Overcoming the barriers to chlamydia screening in general practice—a qualitative study

Clodna A M McNulty, Elaine Freeman, Rebecca Howell-Jones, Angela Hogan, Sarah Randall, William Ford-Young, Philippa Beckwith and Isabel Oliver

Health Protection Agency Primary Care Unit, Microbiology Department, Gloucestershire Royal Hospital, Great Western Road, Gloucester GL1 3NN, UK; Gloucestershire Research & Development Support Unit, Gloucestershire Hospitals NHS Foundation Trust, Great Western Road, Gloucester GL1 3NN, UK; Health Protection Agency, Centre for Infections, HIV and STI Department, Colindale, London NW9 5EQ, UK; Reproductive Health Care, Ella Gordon Unit, St Mary’s Hospital, Portsmouth PO3 6AD, UK; Broken Cross Surgery, Waters Green Medical Centre, Macclesfield, Cheshire SK1 6JL, UK; The Pain Management Centre, Frenchay Hospital, Beckspool Road, Bristol BS16 1LE, UK; and the Health Protection Agency South West, The Wheelhouse, Bond’s Mill, Stonehouse GL10 3RF, UK.

*Correspondence to Clodna McNulty, Health Protection Agency Primary Care Unit, Microbiology Department, Gloucestershire Royal Hospital, Great Western Road, Gloucester GL1 3NN, UK. Email: clodna.mcnulty@hpa.org.uk

Received 6 July 2009; Accepted 5 February 2010.

Background. There is low uptake of chlamydia screening in general practices registered with the English National Chlamydia Screening Programme (NCSP).

Aims. To explore staff’s attitudes and behaviour around chlamydia screening and how screening could be optimized in general practice.

Methods. A qualitative study with focus groups and interviews, in general practices in seven NCSP areas. Twenty-five focus groups and 12 interviews undertaken with a purposively selected diverse group of high and low chlamydia-screening practices in 2006–08. Data were collected and analysed using a framework analytical approach.

Results. Higher screening practices had more staff with greater belief in patient and population benefits of screening and, as screening was a subjective norm, it was part of every day practice. Many staff in the majority of other practices were uncomfortable raising chlamydia opportunistically and time pressures meant that any extra public health issues covered within a consultation were determined by Quality Outcomes Framework (QOF) targets. All practices would value more training and feedback about their screening rates and results. Practices suggested that use of computer prompts, simplified request forms and more accessible kits could increase screening.

Conclusion. Practice staff need more evidence of the value of opportunistic chlamydia screening in men and women; staff development to reduce the barriers to broaching sexual health; simpler request forms and easily accessible kits to increase their ability to offer it within the time pressures of general practice. Increased awareness of chlamydia could be attained through practice meetings, computer templates and reminders, targets and incentives or QOF points with feedback.

Keywords. Chlamydia trachomatis, focus groups, genital, primary care, qualitative, screening.

Introduction

The National Chlamydia Screening Programme (NCSP), introduced throughout all English Primary Care Trusts in 2008, aims to reduce prevalence of chlamydia through an opportunistic rather than a recall approach used by the National Health Service cervical screening programme. As >60% of the NCSP target at-risk population consult their GP annually, opportunistic screening in general practice could be successful. Thus far however, screening rates in general practice remain low forming 16% of all screens, with the majority screening <5% of their 16- to 24-year-old population. This has led some to question the evidence and rationale for opportunistic screening. Modelling suggests that, to substantially reduce prevalence, chlamydia screening will need to reach >50% of 16–24 year olds annually, although lower screening rates will have a lesser effect. Several studies have indicated that the successful introduction of chlamydia screening in general practice will be determined by professional attitudes, manpower, workload, time pressures and financial constraints and incentives such as inclusion in the Quality Outcomes Framework (QOF).
the QOF has improved the quality of primary care, GPs report that it has increased their workloads.\textsuperscript{11} We have found that chlamydia screening coordinators report that general practices with a staff champion and with an interest in sexual health or young people and a whole team approach attain the highest chlamydia screening rates.\textsuperscript{10} However, coordinators reported that although they provided low screening practices with ongoing support and patient follow-up, they were frustrated at the lack of enthusiasm and negative feedback from some general practice staff.\textsuperscript{10} Although men are happier attending general practice for screening than other health care settings,\textsuperscript{12} there is a widespread lack of awareness that chlamydia screening programmes include men;\textsuperscript{13} 88\% of staff in a US study thought that it was more important for them to spend their time testing women.\textsuperscript{13} Evaluation of other sexual health care interventions has revealed similar barriers to their implementation.\textsuperscript{14} For example, most practice staff only offered emergency contraception in response to a direct request or when women presented with an immediate need.\textsuperscript{14} Professionals were only pro-active if they held positive views and saw advance provision of emergency contraception as both necessary and desirable for women registered with their practice.\textsuperscript{14}

No studies have explored the attitudes and behaviour of practice staff within the NCSP. We aimed to explore, with general practice staff, their knowledge of the screening programme and strategies they have used within the current NCSP to opportunistically screen 16- to 24-year-olds for chlamydia when attending their practice. We also aimed to explore how practice staff felt the current screening programme could be optimized within primary care and explore any differences in behaviour and attitudes between practices with high and low screening rates.

