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## A simple approach to improve recording of concerns about child maltreatment in primary care records:

developing a quality improvement intervention

### Abstract

#### Background

Information is lacking on how concerns about child maltreatment are recorded in primary care records.

#### Aim

To determine how the recording of child maltreatment concerns can be improved.

#### Design and setting

Development of a quality improvement intervention involving: clinical audit, a descriptive survey, telephone interviews, a workshop, database analyses, and consensus development in UK general practice.

#### Method

Descriptive analyses and incidence estimates were carried out based on 11 study practices and 442 practices in The Health Improvement Network (THIN). Telephone interviews, a workshop, and a consensus development meeting were conducted with lead GPs from 11 study practices.

#### Results

The rate of children with at least one maltreatment-related code was 8.4/1000 child years [11 study practices, 2009–2010], and 8.0/1000 child years [THIN, 2009–2010]. Of 25 patients with known maltreatment, six had no maltreatment-related codes recorded, but all had relevant free text, scanned documents, or codes. When stating their reasons for undercoding maltreatment concerns, GPs cited damage to the patient relationship, uncertainty about which codes to use, and having concerns about recording information on other family members in the child's records. Consensus recommendations are to record the code 'child is cause for concern' as a red flag whenever maltreatment is considered, and to use a list of codes arranged around four clinical concepts, with an option for a templated short data entry form.

#### Conclusion

GPs under-record maltreatment-related concerns in children's electronic medical records. As failure to use codes makes it impossible to search or audit these cases, an approach designed to be simple and feasible to implement in UK general practice was recommended.

#### Keywords

child maltreatment; computerised records; primary care.

### INTRODUCTION

Child maltreatment refers to any act of commission or omission by parent or other caregiver that results in harm, potential for harm, or threat of harm to a child, even if harm is not intended.<sup>1</sup> It includes different types of abuse (physical, sexual, and emotional) and neglect. All health professionals have a statutory responsibility to protect children from abuse and neglect.<sup>2</sup>

GPs are well placed to identify, monitor, and respond to child maltreatment. Children aged <5 years see their GP, on average, five times a year.<sup>3</sup> As GPs often see multiple family members, they can detect stressors — such as violence, parental depression, drug or alcohol abuse — that put children at risk of maltreatment.<sup>4–6</sup> They hold the continuous health record, making them a key resource for sharing information about maltreatment-related concerns.<sup>4,7,8</sup>

Child maltreatment is common and often chronic but many affected children only occasionally, or never, reach the threshold for investigation or intervention by child protection services.<sup>9</sup> According to large, population-based, self-report and parent-report studies, around 4% of children in the UK and 10% of those in the US experience maltreatment each year.<sup>10,11</sup> In contrast, in England 4.0% of children were assessed by social care services in 2010 (about half for

possible maltreatment) and 0.4% were made the subject of a child protection plan.<sup>12</sup> Doctors report only a minority of suspected cases of maltreatment to child protection services.<sup>13,14</sup> Evidence is lacking about how often GPs in England report child maltreatment.<sup>15</sup>

National policy in the UK is starting to embrace evidence that child maltreatment occurs on continuums of severity and chronicity, and professionals often manage the problem without referral to child protection services. The government's response to the recent Munro Review of Child Protection recommended improved local coordination to identify children at risk of maltreatment who need early intervention but do not meet the criteria for receiving children's social care services.<sup>16,17</sup> Guidance issued by the National Institute for Health and Clinical Excellence (NICE) on when to suspect child maltreatment advises the recording of information on children who reach either the 'consider' or 'suspect' thresholds [Box 1].<sup>18</sup>

This article reports the development of a simple intervention to improve the quality of recording of maltreatment by GPs. The study measured how concerns about child maltreatment are currently recorded in electronic GP records and used an iterative, consensus approach to develop a quality improvement intervention.

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## How this fits in

Guidance from the National Institute for Health and Clinical Excellence recommends recording concerns whenever child maltreatment is 'considered' or 'suspected'. Child maltreatment is undercoded in primary care records, partly because of uncertainty about the diagnosis, confidentiality concerns, or uncertainty regarding which codes to use. As a minimum, it is proposed that GPs flag concerns by coding 'child is cause for concern'.

