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# A missed opportunity

## Lessons learnt from a chlamydia testing observation study in general practice

### Background

Chlamydia is the most frequently notified sexually transmissible infection in Australia and occurs most commonly in young people. Up to 80% of chlamydia infections are asymptomatic. The Royal Australian College of General Practitioners recommends annual chlamydia testing for all sexually active people aged less than 25 years. This study explored potential structural or procedural barriers that might inhibit chlamydia testing in young women in general practice.

### Methods

The chlamydia testing pathways of 12 general practices were examined using a comprehensive practice assessment tool. The pathways of these clinics were compared to a best practice testing pathway, and clinics were offered tailored advice to help improve their practice pathway.

### Results

Clinics were followed up at 2 months. Little change to existing practices had been made.

### Discussion

Clinics employing a practice manager were better equipped to enable systems for chlamydia testing to be developed. Results are discussed in light of May's normalisation theory, which states that changing practices requires shared understanding and commitment by all staff. It is unlikely that chlamydia testing rates in general practice will reach the levels required to reduce the burden of chlamydia without a coordinated clinic level approach.

### Keywords

chlamydia infections; mass screening; general practice; health services research; delivery of health care

Chlamydia is the most frequently notified sexually transmissible infection in Australia, with 74 305 newly diagnosed cases in 2010. Chlamydia occurs most commonly in young people (particularly in those aged less than 25 years).<sup>1</sup> Up to 80% of chlamydia infections are asymptomatic and if left untreated, may result in serious sequelae, including pelvic inflammatory disease, ectopic pregnancy and infertility.<sup>2,3</sup> The Royal Australian College of General Practitioners (RACGP) now recommends annual chlamydia testing of all sexually active people aged less than 25 years,<sup>4</sup> although at the time this study was funded, the recommendation in the RACGP *Guidelines for preventive activities in general practice* (the 'red book', 6th edition) was for the testing of young women only.

Currently only 12% of Australian women aged 15–24 years are tested annually for chlamydia, as recommended by the RACGP.<sup>5</sup> Mathematical modelling suggests that chlamydia prevalence will decrease if testing rates can increase to over 30% each year.<sup>6</sup> As 90% of women aged 15–24 years consult a general practitioner at least once a year, general practice is a good setting in which to achieve annual chlamydia testing.<sup>7</sup> However, insufficient knowledge about the benefits of testing, and a lack of time and difficulty in remembering to offer the test, have been identified as barriers to chlamydia testing by GPs.<sup>8–11</sup>

This study was conducted between May 2008 and January 2009 as part of a randomised controlled trial that aimed to determine the

impact of general practice incentive payments on chlamydia testing among women aged 16–24 years. Trial results have been reported elsewhere.<sup>11</sup> This component of the study investigated ways of improving chlamydia testing in general practice by exploring potential structural or procedural barriers that might inhibit chlamydia testing in young women in general practice.

### Methods

Observational practice visits and staff interviews were conducted to identify the optimal chlamydia screening pathway for that practice. This was then reported back to the clinic.

General practices were eligible to participate if they had at least two full time equivalent GPs willing to participate who collectively saw a minimum of 250 women aged 16–24 years in the preceding 12 month period. General practices were selected from a database collated from the Victorian Yellow Pages telephone directory. To ensure broad representation, practices were recruited by geographic location<sup>12</sup> and socioeconomic status.<sup>13</sup> Practices were initially telephoned by a research assistant to invite participation and provide further information to interested and eligible clinics. Interested practices were visited by a research assistant to obtain consent from GPs. General practitioners consented to the collection of de-identified chlamydia testing data and consultation data on female patients aged 16–24 years. A total of 145 practices were approached, with 12 practices recruited into the study: eight from metropolitan Melbourne and four from regional and rural areas of Victoria. Reasons for nonparticipation included a lack of response from GPs (57%),

no interest from GPs (33%), a lack of time (4%), interest shown after recruitment period had ceased (4%) and clinic participation in other studies (2%).

This study comprised two components: administration of an audit tool and semistructured interviews. We conducted an initial visit to the clinic to administer the audit tool, interview practice managers or practice principals and to make recommendations to improve the clinic's current chlamydia testing pathway. A follow up telephone call was made 2 months later to determine whether recommendations had been adopted.

### Audit tool

To ascertain each practice's youth friendliness and current practices around chlamydia testing, we adapted a comprehensive 20 page audit tool, initially developed to assess practice characteristics for a study on prevention, access and risk taking in young people.<sup>14</sup> The tool covers five main areas: practice demographics, physical location and infrastructure, clinical systems, internal organisation, and patient services. One GP researcher (JK) visited each of the 12 practices for half to 1 day to observe and audit the practice using the audit tool.

