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Factors influencing recording of drug-misuse in primary care –a qualitative study.

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Abstract

Background: Drug-misuse is a serious public health problem. Evidence from previous epidemiological studies show that GPs are recording drug-misuse in electronic patient records (EPRs) however, although the recording trends are similar to national surveys, recording rates are much lower.

Aim: To explore the factors that influence GPs to record drug-misuse in EPRs and to gain a clearer understanding of the gap in recording drug-misuse in primary care compared with national surveys and other studies.

Design and setting: A qualitative interview study of GPs working in general practices across England.

Method: Purposive sampling was employed to recruit 12 GPs both with and without a special interest in drug-misuse from across England. Semi-structured face-to-face interviews were conducted to explore the factors leading to GPs to record drug-misuse. Resulting data were analysed using a combination of inductive and deductive thematic analysis.

Results: The complexity of asking about drug-misuse preceded GPs' decision to record. They described how the following factors influenced if they would firstly ask; the location and size of the general practice, financial incentives of recording, GP experience and training and the interaction between GP and patient. This led to GPs making a clinical decision on if, who and how to record drug-misuse in EPRs.

Conclusion: A confluence of factors affect both how GPs acquire information about drug-misuse and the management and treatment which influence various pathways that can lead to GPs recording drug-misuse. When making decisions about whether or not to record drug-misuse, GPs face complex choices. Aside from their own views, they reported feelings of pressure from the general practice environment in which they worked, their Clinical Commissioning Group as well as government policies.

Keywords: Primary-Care, electronic-patient-records, General-Practice, Read-code-recording, Drug-Misuse, Qualitative research

How this fits in

Drug-misuse is a public health problem and information on the burden of drug-misuse is important for policy on drug prevention and treatment. Previous epidemiological studies using primary care data has found that drug-misuse is recorded, but at lower rates to national surveys. This study examined factors that influenced recording of drug-misuse in electronic patient records. There are currently no national drug-misuse recording protocols. An

anonymous drug-misuse reporting system could be introduced and existing recording-templates could be rolled out nationally.

Introduction

Large primary-care-databases are widely used to examine incidence and prevalence of disease-diagnosis, symptoms and health behaviours[1]. The key strength of primary-care-databases is that they provide a large amount of data from real-life consultations which include rare exposures and outcomes and enable us to study populations that may be otherwise difficult to study; pregnant women, severe mental illness and drug misuse[2–4].

The United Kingdom has a number of primary-care-databases, incorporating electronic patient records (EPR), which contribute to a longitudinal view about the treatment and care of individual patients even if they do not always see the same GP[5-7]. General practice may be the first point of call for vulnerable and stigmatised individuals, such as those who misuse drugs. Drug-misuse and dependence is defined as individuals who misuse illegal psychoactive substances and/or other recreational drugs or are dependent on prescribed medication or over-the-counter opioids[7]. Drug-misuse is a public health problem which can lead to poor health outcomes[8]. Consequences of drug-misuse could necessitate a GP visit which may provide an opportunity for drug-misuse to be raised and potentially recorded by the GP. Previous quantitative work by the authors showed that GPs are recording drug-misuse in EPRs and although the rates are 25% lower, the time-trends mirror those reported in the Crime Survey for England and Wales[2,9,10]. Extrapolated rates from EPRs could therefore potentially be used to estimate the burden of drug-misuse in the general population.

The rise in popularity of the use of primary-care-databases originally collected for administrative purposes, such as patient records means, as Pope *et al.*[1] argued, it is important to understand how and why information was recorded and the consequences for what can be known. We therefore conducted a semi-structured qualitative interview study with GPs in order to gain a clearer understanding of why, how, and in which circumstances GPs record drug-misuse in EPR and to gain a clearer understanding of the gap in recording drug-misuse in primary care compared with national surveys and other studies.

Methods

Sampling and recruitment

We employed purposive sampling according to GPs with and without a special interest in drug-misuse from across England. Our primary sample criteria was to have equal numbers of GPs who had a special interest or not. We also attempted to obtain a spread of GPs working

in inner- and outer-city neighbourhood practices. We continued recruitment until we achieved saturation of emerging themes. An expert from the field emailed GPs a short summary of the study, if GPs were willing to participate they contacted the researchers directly. GPs who fitted the inclusion criteria, were contacted by the researcher to arrange an interview. Prior to the interview an information sheet and consent form were sent to the GP to sign. Each GP was given a £30 voucher for participating in the study.