## METHOD

GPs from 11 practices across England were selected because of a known interest in child protection or an interest in coding; four of these were classified as being 'expert' in child protection (Table 1). The study involved four phases over 18 months, which are outlined below.

### Phase 1: How do GPs record known cases of child maltreatment?

Practice and GP characteristics were captured using an online questionnaire, which was completed in April–May 2010 by the lead GP for each practice. This comprised 14 closed questions about personal details, current recording systems and staff at the practice, multidisciplinary team meetings (to discuss families that are vulnerable), and the child protection experience and training of the GP leads. Deprivation centiles for each practice were obtained by mapping practice postcodes to the Index of Multiple Deprivation.

Current recording practices were explored through short, structured telephone interviews with 9 of the 11 GPs in February–May 2010. Each of the 9 lead GPs was asked

about three children: one for whom there was a current safeguarding concern; one who was currently 'looked after'; and one who was currently in contact with children's social care. During the interview, GPs accessed each child's electronic medical record and described how information was recorded.

A half-day workshop was held in May 2010, during which each GP presented a relevant case to generate themes. Each presentation lasted approximately 15 minutes and related to a child or family who had raised child protection concerns during the last 2 years. The GP was also asked to present the events that gave rise to concerns, actions taken within and outside of primary care, recording of the concerns, and any subsequent events. Presentations were followed by free-ranging group discussion.

Patient identifiable information (used in telephone interviews and study presentations) was accessed only by the patient's GP. No identifiable information was transferred outside of the practice.

### Phase 2: Development of a coding list for the audit

Child maltreatment is a poorly defined condition, the 'diagnosis' is uncertain, and professionals are often ambivalent about using the label. Concerns about maltreatment are recorded in routine health records using a wide variety of codes, including those that are indirect or euphemistic.<sup>19,20</sup> To reflect this, a list of Read Codes were developed that were maltreatment-related, ranging from codes likely to be specific (for example, child protection plan or physical abuse of child), to codes anticipated to be more sensitive, indicating high child welfare need or concerns about parenting (Box 2). For analysis, codes were grouped into four categories.

The code list was developed to meet the threshold of 'consider' child maltreatment (Box 1);<sup>18</sup> this was based on evidence of parental risk factors, adverse parent–child interaction, or harm to the child, according to Glaser,<sup>21</sup> and clinical input from an experienced GP. The codes were identified from searches of Read Code dictionaries, the 'Safeguarding children and young people' toolkit from the Royal College of General Practitioners (RCGP), and codes reported by GPs during the telephone interviews and workshop.

All practices in the UK use the Read Code system, a hierarchical coding system for recording clinical consultations and patient

### Box 1. NICE definition of 'consider' and 'suspect', and recommended action in cases of possible child maltreatment<sup>18</sup>

	Definition	Action
Consider	For the purposes of this guidance, to consider child maltreatment means that maltreatment is a possible explanation for a report or clinical feature or is included in the differential diagnosis	Discuss concern with colleagues; gather collateral information; make provision to review the child
Suspect	For the purposes of this guidance, to suspect child maltreatment means a serious concern about the possibility of child maltreatment but is not proof of it	Refer the child to children's social care services
Consider and suspect		Listen and observe; seek explanation; record concerns

NICE = National Institute for Health and Clinical Excellence.

**Table 1. Characteristics of participating practices and lead GPs**

ID	Location in England	Electronic system	FTEs GPs at practice	Health visitors in practice?	Meetings to discuss vulnerable families	Expertise
1	Northeast, suburban	INPS Vision	4	Yes	Regular	Child protection <sup>a</sup>
2	East Midlands, semi-rural	TPP SystmOne	4	No	Regular	Child protection <sup>a</sup>
3	East, urban	EMIS LV	6	No	Regular	Child protection <sup>a</sup>
4	Southeast, semi-urban	TPP SystmOne	3	Yes	Regular	Child protection <sup>a</sup>
5	Southeast, urban	INPS Vision	3	Yes	Regular	–
6	Southeast, semi-urban	Isoft Synergy	4	No	Not held	Other <sup>b</sup>
7	Southeast, semi-urban	EMIS PCS	6	No	Regular	Other <sup>b</sup>
8	Southeast, semi-urban	INPS Vision	11	No	Not held	–
9	Southeast, semi-urban	INPS Vision	5	No	Ad hoc	Other <sup>b</sup>
10	Southeast, urban	EMIS LV	4	No	Ad hoc	–
Excluded	Southeast, semi-urban	EMIS LV	3	No	Not held	–

