



Health care professionals' views of paediatric outpatient non-attendance: implications for general practice

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Abstract

Background. Non-attendance at paediatric hospital outpatient appointments poses potential risks to children's health and welfare. Prevention and management of missed appointments depends on the perceptions of clinicians and decision makers from both primary and secondary care, including general practitioners (GPs) who are integral to non-attendance follow-up.

Objectives. To examine the views of clinical, managerial and executive health care staff regarding occurrence and management of non-attendance at general paediatric outpatient clinics.

Methods. A qualitative study using individual semi-structured interviews was carried out at three English Primary Care Trusts and a nearby children's hospital. Interviews were conducted with 37 staff, including GPs, hospital doctors, other health care professionals, managers, executives and commissioners. Participants were recruited through purposive and 'snowball' sampling methods. Data were analysed following a thematic framework approach.

Results. GPs focused on situational difficulties for families, while hospital-based staff emphasized the influence of parents' beliefs on attendance. Managers, executives and commissioners presented a broad overview of both factors, but with less detailed views. All groups discussed sociodemographic factors, with non-attendance thought to be more likely in 'chaotic families'. Hospital interviewees emphasized child protection issues and the need for thorough follow-up of missed appointments. However, GPs were reluctant to interfere with parental responsibilities.

Conclusion. Parental motivation and practical and social barriers should be considered. Responsibilities regarding missed appointments are not clear across health care sectors, but GPs are uniquely placed to address non-attendance issues and are central to child safeguarding. Primary care policies and strategies could be introduced to reduce non-attendance and ensure children receive the care they require.

Key words: Appointments and schedules, attitude of health personnel, child welfare, general practitioners, pediatrics, qualitative research.

Introduction

In 2011–12, approximately 12.2% of scheduled hospital outpatient appointments for children and young people in England (excluding cancellations) were not attended (1). Missed appointments are problematic not only because they incur financial costs to health services, increase waiting times and are potentially detrimental to family-provider relationships, but also because children often still require assessment, investigation or treatment and so are at risk of avoidable negative health outcomes (2). This risk will vary depending on the health condition, type and purpose of the appointment and family circumstances, but in extreme cases, the consequences can be severe. Indeed, a confidential enquiry reported that failure to follow-up missed appointments was an avoidable factor associated with a number of child deaths (3). Paediatric non-attendance is particularly concerning as children have a fundamental right to access health care (4) and do not themselves choose to miss appointments, rather they are ‘not brought’ by parents or caregivers (5). In some instances, missed appointments can indicate family vulnerability and potential threats to children’s welfare (6), thereby raising questions about child safeguarding.

Previous research has reported that paediatric outpatient non-attendance is more likely in lower socioeconomic groups (7) and in families with ‘diffuse social problems’ (8). Appointment-related factors are also important, with non-attendance less common in specialist clinics such as cardiology, and at first rather than follow-up appointments (2). Longer waiting times increase missed appointments, (9) and non-attenders are more likely to travel by means other than car, have longer journey times, have more appointments per year, and receive their appointment by post rather than in person (7).

Non-attendance is also related to parents’ perceptions, for example, when they disagree with the need for referral, are fearful of consequences such as unwanted diagnoses, or believe the costs of attending outweigh the benefits. Parental beliefs about children’s health seem particularly important, with ‘child now well’ the most commonly reported reason for non-attendance in one study (2). However, later research found that non-attending parents scored children’s illnesses as more severe than attending parents (7), suggesting that the link between attendance and illness perceptions is not clear-cut.

There are no national standards in the UK for managing paediatric outpatient non-attendance. However, hospital guidelines typically mandate that GPs are informed and asked to review the need for the appointment. It is uncommon for primary care providers to have policies addressing missed hospital appointments, so follow-up depends on the decisions of individual GPs, often taking into account the health issue, type of visit missed (e.g. new referral or routine review) and probability that the appointment is still needed. Similarly, the extent to which

missed appointments are checked by secondary care clinicians may depend on their perceptions of the urgency of appointments. This means that follow-up occurs in some cases, but not in others.

Health care professionals’ (HCPs) views are, therefore, central to effectively managing non-attendance. Previous studies have investigated the potential influences of staff’s perceptions on the management of missed appointments in primary care settings. GPs in one study attributed appointments missed by adult patients mainly to patient rather than service factors and underestimated the influence of doctor–patient relationships (10). Research in the USA found that physicians believed that non-attendance occurred as patients did not value preventive services and struggled with travel costs, leading doctors to suggest patient education and telephone consultations as appropriate alternatives (11).

