in table 18 below.

Table 18 This table shows the recommended certification period averages for condition type (ILM and LBP) and for each vignette version.

Vignette version	1-3 Days	4-7 Days	1-2 weeks	2-4 weeks	4 weeks +
1	0	1 (14.3%)	5 (71.4%)	1 (14.3%)	0
2	1 (11.1%)	0	6 (66.7%)	1 (11.1%)	1 (11.1%)
3	1 (12.5%)	0	5 (62.5%)	2 (25.0%)	0
4	0	0	5 (71.4%)	2 (28.6%)	
Psy (ILM n=31)	n=1 (3.2%)	n=2(6.5%)	n=21(67.7%)	n=6 (19.4%)	n=1(3.2%)
5	0	1 (25%)	2 (50%)	1 (25%)	0
6	0	4 (66.7%)	2 (33.3%)	0	0
7	3(60%)	2 (40%)	0	0	0
8	0	7 (63.6%)	3 (27.3%)	1(9.1%)	0
Phy (LBP n=26)	n=3 (11.5%)	n=14(53.8%)	n=7(26.9%)	n=2 (7.7%)	n=0

This table shows the recommended number of days for each of the vignette version and the average number when the vignette type (Psychological (ILM) 1-4, Physical (LBP) 5-8) is combined. Average days are higher for the psychological condition (1-2 weeks) in comparison to the physical condition (4-7 days).

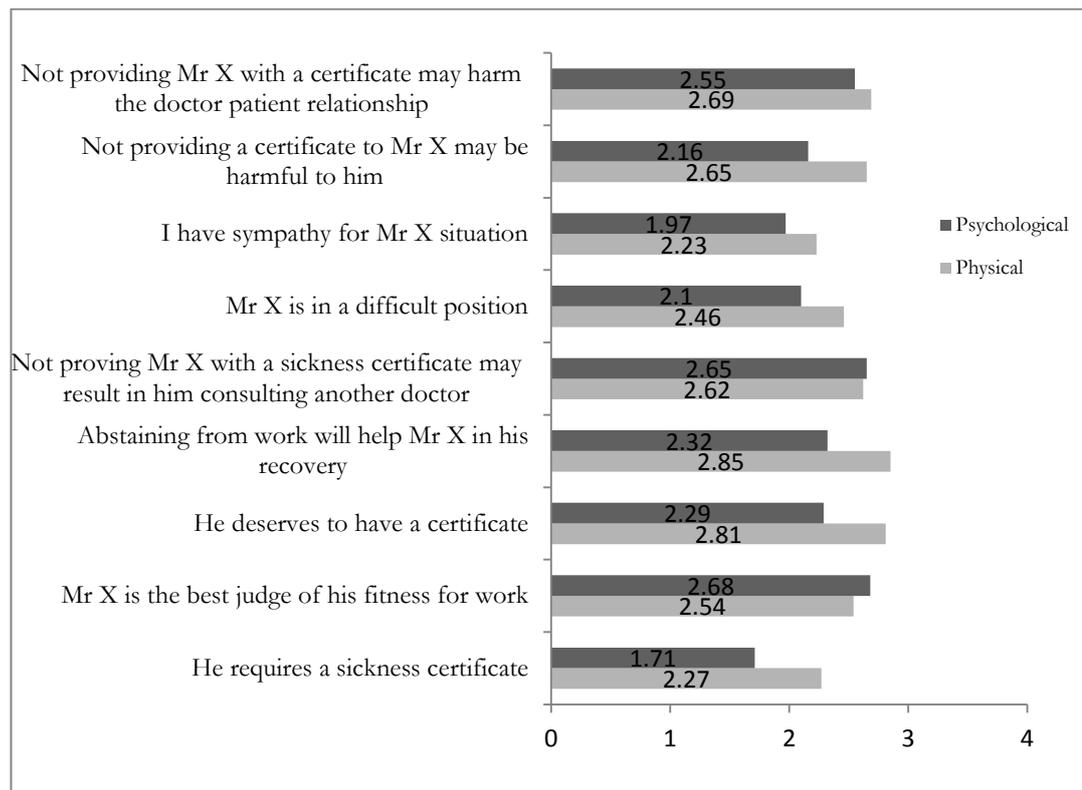
4.3.5.4 Agreement on the decision to certify

Results are shown in figure 11 below for participants who made the decision to provide the patient with a sickness certificate. The participants were asked to indicate their level of agreement with each of statements related to their decision to provide the patient with a sickness certificate using a 4 point Likert scale (to a large extent = 1, to a moderate extent = 2, to some extent = 3 and to no extent = 4). Lower mean scores indicated stronger agreement with each of the statements. Results indicate that participants have greater sympathy for patients with a psychological problem and

consider them more deserving of certification when compared to patients with a physical condition. Stronger agreement that abstaining from work will help “Mr X” is also observed in the case of patients with a psychological problem.

The presence of adverse social circumstances indicated that doctors were more sympathetic towards the single patient and had greater sympathy (mean 1.87) in comparison to married patients (mean 2.13). The patient’s request to be certified did not appear to have any significant effect on scores on GPs’ decision making based on illness type.

Figure 11 Showing combined mean scores by illness type in GPs’ decision to certify the patient; question 4 “You have decided to provide Mr X with a sickness certificate. Can you please indicate to what extent you agree with the following statements?”

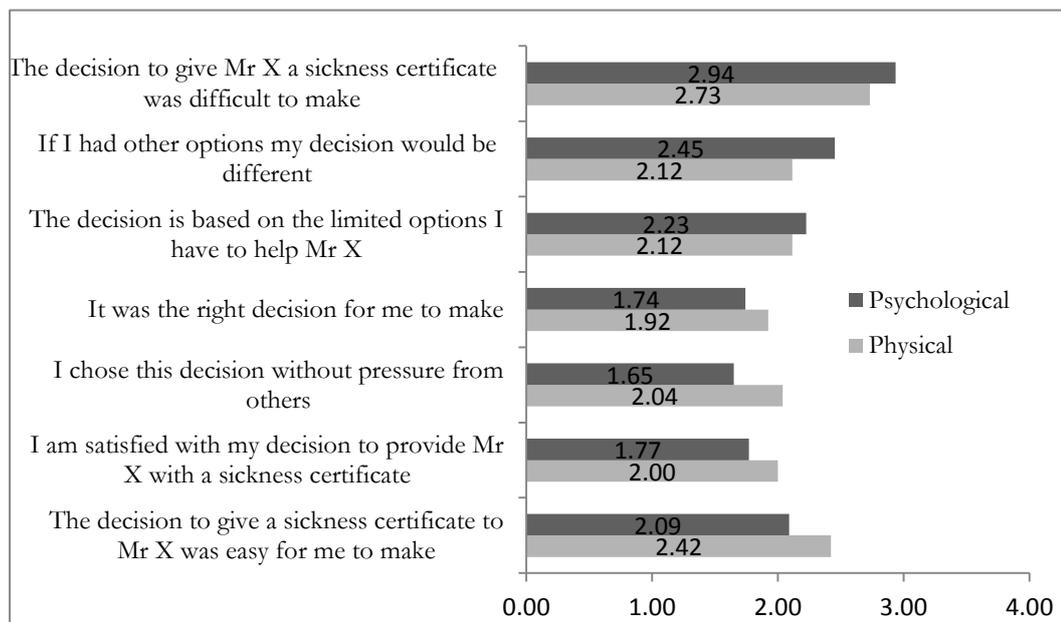


Scores are based combined scores of illness type (ILM v LBP) on a 4-point Likert scale and measured on a continuous scale (to a large extent = 1, to a moderate extent = 2, to some extent = 3 and to no extent = 4). Lower mean scores indicate stronger agreement with each of the statements.

4.3.5.5 Satisfaction with decision making

Question 5 examined doctors' satisfaction with providing sickness certification. Each of the participants was asked to indicate their level of satisfaction with the decision they had made to certify the patient (agree strongly =1, agree = 2, disagree = 3 and disagree strongly = 4). Figure 12 shows the combined mean scores based on illness type (ILM n=31, LBP n=26). Lower mean scores indicated stronger agreement with each of the statements. Results indicated that participants found it easier to provide a certificate, had greater satisfaction in their decision making, felt less pressured and considered their choice to be in the patient's best interest when the patient presented with a psychological problem. Little difference was found in relation to the belief that the decision to certify was based on the limited options available to help the patient.

Figure 12 Showing GPs' satisfaction with decision making for illness type question 5 "With reference to your decision to provide Mr X with a sickness certificate, how would you describe your decision"

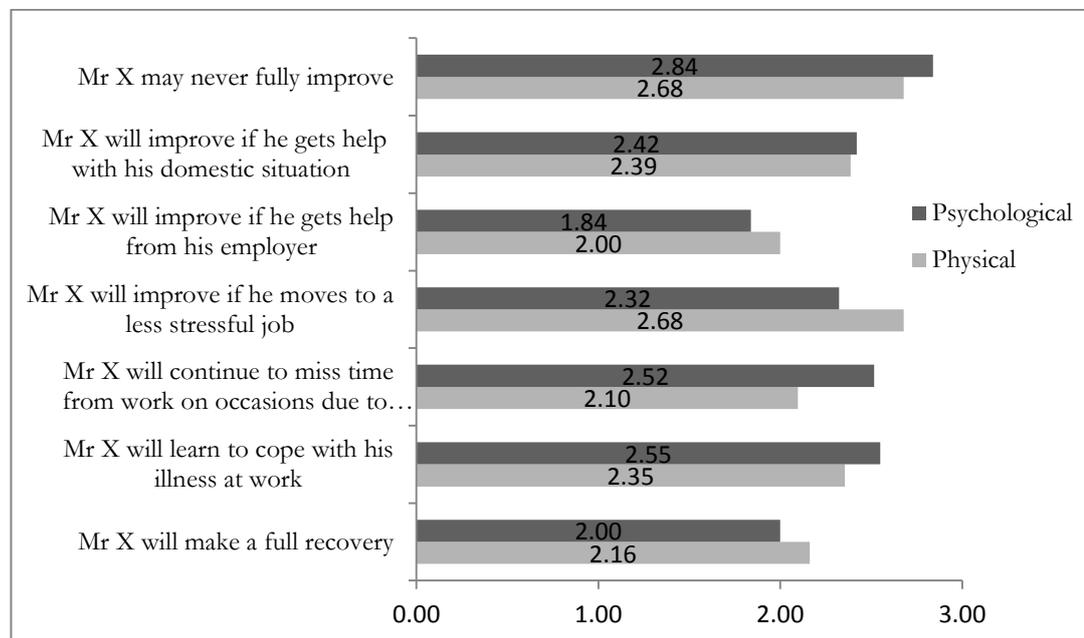


Scores are based on combined vignette version psychological (vignette1-4) and (physical 5-8). Mean scores are based on a continuous scale (agree strongly = 1, agree = 2, disagree = 3 and disagree strongly = 4). Scores below the midpoint of 2 show agreement with each of the statement, while score above the midpoint of 2 show disagreement with the statements shown for A-G.

4.3.6 Expectation for the patient

Question 6 was related to the GP expectation for the patient. Each of the participants was asked to indicate their expectations for the patient based on the four point Likert scale (To a large extent = 1, to a moderate extent = 2, to a small extent = 3 and to no extent = 4). Lower mean score indicated strongest agreement with each of the statements. Combined means scores by illness type (Vignette 1-4 (ILM), n=31, Vignette 5-8, (LBP)=26) showed small differences across statements (see figure 13) . There was agreement that improvement in the patient’s situation for both conditions could result following help from the employer. Overall the scores reflected a positive belief that the patient would improve and make a recovery.

Figure 13 Showing score for the participants expectations for the patient as indicated in question 6 “What is your expectation for the patient”

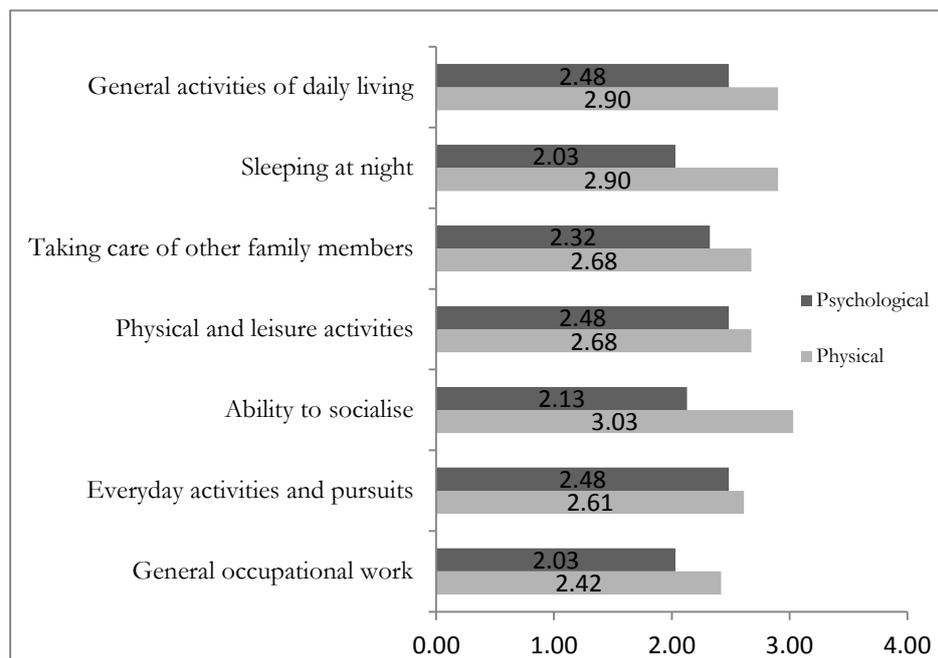


Scores are combined mean scores by illness type (vignette 1-4 (ILM), vignette 5-8 (LBP)) and based on a 4-point Likert scale and measured on a continuous scale (to a large extent = 1, to a moderate extent = 2, to some extent = 3 and to no extent = 4). Lower mean scores indicate stronger agreement which each of the statement A-G.

4.3.7 Impact of the presenting illness on activities of daily living

In question 7, each of the participants were asked to rate how the patient complaint might limit them from a number of activities using a four point Likert scale (To a large extent = 1, to a moderate extent = 2, to a small extent = 3 and to no extent = 4). Lower means scores indicated stronger agreement with each of the statements related to the activity (see figure 14 below). In relation to the presenting illness, doctors showed stronger agreement that the condition would affect occupational work, ability to socialise and sleeping at night in the case of the patient with the psychological condition.

Figure 14 Showing combined mean scores based on illness type (ILM v LBP) indicated for Question 7 - “To what extent will Mr X complaint limit him from the following activities?”

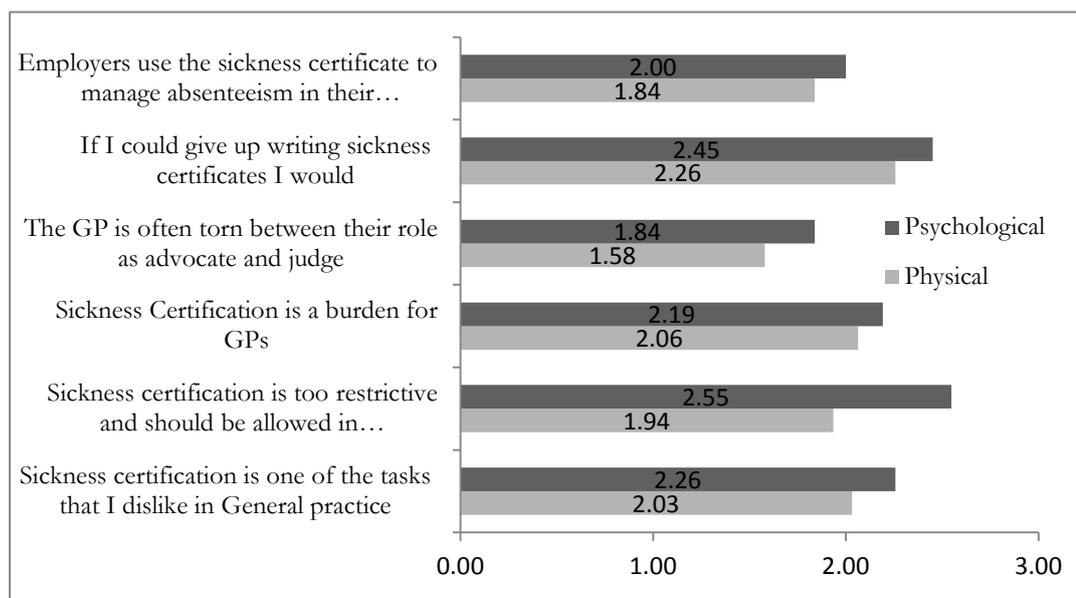


Scores are combined mean scores based on illness type (ILM Vignette1-4, LPB Vignette 5-8) based on a 4-point Likert scale and measured on a continuous scale (to a large extent = 1, to a moderate extent = 2, to some extent = 3 and to no extent = 4). Lower mean scores indicate stronger agreement which each of the statement A-G.

4.3.8 Positive or negative feeling to sickness certification

The final question was concerned with GPs' positive or negative feeling towards the prescribing sickness certification in general practice. Participants were asked to indicate their level of agreement for six statements using a four point Likert scale (agree strongly = 1, agree = 2, disagree = 3 and disagree strongly = 4). Lower mean scores indicated stronger agreement with each of the statements. Figure 15 shows the combined mean scores based on illness type (vignette 1-4 ILM, n=31, vignette 5-8 LBP, n=26). Stronger agreement was observed for the participants presented with the patient presenting with a physical problem. Moderate agreement that the GP was torn between there role of advocate and judge was observed. Further analysis of each vignette version showed that this agreement was independent of the presence or absence of social circumstances or request to be certified.

Figure 15 Showing combined scores based on illness type for GP feeling toward the task of sickness certification for question 7 - “In relation to sickness certification in general practice to what extent do you agree with the following statements?”



Scores are based on combined vignette versions by illness type (ILM vignette 1-4 and LBP vignette 5-8). Mean scores are measured on a continuous scale (agree strongly = 1, agree = 2, disagree = 3 and disagree strongly = 4). Scores below the midpoint of 2 show agreement with each of the statement, while score above the midpoint of 2 show a level of disagreement with the statements shown for A-G.

4.3.9 Analysis of constructs within the questionnaire

Table 19 illustrates mean scores and standard deviation for the main dimensions within the questionnaire for each vignette type.

4.3.10 Fitness for work

Score for the fitness to work construct was based on a scale of 4 -16 where a score of 4 was considered to show strong agreement that the patient was unfit for work and a score of 16 had the highest agreement that the patient was fit for work. When total fitness for work was considered, GPs' felt the patient with the physical condition had a greater level of fitness for work in comparison to the patient with the psychological problem, showing higher mean score across all four vignette versions. Vignette 7 showed highest agreements that the patient was fit for work (mean 11.43, range = 10-12) while vignette 1 (mean score 8.34, range = 6-11) and 4 (mean score 8.34, range = 5-10) showed strongest agreement that the patient was unfit for work (see table 18).

Table 19 Showing mean scores for items on the fitness for work scale.

Psychological n=31				Physical n=26			
Social circumstances present n=16		Social circumstances absent n=15		Social circumstances present n=10		Social circumstances absent n=16	
Request n =7	Reluctant n=9	Request n=8	Reluctant n=7	Request n=4	Reluctant n=6	Request n=5	Reluctant n=11
Mean (range)	Mean (range)	Mean (range)	Mean (range)	Mean (range)	Mean (range)	Mean (range)	Mean (range)
8.43 (6-11)	9.00 (7-11)	8.50 (6-11)	8.43 (5-10)	9.75 (8-11)	9.33 (8-10)	11.4 (10-12)	9.36 (6-16)

Scores are based on combined scores for fitness for work scale (4 items), see table 5. Higher scores reflect stronger agreement that the patient is fit for work.

4.3.11 Patient sympathy

Score for patient sympathy were related to 3 principal statements (see table 20) and based on a scale of 3 to 12 where a score of 3 had the highest level of sympathy for the patient and a score of 12 had the lowest level of sympathy for the patient. Based on the scale combined scores of 9 or above was highly indicative that the GP had no sympathy for the patient. A level of sympathy for the patient was displayed by all GPs. Patients presenting with the psychological condition of ILM generated greater sympathy when compared to the patient with the physical condition. Vignette 4 generated the greatest amount of sympathy (mean 5.29, range = 3-8) while the least amount of sympathy was observed in vignette 7 (mean 8.4, range = 3-11)

Table 20 Showing mean scores for items on the total patient sympathy scale.

Psychological n=31				Physical n=26			
Social circumstances present n=16		Social circumstances absent n=15		Social circumstances present n=10		Social circumstances absent n=16	
Request n=7	Reluctant n=9	Request n=8	Reluctant n=7	Request n=4	Reluctant n=6	Request n=5	Reluctant n=11
Mean (range)	Mean (range)	Mean (range)	Mean (range)	Mean (range)	Mean (range)	Mean (range)	Mean (range)
7.0 (3-12)	7.0 (3-10)	6.0 (3-9)	5.29 (3-8)	7.75 (3-10)	7.83 (4-10)	8.4 (6-9)	6.81 (3-11)

Scores are based on combined scores for total patient sympathy scale (3 items), see table 6. Lower scores reflect greater levels of patient sympathy.

4.3.12 Satisfaction with decision making

A combination score of seven statements was used to calculate GPs' satisfaction with their decision to certify the patient. This produced a scale of 7 to 28 where a score of 7 indicated strongest satisfaction with the decision while a score of 28 showed strongest dissatisfaction with the decision to certify the patient. Equally a combined

score of 14 or below was considered to show a level of satisfaction while a combined score of above 14 was considered to show some level of dissatisfaction with the decision to provide sickness certification. GPs showed greater satisfaction with the decision to certify in the case of the patient with the psychological problem (ILM). The highest levels of satisfaction with decision making was seen in vignette 4 (Psychological, no social circumstances and reluctant) (mean 13.29, range = 9-18) while highest level of dissatisfaction was seen in vignette 7 (physical, no social circumstances and requests) (mean 16.20, range = 14-19) (see table 21).

Table 21 Showing mean scores for items on the satisfaction with decision making scale.

Psychological n=31				Physical n=26			
Social circumstances present n=16		Social circumstances absent n=15		Social circumstances present n=10		Social circumstances absent n=16	
Request n =7 Mean (range)	Reluctant n=9 Mean (range)	Request n=8 Mean (range)	Reluctant n=7 Mean (range)	Request n=4 Mean (range)	Reluctant n=6 Mean (range)	Request n=5 Mean (range)	Reluctant n=11 Mean (range)
13.71 (10-17)	14.11 (8-16)	13.38 (10-17)	13.29 (9-18)	14.25 (8-16)	13.67 (11-16)	16.20 (14-19)	15.18 (9-17)

Scores are based on combined scores for satisfaction with decision making (7 items), see table 7. Lower scores reflect greater levels of satisfaction with decision to provide certification.

4.3.13 Positive or negative feeling towards sickness certification

Positive or negative feeling towards sickness certification produced a scale of 4 to 24 where a score of 4 showed the most negative feeling to sickness certification tasks while a score of 24 showed a positive feeling to sickness certification. A combined score of 14 or less was thought to indicate an overall negative feeling towards prescribing sickness certification while GPs with a score above 14 were thought to have a positive feeling to the task of sickness certification. Participant scores reflected a negative feeling to the task of sickness certification in 7 of the 8 vignette versions.

Participants in vignette 1 appeared to have a more positive attitude to the task (psychological social circumstances present, requests) (mean 15.7, range = 9-17) while GPs in vignette 7 appeared to be the most negative (physical, no social circumstances and requests) (mean = 9.4, range = 6-16) (see table 22).

Table 22 Showing mean scores for items on the positive or negative feeling towards sickness certification scale.

Psychological n=31				Physical n=26			
Social circumstances present n=16		Social circumstances absent n=15		Social circumstances present n=10		Social circumstances absent n=16	
Request n=7	Reluctant n=9	Request n=8	Reluctant n=7	Request n=4	Reluctant n=6	Request n=5	Reluctant n=11
Mean (range)	Mean (range)	Mean (range)	Mean (range)	Mean (range)	Mean (range)	Mean (range)	Mean (range)
15.71 (9-17)	13.44 (7-19)	13.37 (11-18)	10.57 (7-14)	11.75 (9-14)	12.16 (7-15)	9.4 (6-16)	11.45 (6-16)

Scores are based on combined scores for positive or negative feeling towards the task of sickness certification (6 items), see table 9. Lower scores reflect greater levels of negative feeling while higher scores indicate a positive feeling toward the prescribing of sickness leave.