<sup>a</sup>Lead GP was a child protection expert (named child protection doctor and/or involved in child safeguarding policy, and/or delivers child safeguarding training). <sup>b</sup>Other expertise included experts in primary health care informatics, quality improvement, and ethics. FTE = full-time equivalent.

management.<sup>22</sup> The majority of practices use Read Codes Version 2 (5-byte) with a minority using other sub-types, including Read Codes Clinical Terms Version 3 (CTV3) and the systematised nomenclature of medicine clinical terms.<sup>23</sup> Codes were mapped for analysis to Read Codes Version 2 (5-byte) and Read Codes Clinical Terms Version 3 (CTV3). These codes can be readily mapped to other coding systems.

### Phase 3: Rate of recording of maltreatment-related codes

The rate of the recording of maltreatment-related codes was determined using data extracted from the 11 practices for 2009–2010. In addition, data from 442

practices that contributed to The Health Improvement Network (THIN) primary care database in 2009–2010 were also analysed.

Data for the 11 practices were extracted by a technician, who ran an audit query using an established methodology.<sup>24,25</sup> Data on sex and age were taken for all children aged <18 years, who were registered with the practice between 1 January 2009 and the download date in September 2010. The earliest three and latest three maltreatment-related records were extracted. No patient identifiers were extracted. Data from THIN included children aged <18 years, who were registered between 1 January 2009 and 31 December 2010. Numerator data for both datasets comprised any child who had at least one maltreatment-related record.

The rate was calculated as the total number of children with at least one maltreatment-related code divided by the total number of child years of registration. Results are reported for children aged <5 years and ≥5 years to avoid small cell sizes in some practices. Rates across the 11 practices were estimated using a Poisson model to adjust for age group (<1 year, 1–4 years, 5–10 years, 11–18 years). As THIN data are broadly representative of the UK primary care population,<sup>26,27</sup> unadjusted rates were calculated. Detailed analyses of the THIN data will be reported elsewhere.

The types of codes used in both datasets were assessed by ranking the number of times they were used in 2009–2010, excluding codes used in <1 child in the 11 practices and in <10 children in THIN.

### Phase 4: Developing a quality improvement intervention for recording

GPs were invited to a consensus development meeting. A report with results

### Box 2. Coding categories and examples of codes used to estimate rate of maltreatment-related records

Category	Description	Example codes
Child protection procedures	Codes related to child protection procedures, including for siblings	13lv: Subject to child protection plan 9F2: Child at risk — case conference
Direct references and children who are looked after	Codes directly referring to child maltreatment, including domestic violence and maternal alcohol/drug abuse during pregnancy. Codes related to local authority or foster care or care/supervision order	SN5550: Physical abuse of child 13HP600: Violence between parents V4H300: Emotional abuse of child 13IB: Child in care
Child at high risk (serious welfare concerns related to parenting or family)	Codes labelling a child as 'in need', 'vulnerable', or 'at risk', referring to a 'history of' maltreatment, relating to parental drug or alcohol abuse, or to problems with parenting or the child–parent relationship	8CM5: Child in need 13If: Child is cause for concern 13IF.11: Vulnerable child 63CA: hv: Mother not managing well ZV61300: Other parent-child problems
Contact with social care	Codes indicating child is in contact with children's social care	8H75: Refer to social worker

A validation exercise confirmed the specificity of the Read Code list for identifying maltreatment concerns. Three of the 11 GPs looked up the 42 'cases' in their practice identified by the codes (excluding child protection procedure codes and those that referred directly to abuse or neglect). There were no children who had a maltreatment-related code but did not have considered or suspected maltreatment, determined by GP judgement. Of the 42 'cases' from three practices, 40 met thresholds for 'suspect' and two for 'consider' (see Box 1 for definitions).