Data collection

We used semi-structured face-to-face qualitative interviews following a semi-structured iterative topic guide (Supplementary file 1) in order to explore and generate an understanding of the factors that determine GP recording of drug-misuse in primary care. All except one interview was conducted in the GPs' surgeries and lasted on average 44 minutes (range:35-66 minutes). The first author (non-clinical researcher) carried out all interviews.

Data analysis

All interviews were audio-recorded and transcribed implementing data anonymization. Data were analysed using a combination of inductive and deductive thematic analysis. The data analysis was initially conducted by the first author, followed by discussion with the wider research team[11]. The preliminary codes and themes were provided to the departmental data analysing group, where the developing coding framework was discussed and refined. We used Atlas software to organise the data.

Results

A heterogeneous sample of 12 GPs from different general practices were interviewed **(Table-1)**. The sample ranged in terms of gender, years of experience, location, size of the practice and special interest in treating patients who misused drugs. The eight GPs with a special interest had completed at least one module of the Royal College of General Practitioners (RCGP) Certificate in the Management of Substance-Misuse. Two global-themes and six sub-themes emerged from the data.

Global-theme-1: Acquiring information about drug-misuse

The GP accounts illustrated that the complexity regarding the decision to ask patients about drug-misuse preceded the decision about recording. As drug-misuse is a legislative illegal action which can lead to adverse consequences, enquiring is complex and often challenging.

The sub-themes which emerged from global-theme-1 were (i) the context and (ii) the process of acquiring information about drug-misuse and (iii) the influence of the interaction between GP and patient **(Figure-1)**.

Sub-theme-1.i:Context of acquiring information

The first sub-theme was divided into the organisational and individual context and financial incentives of recording drug-misuse.

1.i.a:Organisational context

Location of the general practice

Practices located in areas where drug-misuse was more prevalent were, unsurprisingly more likely to be accessible and have registered patients who misused drugs.

> *"We've traditionally been very keen, we've been very involved, quite a lot of GPs I think are involved, particularly for maintenance, but also for reducing and stopping. So I think we provide a very good place."* ***-P6***

The fact that patients who misuse drugs were regularly attending consultations in the practices seemed to desensitise the perception of drug use. In comparison, practices where drug-misuse was less prevalent seemed to have fewer known registered drug-misusers.

> *"I think possibly we don't, just because we don't see that many [who misuse drugs]."* ***-P10***

Size of the general practice

GPs from larger practices reported that patients did not always see the same GP at each visit which added to the challenge of asking about drug-misuse.

> *"…because a lot of the time this isn't their regular doctor."* ***-P1***

However, the data suggested that some of these larger practices in locations where drug-misuse is more prevalent had the capacity to appoint a lead GP for drug-misuse so that patients could experience more continuity of care.

> *"People who are specifically presenting with concerns [about drug-misuse] will get channelled into me."* ***-P4***

Additionally, two of the inner-city large practices had an allocated weekly drug-clinic, where patients could see the same GP and/or drug-worker. This illustrates how the practice was working towards reaching the Local Enhance Service (LES) targets.

> *"We've been running a specifically dedicated substance abuse clinic, which is run in liaison with [local drug-clinic]."* ***-P7***

1.i.b:Financial incentives for GP practices

Treating drug-misuse is not in the General Medical Services (GMS) contract, however practices in certain areas where the need has been identified have a LES for treating drug-misuse and are therefore financially incentivised for providing drug-misuse treatment.

> *"…and locally the way our enhanced services have gone is that it isn't just for our own practice, it's actually for the whole of [named borough]; we all have to reach that target for the whole group to be paid."* ***-P7***

Consequently, recording of drug use was not only financially beneficial for all the practices in the area, but also facilitated continuity of care for the patient. Conversely, some GPs from practices without a LES expressed that the absence of QOF indicators for drug-misuse influenced their decision to ask about and record drug-misuse.