Similar studies investigating the views of HCPs about appointments missed by children in secondary care are lacking. Given their central role in following up non-attendance, GPs must be included in such research, as well as those involved in delivering and managing children’s services. This qualitative study, therefore, explored the views of clinical, managerial and executive health care staff from both primary and secondary care regarding the occurrence and management of non-attendance at general paediatric outpatient clinics. This study was part of a wider project examining the provision of paediatric outpatient services.

Methods

Sampling

Semi-structured interviews were carried out with clinicians, managers, executives and commissioners from three English Primary Care Trusts and a nearby children’s hospital. To obtain sufficient data from individual groups, approximately 30 interviews were estimated to be required (12). Key informants with experience of contact with, planning or delivering secondary paediatric outpatient clinics were identified through discussion within the research team and were purposively sampled. Additional ‘snowball sampling’, where interviewees suggest potentially useful contacts, identified other professionals with relevant perspectives. Prospective participants were invited by e-mail and followed up by telephone. Recruitment and data collection ended when no new information was identified, and data saturation was reached (13).

Interviews

Interviews were conducted at participants’ workplaces between May and September 2010, and took 40 minutes on average. Informed consent was obtained, including acknowledgement

of job title disclosure, as professional roles provide important context. A semistructured interview schedule was used, allowing flexible exploration of salient responses (Table 1). Interviews were recorded and transcribed verbatim. This study was confirmed by the National Research Ethics Service as a service evaluation not requiring review by an NHS Research Ethics Committee.

Data analysis

Interview data were coded by three of the authors (GH, EC and SR) and analysed following the five stages of a thematic framework approach: familiarization; identifying a thematic framework; systematically applying the framework to the data (indexing); creating a summarized matrix for each theme (charting); and interpretation (14). Codes pertinent to access and attendance were identified for further investigation. The authors met throughout the analysis period to discuss theme development and interpretation.

Results

Thirty-seven health care staff from primary and secondary care participated, as shown in Table 2. The analysis generated five themes, which will be described below.

Perceived barriers to attending appointments

Participants suggested the following barriers to families attending appointments: travel and parking issues; general ‘access’ difficulties; poor administration of appointment letters; conflicting priorities such as school, work or illness; lengthy waiting times; many scheduled appointments; and forgetting. GPs focused on the real-life practicalities for families, highlighting financial costs

and ability to pay; particular difficulties for parents travelling with several young children by public transport; and the impact of “other more pressing social problems” (GP 2).

“You know, if you’re about to be evicted from your house... the last thing on your mind is taking little Johnny or little Jane to the children’s hospital. You’re more interested in keeping a roof over your head, putting food on the table. Let’s be realistic about it”. (GP 2)

Hospital doctors and specialist nurses acknowledged that travel difficulties may cause “tremendous aggravation” (Consultant 7) but asserted that such access issues do not ultimately affect attendance. Instead it was suggested that supposed barriers might be due to unrealistic parent expectations and that access was in fact reasonable. Two hospital-based interviewees proposed that the degree to which attendance is influenced by access barriers depends on parents’ motivation.

“For those people who are motivated to bring their young person to clinic, it doesn’t cause a barrier because nothing would, but for those where anything is going to cause a problem, we’re not the easiest to get to.” (HCP 5)

Perceptions of parents’ values, attitudes and beliefs

The majority of participants perceived that parents’ attitudes and beliefs had at least some influence on attendance. GPs, managers, executives and commissioners cited parents’ perceptions of appointment necessity and importance, and their motivation to attend. They claimed that some parents find them “too much hassle” (Manager 4) or that they “don’t want to go” (Commissioner 2).

Hospital-based doctors and other HCPs also referred to parents’ motivations to attend, such as the value placed on the relationship with the doctor, the influence of previous negative

Table 1. Topics covered in the semi-structured interview schedule and example questions

Interview Topics	Example Questions
Access to paediatric outpatient services	‘How easy or difficult do you think it is for families to come for an outpatient appointment at the hospital?’
Perceived reasons for non-attendance at appointments	‘Why do you think some families do not attend outpatient appointments?’
Ways of managing non-attendance	‘What do you think could be done to prevent nonattendance?’
Perceptions of families’ views and experiences	‘How do you think adolescents feel about visiting the children’s hospital outpatient department?’
Working across the primary–secondary care interface	‘How do you feel about the current children’s hospital outpatient services and their referral system?’
Delivering paediatric outpatient care in community settings	‘How would you feel about having a general paediatric hospital outpatient clinic at your practice?’
The location and design of services	‘How well does the environment of the outpatient department meet the needs and expectations of families?’ ‘Where do you think the best place for community-based clinics would be?’