### Box 3. Key points relevant to coding identified at the GP workshop

- Codes and free text have different purposes: both are needed
- Coding is essential for searchable records and to ensure that information about maltreatment concerns carries over to the next practice
- Who enters the code or text affects how it is interpreted
- Visibility of maltreatment concerns on the screen might be damaging to the therapeutic relationship with the family
- Confidentiality requirements when recording third-party information (for example, relating to parents or siblings) cause concern to the GP is very important information and affects the child's risk status
- Recording should favour events, observations, and findings over opinions
- GPs are not, but should be, routinely informed about children who are referred to social care services by other professionals
- Children followed up by health visitors (and school nurses) for maltreatment concerns should be coded in the GP record
- Recommendations for coding cannot be comprehensive. The best type of recommendations should offer a framework for coding that is feasible to implement, easy for GPs to remember, and does not risk 'putting off' GPs who are less experienced.

from phases 1–3 was circulated in advance and GPs were asked to think of possible strategies for improving recording in preparation for consensus development. At the meeting, results were presented by researchers, followed by a free-ranging discussion about the meaning and implication of results, important concepts to code, and possible ways forward.

The nominal group technique for consensus (also known as 'expert panel' methods) was adapted.<sup>28</sup> GP ownership of the recommended quality improvement intervention was encouraged and the meeting was used to explore reasons for agreement or disagreement.

There was consensus in terms of retaining simplicity and allowing coding of children below and above the threshold for referral to children's social care. Researchers suggested the 'cause for concern' code to capture this and GPs agreed. All 11 participating GPs agreed to implement the recommendations in their practice and to participate in an evaluation in 1 year's time.

#### Report and recommendations

Using results from the consensus meeting and database analyses, two researchers drafted the final report, including the recommended approach; they were helped by two of the other researchers. The report was circulated to all 11 GPs and comments incorporated. All 11 of the GPs agreed to implement the recommendations in their practice with evaluation after 1 year.

Copies of proformas used in the study and the report that was sent to GPs are available from the authors on request.

#### RESULTS

The characteristics of the 11 practices are detailed in Table 1.

#### Phase 1: How do GPs record known cases of child maltreatment?

Of the nine GPs participating in telephone interviews, three reported difficulty in identifying examples of cases. A minority (6/25) of children had relevant free text descriptions or electronic copies of documents but lacked maltreatment-related Read Codes.

The workshop confirmed that absence of relevant codes for a child with known maltreatment is a recognised problem. The case studies presented described GPs having a central role in identifying and supporting children and parents, many of whom had been in contact with social care services at some point. Views supported within the group are summarised in Box 3.

#### Phase 2: Development of a coding list for the audit

In total, 350 Read Codes were identified as maltreatment-related codes; examples of these codes are given in Box 2. Most codes were identified via searches of Read Code dictionaries; only 11 codes were uniquely identified using the other methods. A full list of codes can be requested from the authors.

#### Phase 3: Rate of recording of maltreatment-related codes

Only 82 codes were recorded more than once in the 11 practices or >10 times in THIN (more detailed results can be accessed via <http://www.clininf.eu/maltreatment>). These were used by participants of the consensus development meeting to develop a recommended strategy for recording.

**11 practices.** Records for 24 939 children observed for a total of 3783.2 person years at risk (mean 1.5, median 1.7 years) in 10 practices were analysed. One practice was excluded as no maltreatment-related codes were recorded in the database or for the three cases discussed in the telephone interview. Of all 350 maltreatment-related codes, 34 were used in >1 child. In total, 316 children had a maltreatment-related record.

**THIN.** Records for 875 941 children observed for a total of 1 359 910 person years at risk (mean 1.6, median 2.00 years) were analysed. Seventy-two maltreatment-related codes were used in >10 children. Although the concepts used were similar, the codes used varied between THIN and the 11 practices (24 of the 72 codes were also used in >1 child in the 11 practices).

**Table 2. Rate of children with one or more maltreatment-related codes per 1000 child years of GP registration 2009–2010 (95% CI)**