4.3.14 Measurement of interaction effects

Vignette versions were then combined and relabelled into two principal categorical variables in order to represent each of the corresponding patient scenarios (i.e. Collapsing the versions into two categories, psychological/physical, adverse social circumstances present/absent, patient request/reluctant) (see table 24 below). This increased the sample size to 31 and 26 in each sub-group. A series of 2 and 3 - way ANOVA's were conducted to examine the interaction effect of each independent variables (presenting illness, adverse social circumstances absent/present and patient's request/reluctance) on the four main dimensions perceived fitness for work, total sympathy, satisfaction with decision making and positive or negative feeling to sickness certification. When examining with 2 and 3 - way ANOVA alpha level was

set at 0.01 due to multiple comparisons. Each of the independent variables was checked for possible interaction effects (see table 23 below). No significant interaction was found and therefore it was possible to interpret the main effect of one independent variable (e.g. psychological versus physical collapsed). Levene's test for homogeneity of variance showed a significance of greater than 0.05 and was therefore considered not to have violated homogeneity of variance and thus for each of the main effects the alpha value was set at 0.05. Statistical significant differences were found for main effect, illness type in fitness for work ($F=7.449$, $P=0.009$) and positive or negative feeling to sickness certification ($F=4.249$, $P=0.044$) and for main effect social circumstances absent versus present and positive or negative feeling to the task ($F=6.379$, $P=0.015$).

Table 23 Showing combination of the vignette versions to test the three main independent variables (illness type, adverse social circumstances absent/present and request/reluctance).

Variable type	Combined vignette no	Variable type	Combined vignette no
Illness psychological	1,2,3,4 (n=31)	Illness physical	5,6,7,8(n=26)
Adv Social present	1,2,5,6 (n=26)	Adv Social absent	3,4,7,8(n=31)
Request patient	1,3,5,7 (n=24)	Reluctant patient	2,4,6,8(n=33)

Table 24 Showing main effect and interactions for the 3 independent variables

	Main effect illness type (psychological versus physical) F/P	Main effect social circumstances (absent versus present) F/P	Main effect request versus reluctant F/P	Interaction effect of illness type, social split F/P	Interaction effect of illness type/request split F/P	Interaction social split/request split F/P	Interaction effect illness type/social split/request split F/P
Fitness for work	F=7.449 P=0.009*	F=0.344 P=0.560	F=0.943 P=.009	F=1.175 P=0.284	F=2.155 P=0.148	F=1.265 P=0.266	F=0.776 P=0.629
Total Sympathy	F=4.461 P=0.40	F=1.390 P=0.244	F=0.718 P=0.401	F=0.809 P=.373	F=0.90 P=0.765	F=0.830 P=0.367	F=.133 P=0.717
Satisfaction with decision	F=2.830 P=0.099	F=0.647 P=0.425	F=0.250 P=0.653	F=2.62 P=0.112	F=0.445 P=0.508	F=0.104 P=0.749	F=0.00 P=0.986
Positive or negative feeling to task	F=4.249 P=0.044*	P=6.379 P=0.015*	F=1.737 P=0.193	F=1.007 P=.320	F=4.484 P=0.039	F=.004 P=0.949	F=0.181 P=0.672

* Indicates statistical significance at the 0.05% level.

Significance level reduced to 0.01 in cases of multiple comparisons.

Table shows the main effect for each of the illness types and the interaction effect across all three variables.

4.3.15 Summary of key findings from questionnaire study

92% of GPs provided sickness certification to the patient, 100% in the case of psychological problem (ILM) and 85% in the case of physical problem (LBP).

Duration of certification was longer for patients with the psychological condition when compared to the physical condition. The average duration of sickness certification periods recommended following consultation for the psychological condition of ILM was 1-2 weeks while the average duration of sickness certification period recommended following consultation for the physical condition of LBP was slightly less at 4-7 days.

When total fitness is considered, patients with a psychological problem were considered to be less fit for work than patients with a physical problem. There is a statistically significant difference between illness type (psychological versus physical) and total fitness for work ($p=0.009$).

Patients presenting with the psychological condition of ILM generated greater sympathy when compared to patients with a physical condition, however this is not statistically significant at the 5% level. Lower levels of sympathy were present when social circumstances are absent for patients with psychological problem ILM, but again is not significant at the 5% level.

Higher levels of satisfaction with decision making were seen when doctors certified patients with a psychological problem. The absence of social circumstances in patients with the physical condition generates greater dissatisfaction with the

decision to certify. Satisfaction with decision making is not significantly different for either main effect; illness type, social circumstances or request to be certified.

Participants display a negative feeling towards sickness certification. There is a significant difference in attitudes of doctors based on vignette type for perceived illness. Participants presented with the patient scenario of ILM display lower levels of negative feeling scores when compared to those presented with the physical condition of LBP. There is also a significant difference in means based on adverse social circumstances present or absent ($p < 0.05$). Doctors presented with adverse social circumstances display a more positive attitude to sickness certification in comparison to doctors presented with a patient with no adverse social circumstances.

In relation to presenting illness, participants showed stronger agreement that the psychological condition of ILM has an impact on patients' occupational work, ability to socialise and sleeping at night.

Scores across all vignette versions showed high levels of agreement that the patient's situation would improve with help from the employer.

4.4 Study 3 Results

4.4.1 Introduction

The aim of study 3 was to further discuss aspects of sickness certification and to act as a respondent validation of study 1 through description of a focus group. The dominant theme of the focus group was often expressed as the outspoken difficulty with the current systems of sickness certification in operation in General Practice in Ireland and the lack of any policy to improve the system. The current mechanism of sickness certification was considered by these GPs to have a negative effect on patients' outcomes and not to facilitate early return to work. Frustration was expressed about the structure of the state sickness certification / benefit system, the organisation of healthcare in Ireland, and cultural factors in sickness absence behaviour especially in public sector workers. A summary of sub-themes is presented in table 25.

4.4.2 Perception of the structure of the sickness certification system

All participants acknowledged that the current level of disability and numbers claiming sickness related benefits in Ireland was untenable. The desire of the participants was to change the sickness certification standards and focus on functional assessment and ability of the patient to work. The current system was described as disabling patients and while this continued no significant improvement could be made in the handling of fitness for work cases.

I would like to say, I would like not to be doing certs as a GP. I feel it's absolutely nonsense because I really can't do it properly. I can't really say whether this person is really fit for work or not because the system isn't facilitating me to do it. (Female GP3)

I think the whole emphasis is wrong. There is a big emphasis on what's called disability whereas you should look at them and say 'what's the ability?' (Male GP1)

One of the GP's described his frustration at disabling patients in this way and had written to the DSP to express his concerns and opinion that the some patients' inability to work was simply '*job specific*'. However the structure of the system usually meant that certification was the only option available to both the GP and patient. One GP described patients as using sickness certification system to extend maternity leave, while another suggested it was used to avoid applying for job seekers benefit. While all acknowledged it was wrong of GPs to facilitate such behaviour, they believed they were often coerced into doing so by the patient. One GP suggested that emphasis on functional ability could empower GPs to challenge the reason for sickness certification, whilst empowering patients to seek alternative work or duties. This point was acknowledged and agreed by all in the focus group.

"So what can you do [the patient]?" (Female GP3)

"Yes not what you can't do? It puts a positive spin on it ...just because you've lost your left arm doesn't mean you can't work in a call centre" (Female GP1)

One GP made further reference to this point and stressed that the emphasis on certification was '*all wrong*';

"I think the whole emphasis is wrong. There is a big emphasis on what's called disability whereas you should look at them and say 'what's the ability?' Ok so you lost your right arm.. you can still walk, you can still talk" (Male GP 1)

All GPs expressed an opinion that sickness certification benefits were generous, easily obtained and suggested that a proportion of benefits should be allocated to the rehabilitation and reintegration of the patient back to the workplace. Equally, one GP suggested a system of patient compliance with treatment in order to

remain on benefits in the longer term. All GPs stated that they could not act exclusively as the gatekeeper for state benefits and more rigorous rules and regulations were required for proactive pathways back to work. The following suggestions were made:

“It should be an automatic thing that if you’re out on certs for longer than whatever three weeks either occupational health are called in or they are [the patient] is called before a medical assessor” (Female GP2)

“If people stop getting paid after the first week and if they feel that they are so sick that they can’t go to work that they make their own appointment with the medical assessor and you’ll see your absenteeism rates go through the floor” (Male GP3)

4.4.3 Organisation of healthcare

All GPs recognised that access to secondary care and rehabilitation options to help patients return to work was a major problem. This was viewed as often leading to extended periods of sickness certificate and poor patient outcomes such as poor self-esteem and depression. Lack of services and recent budgetary constraints in the public health system were thought by these GPs to result in long waiting times for routine assessments, which included MRI scanning for musculoskeletal disorders, and other minor procedures. Some GPs expressed the view that the continuity of care was broken once a patient entered secondary care and that a more inclusive approach to include primary healthcare was required within the current hospital system. Hospital doctors/consultants are unable to certify for state benefits and the patient ended up back at the GP surgery requesting certification. The GP felt that this system left them with little or no choice.

“There is no incentive for a HSE [hospital] managers to speed up outpatient MRI scans for knees because it would increase their waiting time for orthopaedic outpatients...nobody on high wants to fix these problems because fixing somebody’s problems would cost money” (Male GP3)

“[following referral] They’re back in and out for their certs. I’m still waiting Doc? I’m Still waiting Doc?” [the patient]’ (Female GP1)

The majority of the GPs had desires to develop a different system and process of sickness certification characterised by strong involvement with occupational health experts and employers. Occupational health in the workplace was considered to be a vital component in ensuring the health and well-being of the workforce, whilst minimising the time spent absent from work. GPs recognised that that a system of this nature would require significant investment, restructuring and cooperation between all stakeholders. Two of the GPs were sceptical that this might happen any time soon and one commented;

“This is the ideal scenario but I doubt in the current climate that much will change” (Male GP5)

4.4.4 Cultural factors in sickness absence behaviour

Cultural factors in absenteeism behaviour and requirement for sickness certification were a recurrent and dominant theme throughout the focus group interview. Some of the GPs believed that absenteeism behaviour was (to a certain extent) normalised in certain sectors of society and this generated preconceived ideas about illness and the requirement to be certified as unfit for work. Additional comments were made around pregnant patients seeking certification. These comments were predominantly from the female GPs, however this is not surprising as they may be more likely to consult with female patients for such matters.(172, 173)

“There are lots of women in Ireland who think pregnancy is an illness...they’re dropping off like flies just because they feel a bit nauseous in the morning. They’re looking for a cert for that” (Female GP1)

“It’s the truth this is not a sickness. Pregnancy is not a sickness. It’s not an illness.... we feed into it ‘Oh you poor thing’ we’re all feeding into it... doctors’ visits, nurse visits, this visit, that visit” (Female GP3)

Another GP added to this comment and highlighted that the majority of pregnant patients looking for sickness leave were not necessarily job related.

“and you see they wouldn’t do heavy jobs as a rule usually office jobs or something” (Female GP2)

Little divergence in views was noted when GPs discussed those working in the public service. Anomalies in public service working conditions were considered to add to a culture of absenteeism behaviour in this cohort of workers. Public service employees in Ireland are paid in full for periods of sickness leave. While GPs acknowledged that problems were also apparent in the private sector; comments reflected the belief that such anomalies created additional problems. GPs described many instances of deviant behaviour in public service workers and referred to patients’ use of the terminology “mandatory sick leave days”¹⁴ One GP illustrated a recent case attending the surgery.

“She came in [the patient] and she sat down and said ‘I haven’t used my sick days’ Doctor will you give me a cert?” (Female GP1)

These experiences suggested that the lack of input from occupational health and human resources in the public sector acted as an additional contributing factor to significant amounts of certified absence in Ireland.

“I’ll give you an example of Girl X, public sector, having problems at work. Really stressful at work and everything like that, goes to Occ Health, goes to Human Resources, goes around. This girl wanted to be at work but had major stress, stress at work in the public system and everybody dragging their feet for months and months and months, no one doing anything” (Female GP3)

¹⁴ Mandatory sickness leave is a term used to describe employees entitlements to uncertified sickness leave. Employers may predefine entitlements. Prior to 2012 public servants were entitled to 7 days (must be less than 3 day of consecutive leave) uncertified sickness leave in any calendar year. Since January 2012 the level of uncertified sickness leave has been reduced to 7 days over two calendar years.

All GPs expressed the view that high levels of absenteeism from work in the public service required significant changes at organisation level and was something that could not be solely fixed by targeting GPs' certification practices.

"You see it's easy to blame the GP but really it comes back to the organisation...It's all to do with the cultural values of the organisation" (Male GP2)

Cultural factors at an organisation level were considered to be a factor in the over use of sickness certification. GPs believed that some employers were not willing to negotiate on the working tasks of patients. Trust issues identified between some employers and employees generated a culture of passing responsibility onto GPs to decide on fitness for work, especially in cases of short term illness. This type of sickness certification was described as *'just giving patients the excuse'* and was merely providing some form of justification to the employer that the patient could not attend work. All GPs believed that self-certification for short term illness would shift the responsibility back to the patient, while allowing employers to become more proactive in the management of health and absenteeism from work.

"They completely pass the responsibility onto us once we give them that white piece of paper don't they? 'Oh the Doctor said...'" (Female GP1)

"I think anyone who's sick for two or three days should be signing themselves; I was sick for two or three days, what in the name of God? Am I there saying 'yes you were sick for two or three days' Seriously they are coming in to ask you to confirm that I was sick [the patient] and had diarrhoea for three days. This is nonsense. Stop this waste of money!" (Female GP3)

Further discussion revealed the view that claiming sickness benefit was an acceptable part of Irish culture and generated sympathy rather than stigma. GPs believed that Irish culture was deeply rooted in the belief that having a medical

condition equalled an inability to work. Shifting this culture was not considered impossible and one GP referred to recent shifts in drink driving behaviour in Ireland, the smoking ban and the campaign to reduce the use of antibiotics in general practice. However all GPs agreed that before any positive changes in sickness certification protocols could take place, the entire sickness certification system required a radical transformation. One GP also highlighted that as a group they needed to be mindful as the role of the GP extended far beyond giving a patient a sickness cert and implied that it was important to maintain a good doctor-patient relationship;

“Culturally it’s difficult in Ireland and the only way to solve that then is to take some of those grey’s out of it and the GPs are one of the biggest shades of grey in the whole mix because just like [Male GP1] said you’re not just there for that day, that cert. You’re looking after that patient’s whole family” (Male GP3)

4.4.5 Summary of results of study 3

My results show the on-going difficulty with GPs’ role in the prescribing of sickness certification with theme main themes and several sub themes emerging (See table 25). While the focus group was only one hour in duration several problems were identified as adding complications to the sickness certification process in Ireland, which included current benefit structures in public and private sectors, cultural factors and lack of communication with other healthcare providers and employers. Overall there was little divergence in views amongst the focus participants. Several problems identified in this focus group appeared not to be directly related to the medical profession. Cultural aspects of patients’ sickness absence behaviour centred in the forefront of GPs problems in prescribing sickness leave. Requirement for sickness leave during pregnancy was one such finding; these views were predominantly expressed from female participants who

appeared to have the most contact with this patient group. An existing social norm portrayed is that being pregnant equals a reduced capacity for work. Being paid in full for periods of sickness, such as those working in the public sector, was thought to influence the patient's sickness absence behaviour. Generally speaking patients who appeared to be less affected in financial terms were considered to show less concern about taking sickness leave. Equally there appeared to be limited opportunities available to rehabilitate the patient or to find alternatives such as reduced working time or other reasonable adjustments to allow the patient remain in the workplace. The theme of maintaining good relationships also emerged in this focus group session. This was rooted in the structure of general practice in Ireland and the requirement to maintain viability through managing patients' expectations. GPs expressed opinions tending towards improving the system and introducing a self-certification period for shorter term.

Table 25 – Main themes and subthemes emerging from the focus group

Main themes	Summary themes	Sub-themes
Perception of the sickness certification system	Fitness for work	Patient inability to work is only job specific System focused on disablement An emphasis on functional ability could empower patients to seek alternative work or duties
	Illness benefits	Payment are generous and easily obtained Public workers are paid in full for periods of sickness leave
	Patient compliance	No system to check for patient compliance with treatment
	Gate-keeping	GPs cannot act exclusively as gatekeeper for state benefits System requires more rigour and regulation
Organisation of healthcare	Rehabilitation options	Poor rehabilitation options for patients Poor rehabilitation leads to extended period of sickness leave Poor rehabilitation option results in poor patient outcomes and increased occurrence of low self-esteem and depression in patients
	Lack of hospital care	Public health system has long waiting times for routine examinations such as MRI and other minor procedures Private patients have better access to secondary and tertiary care
	Continuity of care	Lack of communication between hospital doctors and GPs Sickness certification for state benefit cannot be facilitated by hospital doctors Recertification is the only option while patient is waiting for secondary care Integration required between primary and secondary healthcare in cases where sickness certification is required
	Occupational health	Limited or no occupational health services within most organisations and workplaces No legislation on requirement for occupational health services in the workplace
Cultural factors in sickness absence behaviour	Absenteeism behaviour	Normalised in certain sectors of society Acceptable part of Irish culture Pregnancy often considered cause for sickness absence Deviant behaviour in public sector workers
	Organisational behaviour	Employers not willing to negotiate on working tasks of patients Trust issues between employees and employers Sickness certification used as a mechanism control absenteeism by employers Poor management of health in the workplace

4.5 Overall summary of the three research studies

In this chapter I presented the results of the three studies that took place to explore the sickness certification practices of GPs in the ROI. Results were presented for

the in-depth individual interviews and illustrated the on-going problems within the current system. Secondly, the questionnaire provided a detail account of GPs' decision making in sickness certification and thirdly the focus group provided an opportunity to explore additional themes and revisit previous information obtained in both study 1 and 2. The most compelling results show that the structure of both the medical and social welfare systems in Ireland impacts on the issuing of a sickness certificate. In relation to the medical system, it is evident that the fee for service makes the GP conscious of repercussions if a sickness certificate is denied. The lack of availability of options to offer rehabilitation, reduced working hours, alternative duties or a phased return to work often leaves the GP with limited choice in dealing with the patient's problem, resulting in the usage of sickness certificates in the treatment strategy for patients. The fact that patients' receive generous illness benefit payment adds an additional complexity reflected in the patients' sickness absence behaviour. The social welfare system in Ireland contract the gatekeeping of sickness certification to GPs, however there appears to be limited interaction between both groups and limited feedback of certification data and opportunities further medical assessment to improve patients' prospects in returning to the workplace following a period of absence. GPs in the current study were found to be influenced by the presenting illness of the patient and to a lesser extent when adverse social circumstances are present. The key findings will be discussed in full in chapter five.

Chapter 5

5 Discussion

5.1 Introduction

The following chapter discusses the methodological considerations for each of the three phases of the research and then implications of the findings. I have merged the finding of the three studies together to illustrate the continuous theme of sickness certification.

5.2 Methodological consideration

To the best of my knowledge this has been the first study which explored sickness certification practices in the ROI and notwithstanding issues that present in research I believe that information obtained from each of the studies provides a good insight into the practices of GPs in Ireland. However there are a number of methodological considerations for each of the studies and these are discussed separately beginning with study 1.

5.2.1 Study 1

Qualitative research has its limitations and it is often misused and misunderstood and it is important that definite conclusions are not drawn from it. Researcher bias is also a consideration as the researcher is typically trying to work around specific issues presented to uncover a certain points of interest which may transfer to the content of the results. I was conscious that this could be a potential bias and tried

to minimise this as far as possible by working within a structured approach using 14 semi-structured interviews with GPs and focused on collecting information relating to GPs' opinions about sickness certification and the strategies used during the fitness for work consultation. A strong point of study 1 was the rich source of information obtained from the individual in depth interviews and by understanding the context of the narratives it was possible to derive a series of questions that could be further utilised in study 2. The demographics of the GPs interviewed represented several different counties in Ireland and sample characteristics included a representative mix of GPs in respect of their age, level of experience and gender. Good levels of consistency were found between the experiences of participants and therefore it seems that an acceptable level of data saturation was reached (149).

However, sampling bias may have resulted from the selection of participants; this study represents those who had a particular interest or strong views on the topic. The initial recruitment strategy was to obtain a purposive sample representing practitioners' gender, age and specialist training across several areas. This was not achieved due to several issues with securing recruitment, including obtaining personal contact details of GPs, the lack of willingness to partake in such a contentious topic, an absence of enthusiasm related to giving up valuable time and resource constraints. As a result the sample became more of a convenience sample and resulted in seven of the 14 participating GPs having some formal occupational training. This particular group are considered to have a greater insight into the relationship between work and health and may have resulted in a skewed sample. It is possible that some of the questioning in subsequent interviews may have been influenced by the strong occupational medicine interest and equally the results may be influenced by this interest, thus not fully reflect the views of all GPs practicing

in Ireland. Little divergence in views was observed between both groups of participants (occupational versus non occupational trained GPs) and in qualitative research a degree of divergence in opinion is considered important to ensure maximum variation in the sample. Although similar views were expressed by those not trained in occupational medicine it could be argued that these GPs also expressed a high interest in the topic based on the numbers of those reluctant to participate during the original recruitment phase. The lack of divergence in responses from both groups presents a void. GPs with greater years of experience and working in out of hours service did express a certain level of deviation from other participants. Further exploration of the impact of working arrangements and financial implications in greater detail would have been advantageous. An alternative sampling strategy would greatly reduce sampling bias. Careful stratified sampling recognising distinct sub-populations, with the researcher selecting out random sampling for each stratum separately is recommended. Representing strata in equal numbers according to other a prior knowledge (year of qualification, specialist training, gender, geographic location and location of practice) to include the same probability of inclusion would provide greater validity to a study of this nature. It is important to highlight that occupational physicians' views helped to give greater meaning to the context of the research findings and could be considered advantageous. If the sample had not included a large portion of GPs with occupational training then it could be argued that the results were simply reflecting the prejudices of GPs who agreed to partake.

An argument in qualitative research exists for the independent coding of transcripts as failure to do so limits interpretation and becomes slanted to the researcher's own views. A counter argument exists and implies that heavy reliance on intersubjective

validation may indicate a lack of work or confidence in interpretation by the researcher, or equally an unwillingness to take responsibility for their interpretation. In study 1 a level of independent coding took place, however due to resource constraints it did not involve the full coding of the transcripts but rather validation of subsections under each thematic heading. While this did result in the addition of themes and the rephrasing of others, greater levels of independent coding is more desirable to maximise mutual exclusiveness as well as the exhaustiveness of the categories under each dimension.

Two systems of sickness certification are currently used by GPs in Ireland and it was not always possible to distinguish between them in the study. Both systems run concurrently and I did not explore whether one system has an influence on the other and subsequently if this impacts on GPs' attitudes to sickness certification. It is advisable that further research effort should examine both systems (state and non-state) independently.

The interview guide used in the study was developed within the context of aspects that were identified in the literature as problematic experiences in sickness certification and this may have influenced the direction of discussions with GPs. 14 GPs is a small sample of those practicing and therefore it is not possible to state definitely which particular aspects of sickness certification are impossible to change or most difficult to manage from the GP perspective. Narratives were not fully discussed in relation to GPs' personal or practice characteristics. The principal purpose of the study was to develop a questionnaire that could be further utilised in the study of GPs' decision making in sickness certification. Narratives provided

a rich source of information for this purpose that would not have been achieved otherwise.

5.2.2 Study 2

Study 2 used a vignette designed questionnaire with the overall objective of identifying levels of agreement and factors that impact on GPs' decision making in sickness certification. Rate of response has the potential to threaten the validity of conclusions and can often lead to a study not being published. Low response rates to questionnaires are not uncommon among GPs and it was anticipated that this might be the case in the present study (174). Professional association with the ICGP was considered to increase the participation rates as opposed to using traditional incentives. While every effort was made to maximize the response rate, including two reminder e-mails the response rate of 47% obtained had a usable rate of 31% and was lower than expected. The key issue of a low response rate in studies such as this is that those who responded may be not truly representative of the group under investigation and this potentially contributes to biased results. The use of the ICGP in the administration of the survey provided an additional source of protection of anonymity for the participating GPs and ensured that only one survey was in the field during the period of data collection. The question remains as to why the response rate was lower than expected, despite the effort made to maximise it. A significant factor may have been the controversial nature of the topic under investigation. GPs currently benefit from the payments of sickness certification through the state system and the requirement for patients to prove very short term absence through sickness certification also acts as a source of income generation and GPs may be reluctant to disrupt this arrangement.

The use of an on-line questionnaire question may have impacted negatively on the GPs' response rate. It is a possibility that GPs do not like conducting surveys through e-mail communication because of the volume of correspondence they receive and would prefer to be contacted through traditional postal communication. It is also probable that younger GPs are more likely to be receptive to electronic communication. However there was no significant difference in age between my sample and the normal population of GPs in Ireland. There is limited evidence about which method is preferred in the Irish population of GPs. While not specific to Ireland there is some evidence to suggest that electronic communication is becoming the preferred method in practice. Pagliari and colleagues in their study of the adoption and perception of electronic communication in Scotland in 112 primary care and 92 secondary units found that users responded positively to electronic surveys and electronic access to test results was the most frequently utilised facility (175). In my study, other methods could have been adopted such as distribution via continuing medical education groups in each region. An incentive to complete the questionnaire may have helped to increase the response rate, and on reflection accreditation of the questionnaire for points on the CME (continuing medical education) may have boosted the response rate significantly (176). It is important to note that the research was constrained by the cost of a postal questionnaire; however the use of electronic survey methods should be considered for future studies involving GP populations.

