



# PDSA PROPOSAL

## South Western Sydney Local Health District

**NATIONALLY:** Chlamydia is the most common bacterial sexually transmissible infection (STI) in Australia. Notifications have nearly quadrupled in the past decade, with over 82 000 cases diagnosed in 2013.<sup>1</sup> It is most prevalent among men and women aged between 15 and 29 years who accounted for 79% of diagnoses for the whole population in 2013.<sup>1</sup>

**PDSA PROPOSAL:** SOUTH WESTERN SYDNEY (SWSLHD) has the 2nd highest rate of Hepatitis B (HBV) and the 4th highest rate of Hepatitis C (HCV) in NSW.<sup>2</sup> The rate of HIV has been increasing over the past five years in SWSLHD and in 2012, the LHD had the 3rd highest rate of HIV diagnoses in NSW.<sup>3</sup> Reported low rates of chlamydia diagnoses

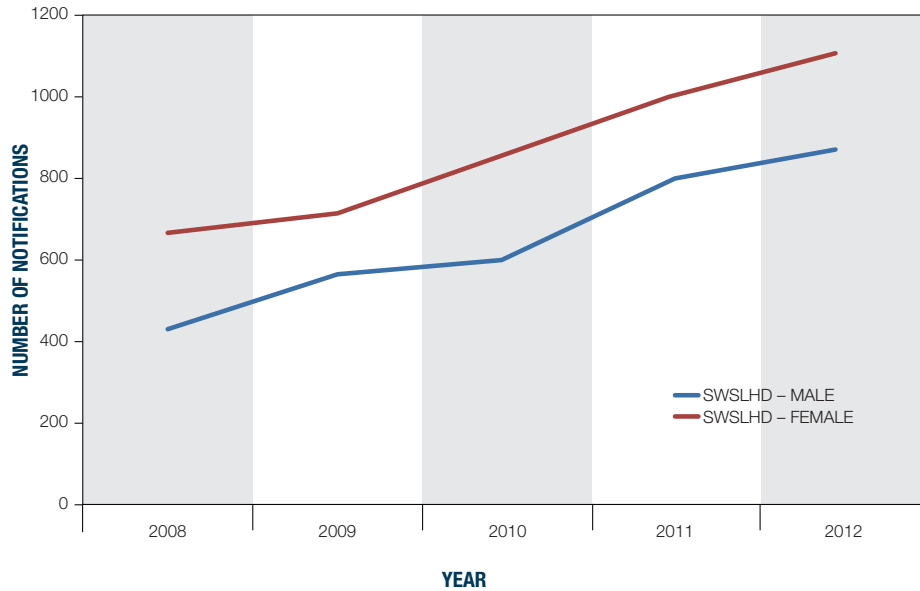
most likely reflect low levels of testing rather than low levels of infection. South Western Sydney has a very young population, which is generally associated with high rates of chlamydia.<sup>2</sup>

In SWSLHD, from 2008 to 2012, there were a total of 7 472 notifications of chlamydia, 901 of gonorrhoea, 419 of syphilis and 111 new cases of HIV. There has been a marked increase in notification rates of both chlamydia and gonorrhoea. Liverpool, Fairfield and Bankstown LGAs continue to have high notification rates for STIs. These patterns of STI notification are consistent with high rates of STI transmission in young heterosexual populations.<sup>4</sup>

## Chlamydia Notifications in SWSLHD

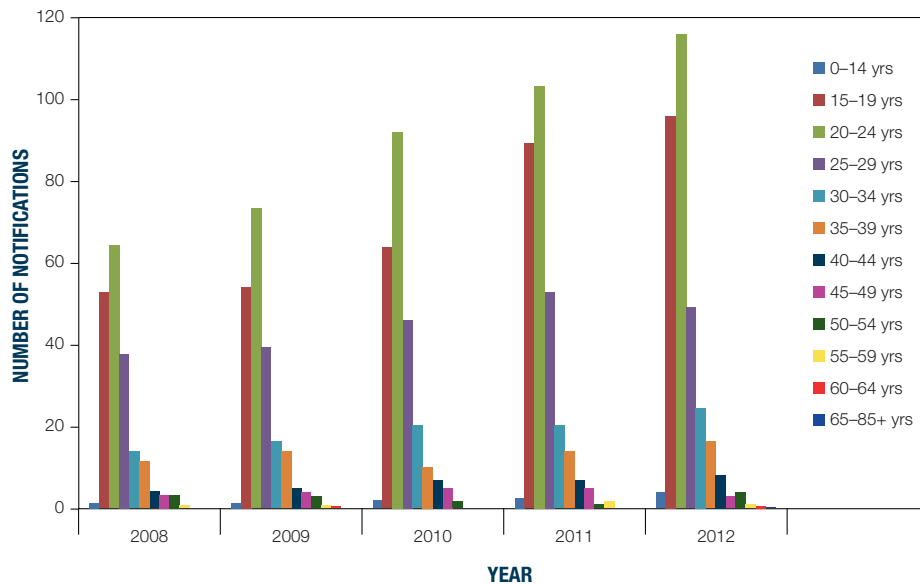
From 2008-2012, there was an increase of 70% in the annual notification rate of chlamydia in SWSLHD. The average age of notification was 26 years, with the highest number of notifications occurring in the 20 - 25 year age group. Female notifications represented 55% of total notifications.