### Semistructured interviews

In addition to the audit, either the practice manager or the practice principal was interviewed to gain more detailed information about specific practices within the clinic, such as systems for updating contact details and processes for informing young people about test results.

### Analysis and follow up

A comparison of audit tool and interview data was undertaken. Potential enablers and barriers to screening for chlamydia in each practice were identified. From these data and the results of a literature review, a pathway to maximise chlamydia testing was developed, incorporating current best practice for screening in the primary care setting (*Table 1*). Each participating clinic received a report detailing their current practice for undertaking chlamydia testing in young people, with evidence based suggestions to improve chlamydia testing based

on the information in *Table 1*. Following this, the randomised control trial component was commenced. Two months later, practices were again contacted by telephone to determine whether they had made any changes as a result of the feedback.

Ethics approval for this study was granted by the Human Research Ethics Committee of the University of Melbourne (HREC No: 050747).

## Results

In total, 12 practice visits were undertaken and 12 practice staff interviewed. Two early observations of barriers to successful chlamydia testing were a lack of time due to the many competing demands on each practice, and that on the whole, practices were not particularly youth friendly. It was evident that only a simple chlamydia testing process was likely to be successful. At the initial practice visit some GPs were aware of the importance of chlamydia testing (and some had relevant information in the waiting room) however, overall, practices were not well set up to facilitate testing.

Two months after participating, practices had received the reports outlining our observations of their current chlamydia testing pathway and our suggestions for improvement based on the evidence based 'best practice chlamydia testing pathway' in *Table 1*. We then contacted the practices to determine whether they had made any of the suggested changes to facilitate chlamydia testing.

### Clinic waiting room

At the first visit, minimal sexual health promotion material (pamphlets and posters) was available in most clinics. In clinics providing this promotional material, it was not placed in an easily seen location. At follow up, the majority had placed chlamydia health promotion material (pamphlets and posters) around the clinic, particularly in the waiting area.

### Reception

At the first visit, few of the practices explained Medicare eligibility criteria to young people aged over 15 years. At follow up, some clinics had attempted to inform young people about Medicare eligibility, however in most practices there was no change.

## Seeing the GP/health professional

At the first visit, two clinics nominated GPs who were interested in sexual health, and in these clinics, GPs appeared to be conducting chlamydia testing appropriately. At follow up, another clinic's GPs were handing patients Family Planning Victoria chlamydia information from a tear-off pad. One clinic was thinking about adding chlamydia testing into the 'warnings' section on a patient's medical file. It is likely that the education sessions for clinic staff, delivered as part of the larger trial, reinforced the importance of the use of nonjudgemental language and provision of age appropriate information about chlamydia.

### Specimen collection

Several clinics had toilets that were in clear view of people in the waiting room. At the first visit, no clinic had instructions on taking first pass urine in the toilet, although most felt the 'first pass urine' specimen poster would be useful for the patient toilets, and some planned to laminate the poster to hand to patients. One clinic felt the poster was 'inappropriate for a family practice', another sent patients to a private onsite specimen collecting service. A third clinic felt the poster was unnecessary as their GPs were already appropriately informing women how to collect the specimen. At follow up, all but these three clinics were using the poster in some format.

### Test results

At the first visit, all clinics had some system for the management of test results, however they varied widely and included the following:

- practice principal checks for recalls monthly
- system for urgent but no system for nonurgent
- practice nurse allowed to 'give results' as 'all fine' or 'make an appointment'
- patients to come in 1 week after testing for results
- urgent recalls by GP, nonurgent by letter
- patients to come in 1 week later, but if they don't, abnormal results stay in file.

No clinic had instituted any change in their test result practices by follow up.

### Confidentiality

At the first visit, all clinics felt they managed confidentiality appropriately, even though we

identified problem areas, such as the lack of a procedural system to ensure unintentional breeches by contacting a young person via a letter or telephone call to their home. Many identified the need for caution in contacting the young person through notes in the patient file. Some practices only used emails or texts; others did not

allow this. Many used mobile telephone numbers for contacting young people. At follow up there was no change in their confidentiality practice.

Overall, we observed that clinics with a practice manager implemented more changes than clinics without a practice manager. Clinics without a practice manager frequently commented

on a lack of time to enable follow up of the testing pathway suggestions.

## Discussion

Through detailed examination of 12 practices using a comprehensive practice assessment tool, interviews and examination of current literature, this study determined a number of key areas which need to be considered to facilitate best practice chlamydia testing for young people in general practice (*Table 1*).

While at the initial visit we were able to identify areas in each practice that might benefit from modification to improve chlamydia testing, at the 2 month follow up, few of these had been taken up. In general, an increase or improvement in display of the health promotion material suitable for young people was the single thing achieved by most clinics, along with the provision of additional instructions for urine collection.