A failing in this section of the investigation was the inability to determine differences between those who responded and those who did not, a necessary requirement to address possible non response bias (158, 161). It was not possible

to analyse the non-responses in terms of the GP population by age and gender as the distribution list remained anonymous due to the fact it was administered by the ICGP. On balance it was considered that every effort was made to gain a representative sample through random sampling of participants and through randomisation of vignette versions.

Perhaps the most important question on the preference of methods for study 2 was the use of case vignettes to examine GPs' decision making in sickness certification. Did the cases presented accurately reflect the decisions made in the day to day clinical practice across the ROI? The use of hypothetical scenarios can be criticised as an over-simplification of a complex process in decision making and what a doctor may like to do is not actually what they would do if presented with a real patient in practice (37, 177, 178). However, vignettes have been validated against other methods of study and they do appear to reflect actual clinical practice (177-179). While the vignettes only contained a brief description of the patient, the present study involved careful planning and input from experienced GPs, including both supervisors who had extensive experience in general practice, piloting of the cases and the inclusion of a section to allow the participating GP to engage with the cognitive process of the consultation through the open-ended questions.

When the vignette versions were analysed, each version had between five and 12 respondents. The low response rate raised questions about the validity of the statistical testing and thus the interpretation of the results. The results of study 2 should therefore be interpreted with caution. However, pooling of the results did increase the sample size and is useful as a both a pilot exercise and equally helpful in examining a revised sample size for replication in future studies. Examining the

results showed small differences in means and it is also a possible that a larger number of GP respondents may have answered the questions in the same way thus producing similar results. The overall aim of the study was to explore the impact of variables on the decision to issue a sickness certificate (presenting problem, adverse social circumstance present/absent and patient's request/reluctance). The first key question was related to the agreement on the decision to provide certification. 91% (57 out of 62) of respondents issued a certificate. In light of the high proportion of GPs who agreed to certify, it is possible that those who responded to the questionnaire may have had a particular interest in the topic or were experiencing particular difficulties related to certification. The additional research aims of study 2, to examine the impact of the patient's presenting problem, request for certification and presence of adverse social circumstances on GPs' decision making process, was therefore hampered by the sample response rate and further analysis was only possible for those who agreed to certify. Pooling of the respondents results into two groups based on presenting problem, social circumstance and patient request increased the sample size for statistical analysis (31 respondents psychological (ILM) and 26 respondents physical (LPB)) and allowed the comparison of these independent variables. In chapter 4 (results) it was stated that the features of the vignettes relating to decision making are shown to be consistent with the assumption of homogeneity. In spite of pooling the results into two groups the sample size would still be considered to lack statistical representation and therefore interpretation of the results warrants caution.

It is also possible that GPs' demographic characteristics interacted with the decision making and although demographics were collected a much larger sample

size was required to have sufficient power for such subgroup analyses and therefore was not conducted.

Calculation of Cronbach's alpha was used to estimate the internal reliability of the scales; fitness for work, satisfaction with decision making, total sympathy and positive or negative feeling to sickness certification. Three of the four scales were above the recommended scale of 0.70 and therefore deemed reliable in measuring the dimension under investigation (166). Fitness for work scale was slightly below the recommended level of 0.70 and may have improved with the inclusion of additional statements.

Although I had consulted extensively during the process of the questionnaire construction, I may have tried to over prioritise the detail of GPs' sickness certification practices and the study may have benefited from a shorter questionnaire, wider rating or ratio scales and fewer vignette versions. The vignette versions of ILM and LPB were shown not to perform to a satisfactory level in determining the impact of patient factors in GPs' decision to provide sickness certification as arguably these illnesses provided highly plausible reasons for providing certified sickness leave regardless of patient request or personal circumstances. The vignettes could benefit from improvements by including a multistage approach in its design. Providing patients' personal circumstances and history in the first instance followed by a description of why the patient had attended the surgery on this occasion is more likely to place greater focus on the background of the case and present a more realistic scenario of what it likely to happen in practice. The inclusion of open-ended questions was shown to produce rich data and to engage GPs in the cognitive process of decision making. Further

use of open-ended question could enhance the vignette design making replicable and valid inference from opinion of GPs at various stages in the judgment of patients' working ability. Every effort was made to ensure that a valid and reliable tool was used in measuring the underlying constructs and this could be further modified taking into consideration the limitations outlined.

5.2.3 Study 3

The purpose of study 3 was to discuss the relevance of findings of study 1 and additionally to gain a more in-depth overview of sickness certification in Ireland following a 3 year period. The focus group was conducted in a large practice and all doctors working in the practice participated and had an equal gender mix, doctors of different levels of experiences and those with experience of sickness certification systems outside of Ireland.

Generally speaking the focus group was dominated by outspoken criticism of the system and while this was not the direct intention of this section of the study it did reveal other aspects of sickness certification not fully explored in study 1. This study highlighted problematic experiences with public sector workers. Public sector workers were thought to have less anxious attitudes to sickness absence as they were paid in full for periods of leave. Pregnant patients featured as a particular group who felt that being pregnant increased their entitlement to having sickness leave. The focus group further highlighted those who wished to work but could not due to problems with access to rehabilitation or because they were not afforded an opportunity to conduct additional duties within the workplace. Some of these problems encountered may account for the high rates of certificates seen in the

vignette study. Despite its inherent content value, the amount of information that is possible to obtain in one focus group is somewhat limited and therefore this may be considered to be one of the major weaknesses of this section of the study. Generally speaking the aim of qualitative research is to achieve a level of data saturation, however this was not the aim of study 3 and instead it focused on providing a respondent validation of study 1. While study 3 was conducted to validate responses it should be noted that this is not the ideal situation and generally respondent validation should encompass those who participated in the original interviews. Some of the focus group discussions were dominated by particular GPs and this may have set a perceived group norm and influenced the debate. However, the focus group mirrored some of the findings of study 1 and was viewed to contribute additional validity to the conclusions of this research. However, this focus group brought to the forefront additional views showing that study 1 had not managed to fully explore the full range of GPs' views on sickness certification. The intent of study 3 was also to examine changes experienced by GPs due to changes in economy in Ireland between the study dates. This was not achieved and therefore represents a major limitation. It is recommended that such issues are more comprehensively explored in further studies. Again, similar to study 1 qualitative research has its limitations and is confined to some extent by researcher bias.

5.3 Timing of the research

These studies took place over the period of 2009 - 2012 and the timing of this research may warrant some consideration. When the research began in 2008, Ireland was at the start of a major recession and this study was conducted during the peak period of the economic downturn and high unemployment. It is not possible at this point to say what effect if any this particular period has on the sickness certification practices of GPs or equally the behaviour of patients. Both government and media attention to rates of sickness related payment has shifted attention onto the process of sickness certification which may have altered the GP perception of the system at this time. In 2010 there was also a notable change in the illness state benefit scheme. Prior to the change, workers with 260 weeks PRSI paid since they first began work were entitled to illness benefit for as long as they were unfit for work and under the age of 66. The duration of payment of benefit changed to a maximum of two years in 2010. It is possible that this change will impact on the sickness certification process in the future.

5.4 Discussion of results

5.4.1 Difficult encounters in the sickness certification process

The recurrent theme that sickness certification creates difficulties, including conflict between the doctor and patient, is consistent with other research (38, 40, 130). Although there were differences in methodological approach between my study and other studies exploring difficulties and conflict in sickness certification, several themes identified in my findings were mirrored in the study conducted by Hussy and colleagues (38). Similar comparative methods were used with independent

coding and group consensus during the analysis of narratives. Interviewer bias may have been reduced in my study as it was not conducted and led by GPs unlike the Hussey study and I had no knowledge of the participants prior to the interviews or focus group sessions. Accepting the procedural disparity in sickness certification across different countries conflict remains a key challenge for doctors in the prescribing sickness leave.

Several studies have shown that GPs are dissatisfied with the process of prescribing sickness leave (24, 38, 40, 68, 69, 89) and GPs in my study were no different, often describing the system as ‘disabling’ and that it encouraged patients to adopt the sick role (study 1 and 3). The sentiment expressed in both study 1 and stressed in study 3 was that there were often few options available to deviate from the concept of ‘fit’ or ‘unfit’. The level of dissatisfaction among GPs may be difficult to measure and in many studies researchers have reported qualitatively on aspects of their dissatisfaction. Having a quantitative indicator in my study (study 2) added additional information in relation to GPs’ feeling towards the task of certification, with 85% of GPs showing a level of negative feeling towards the task of prescribing sickness leave in Ireland. The dislike of the role in sickness certification is also well documented in the literature, and reasons have been attributed to similar findings discussed in this study, such as: demands of the patient, difficulty in the assessment of functional ability, lack of information in their possession to make an informed decision, time constraints in the consultation and inflexibility in certifying for non-medical reasons (38, 87, 95, 113, 117, 118, 120). It should be noted that the Hussey study is almost 10 years old and there have been significant changes in the sickness certification system in the UK since this piece of research was conducted. However, three recent studies show similar findings in spite of

using different methodological approaches and being predominately from Scandinavia with notable differences in healthcare systems. In two of these separate studies conducted by Arrelöv and Engblom, difficulties in sickness certification were reported using a quantitative indicator with both sets of researchers using a closed-ended questionnaire (87, 120). This approach could be criticised in that it fails to fully explore difficult encounters in sickness certification in any great detail. Meanwhile a more recent study conducted by Kiessling used an audit based approach which allowed doctors to collect consecutive samples of patient consultations, followed by more detail discussion of the sick listed cases, thus reducing the risk of recall bias often reported in qualitative designs (117).

My findings showed the greatest levels of negative feeling toward the task of issuing sickness certificates existed when GPs were presented with the vignette on physical illness. It is possible GPs in my study tended to view patients described in the physical vignettes as more complex and problematic in comparison to those with a psychological condition. Regrettably, the sample size (study 2) was not large enough to explore certain factors that may have impacted on negative feeling, such as years of practice and working arrangements of GPs. Other studies show that such factors may be an important and inter-related influence in the decision to prescribe sickness leave. Norrmen and colleagues found that experienced GPs certified more often than those less experienced and that rates of certification increased five-fold if the patient was met by a part-time GP (101). While the Norrmen study examined the certification practices of 65 GPs, it examined only ten patients for each of the participating doctors and only 12 of these were working part-time. However, workload is seen to produce higher rates of consultations resulting in certification (89, 111). Unfortunately, it is hard to quantify to what

extent workload impacts on the rate of sickness certificates issued as research studies that report this as a contributory factor have used qualitative approaches. A more rigorous approach using a quantitative indicator would be required to substantiate these findings. It is possible that higher rates of certification are as a direct result of being unable to extend consultation times when handling sick leave cases (78, 112, 113, 180). Ljungquist and colleagues in a nationwide survey in Sweden highlighted several problems in issuing sickness certification one of which being the lack of time to deal with cases. While this study is confined by the limitations of qualitative research and its generalizability to the wider population a significant strength of the study was that it contained a large number of participants (n=622) and corresponding statements (112). While there is some existing research suggesting that consultation time and workload impact on the sickness certification process evidence remains sparse and requires more detailed exploration.

Sickness certification may be given to avoid conflict with patients and providing sickness leave in such circumstances is not uncommon. Hussey and colleagues in their qualitative study reported that GPs considered the potential for conflict in issuing sickness certificates and adopted strategies to avoid this conflict (38). Swartling and colleagues have reported experiences of threatening behaviour among patients in Sweden when sickness certification was on the agenda (86). GPs in study 1 made some references to possible threatening behaviour and conflict especially in cases where a sickness certificate was denied. However, threatening behaviour and aggression shown to the medical profession is not especially uncommon (181-183) and although the Swartling study is conducted with 3997 doctors it is hard to quantify the actual extent of the 'threat' as the doctor perceived it. Perhaps an important threat perceived by GPs in Ireland was the loss of

revenue to the practice if GPs were too strict on the issuing of sickness certificates. In study 1 and 3, participants showed a desire to maintain a positive doctor patient therapeutic alliance and references were made to the fact that certification was only a small element of the job. GPs may be under additional pressure to maintain high patient loads to ensure business viability and thus there may be motivating factors for GPs to certify patients when they are not entirely conformable to do so. They are paid for each sickness certificate issued by the DSP. Remuneration and fear of loss of patients from practice are considered to be important factors in GPs' decision to prescribe continued sickness leave (24). Although not specific to sickness certification results from an Irish study conducted by Murphy and colleagues demonstrates that a GPs' decision to provide a prescription for antibiotics may be influenced by whether or not the patient pays for their consultation with private patients more likely than GMS card holders to receive a prescription (29). However, it is recognised that reference to payments in sickness certification in my study was reported on qualitatively by a small number of GPs and therefore it is impossible to assess the impact of such payments in the issuing of sickness certificates. Further research is needed in order to clarify this important and delicate matter; however it is unlikely that GPs would admit to monetary gain overriding professional judgement. Nonetheless, the effect of financial incentives in driving certain behaviours in general practice suggests that GPs respond to financial incentives in practice (184, 185). In a randomised control trial of 57 practices in the inner city in the United States found that bonus and enhanced fee for service on documented immunisation rates of children produced a significant increase in uptake(184). While in the UK, analysis of the Northwest Health Authority data showed that financial incentives produced less hospital treatment for patients following the introduction of the fundholding scheme(185). It should

be noted, however, that financial incentives for GPs are not necessarily a bad thing especially if they are as designed to improve the efficiency in which healthcare is delivered. Indeed, the quality and outcomes framework in the UK has shown that financial incentives have had a significant impact on GP behaviour and patient outcomes (186).

5.4.2 Prescribing sickness leave – strategies and influential factors

It was worth noting that some GPs had found ways of handling external and inherent conflict experienced in sickness certification, such as attributing an illness of a sick relative or child to that of the patient, when in fact the patient was not sick or giving the patient the benefit of the doubt (study 1). The development of individual strategies for dealing with aspects of sickness certification has been described in other European studies (38, 41, 42). Hussey and colleagues stated that fixed approaches such as acquiescence was a way that doctors could cope with the stress of prescribing sickness leave on a case by case basis (38).

My findings show that GPs may not fully explore and incorporate the patient's fitness for work during the consultation process (75, 99). An important finding in study 1 was the overwhelming majority of GPs who used a strategy to wait and see if the patient asked for a sickness certificate before offering one. Other strategies were to avoid the topic of sickness leave altogether. The overarching question is to what extent this may affect the outcome of the consultation and could it mean that unless a patient asks to be certified they are sent back to the workplace. GPs may feel that discussing sickness certification encourages the patient to opt for sickness leave.

In study 2, I found high rates of sickness certification in responses to the vignettes of both the psychological and physical conditions and therefore high levels of agreement between GPs in the decision to provide a sickness certificate, 100% for the psychological problem (ILM) and slightly lower rates of 86% for the physical problem (LBP). Although the exact rates of certification are unknown in Ireland, both conditions are associated with high rates of prescribed sickness leave across the EU (3). THOR-GP data reported that 78.8% of patients with work-related psychological problems and 42.2% of patients with work-related musculoskeletal conditions were prescribed sickness leave in 2006-2007 (187). Although it is not possible to draw comparisons between actual data obtained from THOR and data obtained from my vignette study it raises questions in relation to the rates of certification seen in my study for both conditions and in particular for the patient with the musculoskeletal problem. Musculoskeletal problems remain one of the top conditions resulting in sickness benefits claims in Ireland; however there is no accurate data on the rates and reasons for this type of sickness certification. Reviewing those who continue to work while experiencing musculoskeletal conditions could substantially improve our understanding of work related absence for such problems (56). Other areas of priority in reducing the rates of musculoskeletal conditions include prevention mechanisms and should focus on the examination of compliance with existing health and safety legislation and efforts to adhere to good practice in the workplace.

Research has shown that that the patient's desire to be certified may influence the GPs' decision to prescribe sickness leave. In the UK, Wynne Jones et al. in their randomised study of 878 GPs showed that just under half of those surveyed said

that the patient's request for certification influenced their decision to provide one (80). A similar finding was reported in a German study where 99% of requests for certification resulted in a certificate being issued (82). However, the desire to become certified is thought to be influenced by other external factors (103, 104). According to my findings generous sickness benefits received in Ireland were considered to influence the patient in opting for sickness leave especially in the public sector, where some workers are paid in full for periods of extended sickness leave. In study 3 GPs felt that being remunerated in full for periods of sickness leave was part of the reason for patients' opting to take time off work. Other factors such as allowing a number of paid uncertified days added to a sense of entitlement among patients. Other cases, such as pregnancy, described in the focus group study showed the desire for certification was based on perceived social norms, with perceptions among patients that pregnancy equalled an inability to work. This was an interesting finding and not widely discussed in previous literature. A consequence of such factors may be that the patient is certified unnecessarily. However, this finding is only that of opinions expressed by a small number of GPs and further research would be required to validate these particular findings. Similarly in study 1, GPs inferred that patients' desire to become certified often resulted in them issuing a sickness certificate to maintain a positive doctor-patient alliance.

In contradiction to some of the findings of study 1 and the Wynne – Jones (80) and Himmel studies (82), the patient's request or reluctance to be certified did not appear to have an impact on the GPs' decision to provide a certificate (study 2). Consequently, the lack of effect of the patient's feelings concurs with the finding of a similar vignette study by Campbell and Ogden in the UK (37). It should be noted

that there are some differences in the methodological approaches between my study and that of Campbell and Ogden, with strength of my study being the use of a randomised design, an opportunity to gather information from open-ended questions and a greater depth of information contained in the patient scenario. Although the vignettes in my study contain more detail on the hypothetical scenarios of a low mood and musculoskeletal pain compared with the Campbell and Ogden study, it would seem in both studies that the doctors made the decision to certify regardless of the patient's explicit wishes. These results also contradict with the finding of Englund and colleagues who used vignettes to look at the variation in sickness certification (100). These researchers found that patients wishing to become certified were prescribed sick leave to a greater extent than those who were reluctant, with sickness leave prescribed in 73% of cases of low back pain in comparison to 33% for reluctant patients. Differences observed between the three vignette studies may be related to the fact that the vignettes used in the Englund study were not specific to low mood and musculoskeletal conditions and also presented case histories of female patients who may have been seen to have less physically demanding jobs. While the response rates in the Campbell and Ogden study was only 59%, both this and the England study had a much bigger sample size and greater power for statistical testing and subgroup analysis.

Possible explanations for such high rates of sickness certification seen in my study are; firstly that sickness certification is used as part of the management plan in the treatment of these conditions. Secondly, provision of sickness certification is used by GPs as one of the limited treatment options available and thirdly that sickness certification is given as a result of previous unsuccessful attempts at improving the

patient's fitness for work. Some of the barriers identified in both study 1 and 3, such as poor collaboration with other stakeholders and options for patient rehabilitation were cited as reasons for prescribing sickness leave. In study 3 GPs spoke passionately about the lack of options for rehabilitation of patients, including access to routine MRI scans or cognitive therapy. They also implied that rehabilitation could help to measure a person's compliance with their treatment. However, in my study attention should be drawn to the fact that the vignettes presented cases of patients with psychological and musculoskeletal conditions both of which are considered to be particularly problematic due to difficulties in eliciting and measuring pathology (37, 38, 92, 103, 188). Other potential reasons for the high levels of certification may be inferred from the open-ended response to the three questions on information seeking in the consultation (study 2). GPs were particularly concerned for the patient with the psychological condition. There was a statistically significant difference between illness type (psychological versus physical) and fitness for work ($p=0.009$). Results also showed stronger agreement that the psychological condition would have an impact on the patient's work, ability to socialise and sleeping at night. Several studies have shown that certification rates are higher for patients presenting with psychological problems and such conditions seem to generate greater sympathy from GPs (1, 37, 39, 42, 80, 129). However, evidence is lacking to support the therapeutic role of abstaining from work for those with mental health problems (63, 189). Nonetheless, patients have reported that stress and depression have a high impact on ability to work (190) and thus in spite of the evidence that working can be more beneficial than not in certain cases, empathic concern may cause the doctor to switch this viewpoint to the perspective of the patient. Equally the GP may take the view that working with a psychological

condition could add additional pressure to the concept of being ‘well’ while suffering with mental health problems (41).

5.4.3 Workplace factors and guidelines for sickness certification

Content analysis conducted in study 2 found that GPs’ information seeking when consulting with patients showed their line of questioning was related to specific factors identified in the literature as contributing to sickness absence such as workload, work related stress, leadership and management issues (17). Leadership issues, especially in the public service, were cited as a contributory factor in extended sickness leave in study 3, GPs described situations where patients were placed on periods of extended sickness leave because of failures in the public service to deal with impending situations that presented relating to the working environment, while failure of employers to deal with stressful situations and bullying was a recurrent theme in study 1. It appeared that more detailed enquiry carried out when the patient is reluctant to take time from work may be based on GPs’ perceived risk of presenteeism (attending work when sick) (191, 192). While certain characteristics of the working environment can contribute to sickness absence, the responses in the study 2 suggested differences in perceived potential stressors at work. GPs (study 2) recognised that support factors are considered vital in effective management of illness at work (193, 194). However, they may underestimate the role of social support as a protective factor against psychological stress even for those with physically demanding jobs (195, 196). Fifteen references were made to the possibility of ‘bullying at work’; however it is unclear as to how GPs make a judgement when assessing the impact of bullying on the patients’ ability to work. GPs may medicalise such problems even when there is not

demonstrable pathology (89). The information in my study (study 2) was extracted from narratives of 62 GPs and based on hypothetical scenarios of two conditions and while caution must be exercised in generalising these findings, GPs were asked to describe in their own words the type of information that they would seek in a typical consultation and therefore it can be assumed that there is a relationship between what was stated in my study and GPs behaviour in practice.

In addition to concern for bullying in the workplace my findings showed concern for the potential misuse of alcohol and other substances among patients. This is perhaps not surprising as in terms of periodic and problematic forms of alcohol use across Europe, workers who drink to excess weekly are one and a half times more likely to be absent from work because of hangovers (197, 198). Alcohol is cited by employers in Ireland as a causal factor in short term absenteeism, particularly in male workers. 40% of reported absences take place around the weekend period (199). It is likely that patients present at the GPs surgery requiring certification for such issues because of the requirement in some organisations to have a sickness certificate (non-state) following the first day of absence. Regrettably, the use of sickness certification in such cases, while it may be used by employers as a control mechanism for reducing absenteeism could have negative implications for employees and fail to identify the potential and harmful effects of substance misuse in the work force, especially if reasons for absence remains undisclosed or are reported in ambiguous terms such as a medical condition or illness. My findings may be useful to provide a context for improvements in the use of non-state sickness certification as a tool to control absence in the workplace. Future research should also examine the role of substance misuse in the need for certifiable sickness leave.

In study 2 the average recommended duration of certification for patients with the psychological condition was longer at an average of 1-2 weeks versus 4-7 days for the physical condition. There is no way of evaluating if this is an accurate measurement of actual certification periods given for these conditions in Ireland. Under the current Irish state guidelines in the immediate term, GPs are required to evaluate and consult with the patient on a weekly basis. This is perhaps an unrealistic expectation and a waste of resources if the outcome of the condition is known to continue for longer than 1 week, for example in certain types of fractures, post-operative recovery or cancer. In study 1 GPs spoke about the difficulty with the interpretation of the guidelines for state certification. Aspects of the patients' 'usual occupation' and use of the terminology 'fitness for work' outlined by the DSP were perceived by GPs as 'unclear' and open to various interpretation and GPs were often unaware of the working tasks of patients. This was also reiterated in study 3 as GPs spoke about the absence from work being 'job specific' rather than an inability to work. Research suggests that lack of guidelines in sickness certification result in GPs practicing cautiously or may follow societal rather than medical norms with regard to sickness absence behaviour (62, 67, 87). Improvements in guidelines for GPs are shown to reduce levels of certified sickness absence. Skaner and colleagues found a significant reduction the number of days on first time sickness certificates and an increase in the careful and fully completed number of sickness certificates from their analysis of retrospective data of over 236,441 sickness certificates issued between 2004 and 2009 in Stockholm during the period of 2004 and 2009, when significant and substantial changes had been made in both the educational and guidance for GPs in sickness certification in Sweden (200). While situations will vary in relation to sickness leave

requirements for patients, it is important that whatever guidelines are in place are used correctly. Roope and colleagues examined the use of state guidelines for sickness certification implemented six years previous to their study in the UK and found low levels of awareness and use of these guidelines by doctors working in primary healthcare (93). It is unclear if the guidelines used in Ireland are of any added benefit in the prescribing of sickness certification and there is some indication from my findings to suggest they are not. Current Irish guidelines are focused on the administrative nature of issuing a certificate rather than providing diagnosis-specific recommendations. In Sweden an evaluation of recently implemented guidelines by Skaner and colleagues using diagnosis specific recommendations and information to assist with special circumstances were found to benefit GPs to a considerable extent (95). 76% of the participants surveyed in the study were using the guidelines following one year after its introduction. 64.5% of participants in the study reported that the guidelines facilitated their contacts with patients and one third stated that it had improved the quality of their management of sickness certification cases. This Swedish study represented a large proportion GPs working in general practice and was one of the largest studies exploring guidelines in sickness certification, which adds to the validity of their findings. However, the response rate was only 61% and a further limitation was that the questionnaire did not focus on the specifics of the guidelines and therefore it is unclear as to which aspect work best for GPs in practice. Although there are differences in the sickness certification systems between Sweden and Ireland, one could assume that improvements in guidelines for sickness certification in Ireland could help to improve the overall quality of consultations for sickness leave and could be used as a tool for developing competence in sickness certification (95).