	Any child with $\geq 1$ maltreatment-related codes	Any child with a code reflecting a child protection procedure <sup>a</sup>
<b>11 practices 2009–2010 England</b>		
(10 practices; 24 939 children <18 years; 3783.2 years at risk; 316 children $\geq 1$ maltreatment-related code)		
Overall (adjusted for age)	8.4 (7.5 to 9.3)	3.2 (2.7 to 28.2)
<5 years	15.9 (13.3 to 18.7)	6.0 (4.4 to 7.8)
5–18 years	6.3 (5.4 to 7.2)	2.5 (1.9 to 3.1)
Male	7.6 (6.4 to 8.9)	3.0 (2.3 to 3.8)
Female	9.2 (7.8 to 10.6)	3.4 (2.7 to 4.3)
<b>Software type</b>		
INPS Vision	9.6 (8.2 to 11.1)	3.8 (3.0 to 4.8)
Emis	7.7 (6.1 to 9.5)	4.0 (2.8 to 5.2)
TPA	9.4 (7.0 to 12.0)	0.5 (0.1 to 1.3)
Isoft	2.8 (1.4 to 46.9)	2.0 (0.8 to 3.5)
<b>THIN cohort<sup>b</sup> 2009–2010 UK</b>		
(442 practices; 875 941 children <18 years; 1 359 910 years at risk; 10 908 children $\geq 1$ maltreatment-related code)		
Overall (unadjusted)	8.0 (7.9 to 8.2)	3.5 (3.4 to 3.6)
<5 years	13.4 (13.1 to 13.8)	6.0 (5.7 to 6.2)
5–18 years	6.0 (5.8 to 6.1)	2.5 (2.4 to 2.6)
Male	8.5 (8.1 to 8.8)	3.4 (3.3 to 3.6)
Female	8.7 (8.4 to 9.1)	3.5 (3.4 to 3.7)

<sup>a</sup>Including child protection investigations, case conferences, and child protection plans. <sup>b</sup>All GP practices contributing to THIN database use INPS Vision software. THIN = The Health Improvement Network.

**Rates.** Analyses of the two datasets produced similar rates for children with  $\geq 1$  maltreatment-related codes (11 practices, 8.4 per 1000 child years, 95% confidence interval [CI] = 7.5 to 9.3; THIN 8.0 per 1000 child years, 95% CI = 7.9 to 8.2). Rates were higher in children aged <5 years than in older children, but did not differ significantly between the sexes (Table 2). Rates varied between the 11 practices from 2.8 per 1000 child years (95% CI = 1.4 to 4.7) to 31.1 per 1000 child years (95% CI = 23.8 to 39.1) in the practices located in the areas of greatest deprivation (Figure 1). Table 2 shows that rates were similar between most computer systems and for THIN, which uses IPNS Vision software; however, rates were not similar for one practice that used Isoft Synergy and for which recording rates were low.

#### Phase 4: Developing a quality improvement intervention for recording

The group developed and agreed a series of principles to guide a recommended approach to coding. GPs agreed that simplicity and ease of implementation were key. The intervention comprises the following recording recommendations:

- 1) In line with the guidance issued by NICE, GPs should always, and as a minimum,

use the code 'Child is cause for concern' whenever child maltreatment is 'considered': the code is 13lf for Read Codes Version 2 (5-byte) and XaMzr for Read Codes Clinical Terms Version 3 (CTV3).

- 2) Further details of the case should be coded, or not, as appropriate. Important concepts to hold in mind include:

- Why is the child cause for concern?
- Is the family cause for concern? Family risk factors — GPs should record these in the child's records if they consider them to be clinically relevant to the child's risk of potential harm.
- Are child protection or social care services involved? Any contact with children's social services, including whether the child is fostered or living in other forms of statutory care or living informally outside the family home.
- What other professionals are involved? Codes for other professionals, for example, health visitor, community paediatrician, and police, are recommended.

The full list of recommended codes for these four concepts can be accessed via <http://www.clininf.eu/maltreatment> for. There will be an iterative process of feedback and review by which this full list of codes will be periodically revised.

- 3) GPs should be encouraged to code further details of the case on the opening or default screen and to use free text if necessary.
- 4) A code should be entered when the child is no longer a cause for concern and when removed from a child protection plan.
- 5) Recommended codes should be usable in all UK GP practice software systems.
- 6) A short, one-page data entry form (also known as a template) could help to implement the recommendations and would further standardise coding of elements of the history.
- 7) Entries would automatically be tagged with the date entered, type of event (for example, consultation, telephone call, social services report), and who entered the code.

The recommended coding pathway is shown in Figure 2.