> *"…it will be great if it [recording drug-misuse] did [get financially incentivised], but it's always been resisted because drug treatment isn't part of the current GMS contract.* ***-P9***

This suggests that enquiring about and recording drug-misuse may increase if a national QOF existed for drug-misuse.

1.i.c:Individual context

GP experience and training

The RCGP training modules for management of substance-misuse was seen as a positive way to gain experience, build confidence and help improve services provided.

> *"Well, I did it [RCGP-modules] specifically to set up a shared care service…so it was because we felt we weren't looking after the patients well, that we decided, as a practice, we needed to develop more of an expertise"* ***-P7***

In contrast, a GP trainee felt that she lacked confidence but more experience would enable her to ask about drug-misuse more frequently in the future.

"I'm not as confident as I imagine I will be in ten years' time when you've seen a lot more of this, and maybe as you get older you have more confidence to push an issue…" ***-P11***

GPs who worked in both general practice and drug-treatment-clinics found experience from the latter made them more aware of the signs of drug use and therefore more confident to ask.

"It [working in the drug-clinic] helps me suspect things earlier and address them I think, because a lot of people are nervous to ask." ***-P5***

This suggests that combining experience from working across both general practice and drug treatment clinics contributes to improved awareness of people who use drugs and will therefore influence if the GP asks about and records drug use in the EPR.

GPs' role in managing drug-misuse?

Most of the GPs perceived that their role for managing individuals who used drugs was important.

"I think that GPs definitely have a role. I think one of the first things is actually uncovering that there's a problem" ***-P11***

Their role seems to encompass identifying the problem and working together with other health professionals and services in order to manage and support individuals who use drugs**.**

Sub-theme-1.ii:Interaction between GP and patient

The second sub-theme was divided into building a relationship and shifting agendas.

1.ii.a:Building a relationship

GPs perceived that continuity of care was important to help establish a respectful relationship, as well trying to remain non-judgemental.

"We do actually encourage a bit of continuity, so they'd stick with one person because then you build up a rapport and you're more likely to have an idea of what is actually going on at home and with their drug abuse" ***-P8***

It seemed as though this particular GP was trying to gain a deeper understanding of the patient's situation outside of the general practice. Furthermore, GPs discussed the need to balance between clinically appropriate actions and maintenance of the relationship.

> *"If I don't give them what they want, some of them will try to just test another doctor out and whether or not they will be prepared to modify the prescription."* ***-P1***

The decision about recording raised a dilemma with concern that recording may adversely affect patient disclosure.

> *"If they felt that to come and talk to you about something and that would require it being recorded would stop them coming to see you, then that would be detrimental to their care."* ***-P3***

At times GPs need to balance between clinically appropriate actions and the established relationship. Although GPs felt, similarly to disclosure of alcohol use, that people may minimise the extent of drug use in the accounts they presented to GPs.

> *"I think, generally, if people are willing to talk about it, then I've noticed people will, talk it down, and say something like "Oh, well, I just sort of, you know, occasionally might use."* ***-P5***

Skepticism seems to creep in when patients disclose the amount of drugs used.

Patient's choice

Some of the GPs discussed not recording use of drugs in the patient record following patient requests.

> *"…but if someone asked me specifically not to, then I wouldn't."* ***-P4***

GPs appeared to respect patients' autonomy and choice. Others, however, discussed circumstances in which they would urge recording, even when requests were made by patients to the contrary.

> *"I do think I would have the discussion with the person and make a judgement, and if it was really important, I'd try to persuade them that it actually is important to put on their medical notes."* ***-P7***

GPs' actions depended on the circumstances and GPs seemed more uncompromising about recording drug-misuse if a woman was pregnant or if there was someone else involved (e.g. a child) and/or other agencies needed to be brought in.

> *"there are some situations where I would record, regardless of the use; if it was relevant to the consultation or if there were children involved, or the person was pregnant"-**P4***

The consequence of GPs asking about drug-misuse during pregnancy may have adverse implications for mother and child. Additionally, potential bias exists as GPs did not mention asking fathers about drug- misuse.