Other suggested changes from the interviews (study 1) and the focus group (study 3) were for a system of self-certification for acute and short term illness. The question is could such a system work and who would it benefit? It is possible that such a system could remove the requirement for GPs to prove short-term illness for an employer. However such a process would require legislation and a shift in attitudes and culture of organisations at all levels. It should be pointed out that other European countries offer variations of self-certification systems but have similar problems in decision making, assessment of illness and interpretation of guidelines relating to fitness to work (17, 36, 87, 99). However self-certification regulation might lessen the workload for short term self-limiting illness and give patients greater autonomy. Perhaps an alternative to the self-certification process is the use of a system whereby the patient's fitness to carry out specific duties at work is taken into consideration. In the UK a new "fit note" has been introduced to attempt to tackle problems where a person may be fit to complete other working tasks. The "fit note" aims to focus on what working tasks the patient can do rather than what they cannot and has shown some success in the facilitation of early return to work (64). It is possible that GPs in Ireland would benefit greatly from a similar system as it would provide a mechanism to inform the employer with more detail on patients' working ability. Equally, it could reduce the burden on the taxpayer as it could facilitate an employee to remain within the workplace if more suitable duties were available while symptoms persisted. Conversely, the option for self-certification may reduce the need to attend the doctor in the short term and this may have a significant impact on income generation for the practice.

Factors in relation to the workplace are a noteworthy feature in the prescribing of sickness leave. Employers were considered to be a barrier in the return to work

and GPs felt that employers did not facilitate employees to take up alternative roles within the workplace or feared litigation if an employee should return to work early (study 1). Again in study 3 references were made to change the system so that alternative duties and reasonable adjustments in the workplace could facilitate the early return to work. Disclosure of illness to employers was a concern. Issues of trust between employees and employers were identified by GPs in study 1 and some GPs believed that employers were not sympathetic to employees' needs. Disclosure of illness and its impact in the workplace does not appear to be widely discussed in the literature and the GPs' main fear in my study was that the patient may be treated differently if the employer was aware of their condition or would not maintain confidentiality especially in cases of a sensitive nature such as psychological problems (study 1). It is unclear as to where GPs obtain this information and one can suggest that information on how the employer may react is relayed to the GP by the patient. A focus group examining patients' views about the use of their personal information from general practice medical records in health research in Ireland showed that patients are concerned about the leaking of 'sensitive' information such as psychological issues as they felt this could have a negative impact on employment opportunities (201). A qualitative study looking at discrimination associated with mental health problems in Ireland also showed that patient accounts of discrimination were centred on employment opportunities (202). There should be a note of caution in the interpretation of qualitative findings and their generalisability to the wider population. However, stigma associated with mental health is commonly reported (203, 204).

It is thought that opinions on fitness for work are formed as a direct result of doctors' perception of the workplace and they often have low expectations of their

patients returning to work when they present with certain conditions such as musculoskeletal problems (91, 133). The conclusion drawn from a study of individual interviews conducted with 25 patients on a back pain rehabilitation programme in the UK was that GPs provided limited work focused guidance on how patients could remain at work (205). In study 1 GPs admitted to limited engagement with employers on fitness for work issues and stated that they were often unaware of how the illness might impact on the patient's working arrangements (130, 133). If this is the case then it questions the ability of the GP to make an informed decision on fitness for work and perhaps the lack of knowledge about the workplace is a factor which causes the GP to err on the side of caution and prescribe sickness leave. Such factors should be explored in future efforts to examine sickness certification. An important strength of my research was that the questionnaire (study 2) was informed by the interviews with GPs, and this presented an opportunity to explore certain discussion points in greater detail. The results of study 2 showed recognition of the belief that the patient's situation would improve with help from the employer especially for those with the psychological problem. However there was agreement that the sickness certificate was being used by employers to manage absenteeism. The lack of connection between employers and GPs is worrying in the context of ensuring the best possible outcome for the patient. A recent UK study conducted by Coole and colleagues suggests that GPs rarely engage with employers on work related issues and under these arrangements a lack of engagement results in unrealistic expectations in managing their role as certifiers (205). In addition to the lack of connection identified between employers and primary healthcare was the perceived lack of occupational health in the workplace and its subsequent impact on absenteeism.

An integrated approach between primary and occupational health in the workplace may help with detection, prevention and preservation of working capacity.

5.4.4 Social problems and sickness certification

Sickness certification was sometimes requested by a patient when they themselves were not sick in order to allow them to care for a sick child or other family members. Such practice was reported in cases where employers were thought to be unwilling in accepting domestic responsibilities as a genuine reason for absenteeism from work (study 1). When patients seek to legitimise absence in order to act as carers, there may be pressure, either overt or sub-conscious to preserve the “Doctor-Patient Relationship” by the issue of a certificate. While such a phenomenon is qualitatively reported, evidence for the practice is supported by conclusions from a published literature review showing that sickness certification was used as a means to legitimise the reason for non-attendance at work in such circumstances (17). This literature review conducted by Luz and Green was undertaken in 1997 and it could be said that it is somewhat dated with the extrapolation of its findings to the current context problematic. It is also possible that undue emphasis on occupational and preventative medicine by the authors may have influenced their conclusions of their results. However, it would seem that the findings are still relevant and such practice may account for some of the high rates certification in Irish females groups aged 30-39 (20). There is also evidence that patients opt out of being assessed by the DSP medical assessors; in 2007 31% of patients called for a review chose not to attend (35, 206). It is possible that some of these patients may have used the sickness certification system for non-medical reasons such as social or domestic problems. While there is some

indication of reluctance by doctors to accept social problems as a sole reason for granting sickness leave (134), social distress and personal circumstances are reported to influence and often increase the rates of certification (84, 102). While GPs in Ireland may be criticised for providing sickness certification in such circumstances and keeping in mind the levels of females in the Irish workforce some alternative solution such allowing sickness certification in adverse social circumstances such as caring for sick children, similar to that offered in Denmark may reduce the burden on GPs for providing certification in such events.

While the presence or absence of adverse social circumstances (study 2) was not associated with a statistically significant difference when examined across three of the main constructs (satisfaction with decision making, total sympathy and fitness for work), it was statistically significant for the GPs positive or negative feeling towards the task. GPs presented with the vignette version containing the presence of adverse social circumstances displayed a more positive feeling towards the task of certification in comparison to those presented with a single patient with the absence of adverse social circumstances. It is possible that GPs perceive single patients as less believable and more problematic, although there are no current statistics examining the difference between sickness certification rates and marital status in Ireland. There is a further consideration in my study in that vignettes presented cases of male patients; it is possible that vignettes with female scenarios may have prompted different responses and produced different results across the four main constructs. The possibility of unmeasured confounders (GPs years of practice, gender etc.) remains. Nonetheless, in comparison to other studies examining the impact of social circumstances in the prescribing of sickness leave, the question is answered from a number of perspectives across the three studies.

On comparison of results from the open-ended questions, the presence of adverse social circumstance seems to focus the GPs on social and family relationships, domestic worries and financial stresses rather than working tasks. GPs may feel more comfortable in discussing these aspects with patients in their role of family doctor as opposed to the role of ‘expert’ to the authorities in sickness certification matters. Issues in ‘gatekeeping’ in sickness certification are reported frequently, raising questions as to the whether GPs are well placed to adjudicate in benefit claims for government agencies when they are not trained in occupational medicine. (4, 38, 62, 91). In study 1 those trained in occupational medicine believed that they had a better insight in matters that related to work and health. Although the findings of study 1 only represented seven GPs, a similar finding was concluded in a qualitative study of a much larger group of 31 GPs in the UK who believed that training in occupational medicine had better equipped them to consider their patients’ fitness for work and challenge patients’ beliefs about being absent from work when experiencing ill health (77). The majority of the GPs who participated in my vignette study had no formal training in occupational medicine nor did the majority request corroborating medical evidence from an occupational physician in assessing the severity of the patients’ condition. This finding may reflect a disconnection of occupational health services from primary healthcare in Ireland.

5.4.5 Education and training

Education and training in sickness certification is something that frequently appears on the agenda of doctors as a way to improve their sickness leave practice.

However to become a state certifier in Ireland does not require a GP to have any formal training in occupational medicine. Training in occupational medicine for state certifiers is perhaps one area that could be improved upon, nonetheless the formal gatekeeping and responsibility in relation to claiming sickness benefit also lies with the state and the DSP to ensure that claims are appropriate and not fraudulent and to assist in the facilitation of early return to work. GPs in study 1 spoke frequently about the poor relationship between themselves and the DSP medical assessors. Some of the participants indicated that they did not fully understand how the referral system worked to examine fraudulent or suspect cases or those on long term sickness leave. GPs in both study 1 and 3 highlight that improvement in the system of referrals for patients (both secondary care and for medical review) was needed and additional measures to check for patient compliance with treatment. It remains unclear as to how checking patient compliance with treatment to maximise return to work could be achieved. Compliance with medical treatment is a complex area and non-compliance with medical advice is commonly reported. Common issues with compliance such as lack of patient education about medicine and potential side effects, opiate misuse for pain management, and non-adherence to home based rehabilitative exercises and activities are frequently reported in literature (207-210). It is also unclear as to what type of treatments GPs in Ireland would like to recommend for dealing with low back pain and intermittent low mood and there is evidence from my findings to suggest that current strategies are passive such as prescribing sickness leave, and are limited by the lack of access to rehabilitative programmes.

Furthermore, GPs in study 3 stressed that services and supports, which they stated were currently lacking in the Irish system, are required to facilitate the patient's

rehabilitation back to the workplace. Future research should examine this area in closer detail. While my focus group study was small scale, the view that early rehabilitation is needed to improve the chances of the patient returning to work concurs with the findings that examined the sickness certification process in Sweden and Switzerland, a recent systematic review on GPs' feelings in sickness certification and a study of sickness certification for mental health related problems (36, 90, 101, 103, 130).

Chapter 6

6 Conclusion

6.1 Implications for practice

The results of this study broaden the understanding of the complexity of prescribing sickness leave in Ireland. It is feasible that several factors impact on the certifying practices of GPs, including healthcare and social welfare structures, lack of legislation and lack of occupational health pertaining to the workplace. The healthcare policy and the provision of primary care needs to be examined specifically in the context of sickness certification provision. The question remains if it is possible for a GP to provide a service to a government social welfare department where the patient pays a fee for service and secondly where sickness certification is remunerated. Nonetheless, GPs appear disgruntled and frustrated by aspects of the sickness certification system, including the lack of collaboration with the DSP and employers and suggests that the current arrangements are in some respects not fit for purpose. While the role of GPs in acting as gatekeepers for the DSP may have practicalities in a broader sense it may not be sufficient in the requirement to act as an 'expert' in assessment of fitness for work. In conclusion, my results support the argument that sickness certification is problematic for GPs working in primary healthcare in Ireland and this has several implications. A few questions to policy makers and the Irish Government might be raised based on these results. What direction should the GPs' role as certifier of sickness leave take? What resources are required to make it possible for them to manage this role without jeopardising the doctor-patient relationship? How can we successfully integrate primary healthcare and occupational health? How can we improve the

overall health of workers to minimise the need for sickness leave or longer term disability? And what workplace adjustments can be made to facilitate early return to work following periods of absence. Perhaps the best way to look at how policy may be developed is to examine and reflect on sickness certification practice and the findings of this research, albeit recognising its limitations. The fundamental issue as I see them and the potential changes suggested could be used to guide develop and enhance current practice.

The lack of legislation on work place absenteeism presents a quandary in terms of the allowable self-certification days when unable to attend work due to illness. Some employers, both public and private allow one day of uncertified leave, while other 2, 3 or 4 consecutive days without certification evidence from a GP. Again the self-certification days are handled in different ways by different employers and some require written declaration by the employee while others do not and request acknowledgement from the employee by phone. It is unlikely that GPs can be effective in monitoring or the administration of a system that is so diverse. Consideration should be given to create a system where the allowable 'uncertified' or 'self-certifying' days are standardised across the country both in the public and private sector, additionally with their method of acknowledgment to the employer, written or otherwise. This should also allow for 'reasonable adjustment' if the absenteeism is as a result of a genuine adverse social or domestic problem so that it is not counted or reported as illness. The evidence to suggest that sickness certification is being used for social and domestic problems, present a failure in current policy to identify and understand domestic responsibilities in Ireland's contemporary working society.

The non-state certificate issued by the doctor is probably one of the most contentious issues in the system of certification. Doctors feel that such certificates are being used by employers as a management tool in controlling absenteeism. The employee presents the employers with the non-regulated certificate to prove that their absence is a genuine reason to be away from work even for very short term absences. Indeed, this point was raised by GPs over the course of my research. There are no guidelines on how it should be presented or used and while it is signed or stamped by the doctor it really could be compared to a parent giving a child an excuse note. Currently it provides very limited information on the nature or expected outcome and progression of the illness and does nothing to help the employee situation. I suggest two ways in which this system may be improved. Firstly it could be added as an extension of the state certificate and contained as an independent and more descriptive section that is presented to the employer. However, this would only work if the self-certification period was also introduced. Secondly the non-state certificate could be made an official document, with specific guidelines on how it should be used and recognised by all stakeholders, including more descriptive information on the employee fitness for work, while maintaining a level of confidentiality for the patient. This certificate could include a relevant section for employers on the predicted period of absenteeism due to the condition, work place adjustments that may help to allow the employee to remain in the workplace and other factors that may help to rehabilitate the patient back to the workplace. The disclosure of illness should be presented to employers in the best interest of the person as patient and as an employee.

The employer has no statutory obligation to pay sickness leave in the short term. There must be recognition that the employer contributes to pay sickness pay

through employer PRSI contribution. A policy to introduce such a statutory payment in the future may be perceived by the employer to be a double taxation. Equally to introduce a statutory scheme without reviewing problematic encounters in sickness certification could prove to have a new set of difficulties, placing additional pressure on GPs, employers and employees who may feel obliged to attend work when they may not be fit to do so. A fairer system may be to review the PRSI contribution and set aside specific allocation of funds that could be used to introduce a regulated statutory system for short term sickness leave across both the public and private sectors. Perhaps a reduction in employer PRSI payment and the introduction of a separate employer contribution for incentivised workplace health could be introduced not only to deal with short and long term absence but prevention activities and improvements in occupational health, something that is currently lacking in Ireland.

Policy aimed at reducing workplace absenteeism and improving the health of working populations needs to come under the direct responsibility of a single government department. Currently the DSP looks after the reimbursement of both GPs and patients and produces yearly figures in terms of cost, but its principle concern is social welfare provision and not health. Recent changes proposed by the DSP to increase the 'waiting days' from 3 to 6 before being eligible to claim sickness benefit is one example where the DSP have endeavoured to reduce cost. This proposal is most likely to push those employers who did not require non-state certification up to the waiting period to now request it. There needs to be greater recognition that long term illness represents the majority of cost. Short term adjustments, while possibly reducing the overall expenditure in sickness related

benefits are unlikely to make a significant impact in improving the health of the working population.

There appears to be no clear role within the Department of Health in either the measure or use of sickness certification data often used as a proxy measure of disease, thus determining healthcare utilisation resourcing and planning. Disease reporting contained within the sickness certificate should be adjusted to follow the ICD codes for international classification of disease so that the data can be accurately interpreted and used as a comparative measure. This disease reporting could be used to inform policy on work practices identifying the most at risk groups and prevention activities and equally the allocation of resources. Currently the high level of sickness certification for both musculoskeletal and psychological problems present a worrying trend for employers, benefit agencies and public health and this type of certification may be used by the GPs to manage conditions because of lack of alternative medical or rehabilitative services for patients.

In the absence of clear governmental directives, the responsibility for reducing sickness absence and improving workers' health remains ambiguous. Policy makers need to implement a number of practical policies, one of which should accommodate the needs of patients who may require 'alternative services' such as physiotherapy or cognitive therapy in order for them to continue to work. It is feasible that minor changes in the referral system for patients may make an enormous difference and reduce the level of illness and disability benefit claims in the future. Government bodies should focus on public engagement exercise and education to promote work and health, including working during pregnancy, mental health problems and other physical illness.

The current arrangement under which GPs work as private businesses is no doubt a problem in terms of patient expectation but it is unlikely that changes in policy to a universal healthcare system with free GP care would change the pattern of behaviour in requiring sickness certification, in fact if such a system is introduced then the workload of GPs could rise dramatically and reduce even further the time they can allocate to fitness for work matters(211).

The current curriculum in GP training in Ireland is at its capacity with very little time spent on sickness certification and this gap needs to be filled by additional training activities that focus on prescribing of sickness leave. If GPs are required to continue providing sickness certification then they should be given the resources and training to do so. The introduction of practical guidelines with case scenarios, and recommended periods of recovery to help in competency development in sickness certification is one such measure that could be taken. A referral system for problematic patients that do not have access to occupational health at work should also become a requirement. A policy initiative to include the use of a specialist occupational physician or a secondary point of referral could ensure that patients are given the best advice possible in respect of their fitness for work.

GPs are currently not required to have any specialised training to become a state certifier and this needs to be reviewed in the context of the gatekeeping role and value for money for the Irish tax payer. Expansion of the current system could include more auditing, reporting and communication between the DSP, namely the medical assessors and GPs. Perhaps the payments to GPs for certification could be reduced and the allocation of the remaining budget used as an incentive to drive the reduction in the levels of sickness certification and durations of absences.

However, such measure would need to be duly considered and account for occupations and deprivation scores. Recommendations for such a change would also need to be made through negotiations with the Irish Medical Organisation (IMO).

Broadly speaking, a policy to review sickness certification and the health of working population could be guided by the following principles and are summarised in table 26 below.

Table 26 – Showing proposed structure for policy generation in sickness certification in Ireland.

Partnership

The relationship between employers, GPs, healthcare and social welfare agencies should be improved and based on a partnership approach developed to include appropriate planning to fulfil the requirement and needs of all the stakeholders in the system. Groups should work together to identify and share current priorities so as to inform best practices in sickness certification.

Public engagement and transparency

Information about the benefits of work versus reliance on benefits and about the problems caused by absenteeism may be helpful to the Irish public. The basis for funding decisions in relation to sickness related payments and occupational health needs to be transparent and involve consultation at a public level. Major policy initiatives targeted at sickness certification improvements should be based on evidence based research in Ireland or elsewhere where systems are similar in nature.

Efficiency and Effectiveness

Greater public accountability on sickness certification expenditure (including benefits paid and payments to GPs and medical assessors), the efficiency of the system and value for money for the Irish tax payer is required. Effectiveness of how the system operates could be based on analysis of various metrics and comparative measures aimed at reducing longer term illness and permanent disability. Rigorous auditing is required at all levels to ensure sickness benefits are appropriate and not fraudulent.

Unity and cohesion

Future strategy should develop a more coherent approach across all government departments, namely the Department of Social Welfare, Department of Health, Health and Safety Authority and Department of Trade and Employment to minimise and eliminate inconsistencies and contradictions and to utilise and share relevant data across departments.

6.2 Future research

It is questionable if primary healthcare is well placed to deal with aspects of fitness for work; for example, GPs in this study were distracted from dealing with the patient's working situation when they were presented with a history of adverse social circumstances. They made reference to the fact that GPs may not be best placed to deal with aspect of patients' fitness for work. It would be difficult for GPs to obtain a comprehensive view of the patient's working tasks, however there may be merit for a GP to provide information to the employer on working ability, similar to that offered in the new fit note in the UK. Further studies could examine the role of the GPs as fitness for work specialists. In study 1, the seven trained in occupational medicine GPs in our study were unanimous in the view that they had a greater insight into the relationship between work and health. Such a finding may be important and may suggest that consideration should be given to training in occupational health for GPs who certify in general practice, especially in relation to advice relating to the workplace and sickness absence. While it may be unrealistic to train all GPs in occupational medicine, diagnosis specific guidelines for sickness certification in Ireland may provide additional support and guidance for all GPs in practice.

While GPs are at the forefront of providing medical certification, we should not forget cultural factors in work place absenteeism, some of which we mentioned in the study. In view of this it would be interesting to investigate how patients/employees perceive sickness certification in Ireland and its subsequent impact on employers, GPs and society.

The aim of this study was to explore GP perspectives on sickness certification in general practice in Ireland. A key objective was to analyse the views of GPs in their role of prescribers of sickness leave with reference to its operation in Ireland and to examine factors that influenced the decision making process. A significant outcome from this study was the identification of the challenges and complexities in sickness certification experienced by GPs in their day to day practice working as primary healthcare doctors. Arguably, a number of key factors appear to influence the way in which sickness certification is handled in Ireland, which include the presenting illness of the patient, local structural and organisational factors within the medical and social welfare systems and employers' management of illness in the workplace. This research also identifies the lack of legislation governing workplace absenteeism and the need for GPs, employers and government agencies to 'coordinate' work-place illness rather than to 'gate-keep'. This is the first study of its kind in Ireland and presents several considerations for further work in the area of prescribed sickness leave from all perspectives, such as motivations, incentives and other potential cause of variation such as patients' gender and illness. No significant change in the regulation or administration of sickness certification has occurred in Ireland over the past decade and there is a need to understand this area in greater depth. A national review of sickness certification in Ireland is now warranted and should take place within an epidemiological framework, firstly collecting a significant number of outcome measures (e.g. illness type, occupation, socioeconomic status, GP region etc.) in order to gain an in-depth understanding of absence related illness in Ireland.

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Appendix 1 Ethical approval

A1.1 Ethical approval from Waterford Institute of Technology (stage 1)

Waterford Institute of Technology WIT

Institiúid Teicneolaíochta Phort Láirge
Waterford, Ireland.
TEL: +353-51-302000
WTE: WWW.WIT.IE
EMAIL: info@wit.ie



2nd March, 2009

Ms. Michelle Smith,
Department of Nursing,
WIT.

Dear Michelle,

Thank you for bringing your project "*The Sick Note*" – *An exploratory study of General Practitioners in the Irish Republic*" to the attention of WIT Research Ethics Committee. I am pleased to inform you that we are satisfied that you have considered all the ethical implications of your research and we approve WIT's participation in this project.

We wish you well in the work ahead.

Yours sincerely,



Dr. Venie Martin,
Chairperson,
Research Ethics Committee.

cc: Dr. Kevan Thorley
Prof. Aneez Esmail
Dr. Margaret Denny

A1.2 Ethical approval from Waterford Institute of Technology (stage 2)

Michelle Foley
School of Health Science
Waterford Institute of Technology
Telephone 845548

August 23, 2010

Research Ethics Committee
Waterford Institute of Technology
Cork Road
Waterford

Re. PhD study, change of method – ‘The sick note’: An Exploratory study of General Practitioners working in the Republic of Ireland

To Whom it may concern:

I am writing to you in relation to the change of methods in this study. The original approval was sought on a questionnaire design to evaluate knowledge, skills and attitudes of GPs in sickness certification. Due to the finding of phase 1 of this study the research will now be changed to evaluate the decision making process in sickness certification. This will be examined using case vignettes and a questionnaire. If you require any further information please contact me and I can send on further details.

Sincerely,

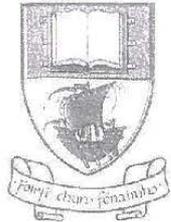
Michelle Foley

A1.3 Endorsement from University of Manchester Ethics Committee

Waterford Institute of Technology

WIT

Institiúid Teicneolaíochta Phort Láirge
Waterford, Ireland.
TEL: +353-51-302000
WEB: www.wit.ie
EMAIL: info@wit.ie



Ref: 11/NUR/04

2nd February, 2011.

Ms. Michelle Foley,
Department of Nursing,
WIT.

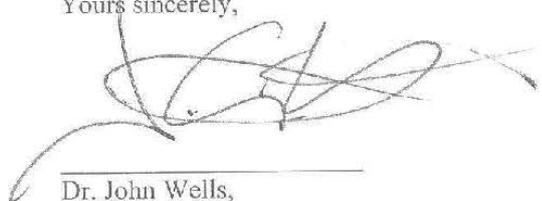
Dear Michelle,

Thank you for submitting your amended documentation in relation to your project "*The Sick Note*" – *An exploratory study of general practitioners in the Republic of Ireland* to the attention of the WIT Research Ethics Committee.

You have considered all ethical implications in relation to the focus groups you wish to conduct following the main survey and I am pleased to inform you that we approve WIT's participation in this project and we will convey this to Academic Council.

We wish you well in the work ahead.

Yours sincerely,


Dr. John Wells,
Chairperson,
Research Ethics Committee.

Cc: Dr. Kevan Thorley
Prof. Aneez Esmail
Dr. Margaret Denny

Dear Michelle

Thank you for your email and apologies for not getting back to you sooner. The University Ethics Committee is happy to endorse the ethical approval given by the Waterford Institute of Technology. Your insurance form has been forwarded to our Insurance Office and is currently being processed.

Please do not hesitate to contact me if you have any further queries.

