**The issue of ‘long-term’ fit notes for depression in the UK: Patient, GP and general practice variation**

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**Abstract**

**Background** Depression is an important cause of certified sickness absence in the UK. It is not known what factors are associated with variation in length of sickness certificates issued by the GP to the depressed patient.

**Aims** The purpose of the study wasto identify patient, GP and practice factors associated with the issue of a long-term (> 4 week) fit note for depression.

**Methods** Sixty-eight UK general practices collected sickness certification data for 12 months.

**Results** Over 35% of 8,127 fit notes issued to 3,361 patients for depression were classed as long-term (over four weeks in duration). Having previous fit notes for depression, not having ‘may be fit’ advice on the fit note, older patient age, the patient living in a deprived neighbourhood and a higher practice deprivation status were all significant predictors of a long-term fit note. Depression fit notes issued by female GPs to female patients were less likely to be long-term. Other GP factors were not significant predictors of a long-term depression note.

**Conclusion** Reducing the number of long-term sickness certificates issued to people with depression should be considered part of return-to work and job retention strategies.

**Introduction**

Depression is a major public health problem, with a worldwide prevalence estimated to be approximately four per cent (Ferrari *et a*l., 2013). In addition to the distress experienced by the individual patient suffering from depression there is a wider impact in terms of social functioning and ability to work (Lerner & Henke, 2008). The core symptoms of depression affect the employee’s emotional, cognitive and social functioning, which directly impacts on their ability to perform normal work duties (Harvey *et al*., 2011). While depressive disorders are directly linked to long-term sickness absence and recurrence (Cornelius *et al*., 2011; Hensing *et al*., 2006; Koopmans *et al*., 2008; Koopmans *et al*., 2011; Nielsen *et al*., 2012; Nieuwenhuijsen *et al*., 2006; Roelen *et al*., 2012), they can also lengthen the sick leave due to co-morbid physical health problems such as low back pain and heart disease (Hansson *et al*., 2006; O’Neil *et al*., 2010). The association between mental health and work is far reaching, and extends beyond the direct economic consequences (for the individual patient/employee, productivity and state spending on benefits). Being in work is central to self-identity and is associated with greater mental well-being (Joyce *et al*., 2015; Waddel & Burton, 2015). The mental and physical benefits of working are seen to outweigh the potential negative consequences of remaining in paid employment. The economic impact of being unable to work is also likely to extend beyond the individual to members of their family (Reinhardt-Pederson & Madsen, 2012). Common mental disorders, such as depression, have replaced musculoskeletal problems as the main cause of long-term sickness absence in most developed countries (Black, 2008; Brown *et al*., 2009; Cattrell *et al*., 2011; Hensing & Wahlström, 2007; Shiels *et al*., 2004). In the UK, there is evidence that, while the contribution to total certified sickness made by musculoskeletal problems has remained fairly stable, the proportion of mental-health related sickness certification has increased significantly in recent decades(Shiels *et al*., 2013).It has also been reported that some common mental disorders are likely to be under-detected in primary care, particularly when co-morbid with somatic conditions, leading to a possible underestimate of mental health-related sickness certification (Bair *et al*., 2003; Soegaard, 2012). It has also been reported that for every 10 general practice consultations relating to reported depression only three result in a certification outcome (Mallen *et al*., 2011).

While previous studies have considered the contribution of patient, GP and general practice (or primary health care centre) factors in the issue of a sickness certificate (Starzmann *et al*., 2015) or duration of total certified sickness absence (Aakvik *et al*., 2010), relatively little attention has been paid to their role in the variation in the length of the individual sickness certificate itself, particularly when issued for the same mental health diagnosis. This paper reports a study that aims to estimate the relative effect of patient, GP and general practice factors on the issue of a ‘long-term’ fit note for depression.

**Methods**

*Data collection*

Sickness certification (‘fit note’) data for the study were generated from two projects commissioned and funded by the UK Department for Work and Pensions (DWP): the national evaluation of the fit note (2011-2013) and the evaluation of Fit for Work Service (FFWS) pilots (2011-2012). The former recruited 49 general practices from five geographical areas of the UK (Scotland, Wales, Derbyshire, North West and South East England). The latter involved 19 practices sited in three FFWS pilot sites (Greater Manchester, Leicestershire and North Staffordshire).

Details of all fit notes issued in a 12-month period were recorded. A practice staff member anonymised and recorded details of each note on a dedicated spreadsheet. In addition to the details on the note (date of issue, diagnosis, period to abstain from work, whether the patient ‘may be fit’ to do some work, whether the patient needed to be re-assessed at the expiry of the note and the certifying GP) a number of additional items were collected from the patient practice record. These included gender, year of birth and post code. The latter was transformed by practice staff into a neighbourhood deprivation score for the patient. Deprivation scores were based on lower-level Super Output Area and Data Zone scores in the most recent Indices of Multiple Deprivation (IMD) for England, Wales and Scotland. Fit note data were transferred monthly by the practices to a project coordinator. At the end of data collection, the respective practice managers provided information about certifying GPs (gender, age, whether a partner or salaried, part-time or full-time) and their general practices (size, location and deprivation status of patient population). Ethical approval for data collection was obtained from the (UK) National Research Ethics Service in June 2011.

*Diagnostic classification of fit notes*

In classifying the health (or related) problem recorded as the reason for the patient being issued a fit note, revised ICD-10 categories were used. A ‘Mild-Moderate Mental Disorder’ (M-MMD) category was used to group sickness certificates issued for depression, anxiety, mixed anxiety and depression, stress, bereavement, substance misuse and various other mental health problems.

*Outcome measure*

The first national assessment of the fit note reported that 73% of notes issued by GPs were for 4 weeks or less (only 32% of those issued for a common mental disorder were longer than a median of 4 weeks) (Shiels *et al*., 2013). For this study we used the 4 week threshold to create a dichotomous outcome measure, with a fit note > 4 weeks defined as ‘long-term’.