1.ii.b:Shifting agendas

There was the potential for a patients' original agenda and formulation of their problem to be superseded by a conversation about drug-misuse.

> *"Also social problems, work problems I might ask them about it [drug-misuse] if they present with these [symptoms]"-**P2***

However, the consultation may be sent in a different direction and a risk of communication breakdown as the patient's agenda is not properly met. Patients presenting with common signs, symptoms and co-morbidities seemed to trigger awareness of drug-misuse and prompt the GP to ask about drug-misuse.

> *"…they generally come along with emotional difficulties: symptoms of depression and anxiety, and have just been unhappy with the way they are really."-**P2***

Sub-theme-1.iii:Process of acquiring information

The last sub-theme incorporates if, who, how and when GPs ask about drug-misuse.

1.iii.a:Do GPs ask about drug-misuse?

GPs do not always ask about drug-misuse, however when the topic does arise, it is usually during a consultation about a different problem, this relates to the earlier theme about shifting agendas.

> *"it's more kind of mostly an incidental thing that will come up as part of questioning during a consultation"-**P4***

Mainly GPs who did not have a special interest in substance-misuse expressed that time was a barrier for enquiring about drug-misuse.

> *"But I don't routinely ask. I mean to be honest, we just don't have time."* ***-P11***

Conversely to GPs with a lot of experience, GPs with less experience seemed more hesitant and less confident to ask about drug-misuse. Some GPs reported not asking about drug-misuse as they may not have time within the consultation to help with the other emerging complex issues.

> *"Otherwise a lot of people [GPs] are just thinking they're going to open a can of worms and it's going to make a consultation twice as long…"* ***-P7***

However, some GPs perceived that patients seemed relieved when asked as they could then get the appropriate help.

> *"I think often people are relieved [to be asked] and actually quite pleased to feel like there is some help..."* ***-P8***

GPs are well positioned to query about drug use, however barriers such as time, experience and the complexity of the issue seem to have an impact on the number of patients GPs ask and therefore record in electronic health records.

1.iii.b:Who do GPs ask?*-Stereotypical vs atypical*

GPs recounted that they did not have time to ask everyone about drug-misuse and therefore through experience directed their queries to individuals presenting with certain characteristics. These included those with mental health issues, young professionals, students, homeless people.

> *"And anybody who comes in with depression or mental health issues we'd ask, regardless of age, in the same way as you'd ask about alcohol."* ***-P7***

It appeared that certain types of people were triggers for GPs asking about drug use. There was however an awareness that certain types of people, particularly those in a more privileged position in society, may not be asked.

> *"I think some of the party drugs male patients are not presenting, not being honest about it, and maybe that's because they're in sort of more professional roles such as solicitors and barristers, than our typical drug-misuser in the past"* ***-P7***

A key difference that emerged between GPs who saw and did not see patients regularly who misused drugs, was that the former viewed that there was a risk that individuals may be missed if the GP only focused on asking particular groups of patients.

1.iii.c:How do GPs approach asking about drug-misuse?

GPs have developed different styles of questioning in order to ask about drug-misuse, accounts included both direct and indirect approaches.

> "*I don't ask people directly whether they are taking or misusing substances. I ask them permission to ask it first, and so they have a 'get out' clause"* ***-P9***

> *"I think you have to ask your question to the point, because otherwise you might not get the answer and people might not understand your questions either"* ***-P3***

Experience and reflection seemed to have shaped different questioning styles that fulfilled the purpose of acquiring information about drug misuse.

1.iii.d:When were the critical time-points for asking?

There were distinctive and significant time-points when opportunities for asking about drug misuse naturally fitted such as new-patient registration.

> *"This is our new Patient Health Questionnaire, and on it, it has a section, 'Do you misuse any of the following drugs or substances? Alcohol is slightly easier than substance misuse, and, you know, in a questionnaire, I probably don't get the whole details of alcohol and less of drugs" –* ***P6***

It seems that although the patient questionnaire may be an opportunity for the GP to indirectly ask about drug use, there was some scepticism about the validity of the results. Although registration of a new patient may be a critical time for asking about drug use, it may not be the right time for an individual to disclose and therefore affects recording of drug use in electronic health records.