Methods

Practice selection
We used stratified criterion-based (purposive) sampling\textsuperscript{15} to select practices, with a range of chlamydia screening rates, registered with the English NCSP. All 576 general practices registered with the NCSP in seven NCSP areas where there was significant screening being undertaken in general practice, were ranked by the total number of chlamydia screens (disaggregate data) in the 6 months prior to practice selection. We were unable to base initial practice selection on screening rates per thousand patients, as we did not have data on the 16- to 24-year-old practice populations prior to practice visits, due to data protection issues.

Focus group practice selection and participants
Practices were selected from six programme areas. In four areas with very few high-screening practices, we selected the two practices with the highest screening numbers. In the other two programme areas, we randomly selected two practices from the six with the highest screening numbers. Practices were excluded if they undertook chlamydia research or the practice included a NCSP steering group member. We then purposively selected two practices with low screening numbers that were in a similar geographical area to the high-screening practices. Practices were invited, by telephone, by one of the researchers then by letter (from CMcN) with information sheets and consent forms, to take part in a focus group\textsuperscript{16} exploring their approach to chlamydia screening. Two high and six low screening practices declined to participate in focus groups, due to time constraints or shortage or changes of staff. Practices were asked if at least one member of each category of staff could attend the focus group; this included doctors, practice managers, nurses, health care assistants and administrative staff. At visits, practise population data were used to determine each practice’s annual screening rates per 100 patients registered aged 16–24 years. Practices were then defined as high-screening practices 10\% and above, medium between 3\% to 9\% and low screening practices if <3\% (Table 1).

Interview practice selection and participants
In 2008, we visited low screening practices in a further screening area (Table 1). We had hoped to undertake interviews in high-screening practices in this programme area, but there were no practices in this area that screened >3\% of their target population. Three of six practices responded to a letter inviting them to participate in semi-structured interviews. We visited the first two practices that responded, to explain the study fully and to invite all staff to participate.

Ethics
Ethical approval was obtained for focus groups from Multi-centre Research Ethics Committees [04/MRE10/41] and for interviews with Warwickshire National Research Ethics Service reference: 08/H1211/57; local research governance approval was obtained from the relevant Trusts. The practices received a payment of £25 per participant for focus groups and £20 in gift tokens for each interview. All health care practice staff were assured of anonymity and gave informed consent.

Focus group and interview content
CMcN, EF and RHJ undertook the 1-hour focus groups. A draft focus group schedule was developed by EF and CMcN based on our and other previous research in the area of chlamydia screening in primary care.\textsuperscript{7,10,17–19} The schedule was then discussed, refined and agreed by the project research management group members, who included a service user. The moderators (EF, CMcN and RHJ) encouraged respondents to speak candidly about their experiences of chlamydia screening. The topic areas discussed were as follows: their views of the screening programme; factors which
determined their screening rates; strategies used by staff to identify and approach their target population; strategies used by different staff in consultations related to and unrelated to sexual health in men and women (focus group and interview questions available on request from corresponding author). The acceptability and feasibility of potential strategies volunteered in early focus groups were discussed in subsequent focus groups.

The interviews were undertaken by AH who used a questionnaire schedule, based on the results of the focus group analysis, which aimed to determine GP surgery staff's behaviour, intention and beliefs about offering chlamydia screening based on the Theory of Planned Behaviour (TPB). Interviews lasted for 20–40 minutes.

Data analysis

Data collection and analysis occurred concurrently and we continued enriching the data through purposive sampling. Focus groups and interviews were audio-taped, transcribed and checked against the audio tapes by a researcher present at data collection. We planned a stepwise ‘Framework’ analytical approach, which allows the researcher to systematically appraise and reappraise transcriptions, to develop ideas and theories behind the phenomena of interest, in this case strategies used to promote, and remaining barriers to chlamydia screening. An initial coding framework was developed after the first 10 focus groups by EF and CMcN working together using an inductive approach. This approach was used, as we wanted to be open to all the data collected and thus gather the range of opinions and reported behaviour described. The initial coding frame was based on the focus group notes they made and knowledge of the actual focus group they attended. The themes covering barriers to screening were also influenced by our and others’ previous research. The themes covered strategies used by practice staff to promote chlamydia screening, and barriers and attitudes to screening. EF and CMcN then went through these transcripts independently line by line to identify data relating to each theme and adding new ones as they arose. QSR NVivo software (QSR International PTY Ltd, Melbourne, Australia) was used to code and facilitate analysis of the data. EF and CMcN then discussed the data for each theme and agreed on some additional themes. Each of the themes, with illustrative quotes, was discussed in detail by the research team at several meetings. EF then analysed all the transcripts line by line and with word searches. In the context of developing an intervention to improve screening in primary care, the themes were then placed in headings within a cognitive theory framework. The TPB is used to explain human behaviour and has been used to design interventions to change GPs’ intentions when implementing evidence-based practice. The theory proposes that three areas influence a person’s behaviour: personal attitude (whether a person is in favour of chlamydia screening, which maybe influenced by an individual’s beliefs about the disease, the consequences of not screening and rewards for screening); subjective norm (the social pressures on a clinician to screen) and perceived behavioural controls (whether the clinician feels able to screen due to lack of personal ability or external barriers). Interview transcripts were then analysed in detail, line by line, and by word search by AH, using the themes already identified by EF and CMcN, and quotations that illuminated the themes were imported into Microsoft Word. The quotations chosen to demonstrate the range of data in both high and low practices were checked for accuracy, within the context of the transcripts and themes, by a second researcher (CMcN). Within the framework, all data were sorted by the practice screening rates (high, medium and low) and the relationship between screening rates and data was further examined.