Regards,

Eliza Pimlott
Secretary to Dr T Stibbs
Room 2.004 John Owens Building
University of Manchester
Oxford Road
Manchester, M13 9PL

Appendix 2 Summary of literature used to develop the qualitative interview guide

Authors and year of publication	Principle aim	Design of study	Participants	Data collection method	Outcome measures	Results	Theme
Condren et al. 1984 Ireland (102)	Variation in decision making on sickness certification and relevance of social and other factors on the process	Questionnaire using case vignettes	118 GPs	Physician reported	Decision making	Wide variation in decision making in 8 of 10 cases of sickness leave. Social and other factors influence the decision	Influences in decision making
Tellnes, Sandvik and Mourn 1990 Norway(4)	Influence of doctor related factors on sickness certification	Questionnaire	107GPs	Physician reported	Predictors of sickness certification	No association found between duration of episodes and doctor attitude toward sickness certification. Duration of episodes was significantly longer in patients from the oldest doctors and shorter in patients of specialists in GPs and those working part time as industrial medical officers.	Influences in decision making GP attitudes to task

Hjortdahl and Borchgrevink 1991 Norway(99)	Influence of GPs knowledge about patients on the use of resources in the consultation	Questionnaire	133 GPs	Physician reported	Influence assessed by doctor of accumulate knowledge on use of lab tests, prescriptions sickness certification, referral and time.	Previous knowledge of the patient resulted in a 53 times greater chance of sickness certification	Influences in decision making
Larsen, Ford and Tellnes 1994 Norway(81)	Decision making on sickness certification	Cross sectional questionnaire	38 GPs	Physician reported	Diagnosis Initiative for certification	91% of patients were certified as sick. If the patient took the initiative 95% were certified if physician took initiative 84% were certified. Where no objective signs or symptoms were present the patient took first initiative in 85% of cases and the doctor in 15%. Men took the initiative more often than women (70% V 66%)	Decision making Initiation of sickness certification

Brage et al Norway 1995(83)	Comparison of views on sickness certification and concept of disease between GPs and laypeople	Random design questionnaire using case vignettes	194 GPs and 321 Lay people	Physician and layperson reported	Use of case history to explore concept of disease, illness and sickness certification	Sickness certification recommendation was higher among lay people when compared with GPs for musculoskeletal and mental health conditions. Higher rates of sickness certification was recommended by GPs for respiratory conditions only	Comparison of views between GPs and lay people
Himmel , Sandholzer and Kochen 1995 Germany(82)	Frequency of sickness certificate and who initiates	Cross sectional survey using a structured questionnaire	469 patient(employed)consultations in 14 general practices	Physician reported	Sick leave period and diagnosis; age gender and question of sickness certification	40% received a sickness certificate, rate of certification males (41%) to females (37%) Main problems – musculoskeletal, cardiovascular and skin 80% probability of sickness certificate if issue was raised 31% initiated by patient and 69% by doctor	Decision making Initiation of sickness certification
Timpka, Hensing and Alexanderson 1995 Sweden(90)	Dilemmas experienced by GPs and psychiatrists in sickness certification	Critical incident questionnaire	84 GPs', 22 psychiatrics, 19 private physicians	Physician reported	Dilemmas in sick leave , consequence and resolution	2 principle dilemmas identified. Sickness Insurance legislation regarding grading capacity and duration and primary medical dilemmas such as subjective medical history, diagnosis and patient compliance	Assessment of work ability Role responsibility

Haldorsen, Brage et al 1996 Norway(134)	Criteria for sickness leave due to muscular pain	Questionnaire using vignettes	436 GPs 111 medical consultants 457 Insurance benefit clerks and 600 laypersons	Physician and lay person reported	Consensus on sickness leave	No consensus found regarding sickness leave. GPs were more restrictive than other in suggesting sickness leave All groups showed a reluctance to accept social problems as reason for sickness leave and resulted in lower certification in this cohort	Comparison of views between physicians and laypeople
Lofvander et al 1997 Sweden(84)	Ill health and related factors in young immigrants on long term sickness leave	Resprospective sickness certification data	52 patient (immigrants) on long term sickness leave	Physician reported	Illness type and pain behaviour	Influenced by patients pain presentation when rating functional ability. Social and iatrogenic factors may play part in sick leave pattern of group	Influences in decision making
Reiso et al 2000 Norway (42)	Comparison between the level of work ability assessment by patients and GPs in new sickness certification episodes	Cross sectional questionnaire	408 patients and 49 GPs	Physician and patient reported	Assessment of work ability by patient and GPs	Patients and GPs agreed in 40% of assessments. GPs assessed work ability as more reduced the more their assessment was based on clinical findings and for depression. The main information for assessing work ability by patients was statement s in relation to illness 66% and on clinical finding 34%.	Assessment of work ability

Englund et al Sweden 2000(100)	Variation in sick-listing among gender	Case Vignettes	360 GPs, 180 psychiatrists, 180 orthopaedic surgeons	Physician reported	If a person was sick listed	Patients wishing sick listing were sick listed to a greater extent than those who were reluctant. Female doctors sick listed more often than male doctor	Influences in decision making
Hiscock and Ritchie 2001 UK(24)	Role GPs in sickness certification	Qualitative	33 GPs and 5 focus groups	Physician reported	GPs views on sickness certification	Patient conflict and fear of litigation were recurrent themes. Preference to give up the role. Judging incapacity and assessment of fitness for work were problematic	Conflict Role responsibility
Reiso et al. 2001 Norway(125)	Association between assesses work ability and duration of certified sickness absence	Cross-sectional survey using a doctor and patient questionnaire	549 patients and 52 GPs	Physician and patient reported	Self assessed work ability as predictor of certification in new and prolonged episodes of certification	Longer duration of certification was associated with musculoskeletal and psychological disorders – patients assessed work ability was assessed as very much reduced. Patients over 50 years were associated with longer duration of certified sickness	Assessment of work ability

Hussy et al. 2003 Scotland(38)	How GP operate the sickness certification system and scope for change	Qualitative interview using focus groups,	11 groups containing 67GPs	Physician reported	Examination of emergent themes from topic guide	Current system failed to address complex chronic or doubtful cases. Various operational strategies employed in practice. Misuse of the system by some GP. Issues in gate-keeping role and doctor-patient relationship	Role responsibility Conflict
Arrelov, Borgquist and Svardsudd 2005 Sweden(87)	Effect of local structures on sick certification practices	Retrospective data from sickness certificates during 2 periods of 4 and 2 months	57,563 sickness certificates from 27 municipalities in eight counties	Sickness certification data	Rate of certification according to local structural factors such as county, size and presence of a hospital	Certificates from small municipalities had few crude net days and shorter episodes than large municipalities. Those with no hospital had the shortest and smallest net days GPs issued the shortest certificate and shortest episodes.	Rates of sickness certification

Campbell and Ogden 2006 UK(37)	Factors that influence decision on issuing a sickness certificate	Questionnaire using Case Vignettes	489GPS	Physician reported	Doctor's beliefs about the patient and their subsequent behaviour	Rated patients with psychological problems more ill and less able to work. A patient demand for a sickness certificate had no effect on doctors' belief about the patient. More likely to give a sickness certificate to a patient with a psychological problem as they were more worthy and deserved one. Maintaining the patient doctor relationship was main reason for issuing a certificate to a patient with a physical ailment.	Influences in decision making
Norrmen Svardsudd and Anderson 2006 Sweden(101)	Factors associated with physician decision to issue a sickness certificate during a consultation	Cross sectional study using questionnaire	65 GPs	Physician reported	Sickness certification decision and physician characteristics	Physicians with a long experience in family medicine and working part time issued more certificates when all patient encounters were considered. GPs working part time issued more certificates than full time. Those who had regular contact with social insurance officials issued more often. No impact of physician gender was found	Influences in decision making

Meershoek et al. 2007 Netherlands (69)	GPs evaluation of patients and use of information for sickness certification	Qualitative	20 Physicians involved full time in sickness certification	Physician reported	Doctors evaluation and use of information	More than formal decision making process and took into account personal circumstances of the patient and consequences of sickness leave. Considered patients views of complaint	Influences in decision making Conflict Role responsibility
Watson et al 2007 Jersey (79)	Relationship between practitioner beliefs and actual behaviour in sickness certification of patient with back pain and other non specific conditions	Pain attitudes and belief scale and retrospective sickness certificate data	83 GPS	Physician reported	Evaluation of the PABS and sickness certificates issued	Neither the biomedical or psychological subscales of PABS predicted the number of sickness certificates issued.	Attitude to sickness certification Influences in decision making
Gulbrandsen et al 2007 Norway (110)	Experience, attitude and management of sickness certification	Cross sectional questionnaire	308 GPs	Physician reported	Differentiation of response patterns by perceived burden, self evaluation, doubt, task, permissiveness, and socio-political attitude	No difference between groups regarding the number of sickness certificates issued, job satisfaction or degree of paternalism.	Rates of sickness certification Attitude to sickness certification

Bollag et al. 2007 Switzerland (103)	Quantification of sickness certification and the process	Study of GPs participation in the Swish Sentinel Surveillance Network using a questionnaire and certification data	150 GPs	Physician reported	Rate of certification, views on procedure and suggestion for change	4 in 100 Sickness certificate issued from consultations. Recommendation for change included prolonged self-certification time, uniform declaration form, referral route for complex cases.	Rates of sickness certification Role responsibility
Arrelov et al. 2007 Sweden(87)	Perceived problems and coping strategies related to the task of sickness certification	Cross sectional study using a structured questionnaire	673 GPs and 149 occupational surgeons(OSs)	Physician reported		Experienced problem at least once per week on work ability, handling situations when they differed in opinion. GPs had a common strategy for handling sickness certification at the clinic than OSs	Decision making Conflict
Lofgren et al. Sweden 2007(40)	Frequency and nature of problems associated with sickness certification	Cross sectional questionnaire	5455 physicians consisting of 978 GPs	Physician reported	Frequency of consultations involving a sickness certificate and nature of problem	GPs found assessing functional ability (64.5%), work ability (81.8%), handling disagreements (82.8%) and filling out certificates (43.4%) fairly or very problematic. GPs had the highest frequency of problems concerning sickness certification while specialist in internal medicine and surgery had the lowest	Influences in decision making Conflict

O'Brien et al. 2007 Wales UK(214)	Patients views of sickness certification within general practice and how these could be improved	Qualitative interviews	19 patients from 12 general practices who had received a recent sickness certificate for a GP	Patient reported	Patient experiences and expectations	Patients rarely attended solely for a sickness certificate. They valued the continuity of care and the doctor patient relationship in consultations. Many of the patient felt that doctors did not have enough time or knowledge in the consultation to address issues when consulting for a sickness certificate. They did not feel that being questioned by the GP upset the doctor patient relationship.	Patients experiences in sickness certification
Swartling et al 2007 Sweden(84)	Problems in sickness certification in 3 groups of physicians	Quantitative questionnaire	3,997 physicians	Physician reported	Problems in sickness certification within and between groups	Physicians at orthopaedic clinics and in primary healthcare centres (PHCC) experienced greater problems in sickness certification when compared to other clinics. 10% of PHCC physicians felt threatened by patients at least once per month. Physicians at PHCC found sickness certification five times more problematic than other groups	Conflict Role responsibility Variation between physician groups

Shiels and Gabby 2007 United Kingdom(39)	Association of patient, doctor and general practice factor on long term certified sickness	Retrospective data from sickness certificates	3,385 patient sickness episodes certified by 44 GPs	Physician reported	Patient factors Certifying behaviour of physician	Older patient age and episodes of mild mental disorder (MMD) significantly increased the risk of long term incapacity. MMD and musculoskeletal accounted for 37.3% and 20.1% of sickness certifications. Types of diagnosis and periods of certification varied amongst GPs.	Rates of sickness certification Variation between doctors
Krohe and Brage 2007 Norway(86)	How Physician handle sickness certification following new standards	Qualitative focus groups	4 focus groups of 23 physicians	Physician reported	Physician views on new standards for functional assessment	Physicians reported difficulties and reluctance to act in accordance with new functional assessment demands on both a practical and a conceptual level. Following introduction of new rules problems were identified in terminology, communication and trust	Role responsibility Conflict
Swartling et al Sweden 2008(92)	Barriers to good practice in sickness certification	Qualitative interviews	19 GPs	Physician reported	Barriers to good practice	Barriers included complexity of clinical judgement and conflict. Other barriers included health system deficiencies and societal attitudes	Difficulties in sickness certification Conflict

Norrmen, Svardsudd, Andersson. 2008 Sweden(41)	Influence of medical factors and functioning on sick listing probability	Cross sectional questionnaire Patient consultations using physician patient questionnaire	474 patients and 73 GPs	Physician and patient reported	Whether or not a sickness certificate was issued	116 of the patients were certified from the 474 consultations. Patients with musculoskeletal were sickness certified to a greater extent than other illness. Complaints resulting in severe limitation of occupational work capacity as assessed by the patient and the doctor increased the risk of sickness certification.	Rates of sickness certification
Von Knorring 2008 Sweden (89)	Problems in sickness certification	Qualitative interview	6 focus groups	Physician reported	Physician responses	Four key areas identified as problematic – Society and social insurance system, physicians working situation, organisation of healthcare, and incentives and support for handling sickness certification of patients	Difficulties in sickness certification Role responsibility Conflict

Gerner and Alexanderson 2009 Sweden(78)	Experiences of physicians regarding the task of sickness certification	Cross sectional questionnaire	5,455 physicians involved in sickness certification	Physician reported	Physician responses	Physicians found it difficult to provide sickness certificates, experienced problems in assessing work capacity, lack of time and resources and issues in the labour market. Found it hard to manage the double role of advocate and medical expert. Suggestion for change included transfer of sickness certification to specialised physicians and clinics, multi professional team approach and the introduction of specific guidelines.	GPs views on sickness certification Role responsibility Conflict
Wynne-Jones et al 2009 UK(80)	GPs sickness certification practices	Cross-sectional study	2154 GPs involved in sickness certification	Physician reported	Physicians responses	GPs do ask about the patient work situation. GPs lack training in the certification process. Would like to maintain their role and believe other healthcare professionals could certify. They report more frequent sickness certificates for mental health and musculoskeletal issues	Role responsibility

Appendix 3 Interview guide used in study 1

Code _____

Demographics

Gender Male Female

Location Urban Suburban Rural
Remote

Years in practice _____

Contact hour's Full-time Part time
other

Level of Education Postgraduate Qual in Occupation Medicine
Postgraduate Other

Practice size _____

Questions

I am going to ask you some general questions on the topic of sick note

- 1. Can you tell me what your initial thoughts are when you hear the word 'sick note 'or 'medical cert'**
- 2. How do you feel about this task in general**

Prompt –

Can you tell me any views that you may have on the task of issuing 'sick notes' or 'medical certificates'

Do your views differ for different types of illness such as psychological, musculoskeletal or cardiovascular?

- 3. Can you describe to me a recent consultation that resulted in you issuing a sick cert**

- 4. Can I ask who initiated the certification**
- 5. How did you feel about giving the certificate**
- 6. So what makes it easy for you to issue a certificate**
- 7. What makes things difficult?**

Can you tell me about them?

Is there a patient that calls to mind where the situation was particularly difficult?

Do you think about social implications?

Do you think of family implication at all?

- 8. Are there times when you ever felt pressurised into giving a cert?**

Prompt –

Can you tell me about them?

Can you give me an example that calls to mind where you may have felt pressurised?

Do you worry that the patient may go elsewhere if you don't provide one?

- 9. How do you consider your role when issuing certificates**

Prompt –

Do you consider yourself as advocate for the patient/employer/social welfare?

Do you feel the task conflicts with your role as a GP

- 10. Do you have a strategy or set or criteria in place for implementing the system of giving a sick cert?**

Prompt –

Practice strategy versus personal strategy

Department of Social and family affairs

ICGP

Are they helpful?

11. Do you ever consult or interact with other colleagues in relation to this task

Prompt –

What might you discuss?

Would you ever have a meeting to discuss this particular task?

12. Can you tell me approximately how many sick notes that you think you may write in a typical week for example

Prompt –

Do you maintain any records in your practice?

What is done with the data?

Does it impact on your workload as a GP?

I am going to ask you some questions now specific to occupational related illness.

13. Typically, what type of occupational illness would you see in your practice?

Prompt – What typically do you see as an occupational illness?

14. What are your thoughts on the provision to deal with occupational related ill health in primary healthcare?

Prompt –

Are there any courses offered or information provided by government agencies for example?

Is there a difference in certifying somebody in an occupationally related case?

Do you have referral routes for patient such as specialist care or for a second opinion?

Are there any support mechanisms such as websites, forums etc. that you can access for further information?

15. Do you feel there should be more interaction with primary healthcare and employers?

Prompt – do you have any views on policies to deal with illness in the workplace?

16. Do you feel that there are alternatives that could be offered to patients apart from a sick note

Prompt –

Can you tell me about them?

For example a well-note maybe shorter working hours or reduced days for certain illness

17. How do you feel about writing patient diagnosis on sick notes for employers?

Prompt-

Is it appropriate? (some of the time or the time or all of the time)

can you give me any examples of illness where you feel this is not appropriate?

18. Are you aware of any reporting system in place for occupational related illness in Ireland, UK or worldwide

Prompt –

Yes - can you tell me about them?

No – do you think there should be?

19. Is there anything else that you would like to tell me or discuss with me in relation to the task?

Thank the person.

Appendix 4 Letter of invitation for study 1



Dear Dr xxxxx

I am currently engaged in a PhD research project which is being supervised at the Faculty of Medicine at Manchester University. My research hopes to explore the knowledge, skills and attitudes of individual General Practitioners with reference to the current role, operation and management of the sickness certification system in Ireland. There is currently little published research in an Irish context and in particular from the perspective of GPs who operate the system. The findings from the study will be used to establish the nature and extent of problems associated with the task of sickness certification.

You have been chosen as part of a purposive sample from the general register of Medical Practitioners to take part in the first phase of the study. This will involve a once off face to face interview lasting approximately 30 minutes. This will be conducted at a convenient time for you. The findings from phase 1 will be used to construct a reliable and valid questionnaire that can then be used to conduct a national study. Can I assure you at this point that if you agree to take part that anonymity and confidentiality will be ensured throughout the project. This is undoubtedly a sensitive area for practitioners and if you agree to take part you may withdraw from the study at any time without any reason. Your transcript will also be provided to you for your approval.

Findings will be shared with participants, publications, reports or papers will disseminated to all research participants that agree to take part. Ethical approval has been granted for the study.

I will make contact with you in due course or alternatively you may contact me at Mobile 087-9381585 or by e-mail msmith@wit.ie.

Appendix 5 Information sheet and consent form study 1



Code _____

Information sheet

Investigator Ms Michelle Smith
Supervisors' Dr Kevan Thorley,
Prof. Aneez Esmail, Dr Margaret Denny.

This research is being undertaken for the award of Doctorate of Philosophy by research at the University of Manchester, Faculty of Medicine and Waterford Institute of Technology, School of Health Science.

The study aims to obtain information on the knowledge, skills and attitudes of General Practitioners' in issuing medical certificates to patients in an Irish context. Medical certification is considered to be one of the most common and complex task of a General Practitioner. There is a great need to look at the complexity of this issue from the GP's perspective so that operational strategies of this task can be improved for all stakeholders, including patient care. If you decide to take part in this study I will arrange at a suitable time to interview you in relation to the task of medical certification of patients in your care. This interview will take approximately half an hour to complete.

No direct patient information is required for this research and all information from this study will be strictly confidential. Your identity or indeed the identity of your practice will not be revealed to anyone and your name will not appear in any report or publication.

Your participation is completely voluntary and you may withdraw at any time without giving any reason.

If you have any question now, please ask them. If you have any questions later, you are welcome to contact Ms Michelle Smith by telephoning 087 9381585 or by e-mail at msmith@wit.ie

Consent Form

An Exploration of the Clinical Experiences and Attitudes of General Practitioners in issuing Medical Certificates to patients in the Republic of Ireland

Please tick the boxes

1. I confirm that I have read the information sheet concerning this study and understand what will be required of me if I take part in the study
2. I am satisfied that I understand the information provided and have had enough time to consider the information
3. I understand that at any time I may withdraw from the study without giving any reason
4. I agree to take part in the above study

Name of Participant

Date

Signature

Researcher

Date

Signature

Appendix 6 Questionnaire

This study examines the decision making process in sickness certification. In this questionnaire you are presented with one clinical vignette, and a series of questions will follow that you will be asked to complete.

All information is secure and will be treated in the strictest confidence in accordance with the Data Protection Act 2003. The researcher has no access to personal or practice information. You may withdraw from the questionnaire at any stage.

This questionnaire is 5 pages long and will take approximately 10 minutes to complete

1. You are about to enter the questionnaire.

	Yes
I understand what is expected of me;	<input type="radio"/>
I understand that I can withdraw for the study at any stage;	<input type="radio"/>
I consent to take part in the study.	<input type="radio"/>

1. Are you Male or Female

- Male
 Female

2. What is your age

- 25-30 years
 31-40 years
 41-50 years
 50+ years

3. In which country did you complete your undergraduate training in Medicine

Country:

4. In which country did you complete your training as a GP

Country:

5. What year did you graduate as a GP

6. Do you hold a postgraduate qualification in Occupational Medicine

- Yes
 No

7. If you answered YES to the above question can you please indicate which qualification you hold

- LFOM
 HDOH
 FFOM(UK)
 AFOM(UK)
 DOCCMED(UK)

Other (please specify)

8. How many years have you been working as a GP in your current location

- Less than 1 year
 1-5 years
 5-10 years
 10-15 years
 greater than 15 years

9. Is your practice

- Urban
- Suburban
- Suburban (near large urban center)
- Rural
- Remote

10. Is your practice type

- Single handed (1 GP)
- Small Group (1-4 GPs)
- Group (greater than 5GPs)

11. Is the practice you work in

- Small (less than 2,000 patients)
- Medium (2,000-8,000 patients)
- Large (greater than 8,000 patients)

12. Is your practice

- Mixed (GMS and private patients)
- Private (private patients only)

13. Are you on the state panel of recognised medical certifiers (Department of Social Protection)

- Yes
- No

The following vignette presents a hypothetical situation of a person that has come to the surgery.

Mr Flynn is a 38 year old office manager who has been with the company for the last five years. The company is a large multinational company specialising in pharmaceuticals. Mr Flynn supervises a team of ten administrators. The job involves accounts, personnel and general administrative work. There are occasional visits to sister plants but mainly the job is office based. Mr Flynn is married with three children. Mr Flynn's partner works as a nurse in the local hospital, this often involves her working at night and at weekends.

Your notes indicate that Mr Flynn is experiencing intermittent low mood and tearfulness over the past two years. This has resulted in Mr Flynn taking occasional days off work. A month ago he came to you and reported that he had experienced persistently low mood and tearfulness. Mr Flynn also indicated that he is having problems with concentration and sleeping. You gave Mr Flynn a sickness certificate for two weeks and prescribed an antidepressant.

At the end of the certification period Mr Flynn returned to work for a four week period, but is now back at the surgery and states that the symptoms have 'gotten worse' and he is now having anxiety attacks and feels he just can't cope. Mr Flynn asks if you can provide another sickness certificate. He feels that an extended period of recovery will help to alleviate some of the symptoms.

1. What specific information would you look for during the consultation process on Mr Flynn's social/family circumstances?

2. Can you describe what specific data you would search for in the patient's history relating to the workplace?

3. What additional information may you need to assess the severity of Mr Flynn's condition?

¹⁵ - Vignette version shown is from vignette scenario 1

¹⁵ Vignette scenario shown in questionnaire is based on vignette 1. This scenario was changed for each version 1-8 inclusive - refer to figure 7 for details of each scenario

1. How would you describe Mr Flynn's fitness for work?

	agree strongly	agree	disagree	disagree strongly
Mr Flynn is fit for work;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Going to work may harm Mr Flynn's recovery;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mr Flynn is malingering from work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Do you believe that any of the factors listed below are contributory causes in Mr Flynn's fitness for work:

	To a large extent	to a moderate extent	to some extent	to no extent
Work related stress;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adverse social circumstances;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Work-life balance;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Would you issue a sickness certificate to Mr Flynn on this occasion?

Yes
 No

1. You have decided to provide Mr Flynn with a sickness certificate. Can you please indicate to what extent you agree with the following statements:

	To a large extent	to a moderate extent	to some extent	to no extent
He requires a sickness certificate;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mr Flynn is the best judge of his fitness for work;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
He deserves to have a certificate;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Abstaining from work will help Mr Flynn in his recovery;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not providing Mr Flynn with a sickness certificate may result in him consulting another doctor;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mr Flynn is in a difficult position;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have sympathy for Mr Flynn's situation;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not providing a certificate for Mr Flynn may be harmful to him;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not providing Mr Flynn with a certificate may harm the doctor-patient relationship.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

¹⁶ If sickness certification was granted the participant proceeded to this page

¹⁶ Based on the decision for or against issuing a certificate the participants was directed to this page or the next page below

1. You have decided not to provide Mr Flynn with a sickness certificate. Can you please indicate to what extent you agree with the following statements:

	To a large extent	to a moderate extent	to some extent	to no extent
Abstaining from work will not help Mr Flynn's recovery;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mr Flynn does not deserve a sickness certificate;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mr Flynn needs to sort out his problems by himself;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Providing a sickness certificate may be harmful to Mr Flynn in the longer term.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify)	<input type="text"/>			

2. With reference to your decision not to certify Mr Flynn, how would you describe your decision:

	Agree Strongly	Agree	Disagree	Disagree Strongly
The decision not to give a sickness certificate to Mr Flynn was easy for me to make;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with my decision not to provide Mr Flynn with a sickness certificate;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I chose this decision without pressure from others;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It was the right decision for me to make;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Providing Mr Flynn with a sickness certificate would have been an easier option for me;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The decision not to give a sickness certificate to Mr Flynn was difficult for me to make.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

¹⁷If sickness certification was not issued the participant was directed to this page and asked to complete

¹⁷ If sickness certification was not issued the participant was directed to this page and asked to complete. This then took them to subsequent pages.