*Statistical Analysis*

In order to simplify analysis, and to more accurately estimate relative effects on outcome, only fit notes with a single diagnosis, “depression”, were included in analysis. Hence, multiple-diagnosis fit notes, citing depression (along with other mental or physical diagnoses) as the reason the patient should abstain from work, were excluded.

Univariate analysis was conducted in order to test for association between outcome and characteristics of the fit note, the patient, the certifying GP and the general practice. The chi-square test, with a continuity correction for 2x2 tables, was used.

A random-intercept (multilevel) logistic regression model was run in order to estimate the independent effect of fit note, patient, GP and practice factors on risk of issuing or receiving a long-term fit note for depression. In order to account for the hierarchical nature of the data, the model included random intercepts for patient, GP and general practice. For reporting fixed effects, the Odds Ratio (OR), 95% Confidence Intervals (CIs) and associated P-value of each independent covariate are reported. Before entering covariates, a null (empty) model was run in order to calculate the degree of variance in outcome at the levels of patient, GP and the general practice. The proportion of total variance attributed to each level was calculated as the individual level variance divided by (π2/3 + Vpatient + Vgp + Vpractice).

For univariate and multivariate analyses, a conventional criterion of statistical significance (P<0.05) was used.

All data were analysed using SPSS for Windows 22.0 and Stata IC 10.

**Results**

*Diagnoses on fit notes*

Details of 79, 815 fit notes issued over a 12-month period were collected from the 68 general practices. Thirty-five percent (n=27,792) of the fit notes were issued to patients for a M-MMD. Over half (n=14,176) of the M-MMD fit notes had a diagnosis of depression included as a reason for the patient to abstain from work. However, 6,049 (43%) of these notes included other diagnoses (psychological and physical) along with depression (3,424 fit notes cited mixed anxiety and depression diagnoses). Hence, 8127 fit notes were issued for depression only.

*Length of fit notes issued for depression*

The most common entry in the duration section of the depression fit notes was for the patient to abstain from work for “four weeks” or “28 days”. Over 30% (2,467/8,127) of the depression notes included this advice from the GP. Nearly 29% (n=2,341) of the fit notes were for two weeks or less, and 35% (n=2,800) advised that the patient was unable to work for a period exceeding four weeks.

*Patients receiving a fit note for depression*

The 8,127 depression fit notes were issued to 3,631 patients in the 12-month data collection period. Over half of the patients (n=1,839) were issued more than one sickness certificate for depression. Over 29% (n=1,066) of depression patients had received a previous fit note for another M-MMD (either alone, or along with depression), and nearly 20% (n=713) had been issued a previous fit note for a physical health problem.

Over 57% (n=4,630) of all depression fit notes had been issued to females, 23% (n=1,870) to patients aged under 30, 20% (n=1,654) to over-50s and 34% (n=2,723) to patients living in one of the 20% most deprived neighbourhoods in the country.

*GPs issuing fit notes for depression*

A total of 631 different GPs issued the 8,127 depression fit notes. Over half (n=322) were female, 28% (n=177) were aged under 35, 27% (n=170) were over 50 years of age, 59% (n=372) were practice partners (and not salaried) and 53% (n=334) worked full-time.

*General practices in the study*

Twenty-two general practices had small patient list sizes (<5000 registered patients). Seventeen had more than 10,000 patients on their register. Forty-five practices were located in an urban or suburban setting, and 23 served a largely rural population. Twenty-six practices were classed as having ‘highly deprived’ patient populations (over 70% of their patients living in the 20% most deprived neighbourhoods in the country) and 24 were estimated to be ‘low deprivation’ practices (less than 20% of patients in the most deprived areas).

*Long-term fit notes issued to patients for depression*

A total of 2,800 fit notes issued for depression were classed as ‘long-term’ (over four weeks in duration). Fit notes were more likely to be long-term when the patient had received previous fit notes for depression in the study period (Table 1) (34% of first fit notes issued to a patient compared to 38% of the fit notes where there had been three or more prior depression notes, χ2=13.9 df=3 P=0.003). However, a significantly lower proportion of depression fit notes where the patient had received a previous note for another M-MMD (32% v 35%, χ2=7.5 df=1 P=0.006) or a physical health problem (28% v 36%, χ2=31.3 df=1 P<0.001) were long-term.

Less than 4% of all depression fit notes included ‘may be fit’ advice from the GP, advising that the patient might be fit to return to work with an appropriate level of support. While relatively few in number, these ‘may be fit’ notes tended to be shorter than those fit notes including no such advice. Only 17% of ‘may be fit’ notes were over four weeks in duration compared to 35% of other fit notes (χ2=40.9 df=1 P<0.001).

There was no significant difference in proportions of long-term fit notes issued to male and female patients (χ2=1.5 df=1 P=0.22). A higher proportion of depression fit notes issued to older patients were over four weeks in duration (37% of notes issued to over-50s, 31% of those issued to under-30s, χ2=13.4 df=2 P=0.001). There was a highly significant increase in the proportion of long-term fit notes issued to patients living in the most socially deprived areas (43% compared to 30% of notes issued to less deprived patients, χ2=138.7 df=1 P<0.001).