Table 2. Participant characteristics

Primary care	Secondary care
6 GPs	9 Consultants
	6 General paediatrics
1 Other HCP	1 Respiratory medicine
1 Health visitor	1 Dermatology
	1 Emergency medicine
1 Manager	3 Paediatric registrars
2 Executives	1 Neurology
2 Commissioners	1 Metabolic diseases
	1 Paediatric intensive care
	5 Other HCPs
	3 Clinical nurse specialists
	1 Phlebotomist
	1 Occupational therapist
	3 Managers
	5 Executives
Total = 12	Total = 25

experiences at the hospital and concerns about wasting clinicians' time. Hospital staff discussed the influence of parents' perceptions of the child's condition, whether it is considered problematic or resolved, and their level of anxiety.

"If parents have got a concern about their child, they will more likely than not follow that through... if they have been told that there is a concern or a worry that they are not concerned or worried about, if the child's slightly overweight or has some behavioural difficulties that the parents aren't worried about, I think in that situation they are highly unlikely to attend." (Paediatric Registrar 1)

Hospital consultants, specialist nurses and executives suggested that non-attendance may be related to the value placed on the child's health.

"Some families that are far more concerned about themselves than their child actually... it's more important to go and do something because they want to do that as an adult, rather than actually the child needs to be reviewed." (HCP 1)

Many hospital-based participants also cited more serious child protection issues as a factor associated with non-attendance, suggesting that some appointments are missed for "more sinister reasons" (Consultant 8).

Views on the characteristics of families who do not attend

Participants from all groups proposed links between attendance and demographic factors, including socioeconomic status, educational level and ethnicity. Missed appointments by minority ethnic families were explained by language issues, cultural beliefs

and previous experience. However, one HCP pointed out non-attendance is not entirely predictable from demographic factors.

"There are pockets of those patients... that I could equally say you know, they will definitely come and they're in that socioeconomic group [socioeconomic groups 4 and 5], because they have the perception that they don't want to waste your time and so there's a personality thing as much as it is a socioeconomic thing." (HCP 5)

GPs and hospital-based doctors proposed a greater likelihood of non-attendance in 'chaotic' or dysfunctional families. GPs linked family 'dysfunction' to social factors, such as "poor educational abilities" (GP 2). Consultants thought that other issues may take precedence in their lives, they lack organization, and "don't run on diaries" (Consultant 9).

"Because they've got a chaotic life and they don't, they haven't really sort of put that right up at priority one, or they don't have system for making something priority one." (Consultant 2)

Moreover, hospital-based consultants and other HCPs claimed that there were distinct types of families, suggesting that they perceive attendance as a relatively fixed characteristic of families.

"I think your general attenders are your general attenders, I think your nonattenders are your general nonattenders." (Consultant 8)

Potential strategies for reducing non-attendance

All groups recommended confirmation or reminder systems and improved communication processes with families. Participants in primary care also proposed shorter waiting times, increased flexibility and convenience. Hospital interviewees suggested new ways of delivering services such as evening clinics, suspended appointments and multi-appointment 'one-stop-shop' visits. They also recommended improved transport links, sufficient appointment notice and greater choice over appointment time and location.

GPs and managerial and executive-level decision makers from primary and secondary care were largely in favour of providing 'care closer to home' in community settings, though some claimed that effectiveness would depend on the specific transport links and location of such services. Many hospital doctors felt strongly that despite potential other benefits, such services would have no effect on attendance.

"They don't make a hoot of difference to health really or to DNA [did not attend] rates." (Consultant 7)

Two hospital-based HCPs advocated addressing parental motivation by penalizing families who miss appointments through monetary fines or withholding treatment, but acknowledged this would be difficult to implement. Other interviewees saw this as unfair and detrimental to children's well-being. Educational

approaches were also proposed by hospital-based participants, with managers and executives focusing on the costs and consequences of missing appointments, while doctors and HCPs emphasized knowledge of the reason for the appointment, and their rights and responsibilities around cancelling appointments.

Roles and responsibilities in managing non-attendance

In accordance with local policy, hospital consultants, managers and executives stated that referring GPs were informed when appointments were missed. However, one hospital manager expressed concerns about ‘passing the buck’ and uncertainty about the thoroughness of GP follow-up. Hospital consultants and HCPs suggested that they should retain responsibility for following up certain cases depending on the appointment type and perceived urgency.

