Managing migraine

A women’s health issue?

The Work Foundation
About the Work Foundation
Through its rigorous research programmes targeting organisations, cities, regions and economies, now and for future trends, the Work Foundation is a leading provider of analysis, evaluation, policy advice and know-how in the UK and beyond.

The Work Foundation addresses the fundamental question of what Good Work means: this is a complex and evolving concept. Good Work for all by necessity encapsulates the importance of productivity and skills needs, the consequences of technological innovation, and of good working practices. The impact of local economic development, of potential disrupters to work from wider-economic governmental and societal pressures, as well as the business-needs of different types of organisations can all influence our understanding of what makes work good. Central to the concept of Good Work is how these and other factors impact on the well-being of the individual whether in employment or seeking to enter the workforce.

For further details, please visit www.theworkfoundation.com.

About the Health at Work Policy Unit
The Health at Work Policy Unit (HWPU) provides evidence-based policy recommendations and commentary on contemporary issues around health, wellbeing and work. Based at the Work Foundation, it draws on the Foundation’s substantial expertise in workforce health, its reputation in the health and wellbeing arena and its relationships with policy influencers. The HWPU aims to provide an independent, authoritative, evidence-based voice capable of articulating the views of all stakeholders.

Acknowledgements
This paper was written by a team at the Work Foundation comprising Dr James Chandler, Karen Steadman, and Heather Carey. We would like to thank all of the individuals and organisations involved in the research for their valuable input.

This paper has been supported financially by grants from the British Safety Council and Napp Pharmaceuticals Limited who have had no editorial input.

Picture credits
Cover: Pexels
Executive summary

Background
Migraine is a common and disabling primary headache disorder. It affects roughly one in four women in the UK (for whom it is the third most common disease), compared to only one in eight men. While common across all age groups (18.5%), it is especially prevalent amongst those of working age (23.3%) and, in particular, working age women (31.8%). It is also the second highest cause of years lived with disability in the UK for both sexes.

People with migraine typically experience attacks 20-30 days a year with each attack usually lasting a day or more. These attacks often cause severe or extremely severe pain, which can cause interference with their daily life. Given it disproportionately affects people of working age, migraine has important implications for one’s ability to work.

Migraine is responsible for relatively high levels of absenteeism and presenteeism (reduced capacity when working) in the UK. As a result, it carries a substantial economic cost in lost productivity. However, evidence suggests the attention it receives with policymakers is not commensurate with its impact; a recent European study found that migraine is the least publicly funded of all neurological diseases relative to its economic impact.

Existing evidence indicates that migraine is, generally speaking, badly treated and badly managed by the health system. For example, delayed diagnosis and misdiagnosis is common and understanding of the condition – amongst professionals the public – is poor. Patient pathways are vague and people with migraine often end up, unnecessarily, in secondary care. This leads to avoidable waste and variation in care.

In addition, people with migraine face challenges at work. Employers rarely understand the condition and often do not see it as ‘genuine’. Those that do want to help are not sure how and typical short-term sickness absence policies do not accommodate fluctuating conditions well. Although reasonable adjustments could help, it is often difficult for people with migraine to get them. Furthermore, the evidence regarding their effectiveness for migraine is inconclusive.

Government policy has the potential to change and improve the way migraine is treated and managed by the health system. It could also help people with migraine deal with the challenges they face in the workplace, for example by supporting employers to support their staff. Government – and employers – would benefit from significant savings in lost productivity while improving the welfare of millions of people with migraine in the UK.

In this paper we explore some of the policy options that are available to government. This is informed by the academic and grey literature, secondary data analysis and insights from conversations with people with migraine, healthcare professionals, academics and third sector organisations.

Key messages
We found that migraine is highly prevalent in the UK, affecting almost 1 in 4 working age adults. It is responsible for the loss of an estimated 86 million equivalent workdays each year (through absenteeism and presenteeism), at a cost of almost £8.8 billion each year. These costs can, in part, be addressed by improving the care people with migraine receive and their experience in the workplace.
Recommendations

Our recommendations provide a way forward, given the substantial costs associated with migraine, to improve health and work-related outcomes for people with the condition and reduce its burden on the UK. This requires action in three ‘settings’:

1. the health system – improving care
2. the individual level – improving patient and public understanding; and
3. the workplace – improving work-related outcomes.

All three areas are mutually reinforcing: better organisation of care is supported by improved patient and public understanding, both of which support better health and work-related outcomes for people with migraine.

Improving care

Migraine should be treated within a national framework of structured services comprising three levels: (i) primary care (level one); (ii) intermediary care (level two); and secondary/specialist care (level three).

This should be underpinned by a clear and unambiguous patient pathway. This would better address avoidable waste and variation in care. Most people with migraine would be managed in the community (at level one and two). This would require informed patients and GPs, operating at level one, with sufficient knowledge/skills to correctly diagnose and treat migraine, support effective self-management or refer appropriately – acting as ‘gatekeepers’. Intermediary clinics (level two) could be staffed by GPs with a special interest (GPwSI) in headache and/or Clinical Nurse Specialists (CNS), possibly with some (arm’s length) cover from a neurologist.

Improving patient and public understanding

People with migraine should be empowered to effectively self-manage their condition. They should be supported by clear, unambiguous, messaging from a reliable source (e.g. NHS). A national public health campaign to educate people – ideally from a young age – on migraine and how to manage it is therefore needed. This should include information on lifestyle changes that can be made to manage symptoms effectively (during the ‘ictal’ and ‘interictal’ state and the role of ‘triggers’); when – and where (supported by a structured headache service) – to seek medical help; and effective signposting to reliable and useful sources of information.

This should be underpinned by community pharmacies and pharmacists supported to play an expanded, more active role in empowering patients to manage their own health with the right diagnosis, advice, over the counter treatment and, if needed, support with lifestyle changes.

Improving work-related outcomes

Everyone – including people with migraine – has the right to a ‘good’ job. Employers should – and increasingly do – provide healthy work environments which support a happy, healthy and engaged workforce. People with migraine, should not be ‘singled out’ for special treatment unnecessarily but rather be able to benefit from (as any other employee would) a ‘good’ psychosocial work environment. More control and autonomy would allow them to manage their workload and perceived ‘triggers’; manageable demands reduce the risk of stress – a ‘trigger’; social support from colleagues and managers helps them manage their condition; and workplace flexibility enables them to manage their hours and fit work around symptoms. A healthy migraine workplace is a healthy workplace for all.
In addition, employers should be empowered to understand their employees’ needs. Information is therefore needed on how to make workplaces amenable to employees with long-term, fluctuating, chronic conditions. This requires a review of health policies (including inflexible short-term sickness absence policies), better access to occupational health services, recognition of the role line managers play, and a stronger evidence base around ‘what works’ regarding reasonable adjustments. This would enable employers to better support employees in general and specifically those with migraine.
Managing migraine: a women’s health issue?

