

Opportunistic Chlamydia Testing- Its NAAT Hard

Results of the Auckland Chlamydia Pilot

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Background

- In 2010 Chlamydia continued to be the most commonly diagnosed STI in New Zealand
- The majority of cases were (as in previous years) diagnosed in those aged under 25.
- In 2010 aggregate laboratory data showed a test positivity rate of 9% and a chlamydia prevalence rate of 782 per 100,000 head of population.
- The national rate for females (1191 per 100,000 head of population, 18,884 cases) was more than three-times the national rate for males (384 per 100,000 head of population, 6303 cases).

Background

- These data support targeted opportunistic testing in the under-25 year age group
- Reasons for gender disparity in the surveillance data need to be further explored, in particular comparing testing patterns for chlamydia in sexual health clinic and primary care settings.
 - Data from the Waikato pilot found that testing rates were much lower in males(9%) compared with females(45%)in 2009
 - The Lakes pilot also found test coverage to be much lower in males

Background

- In 2008, the Ministry of Health published the *Chlamydia Management Guidelines* which have not been implemented on a national basis
- The Auckland pilot project was one of three funded by the Ministry of Health to better understand chlamydia prevalence, costs and other issues related to improving case management of chlamydia in primary care.
- In 2010 ASHS contracted Total Healthcare Otara (THO) to trial implementation of the guidelines in its 10 primary care practices.

About Total Health Otara

- THO situated in South Auckland has a multi ethnic enrolled population.
- The age and ethnic distribution of THO enrolled population made it an ideal host to inform improved chlamydia management particularly of Pacific and urban Maori under - 25 year olds
- The MOH approved the project implementation plan for the pilot in late September 2010
- However Ministry time constraints only allowed for a 3 month data collection period for the pilot.

THO

- The THO model of care is focused on removal of barriers to access for its largely high needs population
- Primary care clinics in convenient locations
- Walk-in service with no appointments required.
- Clinics open until 11 pm seven days of the week.
- Low fee structure with subsidised care at any THO clinic
- THO further subsidised the VLCA from its own resources to make the chlamydia pilot consultations free for under-25 year olds.

Pilot Aims

- To integrate opportunistic chlamydia testing of under - 25 year olds into an already busy primary care environment.
- Enhance chlamydia test uptake by young people
- Identify ways to improve partner notification by patient referral.

THO Ethnicity Data

Table 1: Ethnicity of people aged 14–24 and enrolled in THO

	All	Female	Male
Pacific	57.4%	56.8%	58.5%
New Zealand Maori	17.6%	19.2%	15.0%
Asian	5.7%	5.7%	5.8%
European	7.4%	8.1%	6.4%
Other	4.1%	3.7%	4.6%
Total	100.0%	100.0%	100.0%

Pre-pilot Youth Consultation

- Two youth consultation groups were conducted during preparation for this pilot
- Views concerning:
 - provider roles
 - publicity about opportunistic chlamydia testing
 - acceptance of self-collection of swabs
 - practice nurse dispensing of antibiotics
 - notification of test results
 - partner notification approaches

Pre-pilot Youth Consultation

- Chlamydia screening and treatment should be free
- Posters are acceptable publicity
- Either nurse or doctor is acceptable
- Ethnicity, gender and professional role doesn't matter
- Simple and appropriate language
- Respect and privacy important

Pre-pilot Youth Consultation

- Information about chlamydia should be discussed and offered with a suitable pamphlet
- Young people whole-heartedly support the idea of self-collection of specimens
- Young people are concerned about confidentiality
- ideally partners should be notified by the index case
 - Partner notification would be aided by a small card
 - While it may be possible to give antibiotics to a partner, young people consider that this is best done by a health professional