Results

We conducted 25 focus groups at general practice locations between November 2005 and April 2007 and 12 semi-structured interviews at two practices in 2008. We recruited 6 high, 10 medium and 9 low screening practices for the focus groups and two low screening practices for the interviews. These included practices in English inner city, urban, rural and

<table>
<thead>
<tr>
<th>Chlamydia screening rate/100 16- to 24-year-olds/year</th>
<th>Number of participating practices</th>
<th>Number of registered 16- to 24-year-olds in practices (range)</th>
<th>Percentage of 16- to 24-year-olds as % of total practice population (range)</th>
<th>Number of screens in previous 6 months (interviews three months)</th>
<th>Number of screens/100 16- to 24-year-olds/year (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High ≥10%</td>
<td>6</td>
<td>879 (359–1198)</td>
<td>9.9 (8.2–12.4)</td>
<td>75 (25–180)</td>
<td>16 (10–32)</td>
</tr>
<tr>
<td>Medium 3–9%</td>
<td>10</td>
<td>681 (270–1190)</td>
<td>9.9 (5.0–13.8)</td>
<td>19 (6–38)</td>
<td>6 (3–8)</td>
</tr>
<tr>
<td>Low &lt;3%</td>
<td>9</td>
<td>837 (415–1302)</td>
<td>9.9 (8.6–12)</td>
<td>6 (0–13)</td>
<td>1 (0–2)</td>
</tr>
<tr>
<td>Interviews</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium 3–9%</td>
<td>1</td>
<td>1030</td>
<td>9</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Low &lt;3%</td>
<td>1</td>
<td>237</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

TABLE 1  100 16s and patient populations of practices participating in focus groups and interviews
suburban locations, some with high ethnic practice populations and mix of social class. Seventy-two GPs, 46 nurses, 23 receptionists/administrators, 8 practice managers and 7 other staff participated in the focus groups (2–20 staff, median six/focus group). Of 14 staff approached to participate in the interviews, 12 agreed (5 general practitioners, 3 nurses, 1 receptionist, 2 health care assistants and 1 manager). One nurse was on leave, and one practice manager declined.

Practice chlamydia screening rates ranged from 0% to >30% but, in all screening programme areas, the majority of practices had screened <5% of their 16- to 24-year-olds.

**Personal attitudes of staff (Box 1)**

**Belief in and awareness of screening.** Staff in the six higher screening practices were more likely to report the short- and long-term benefits of chlamydia screening for the individual patient. Most staff in lower screening practices and some staff in other practices were not convinced of its public health importance. Lower screening practice staff were more likely to report that they focused on other disease areas they thought were higher priority, which were usually determined by QOF targets. Several staff thought that screening would be more appropriate in genitourinary clinics.