A GP trainee without a special interest in drug use described how she does not routinely ask about drug use on its own, but found it easier to ask about drug use together with sexual health issues.

"The other time when I would have asked [about drug-misuse] people who'd come in for the Morning After Pill." ***-P11***

Consultations regarding other sensitive but maybe slightly less stigmatised issues may present and opportune time for asking about drug use.

Pregnancy was also seen as a timely opportunity when other lifestyle decisions (eg.drinking and smoking) are discussed.

"The other area would be in pregnancy, so for example if I'm concerned that either someone might be smoking or could potentially be using drugs." ***-P4***

Global Theme 2:Recording of Drug-misuse

Once GPs have acquired information on drug-misuse, they need to make a decision on whether or not to record or not in the EPR (Figure 1).

Sub-theme-2.i:When and who do GPs record?

GP opinions' differed with regards to when and who to record drug-misuse in EPR. Some GPs did not feel that it was necessary to ask patients for their permission to record and described how recording was an administrative issue and did not appear to engage with the potential sensitivity.

"If somebody comes in about a drug issue, they would see me writing during the consultation. So I guess that's implied consent." ***-P8***

Other GPs expressed the view the patient should be made aware of recording.

"I think that's something we'd have to discuss with the patient because the problem is that once it's on their record, it's on their record forever." ***-P3***

In contrast to his argument, a female GP from an inner city practice with a special interest in drug use perceived that it was important to record for insurance purposes.

"And even if you don't do it, I would be liable if say it's an insurance report, it's still if you know the information then it would make their insurance thing null and void" ***–P8***

These differences in opinion suggest that GPs may struggle between the role of GP providing care and role as a bureaucratic gatekeeper.

The issue of not recording could be explicitly raised in an attempt to gain an accurate picture of use.

> *"I've asked somebody about their drug-misuse and said to them that I'm not looking to record this, I think it'd just be useful to know cos it's potentially relevant to their stress or insomnia"-**P5***

In contrast, other GPs stated the need to record drug-misuse in the interests of providing continuity of care across different clinicians.

> *"So I usually say to them, "Look, if you're seeing somebody and they don't know something about you that's going to influence how they treat you, then it's in your interest to have it on the record."-**P7***

It seemed that the decision to record was a balancing act with regards to patient care and the existing GP-patient relationship.

All the GPs were unanimous about recording in detail if a child was affected by parental drug-misuse as they viewed it as their duty and responsibility to record any adverse situations affecting a child.

> *"Usually when I'm doing a consultation with someone who is pregnant or if I was doing a consultation where I thought that it would be a social work concern, I'd be more structured and detailed I think than just my usual rambling free-text"-**P4***

Recording may however not be via a Read code, but rather in the referral letter to the midwifery service.

> *"I can think of one woman recently who was a cannabis user, but she wasn't using any opiates, so I put that in her letter [referral] but I did not use a Read code"-**P4***

Sub-theme-2.ii:How do GPs record information about drug-misuse?

GPs described how time-consuming finding specific Read codes can be and that free-text was often easier and quicker.

*"So, yes, I think that's very true of EMIS that it probably needs to be cleaned, but I guess there's often one to find…**P11***

GPs both with and without a special interest in drug-misuse described how they usually Read code the primary problem that the patient had come about rather than drug-misuse.

*"In general practice it would just be what you thought the main problem was"**-P9***

Once a woman is discharged from the midwifery service GPs receive a detailed discharge letter which are usually scanned but not always Read coded.

*"I would certainly record if I got that [drug-misuse in the discharge letter] letter back. I would open up the mum's and kid's records, and pick a Read code and put it in."**-P11***

Finally, some general practices have developed templates or protocols to use specific Read codes to record drug-misuse.

*"So the only way you're going to get people to use similar Read codes is to make them use a template."**-P4***

The template offers more opportunity for auditing the information regarding drug-misuse in their general practice, as the same Read codes would be used. Practices with more registered drug-misusers seemed more likely to have developed a template or protocol.