2. With reference to you decision to provide Mr Flynn with a sickness certificate, how would you describe you decision:

	Agree Strongly	Agree	Disagree	Disagree Strongly
The decision to give a sickness certificate to Mr Flynn was easy for me to make;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with my decision to provide Mr Flynn with a sickness certificate;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I chose this decision without pressure from others;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It was the right decision for me to make;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The decision is based on the limited options I have to help Mr Flynn;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I had other options my decision would be different	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The decision to give a sickness certificate to Mr Flynn was difficult for me to make.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. What duration of certification would you recommend on this occasion

1-3 days

4-7 days

1-2 weeks

2-4 weeks

4 weeks or more

¹⁸If sickness certification was issued the participant was directed to this page

¹⁸ If sickness certification was issued the participant was directed to this page following the completion of question 1 if sickness certification was denied the participant was asked the same question without the recommended duration

4. What are your expectations for Mr Flynn based on this consultation:

	To a large extent	To a moderate extent	To a small extent	To no extent
Mr Flynn will make a full recovery;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mr Flynn will learn to cope with his illness at work;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mr Flynn will continue to miss time from work on occasions due to his illness;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mr Flynn will improve if he moves to a less stressful job;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mr Flynn will improve if he gets help from his employer;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mr Flynn will improve if he gets help with his domestic situation;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mr Flynn may never fully improve.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. to what extent will Mr Flynn's complaint limit him from the following activities in the immediate term:

	To a large extent	To a moderate extent	To some extent	To no extent
General occupational work;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Everyday activities and pursuits;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to socialise;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical and leisure activities;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taking care of other family members;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sleeping at night;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
General activities of daily living.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

¹⁹All participants were directed to this page and the next page below

¹⁹ All participants were directed to this page and to the next page below regardless of the decision to provide or deny a sickness certificate

1. In relation to sickness certification in general practice, can you please indicate to what extent to you agree with the following statements:

	Agree Strongly	Agree	Disagree	Disagree Strongly
Sickness certification is one of the tasks that I dislike in General Practice;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sickness certification is too restrictive and should be allowed in circumstance other than a patient's illness;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sickness certification is a burden for GP's;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The GP is often torn between their role as 'advocate' and 'judge' in sickness certification;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I could give up writing sickness certificates I would;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employers use the sickness certificate to manage absenteeism in their organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I would like to thank you for taking the time to answer this questionnaire. The results will be disseminated by the ICGP in due course.

Appendix 7 Application to ICGP

21st June 2010

Re: Sickness Certification

Dear Dr Collins,

I am currently engaged in a PhD research project which is being supervised at the Faculty of Medicine at Manchester University. My research to date has explored with GPs their views on the sickness certification system in Ireland and these findings are due to be published shortly. The second phase of the study will commence shortly and will focus on the decision making process and attitudes of GPs in the provision of sickness certificates to patients. It is recognised that medical and non-medical factors can affect the way doctors make decisions to certify a patient as unfit for work and it is hoped that this research will identify some of the influential factors. It is anticipated that on completion a greater understanding and knowledge of the sickness certification process will be obtained and will help to focus future developments in the area.

A colleague Mr Barry Lambe suggested that I contact you regarding the study as you may be in the position to give me some advice. Your help would be greatly appreciated. Please could you contact me at your convenience on my office number 051 845548, mobile number 087 9381585 or by e-mail at mfoley@wit.ie.

Thank you for your time. I look forward to hearing from you.

Yours sincerely,

Michelle Smith-Foley

Requests for access to the ICGP Membership Database for Research Purposes – College Members/Officers only

As of July 2006, the ICGP does not provide open access to its membership database or provide members' names to any other organisation/individual. College members and officers may access the database for ICGP business purposes and may apply for access for research purposes. Such applications are considered on an individual basis by the ICGP Research Committee with regard to the significance and relevance of the topic under investigation, methodological rigour and burden to members.

All requests for access to the ICGP membership must be made using this form – please complete and return this form to: Niamh Killeen, ICGP, 4-5 Lincoln Place, Dublin 2 or carol.white@icgp.ie. Please keep within the space provided in each section.

Applicant Details

Primary Applicant

Surname: Foley

First Name: Michelle

Position: Clinical Skills Co-ordinator

Organisation: Waterford Institute of Technology

Other Applicant 1

Surname: Thorley

First Name: Kevan

Position: Senior Clinical Research Fellow

Organisation: University of Manchester

Other Applicant 2

Surname: Denny

First Name: Margaret

Position: Lecturer

Organisation: Waterford Institute of Technology

Title: 'The Sick Note': An Exploratory study of General Practitioners working in the Republic of Ireland

Aim: To identify if there are factors that impact on the behaviour of a GP to certify a patient as unfit for work

Objectives:

- 1. To identify levels of agreement in provision of sickness certificates**
- 2. To establish if certain factors influence the doctors decision to certify**
- 3. To examine attitudes of GPs in the provision of sickness certificates to patients**

Methodology

Design: Factorial experimental questionnaire involving eight case vignettes with 3 manipulated independent variables (i.e. illness presentation (physical v psychological, social circumstances (absent/present), patient demand (absent present))

Follow-up requirements: Focus groups

Data collection method: Online questionnaire

Perceived significance/relevance of this project to general practice: Results may utilised for educational and training purposes in sickness certification for GPs

Work involved for participating GPs: Answer a single case vignette and questionnaire, maximum time of 15-20 mins

Proposed dissemination – method: Peer reviewed journals, thesis, and conferences

Source of funding: Sponsored by Waterford Institute of Technology training and development fund

Is this research being conducted in full/part fulfilment of a course? Yes

If Yes: please give details of: Course: PhD by Research

Institution: University of Manchester

Please specify the sample size of GPs required: 300

List any criteria relevant to the selection †: on the GP register and working in

IMPORTANT NOTES FOR APPLICANT:

1. Access to the database is limited to a small number of projects each year and is restricted to projects with GP involvement/consultation.
2. ‡ This form must be submitted to the ICGP with sufficient time to be reviewed by the Research Committee. It is recommended that you submit your application at least three months prior to the date you require access to the membership.
3. Selection is primarily based on the Research Committee's assessment in terms of the appropriateness and importance to general practice, while also considering the methodological approach.
4. Access to the database is not available for commercial purposes.
5. Access is only given to research projects that have been reviewed and approved by a recognised Research Ethics Committee.* A copy of your ethical approval is required before issuing of sample by the College.
6. † It may not be possible to fulfil all your criteria. At a minimum, a simple random sample of all members will be supplied.
7. Lists of GPs are not supplied directly to you. If access is granted, you will be required to abide by the ICGP conditions of access (which is attached).
8. A report of the completed research should be lodged at the ICGP no later than 12 months after the projected end date of the research.

For ICGP Office Use Only

Date of Receipt:

Date of Review:

Documentation complete: Yes No

Access given: Yes No

Conditions of Access to ICGP Membership Database
College Members/Officers only

Prior to receipt of your sample, you must supply a copy of your ethical approval.

On approval, you will be supplied with a set of labels for posting purposes²⁰. Lists of GPs will not be supplied directly to you. The number of GPs names supplied to you is the number you request on your application form – if you require additional names, an additional application may be required.

You will be required to abide by the following conditions of access.

I _____ of _____
agree:

- to use the names supplied to me only once
- to use the names supplied to me for the sole purpose of the research outlined in my application of _____ (date) to the ICGP

- not to retype/scan/copy/duplicate in any way the list of names supplied²¹
- not to circulate/share/publish the names supplied or the names of those who participate in the research
- not to use the names supplied for any commercial or marketing purpose
- to lodge a copy of the research report of this research with the ICGP no later than 12 months after the projected end date of the research

Signed: _____ Date: _____

Please return to Carol White, ICGP, 4/5 Lincoln Place, Dublin 2.

²⁰ Alternative arrangements may be agreed - contact the ICGP Director of Research.

²¹ We have a procedure in place to allow for the issuing reminders to non-responders and options if you require GPs to provide their details to you for further contact. Please contact the ICGP Director of Research to discuss these options if relevant to you.

Appendix 8 Invitation to take part in study 2 and associated links

Hi Carol,

Attached below is the e-mail that I would like you to send with the survey. I have put the eight links here so if you want to slot them in as you go along with the 8 groups. I have named them vignette 1 through to 8 for easy identification. Thanks so much for all your help on this project, it is much appreciated and if you have any further questions let me know.

Kind Regards,
Michelle

<https://www.surveymonkey.com/s/Vignette1>

<https://www.surveymonkey.com/s/Vignette2>

<https://www.surveymonkey.com/s/Vignette3>

<https://www.surveymonkey.com/s/Vignette4>

<https://www.surveymonkey.com/s/Vignette5>

<https://www.surveymonkey.com/s/Vignette6>

<https://www.surveymonkey.com/s/Vignette7>

<https://www.surveymonkey.com/s/Vignette8>

Dear General Practitioner

I am currently undertaking a research study at the University of Manchester, as part of the requirement for a PhD in community based medicine. This is a shared study between the University of Manchester, Waterford Institute of Technology and Waterford Health Park.

I would like you to participate in a research study that explores sickness certification in General Practice in Ireland. The aim of this study is to provide information on GPs decision making process in sickness certification. The process 'Sickness Certification' is unexplored in an Irish context and it is hoped that this research will help to identify factors that may impact on this complex decision making process and subsequently enhance a better understanding of this common task that is undertaken by GPs in everyday practice.

This study has been approved by both University of Manchester and Waterford Institute of Technology Institutional Ethics Review Boards.

Your name has been selected from the ICGP database of names that were provided for this purpose. The questionnaire is confidential and anonymous. The researcher does not have access to any of the participating GPs or to practice details. Participation in

this research is completely voluntary and subjects may refuse to participate without consequence. Your participation is vital to the success of this study.

Please complete the online questionnaire that takes approximately 10 minutes to complete. You will be presented with one clinical vignette and a series of questions will follow that you will be then asked to complete. Please click on the link below to enter the questionnaire.

(link here),

Further information regarding the research, or if you would like to know the results of this research, can be obtained from the principal researcher Ms Michelle Foley, by phone -051 845548 or email - mfoley@wit.ie. The results will also be disseminated by the ICGP in due course. Thank you for participating in my research study. Your help is greatly appreciated.

Yours faithfully,

Ms.Michelle Foley BSc; MSc; Pg(Dip)EPI

Appendix 9 Application to ICGP for final e-mail reminder

From: Michelle Foley [<mailto:MFOLEY@wit.ie>]
Sent: 04 July 2011 12:22
To: Carol White
Subject: sickness certification

Hi Carol,

Thank you for all your help in this research it was much appreciated. My response rate is poor enough at 52 full responses. As it is a PhD I need to exhaust all avenues in relation to maximizing my response rate and therefore was wonder if the ICGP would consider another reminder. My responses were best on the days that you send out the e-mail. I was also considering a shorter version just to get my numbers up . I realise that you are receive constant request for access; however I have to pursue to the bitter end! Thanks again

Regards,

Michelle

From Claire Collins 07/07/2011 12:30:04

Michelle,

Due to an explicit request from our members, we are no longer facilitating access to our membership database for external research projects (this was revised in May and a revised policy statement updated on our website).

We were aware of the poor response rates to email survey requests among our members and this was communicated to you at the time of application.

Given the above and that we have already sent a reminder, I could not personally approve your request and it would have to be considered by our Research Committee but I would not be optimistic regarding the outcome but will bring it to the meeting if you wish to proceed.

Kind Regards,
Claire.

Claire Collins (PhD)
Director of Research
Irish College of General Practitioners
4-5 Lincoln Place
Dublin 2
Tel: 00353 (0)1 6763705
Fax: 00353 (0)1 6765850
Email: claire.collins@icgp.ie
Web: www.icgp.ie <<http://www.icgp.ie/>>

Carol White" 09/08/11 2:36 PM

Hi Michelle,

Just to advise that I should be in a position to facilitate a final reminder for you at some stage this week and you might forward a note in this regard.

Kind regards,

Carol.

From: Michelle Foley [<mailto:mfoley@wit.ie>]
Sent: 10 August 2011 15:52
To: Carol White
Subject: RE: Michelle Foley reminder

Hi Carol

We are going to stick with the same format and see what happens, fingers crossed, even if I got 20 more responses it would be great. Here is the reminder that I would like attached, thanks again for everything. Do you still have the original links? Can you let me know when you e-mail it out.

Dear General Practitioner,

This is the final reminder, if you have not done so, to please complete the short on-line questionnaire which aims to explore the factors which influence your clinical practice in issuing sickness certificates. Your participation is essential to enhance a better understanding of this common task that GPs face in practice.

Just to reiterate that the information collected will be kept strictly confidential. As the researcher, I do not have access to any of the participating GP or practice details and your responses will be completely anonymous. Ethical approval has been granted for the study by both the Waterford Institute of Technology and Manchester University research ethics boards.

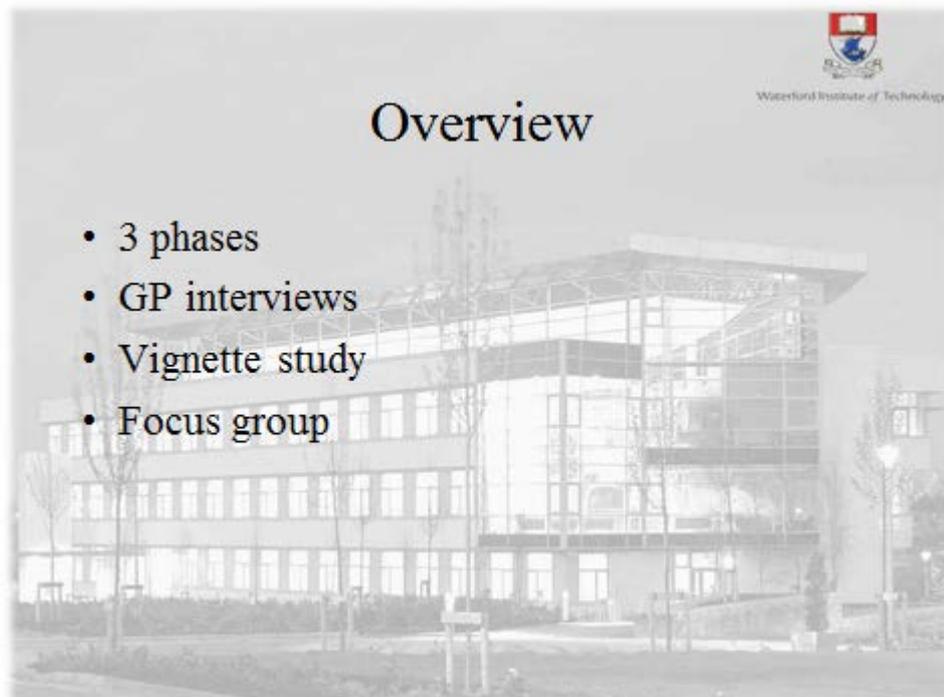
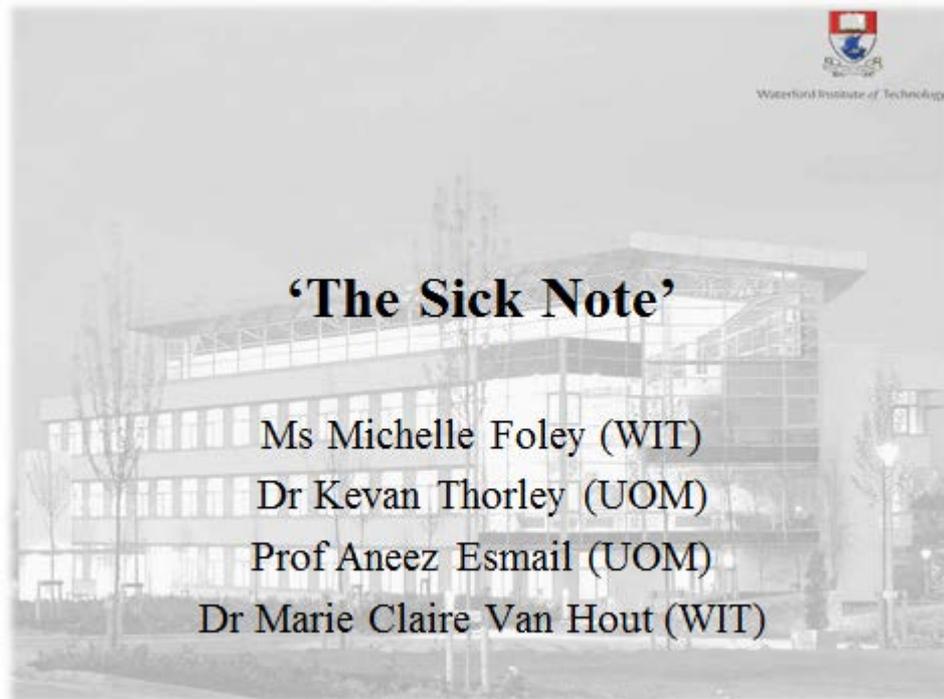
Please click on the link below;
(link here)

This is a shared study between the University of Manchester (where I am registered for my PhD), Waterford Institute of Technology and Waterford Health Park.

If you have any further questions please do not hesitate to contact me on 051 845548 or via email at mfoley@wit.ie.

Kind Regards,
Michelle Foley BSc; MSc; Pg(Dip)EPI

Appendix 10 Power point presentation used prior to the focus group session.



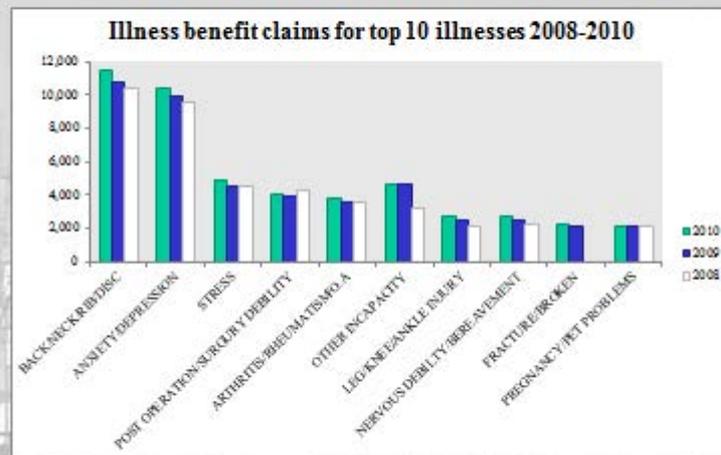


Overview

- GPs are required to act as gatekeepers for statutory benefits, thereby further complicating the fitness for work consultation process.
- Significant rise in the level of sickness certification in Ireland and currently over 80% of all sickness certificates relate to illness with diagnostic challenges such as psychological problems and musculoskeletal conditions.
- Differences in rates of certification based on gender
- Differences in rates of certification based on age



Current situation in Ireland

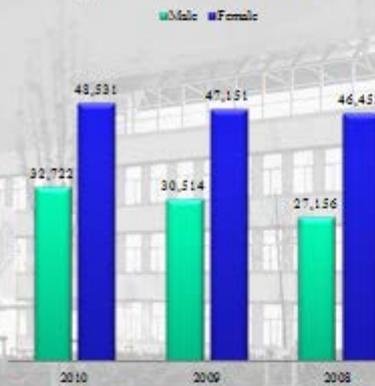


Current situation in Ireland

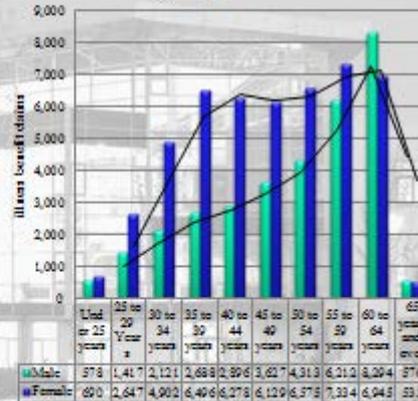


Waterford Institute of Technology

Illness Benefit by Gender and year of claim 2008-2010



Illness benefit by Gender and Age group 2010



Results – Study 1



Waterford Institute of Technology

- GPs can find their role as certifiers problematic, and a source of conflict with certification often based on the GPs' desire to preserve the doctor-patient relationship
- Non medical factors such as social circumstances and demand for certification rather than fitness for work have been implicated in GPs' decision making on sickness certification.
- GPs' imply that negotiation with patients and their perceived ability to work present difficulties during the consultation process .
- Training in occupational medicine is considered inadequate and GPs report that they are often ill-prepared for the task of assessing fitness for work.



Vignette Study – study 2

- The study took place between April and June 2011 using an on-line survey tool with 8 vignette versions
- Recruitment was facilitated by the ICGP (n=300)
- Response rate 31% (n=62)
- Ethical approval was granted by the Waterford Institute of Technology, ROI and University of Manchester Research Ethics Committees, UK.
- Data was analysed using SPSS NVivo version 8

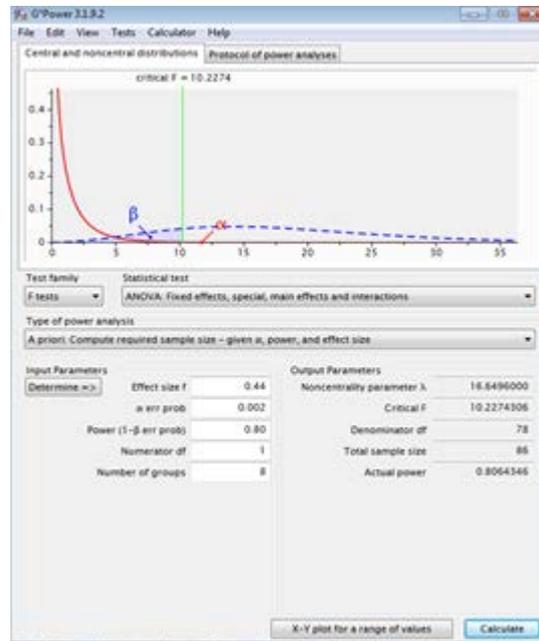


Results- study 2

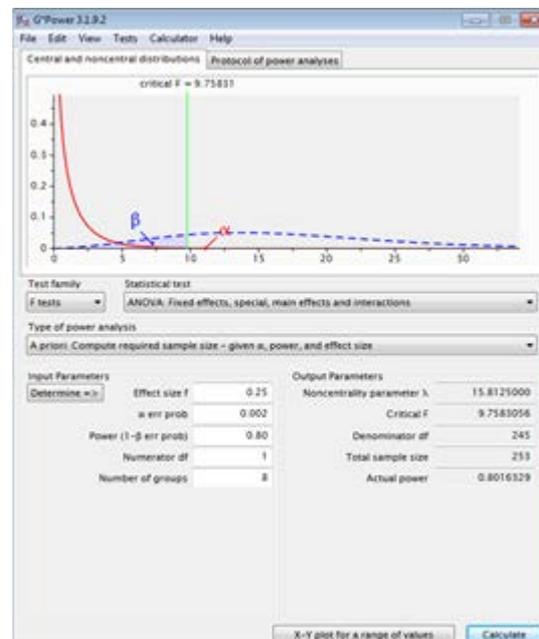
- Support structures, relationship health interpersonal and financial circumstance were dominant themes across all vignette versions.
- Overall, GPs wanted to know more about the patients social circumstances when presented with a psychological illness.
- Information on substance misuse also dominated in questioning of the psychological condition.
- Information seeking on patients' workplace was consistent with known reasons for workplace sickness leave but showed notable differences based on the type of presenting problem.
- Physical signs and symptoms were the most frequently requested information needed to assess the severity of the condition
- Suicidal ideation was most requested to assess the severity of the psychological condition
- Accessing evidence in the physical complaint was mostly related to obtaining the results of MRI and X-ray procedures.

Appendix 11 Sample size calculations

Analysis in G power using large effect size



Analysis in G power using medium effect size



Appendix 12 Publications

Original Article

'The sick note': A qualitative study of sickness certification in general practice in Ireland

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KEY MESSAGE(S):

- Issuing a sickness certificate to a patient may be influenced by the medical and social welfare structures. Improving the system requires significant engagement with employers and social benefit agencies.
- Focus should be placed on referral and rehabilitative pathways for patients to ensure appropriate certification and early return to work.

ABSTRACT

Background: Sickness certification is a common task undertaken by General Practitioners (GPs) in most developed countries. Research suggests that they find this task complex and difficult. Primary health care structures and sickness certification practices differ across Europe and little research explores GPs certifying practices in the Republic of Ireland.