1. Introduction

1.1. The context

Migraine is a common and disabling primary headache disorder. It disproportionately affects women. In the UK, roughly one in four women (24.4%) have migraine, compared to one in eight men (12.1%), and, amongst women, it is the third most common disease. Although common across all age groups (18.5%), it is especially prevalent among people of working age (23.3%) – particularly working age women: 31.8%1. Furthermore, it is the second highest cause of years lived with disability in the UK for both sexes (though it accounts for a higher proportion in women than men: 7.1% compared to 4.3%)2,3.

People with migraine typically experience attacks 20-30 days a year with a mean duration of 25-30 hours4, usually accompanied by severe or extremely severe pain5. This often causes interference with their daily life6. Given this, and the fact people of working age are disproportionately affected, migraine has the potential to have a significant impact on people’s – and particularly women’s – career paths.

Migraine is responsible for relatively high levels of absenteeism and presenteeism (reduced capacity when working) in the UK7. It therefore carries a substantial economic cost in lost productivity8. However, despite its impact, it is neglected by policymakers9. One study, based on data from Europe, concluded that migraine is the least publicly funded of all neurological diseases relative to its economic impact10.

If given sufficient priority by policymakers, migraine’s impact could be reduced significantly. It is badly treated and badly managed by the health system: it is underdiagnosed, undertreated, and public and professional understanding of the condition is poor11. Furthermore, patient pathways are vague12. Patients that could – and should – be treated in primary care end up in secondary care13. This is inefficient, resulting in unnecessary waste and variation in care.

In addition, people with migraine face many challenges at work14. Employers rarely understand the condition and often do not see it as ‘genuine’. Those that do want to help are not sure how and typical short-term sickness absence policies do not accommodate fluctuating conditions well. Although reasonable adjustments could help, it is often difficult for people with

---

8 Steiner et al. (2003).
migraine to get them. Furthermore, the evidence regarding their effectiveness for migraine is inconclusive.

A change in government policy could improve the way migraine is treated and managed by the health system. It could also help people with migraine deal with the challenges they face in the workplace, for example by supporting employers to support their staff. Government – and employers – would benefit from significant savings in lost productivity while improving the welfare of millions of people with migraine in the UK.

1.2. This paper

In this paper we explore some of the policy options that are available to government. This is informed by the academic and grey literature, secondary data analysis and insights from conversations with people with migraine, healthcare professionals, academics and third sector organisations. We first outline the prevalence and cost of migraine in the UK, before considering the barriers to optimal health and work-related outcomes for people with migraine. This is followed by a number of policy recommendations, aimed primarily at national government, that represent evidence-based solutions to these problems.

This paper is the fourth in our Gender, sex, health and work series, which explores the issue of health and work through a ‘gendered’ lens. This series focuses on areas where gender and sex have a significant impact on work and/or health outcomes. Other papers in the series include:

- More than ‘women’s issues’: women’s reproductive and gynaecological health and work
- Men’s health and work: the case for a gendered approach to policy
- Who cares? The implications of informal care and work for policymakers and employers

For more information, see our background paper and accompanying infographics.
2. **Migraine prevalence and costs**

In this chapter we consider migraine’s prevalence and the costs attributed to it in the UK. We begin with a definition of migraine – distinguishing it from other headache disorders. Having done that, we assess, using the latest data, its prevalence and disability burden. This is followed by an exploration of costs attributed to migraine in lost productivity. We then conclude with some key messages.

2.1. **What is migraine?**

Migraine is a common and disabling primary headache disorder\(^{15}\). It is a complex condition comprising a wide variety of symptoms. For many people, the main feature is a painful headache. However, other symptoms include disturbed vision, sensitivity to light, sound and smells, feeling sick and vomiting. The most common types include migraine with aura, migraine without aura and migraine aura without headache\(^{16}\). ‘Aura’ generally refers to visual disturbances including blind spots in the field of eyesight, coloured spots, sparkles or stars, flashing lights before the eyes, etc.\(^{17}\) Migraine without aura is, however, more common\(^{18}\). Typically, it is characterised by headache on one side of the head with throbbing or pulsating pain with attacks lasting between 4 and 72 hours when untreated or not treated properly. Migraine is usually considered either episodic, with headache occurring between 1 and 14 days a month, or chronic, with 15 or more headache days a month\(^{19}\) (though in some cases broader criteria for chronic migraine are used\(^{20}\)).

Other primary headache disorders include tension-type headache (TTH)\(^{21}\). Symptoms include pressure or tightness around the head, possibly including pain in the neck and shoulder muscles. Unlike migraine, which causes pain that can be disabling, TTH is characterised by mild to moderate pain. Cluster headache is another primary headache disorder. Although it can cause extremely severe headache pain, it is significantly less common than migraine and TTH, affecting fewer than 1 in 1,000 adults worldwide according to the World Health Organization\(^{22}\).

2.2. **Migraine prevalence and disability burden**

According to the latest iteration of the Global Burden of Disease (GBD) study (described as “the most comprehensive worldwide observational epidemiological study to date”\(^{23}\)), migraine prevalence in the UK is 18.5%. However, this varies significantly by both sex and age. For males, prevalence is only 12.1%, while for women it is more than twice as much: 24.4%. Prevalence is also higher for those of working age\(^{24}\) (23.3%) and significantly higher for

---


\(^{24}\) 15-69 years
working-age women: 31.8\%^{25}. Thus, based on these estimates, nearly one in three working age women in the UK have migraine. This distribution is illustrated in Figure 2.1 (below).

**Figure 2.1 – Prevalence of migraine by age for both sexes**

![Prevalence of migraine by age for both sexes](image)

Source: Institute for Health Metrics and Evaluation^{26}

While migraine’s prevalence may be lower than some other primary headache disorders (e.g. TTH^{27}), it carries the greatest disability burden. Of the seven possible classes, the WHO ranks ‘severe migraine’ in the highest – disability class VII – alongside conditions like severe depression and terminal stage cancer^{28}.

The latest data from the GBD study show that migraine is responsible for 5.9\% of total years lived with disability (YLDs) in the UK, across all age groups^{29}. As expected, due to the variation in prevalence by sex, it accounts for a higher proportion of YLDs in women (7.1\%) than in men (4.3\%)^{30}. Furthermore, it is in fact the 2\textsuperscript{nd} highest cause of YLDs in the UK^{31}, second only to ‘low back pain’, which itself comprises more than one disorder.

As migraine is a fluctuating condition^{32}, it is important to consider its attack frequency and duration, i.e. how often people with migraine experience the ‘ictal’ state and how long they spend in it. Studies tend to report attack frequency ranging between 20-30 times a year,

---


^{27} While it is true that MOH is more disabling than TTH at an individual level, there is not sufficient data available to reliably estimate its prevalence in the population


usually lasting one day but often more\textsuperscript{33,34,35}. Furthermore, pain intensity is typically reported as ‘severe’ or ‘extremely severe’\textsuperscript{36,37,38}.