## DISCUSSION

### Summary

On average, maltreatment-related codes were recorded in 8.0–8.4 children per 1000



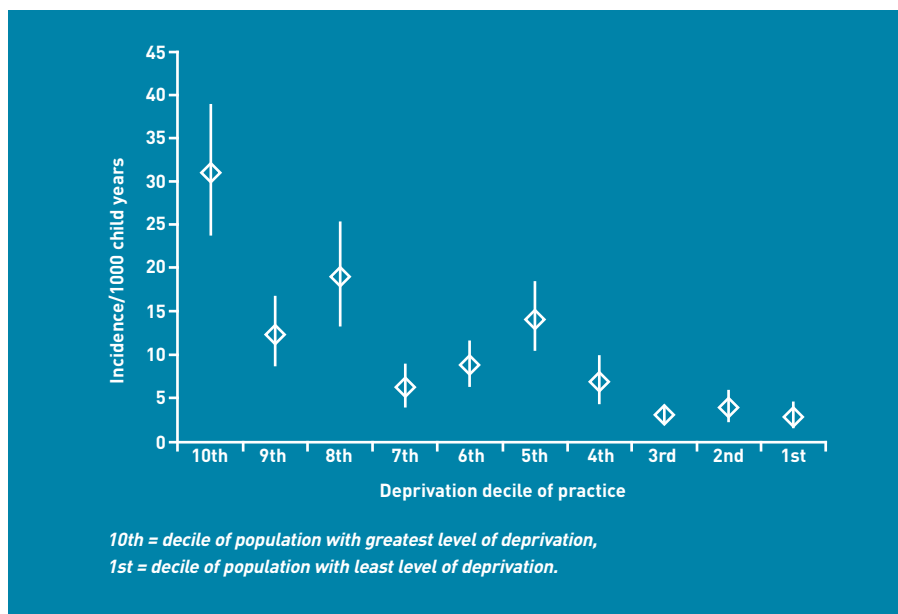


Figure 1. Age-adjusted incidence rates by practice, sorted by deprivation index (high to low).

child years, with variation between practices. The rate of maltreatment-related concerns recorded in THIN is likely to be generalisable to UK general practice.

However, in response to concerns about child maltreatment in the 11 expert practices, evidence of considerable uncoded activity was found. The disincentives to code raised by the 11 GPs were similar to those outlined in documents from the RCGP:<sup>33</sup> potential harm for the child or parents

having seen documented concerns, and perceived legal barriers to recording third-party information about parent risk factors or maltreatment of a sibling in a child's records. Further research is needed to determine whether these disincentives result in uncoded activity in general practice across the UK.