**Figure 1: Number of chlamydia notifications by sex, SWSLHD 2008-2012**



Overall, 57% of all chlamydia notifications in SWSLHD occurred in the 15-25 year age group. In Camden and Campbelltown LGAs, 65-67 % of all notifications occurred the 15 to 25 year age groups and the rate of notification doubled from 2008-2012.

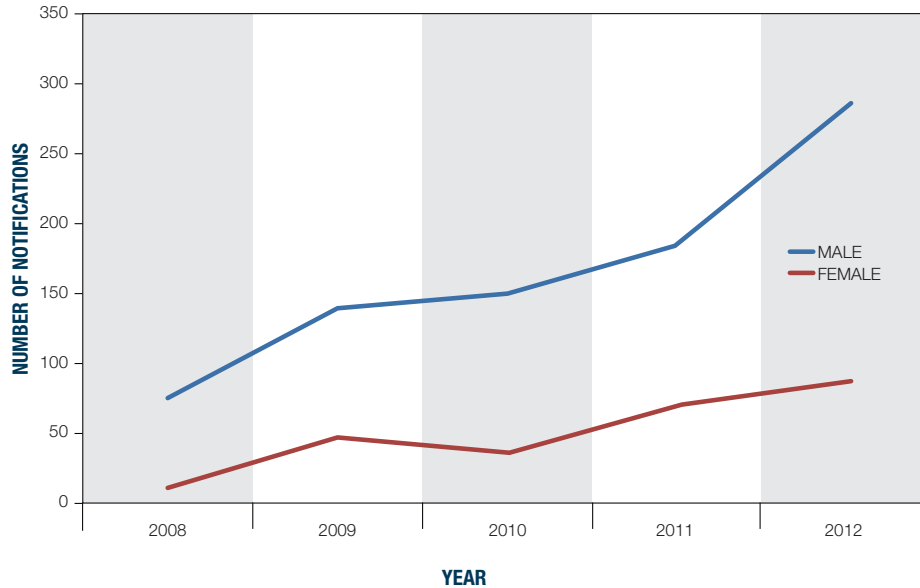
**Figure 2: Number of chlamydia notifications by age group, SWSLHD, 2008-2012**



## Gonorrhoea Notifications in SWSLHD

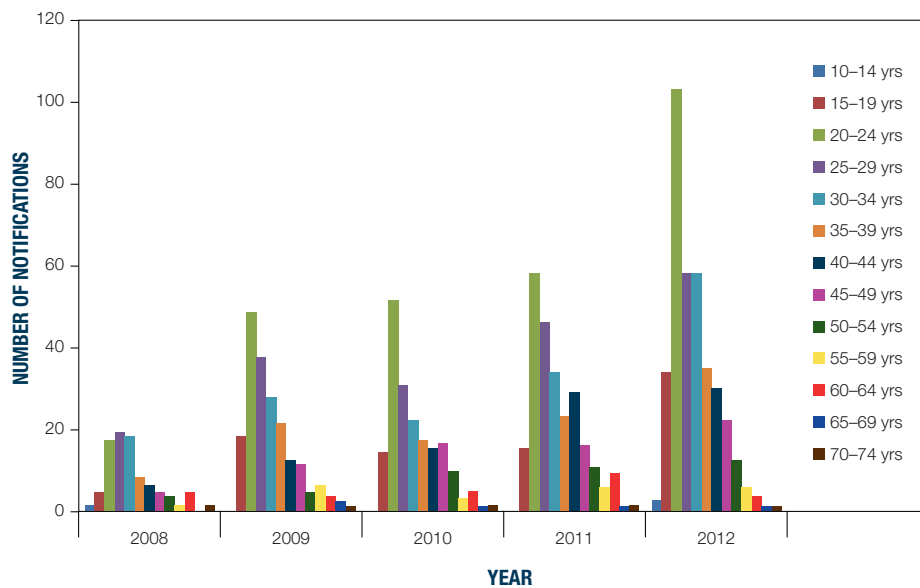
There was a fourfold increase in the average annual notification rate of gonorrhoea in SWSLHD. The average age of notification was 32.5 years, with the highest number of notifications occurring in the 20-24 year age group. Male notifications represented 77.4% of total notifications.