There is also evidence to suggest that ‘interictal’ disability in migraine (i.e. between attacks) is real and measurable\textsuperscript{39}. Recent research involving 6,455 adults from 10 EU countries shows that 26% of people with migraine experience symptoms during the interictal state. Although the ictal state is considerably more disabling, people with migraine spend considerably more time in the interictal state: 317 days a year on average\textsuperscript{40}.

2.3. **Costs attributed to migraine in the UK**

The costs attributable to migraine are substantial and felt by government, employers, and people with migraine.

Many people with migraine report interference with their daily activities\textsuperscript{41}. A survey of 4,200 employees of a hospital trust in England, found that 76% “always had to lie down” when experiencing migraine, 73% agreed that their migraine limited their ability to work, and 72% had difficulty performing work activities during an attack\textsuperscript{42}. A more recent survey supports these findings\textsuperscript{43}.

Thus: (i) migraine is highly prevalent, particularly amongst people of working age (peaking at 30-40 years); (ii) people with the condition experience attacks roughly 20-30 days a year with a mean duration of 25-30 hours, often accompanied by severe or extremely severe pain; and (iii) the majority report interference with their daily lives. It is therefore not surprising that migraine carries a substantial economic cost; people are most susceptible to it at a stage in life when they are at their most productive, furthering their careers and starting families.

2.3.1. **Migraine-related absenteeism**

The vast majority of migraine’s economic burden is attributable to absenteeism and presenteeism (i.e. reduced capacity when working).

---


\textsuperscript{36} Steiner et al. (2003)


\textsuperscript{42} Clarke et al. (1996).

\textsuperscript{43} Steiner et al. (2003).
Studies conducted in Europe and the US typically report between three and seven workdays lost per person with migraine per year\textsuperscript{44, 45, 46, 47, 48}. Similar results were reported by a 2003 study of 4,007 English working age adults\textsuperscript{49} surveyed by telephone. It found that people with migraine lost, on average, 5.7 workdays per year. From this they calculated that around 25 million workdays are lost every year in the UK\textsuperscript{50}, presenting a bill estimated at £2.25 billion in lost productivity\textsuperscript{51}. These figures are based, however, on population and wage data from 2003 and a migraine prevalence of 15% amongst adults\textsuperscript{52}. A more recent study provides an updated estimate\textsuperscript{53}. Using the latest data for adult\textsuperscript{54} migraine prevalence in the UK (23.3% according to the latest GDB study\textsuperscript{55}), the current size of the current UK workforce\textsuperscript{56} and average wage\textsuperscript{57}, it estimated that just under 43 million workdays are lost every year resulting in a cost of almost £4.4 billion in lost productivity\textsuperscript{58}.

Figure 2.2 – Number of working days lost due to headaches and migraine, 2012-2016

Source: Office for National Statistics\textsuperscript{59}

\textsuperscript{47} France: 2.2 days; Netherlands: 3.2 days; Spain: 8.5 days; Sweden: 2.7 days; UK: 2.0 days
\textsuperscript{48} Steiner et al. (2003).
\textsuperscript{49} Aged 16-65
\textsuperscript{50} Steiner et al. (2003).
\textsuperscript{51} APPG on Primary Headache Disorders. (2010).
\textsuperscript{52} Aged 16-65 years
\textsuperscript{54} Aged 15-69 years
\textsuperscript{58} This assumes average number of days lost per person with migraine is 5.7, based on Steiner et al. (2003).
In addition to the data provided by these studies, we can see that the number of workdays lost to ‘headaches and migraines’ has risen in recent years. The Labour Force Survey (LFS) is a long-running national survey of the employment circumstances of the UK population with a sample size of 100,000 individuals. It collects data describing the sickness absence rates of workers in the labour market and the reasons given for their absence. The latest data indicate that, of a total 137.3 million days lost through sickness absence annually, 2.8 million were attributable to ‘headaches and migraines’. This represents a 100% increase since 2012 (see Figure 2.2 above), indicating significantly more people reporting absence from work due to headache. For context, the increase in total days lost for this period was around 2% (137.4 million to 137.3 million).

2.3.2. Migraine-related presenteeism

Having explored the costs associated with absenteeism we now turn to so-called ‘presenteeism’, i.e. reduced effectiveness at work. Research suggests that people with migraine are more likely to report to work with symptoms – and work at reduced capacity – than take a day off. There is indeed evidence indicating that migraine-related presenteeism has an equal, if not greater, impact on work productivity than actual missed days. However, compared with absenteeism, it is difficult to measure and quantify.

A recent review of instruments designed to measure presenteeism found that half had been developed explicitly for individuals with migraine. This could be an indication of how significant an impact migraine has on workplace productivity. Ways of measuring the impact of presenteeism, adopted by several studies, involves estimating ‘lost workday equivalents’. People with migraine are asked to rate, from 0 to 100%, their level of ‘effectiveness’ at work on days they were experiencing migraine symptoms. If, for example, they worked two days in the previous month at 50% effectiveness, this would count as one ‘lost workday equivalent’, i.e. one day lost to sickness absence for that month.

Using this method, five studies (two from the UK and one from the Netherlands) with a combined sample size of almost 10,000 people with migraine found that reduced effectiveness at work was responsible for a greater share of lost productivity than actual days lost. On average, of 6.3 total days lost, the majority (4.2) were attributable to presenteeism, i.e. 66%. Furthermore, it was reported that people with migraine rated their effectiveness at 65% when working with symptoms.

---

62 Steinert et al. (2003).
66 Von Korff et al. (1998).
67 Clarke et al. (1996).
68 Stewart et al. (1996).
69 Von Korff et al. (1998).
70 Clarke et al. (1996).
72 Von Korff et al. (1998).
Only one study has attempted to quantify the costs attributable to migraine-related presenteeism. It estimated that 5.7 ‘workday equivalents’ are lost per person with migraine every year\(^{75}\). Based on a 23.3% prevalence amongst adults, this would mean almost 43 million workday equivalents are lost every year to reduced effectiveness at work at a cost of almost £4.4 billion in lost productivity.

When absenteeism and presenteeism due to migraine are combined, they are estimated to cause the loss of 86 million equivalent workdays per annum in the UK at a cost of around £8.8 billion\(^{76}\). This is based on an adult migraine prevalence of 23.3% and assumes that the equivalent of 11.4 days is lost per person with migraine each year.

### 2.4. Key messages

It is clear that the economic burden of migraine on the UK is substantial. It is a highly prevalent, fluctuating condition characterised by frequent, painful attacks which last a day or more. It disproportionately affects people of working age – especially women – and often has a profound negative impact on their ability to work. It is therefore hardly surprising that a significant number of workdays lost (both actual and equivalent) are attributed to it. This carries a considerable cost in lost productivity.


\(^{76}\) Ibid.
3. Migraine patients’ care

Having looked at the prevalence of migraine in the UK and the costs associated with it, we now turn our attention to migraine patients’ care, drawing on existing evidence and conversations with people with migraine, healthcare professionals and academics. First, we consider migraine patients’ experience of care, including their level of satisfaction with it, and their perception of GPs, medication, and non-pharmacological therapies. This is followed by an exploration of the barriers to optimal care for people with migraine, i.e. the systemic problems responsible for the generally poor care that people with migraine receive. The chapter concludes with some key messages.