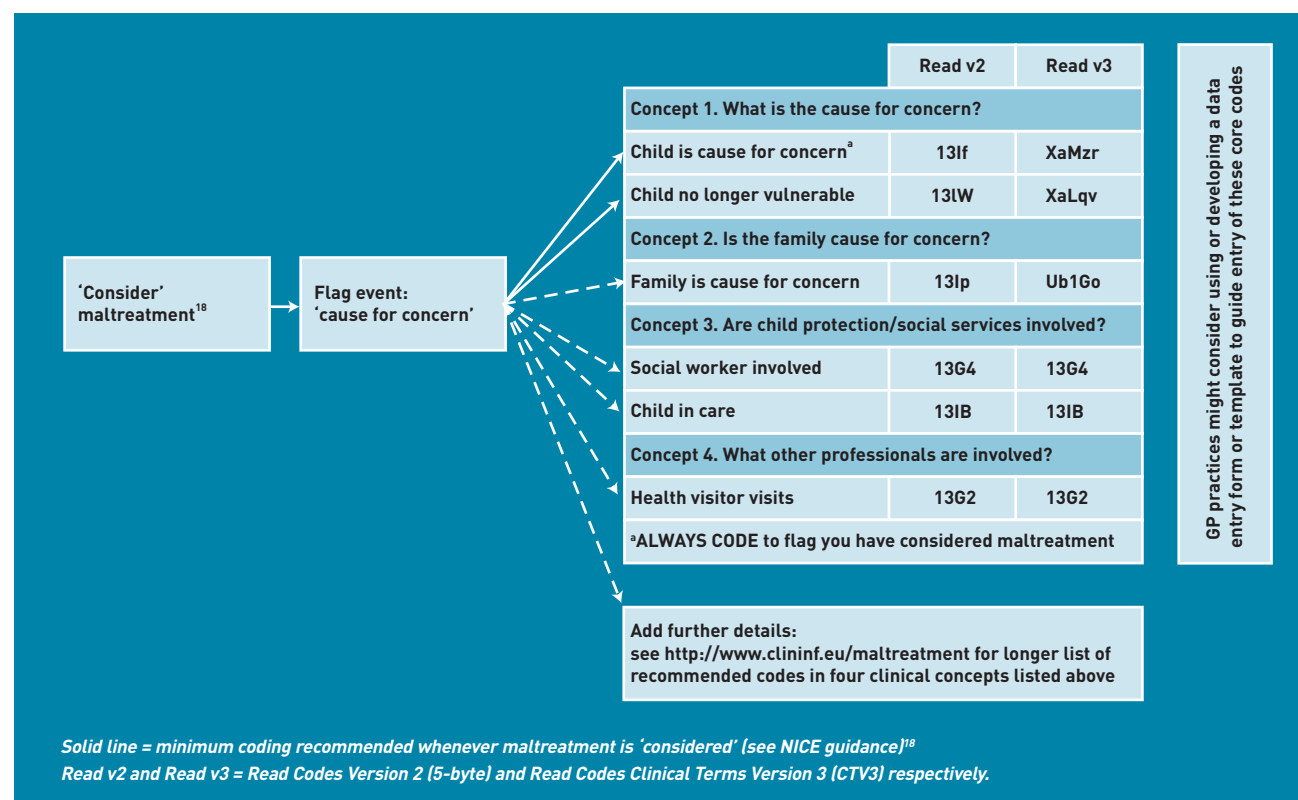
The variety and limited overlap of maltreatment-related codes used in the two datasets supports the argument for standardisation. This study recommends the single code 'child is cause for concern' as a simple way to flag concerns whenever child maltreatment is 'considered', as per NICE guidance.<sup>18</sup> Proposals include four key concepts to be coded for these children, a list of relevant codes, and a short data entry form (or 'template') to increase standardisation of recording.

A systematic approach, building on expert recommendations from the RCGP, was adopted,<sup>29</sup> with an attempt to keep guidance simple, feasible, and easy to remember.<sup>30</sup> The suggested use of a data entry form is designed to counter large variations in coding that are exaggerated by 'velocity coding' [systems that encourage users to choose the most frequently used codes].<sup>31</sup>

### Strengths and limitations

One limitation of the analyses of rates of recording is that the sample of 11 practices

Figure 2. Recommended coding pathway.



## Funding

The study of 11 practices was designed, registered, and funded as an audit. The clinical audit was coordinated by the RCGP-Clinical Innovation and Research Centre and funded by the HealthCare Quality Improvement Partnership. JW was funded by an Medical Research Council/Economic and Social Research Council interdisciplinary PhD studentship.

## Ethical approval

The Health Improvement Network (THIN) scheme for obtaining and providing anonymous patient data to researchers was approved by the NH South East Multicentre Research Ethics Committee in 2002. Scientific approval for this study using THIN was obtained from the Medical Research Scientific Review Committee in May 2011 (ref 11-011).

## Provenance

Freely submitted; externally peer reviewed.

## Competing interests

The authors have declared no competing interests.

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was too small to examine reasons for variable rates. Variability in THIN will be reported elsewhere. A second limitation is that the 11 practices are unlikely to be representative of general practice in the UK, because of their lead GPs' expertise in child protection. However, as practices included in THIN are broadly representational of the UK primary care population, and overall rates were similar in both data sources, the minimum estimate of GP activity in this area is likely to be generalisable to general practice as a whole.

A third limitation is the difficulty of developing a measure of maltreatment-related concerns. The codes used to estimate rates were very specific to child maltreatment but did not detect all children who had given rise to concern about maltreatment. GPs record information about child maltreatment concerns in electronic records using codes, text, and scanned documents; GP case studies revealed no relevant codes for some known cases. Future studies could improve the sensitivity of the measure of maltreatment-related concerns by including free-text entries.

To gain an accurate and reliable estimation of the specificity of the 82 maltreatment-related codes recorded frequently in the 11 practices (34 codes) or in THIN (72 codes) requires a validation study involving scrutiny of patient records (including scanned documents) for all children identified by these codes. Nevertheless, participating GPs agreed that these codes would likely represent a clinically significant level of concern because of the disincentive to use permanent and potentially stigmatising codes that could be seen by patients and parents and this was supported by a validation exercise (Box 2).