**Figure 3: Number of gonorrhoea notifications by sex, SWSLHD 2008-2012**



The pattern of gonorrhoea notification in SWSLHD is consistent with higher male to male sexual transmission. 45% of all notifications occurred in males aged 20 to 34 years. Fairfield LGA had the highest number of notifications with 27% of all notifications followed closely by Bankstown LGA with 24% of all notifications from 2008 to 2012.

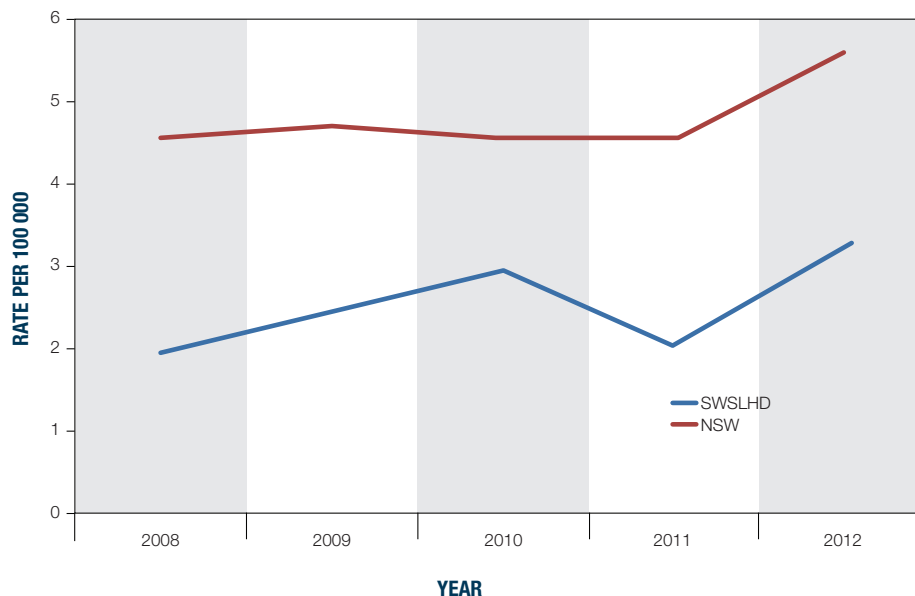
**Figure 4: Number of gonorrhoea notifications by age group, SWSLHD 2008-2012**



## HIV Notifications

In 2012, SWSLHD had 30 new notifications of HIV, representing 7.3% of all new notifications of HIV in NSW for 2012. There was a 44% increase in the number of HIV notifications seen between 2011 and 2012; this mirrors a similar state-wide increase that was seen in the numbers of notifications during this same period. Bankstown and Liverpool LGA had the highest number and rate of notifications.

**Figure 5: HIV notification rate (per 100,000 population) SWSLHD and NSW 2008-2012**



In SWSLHD, HIV data from NSW Health indicates that between 2008-2013, 21% of newly diagnosed HIV cases reported were diagnosed in advanced stages of the infection and only 36% of those newly diagnosed with HIV reported having CD4 counts greater than 500.

37% of the newly diagnosed HIV cases acquired HIV through heterosexual contact. Compared to other LHDs, this is a higher rate. 57% of newly diagnosed HIV cases acquired HIV infection through MSM (men who have sex with men) contact.