3.1. Migraine patients’ experience of care

Migraine patients are generally unsatisfied with their care. This is variously attributed to (i) delayed diagnosis, (ii) GPs’ inability to treat and manage them effectively, and (iii) their lack of belief in the effectiveness of medication. As such, they are often willing to try non-pharmacological therapies – despite a lack of evidence that they work – and seek referrals to specialists without sufficient cause.

3.1.1. Satisfaction with care

Evidence suggests that people with migraine are generally unsatisfied with the care they receive. Findings from a recent UK qualitative study indicated that people with migraine felt that general practitioners (GP) did not take their condition seriously enough and showed a lack of interest in it.

Furthermore, it has been reported that patients lack belief in the ability of GPs – and primary care practitioners generally – to effectively treat their condition. As a result, patients feel resigned to the fact that nothing can be done to relieve their symptoms. A UK population-level survey reported that almost one in four (22%) migraine patients cited this as the reason for never consulting a physician for headache and over a quarter (26%) gave it as the reason for lapsing from care. Similar findings were reported in a Swedish nation-wide survey. This is also reflected in qualitative research; a recent study of people with chronic migraine reported their frustration with the lack of improvement in their condition despite seeing a specialist and taking medication.

---

84 Rutberg & Öhrling. (2012).
3.1.2. Delayed diagnosis and misdiagnosis

People with migraine often experience delayed diagnosis and misdiagnosis. Research suggests that people with migraine attribute this partly to not being believed by GPs. A recent study concluded that, despite migraine being a frequent reason for presentations to primary care, "misdiagnosis is a significant problem".

Furthermore, it is apparent that migraine is underdiagnosed. It is estimated that only around 50% of people with migraine have a diagnosis. Contrary to what some may think, it is not just those with less severe symptoms that are undiagnosed. UK data suggest almost two-thirds (64%) of people with migraine without a formal diagnosis experience "substantial disability".

People with migraine often have to see several healthcare professionals before they get a diagnosis. A recent qualitative study described achieving a diagnosis as "a long and tortuous process, reminiscent of an obstacle course". Some people with migraine describe this process as a 'fight', and that GPs are not always cooperative.

3.1.3. The role of the GP

It has been reported that people with migraine cite the ‘invisibility’ of their condition as responsible for GPs doubting them and, in turn, difficulty getting diagnosed. Much has been written about the nature of migraine being “always present, and yet invisible to others” and the often negative implications this has for their care. Thus, it is considered important that the GP understands – or attempts to understand – the profound impact migraine has on patients’ lives. Though this is not easily achieved given how little time clinicians typically spend with their patients.

The British Association for the Study of Headache (BASH) guidelines stress the importance of listening to the patient. Listening to the patient is an effective means of enabling co-production, i.e. ‘working with’ rather than ‘doing to’. Qualitative findings from a recent study support this; patients put a lot of emphasis on finding a GP that listened to and worked with them to find solutions.

3.1.4. The role of medication

Due, in part, to "limited efficacy and significant tolerability and safety issues with available preventive therapies", many people with migraine – as many as 40% – who might benefit...
from preventative treatment do not use it\textsuperscript{103}. This raises the possibility that (i) there is significant unmet medical need for migraine prophylaxis (i.e. preventative treatment)\textsuperscript{104} and (ii) preventative therapy would benefit many more of those with migraine than currently receive it\textsuperscript{105}.

Insights gained from existing qualitative research into people’s lived experience of migraine suggests people with migraine have “low expectations” and “fear of side effects” which made “using acute medications more acceptable than using prophylactic drugs on a daily basis”\textsuperscript{106}. People with migraine can be reluctant to try preventative medication, partly because they think it would not be effective, but also because they are more comfortable using painkillers\textsuperscript{107}.

It should be pointed out that preventative medication, although it has been shown to be effective in the treatment of migraine by numerous studies\textsuperscript{108}, and underutilised\textsuperscript{109}, should not be offered to all patients. It is usually considered when “headache frequency or severity increases to a point when it is significantly interfering with work, school or social life”\textsuperscript{110}. Exactly what ‘significant interference’ amounts to is open to interpretation and the criteria for preventative treatment have been described as “somewhat arbitrary”\textsuperscript{111}. Although people with chronic migraine – as one might expect – normally meet these criteria\textsuperscript{112} there is uncertainty, due to a lack of high quality evidence (from randomised controlled trials), over when an individual should be offered preventative drugs for migraine\textsuperscript{113}.

Despite this, the National Institute for Health and Care Excellence (NICE) does provide some specific criteria for preventative treatment, suggesting that it should be considered if “attacks are causing frequent disability (for example, if there are two or more attacks per month that produce disability lasting for 3 days or more)” and if the person is at risk of medication overuse headache (MOH)\textsuperscript{114}.

### 3.1.5. Non-pharmacological therapies

There is some evidence to suggest that non-pharmacological treatments, such as acupuncture and psychological interventions, may be beneficial for people with migraine\textsuperscript{115}. However, a recent Cochrane Review\textsuperscript{116} concluded that while there is evidence of the effectiveness of some non-pharmacological treatments, e.g. acupuncture, for migraine, methodological problems make it difficult to draw strong conclusions\textsuperscript{117}.

\textsuperscript{104} Mannix et al. (2016).
\textsuperscript{106} Palacios-Ceña D. et al. (2017).
\textsuperscript{108} Weatherall. (2015).
\textsuperscript{110} Weatherall. (2015).
\textsuperscript{111} Lipton et al. (2007).
\textsuperscript{112} Weatherall. (2015).
\textsuperscript{114} Ibid.
\textsuperscript{116} Cochrane Reviews are systematic reviews of primary research in human health care and health policy, and are recognised as the highest standard in evidence-based health care resources
\textsuperscript{117} Sándor & Afra. (2005).
Regarding psychological interventions, evidence suggests that when used in chronic pain management they may be associated with positive outcomes\textsuperscript{118}, particularly when delivered to people in groups\textsuperscript{119}. Though, again, it is difficult to draw strong conclusions given the heterogeneity in the trials that the evidence is drawn from\textsuperscript{120}.

NICE guidelines do not include recommendations for non-pharmacological treatment in people with migraine\textsuperscript{121}. BASH guidelines, however, do indicate that these approaches may be beneficial\textsuperscript{122}. Thus, the overall picture is unclear.

### 3.1.6. Referral to a specialist

It is often the case that people with migraine have seen a specialist – specifically a neurologist – at some point during their migraine ‘journey’\textsuperscript{123}. However, they are not always supported by their GP in doing this. A qualitative study involving people with chronic migraine describes their frustration at what they perceived as the clinician’s failure to refer them to a specialist\textsuperscript{124}. This desire to see a specialist is probably due in part to the fact that GPs find it difficult to diagnose and manage the condition properly\textsuperscript{125}.