Table 1

**Table 1: Fit note and patient characteristics, and proportion of long-term (> 4 week) depression fit notes issued.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **No of fit notes issued for depression** | **No of long-term (> 4 week) fit notes**  | **Row Percent** | **P** |
| **The depression fit note** |  |  |  |  |
| Number of previous fit notes issued for depression: |  |  |  |  |
| *None (first issued to patient)* | 3,631 | 1,215 | 33.5 | 0.003 |
| *One* | 1,839 | 609 | 33.1 |
| *Two* | 1,084 | 370 | 34.1 |
| *More than two* | 1,573 | 606 | 38.4 |
| Preceded by a fit note issued for another mental disorder: |  |  |  |  |
| *No* | 5,867 | 2,074 | 35.4 | 0.006 |
| *Yes* | 2,260 | 726 | 32.1 |
| Preceded by a fit note issued for a physical health problem: |  |  |  |  |
| *No* | 6,648 | 2,383 | 35.8 | <0.001 |
| *Yes* | 1,479 | 417 | 28.2 |
| Fit note includes ‘may be fit’ advice: |  |  |  |  |
| *No* | 7,841 | 2,752 | 35.1 | <0.001 |
| *Yes* | 286 | 48 | 16.8 |
|  |  |  |  |  |
| **The patient** |  |  |  |  |
| Gender |  |  |  |  |
| *Male* | 4,630 | 1,569 | 33.9 | 0.22 |
| *Female* | 3,495 | 1,230 | 35.2 |
| Age-group |  |  |  |  |
| *Under 30* | 1,870 | 586 | 31.3 | 0.001 |
| *30-50* | 4,600 | 1,598 | 34.7 |
| *Over 50* | 1,654 | 614 | 37.1 |  |
| Living in one of most deprived 20% of neighbourhoods in country: |  |  |  |  |
| *No* | 5,300 | 1,593 | 30.1 | <0.001 |
| *Yes* | 2,723 | 1,178 | 43.3 |
|  |  |  |  |  |

*Practice variation in issue of long-term fit notes*

Larger practices, a location in an urban environment and having a large majority of social deprived patients were significantly associated with issuing a higher proportion of long-term depression fit notes (Table 2). Practices with over 10,000 registered patients issued a higher proportion of long-term notes for depression (39%) than did smaller practices (32%) (χ2=43.7 df=1 P<0.001). Nearly 37% of sickness certificates issued to patients for depression at practices in urban or suburban settings were long-term compared to only 29% of those issued by rural practices (χ2=50.1 df=1 P<0.001). Practices categorised as having a ‘high deprivation’ status issued more long-term fit notes for patients with depression (39%, compared to 30% of fit notes issued by practices with less deprived patient populations, χ2=66.5 df=1 P<0.001).

Table 2

**Table 2: General practice and certifying GP characteristics, and proportion of long-term (> 4 week) depression fit notes issued.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **No of fit notes issued for depression** | **No of long-term (> 4 week) fit notes**  | **Row Percent** | **P** |
| **The general practice** |  |  |  |  |
| Patient list size |  |  |  |  |
| *<5000 patients* | 1,252 | 415 | 33.1 | <0.001 |
| *5-10,000 patients* | 3,575 | 1,109 | 31.0 |
| *Over 10,000 patients* | 3,300 | 1,276 | 38.7 |
| Location of practice |  |  |  |  |
| *Rural* | 2,273 | 647 | 28.5 | <0.001 |
| *Urban* | 5,854 | 2,153 | 36.8 |
| Deprivation of patient population |  |  |  |  |
| *Low* | 1,721 | 463 | 26.9 | <0.001 |
| *Moderate* | 2,576 | 843 | 32.7 |
| *High* | 3,830 | 1,494 | 39.0 |
|  |  |  |  |  |
| **The certifying GP** |  |  |  |  |
| Gender |  |  |  |
| *Male* | 4,273 | 1,676 | 39.2 | <0.001 |
| *Female* | 3,829 | 1,222 | 31.9 |
| Age-group |  |  |  |  |
| *Under 35* | 1,772 | 597 | 33.7 | <0.001 |
| *35-50* | 4,080 | 1,658 | 40.6 |
| *Over 50* | 2,275 | 787 | 34.6 |
| Partner in practice |  |  |  |  |
| *No* | 2,368 | 853 | 36.0 | 0.18 |
| *Yes* | 5,759 | 2,189 | 38.0 |
| Works full-time |  |  |  |  |
| *No* | 3,065 | 1,002 | 32.7 | <0.001 |
| *Yes* | 5,058 | 2,040 | 40.3 |

*GPs issuing long-term fit notes*

The gender, age and full-time status of the certifying GP were significantly associated with issuing more long-term fit notes. However, there were no significant differences between GPs who were partners in their practice and GPs with another contractual status (Table 2). Male GPs issued a higher proportion of long-term fit notes for depression (39% v 32% of those issued by female GPs, χ2=38.4 df=1 P<0.001). A higher proportion of fit notes issued by GPs in the 35-50 age category were long-term (χ2=21.9 df=2 41%, compared to 34% of the notes issued by younger and older GPs). A higher proportion of long-term notes was associated with GPs working full-time (40%) rather than part-time (33%) (χ2=28.8 df=1 χ2= P<0.001)

*Risk of issuing/receiving a long-term fit note for depression*

All measured fit-note, patient, GP and practice variables were entered as covariates in a multilevel logistic regression model in order to estimate independent effects on risk of a long-term depression fit note. The model included random intercepts for the patient, certifying GP and the general practice. The independent covariates included a term to estimate the effect of GP-patient gender interaction.

*Random effects:* Before running the full model*,* a null (empty) model was run with three random intercepts. Over 48% (5.21/10.8) of the total variance in the long-term fit note outcome was at patient level, 11% (1.18/10.8) at the GP level and 10% (1.08/10.8) at the general practice level.

*Fixed effects*: When the independent covariates were entered in the model, six were significantly and independently associated with the issue of a long-term note for depression (Table 3).

After a patient had been issued a third depression fit note there was significantly more likelihood of a long-term note being issued. Compared to a first note issued for depression, the odds of receiving a long-term note were increased by 2.85 (95% CI 2.06-3.93). The inclusion of ‘may be fit’ advice on a fit note significantly decreased the probability of it being over four weeks in duration (OR= 0.28, 95% CI 0.14-0.56). Older patient recipients (aged over 50) of a depression fit note were more likely to receive a long-term note (compared to under-30s, OR= 1.75, 95% CI 1.17-2.62).

The social deprivation of the patient’s area of residence and the composite measure of deprivation at the practice level were both significantly associated with a higher risk of a long-term fit note. Depression fit notes issued to patients living in one of the most socially deprived neighbourhoods in the country were more likely to be over four weeks in length (compared to those issued to less deprived patients, OR= 1.91, 95% CI 1.30-2.80). A fit note issued by a ‘high deprivation’ practice was significantly more likely to be long-term than one issued by a ‘low deprivation’ practice (OR= 3.17, 95% CI 1.53-6.59).