Despite consulting with a high proportion of young people, not all practices had considered trying to be youth friendly. So, given these practices were all keen to improve chlamydia testing in young people, why was there so little change over the 2 months?

Resistance of health practitioners to changing their practice has been commonly observed within primary care settings.<sup>15,16</sup> Past methods of encouraging change have included education, clinical guidelines and checklists, pharmaceutical detailing and financial incentives, all of which have had limited effect in changing doctors' behaviour.<sup>17–20</sup>

A body of literature shows that general practices need to be seen as complex adaptive systems in which the staff, patients and organisational operations interact dynamically. The resulting web of relationships continually evolve (or resist evolution) in the face of change.<sup>21</sup> Furthermore, within each practice are implicit precepts, guiding the actions and behaviour of staff,<sup>22</sup> which will affect the ease with which a new task can be introduced into the practice.

May's normalisation process model<sup>21</sup> suggests that for a new intervention to become embedded in healthcare practice, there are four key principles: all staff must have shared understanding of the work, all staff must have shared understanding of its importance, they must collectively decide on its implementation and on

**Table 1. Evidence based best practice chlamydia testing pathway**

### Clinic waiting room

Health promotion information makes young people feel more comfortable when sexual health issues are raised with a health professional. Information on chlamydia should be obviously placed in the waiting room, so young people are aware it is an important public health issue for their age group

### Reception

Activities to streamline chlamydia testing at reception include updating preferred contact details for each visit and offering information about young people obtaining their own Medicare number and card

### Seeing the GP/health professional

A nonjudgemental statement can raise the sensitive issue of chlamydia testing without making young people feel they have been singled out as someone who is likely to need a test. GPs should use words such as 'medical experts are recommending all girls/women your age be tested for chlamydia' and provide the young person with basic information about chlamydia, for example: 'Chlamydia is passed on through sex. All women aged 16–24 are being offered the test as part of national guidelines.\* Chlamydia is common and easily tested for and treated. Most people with chlamydia infection don't develop any symptoms. Failure to treat can impact on a woman's fertility. Chlamydia testing is part of self care

### Specimen collection

Different options for testing should be offered, ie. first pass urine, self administered vaginal swab, swab on pelvic examination. Specimen collection can be facilitated by ensuring rooms are adequately stocked with urine containers and swabs. It is also important to consider the position of the toilet in relation to the waiting room, and how a young person might feel in relation to privacy, especially when carrying a specimen container. Provide collection instructions on toilet walls (see below) and explain what the patient should do with the specimen once it has been collected

### How to collect a 'first pass urine' specimen for chlamydia testing

1. This test works best if you haven't been to the toilet to pass urine in the past hour. If it is less than 1 hour since you passed urine, this test may not be accurate. Let your doctor know if this is the case
2. You do not need to clean or wipe yourself before this test
3. You need to collect the very first part of your urine stream. This means first passing urine straight into the container, not into the toilet
4. Once the container is about a quarter full, pass the rest of your urine into the toilet

### Test results

Young people need to know in advance the arrangements for test result collection, and what they will need to do if the result is positive

### Confidentiality

Confidentiality is always an issue for young people, so it is important to ensure that a preferred mailing address is identified. Some young people may not want mail sent to their home. Caution also may be necessary with leaving messages on family/shared telephones

\* The RACGP now recommends testing of both young women and young men

who will modify or upgrade it to ensure it is done properly. Thus, an exemplary general practice will have well developed policies and procedures about all aspects of the testing pathway and systems in place to ensure this information is shared among all staff.

In this study, much of the interaction in determining the current and best fit chlamydia testing pathway was between the researcher and the practice manager, or practice principal or nurse, where there was no practice manager. While, mostly, more than one staff member contributed information to the practice assessment, there was no opportunity given for the researcher to create a collective understanding of the importance of streamlining the chlamydia testing pathway and what this might entail. In clinics where a practice manager was present and championed the study, it appeared that some change had occurred.

## Strengths and limitations of the study

General practices vary widely in every respect, and clearly a small intervention study can only offer limited results. However, this study has several strengths. It has enabled identification of the key areas involved in a chlamydia testing pathway for young people, and it alerted us to the importance of the practice manager as an agent of change. As part of the pre-intervention work for a larger cluster randomised control trial of annual chlamydia testing for young people in general practice, it was a timely reminder that the 'normalisation process model' is an important consideration in whole-of-practice change.

## Conclusion

Using a practice assessment tool, this study determined elements of a chlamydia testing pathway and found clinics employing a practice manager were better equipped to enable systems for chlamydia testing to be developed. However, to ensure that the new testing system is normalised within the practice, a shared understanding and commitment by all staff is required. It is unlikely that chlamydia testing rates in general practice will reach the levels required to reduce the burden of chlamydia without this coordinated clinic level approach.

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