### 3.2. The barriers to optimal care for people with migraine

Having considered migraine patients’ care from their perspective, we now look at the barriers to optimal care from the perspective of relevant healthcare professionals, academics and third sector organisations.

There is a lack of guidance (e.g. patient pathways) regarding how migraine patients should be treated and managed. This isn’t helped by GPs’ lack of knowledge and understanding of this condition. Most migraine patients could – and should – be treated in primary care, but there are a number of barriers preventing this. Improving migraine patients’ self-management, potentially with community pharmacist support, is also needed.

#### 3.2.1. The patient pathways for migraine are vague

A principal finding from the recent 2014 All-Party Parliamentary Group (APPG) report on primary headache disorders was “the lack of clearly defined pathways for headache patients across Clinical Commissioning Groups and Strategic Clinical Networks in England”\textsuperscript{126}. This problem is further compounded by a lack of GP knowledge\textsuperscript{127}.

While there is evidence that some elements of the care pathways – mainly those around the use of medication therapies in the acute stage or as prophylaxis – are supported by reasonably clear guidelines GPs do not make full use of them\textsuperscript{128}. A UK study of general practices in the UK found that established guidelines do not play a role in the diagnosis of patients presenting


\textsuperscript{120} Ibid.

\textsuperscript{121} Ibid.

\textsuperscript{122} British Association for the Study of Headache. (2012).

\textsuperscript{123} Work Foundation. (2018).

\textsuperscript{124} Palacios-Ceña et al. (2017).

\textsuperscript{125} Kernick et al. (2008).


\textsuperscript{128} National Institute for Health and Care Excellence. (2018).
with headache. As a result, underuse of the specific recommendations for diagnosing migraine may be a factor in the delayed diagnosis and misdiagnosis of migraine.

### 3.2.2. Lack of GP capability around migraine care

The evidence suggests that people with migraine that do see a GP rarely get appropriate treatment and management. This is attributed, in part, to GPs’ lack of education and training on the subject of headache and migraine. As a result they are unsure which treatments are appropriate for someone presenting with migraine and when to refer to a specialist. There is evidence to suggest that GPs lack “competence and confidence” managing patients with headache and migraine.

This is in no doubt related to the limited time spent on these issues in the medical curriculum (about one hour). It has also been reported that “headache teaching is not on the curriculum for approximately 75% of the undergraduate medical schools in England”. This seems disproportionate given that headache (with migraine being the most common diagnosis) “is one of the most frequent causes of consultation in both general practice and neurological clinics”, and the most common neurological reason for visiting accident and emergency (A&E).

Ways of improving GPs’ knowledge and capability have been explored in the literature. A recent study carried out in Estonia aimed to develop, implement and test an educational model to improve GPs’ ability to treat migraine effectively in a primary care setting. It produced some positive results. The intervention comprised two educational one-day (six hour) courses combined with educational materials and managerial aids for all participating GPs. The study reported less dependence on referral and greater willingness to initiate treatment, providing some, albeit limited, evidence that structured educational programmes can positively affect GP behaviour.

However, changing clinician behaviour is often difficult. The findings of a review into interventions that change clinician behaviour concluded that education is a necessary but not sufficient condition for behaviour change and is more effective if part of a multifaceted intervention combined with other reinforcing strategies.

Due to GPs’ inability to treat and manage migraine patients effectively, recent studies have highlighted the need for more qualitative research on the experience of migraine to “help healthcare providers develop a deeper understanding of the experience their patients are undergoing”. However, it is difficult to do this given the relatively short length of time.
minutes on average\(^{142}\) – that GPs spend with patients. The average consultation length of 10 minutes in the UK is thought to be the shortest in the developed world\(^{143}\). The British Medical Association has called for longer, 15 minute consultations, claiming that 10 minutes is insufficient to treat all patients properly\(^{144}\).

3.2.3. The organisation and delivery of migraine care

There is agreement that the current system of migraine care needs reorganising. The model proposed in the current literature\(^{145,146}\) comprises three ‘levels’:

(i) primary care, staffed by GPs;
(ii) specialist interest headache care, staffed by GPs with a Special Interest (GPwSI) in headache or clinical nurse specialists (CNS); and
(iii) headache specialist centres, which are likely to be academic, supported by specialist neurological expertise.

The first level would handle the vast majority of cases referring a small proportion to level two, and an even smaller proportion to level three – effectively acting as a gatekeeper. Patients seen at level two could also be referred to the next level. The high prevalence of migraine in the population makes it very difficult to be managed by specialist centres.

However, currently there are too few specialist clinicians (e.g. only 30 GPwSI in headache in the UK) and GP interest in specialising in this area is low\(^{147}\). Furthermore, there is a very small number of nurse specialist clinics in the UK – there are just 12 in England\(^{148}\).

An additional barrier to the provision of this type of service again concerns GPs’ capability. If they are to fulfil their role as gatekeepers effectively, it is crucial that they “have the skills and competencies to diagnose and manage most patients with migraine”\(^{149}\) and know when a patient should be referred on. Headache diagnosis and management requires no more than basic knowledge of a few common disorders, and “only standard clinical skills, which every physician should have”\(^{150}\). However, GPs often resist training and do not, generally speaking, consider headache important\(^{151}\).

A recent study revealed the existence of community-based GPwSI clinics operating in two UK regions\(^{152}\) where community headache pathways have been developed\(^{153}\). They work in ‘partnership’ with primary and specialist care, with most patients being seen by GPs. Both have been successfully managing the majority of headache and migraine patients’ needs.


\(^{143}\) Ibid.


\(^{149}\) Steiner et al. (2011).


\(^{152}\) Oxfordshire CCG and new Devon CCG

Managing migraine: a women’s health issue?

Such models warrant further investigation to explore their potential viability in order to shape solutions that could operate at a larger scale across the UK.

3.2.4. Enhancing patient understanding and community pharmacist support

While there is a need to improve GPs’ understanding of migraine, there is also a need to improve patients’. In particular, there is a need for better understanding of analgesic use, which can help guard against medication overuse headache (MOH), which – although rare – is rising and very debilitating\textsuperscript{154}.

There is potential for community pharmacists to play a more enhanced role in helping patients manage their condition better\textsuperscript{155}. Community pharmacies are well-placed to support people with a long-term condition to manage it better, given that they are “the nation’s most accessible healthcare providers”\textsuperscript{156} (around 90\% of the English population live within 20 minutes walking distance of a pharmacy and their services can be accessed without the need for an appointment\textsuperscript{157}). Furthermore, they have a professional responsibility to prevent medication overuse and are trained to intervene if they suspect a patient is at risk of developing MOH\textsuperscript{158}. A recent study concluded that, with proper knowledge, community pharmacists are well placed to help prevent MOH\textsuperscript{159}.