In terms of the gender of the patient receiving, and that of the GP issuing a depression fit note, notes issued by female GPs to female patients were significantly less likely to be long-term (compared to the reference male-male category, OR= 0.52, 95% CI 0.31-0.86).

Table 3

**Table 3: Fit note, patient, GP and general practice factors independently associated with risk of the issue of a long-term (> 4 week) fit note for depression.**

|  | **Odds Ratio** | **95% CI** | **P** |
| --- | --- | --- | --- |
| **The depression fit note** |  |  |  |
| Number of previous fit notes issued for depression: |  |  |  |
| *None (first issued to patient)* | 1.00 |  |  |
| *One* | 1.21 | 0.94-1.56 | 0.15 |
| *Two* | 1.41 | 1.03-1.92 | 0.03 |
| *More than two* | 2.85 | 2.06-3.93 | <0.001 |
| Preceded by a fit note issued for another mental disorder: |  |  |  |
| *No* | 1.00 |  |  |
| *Yes* | 0.87 | 0.64-1.17 | 0.36 |
| Preceded by a fit note issued for a physical health problem: |  |  |  |
| *No* | 1.00 |  |  |
| *Yes* | 0.77 | 0.54-1.09 | 0.14 |
| Fit note includes ‘may be fit’ advice: |  |  |  |
| *No* | 1.00 |  |  |
| *Yes* | 0.28 | 0.14-0.56 | <0.001 |
| **The patient** |  |  |  |
| Age-group |  |  |  |
| *Under 30* | 1.00 |  |  |
| *30-50* | 1.36 | 0.98-1.89 | 0.07 |
| *Over 50* | 1.75 | 1.17-2.62 | 0.007 |
| Living in one of most deprived 20% of neighbourhoods in country: |  |  |  |
| *No* | 1.00 |  |  |
| *Yes* | 1.91 | 1.30-2.80 | 0.001 |
| **The general practice** |  |  |  |
| Patient list size |  |  |  |
| *<5000 patients* | 1.00 |  |  |
| *5-10,000 patients* | 0.56 | 0.25-1.18 | 0.13 |
| *Over 10,000 patients* | 0.86 | 0.37-1.99 | 0.74 |
| Location of practice |  |  |  |
| *Rural* | 1.00 |  |  |
| *Urban* | 1.30 | 0.70-2.42 | 0.41 |
| Deprivation of patient population |  |  |  |
| *Low* | 1.00 |  |  |
| *Moderate* | 1.70 | 0.84-3.42 | 0.14 |
| *High* | 3.17 | 1.53-6.59 | 0.002 |
| **The certifying GP** |  |  |  |
| Age-group |  |  |  |
| *Under 35* | 1.00 |  |  |
| *35-50* | 1.36 | 0.75-2.46 | 0.31 |
| *Over 50* | 0.99 | 0.51-1.97 | 0.99 |
| Partner in practice |  |  |  |
| *No* | 1.00 |  |  |
| *Yes* | 1.37 | 0.81-2.34 | 0.24 |
| Works full-time |  |  |  |
| *No* | 1.00 |  |  |
| *Yes* | 1.22 | 0.76-1.97 | 0.40 |
| **GP and patient gender** |  |  |  |
| *Male GP-male patient* | 1.00 |  |  |
| *Male GP-female patient* | 0.93 | 0.66-1.31 | 0.66 |
| *Female GP-male patient* | 0.63 | 0.36-1.09 | 0.09 |
| *Female GP-female patient* | 0.52 | 0.31-0.86 | 0.01 |

Random-intercept logistic regression model: Levels (i) fit note (ii) patient (iii) GP (iv) general practice

**Discussion**

*Summary of findings*

Over 35% of fit notes issued for depression (alone) were classed as long-term (over four weeks in duration). A higher proportion of long-term fit notes for depression was found when the patient had received previous depression notes, was older, living in a socially deprived area, the general practice was larger, the location was urban, the practice patient population was deprived, the certifying GP was male, aged 35-50 and was full-time. Significantly lower proportions of long-term notes were found when the patient had received a prior note for another mental or physical health problem or the depression fit note included GP advice that the patient ‘may be fit’ to return to work.

However, only a limited number of the measured variables were independently associated with a higher risk of a long-term fit note outcome. Having previous fit notes for depression, not having ‘may be fit’ advice on the fit note, older patient age, the patient living in a deprived neighbourhood and a higher practice deprivation status were all significant predictors of a long-term fit note. Depression fit notes issued by female GPs to female patients were less likely to be long-term. Other GP factors were not significant predictors of a long-term depression note.

*Strengths and limitations*

The study had the benefit of being able to access data from the most comprehensive collection of sickness certification in the UK to data. The general practices collecting the fit note data were recruited from different regions of the country, and were representative in terms of location, size and social deprivation of their catchment populations. The main limitation of the study was the lack of access to sources of information to support that found on the fit note itself. In particular, we were limited to patient information that is routinely recorded in general practices in the UK. Other patient data, such as that relating to employment and occupation, would have increased the robustness of analytical models. Unfortunately, occupational information is not routinely recorded in the patient record, even when the patient is a long-term sickness absentee. In fact, this is a limitation of all UK research in this substantive area. Sickness certification researchers in other European countries have the advantage of access to large comprehensive social insurance systems (such as MiDAS in Sweden and NAV in Norway).