**Awareness of chlamydia screening for men.** Very few staff in any of the practices considered screening men an

<table>
<thead>
<tr>
<th>Box 1 Personal attitudes of staff towards screening</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Belief in and awareness of screening:</strong></td>
</tr>
<tr>
<td>Staff in high and some medium aware of benefits:</td>
</tr>
<tr>
<td>‘Well, we got involved originally because we were concerned that our under 25s sexually active were perhaps contracting chlamydia and we weren’t detecting it and weren’t treating it, … so that’s why we’re quite keen to get involved in that.’ FG1 respondent 2 high screening practice</td>
</tr>
<tr>
<td>‘We know it’s important, and when people are coming in to the young persons clinic then it is time to remind them really … we want to maintain as healthy a young persons population as we can really in the practice. In terms of potential, as a screening service its probably very high, if you compare it with breast screening or cervical screening or the one of the other … screening programmes, actually. And it’s so easily treatable, and the swab is easily done, and you know the effects of non treatment can be so devastating its, it’s a really worthwhile thing to be doing. I think it is absolutely good practice, it almost seems bad practice not to be talking about it.’ FG6 respondent 2 medium screening practice</td>
</tr>
<tr>
<td>Low screeners were not convinced of the benefits of screening:</td>
</tr>
<tr>
<td>‘You would need to produce the evidence that there are a large significant group of people out there who had chlamydia who had been damaged and we needed to do something about it and that would motivate us. A study that says it’s bloody obvious you should be doing this. If you’ve got to hit a target of 15-30% I think you’re not going to do it just opportunistically. You would probably need to set up a formal call or recall system.’ Interview 01/07 male GP low screening practice</td>
</tr>
<tr>
<td>Several staff were unsure of the public health benefit beyond the individual:</td>
</tr>
<tr>
<td>‘There’s no doubt about individual health benefit … but in terms of any public health impact because it is just a disaster. Ok, when you have … X people in your target population, and in one year only XX people get tested, there is no public health benefit in that. We don’t see populations we see individuals, and so our enthusiasm comes from actually seeing individual, as a GP it’s much more, single individuals that fires you up than actually saying our population screening programme’ FG5 respondent 5 high screening practice</td>
</tr>
<tr>
<td>Several staff thought that chlamydia screening was more appropriate in GUM:</td>
</tr>
<tr>
<td>‘Whether we are the best set up to offer that sort of service within general practice. I’m not sure whether it would be better in the GU clinics.’ Interview 01/05 nurse low screening practice</td>
</tr>
<tr>
<td><strong>Awareness of chlamydia screening for men:</strong></td>
</tr>
<tr>
<td>Very few staff considered screening men:</td>
</tr>
<tr>
<td>‘I don’t think I’ve ever given a male a urine sample and I’ve never done one [a screen] in six years they’ve always been female.’ FG26 practice nurse low screening practice</td>
</tr>
<tr>
<td>Many staff reported they rarely saw men:</td>
</tr>
<tr>
<td>‘And its very, very rare, as nurses we would see a male under the age of twenty-five, [an] asthma check it’s the only thing that I can think of that they come to see us, or for removal of sutures.’ FG22 nurse low screening practice</td>
</tr>
<tr>
<td>Some staff reported that men were not motivated to accept screening:</td>
</tr>
<tr>
<td>‘It’s getting to the young boys as well, because they are rather lethargic about it. They are not quite as forthcoming as the girls …’ ‘I don’t think they see it as so much of a problem, I’ve had quite a few of them say ‘it’s not really my problem is it?’ FG2 respondents 1&amp; 5 medium screening practice</td>
</tr>
</tbody>
</table>
important part of the NCSP. As a result, none had a systematic approach to screening men and only considered chlamydia if a man was symptomatic. High-screening practices were more likely to report that young men attended for travel vaccinations, asthma checks and sports injuries, but only a minority of staff used these opportunities to raise chlamydia screening. Most of the practices in medium and low screening practices thought that their young male population did not visit the surgery or did not see the nurses who led chlamydia screening. All practices were surprised by Salisbury’s findings that a high proportion of young men visit their general practice annually.3 Some staff reported that men were not motivated to accept screening.

Subjective norms, social pressures on a clinician to screen (Box 2)
Profile of NCSP in the practice. Staff in the higher screening practices were more likely to report that chlamydia had a high profile and that chlamydia screening was an important part of their daily practice. Usually, several doctors, practice nurses, support staff or receptionists were involved and supported each other. Receptionists played a key role in a few practices by flagging notes to remind clinicians to offer a test. Some high practices routinely offered screening at new patient health checks, travel vaccinations or young people clinics. In medium and low screening practices, screening had not become the norm; these practices were more likely to report that they had only a single individual with a personal belief in screening who championed and tried to promote screening, but either other members of the team were not fully supportive, were unaware of the NCSP, or did not consider chlamydia important enough to screen opportunistically. Clinicians in lower screening practices were more likely to report that they undertook screening very infrequently, with the majority undertaken in symptomatic patients or in sexual health consultations.

Factors discussed by staff that may affect personal attitudes and subjective norms (Box 3)
Importance of practice champion supported by other practice staff. The higher screening practices were...
more likely to report that the individual in the practice who had an interest in sexual health or young people and championed screening was supported by their colleagues. Although staff recognized the importance of increasing the profile of chlamydia screening, the champion in low screening practices often reported

**Box 3  Factors discussed by staff that may affect personal attitudes and subjective norms**

Importance of practice champion, meetings, coordinator visits, training, newsletters and feedback:

‘One must have a lead GP with a senior nurse who is very passionate about chlamydia screenings, who have monthly meetings to make sure that’s on the agenda’. FG19 senior partner low screening practice.