“I think follow-up DNA’s we do have a responsibility for because it’s us that’s asked for the appointment, we know the problem we’re dealing with and then we can make a decision about whether it matters or not. And if it matters then we chase up the patient.” (Consultant 4)

An emphasis on adequate follow-up to ensure child safeguarding was apparent in the interviews of many clinical and non-clinical hospital participants.

“...one or two missed appointments and are we actually talking about a child protection issue? ...I don’t feel that we could a hundred percent say that we’re confident, that we follow all these kids up and can say categorically no there isn’t.” (HCP 1)

To prevent missed appointments, some consultants thought that GPs could “tighten their referring practice” (Consultant 6) to ensure appropriate referrals and educate families about the importance of attending. One GP, however, was hesitant to interfere with parental responsibilities, instead suggesting that the role of the GP is limited to family support and re-referral. Three hospital-based interviewees echoed this sentiment that parents are ultimately responsible for ensuring attendance and should be encouraged to choose for themselves, but one GP and one registrar noted that these parental choices can result in missed health care for children.

“...it’s not the children who are not attending, it’s the parents who aren’t bringing them.” (Paediatric Registrar 3)

Discussion

All groups suggested that attendance is influenced by practical barriers, parental beliefs and sociodemographic factors. GPs perceived the greater influence to be situational difficulties, while hospital-based HCPs presented parents’ perceptions as

the dominant factor. The latter attributed more personal causes and therefore classified families as ‘attenders’ or ‘non-attenders’. Non-clinical participants cited both factors but presented less detailed insights. Accordingly, GPs and primary care interviewees focused on reducing barriers and forgetting, tended to be in favour of community-based clinics and limited their role to reactive follow-up of missed appointments. Hospital staff suggested more educational and behavioural approaches to prevention, were sceptical of the effectiveness of ‘care closer to home’ for reducing DNA rates and were keen to target parental beliefs.

Divergent views on the occurrence and management of non-attendance may be explained by the professional context and orientation of different groups. Secondary care professionals often have relatively short-term relationships with families and direct knowledge of missed appointments in a hospital setting. They may, therefore, focus on available transport links and the number of families who *do* manage to attend appointments, rather than individual practical difficulties. This group might consider more novel prevention strategies, as missed appointments have an acute impact on their practice and the success of traditional approaches may have levelled off. Additionally, staff working in a children’s hospital are child focused and prioritize the needs of the child patient over those of the whole family. This explains their emphasis on child protection, willingness to intervene in non-attendance and hesitance to rely solely on GP follow-up of missed appointments.

Conversely, GPs have regular contact with families so are likely to have a greater understanding of the practical and social difficulties faced by parents and the specific requirements of travelling to hospitals from their locality, thus explaining their focus on barriers. Moreover, parents may emphasize practical difficulties when explaining missed appointments to GPs to avoid blame and maintain positive relationships. Similarly, some GPs may prefer not to address motivational issues in case this harms their rapport with families. A previous study found that GPs were cautious about addressing adult missed appointments in primary care for this reason (15). GPs also retain the notion of being a ‘family doctor’; they address the needs of whole families and treat child patients within this context. Their support for parental autonomy and responsibility may be related to this promotion of the primacy of the family unit.

Though divergent staff perceptions can be explained by alternative professional priorities, the difference in views regarding responsibilities for dealing with non-attendance is a barrier to effective management of missed appointments, which must be considered and addressed.

Links to existing literature

Participants in this sample were aware of the majority of factors identified in the literature as influencing attendance, including access barriers, service issues (7) and parent decision making,

akin to the cost–benefit analyses reported in earlier research (2). Interviewees acknowledged links between attendance and socio-demographic factors but presented relatively nuanced views. For instance, ethnicity was thought to affect attendance mainly through the influence of language and cultural beliefs, supporting a previous study that showed that differences in non-attendance rates between ethnic groups were not significant when culturally appropriate measures were implemented (16). While participants noted that non-attendance might be more likely in lower socioeconomic groups, it was emphasized that social background is not sufficient to explain non-attendance. As one interviewee indicated, parents from deprived backgrounds may nevertheless be motivated to attend, suggesting an over-riding influence of parental beliefs. The notion of ‘chaotic families’ cited by health care staff also accords with earlier findings that non-attendance is higher in families with ‘diffuse social problems’ (8) and who have contact with social services (17).