*Relation to previous research*

The majority of studies investigating the association between common mental disorders and long-term sickness certification have focused on depression (even though other diagnoses, such as anxiety, may have similar negative implications for work capacity) (Knudsen *et al*., 2013). Fit notes issued for depression, while less prevalent than certificates issued for some other common mental disorders, have been reported to be relatively longer in duration (Shiels *et al*., 2013). In fact, it has been argued that the burden of depression, in relation to work incapacity, may have been underestimated (Soegaard, 2012). For instance, it has been reported that up to a third of patients reporting with chronic pain symptoms may have a diagnosis of depression (Breivik *et al*., 2006). Other studies have reported that when the cause of pain is not known, the prevalence of unrecognized mental disorders may be as high as 80% (Kroenke *et al*., 2011; Ohayon & Schatzberg, 2010). Previous sickness certificates issued for depression increase the likelihood of further episodes. Patients with depression have one of the highest rates of recurrence of a longer episode of certified sickness absence (Koopmans *et al*., 2011).

Since the introduction of a new sickness certificate (fit note) in 2010, GPs in the UK have been able to include advice that the patient ‘may be fit’ to return to work provided appropriate support has been made available by the employer (such as amending normal work duties). The low prevalence of this type of advice found on depression fit notes appears to reflect the under-utilisation of the ‘may be fit’ options in general, but particularly within fit notes issued for mental rather than physical health problems. Fit notes including this type of advice appear to be more ‘transitional’ in nature, with a shorter duration than those including no return-to-work advice (Shiels *et al*., 2013).

Previous studies that have included patient socio-demographic characteristics as potential predictors of long-term sickness absence for mental disorders have reported conflicting findings (Nielsen *et al*., 2010). However, there is relatively consistent evidence of an association between older age and longer sickness absence (Koopmans *et al*., 2008; Nieuwenhuijsen *et al*., 2006; Vaez *et al*.,2007). While our study reports a significant association between social deprivation (of patient neighbourhood and general practice) and risk of a long-term depression note, no previous studies have included an area-based measure of deprivation. We found that female GPs issuing fit notes to female patients with depression had the lowest rate of issuing ‘long-term’ sickness certificates. Male GPs certifying male patients had the highest rate. Gender interaction in certifying sickness absence has received hardly any attention in previous research in the substantive area. One previous study, looking at gender of the GP and patient in sickness certification of all diagnoses, reported a similar trend in that duration of episodes of certified sickness absence tended to be shorter when both the certifying GP and the patient were female (Shiels & Gabbay, 2006). Some of the conclusions drawn by the authors then may be relevant to interpreting the findings of the present study of depression fit notes. The communication skills of doctors of different gender, and the presenting styles of male and female patients, may both play a part. Female GPs may have better interpersonal skills in dealing with patients with depression, and may have a greater insight into the implications of long-term sick leave for a patient of the same gender. Male patients present psychological problems in a different way than do female patients, and this may impact on the level of negotiation involved in the certification process and the resulting length of the fit note.

No other measured GP characteristic was independently associated with the issue of a long-term fit note for depression. In previous studies comparing GP-based variables with patient and other factors in predicting length of sickness certification, the cumulative effect of the measured GP factors was found to be relatively unimportant (Aakvik *et al*., 2010).

*Implications of findings for policy and practice*

Any strategy aimed at addressing the level of incapacity for work caused by depression (and other common mental health problems) needs to consider the existing variation in the length of individual sickness certificates. While we found that the GP factors measured in our study had relatively little impact on the issuing of long-term fit notes, it has been reported elsewhere that patterns of certifying sickness differ widely across GPs and that recommendations relating to the duration of sick leave are far from consistent (Roope *et al*., 2009). With respect to fit notes issued for depression, an underlying factor in variation may lie in a perceived shortage of skills in the diagnosis and treatment of depression in primary care in the UK. Many GPs acknowledge a lack of expertise in the management of common mental disorders (OECD, 2014). In addition, GPs are unlikely to have sufficient knowledge of the patient’s working environment and the demands it may make on their mental health. More training for GPs, both in the process of certifying sickness (when to issue a fit note, how long it should be and what information has to be included) and the management of patients presenting with mental health problems, would be desirable.

Patient-based initiatives are likely to be more effective in any attempt to reduce the number of long-term notes issued for common mental health problems such as depression. UK welfare policy has been increasingly focused upon design of early interventions aimed at retaining people in employment or returning them to work sooner (Black, 2008). The large-scale Improving Access to Psychological Therapies (IAPT) programme aims to significantly increase the availability of evidence-based psychological treatments for common mental disorders (particularly anxiety and depression) within the National Health Service in England. While acknowledging that IAPT has significantly increased the capacity of psychological health therapies, the programme has been criticised for not keeping pace with the increasing demand for psychological therapies and for persisting regional inequalities in access to its services (OECD, 2014).It is still unclear what sort of clinical intervention has the best outcome in terms of enabling the person with depression to remain in work. There is moderate evidence that Cognitive Behavioural Therapy (CBT), delivered as part of a specific return-to-work programme, may have positive outcomes in terms of individual symptom reduction and shorter sickness absence (Joyce *et al*., 2015).A review of 14 studies looking at effectiveness of return-to-work programmes for people with anxiety and depression found that CBT was the most popular psychological intervention used for returning people to work, having potential to improve the function of the individual and having positive organisational goals in reducing duration of sick leave (Corbiere & Shen, 2006). A Cochrane review of return-to-work interventions for depressed people found “moderate quality evidence” for telephone or online CBT reducing sickness absence more than usual primary or occupational care (Nieuwenhuijsen *et al*., 2014).

When the fit note was introduced in 2010 there were expectations that the new format of the certificate, enabling GPs to advise a return to work subject to specific adjustments in normal work conditions, would make a real impact on levels of work incapacity. However, the current evidence is disappointing, with the use of ‘may be fit’ options on the note being rarely used by GPs. When such advice is given, it tends to be more prevalent when physical health problems are the reason for the certification of sickness absence, and the patient is living in one of the *less* socially deprived areas (Shiels *et al*., 2014). Hence the socially deprived group we found at higher risk of receiving a long-term fit note also appear less likely to receive return-to-work advice. Given the increasing importance of depression and other common mental disorders in sickness absence, it is particularly disappointing that the fit note is not being used more effectively in facilitating a return to work for depressed patients. Why a recommendation such as ‘phasing’ a return to normal work hours is appropriate for a patient with a musculoskeletal problem, but not for one suffering from a psychological disorder, is not clear and warrants further investigation.