‘I think having a coordinator [within the practice] like X has be useful I think because she’s been to the update and she’s come back and … reminded us all … so all the doctors are aware where everything is so they’ve not got to interrupt surgery’ FG8 respondent 1 low screening practice

Low screening practices suggested screening would increase if it was the norm:

‘I think the thing is it’s to offer it as a general thing, as much as testing for glucose and cholesterol and demystify it a bit, for it not to be seen as some dirty word and for it to be seen as a general testing as other things are.’ Interview 01/04 health care assistant low screening practice

Coordinator visits:

‘We had a meeting but it was quite a long time ago. It’s up to them to be proactive but I personally haven’t got time to be chasing coordinators’ FG23 Female GP low screening practice.

Feedback:

‘… it would be helpful for us to have some incentive to carry on doing it. It’s taking us away from other areas of work … I think to keep the motivation going its essential to have feedback on how well we’re doing, which we haven’t had. Otherwise you’ll say, “What else can we do to keep motivation?”’ More contact with the people who are running it. Even if we weren’t getting paid for it, if we were getting some feedback to say, well you’ve screened 100% patients 10% were positive, and you’ve saved 10% of people from pelvic inflammatory disease, that’s an incentive enough.’ FG24 nurse and female GP low screening practice

Targets and QOF:

‘The last co-ordinator would help [us by] having an incentive to get certain numbers done. It would also help to have graphs where we are [in relation to] other local practices. We hate being at the bottom end [of a league table].’ FG19 senior partner low screening practice

‘if the government was to make it one of the main targets for GP’s to reach like they did for vaccinations then yes … it would become officially a priority; our duty in a way.’ FG19 male GP low screening practice

Motivation lost as Local Enhanced Service not funded:

‘I think in essence I’m reliant on the whole of the rest of the team to refer people to me if it’s relevant, and I think because funding is not there the GP’s have stopped directing them towards me …’ FG17 nurse low screening practice

Use of computer templates at consultations attended by at-risk group:

‘There’s so much information a person can cope with, if you have templates for a fifteen year old check when it comes up on the template, we can add chlamydia to that, [it] would be a good idea.’ FG25 respondent 1 medium screening practice

‘If you give them [the nurses] a really good protocol to follow they will do it … if it is a nurse led thing it will work very well.’ Interview 01/03 female GP low screening practice

Most respondents reported that computer reminders/alerts would be helpful:

‘Yes [computer prompts] would be useful it may be you are doing something totally different and it’s a reminder, isn’t it basically, so yeah it would be useful.’ Interview 01/01 health care assistant low screening practice

Some respondents were aware that you could get prompt fatigue:

‘On the computer everything’s flashing up as it is. I think that a prompt that only invites those who haven’t already been invited, so you’re not going over the same ground.’ FG18 Female GP low screening practice

‘We’ve got too many prompts. We try to keep to those things that are really top very vital top level priority.’ FG23 female GP low screening practice

Staff suggested that more leaflets and advertising might make screening more acceptable to patients:

‘I think we should have more handouts available to that age range, so that patients are aware. Otherwise young people will be frightened to come in at all, if they are going for a sore knee and then they are pounced on about having chlamydia screening.’ Interview 02/10 practice manager low screening practice
frustration at the lack of commitment or knowledge of their colleagues. Several practices reported that their initial motivation for screening had decreased when the pivotal screening champion had left or started working part-time.

Importance of maintaining high profile of screening through practice meetings, coordinator visits, training, newsletters and feedback of screening rates. Most practices reported the importance of maintaining the high profile of screening by reminders through regular practice meetings and ongoing support from NCSP coordinators. Two health care workers were motivated by feedback from doctors about positive patients they had screened at routine health checks. Almost all practices reported little contact with their local chlamydia coordinator subsequent to an explanatory visit; one high-screening practice reported that the coordinator had updated them with knowledge and skills training. Some practice staff had received a newsletter, although not all staff had seen it. Lack of feedback about individual and overall patients’ results from the NCSP was considered a negative driver to screening.

Targets and QOF. No practices knew how many 16- to 24-year-olds were registered or had internal practice or coordinator-generated screening targets. The majority of practices reported that if chlamydia was included in the QOF priorities, they would consider it more important and develop a much more systematic approach to screening. A minority of practices said extra QOF targets would put additional pressure on staff.

Computer templates and reminders. Some clinical staff and receptionists in two high-screening practices reported that patient’s age on the computer record reminded clinicians to offer screening. Although two practices did include chlamydia screening in new patients’ health checks, none of the practices had chlamydia screening specifically included in any other consultation templates or protocols, but most staff said this would be a good idea. Most staff thought that computer alerts or tagged notes would raise the profile and remind clinicians to opportunistically offer screening. Five GPs in the low screening practices thought they already had too many QOF-related reminders. One GP suggested that a prompt should only appear if the patient had not been offered a screen.