Discussion

Summary of findings

Recording of drug-misuse in EPR is complex and the decision is influenced by multiple factors, such as GPs' individual experience and training, general practice protocols, clinical commissioning groups' (CCG) service provision and government policies. Our study helps understand why there are gaps in recording drug-misuse in primary-care-data.

Strengths and limitations

The main strength of this qualitative study was that it gave new perspectives about GP recording of drug-misuse using GP accounts to describe when and why they did not record drug-misuse in EPR. We recruited and interviewed GPs from a demographic and geographical spread which allowed us to gain an understanding of different perspectives and practices in different regional areas. We were also able to recruit GPs in various stages of

their careers, those who were leads in substance misuse and those who did not see individuals who used drugs regularly. This allowed us to explore if there were similarities and differences in recording practices of GPs with more and with less interest in drug-misuse.

In some cases GPs referred back to EPR to ascertain exactly how they had recorded, but this was not always the case. These are also the views and perspectives of a small sample of GPs alone, and this study lacks opinions from other health professionals, including practice nurses and drug workers. The voices of those who misuse drugs and consult their GPs are also not included in our study.

Comparison with existing literature

Primary care may be the first point of contact for individuals who misuse drugs and our findings reaffirmed the RCGP recommendations that GPs should maintain a non-judgemental attitude towards patients and their behaviours[10]. Additionally, GPs' views and perceptions seem to be shaped by their experience and training[11]. Our findings supported the importance of the RCGP guidelines which recommend that practitioners with special interests should undergo specific training and accreditation such as the RCGP training modules[12,13].

Our findings echo with previous studies where time was a barrier for GPs asking patients with complex issues such as sexual-health[19] and alcohol[17]. Similar to Gott *et al's* work with GPs asking about sexual health, GPs from our study used the phrase "*opening a can of worms*" indicating that they may not have time within the consultation to deal with additional problems relating to the adverse behaviour[19]. GPs may choose to only ask patients with particular physical, psychological or social symptoms[18]. However, a key difference that emerged in our findings was that specialist drug-misuse GPs argued that individuals may be missed if GPs only asked particular groups of patients.

The doctor-patient-relationship is an imperative aspect of patient-care and possibly as important as therapeutic treatment[20]. This, together with GPs' recognition of the importance of trust when patients, who may feel vulnerable, disclose sensitive information, resonate with our findings[20,21]. This may be particularly evident if patients' original agenda shifts during the consultation and/or if the presenting problem triggers GP's awareness of drug-misuse leading to the GP focusing on drug-misuse rather than the original problem. In such circumstances patients could become frustrated and deem the consultation unsuccessful[22,24].

When deciding to record sensitive issues such as drug-misuse, shared decision making and a sense of partnership could help to maintain patients' trust in their GP[19,21]. Some health professionals seem to view coding as a complex socio-cultural issue which could potentially impact the GP-patient-relationship[22].

Furthermore, evidence from studies examining GPs' recording behaviour of other sensitive issues suggested that GPs seemed more concerned about building and maintaining a trustful relationship than recording alcohol-misuse[25] and were careful and cautious before using a permanent maltreatment-code[26]. The definition of child neglect includes antenatal substance-misuse [29] which could partially explain why GPs in our study seemed more inclined to include drug-misuse in the midwifery referral letter rather than using a code to record.

The location of the general practice could influence the need for a lead GP in drug-misuse who could deliver continuous care. The Localism Act (2011) influenced a shift of responsibility from central to local Public Health bodies leading to specific service delivery being informed by local population needs[30,31,34]. Treating drug-misuse is not in the GMS contract, however, LES for drug-misuse are incorporated in areas where the problem is more prevalent[31,35]. For areas without a LES, the model of shared-care, where general practices work together with NHS and voluntary-sector drug-services, are available [32]. It is essential that GPs have a clear understanding of where to sign-post or refer individuals for the most appropriate treatment[30]. Decisions and services provided by CCGs can indirectly influence GP recording of drug-misuse in the EPR and our study suggests that financial incentives my improve systematic recording[31].