Objectives: The aim of the study was to explore GPs' views on sickness certification, the strategies used to issue sickness certificates to patients and scope for improvement in the current system.

Methods: A qualitative thematic approach used one to one in-depth interviews with 14 individual GPs, across 11 primary health care practices in Ireland. Analysis of the data was conducted using NVivo 8 qualitative software.

Results: GPs can find their role as certifier problematic, and a source of conflict during the consultation process with patients. GPs were concerned with breaching patient confidentiality and in particular disclosing illness to employers. They reported feeling inadequate in dealing with some cases requesting sickness leave, including certification for adverse social circumstances. Sickness certification was often given in response to patient demand. GPs felt a need for better communication between themselves, employers and relevant government departments.

Conclusion: This study highlights the various complexities and challenges that GPs face when dealing with patients requiring sickness certification. Issues in assessment of fitness for work and problems within the social welfare structure were recurrent themes. The study highlights the opportunities to improve the system and how these might be achieved. Further research is now warranted in Ireland.

Key words: General practice, epidemiology public health, sickness certification, sickness absence

BACKGROUND

The increase in certified sickness absence found in most European countries during the last decade is of increasing concern to public health agencies (1–3). While sickness absence can promote rest and recovery from illness, it may also have negative consequences, including increased risks of inactivity and isolation, poorer quality of life and increased use of

health services (4–6). In the Republic of Ireland (ROI), sickness certification is part of General Practitioners' (GPs') contractual service to the Department of Social and Family Affairs (DSFA) (Supplementary Box 1 available online only at <http://informahealthcare.com/doi/abs/10.3109/13814788.2012.672967>). Sickness certificates are also issued to patients as evidence of illness for employment purposes.

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Sickness certification is associated with important social and economic issues (6–9). Reported figures for 2008 suggest that the cost of illness related benefits to the taxpayer in Ireland is in excess of €2.5 billion. In this period 10% of the total working population claimed benefits; 73 609 people received sickness benefit, 53 725 received invalidity benefit and 95 752 disability benefit (10). Although entitlement rules differ across the European Union (EU), these figures compare to working age population sickness-related benefits claims of 9% in Sweden, 7% in Denmark and 7% in the UK (11). In 2006, Ireland's total social protection expenditure in paid sickness leave and medical costs accounted for 41% of total social benefits and was 11% higher than the EU average (12).

A recent systematic review implies that sickness certification requires GPs to fulfil multiple roles, which may cause difficulties and conflict in their position as doctors (13). Common occupationally related conditions, such as musculoskeletal and mental health related problems are thought to pose particular difficulties for GPs in the certification process (7,14). GPs must often rely on the patient's own assessment of functional capacity to work (14,15). In addition, concerns have been raised about the skills of doctors in managing fitness for work, their knowledge of a patient's working tasks and their understanding of the certification system (16). It is thought that GPs may learn about occupational tasks through second-hand knowledge provided by the patient and the process of sickness certification is learned through a system of trial and error (14,17). Some GPs in the UK have implied that they would like to remove the task of sickness certification from their practising role (18).

There is a paucity of research that explores the process of sickness certification or GP attitudes to sickness certification in an Irish context (19). The aim of this study was to explore GPs' views on sickness certification practices, the strategies used to issue sickness certificates to patients and scope for improvement in the current system. The study was conducted as phase one of a larger mixed method investigation of sickness certification practices in the ROI.

METHODS

A qualitative approach using one to one interviews was adopted for this section of the study so that the topic of sickness certification could be probed in depth by the researchers. Preliminary qualitative research is considered valuable when the subject matter is new, underdeveloped or complex and where there is a need to compile appropriate dimensions or questioning for larger quantitative studies (20).

Waterford Institute of Technology and the University of Manchester Research Ethics Committees granted ethical approval in 2009.

Participants

The study was conducted in eleven primary care practices across the Republic of Ireland between February and June 2009 (Box 2). The sample population was initially drawn purposively from the Medical Directory of Healthcare Professionals. The selection process was based on the year of graduation, gender and geographical location (urban/rural) of the GP. A letter detailing the study was sent to thirty GPs as an invitation to participate in the study. A telephone call followed. 6 of the 30 GPs agreed to participate, 7 refused and 17 did not respond. 4 GPs were recruited following an article in a national newspaper and a further 2 as a result of a GP conference. A further 4 GPs were contacted by letter, 3 accepted but 1 was unable to participate because of a patient emergency. 14 GPs took part in the qualitative interviews. 2 were still on the GP registrar programme and, therefore, still in training, but were not excluded as they were working and certifying in general practice. As soon as 'theoretical saturation' was reached, no further GPs were recruited.

Interviews

The participating GPs were interviewed using an interview schedule developed from issues identified in the literature (Box 3). The interview guide was piloted with two GPs prior to the main interviews. All interviews were conducted by the main researcher and these took place at an arranged time in the interviewees' own place of work. Written consent was obtained along with demographic information before each interview began and discussions were audio digitally recorded. Each interview began by asking the GP to give their initial thoughts about sickness certification and topics were then raised in turn following the interview guide. Aspects of sickness certification brought up by the participant were probed in more depth by

Box 2. Socio-demographic data of participating GPs.

Gender

Male ($n = 9$); female ($n = 5$)

Postgraduate qualification in occupational medicine

Yes ($n = 7$); no ($n = 7$)

Practice location

Urban ($n = 5$); suburban ($n = 4$); mixed ($n = 4$); rural ($n = 1$)

Practice size (small < 2000) (medium = 2000–8000) (large = > 8000)

Small ($n = 2$); medium ($n = 8$); large ($n = 4$)

Number of years as GP

Registrar programme ($n = 2$); 6–10 years ($n = 3$); 11–15 years ($n = 3$); 16–20 years ($n = 2$); > 20 years ($n = 4$)

Contact hours

Full-time ($n = 11$); Part-time ($n = 3$)

Box 3. Main interview topics.

- GPs' thoughts on sickness certification
- How GPs' felt about the task of issuing sickness certificates
- Discussion of a recent consultation that involved giving a sickness certificate, Doctor initiated/patient requested?
- Difficulties experienced by GPs in sickness certification
- Discussion of the GPs role when issuing sickness certificates
- Strategies GPs used in issuing sickness certificates
- Supports for GPs and patients; and scope for change
- Discussion on occupational related illness presenting within primary health care
- GPs' views on employers and their handling of illness in the workplace

the researcher. At the end of each interview, GPs were asked to reflect and add any further comments in relation to sickness certification. Interviews lasted between 25 and 40 minutes.

Data analysis

Analysis was conducted using NVivo 8 qualitative software. The main researcher transcribed interviews throughout the process of data collection. Each transcript was read and re-read to obtain an overview of the data and to identify any further points of interest that required exploration in the subsequent interviews. On completion of all interviews each interview was coded into the main categories from the interview guide. The content of each of these categories was re-coded into broad themes using the process of simple thematic analysis (21). Interpretation of the narratives was decided on through negotiated consensus among the researchers. Finally, through a process of discussion each theme was agreed. Eight major themes were identified from the data.

RESULTS

Theme one—GP's role in sickness certification

The question of how GPs viewed their role in the issuing of sickness certificates was raised during the interviews. All 14 GPs agreed that the role of a GP in sickness certification is to act as an advocate for the patient. GPs were keen to acknowledge that their role was not a policing role for employers or to act as gatekeepers for patients in receipt of social welfare illness related benefits.

"We are doctors, we are there to get people better, we are not policemen for the state or department of social welfare and we are not there to police (GP2)."

Theme two—conflict in sickness certification

GPs believed that the vast majority of patients who required certification appeared genuine. However, all participants indicated conflict in sickness certification over the course of the interview. GPs described the pressure to provide sickness certificates when they were not entirely comfortable to do so. This type of sickness certification was most commonly associated with the patient's adverse social circumstances, for example, caring for a sick child or other family member. Several GPs spoke of the structure of primary health care in Ireland and implied that they were often torn between business pressures and certification practices. If GPs were too rigorous in certifying a patient, they were concerned it would affect the doctor-patient relationship and that patients may move to a different practice. All GPs spoke of the internal conflict they felt when sickness certification was required for a problem that had limited measurable or demonstrable pathology. Further conflict in roles was described by 3 GPs in relation to the structure and level of sickness absence payments for patients and the financial incentives for GPs in continuing to certify these patients as unfit for work.

"If you have built up a relationship with a patient then it is difficult to refuse a sick note in tragic circumstances (GP2)."

"You are often between a rock and a hard place, you have a duty to society, ..., like if I was too hard on certs they would just go down the road to the competition, we are mindful of that and we try and do a balancing act (GP3)."

"This state certification is another area where somebody is out of work because of a particular condition and entitled to social welfare, it's how to get them off that band wagon afterward can be difficult ... there may well be an incentive for GPs to continue certifying for the state because there is a fee each time (GP10)."

Theme three—patients and disclosure

The issue of patient confidentiality was an important concern for GPs. The opinions of the participants were mixed for disclosure of illness to an employer. 3 GPs claimed they took a conservative approach and said they would never disclose an illness, while the remaining 11 felt it was meaningful in some cases to inform the employer. All GPs showed some concern about breaching patient confidentiality and who might have access to the information on the certificate. 5 GPs highlighted concern about disclosing illness of a psychiatric nature to an employer and worried what affect this type of illness could have on a patient in the workplace.

"In the short term pieces of paper (non-state) ... well that system is nuts because we are sending out letters to people that are not medical and there is a huge confidentiality issue (GP14)."

"Most of the time I will write it down, if it's a physical illness, if it's a psychiatric illness I would not write that, if it was work related stress I would write that with the patient's permission (GP4)."

Theme four—supports for GPs in practice

GPs described several stakeholders in the sickness certification system including patients, employers, DSFA, medical assessors, specialists and other colleagues who were certifying in an occupational capacity as independent company assessors. All GPs expressed a level of dissatisfaction with supports provided to help in fitness for work cases and mentioned the lack of resources in prevention and rehabilitation services. GPs, with the exception of one, described the relationship between GPs and the DSFA as 'non-existent.' Although guidelines were presented by the DSFA and a medical review system was in place, most GPs stated that they never had any contact with the DSFA or the medical assessors and only received information when they had requested a case to be reviewed. 4 GPs seemed unsure of the actual process in referring a patient to the medical review board for a second opinion or how they operated in their review of long-term certified patients. GPs acknowledged that referral to specialist occupational physicians was an option available to them but that if the public system was used there was frequently a long wait, which they feared might lead to a more chronic patient sick role. There was unanimous agreement that the main support for GPs in sickness certification was through interaction with other GPs. This was often facilitated through the Continued Medical Education (CME) Network.

"DSFA ..., updates, nothing, no feedback, no dialogue what so ever ... and the only link is the medical referee in the middle ... we never hear, see, know what they look like, know what they are thinking (GP10)."

"It's kind of vague all right there are examinations to make certain decisions and check the genuineness of it. I am not really clear on whether I initiate that or whether the social welfare board call them (GP12)."

"In our continuing education forum we have the ability to discuss difficult cases, one time we found that a guy went to one doctor looking for a cert and he didn't get it, it turned out that he had gone to two or three in the group until eventually he got one (GP3)."

Theme five—training and education in sickness certification

Several GPs highlighted the lack of occupational training at undergraduate and postgraduate level. The 7 GPs trained in occupational medicine were keen to point out that occupational medicine training had given them a good insight into the area of sickness certification. 1 GP who was involved in GP training commented that training in occupation medicine was something that could be improved but this was 'complex' and other factors required consideration such as the congestion in the GP training curriculum and the structure of primary health care. Both participants on the GP registration programme felt ill prepared to issue sickness certificates and one stated that there was 'no emphasis at all on certification in training.'

Theme six—strategies for issuing sickness certificates

All GPs stated that the sickness certification system was patient driven and that the patient usually initiated the conversation. The responses from GPs suggested the strategy for issuing a sickness certificate was dictated by the patient's request to be certified.

"Usually the patient (asks for a cert), sometimes I would ask if they needed one (GP2)."

"I do think it a bit of both, people come in and its their agenda and they do need a cert and that is what the whole consultation is about, and there are some people that don't want to take time off work even though they are sick. It's more often generated by the patient as they need them now for employment reasons (GP14)."

Other strategies included giving the patient the benefit of the doubt when they presented with limited measurable pathology. GPs cited patients who they felt were comfortable in the sick role and happy to be claiming benefits. GPs used various strategies to cope with extenuating social circumstances and would often certify a person as 'stressed' when they had to care for a sick relative. One GP said that they would attribute a child's illness to the parent and certify the parent as suffering from the child's ailment.

"The longer I am in practice the more likely I am to say that they (the parent) are suffering and I put down whatever the child is suffering from, if the child has an ear ache I will put down that the patient is suffering from an ear infection, because they are (laugh). If you think about it, by extension they are suffering (GP11)."

Theme seven—scope for change

All GPs acknowledged that there was a need for change and a review of the current system. One GP commented on the need to be reminded of the ‘implication of certification.’ A number of suggestions were put forward to improve the current system including a regulated self-certification period similar to that in the UK and other European countries and the facility for other professions to certify in shorter-term illness. By contrast, two GPs raised concerns about changing the current system and made reference to Irish society.

“I am a great believer and I think that if you can generate honesty transparency and trust of an employee for a company then self certification has to be the way to go, medical certification in my opinion is somewhat abused in Ireland ... I don’t know about the Irish mentality though, the Irish love something for free and while there is no evidence to back this up that is my personal opinion not a professional one (GP1).”

“Self-certification I don’t know, not in the Irish society we live in at the moment (laugh), the question is who the self-certification thing would go to and who is going to judge that. I think it would be very problematic (GP14).”

GPs were asked if the sickness certification process could be improved if patients were required to register at only one practice and did not have the freedom to shop around. They all replied positively and that all patients should have ‘their usual doctor.’

Some of the comments suggested the need for change in the state sickness certification system. The changes deemed necessary were to the administrative aspects of sickness certification, to guidelines concerning examination rules, fitness for work criteria and certification periods.

“Again, a number of people on long term disability, they probably couldn’t go back to the work that they are doing, but I wouldn’t see them never working again and I think that its a real shame, so what you are getting at is are they fit to work or unfit to work ... yes that needs to be changed (GP7).”

Theme eight—employers, attitudes and practice

When asked about the type of occupational illnesses that GPs most frequently deal with in primary health-care, musculoskeletal and psychological problems were the two types of condition that were most frequently mentioned.

“Things that occur as a result of workplace or are aggravated by the work place, hazards, most common, musculoskeletal and soft tissue issues. Occupational stress is something that we are seeing a bit of (GP5).”

GPs spent a proportion of the interview discussing their views of employers. While it was felt that GPs have a certain amount of responsibility to the employer, several of the participants expressed the opinion that employers were responsible for some sickness absence because of the policies and practices that operated in their workplaces.

“The other side of it is that many employers have a situation set up like a sick pay scheme where somebody has to produce a piece of paper justifying their absence or I have seen in some situations where somebody has to be out for three days before they get something on the sick pay scheme (GP5).”

In some cases parents of sick children asked the GP to certify them as the sick person as they were unable to take uncertified time from work to provide care. GPs thought that such a system was inflexible and did not offer alternatives to employees who were unable to attend work for reasons other than sickness. One GP commented that such situations should be ‘better facilitated by employers.’ Other GPs suggested that happy employees resulted in healthier employees. Comments reflected the opinions of some GPs that the links between them and employers could be improved in the interest of patients.

“Communication could be an awful lot better ... the GP does not get any background or information on the person’s job description or how they are managing at work, recent changes, how often they have been out of work ... you need as much background as possible to be as helpful as possible.... The better the communication the better the outcome (GP6).”

In contrast, one GP thought that it was not the function of GPs to engage with employers;

“If there is a company medical advisor in place, I think the 2 doctors can control the volume of communication. I think if you bring the employer in, the employer’s skill set is centrally associated with the work process in a lot of respects is not skilled or effective in meaningful communication with doctor (GP8).”

Another felt that communication with employers could be beneficial, but could prove to be difficult;

“The primary relationship is between the GP and the patient ... sometimes you can have the employer ringing the GP without the patient’s knowledge requesting information about the issuing of certs, that can be difficult with the risk of breaching patient confidentiality (GP2).”

Concerns were raised about the limited knowledge GPs had in relation to the working tasks of patients. Such deficiencies rendered difficulties in decision making related to fitness for work. It was acknowledged that larger organisations were proactive in occupational issues and usually employed an occupational doctor to assess fitness for work. Comments reflected a view that such a system should become a requirement of all organizations.

“I think that every company by law should have a company doctor.... If you are really serious about cutting down on absenteeism and improving the general health of your workers that would be the way to go (GP3).”

It was suggested that fear of litigation could influence employers negatively. GPs thought that some employers might not wish to allow a claimant into the workplace while compensation procedures continued.

“That’s a huge issue ... when litigation is complete; when the process is complete, often back pain will improve ... I suppose if you focus on neck and back pain it’s going to be worse.... I think it would be wonderful to have a staged return to work; some employers are less understanding and won’t give somebody a less physical task (GP7).”

DISCUSSION

GPs acknowledged their role as advocate and their professional responsibilities in the provision of sickness certification. While they expressed the view that a high proportion of sickness certification was genuine and did not present difficulties for them, they were concerned with aspects of the current system. These included difficulties in assessment of fitness for work, lack of resources in prevention and rehabilitation, lack of training in occupational medicine, problems with employers and employment practices and lack of contact with the DSFA. In addition, they were concerned with lack of flexibility in the system and concerns about possible breaches of patient confidentiality. GPs incorporated

various strategies for dealing with sickness certification, including waiting for a patient to ask before offering a sickness certificate, certifying a person as unfit for work when in fact somebody else was sick and giving the patient the benefit of the doubt without measurable pathology. GPs shared the view that scope for change exists in the current system in Ireland.

Strengths and limitations of the study

The GPs interviewed were from several different counties in Ireland. The sample characteristics included a representative mix of GPs in respect of their age, level of experience and gender. Good levels of consistency were found between the experiences of participants and, therefore, it may be assumed that an acceptable level of data saturation was reached (22). Sampling bias may have resulted from the selection of participants; it is feasible that this study represents those who had a particular interest or strong views in the topic. 7 of the 14 participating GPs had some formal occupational training and may have a greater insight into the relationship between work and health. Therefore, the results may not fully reflect the views of all GPs practising in Ireland. Two systems of sickness certification are currently used by GPs in Ireland. We have not always distinguished between the two in this study. Both systems run concurrently and we did not explore whether one system has an influence on the other and subsequently if this impacts on GPs’ attitudes to certification.

Comparison with existing literature

These results are consistent with those of European studies that found conflict between being a patient advocate and managing the professional role as ‘judge’ in fitness for work (7,13,18). GPs in the present study suggest that sickness certification may be required solely to preserve the ‘doctor–patient relationship,’ for example when they are faced with a ‘difficult’ patient or placed under ‘pressure’ to certify. Such motivation was indicated as one of the main reasons for issuing sickness certificates to patients in two previous UK studies (8,18).

Strategies for dealing with aspects of sickness certification were described by several GPs in our study; for example providing a sickness certificate on a patient’s request or avoiding the discussion about certification and fitness for work. The development of individual strategies for dealing with aspects of sickness certification is not uncommon and has been described in other European studies (14,15,18). Findings from studies focusing specifically on fitness for work consultations suggest that ‘fitness for work’ is not always fully explored in the consultation (23,24).

The term 'fitness for work' was perceived by GPs in our study as 'unclear' and open to various interpretation and they were often unaware of the working tasks of patients. They stated that they commonly accepted the patient's word in assessing their functional ability in the workplace. Similar difficulties have been identified in several studies conducted in the UK and Scandinavia (15,16,19). In the UK, a new 'fit note' has been introduced to attempt to tackle this problem. The 'fit note' aims to focus on what working tasks the patient can do rather than what they cannot (25).

Based on our study results GPs commonly certify for psychological problems, a finding consistent with those of other studies (8,30). This certification may be related to GPs' perception of employers, stigma associated with psychological related problems or absence of support for patients who remain in the workplace. Patient confidentiality and disclosure of illness to employers was one of the matters of concern for GPs. It is unclear what evidence Irish GPs have to draw upon in relation to this aspect of sickness certification and further exploration is warranted.

GPs in Ireland may be under additional pressure to maintain high patient loads to ensure business viability, thus there may be motivating factors for GPs to certify patients when they are not entirely comfortable to do so. They are paid for each sickness certificate issued by the DSFA. The conflict between payments for GPs in sickness certification versus encouraging return to work is not widely discussed in the literature. However, the role of financial incentives in driving behaviour in general practice has been seen in other areas such as childhood immunization and fund holding schemes (26,27). An analysis of data preceding the implementation of the GP fund holding scheme in the UK implies that GPs respond to financial incentives in practice (27).

Statistics show that illness benefit case referrals to medical assessors dropped by 45% between the period of 1998 and 2007 (28). The reduction in referrals may be related to some factors including the lack of collaboration identified between GPs and the DSFA or the structure of the reimbursement scheme operated within the Irish system. There is evidence that several patients opt out of being assessed by the DSFA when called for examination, for example in 2007 31% of patients called for a medical review chose not to attend (28). Explanations for such behaviour include the use of sickness certification for non-medical reasons such as social or domestic problems.

The GPs in our study were open to changes in the current system and suggested a regulated system of self-certification as they felt that employers were driving the criteria for short-term sickness certification. While such a change may bring some regulation to the Irish system, it is unlikely that it would remove the more complex problems that occur in the sickness certification process. The UK and other European countries offer a regulated

system, but have similar problems in decision-making, assessment of illness and interpretation of guidelines relating to fitness for work (13,14,29,30). However, regulation might lessen the workload for short-term self-limiting illness and give patients greater autonomy. Recommendations for a better system of referral for patients, support for GPs and greater contact with the DSFA were conveyed by GPs in our study. Some of these findings concur with those of a study, which examined the sickness certification process in Sweden and a recent systematic review on GPs' feelings in sickness certification (13,31). GPs in our study felt improved interaction with employers on sickness certification could lead to better outcomes for all; the employer, the patients and the doctor. A recent UK study suggests GPs rarely engage with employers on work related issues and under these arrangements a lack of engagement results in unrealistic expectations in managing their role as certifier (32).

Implications for practice and future research

It is feasible that the primary health care and social welfare structures in Ireland impact on the certifying practices of GPs. GPs appear disgruntled and frustrated by aspects of the sickness certification system. It appears that sickness certification may be influenced by the nature of the presenting problem, the social circumstances of the patient, or by the patient's demand. Many of the discussion points raised by GPs in the interviews raise the hypothesis that some regulation is required for the purpose of 'proof of illnesses' for an employer, as it represents a source of conflict for them and may breach the core ethics of patient confidentiality. Further research should explore the area of ownership of sickness certification data and its disclosure in greater depth. There is a perception among GPs that employers are using non-state sickness certificates as a management tool in controlling absenteeism. If so, then future collaboration between primary health care and employers is required to resolve this issue. Focus should be placed on rehabilitation pathways and other alternatives to allow patients to remain within the workforce.

The 7 occupationally trained GPs in our study were unanimous in the view that they had a greater insight into the relationship between work and health. Such a finding may be important and may suggest that consideration should be given to training in occupational health for GPs who certify in general practice, especially in relation to advice relating to the workplace and sickness absence.

Conclusion

This research demonstrates that GPs face many challenges and complexities in sickness certification in day-to-day practice and that these problems are similar to those

identified in other European studies. A review of sickness certification in Ireland is now warranted and should take place within an epidemiological framework to establish a baseline for further research and policy generation.

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Supplementary material available online

Supplementary Box 1

Original Article

Assessing fitness for work: GPs judgment making

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KEY MESSAGE:

- GPs show difference in the type of information gathering in the fitness for work consultation based on the presenting illness.
- GPs shows differences in the perceived potential stressors at work based on the way patients presents their condition.
- GPs recognize that additional support factors are vital to manage effectively illness at work.

ABSTRACT

Background: The complexity of a fitness for work consultation is well documented. General practitioners (GPs) find that such consultations often create conflict and they feel ill-prepared for the task.

Objectives: We aimed to examine the consultation process in the fitness for work consultation and to report on the response of GPs to two hypothetical consultations of work related sickness absence, one of a psychological and one of a physical nature.

Methods: Three areas of the consultation were examined; social/family circumstances, workplace history and information required assessing the severity of the condition. We used a randomized design using an online questionnaire completed by 62 GPs located in the Republic of Ireland. Analysis was conducted in NVivo 8 qualitative software using thematic and content analysis techniques.

Results: GPs may be expected to collect and consider information relating to social, domestic, financial, lifestyle and workplace factors, including workload, job satisfaction, job strain, work ethic, inter staff relationships and employee support mechanisms. The mode of presentation may trigger specific information seeking in the consultation.

Conclusion: GPs may evaluate fitness for work in a variety of ways depending on medical and non-medical factors. Further research should further examine the factors that may influence the GPs decision to prescribe sickness leave.