## Comparison with existing literature

The rate of 8.0–8.4/1000 child years is far lower than annual rates of children referred to social care services in England in 2009 (47/1000 children per year<sup>12</sup>) and the estimated 4–10% of children affected in the community each year.<sup>1</sup> Previous research using similar definitions of maltreatment to those used in the current study found that there was a coded maltreatment-related concern in 3% [95% CI = 2.7 to 3.1] of all acute injury admissions for children aged <5 years in England in 2007 (0.4 maltreatment-related acute injury admissions per 1000 child years in the population [95% CI = 0.3 to 0.4]).<sup>20</sup> Future linkage of GP data to routine hospital data or

social care data is needed to explore which children are being recognised by different professionals.

**Reasons for under-recording.** Previous studies suggest that under-recording reflects a combination of under-recognition, under-recording, and reluctance to refer children to child protection services because of: uncertainty about the diagnosis; concerns that harms will outweigh benefits; lack of capacity of child protection services to respond; and a sense that the GP can manage the case themselves.<sup>32–34</sup> One factor affecting recognition may be lack of training, although there is mixed evidence about the impact of training on recognition.<sup>9</sup> Although 40% of GP consultations are with children or families, only 50–60% of GPs have had any formal training in paediatrics or child health outside of general practice. On average, only 30% of GPs have received at least one half-day of child protection training.<sup>35</sup>

Disincentives to recording in the UK include potential harms for the child or parents from seeing documented concerns about maltreatment, and perceived legal barriers to recording third-party information about parent risk factors or maltreatment of a sibling in a child's records.<sup>33</sup> These disincentives were echoed by the expert GPs during workshops. The professional licensing body, the General Medical Council, is currently consulting on guidance that aims to clarify that third-party information can be recorded if considered relevant to a child's risk of harm and that all concerns, including 'minor' ones, should be recorded in the electronic medical record.<sup>36</sup> The importance of recording parental risk factors is supported by a Danish study where half of the 70 'child in need' cases initially presented with a problem related to the parent(s) or parent-child interaction.<sup>5</sup>

The low levels of recording in children aged ≥5 years contrast with evidence from community-based studies, which indicate higher rates of maltreatment in children of school age and adolescents.<sup>5,15,37,38</sup> Potential explanations include the fact that older children present less often to GPs,<sup>3</sup> GPs may fail to ask relevant questions, or they may recognise maltreatment but code it as something else.

## Implications for practice

This quality improvement intervention for recording maltreatment concerns was generated from a systematic analysis of current practice. The intervention builds on evidence that use of data entry forms and/or standardised coding in primary care settings

can improve recording<sup>39,40</sup> and can have promising effects on process outcomes (that is, measures of good clinical management) for other chronic conditions.<sup>41,42</sup>

Improved recording allows the GP to identify rapidly any previous maltreatment concerns during a consultation. At a practice level, searches for children with maltreatment concerns can be used to ensure appropriate review in team meetings or early intervention (for example, targeted health visiting or parent training).<sup>29</sup> Use of the proposed approach would also demonstrate compliance with NICE guidance and standards of care required by the national inspectorate, the Care Quality Commission, and provide a measure of resource intensive and currently uncoded activity.

Implementation of this approach need not wait for evidence from large randomised controlled trials, costs would be minimal. The approach simply provides a standard way of implementing widely accepted recommendations to record concerns. Potential adverse effects of labelling or

recording would be detectable only in very large observational studies that are only feasible after implementation.

There is a need for controlled trials to evaluate whether improved recording of maltreatment concerns leads to effective intervention and improved outcomes for children and their families. Recording concerns could be evaluated as part of a whole-service package, designed to improve outcomes for children who are maltreated and their families. Any complex intervention should be developed and evaluated according to established methodologies.<sup>43</sup>

Studies that link routine primary care data with routine hospital data and social care data are needed to investigate the contribution of GPs in relation to other professionals. Clarity from policy makers is also required with regard to how primary teams are to access early interventions for children who raise maltreatment concerns but who do not reach the threshold for referral to child protection services.<sup>16</sup>



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