Patient posters and leaflets. All practices reported that offering screening would be easier if patients were made more aware of screening through increased use of leaflets and posters; this is covered in more detail in a separate paper.25

Perceived behavioural controls, clinicians’ personal ability and external barriers (Box 4) Staff training and ability to raise chlamydia in a consultation. In all practices, a clinician’s self-belief that they were comfortable raising sexual health issues was a key factor in how often staff offered screening. Staff who were comfortable raising chlamydia did so more often and, in the high-screening practices, in any consultation. This was not just restricted to doctors and nurses; two health care assistants reported that they had been trained and were enthusiastically offering chlamydia screening at new patient checks. Some staff in all practices felt uncomfortable discussing sexual health issues with some patients, as they thought it could cause offence. Consequently, medium and low screening practices usually only offered chlamydia screening in consultations related to sexual health. Staff found raising chlamydia screening was even more difficult if a parent was present. In medium and low practices, chlamydia screening was not offered at new patient checks or offered by health care assistants who reported insufficient training in this area. Although receptionists were involved in two practices, the majority of medium and low screening practices reported their receptionists were not trained appropriately or did not have sufficient time.

Relationship with coordinator. Staff in lower screening practices were more likely to report a poorer relationship with their coordinator. However, a GP from a high-screening practice reported that they believed the coordinator had a lack of understanding about general practice and how it worked and that appointing a coordinator without primary care experience was a mistake.

Confidentiality issues. Although all types of staff reported that receptionists could distribute discrete leaflets or cards, many thought that their reception area was not confidential enough for receptionists to discuss chlamydia screening with patients.

Time pressures. In all practices, some clinicians reported that their screening behaviour was influenced by time pressures, and many clinicians were reluctant to extend consultations or just forgot to discuss chlamydia. Staff reported that coordinators needed a greater understanding of the barriers in general practice to implement the programme. Many staff reported that, as screening kits were not readily accessible, to save time they used the standard local laboratory request forms or didn’t screen. Staff also reported that the screening request forms were difficult for some patients and time-consuming for staff to complete; a few screening practices (one high and one low) saved time by offering self-screening kits without a consultation.
Box 4  Perceived behavioural controls, a clinician’s perceived personal ability and external barriers

Ability to raise chlamydia in high-screening practices:
‘Everybody does, [chlamydia screening] I think we all do a little bit so there is some consistency and I think most of us … [are] fairly comfortable dealing with that age group that aren’t too embarrassed to offer them a leaflet and then [a screening test]’ FG11 respondent 1 high screening practice

Some health care assistants had been trained:
‘I try to implement that in my new patient check I’m pleased with it because I’ve had the doctors come to back to me a few times and said the new patients have come back positive, and they’ve been able to deal with that.’ FG9 health care assistant high screening practice

Some staff in all practices were not comfortable raising chlamydia screening:
‘I do find it more difficult to speak about sexual matters particularly if they come about something completely unrelated. If they come about contraception or something else it’s easier. I think if they come for an ear infection, I wouldn’t dream to bring it up’ FG10 respondent 1 medium screening practice

Some staff thought that offering an opportunistic screen might cause offence:
‘As they’re 70% asymptomatic they obviously [think] why am I getting all this, you know and they get defensive. I feel that they might take offence, ‘why are you asking me that?’’ FG15 respondent 1 nurse practitioner and 2 male GP low screening practice

Raising screening difficult if a parent is present:
‘[If they] turn up with a parent, it is difficult sometimes to discuss things’. ‘They don’t even get smoking cessation … they’re not going to say yes to a chlamydia test.’ FG4 respondents 2 & 3 low screening practice

Many staff (especially if not GPs) in medium and low screening practices reported insufficient training:
‘With the right training I think (I would offer opportunistic chlamydia screening) … I would think maybe just a sort of an hour’s tutorial on how to go about it, and a few facts really.’ Interview 01/04 health care assistant low screening practice.

Confidentiality issues for screening in reception areas:
‘I don’t think it will work … not at all’ ‘From the confidentiality point of view, they have very busy time, I don’t think its receptionists’ responsibility to talk [to patients] informing them about chlamydia I think that’s our job’ FG14 GPs 1 & 2 medium screening practice

‘As receptionists there’s no way we would ask questions, if they [patients] did ask questions, we’d say it’s best to discuss it with a nurse.’ FG8 receptionist 1 low screening practice

Leaflets could be appropriate at reception:
‘I think reception are very busy what with one thing and another. But I think definitely having leaflets on the desk.’ Interview 01/03 female GP low screening practice

Time pressures:
‘I think in a busy practice you might find it difficult because it’s not the sort of thing you can just say by the way can I check your blood pressure. There’s got to be some explanation around it, I wouldn’t feel uncomfortable doing it but it would be the time constraints that would stop me doing it I think.’ Interview 01/07 male GP low screening practice

Easy availability of screening kits would save time:
‘If the nurse and both doctors’ rooms had a box with them [screening kits] in and it was next to us with the forms and they’re on hand you’re far more likely to give them out. It would save me running out and getting it and running back in’ Interview 02/012 female GP low screening practice

Packs left in reception area:
‘We just left [packs] on the desk at the reception and there was quite a lot taken really, we were quite surprised. We left them on the desk in a big basket with a poster about it all.’ FG8 respondent 1 low screening practice screening practice.