Another avenue for facilitating a return to work for patients may lie in a referral to the recently introduced Fit for Work service (*FfW*). An independent review of sickness absence in Great Britain was commissioned by the Department for Work and Pensions in 2009. One of the key recommendations of the subsequent report (published in 2011) was that the government should fund a new independent assessment service. This service would provide an in-depth assessment of an individual’s physical and/or mental function, and provide advice about how an individual on sickness absence could be supported to return to work. It was recommended that a sickness absentee should become eligible for a GP referral to the service after the absence spell had lasted around four weeks (including the 7 days of self-certification required in the UK before receipt of a sickness certificate) (Black & Frost, 2011). The *FfW* service is now fully operational, and is open to referrals from all GPs (and employers) in England and Wales. Whether the service can help reduce the number and length of depression fit notes remains to be seen. Given the importance of mental health problems such as depression in the duration of sickness certification, the service will need to take into account the specialised needs of patients taking sick leave for psychological disorders. Our study found that nearly 70% of depression fit notes issued were for a period of three weeks or more. While some patients will not be deemed to be suitable for referral by the GP, and others will not consent to be referred, there are still obvious resource implications for the service. In particular, it will be important to provide the capacity for appropriate psychological assessment using valid measures, and to provide integrated work-related and psychological services (OECD, 2014).

In conclusion, this study has attempted to make a case for focusing on the issue and length of individual fit notes for depression, using data provided by 68 general practices in the UK. The reduction of ‘long-term’ fit notes for depression may be a key component of any strategy to address the increasing burden that mental-health related incapacity places on the sickness certification system. Some factors associated with issue of long-term notes (eg.lack of ‘may be fit’ advice) are readily open to intervention and modification.

**References**

Aakvik, A., Holmas, T.H. & Islam, M.K. (2010). Does variation in general practitioner practice matter for the length of sick leave? A multilevel analysis based on Norwegian GP-patient data. *Social Science and Medicine*, **70**, 1590-1598.

Bair, M.J., Robinson, R.L., Katon, W. & Kroenke, K. (2003). Depression and pain comorbidity – a literature review. *Archives of Internal Medicine*, **163**, 2433–2445.

Black, C. (2008). Working for a healthier tomorrow. London: The Stationery Office.

Black, C. & Frost, D. (2011). Health at Work: an Independent Review of Sickness Absence. London: The Stationery Office.

Breivik, H., Collett, B., Ventafridda, V., Cohen, R. & Gallacher, D. (2006). Survey of chronic pain in Europe: Prevalence, impact on daily life, and treatment*. European Journal of Pain*, **10**, 287–333.

Brown, J., Hanlon, P., Turok, I., Webster, D., Arnott, J. & Macdonald, E.B. (2009). Mental health as a reason for claiming incapacity benefit–a comparison of national and local trends. *Journal of Public Health*, **31**, 74–80.

Cattrell, A., Harris, E.C., Palmer, K.T., Kim, M., Aylward, M. & Coggon, D. (2011). Regional trends in awards of incapacity benefit by cause. *Occupational Medicine*, **61**, 148–151.

Corbiere, M. & Shen, J. (2006). A systematic review of psychological return-to-work interventions for people with mental health problems and/or physical injuries. *Canadian Journal of Community Mental Health*, **25**, 261-288.

Cornelius, L.R., van der Klink, J.J., Groothoff, J.W. & Brouwer, S. (2011). Prognostic factors of long term disability due to mental disorders: a systematic review. *Journal of Occupational Rehabilitation,* **21**, 259–274.

Ferrari, A.J, Charlson, F.J, Norman, R.E., *et al*. (2013). The epidemiological modelling of major depressive disorder: application for the Global Burden of Disease Study 2010*. PLoS One*, **8**, e69637.

Hansson, E., Hansson, T. & Jonsson, R. (2006). Predictors for work ability and disability in men and women with low-back or neck problems. *European Spine Journal,* **15**, 780–793.

Harvey, S.B, Glozier, N., Henderson, M., Allaway, S., Litchfield, P., Holland-Elliott, K. & Hotopf, M. (2011). Depression and work performance: an ecological study using web-based screening. *Occupational Medicine,* **61**, 209–211.

Hensing, G., Andersson, L. & Brage, S. (2006). Increase in sickness absence with psychiatric diagnosis in Norway: a general population-based epidemiologic study of age, gender and regional distribution. *BMC Medicine,* **4**, 19–28.

Hensing, G. & Wahlström, R. (2007). Sickness absence and psychiatric disorders. *Scandinavian Journal of Public Health* (Supplement), **63**, 152–180.

Joyce, S., Modini, M., Christensen, H., Mykletun, A., Bryant, R., Mitchell, P.B. & Harvey, S.B. (2015). Workplace interventions for common mental disorders: a systematic meta-review. *Psychological Medicine*, **1**, 1-15.

Knudsen, A.K., Harvey, S.B., Mykletun, A., & Øverland, S. (2013). Common mental disorders and long-term sickness absence in a general working population. The Hordaland Health Study. *Acta Psychiatrica Scandinavica*, **127**, 287–297.

Koopmans, P.C., Bultmann, U., Roelen, C.A.M., Hoedeman, R., van der Klink, J.J.L. & Groothoff, J.W. (2011). Recurrence of sickness absence due to common mental disorders. *International Archives of* *Occupational and Environmental Health,* **84**, 193-201.

Koopmans, P.C., Roelen, C.A.M. & Groothoff, J.W. (2008). Sickness absence due to depressive symptoms. *International Archives of Occupational and Environmental Health,* **81**, 711–719.

Kroenke, K., Wu, J., Bair, M.J., Krebs, E.E., Damush, T.M. & Tu, W. (2011). Reciprocal relationship between pain and depression: a 12-month longitudinal analysis in primary care. *Journal of Pain***, 12**, 964–973.