Keywords: general practice/family medicine, qualitative designs and methods development of measurement instruments, psychological problems, musculoskeletal disorders

INTRODUCTION

There is a large body of research exploring how consultations are approached and handled in primary health-care (1). Over the past four decades, several models of the consultation have been developed to explain and investigate the consultation process (2). However, research investigating the consultation process in sickness absence certification is limited. The sickness certification consultation presents the opportunity to discuss

the illness and its impact on social functioning including work. In many cases of work related absence, doctors can neither confirm nor deny the presence of pathology and the quality of advice given to the patient will depend on the General Practitioners' (GPs') knowledge and consultation skills (3,4). There are implications for a patient who is deemed 'unfit for work'. Longitudinal studies reveal that prolonged spells of work related absenteeism can result once a person starts certified sickness

leave. Rates of return to work are reduced after a period of 12 weeks and following a period of six months it is estimated that a person has a 20% chance of returning to work within a five year period.

GPs can find their role as certifiers problematic and a source of conflict. The prescribing of sickness leave is often based on the GPs' desire to preserve the doctor-patient relationship (5-7). Non medical factors such as social circumstances and demand for certification rather than fitness for work have been implicated in GPs' decision making on sickness certification (8,9). Difficulties include negotiation with the patient about fitness for work and disagreement between the GP's and patient's perceptions about their ability to work (4). Training in occupational medicine is considered inadequate and GPs report that they are often ill-prepared for the task of assessing fitness for work (9-13).

In Ireland GPs are required to act as gatekeepers for statutory benefits, thereby further complicating the process. Over the past decade there has been a significant rise in the level of sickness certification in Ireland and currently over 80% of all sickness certificates relate to illness with diagnostic challenges such as psychological problems and musculoskeletal conditions. Uncertainty in assessment of these conditions is thought to be one problem for GPs in decision making about sickness certification (14).

We aimed to move away from the area of problematic experience in sickness certification and instead to focus on the process of information seeking in the fitness for work consultation. The aim was to report qualitatively on two hypothetical consultations of work related sickness absence, one of a psychological and one of a physical nature as these conditions represent the highest frequency of certified absence. We wished to explore the specific nature of the consultation process related to three areas; information seeking in relation to the patient's social/family circumstances, information seeking related to workplace history and other information required by the GP to assess the severity of the condition. The study was conducted as a larger exploratory study aiming to explore sickness certification in the Republic of Ireland.

METHODS

General design

The study took place between April and June 2011 using an online survey tool. Ethical approval was granted by the Waterford Institute of Technology, ROI and University of Manchester Research Ethics Committees, UK. Two hundred GPs were e-mailed by random allocation using the Irish College of General Practitioners (ICGP) electronic mailing database. GPs were asked to complete one of eight computerized clinical vignettes. Two

additional e-mail reminders were sent to the selected GPs following a two and four week period. Ninety-seven out of 200 GPs agreed to participate, 62/97 completed the survey, leaving a useable rate of 31%. GP consent was obtained electronically and this allowed them to gain access to the vignette.

Vignette construction

Vignettes were constructed to present typical scenarios of patients attending the GP's surgery. The medical conditions chosen represented those most frequently resulting in sickness absence as described by the Department of Social Protection (Ireland) and THOR—GP (UK) (15,16). Two scenarios were prepared, one of a male with a psychological problem and the other of a male with a physical problem. Variables were manipulated to include the presence or absence of a social problem and the request from or reluctance of the patient to be certified to explore the influence of these variables in the information seeking. The result was eight hypothetical scenarios, four of a psychological nature and four of a physical nature. Each scenario was reviewed to check for validity and relevance of the vignette to clinical practice using pre determined criteria. Reviewers included a psychologist, a GP trainer, three occupationally trained GPs, five GPs working in primary healthcare, and two faculty members of an Academic Institution. The final vignettes were agreed and organized into three principal sections: work and family history, nature of the condition and treatment plan, and the current reason for a visit to the surgery. Boxes 1 and 2 illustrate the vignette versions used in the study.

Questions

After reading the scenarios, participants were asked to enter their typical responses to three open-ended questions relating to the specific fitness for work consultation:

1. What specific information would you search for related to the patient's social/family circumstances?
2. What specific information would you search for in the patient history related to the workplace?
3. What additional information would you require to assess the severity of the condition?

Data analysis

GP entered brief responses to each of the questions (maximum of 200 words). Each of the responses was downloaded and entered in NVivo 8 qualitative software for thematic and content analysis. The first level of coding was conducted by reading through the qualitative

Box 1. Showing the psychological vignette version.

Vignette (1–4) variable type psychological problem (PSY+)
Mr X is a 38-year-old office manager who has been with the company for the last five years. The company is a large multinational company specializing in pharmaceuticals. Mr Flynn supervises a team of ten administrators. The job involves accounts, personnel and general administrative work. There are occasional visits to sister plants, but mainly the job is office-based.

Variable type (+) = Mr X is married with three children.
Mr X partner works as a nurse in the local hospital; this often involves her working at night, and at weekends.

Variable type (–) = Mr X is single

Your notes indicate that Mr Flynn is experiencing intermittent low mood and tearfulness over the past two years. This has resulted in Mr X taking occasional days off work. A month ago he came to you and reported that he had experienced persistently low mood and tearfulness. Mr X also indicated that he is having problems with concentration and sleeping. You gave Mr X a sickness certificate for two weeks and prescribed an antidepressant.

At the end of the certification period Mr X returned to work for a four week period, but is now back at the surgery and states that the symptoms have ‘gotten worse’ and he is now having anxiety attacks and feels he just cannot cope.

Variable type (+) = Mr X asks if you can provide another sickness certificate. He feels that an extended period of recovery will help to alleviate some of the symptoms.

Variable type (–) = Mr X states that he cannot really afford to take more time off from work.

Box 2. Showing the physical vignette version.

Vignette (5–8)—variable type physical problem (PHY+)
Mr X is 41 years old. He has been a machine operator for the past five years. It is a local company that provides components to the medical devices industry. The job involves machine set-up, machining and measuring of component parts. The job also requires some lifting, which is assisted using hoist equipment.

Variable type (+) = Mr X is married with three children. Mr X partner works as a nurse in the local hospital; this often involves her working at night and at weekends.

Variable type (–) = Mr X is single

Mr X records show that he is experiencing occasional lower back pain over the past three years, which has led to the occasional day or two off from work. He has been treated with pain killers on these occasions and you also recommended that he takes regular exercise. Two weeks ago Mr X came to you experiencing a dull ache in his lower back, which he explains has gotten progressively worse over the previous four months. Mr X describes that he is very stiff first thing in the morning.

You provide Mr X with a sickness certificate for a period of one week. Mr Walsh went back to work for one week, but he is now back at the surgery complaining of pain when bending down and reaching forward.

Variable type (+) = Mr X asks if you can provide another sickness certificate. He feels that an extended period of recovery will help to alleviate some of the symptoms.

Variable type (–) = Mr X states that he cannot really afford to take more time off from work.

data chronologically and generating broad participant driven categories. These categories were discussed between the first and second author and subsequently grouped by theme. Themes were discussed between all authors, and this strategy led to the identification of the several sub-categories of information seeking. References made by the participants to each of the sub categories were noted. The total number of references in each sub-category was then counted and presented as a frequency (Table 1).

RESULTS

Social circumstances and psychological problems

Socio-demographic information of participating GPs is presented in Table 2. Support structures, relationship health, interpersonal and financial circumstance were dominant themes across all vignette versions. Overall, GPs wanted to know more about the patients social circumstances when presented with a psychological problem. The mode of presentation may trigger specific information seeking during the consultation process. The presence of a psychological problem prompted greater inquiry into family support structures, the presence or absence of problems in the patient’s relationships, and financial worries when compared to a patient having a physical problem. Having a psychological problem was

associated with increased concern from the GP about addiction and substance misuse. The presence of adverse social circumstances did not appear to impact greatly on the information seeking process; however, social isolation and poor living conditions were mentioned in the case of the single patient and were given greater importance by the GP when the patient had a psychological condition. The GPs’ concern about suicide appeared more marked when the patient was reluctant to take additional time off from work.

Workplace

Information seeking on patients’ workplace was consistent with known reasons for workplace sickness leave, but there were differences based on the type of presenting problem. Taking the history of the workplace included working conditions, workload, work ethic, job satisfaction, job security, and inter-staff relationships and employee support mechanisms. GPs considered the working tasks of patients more often when presented with the physical condition and seemed to engage in more detailed inquiry when the patient was reluctant to take additional time off from work; whereas in the case of the patient with the psychological problem GPs were more concerned with workload and social networks and relationships with employers and fellow employees.

Table 1. Showing the main thematic categories and references made for each vignette version.

Vignette version	PSY +++	PSY ++-	PSY +-+	PSY +--	PHY +++	PHY ++-	PHY +-+	PHY +--
Frequency (f)	n = 7	n = 9	n = 8	n = 7	n = 5	n = 7	n = 7	n = 12
<i>Question 1</i>								
Information seeking related to the patients social/family circumstances								
Thematic category	(f)							
Interpersonal stress	4	3	2	2	2	3	1	3
Support structure (Spouse, family, childcare, friends)	5	7	6	3	0	6	1	3
Relationship health	4	6	5	1	2	1	1	2
Financial situation	1	3	1	5	1	2	3	2
Substance misuse	1	4	4	3	0	1	1	4
Family history of illness	0	1	1	3	1	0	1	0
Social Isolation/living conditions	0	0	5	2	0	0	1	4
Physical activity and other interests	0	3	4	1	1	0	0	4
<i>Question 2</i>								
Information seeking in patient's history related to the workplace								
Thematic category	(f)							
Work-related stress	1	2	3	2	1	0	0	0
Work load	1	5	5	3	0	2	0	1
Bullying at work	4	3	5	3	2	0	1	0
Inter staff relationships and employee supports	4	5	3	3	1	0	1	4
Working tasks	4	2	3	0	4	5	3	8
Working conditions	0	2	3	5	2	6	2	10
Job satisfaction	2	0	0	0	2	0	1	1
Job security	2	0	2	1	1	0	1	1
<i>Question 3</i>								
Additional information required to assess severity of patient's condition								
Thematic category	(f)							
Suicidal ideation	1	6	4	6	0	0	0	0
Physical and psychological signs and symptoms (mood, sleep appetite changes)	3	5	6	3	2	4	3	9
Physical medical evidence (X-ray, MRI, etc.)	0	0	0	0	2	3	5	8
Consultants report	1	1	0	0	0	0	2	0
Family history	3	2	3	0	0	1	0	2
Medication history	2	1	0	0	0	2	1	2

Medical aspects

Additional information needed to assess the severity of the condition was largely associated with clinical diagnostics and included medical assessments, medical history, medication and results from previous diagnostic examinations. Corroborating medical evidence required to assess the severity of the condition was evident for the patient with a physical problem (X-ray, MRI, etc.) but not sought for the patient with the psychological problem (i.e. psychiatric assessment, psychiatrist report, etc). Suicidal ideation was most frequently requested to assess the severity of the psychological condition while assessing evidence in the physical complaint was mostly related to obtaining the results of MRI and X-ray procedures.

DISCUSSION

We highlight the complexity of information GPs may be required to collect and process during a typical fitness

for work consultation. Such information includes social, domestic, financial, and lifestyle factors; workplace problems, including workload, job satisfaction, job strain, work ethic, inter staff relationships employee support mechanisms; and medical factors including the results of previous investigations.

Reasons for psychological related sickness certification

Findings in this study may provide further insight into the reasons for high rates of psychological related sickness certification. Several studies have shown that certification rates are higher for patients presenting with psychological problems, and the condition seems to generate greater sympathy from GPs (6,9,17–20). There is little evidence to support the therapeutic role of abstaining from work for those with mental health problems (21,22). However, patients have reported that stress and depression have a high impact on the ability to work, and thus

Table 2. Socio-demographic data of participating GPs.

n = 62	Frequency (f)	% respondents
Age		
25–30 years	1	1.6
31–40 years	23	37.1
41–50 years	17	27.4
Older than 50 years	21	33.9
Gender		
Male	25	40.3
Female	37	59.7
Undergraduate medical training		
Ireland	59	94.2
UK	2	3.2
Other EU	1	1.6
GP training		
Ireland	51	82.2
UK	9	14.5
Other EU	1	1.6
USA	1	1.6
Postgraduate training in occupation medicine		
Yes	3	4.8
No	59	95.2

empathic concern may be driven by a switch in viewpoint from the GPs own personal perspective to the perspective of the patient (23). Equally the GP may take the view that working with a psychological condition could add additional pressure to the concept of being 'well' (24).

The workplace: stress or protection?

The information GPs sought during the consultation in the present study was similar to that identified in the literature as contributing to sickness absence in the workplace (25). There appears to be greater enquiry into the working situation when the patient is reluctant to take time from work and this may be based on the GP perceived risk of presenteeism (attending work when sick) (26). While certain characteristics of the working environment can contribute to sickness absence, the responses in the current study suggest differences in the perceived potential stressors at work. GPs in the current study recognize support factors considered vital to manage effectively illness at work (27,28). However, they may underestimate the role of social supports as a protective factor against psychological stress even for those with physically demanding jobs (29). Fifteen references were made to the possibility of 'bullying at work' a finding, which concurs with those of a recent qualitative study conducted in Ireland suggesting that workplace bullying is a common reason for sickness certification (7). This suggests that GPs may medicalize such problems even when they are not necessarily medical (30).

Occupational healthcare?

Corroborating evidence from the employer or an occupational physician was not considered by the GPs in the current study and this finding may reflect the disconnection of employers and occupational health from primary healthcare. There is some evidence from other studies to suggest that GPs rarely engage with employers on work related issues and under these arrangements a lack of engagement results in unrealistic expectations in managing their role as certifiers (13,31). It also appears that GPs may be more confident in certifying for psychological problems and require 'hard evidence' to a greater extent in cases of a physical nature. This may be related to increased awareness and training of GPs in psychological medicine.

Strengths and limitations

Although concerns have been raised in relation to the use of vignettes in research they may be useful in measuring aspects of clinical practice, especially in conducting comparative analysis or where ethical issues present in practice (32,33). We took care to construct vignettes to take account of various clinical scenarios relating to typical fitness for work consultations. However, they present hypothetical situations and may not necessarily reflect what a doctor would actually explore in a real fitness for work consultation with a patient (34). Furthermore, the questions did not allow the doctor to explore patient responses, which would further guide the consultation process. Yet, these vignettes could be utilized in further comparative GP studies on sickness certification.

We restricted the vignettes to male patients to minimize the number of vignette versions; future research can delineate any gender issues that could arise. Patients' gender is an important variable in predicting sickness absence and women are shown to have higher rates of certification compared to men (15,35,36). Possible explanation is the use of sickness certification for extenuating circumstances such as caring for sick children (7,37,38).

The response rate of this study is low at 31%, and no information is available to compare the respondents to the non-respondents, although GPs represented in this study are reflective of gender proportions and age profiles of GPs working in Ireland. Results have not been analysed in the context of GPs working experience, gender or additional qualifications, specialism and training. However, research on sickness certification in Ireland is limited, and this study highlights the multiplicity of factors for consideration in a case of work related illness.

Conclusion

We highlight various roles that GPs may be required to undertake in relation to sickness certification including

the potential conflicting role as a patient advocate. The GP must often balance the patient's needs and expectations with their perceived probability of risk should the patient attend or abstain from work. The most important finding is the variation in information seeking based on the type of illness presentation. GPs may be focused on the organizational factors in the workplace rather than the working tasks of patients particularly in cases that present of a psychological nature. While training and education for GPs may increase awareness and understanding of work related sickness absence, failure to recognize the complexity of the problems that occur when consulting on sickness absence may result in lack of preparation of newly qualified GPs for this task. Further research into sickness certification and work related absence in Ireland may benefit both doctors and patients.

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ETHICAL APPROVAL

Waterford Institute of Technology and the University of Manchester Research Ethics Committees.

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SHORT REPORT

Sickness certification difficulties in Ireland—a GP focus group study

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Background	Sickness certification causes problems for general practitioners (GPs). Difficulty with the assessment of capacity to work, conflict with patients and other non-medical factors have been shown to influence GPs' decision-making. Inadequate leadership and management of certification issues add to GPs' difficulties.
Aims	To explore problems associated with sickness certification, as part of a larger mixed method research project exploring GPs' experiences and perceptions of sickness certification in Ireland.
Methods	A qualitative study in an urban region of Ireland. A focus group of four male and four female GPs explored problems encountered by GPs in certifying sickness absence. Thematic data analysis was used.
Results	Three major themes emerged: perception of the sickness certification system, organization of health care and cultural factors in sickness absence behaviour. Employment structures in public and private sectors and lack of communication with other health care providers and employers were identified as complicating sickness certification.
Conclusions	GPs encounter a complexity of issues in sick certification and are dissatisfied with their role in certifying sickness absence. Our results open the debate for policy change and development in Ireland.
Key words	Fitness for work; sickness absence; sickness certification.

Introduction

Evidence suggests that the current sickness certification system creates difficulties for general practitioners (GPs) in Ireland, involving a complexity of both medical and non-medical factors [1]. Sickness absence rates and subsequent illness benefits increased by 9.5% during 2008–2010 and cost more than €2.7 billion for Ireland's 4 million residents [2].

In Ireland, general practices operate as private businesses. GPs act as gatekeepers for the Department of Social Protection (DSP) and are paid a consultation fee and a fee for each sickness certificate issued for patients to claim state sickness benefit. Sickness certificates used to provide proof of illness for employers, which is required in work-related absences, are unregulated. There is no statutory requirement for sickness benefit in Ireland and no legislation. In the public sector, there are rules guiding the number of self-certifying days and employees' rights to sickness pay paid by the employer. State sickness benefit

can be claimed from the DSP for those eligible after three consecutive days of illness from the pay-related social insurance fund (PRSI). The PRSI funded by employers and employees earning more than €38 per week.

This study explored problems associated with sickness certification as part of a larger mixed method research project exploring GPs' experiences and perceptions of sickness certification in Ireland.

Methods

Ethical approval was granted by Waterford Institute of Technology (Ireland) and Manchester University Research Ethics committees (UK) in 2009. The focus group took place in April 2012 ($n = 8$), was unstructured and began with a general question 'What is your experience with sickness certification in Ireland?' The interview lasted 54 min, was audio digitally recorded and transcribed verbatim.

Qualitative analysis was performed using thematic analysis in Nvivo 8 qualitative software. Broad themes from the transcript were coded by the main researcher. Subsequent levels of coding were then conducted and discussed regularly by all authors.

Results

Three main themes were identified: perception of the sickness certification system, organization of health care and cultural factors in sickness absence behaviour.

Several subthemes also emerged (see Table 1). Narratives supporting these themes are illustrated as quotes in Table 2. Participants expressed dissatisfaction with the current system of sickness certification and a desire to focus on functional assessment and ability of patients to work. Generous sickness related benefits and anomalies of full pay while on sickness leave were thought to contribute to high levels of workplace absenteeism.

Problems were identified in ‘gatekeeping’ for the DSP and lack of systems to check patients’ compliance with treatment. Lack of access to secondary care and

Table 1. Main themes and subthemes emerging from the focus group

Main themes	Summary themes	Subthemes
Perception of the sickness certification system	Fitness for work	<ul style="list-style-type: none"> • Patient inability to work is only job specific • System focused on disablement • An emphasis on functional ability could empower patients to seek alternative work or duties
	Illness benefits	<ul style="list-style-type: none"> • Payment are generous and easily obtained • Public workers are paid in full for periods of sickness leave
	Patient compliance	<ul style="list-style-type: none"> • No system to check for patient compliance with treatment
	Gate-keeping	<ul style="list-style-type: none"> • GPs cannot act exclusively as gatekeeper for state benefits • System requires more rigour and regulation
Organization of health care	Rehabilitation options	<ul style="list-style-type: none"> • Poor rehabilitation options for patients • Poor rehabilitation leads to extended period of sickness leave • Poor rehabilitation option results in poor patient outcomes and increased occurrence of low self-esteem and depression in patients
	Lack of hospital care	<ul style="list-style-type: none"> • Public health system has long waiting times for routine examinations such as MRI and other minor procedures • Private patients have better access to secondary and tertiary care
	Continuity of care	<ul style="list-style-type: none"> • Lack of communication between hospital doctors and GPs • Sickness certification for state benefit cannot be facilitated by hospital doctors • Recertification is the only option while patient is waiting for secondary care • Integration required between primary and secondary health care in cases where sickness certification is required
	Occupational health	<ul style="list-style-type: none"> • Limited or no occupational health services within most organizations and workplaces • No legislation on requirement for occupational health services in the workplace
Cultural factors in sickness absence behaviour	Absenteeism behaviour	<ul style="list-style-type: none"> • Normalized in certain sectors of society • Acceptable part of Irish culture • Pregnancy often considered cause for sickness absence • Deviant behaviour in public sector workers
	Organizational behaviour	<ul style="list-style-type: none"> • Employers not willing to negotiate on working tasks of patients • Trust issues between employees and employers • Sickness certification used as a mechanism control absenteeism by employers • Poor management of health in the workplace

rehabilitation was recognized as a major problem often leading to extended sickness certification. Continuity of care was broken once patients entered secondary care. Hospital doctors/consultants cannot certify for state benefits and patients return to their GPs requesting certification, often leaving the GP with little or no choice.

Cultural factors in absenteeism behaviour and requirement for sickness certification were a recurrent and dominant theme. Some participants believed that absenteeism behaviour was (to some extent) normalized in certain sectors of society and that this generated preconceived ideas about illness and the requirement to be certified as unfit for work. Additional comments were made about pregnant patients seeking certification and deviant behaviour in public service workers.

Some participants perceived a lack of occupational health and human resources as contributing to significant amounts of certified absence in Ireland. Organizational cultural factors were considered to be a factor in the overuse of sickness certification and that employers were sometimes not willing to negotiate patients' work tasks. Trust issues identified between some employers and employees generated a culture of passing responsibility onto GPs to decide on fitness for work.

Table 2. Quotes from the GP focus group

<p>'I would like to say, I would like not to be doing (sick) certs as a GP. I feel it's absolutely nonsense because I really can't do it properly. I can't really say whether this person is really fit for work or not because the system isn't facilitating me to do it'. (Female GP3)</p> <p>'I think the whole emphasis is wrong. There is a big emphasis on what's called disability whereas you should look at them and say "what's the ability?"' (Male GP1)</p> <p>'It should be an automatic thing that if you're out on (sick) certs for longer than whatever three weeks either occupational health are called in or they are [the patient] is called before a medical assessor'. (Female GP2).</p> <p>'If people stop getting paid after the first week and if they feel that they are so sick that they can't go to work that they make their own appointment with the medical assessor and you'll see your absenteeism rates go through the floor'. (Male GP3).</p> <p>'[following referral] They're back in and out for their (sick) certs. "I'm still waiting Doc? I'm still waiting Doc? [the patient]"' (Female GP1)</p> <p>'There are lots of women in Ireland who think pregnancy is an illness...they're dropping off like flies just because they feel a bit nauseous in the morning. They're looking for a (sick) cert for that'. (Female GP4)</p> <p>'You see it's easy to blame the GP but really it comes back to the organisation. It's all to do with the cultural values of the organization'. (Male GP2)</p> <p>'I think anyone who's sick for two or three days should be signing themselves; I was sick for two or three days, what in the name of God? Am I there saying 'yes you were sick for two or three days' Seriously they are coming in to ask you to confirm that I was sick [the patient] and had diarrhoea for three days. This is nonsense. Stop this waste of money!' (Female GP3)</p>
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Discussion

In this focus group study GPs expressed difficulty with their role in certifying sickness absence. Several problems complicating sickness certification were reported including the current benefit structures in public and private sectors, cultural factors and lack of communication with other health care providers and employers.

These results support findings from previous studies reporting problems with sickness certification and highlight the conflicting role of GP 'gatekeeping' in sickness certification [3–5], the desire to maintain a positive doctor–patient therapeutic alliance [6] and problems with communication, lack of support and rehabilitation opportunities [7,8]. This study was small and the findings cannot be generalized, but it identified cultural and process aspects of sickness certification not previously described in an Irish context. Further GP focus group or interviews could validate these findings.

Our results support a system for identifying 'fitness for work'. Such a system has been recently introduced in the UK, focusing on patients' ability rather than disability [9]. The introduction of a regulated self-certification system for short-term illness in Ireland may reduce the burden on GPs and create greater patient autonomy. However, problems with self-certification include cultural aspects of sickness absence behaviour and payments for certified sickness absence. The special case of pregnant patients was noted; the perception being that pregnancy equalled an inability to work. DSP statistics in Ireland demonstrate high rates of certification in females aged 30–39 [2]. GPs in our study perceived absenteeism behaviour as related to a lack of occupational health in the workplace. An integrated approach between primary and occupational health care may help with detection, prevention and preservation of working capacity [10].

Further work is needed to elucidate how sickness benefit structures and the arrangement of the health care system affect sickness certification practice in Ireland. Recognition of the complexity of problems in sickness certification is a prerequisite to successful solutions.

Key points

- General practitioners experience complex challenges in sickness certification.
- Collaboration with employers and resource allocation in health care could greatly reduce certified sickness absence.
- A regulated system of identifying patients' fitness for work may decrease the burden placed on general practitioners in the prescribing of sickness leave.

Conflicts of interest

None declared.

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