### Percentage of NSW Residents Newly diagnosed with HIV in SWSLHD by Stage of Infection in 2008-2013

LHD Residents	Unknown	Advanced	CD4 200<350	CD4 350 <500	CD4 >500	Early
SWSLHD	5%	21%	14%	10%	36%	25%

## Barriers to testing for STIs in General Practice

- GP time
- GP concern for unfounded patient embarrassment
- GP embarrassment
- Lack of financial incentive
- Confusion regarding primary health care nurse role in sexual health care
- Unspoken and unrecognised priority for the practice

For further information on STIs and the role of General Practice, refer to RACGP *Guidelines for Preventive Activities in General Practice 8th Edition* (Red Book)<sup>5</sup>

## Suggestions for a PDSA in Sexual Health

- All patients in the age group 15-29 years are offered a chlamydia test
- Establish a system for 3 monthly recalls for those who tested positive for chlamydia
- All patients who attend for travel vaccinations are offered a STI screen prior to travelling and on their return
- All patients who identify as MSM are offered a HIV test annually

## Strategies for implementation:

- Investigate sexual health and population data from the Medicare Local to decide your plan of action
- Talk to your local sexual health service & HARP Health Promotion Unit at the SWSLHD
- Source references to share with your colleagues
- Seek whole of practice support including GPs, primary health care nurses, practice managers and reception/administration staff
- Present your ideas at a clinical meeting
- Don't give up!

## Plan-Do-Study-Act cycle:

RACGP QI&CPD Program identifies the Plan-Do-Study-Act cycle as a program to implement systematic change in general practice. It encourages the practice team to implement a planned improvement by breaking down change into manageable chunks, and testing each small change to make sure improvements are worthwhile and no effort is wasted. The program emphasises starting on a small scale and reflecting and building on learning.

Practice PDSA cycles focus on improving the capacity of the practice to deliver quality patient care, (improving quality, safety and performance of the practice). A minimum of 2 rapid PDSA cycles must be completed within a 3 month period. A whole of practice approach is encouraged and attracts 40 Category 1 RACGP QI&CPD points.

### Steps:

- Select leader/facilitator
- Decide who will be in the group (minimum of 2 and maximum of 12 participants)
- Three main questions underpin the PDSA cycle:
  - a. What is the practice trying to accomplish?
  - b. How will the practice know that a change is an improvement?
  - c. What changes can be made that lead to an improvement?
- Select a topic around a sexual health issue
- Start first rapid PDSA cycle:
  - a. Plan-who, what, where, when, how
  - b. Do-implement the plan, collect the data, record any unexpected events/problems
  - c. Study-review and reflect on results
  - d. Act- make any necessary adaptations or improvements
- Develop second cycle
- Develop further cycles as required
- At completion of the cycles undertake a quality improvement reflection and describe:
  - a. What changes did you implement in your practice?
  - b. How do you monitor these changes?
  - c. What evaluation process do you use to measure these changes?
- Complete RACGP QI&CPD Program – PDSA application and submit to RACGP

## References

1. National Notifiable Diseases Surveillance System Number of notifications of Chlamydial infection, Australia in the period of 1991 to 2013 and year-to-date notifications for 2014 accessed 27 March 2014  
[http://www9.health.gov.au/cda/source/rpt\\_3.cfm](http://www9.health.gov.au/cda/source/rpt_3.cfm)
2. HIV, STIs, Hepatitis B (HBV) and Hepatitis C (HCV) – Issues for Medicare Locals ASHM NSW April 2012
3. NSW Ministry of Health
4. South Western Sydney Local Health District - Sexually Transmitted Infections Report 2008-2012 Public Health Unit
5. RACGP *Guidelines for Preventive Activities in General Practice* 8th Edition (Red Book) September 2013 <http://www.racgp.org.au/download/Documents/Guidelines/Redbook8/redbook8.pdf>

## Key Contacts/Resources

### HARP Health Promotion Unit

South Western Sydney Local Health District (SWSLHD)  
Hugh Jardine Building Eastern Campus, Liverpool Hospital  
Liverpool NSW 2170

Ph: 02 9828 5754 Fax: 02 9828 5955  
Website: [www.sswahs.nsw.gov.au/PopulationHealth/hiv.html](http://www.sswahs.nsw.gov.au/PopulationHealth/hiv.html)

### Practice Support Team

South Western Sydney Medicare Local  
Level 3, 1 Bolger Street  
Campbelltown NSW 2566

Ph: 1300 179 765 Fax: 02 4625 9466  
Website: [www.swsml.com.au](http://www.swsml.com.au)

### RACGP

Plan, Do, Study, Act Cycle – Putting Prevention into Practice – Guidelines for the implementation of prevention in the general practice setting (green book) 2006



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For further information contact: [nswstipu@gmail.com](mailto:nswstipu@gmail.com)