Patients with ‘chaotic’ lifestyles were also mentioned in previous qualitative studies of staff views in primary care settings. One GP in a study by Martin *et al.* (10) stated that, “some people’s lives are so chaotic they are incapable of remembering things.” This closely reflects the statements in our study that these families were disorganized and had no systems for prioritizing appointments. ‘Chaotic lives’ were also mentioned by GPs in studies by Hussain-Gambles *et al.*, (15) who ascribed this trait to young people in particular, and by Gill *et al.*, (18) who noted this as a source of powerlessness preventing them from influencing child hospital admissions. This perceived link between non-attendance and disorganized lifestyles seems to be pervasive among HCPs in the UK. Further research is required to understand the origin and meaning of this term, whether disorganization is linked to non-attendance and if so, the precise relationship between them. Interventions could then be designed to target specific issues in this group of patients. Meanwhile, existing strategies could be tailored to best fit the needs of such families, for example, delivering multiple appointment reminders.

Additionally, our interviewees referred to non-attendance as a fixed characteristic of patients and families. This was also mentioned by health care staff in the study by Hussain-Gambles *et al.* (15) who referred to “repeat offenders.” This too warrants further study, and there is already evidence to suggest that non-attending families are significantly more likely to have also missed previous appointments (7). Interventions could, therefore, be targeted at families who do not attend on multiple occasions.

Implications and recommendations

Our findings suggest that GPs can be reluctant to interfere with parental responsibilities regarding attendance at children’s hospital appointments, focusing primarily on barriers to attending rather than parents’ motivations. Yet, by dealing with parents’ beliefs and practical concerns, GPs can help to uphold the rights

of their child patients to access the health care that they require. UK guidelines explicitly recommend that local systems are developed to enable GPs to take action following missed appointments (6) and highlight the central role played by GPs in child protection (19,20). Moreover, GPs are in a unique position to address non-attendance given their long-term and ‘near-universal’ contact with children and families (21), and the privileged knowledge of families obtained through these relationships.

Thus, primary care providers could take responsibility for promoting attendance and managing non-attendance at hospital appointments, being the central organizing hubs of patients’ health care. This notion of GP responsibility for coordinating care across multiple settings is a core principle of the Patient Centred Medical Homes that have arisen in the USA since 2007 (22). Even in cases where referrals are made to specialist services by other HCPs (e.g. from an emergency department), GPs are usually notified and can maintain an active role in overseeing their patients’ interactions with the health care system.

To promote attendance, GPs can check parents’ understanding of the reasons and need for referred appointments, emphasize the importance of attendance and ensure they know how to cancel or reschedule, and the importance of doing so if necessary. This type of approach was recommended by some of the hospital-based interviewees in our study, though purely ‘educational’ or information-giving strategies are unlikely to have large effects on attendance on their own. Rather a ‘package’ of techniques to influence behaviour, of which information provision is one aspect, would usually be more effective (23). Engaged two-way discussions, problem solving and confidence-building approaches may all be useful supplementary methods that could be implemented by both primary and secondary care clinicians.

It is also essential that all missed outpatient appointments are followed up by primary care centres. This is especially important as secondary care clinicians may only follow up non-attendance if they see the health condition as serious and believe that parents are ‘bothered’ about the appointment, or they may have unnecessary concerns about child safeguarding that could be precluded by GPs’ input. GP practices could develop policies addressing hospital non-attendance and systems for implementing a follow-up procedure. This could be by phone call, in person or using digital communication as appropriate, and might be carried out by health visitors, nurses or receptionists in addition to GPs. The methods used may depend on available resources, perceived urgency of particular appointments and individual family circumstances. Automated electronic reminders and recording systems on GP computers could facilitate this. Annual review of all children who miss primary care appointments has previously been recommended by GPs as a new health care quality marker for children’s care (18). However, we suggest that follow-up should be initiated immediately following non-attendance to ensure that the reasons for missing the appointment can be addressed while still pertinent, and to monitor child safeguarding issues.

Strengths and limitations

To our knowledge, this is the first qualitative study to investigate HCPs' views of non-attendance at secondary paediatric outpatient clinics. The study benefited from a diverse sample; however, we acknowledge that the majority of participants came from secondary care. This was due to difficulty recruiting busy GPs from our base within a hospital setting, and the potentially greater resonance of the topic with those in the children's hospital.