3.3. Key messages

Several barriers stand in the way of people with migraine getting optimal care. They are primarily related to GPs’ lack of capability around migraine, which is attributed to inadequate education, training and interest in the condition, as well as short consultation times. All of this is compounded by vague patient pathways. As such, the quality of migraine care is highly variable – people with migraine face a ‘care lottery’. They often experience delayed diagnosis and misdiagnosis and inappropriate referrals. Consequently they have little faith in GPs’ ability to treat them and the efficacy of treatments, particularly prophylaxis.

Most cases of migraine can and should be treated effectively in primary care but this would require structured headache services operating in a hierarchical or partnership model. Although there are practical difficulties involved in implementing such a service, similar models are operating at local level and could have the potential to be scaled up. Barriers to optimal care can also be addressed through patient education and improved understanding of migraine supported by community pharmacists.

\textsuperscript{156} Pharmacy Voice. (2016). Community pharmacy forward view.
4. **People with migraine in the workplace**

Having looked at the barriers to optimal care for people with migraine, we now consider their experience of work and the barriers they face to optimal work-related outcomes. Our findings are based on the existing evidence and discussions with people with migraine, healthcare professionals, academics and third sector organisations.

4.1. **The barriers to optimal work-related outcomes**

There are many barriers to optimal work-related outcomes for people with migraine. As is the case with the health system and the general public, employers do not understand the condition. This is not helped by a lack of information on how to support people with migraine in the workplace. Its fluctuating and unpredictable nature makes it difficult to combine with work responsibilities, and effective reasonable adjustments are hard to come by. A lack of good work – comprising the psychosocial and physical work environment – is also a problem, as well as the risks surrounding disclosure.

4.1.1. **Poor understanding of migraine**

There is agreement amongst people with migraine, relevant healthcare professionals, academics and third sector organisations that limited understanding of migraine, and the impact it has on functioning, represents a significant barrier to optimal work-related outcomes for people with migraine\(^{160}\). This lack of understanding is evident in some employers’ attitudes and, in some cases, colleagues’, and may be a reflection of the low level of understanding of migraine in society at large\(^{161}\).

Qualitative evidence suggests that some employers do not see migraine as ‘genuine’\(^{162}\). This perception is certainly not helped by the stigma surrounding the condition and market research surveys that suggest migraine is one of the most common reasons for ‘pulling a sickie’\(^{163}\). Popular misconceptions about migraine being ‘just a headache’ are partly to blame\(^{164}\). This situation is not helped by the ‘invisibility’ of the condition (discussed earlier).

4.1.2. **Lack of knowledge and information**

Evidence from a recent UK-based study suggested that employers’ lack of understanding of migraine is at least partly attributable to the lack of available information on how to support people with migraine in work\(^{165}\). Thus, it’s not necessarily that employers are ‘bad’ or don’t care, it’s that there is very little information available to them about how to help or what to do. Whether a person with migraine feels supported at work or not often depends on whether their employer, or line manager, understands their condition (i.e. luck)\(^{166}\).

A potential solution to this problem involves disseminating useful information to employers, ‘signposting’ them to relevant resources and tools. People with migraine are encouraged to be proactive, pointing their employer to useful guidance like the *Employment Advocacy Toolkit* by the Migraine Trust\(^{167}\).

---


\(^{161}\) Ibid.

\(^{162}\) Ibid.


\(^{166}\) Ibid.

4.1.3. The fluctuating nature of migraine

The unpredictable nature of fluctuating conditions makes it difficult for employers and managers to understand the reality of migraine\(^{168}\). People with migraine appear well when working, are productive, but then suddenly are unable to work, for perhaps one or two days, and then they return to work\(^{169}\). Thus, people with migraine often have relatively high rates of short-term sickness absence. Due to this they can fall foul of employers' sickness absence policies, which typically punish re-occurring periods of short-term absence\(^{170}\).

4.1.4. Difficulty getting reasonable adjustments

Because migraine is not always considered a 'disability' under the Equality Act 2010 (employers are obligated to make adjustments for workers who have a disability\(^{171}\)), it can be difficult for people with migraine to get reasonable adjustments at work. There have been calls for this to be changed, e.g. allowing people with migraine to take time off work when needed and not be penalised for it\(^{172}\). There is also evidence that people with migraine themselves would welcome any change that makes it easier for them to get reasonable adjustments\(^{173}\).

4.1.5. A lack of ‘good’ work

There is evidence to suggest that the barriers people with migraine face at work are, in part, attributable to a lack of ‘good’ work (i.e. a low quality psychosocial work environment, unsupportive workplace culture and poor management practices)\(^{174}\). Clearly, people with migraine – and the workforce in general – would benefit from increased access to ‘good’ work\(^{175}\); previous Work Foundation research has highlighted a number of ways in which people with chronic, fluctuating conditions can benefit\(^{176}\). The following would be particularly beneficial:

- **increased autonomy and control** – allowing them to manage their workload and perceived ‘triggers’;
- **manageable demands** – reducing the risk of stress, which is trigger;
- **social support from colleagues and managers** – to help them manage their condition; and
- **workplace flexibility** – enabling them to manage their hours, work from home if necessary and fit their work around their migraine.

There is a vast body of evidence showing the positive effect that these components of the psychosocial work environment have on employee health and wellbeing\(^{177}\).

In its response to the *Taylor Review of Modern Working Practices* the Government identified ‘good work for all’ as a national priority, placing obligations on local authorities to support better

---


\(^{173}\) Ibid.

\(^{174}\) Ibid.

\(^{175}\) Ibid.


management practices which, in turn, support better health at work\textsuperscript{178}. It is clear that people with migraine would benefit from increased access to good work several ways.

4.1.6. The physical work environment

In addition to the psychosocial work environment, aspects of the physical work environment can act as barriers to optimal work-related outcomes for people with migraine. People are often forced to work in hot and stuffy environments, with low quality lighting, computer screens, poor ventilation, loud noises and the presence of strong odours, etc. All of which can be perceived ‘triggers’ for a migraine attack\textsuperscript{179, 180}.

4.1.7. Limitations due to job type and organisation size

While people with migraine would clearly benefit from small adjustments to aspects of the psychosocial and physical work environment, this is not always feasible. For example, somebody who works fixed 12 hour shifts with a one hour break in between would not be able to work from home\textsuperscript{181}.

Furthermore, certain accommodations are only possible in organisations of a sufficient size. For example, people with migraine can benefit from having a dark room to lie down in, but only larger organisations can realistically offer this\textsuperscript{182}. In addition, larger organisations, relative to smaller ones, are better placed to ‘absorb’ the impact of someone being off sick\textsuperscript{183}. Conversely, smaller organisations can show more flexibility and less rigidity than larger ones\textsuperscript{184}. The point is that there is no ‘one-size-fits-all’ solution – what can be implemented depends, in part, on the job type, sector and organisation size.

4.1.8. Disclosure

Published guidance for people with migraine suggests that an employer is less able to provide support and understand the condition if the person does not disclose it to their employer\textsuperscript{185}. This is of course logical but disclosing one’s condition can be daunting and does present some risks. The employee may be unsure whether their employer is committed to supporting them or not\textsuperscript{186} and as such disclosing may result in unfavourable treatment. However, related research on another neurological condition – multiple sclerosis – provides empirical support for the positive role of disclosure in maintaining employment\textsuperscript{187}.