Lerner, D. & Henke, R.M. (2008). What does research tell us about depression, job performance, and work productivity? *Journal of Occupational and Environmental Medicine,* **50**, 401–410.

Mallen, C., Wynne-Jones, G. & Dunn, K. (2011). Sickness certification for mental health problems: an analysis of a general practice consultation database. *Primary Health Care Research and Development*, **12**, 179-182.

Nielsen, M.B., Bultmann, U., Madsen, I.E, Martin, M., Christensen, U., Diderichsen, F. & Rugulies, R. (2012). Health, work, and personal-related predictors of time to return to work among employees with mental health problems. *Disability and Rehabilitation,* **34**, 1311–1316.

Nielsen, M.B., Bultmann, U., Amby, M., Christensen, U., Diderichsen, F. & Rugulies, R. (2010). Return to work among employees with common mental disorders: Study design and baseline findings from a mixed-method follow-up study. *Scandinavian Journal of Public Health*, **38**, 864–87.

Nieuwenhuijsen, K., Verbeek, J.H., de Boer, A.G., Blonk, R.W. & van Dijk, F.J. (2006). Predicting the duration of sickness absence for patients with common mental disorders in occupational health care. *Scandinavian Journal of Work and Environmental Health,* **32**, 67–74.

Nieuwenhuijsen, K., Faber, B., Verbeek, J.H., Neumeyer-Gromen, A., Hees, H.L., Verhoeven, A.C., van

der Feltz-Cornelis, C.M. & Bültmann U. (2014). Interventions to improve return to work in depressed people. C*ochrane Database of Systematic Reviews* 2014, Issue 12. Art. No.: CD006237. DOI: 10.1002/14651858.CD006237.pub3.

Ohayon, M.M. & Schatzberg, A.F.(2010). Chronic pain and major depressive disorder in the general population. *Journal of Psychiatric Research***, 44**,454–461.

O’Neil, A., Sanderson, K. & Oldenburg, B. (2010). Depression as a predictor of work resumption following myocardial infarction (MI): a review of recent research evidence. *Health and Quality of Life Outcomes,* **8**, 95.

Organisation for Economic Co-operation and Development (OECD). (2014). Mental Health and Work: United Kingdom. Paris: OECD Publishing.

Reinhardt-Pedersen, C. & Madsen, M. (2002). Parents' labour market participation as a predictor of children's health and wellbeing: a comparative study in five Nordic countries. *Journal of Epidemiology and Community Health*, **56**, 861-867.

Roelen, C.A., Norder, G., Koopmans, P.C., van Rhenen, W., van der Klink, J.J. & Bultmann, U. (2012). Employees sick-listed with mental disorders: who returns to work and when? *Journal of Occupational Rehabilitation,* **22**, 409–417.

Roope, R., Parker, G. & Turner, S. (2009). General practitioners’ use of sickness certificates. *Occupational Medicine*, **59**, 580 –585.

Shiels, C. & Gabbay, M. (2006). The influence of GP and patient gender interaction on the duration of certified sickness absence. *Family Practice*, **23**, 246–252

Shiels, C., Gabbay, M. & Ford, F. (2004). Patient factors associated with duration of certified sickness absence and transition to long-term incapacity. *British Journal of General Practice*, **54**, 86-91.

Shiels, C., Hillage, J., Pollard, E. & Gabbay, M. (2013). National Evaluation of the Statement of Fitness for Work (Fit Note): Quantitative Survey of Fit Notes. DWP Research Report No 841. London: The Stationery Office.

Shiels, C., Gabbay, M. & Hillage, J. (2014). Factors associated with prevalence and types of ‘may be fit’ advice on fit notes: a cross-sectional primary care analysis. *British Journal of General Practice,* **64**, 137–43.

Soegaard, H.J. (2012). Undetected common mental disorders in long-term sickness absence. *International Journal of Family Medicine*, doi: 10.1155/2012/474989.

Starzmann, K., Hjerpe, P., Dalemo, S., Ohlsson, H., Björkelund. C. & Bengtsson-Boström, K. (2015). Diagnoses have the greatest impact on variation in sick-leave certification rate among primary-care patients in Sweden: A multilevel analysis including patient, physician and primary health-care centre levels. *Scandinavian Journal of Public Health***, 43**, 704-712.

Vaez, M., Rylander, G., Nygren, A., Asberg, M. & Alexanderson, K. (2007). Sickness absence and disability pension in a cohort of employees initially on long-term sick leave due to psychiatric disorders in Sweden. *Social Psychiatry and Psychiatric Epidemiology*, **42**, 381–388.

Waddel, G. & Burton, A. (2006). Is Work Good for your Health and Well-being?. London: The Stationery Office.

**Table 1: Fit note and patient characteristics, and proportion of long-term (> 4 week) depression fit notes issued.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **No of fit notes issued for depression** | **No of long-term (> 4 week) fit notes**  | **Row Percent** | **P** |
| **The depression fit note** |  |  |  |  |
| Number of previous fit notes issued for depression: |  |  |  |  |
| *None (first issued to patient)* | 3,631 | 1,215 | 33.5 | 0.003 |
| *One* | 1,839 | 609 | 33.1 |
| *Two* | 1,084 | 370 | 34.1 |
| *More than two* | 1,573 | 606 | 38.4 |
| Preceded by a fit note issued for another mental disorder: |  |  |  |  |
| *No* | 5,867 | 2,074 | 35.4 | 0.006 |
| *Yes* | 2,260 | 726 | 32.1 |
| Preceded by a fit note issued for a physical health problem: |  |  |  |  |
| *No* | 6,648 | 2,383 | 35.8 | <0.001 |
| *Yes* | 1,479 | 417 | 28.2 |
| Fit note includes ‘may be fit’ advice: |  |  |  |  |
| *No* | 7,841 | 2,752 | 35.1 | <0.001 |
| *Yes* | 286 | 48 | 16.8 |
|  |  |  |  |  |
| **The patient** |  |  |  |  |
| Gender |  |  |  |  |
| *Male* | 4,630 | 1,569 | 33.9 | 0.22 |
| *Female* | 3,495 | 1,230 | 35.2 |
| Age-group |  |  |  |  |
| *Under 30* | 1,870 | 586 | 31.3 | 0.001 |
| *30-50* | 4,600 | 1,598 | 34.7 |
| *Over 50* | 1,654 | 614 | 37.1 |  |
| Living in one of most deprived 20% of neighbourhoods in country: |  |  |  |  |
| *No* | 5,300 | 1,593 | 30.1 | <0.001 |
| *Yes* | 2,723 | 1,178 | 43.3 |
|  |  |  |  |  |