Multiple researchers analysed and interpreted the data, thereby lending credibility to the findings. Although we would be cautious about transferring findings directly into other contexts, this article addresses fundamental issues relating to health services' responsibilities to families and patients and thus has wider relevance for the management of non-attendance, including in primary care and adult outpatient clinics.

Conclusion

Although national policies, funding, procedures and technologies have not thus far been developed to address non-attendance at children's outpatient appointments, this is nonetheless an important issue that can have significant bearing on children's health and well-being and warrants due attention. By discussing with parents their motivations to attend and following up all missed hospital appointments, GPs can act to help ensure that their paediatric patients receive appropriate and timely care.

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Conflict of interest: none.

References

1. NHS Information Centre for Health and Social Care. Hospital Outpatient Activity - April 2011-March 2012: Provider Level Analysis. <http://www.hscic.gov.uk/catalogue> (accessed on 5 August 2013).
2. Andrews R, Morgan JD, Addy DP, McNeish AS. Understanding non-attendance in outpatient paediatric clinics. *Arch Dis Child* 1990; **65**: 192-5.
3. Confidential Enquiry into Maternal and Child Health (CEMACH). *Why Children Die: A Pilot Study, 2006. England (South West, North East, West Midlands), Wales and Northern Ireland*. London: CEMACH, 2008.
4. United Nations. Convention on the Rights of the Child (1989). <http://www.unicef.org/crc> (accessed on 25 June 2012).
5. Roe M. Child patients: WNB not DNA. *BMJ* 2010; **341**: c6332.
6. Department of Health. *National Service Framework for Children, Young people and Maternity Services*. London: Department of Health, 2004.
7. McClure RJ, Newell SJ, Edwards S. Patient characteristics affecting attendance at general outpatient clinics. *Arch Dis Child* 1996; **74**: 121-5.
8. Cooper NA, Lynch MA. Lost to follow up: a study of nonattendance at a general paediatric outpatient clinic. *Arch Dis Child* 1979; **54**: 765-9.
9. Bowman RJ, Bennett HG, Houston CA, Aitchison TC, Dutton GN. Waiting times for and attendance at paediatric ophthalmology outpatient appointments. *BMJ* 1996; **313**: 1244.
10. Martin C, Perfect T, Mantle G. Non-attendance in primary care: the views of patients and practices on its causes, impact and solutions. *Fam Pract* 2005; **22**: 638-43.
11. Zeber JE, Pearson D, Smith D. Analysis of health appointment no-shows. *Prim Health Care* 2009; **19**: 25-9.
12. Morse JM. Researching illness and injury: methodological considerations. *Qual Health Res* 2000; **10**: 538-46.
13. Bradley EH, Curry LA, Devers KJ. Qualitative data analysis for health services research: developing taxonomy, themes, and theory. *Health Serv Res* 2007; **42**: 1758-72.
14. Ritchie J, Spencer L. Qualitative data analysis for applied policy research. In: Bryman A, Burgess RG (eds). *Analysing Qualitative Data*, London: Routledge, 1994, pp. 178-93.
15. Husain-Gambles M, Neal RD, Dempsey O, Lawlor DA, Hodgson J. Missed appointments in primary care: questionnaire and focus group study of health professionals. *Br J Gen Pract* 2004; **54**: 108-13.
16. Gatrud AR. A completed audit to reduce hospital outpatients non-attendance rates. *Arch Dis Child* 2000; **82**: 59-61.
17. Watson M, Forshaw M. Child outpatient non-attendance may indicate welfare concerns. *BMJ* 2002; **324**: 739.
18. Gill PJ, Hislop J, Mant D, Harnden A. General practitioners' views on quality markers for children in UK primary care: a qualitative study. *BMC Fam Pract* 2012; **13**: 92.
19. Royal College of General Practitioners, National Society for the Prevention of Cruelty to Children. Safeguarding children and young people: A toolkit for general practice 2011. http://www.rcgp.org.uk/clinical_and_research/safeguarding_children_toolkit.aspx (accessed on 14 May 2012).
20. Department for Education. The Munro review of child protection: final report. <http://www.education.gov.uk/munroreview/index.shtml> (accessed on 14 May 2012).
21. Wilson P, Mullin A. Child neglect: what does it have to do with general practice? *Br J Gen Pract* 2010; **60**: 5-7.
22. Rittenhouse DR, Shortell SM. The patient-centered medical home: will it stand the test of health reform? *JAMA* 2009; **301**: 2038-40.
23. House of Lords Science and Technology Select Committee. *Behaviour change: second report of session 2010-12*. London: The Stationery Office, 2011.