4.1.9. The benefits system

People with migraine can find it difficult to access benefits – e.g. Employment Support Allowance and the Personal Independence Payment – that provide financial support for those with health conditions or disabilities\textsuperscript{188}. The eligibility tests, which test physical functioning, do

\textsuperscript{180} Work Foundation. (2018).
\textsuperscript{181} Ibid.
\textsuperscript{182} Ibid.
\textsuperscript{183} National Institute for Health and Care Excellence. (2014). \textit{Absence Management}.
\textsuperscript{185} Migraine Trust. (2010). \textit{Employment Advocacy Toolkit}.
\textsuperscript{186} Work Foundation. (2015).
not give people with migraine a fair chance of qualifying\textsuperscript{189}. Furthermore, the system is not accommodating of people with fluctuating conditions\textsuperscript{190}.

The support provided by Jobcentre Plus – and specifically the work coaches assigned to individuals – has been reported as inadequate for people with migraine\textsuperscript{191}. The effectiveness of Jobcentre Plus and work coaches received a lot of attention in the recently published command paper, \textit{Improving Lives: the future of work, health and disability}\textsuperscript{192}. It highlighted the need for work coaches to be able to provide tailored support, have specialised knowledge and an understanding of common health conditions and medication. Expanding work coaches’ expertise to include knowledge of migraine would be welcome.

4.2. \textbf{Key messages}

There are a number of barriers for people with migraine to optimal work-related outcomes. First, the lack of public understanding of migraine extends to employers and as such they do not see migraine as ‘genuine’. This is not helped by a lack of information on how to support people with migraine in work, and compounded by short-term sickness absence policies that punish the fluctuating nature of migraine. Though reasonable adjustments could help, it is difficult for people with migraine to get them.

Increased access to good work, i.e. adequate control, sufficient support, workplace flexibility, would be benefit people with migraine; though aspects of the physical work environment represent barriers too. Furthermore, the extent to which the work environment can be modified is limited by job type and organisation size. While disclosing one’s condition can help with getting support, this can present risks. Finally, the benefits system is not well suited to supporting people with migraine.

\textsuperscript{189} Work Foundation. (2018).  
\textsuperscript{190} Work Foundation. (2015).  
\textsuperscript{191} Work Foundation. (2018).  
\textsuperscript{192} Joint publication from the Department for Work and Pensions and the Department of Health and Social Care
The economic burden of migraine on the UK is substantial. Migraine is highly prevalent (affecting 23.3% of UK adults) and is characterised by frequent, painful attacks which last a day or more. It disproportionately affects people of working age – especially women – and often has a profound negative impact on their ability to work. It is responsible for an estimated 86 million lost workday equivalents each year, at a cost of £8.8 billion in lost productivity. Thus, it is a significant workplace health problem that warrants attention from both government and employers.

Based on the figures alone, the need for an effective policy response is clear. The need for action becomes even clearer when one considers how badly migraine is currently treated and managed by the health system. If given sufficient priority by policymakers, migraine’s impact could be reduced significantly. It is badly treated and badly managed by the health system: it is underdiagnosed, undertreated, and public and professional understanding of the condition is poor. Furthermore, patient pathways are vague. Patients that could – and should – be treated in primary care end up in secondary care. This is inefficient, resulting in unnecessary waste and variation in care.

In addition, people with migraine face many challenges at work. Employers rarely understand the condition and often do not see it as ‘genuine’. Those that do want to help are not sure how and typical short-term sickness absence policies do not accommodate fluctuating conditions well. Although reasonable adjustments could help, it is often difficult for people with migraine to get them. Furthermore, the evidence regarding their effectiveness for migraine is inconclusive.

A change in government policy could improve the way migraine is treated and managed by the health system. It could also help people with migraine deal with the challenges they face in the workplace, for example by supporting employers to support their staff. Government – and employers – would benefit from significant savings in lost productivity while improving the lives of millions of people with migraine in the UK.

In sum, the substantial costs caused by migraine in the UK demand the Government’s attention. Despite its huge burden, public and professional understanding of migraine is poor and it is poorly managed by the health system. This seems unjustified particularly when:

(i) migraine is treatable with good effect;
(ii) implementation of relatively low cost measures aimed at improving patient and public understanding could improve the welfare of millions leading to significant socioeconomic savings; and
(iii) the often negative impact migraine has on work-related outcomes can, to some extent, be avoided in ‘good’ working conditions.

In the following section we outline recommendations aimed at addressing the barriers to optimal health and work-related outcomes for people with migraine.

5.1. Recommendations
These recommendations provide a way forward, given the costs associated with migraine, to improve health and work-related outcomes for people with the condition and reduce the burden on the UK. This requires action in three ‘settings’.
1. **Improving care.** Several barriers to optimal care prevent effective treatment and management of migraine resulting in waste, inefficiency and variation in what is delivered.

2. **Improving patient and public understanding.** Many people with migraine self-manage their headaches inappropriately or ineffectively due to a lack of reliable information. A particular danger is overuse of analgesics (painkillers) bought over the counter, promoting medication overuse headache (MOH).

3. **Improving work-related outcomes.** Employers’ understanding of migraine is poor, it is difficult for people with migraine to get reasonable adjustments and work demands can be difficult to reconcile with symptoms. This risks inhibiting individuals’ effectiveness at work and business’ productivity.

All three areas are mutually reinforcing: better organisation of care is supported by improved patient and public understanding, both of which support better health and work-related outcomes for people with migraine (see Figure 5.1 below). For each setting we outline (a) what should be done and (b) how it can be achieved.

**Figure 5.1 – Three settings for action**

5.1.1. **Improving care**

Migraine should be treated within a national framework of structured services comprising three levels:

(i) primary care (level one)

(ii) intermediary care (level two); and

(iii) secondary/specialist care (level three).

This should be underpinned by a clear and unambiguous patient pathway. This would better address avoidable waste and variation in care. Most people with migraine would be managed in the community (at level one and two). This would require informed patients and GPs, operating at level one, with sufficient knowledge/skills to correctly diagnose and treat migraine, support effective self-management or refer appropriately – acting as ‘gatekeepers’. 
Intermediary clinics (level two) could be staffed by GPs with a special interest (GPwSI) in headache and/or Clinical Nurse Specialists (CNS), possibly with some (arm’s length) cover from a neurologist.

There are currently several initiatives and national bodies active in improving headache care, presenting an unprecedented opportunity to bring about a transformation in care provision and significantly reduce migraine’s socioeconomic impact.