**Table 2: General practice and certifying GP characteristics, and proportion of long-term (> 4 week) depression fit notes issued.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **No of fit notes issued for depression** | **No of long-term (> 4 week) fit notes**  | **Row Percent** | **P** |
| **The general practice** |  |  |  |  |
| Patient list size |  |  |  |  |
| *<5000 patients* | 1,252 | 415 | 33.1 | <0.001 |
| *5-10,000 patients* | 3,575 | 1,109 | 31.0 |
| *Over 10,000 patients* | 3,300 | 1,276 | 38.7 |
| Location of practice |  |  |  |  |
| *Rural* | 2,273 | 647 | 28.5 | <0.001 |
| *Urban* | 5,854 | 2,153 | 36.8 |
| Deprivation of patient population |  |  |  |  |
| *Low* | 1,721 | 463 | 26.9 | <0.001 |
| *Moderate* | 2,576 | 843 | 32.7 |
| *High* | 3,830 | 1,494 | 39.0 |
|  |  |  |  |  |
| **The certifying GP** |  |  |  |  |
| Gender |  |  |  |
| *Male* | 4,273 | 1,676 | 39.2 | <0.001 |
| *Female* | 3,829 | 1,222 | 31.9 |
| Age-group |  |  |  |  |
| *Under 35* | 1,772 | 597 | 33.7 | <0.001 |
| *35-50* | 4,080 | 1,658 | 40.6 |
| *Over 50* | 2,275 | 787 | 34.6 |
| Partner in practice |  |  |  |  |
| *No* | 2,368 | 853 | 36.0 | 0.18 |
| *Yes* | 5,759 | 2,189 | 38.0 |
| Works full-time |  |  |  |  |
| *No* | 3,065 | 1,002 | 32.7 | <0.001 |
| *Yes* | 5,058 | 2,040 | 40.3 |

**Table 3: Fit note, patient, GP and general practice factors independently associated with risk of the issue of a long-term (> 4 week) fit note for depression.**

|  | **Odds Ratio** | **95% CI** | **P** |
| --- | --- | --- | --- |
| **The depression fit note** |  |  |  |
| Number of previous fit notes issued for depression: |  |  |  |
| *None (first issued to patient)* | 1.00 |  |  |
| *One* | 1.21 | 0.94-1.56 | 0.15 |
| *Two* | 1.41 | 1.03-1.92 | 0.03 |
| *More than two* | 2.85 | 2.06-3.93 | <0.001 |
| Preceded by a fit note issued for another mental disorder: |  |  |  |
| *No* | 1.00 |  |  |
| *Yes* | 0.87 | 0.64-1.17 | 0.36 |
| Preceded by a fit note issued for a physical health problem: |  |  |  |
| *No* | 1.00 |  |  |
| *Yes* | 0.77 | 0.54-1.09 | 0.14 |
| Fit note includes ‘may be fit’ advice: |  |  |  |
| *No* | 1.00 |  |  |
| *Yes* | 0.28 | 0.14-0.56 | <0.001 |
| **The patient** |  |  |  |
| Age-group |  |  |  |
| *Under 30* | 1.00 |  |  |
| *30-50* | 1.36 | 0.98-1.89 | 0.07 |
| *Over 50* | 1.75 | 1.17-2.62 | 0.007 |
| Living in one of most deprived 20% of neighbourhoods in country: |  |  |  |
| *No* | 1.00 |  |  |
| *Yes* | 1.91 | 1.30-2.80 | 0.001 |
| **The general practice** |  |  |  |
| Patient list size |  |  |  |
| *<5000 patients* | 1.00 |  |  |
| *5-10,000 patients* | 0.56 | 0.25-1.18 | 0.13 |
| *Over 10,000 patients* | 0.86 | 0.37-1.99 | 0.74 |
| Location of practice |  |  |  |
| *Rural* | 1.00 |  |  |
| *Urban* | 1.30 | 0.70-2.42 | 0.41 |
| Deprivation of patient population |  |  |  |
| *Low* | 1.00 |  |  |
| *Moderate* | 1.70 | 0.84-3.42 | 0.14 |
| *High* | 3.17 | 1.53-6.59 | 0.002 |
| **The certifying GP** |  |  |  |
| Age-group |  |  |  |
| *Under 35* | 1.00 |  |  |
| *35-50* | 1.36 | 0.75-2.46 | 0.31 |
| *Over 50* | 0.99 | 0.51-1.97 | 0.99 |
| Partner in practice |  |  |  |
| *No* | 1.00 |  |  |
| *Yes* | 1.37 | 0.81-2.34 | 0.24 |
| Works full-time |  |  |  |
| *No* | 1.00 |  |  |
| *Yes* | 1.22 | 0.76-1.97 | 0.40 |
| **GP and patient gender** |  |  |  |
| *Male GP-male patient* | 1.00 |  |  |
| *Male GP-female patient* | 0.93 | 0.66-1.31 | 0.66 |
| *Female GP-male patient* | 0.63 | 0.36-1.09 | 0.09 |
| *Female GP-female patient* | 0.52 | 0.31-0.86 | 0.01 |

Random-intercept logistic regression model: Levels (i) fit note (ii) patient (iii) GP (iv) general practice