Our findings suggested that templates seem to be useful and efficient with regards to recording management and treatment of drug-misuse in general practice. Maisey *et al.* also reasoned that templates can help ensure quality assurance with regards to recording[32]. Furthermore, our findings suggest that having no QOF for drug-misuse may affect recording which reiterates that diseases included in QOF usually have quality assured protocols and are recorded more systematically[27,28]. Lock *et al.* (2009) reasoned that the inclusion of alcohol-misuse treatment should be included in both the GMS and QOF[16]. A similar argument could be made for drug-misuse. Additionally, Dixon *et al*. argued that current QOF could be a barrier to suitable services commissioned in populations with social inequalities and complex needs as the framework does not provide incentives for practices in these area[33]. A pilot study (Payments-by Results) is currently evaluating incentives for delivery of recovery for

drugs and alcohol in primary care[34]. If implemented, recording for drug-misuse may improve, however, this could negatively impact the GP-patient-relationship.

GPs therefore need to weigh up many factors and competing priorities before making a decision to ask about and/or record drug-misuse in EPR. GPs act at an individual level, but are influenced by wider structural factors such as practice and wider local and national policy decisions.

Implications for practice and research

Recording drug-misuse with Read codes in EPR may be challenging as recording is permanent and may impact on the GP-patient-relationship. A similar anonymous reporting system as for HIV cases could potentially be introduced for drug-misuse to help understand the size and burden[35]. This is comparable to the eCHAT program in New Zealand where information about harmful behaviours, including drug-misuse, can be collected anonymously using an iPad in the waiting room or via the internet[36]. Furthermore, the eCHAT program allows patients, who are wanting to discuss the issue with their GP, to identify these behaviours and the impact they may have on their mental health before the consultation[40]. GPs will have access to this information and can initiate discussion about both the unhealthy behaviour and mental health impact in a holistic manner[40]. Additionally, new patient registration forms and previously developed recording-templates could be used and rolled out nationally.

Furthermore, recording systems between services and general practices have been linked in some CCGs and will be linked in Scotland by 2018[37,38]. If a patient gives consent, GPs can monitor and acquire a clearer picture of a patient's management and treatment in other drug services[38]. The linkage of services using Read codes could also potentially be rolled out nationally. Finally, researchers using primary-care-databases to examine drug-misuse should use an ontology-based process as individuals may not be captured using Read codes[39].

Conclusion

This study presents an understanding of the complexity of how, why and in which circumstances GPs record drug-misuse in EPR. It is evident from our findings that people who misuse drugs are consulting with their GP. A confluence of factors affect both how GPs acquire information about drug-misuse and the management and treatment which influence

various pathways that can lead to GPs recording drug-misuse. The fact that drug-misuse is still a stigmatised and sensitive issue could influence whether or not GPs follow RCGP guidelines, practice protocols or templates. Furthermore, the analysis identified and explored the four distinct levels which influence GP recording of drug-misuse in EPR; GPs, the general practice, CCGs and government policy.

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Ethical approval

Ethical approval for the study was granted by UCL Ethics committee (number:5664/001)

Contributions:

Conceived and designed the study HDK. FS, IP and IN. Analysed the data: HDK and FS. Wrote the paper: HDK. Edited subsequent drafts: FS, IP and IN. HDK conducted work whilst at UCL, but is not affiliated with the University of Surrey.

Competing interests:

None declared.

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Tables:

Table 1: Demographics of GPs

Gender	Completed RCGP substance-abuse modules	Years' of experience	Location	No of GPs in practice (male :female)
	GPs with a special interest in drug-misuse			
1-M	Yes	>15	Inner city	8 (3:4)
2-M	Yes	>15	Inner city	4 (1:3)
3-F	Yes	>15	Outer city neighborhood	5 (2:3)
4-F	No	5-10	Inner city	6 (2:4)
5-M	Yes	10-15	Inner city	6 (1:5)
6-M	Yes	>15	Inner city	4 (2:2)
7-F	Yes	>15	Inner city	7 (1:6)
8-F	Yes	>15	Inner city	7 (3:4)
	GPs without a special interest in drug-misuse			
9-M	No	10-15	Outer city neighborhood	8 (3:5)
10-F	No	5-10	Outer city neighborhood	7 (3:4)
11-F	No	GP trainee	Inner city	9 (3:6)
12-M	No	>15	Inner city	8 (3:5)