**Box A – Recommendations for improving care**

- National bodies currently active in improving public health and clinical care (e.g. the National Neurology Advisory Group (NNAG); NHS RightCare; Neurology Intelligence Network (NIN); National Advisory Committee for Neurological Conditions (NACNC)) should work with the network of headache and migraine stakeholder groups in the UK to include the British Association for the Study of Headache (BASH), the Migraine Trust, Headache UK, relevant academics, expert bodies, health professional groups and people with migraine and their families. Collectively, they should develop a strategy/plan for headache and migraine care in the UK.
- This would need to identify and convene an expert multi-stakeholder group with relevant expertise to agree on a proposal to integrate current initiatives and address gaps to produce a coherent national framework for structured headache services and support for self-management and consistent public health messaging.
- The proposal would require comprehensive cost-benefit analyses to demonstrate how much such a system would cost and how much it would save (currently available cost-effectiveness data, though limited, suggests the findings would be positive).
- Action from local and national health decision-makers and commissioners would be needed to implement the strategy.

5.1.2. **Improving patient and public understanding**

People with migraine should be empowered to effectively self-manage their condition. They should be supported by clear, unambiguous, messaging from a reliable source (e.g. NHS). A national public health campaign to educate people – ideally from a young age – on migraine and how to manage it is therefore needed. This should include information on lifestyle changes that can be made to manage symptoms effectively (during the ‘ictal’ and ‘interictal’ state and the role of ‘triggers’); when – and where (supported by a structured headache service) – to seek medical help; and effective signposting to reliable and useful sources of information provided by the British Association for the Study of Headache (BASH) and third sector organisations e.g. Migraine Trust and Migraine Action. A clear message should be that a ‘migraine prevention lifestyle’ is healthy lifestyle for everyone comprising healthy eating, regular exercise, etc.

This should be underpinned by community pharmacies and pharmacists supported to play an expanded, more active role in empowering patients to manage their own health with the right diagnosis, advice, over the counter treatment and, if needed, support with lifestyle changes. Community pharmacists are also in a good position to identify people at risk of analgesic overuse and thereby help prevent medication overuse headache.
Box B – Recommendations for improving patient and public understanding

- Convene a group of relevant stakeholders, government and expert health bodies comprising Department of Health and Social Care (DHSC) and devolved health representatives from the UK's different nations to work with the network of headache and migraine stakeholder groups in the UK (including BASH, the Migraine Trust, Headache UK, relevant academics, expert bodies, health professional groups and people with migraine and their families). This group should decide on the shape of national public health campaign to educate people – ideally from a young age – on migraine and provide consistent, clear messaging to aid self-management. People with migraine should be involved in developing the campaign.
  - The campaign should help with effective dissemination of existing resources, such as those provided by BASH, the Neuro Network Vanguard, the Migraine Trust and Migraine Action.
- A strategic partnership between government and pharmacy bodies – with input from relevant third sector organisations and stakeholders – should explore the potential for community pharmacies and pharmacists playing a greater role in facilitating the self-management of people with migraine and prevention of analgesic overuse.
- Government – DHSC, PHE and the NHS – should explore the potential for using technology, e.g. a phone ‘app’, as a means of empowering patients with self-records of their symptoms, treatment trials and lifestyle goals as well as disseminating advice and information to help people with migraine effectively self-manage and ‘bust’ migraine myths. NHS England’s ‘digital programme’ – approving apps to manage health conditions – is already underway.

5.1.3. Improving work-related outcomes

Everyone – including people with migraine – has the right to a ‘good’ job. Employers should – and increasingly do – provide healthy work environments which support a happy, healthy and engaged workforce. People with migraine, should not be ‘singled out’ for special treatment unnecessarily but rather be able to benefit from (as any other employee would) a ‘good’ psychosocial work environment. More control and autonomy would allow them to manage their workload and perceived ‘triggers’; manageable demands reduce the risk of stress – a ‘trigger’; social support from colleagues and managers helps them manage their condition; and workplace flexibility enables them to manage their hours and fit work around symptoms. A healthy migraine workplace is a healthy workplace for all.

In addition, employers should be empowered to understand their employees’ needs. Information is therefore needed on how to make workplaces amenable to employees with long-term, fluctuating, chronic conditions. This requires a review of health policies (including inflexible short-term sickness absence policies), better access to occupational health services, recognition of the role line managers play, and a stronger evidence base around ‘what works’ regarding reasonable adjustments. This would enable employers to better support employees in general and specifically those with migraine. Furthermore, Jobcentre Plus should be able to provide effective support for people with migraine.
Box C – Recommendations for improving work-related outcomes

- In its response to the *Work, Health and Disability* green paper and the *Taylor Review of Modern Working Practices*, the Government identified ‘good work for all’ as a national priority, recognising its positive relationship with health specifically as well as driving improvements in business performance more generally. Making progress on promoting health and wellbeing at work, ensuring individuals’ needs are supported, requires effective joined up working between various agencies (especially those operating locally) – employers, Jobcentre Plus, Local Enterprise Partnerships (LEPs), professional bodies, Chambers of Commerce, the NHS and local authorities. In concordance with the *Taylor Review*, relevant government departments – Business Energy and Industrial Strategy, Department for Communities and Local Government, Department for Work and Pensions and DHSC – should explore ways of supporting and incentivising local authorities and partners (e.g. city regions and combined authorities) to develop more specialist and integrated approaches to improving health and wellbeing at work, with emphasis on supporting – and empowering – those with fluctuating, chronic conditions and supplementing general management practices with specialist support as required.

- Addressing these challenges requires robust knowledge of current employer practices and how decision-making differs across businesses. Thus, local partners should work with employers through recognised business communities, at local level, supported through trade and professional bodies as well as national bodies, including Be the Business, and government departments to support wider adoption and take-up. The intention here is to support collaborative action, developing case study materials, and sharing knowledge, learning and good practice to support the health and productivity of people with migraine at work. Bodies such as Be the Business are currently working with LEPs, and other local partners, to increase the quality of management practices generally and this work can be supplemented to enhance the benefits for the better management of health at work too.
  - There should be an emphasis on co-produced solutions (i.e. developed by the employer and employee) meeting local industry needs.
  - The crucial role that line managers play in supporting employees’ health and productivity at work should be recognised.

- To enable employers to support the health and productivity of people with migraine, develop an online repository – ‘hub’ – of information curated by employers, expert bodies and relevant third sector organisations signposting them to reliable sources of information, such as those provided by the Migraine Trust and Migraine Action.

- Government, working with local partners, should explore the need to commission new research into the business case for supporting the productivity of people with migraine at work, serving as a platform for further advice and tools to support effective reasonable adjustments for people with migraine, i.e. ‘what works’.

- Government should explore how sickness absence policies can be adapted to better accommodate people with fluctuating conditions and, building on commitments set out in *Improving Lives*, improve access to occupational health and support schemes such as Access to Work.

5.2. Final comment

This paper demonstrates the need for policy action – in three settings – to address migraine’s substantial economic burden to the UK. A change in government policy has great potential to significantly improve the way migraine is treated and managed by the health system and help people with migraine deal with the challenges they face in the workplace more effectively. Both government and employers could benefit from significant savings in lost productivity while improving the welfare of millions of people with migraine in the UK.