Coordinators lacked understanding of how general practice worked:
‘I think you can learn about chlamydia, but you cannot learn about British general practice, I think appointing somebody [the coordinators] who’d never worked in primary care was a real disadvantage … I just think a lack of understanding about general practice how it works, how it functions, just a missed opportunity, I just feel that they [the coordinators] have failed to embrace the willingness of general practice to be involved’ FG5 respondent 3 male GP high screening practice.

Several staff reported it would be useful to be able to record screening offers:
‘… We don’t record if we offered it, so we haven’t got a marker on our computer for that at the moment and … if we put on offered, but declined chlamydia screening that would be a good thing coz it would be recorded that some people have said no.’ FG 17 respondent 1 low screening practice
Barriers to recording offers of screens. Staff reported that, as there were no computer Read codes to record if they had offered chlamydia screening and if the patient had agreed or declined, it would be difficult to audit screening offers and uptake.

Discussion

Key findings
100 16s were still very low in the majority of these general practices, even though they were registered with the NCSP. Chlamydia screening had become a part of everyday practice (a subjective norm) in only the minority of practices where most staff had a personal belief in the importance of chlamydia screening. This ‘whole team’ approach was key to attaining higher rates. In most other practices, it had not become the accepted norm to undertake screening; as chlamydia was not included in the QOF, it was considered a low priority. Staff missed many opportunities for screening the target population and only offered screening when they remembered, usually at contraception consultations. None of the practices had a systematic approach to screening men and most staff were unaware this was part of the NCSP. In all practices, some staff felt uncomfortable discussing chlamydia in consultations unrelated to sexual health and this perceived behavioural control limited the amount of screening. Some general practices were working in isolation from their screening coordinator and wanted more education, feedback of individual results and screening rates, and understanding of the pressures on practice staff. Staff suggested computer reminders and feedback about positives and targets might motivate practices to screen greater numbers.

Other work in this area
Some GPs in our study were not convinced of the evidence for chlamydia screening in their practice population. Although systematic reviews and randomized trials have shown that screening women at high risk of chlamydia reduces the risks of sequelae, there is an absence of evidence supporting opportunistic chlamydia screening in the general population <25 years, the recommended approach in the NCSP in England. This may make it more difficult for screening coordinators to change a clinician’s personal attitude towards the benefits of screening.

A US primary care questionnaire survey also showed that greater confidence in how to screen and feeling comfortable to screen were associated with greater screening activity by clinicians. Most of the practice staff in our study reported the need for more specific training on how to raise chlamydia in consultations unrelated to sexual health. Several types of educational approaches have successfully increased screening by breaking down these barriers influencing behaviour.

In the USA, an electronic flag was successfully used to cue health care providers to offer chlamydia screening to adolescent mothers. In California, a multifaceted approach used many of the strategies highlighted by our practice staff, including identifying a champion, team building, a flow chart to identify barriers and solutions for changing practice, promotional materials and monthly meetings to feedback progress on performance indicators. Feedback about positive results has been shown to be important in several studies. GPs who had a positive test result in at least one of their patients offered significantly more screening than GPs for whom none of the first 10 tests were positive. Physicians who got only negative test results were more likely to abandon screening.

The practice staff we interviewed reported that the demands of the QOF system meant that extra demands on them that fell outside QOF were a lower priority. Incentive-based targets were suggested by some practice staff, but there is not a direct link between Local Enhanced Service (LES) agreements and screening rates within the NCSP (NCSP 2009, personal communication). In a London PCT, practices paid a LES to facilitate sexual health services, diagnosed eight times more chlamydia infections than non-LES practices, but a third of the LES practices made no chlamydia diagnoses despite being paid the retainer fee. Thus, LES agreements will probably not be effective in isolation without other behavioural interventions.

Many multifaceted interventions aim to address the different components of a cognitive theory model such as the TPB. Pavlin et al. have shown, using Ajzen’s TPB, that many of the behaviour changes needed for patients to accept screening are similar to those needed by staff, that is encouraging the personal attitudes of patients to be more in favour of screening through awareness that it has long-term effects, encouraging patients to see chlamydia screening as a social norm and encouraging women to feel able to have a chlamydia test by easier access to, and understanding of, tests. The aim to screen 25% of 15- to 24-year-olds in 2009–10 and 35% in 2010–11 is challenging with the current pressures on GPs, even with the combination of approaches we have identified in this work, but it will be very difficult without screening in primary care. The NCSP is currently encouraging PCTs to focus their efforts on increasing screening in general practice and, through 2009, screening in this setting has increased by 125%. In 2009, the Department of Health launched a new national sexual health campaign, ‘Sex—worth talking about’, covering contraception, condom use and chlamydia testing, which is also based on the TPB, and this may go some way to further increase patient and staff acceptance and understanding of chlamydia screening.
Strengths and weaknesses
This is the first qualitative study in the UK involving general practices in the established NCSP. Our qualitative methods enabled us to probe answers to fully understand the behavioural issues around chlamydia screening with a diverse group of practices, and therefore, the study findings are likely to be transferable to the majority of general practices involved in chlamydia screening programmes. The focus group setting may have inhibited some practice staff from expressing their views in the presence of more senior staff, however all types of staff did express their opinion. The additional interviews allowed us to collect extra data within a setting where all staff were able to express their opinions unhindered by other staff and the findings were very similar. The study was not designed to allow us to say whether the strategies used in high-screening practices would definitely increase screening in low screening practices; a specific intervention study would be needed to ascertain this.

Implications of the research for NCSP and PCTs
There is a need for more research evidence of the short- and long-term benefits of opportunistic screening in the general practice population, which the NCSP can use to promote screening in general practice; this should include men (Box 5). Staff concerns about raising sexual health issues opportunistically need to be addressed through training tailored to general practice on exactly how to broach and offer screening within the time constraints of a busy surgery. Staff need to be shown evidence that men are also happy to be offered screening. Policy makers should be aware of the effect of QOFs on practice behaviour and commitment to screening and consider QOF-based targets to further motivate practices. The screening request forms need to be simplified and Read codes need to be developed for screening offers, acceptance and refusals. Screening coordinators, through the practice champion and practices visits, need to discuss targets, feedback information about screening rates and positives, and maintain training.

Implications for practices. Practices need to organize appropriate staff development to enable all staff to understand the value of screening and to feel comfortable with offering screening to women and men. For GPs, this could include the Royal College of General Practice certificate in sexual health. Staff need to be made aware of how many screening tests they need to undertake to reach any PCT targets and Read code offers. If each general practice registered with the screening programme in 2009 undertook just one screen each day, this would equate to 1 156 800 per year. Screening kits need to be readily accessible. To help staff remember to opportunistically screen, practices should include chlamydia in templates for new patient, contraceptive, travel and young people’s clinics and incorporate computer reminders in the target age groups. Staff championing chlamydia screening need to be given time to discuss screening with the whole practice team and feedback screening rates and positivity.

Box 5 Structured approach at national and local level to maximize chlamydia screening

- Provide evidence to practices of the short- and long-term benefits of opportunistic chlamydia screening for women and men in the general practice setting
- Develop training packages for all types of practice staff
- Simplify screening request forms
- Develop Read codes for screening offers, acceptance and refusals
- Develop screening targets based on consultations with practice 15- to 24-year-old population
- Consider National and Local QOF indicators for chlamydia screening
- Audit leaflets and packs given out, attendance by young people, uptake of screening
- Feedback of screening activity and positivity results to all staff
- Recognize or reward practices when they attain screening targets At the practice
- Through education:
  - Make chlamydia screening a greater priority for the whole practice team
  - Enable staff to feel comfortable raising chlamydia in all consultations
  - Enable staff to offer chlamydia in a timely manner without extending consultation time
  - Enable non-clinical staff to feel comfortable to offer a screening leaflet or card and raising chlamydia with the at-risk population
- Develop screening targets and make all staff aware how many patients they need to screen to attain them
- Identify a ‘champion’ for chlamydia screening who can maintain the profile of chlamydia and feedback progress at practice meetings
- Make chlamydia screening part of normal every day practice
- Develop templates for chlamydia screening, for consultations by 15–24 year olds including family planning, travel, new patient checks and audit their use
- Develop computer prompts to remind clinicians and/or receptionists to offer screening
- Make screening kits easily accessible
- Audit leaflets and packs given out, attendance by young people, uptake of screening
Acknowledgements

Our grateful thanks to all the practice staff for their willing participation in the focus groups and to Medical Research Council for funding the study. Thanks to Lynsey Emmett and the NCSP for providing us with screening data. Thanks are due to Sue Starck, Allison Bates and Jiyoon Knight for transcribing the focus groups and to Mark Walker for his help in the data collection. Thank you to Jill Whiting for organizing the focus groups and steering group meetings and for help with the grant application and ethical approval. Thanks to Louise Wallace for her advice on the TPB. All the authors contributed to the design of the study and had input into the paper. EF, RHJ and CMCN undertook the focus groups and detailed analysis. A Hogan undertook the interviews and interview analysis. E Freeman and C McNulty wrote the paper.

Declaration

Funding: Medical Research Council (G0500126); Health Protection Agency Research and Development (105042).

Ethics: Multi-centre Research Ethics Committees (04/MRE10/41) and Warwickshire National Research Ethics Service (reference: 08/H1211/57).

Conflict of interest: CMCN writes the Health Protection Agency Diagnosis of Chlamydia Quick Reference Guide for General Practices. IO is a member of the English National Chlamydia Screening Advisory Group. SR and WFY are former members of the English National Chlamydia Screening Advisory Group.

References