Project Advisory Group

Name	Current position
Auckland Sexual Health Service	
Nick Laing	Programme Supervisor
Dr Sunita Azariah	Sexual Health Physician
Suzanne Werder	Nurse Specialist
Total Health Care Otara Primary Health Organisation	
Mark Vella	Executive Officer
Dr Richard Hulme	Clinical Director
Dr Mahesh Patel	Clinical Operations Leader
Gillian Davies	Nurse Leader
Ranjna Patel	Practice Manager
Independent Evaluation	
Stephen McKernon	Supplejack Ltd Design Research
Project Manager	
Karen Holland	Karen Holland & Associates

Pilot Implementation

- CME Session for GPs and practice nurses
- Specific Medtech template was developed
- WDHB Chlamydia algorithm
- Resources provided:
 - WDHB chlamydia pamphlet
 - Posters for waiting rooms
 - Self-assessment sheets
 - Contact cards
 - Instruction cards for collection of vaginal swabs
 - Script suggestions

Clinical Pathway at THO

- A stepped triage process
 - Chlamydia test discussed with triage nurse
 - Patient provides specimen
- Centralised call centre with a dedicated RN to ring patients and discuss results
 - All cases were to receive a follow-up phone call 1 week after treatment
- THO Clinical Family Navigators

CHLAMYDIA IS...

COMMON
INVISIBLE
SERIOUS
SPREADING

EASILY TREATED

Ask the clinic staff
you are seeing
today to learn more.



auckland
sexualhealth
service

Acknowledgement:
Original design and layout Waikato DHB

Contact Cards

You have had sexual contact with someone with

Chlamydia

This **is** an **easily treated** sexually transmitted infection (STI)

Get yourself checked out **at your**

Doctor / GP

or Free @ Auckland Sexual Health Service
0800 739 432

For more information:
www.ashs.org.nz

Information For Your Clinician

Treatment and Testing for a sexual contact of someone with Chlamydia:

- They may not have any symptoms – most people don't.
- On their first visit to a clinician a contact should be
 - Tested for chlamydia as part of an STI check up and
 - Treated for the infection (even before the result of the test is known). Treatment is a simple two-tablet dose of antibiotics

For testing & treatment guidelines go to -
www.ashs.org.nz

Testing

- Women: Swab (check guidelines)
- Men: Urine
- An anal swab is recommended if there has been any receptive anal sex

Treatment

- Azithromycin 1g
- Abstain from sex or use condoms for 7 days after treatment

Clinical Advice

- Clinician advice line: **021 883703**
- Anorectal Chlamydia cases should be discussed with a sexual health specialist.

For client handouts: www.ashs.org.nz



Auckland Sexual Health Service

Name		Date of Birth / /	
First Name	Last Name	Day / Month / Year	
Address		Gender	
		Ethnicity	
		NZ Resident	Yes / No
		Country of Birth	
No mail please <input type="checkbox"/>		If not NZ date of entry Day / Month / Year	
Cell Phone			
Home Phone			
Email			

Have you ever had a sexual health check?	Yes	No
Before today, had you heard of Auckland Sexual Health Service?	Yes	No

Do you currently have any of the following symptoms?

Male

- Discharge from the penis ☐ ☐
- Pain passing urine ☐ ☐
- Painful testes (balls) ☐ ☐
- Genital skin changes (lumps or sores) ☐ ☐
- Are you aware that you or your partner has or has had an STI ☐ ☐
- Have you had sex with a man ☐ ☐
- Any other concerns ☐ ☐
- Have you passed urine in the last hour? ☐ ☐

Female

- Unusual vaginal discharge ☐ ☐
- Pain passing urine ☐ ☐
- Lower abdominal pain ☐ ☐
- Pain during sex ☐ ☐
- Unusual bleeding ☐ ☐
- Genital skin changes (lumps or sores) ☐ ☐
- Are you aware if you or your partner has, or has had an STI ☐ ☐
- Any other concerns ☐ ☐

If your results show that you have Chlamydia you will be contacted within a week for follow up.
If your results show you do not have the infection you will receive a txt or an email from Auckland Sexual Health Services.

Please Note: If you have had unprotected sex in the last 2 weeks a new Chlamydia infection may not show up.

This information is true and correct Date / / 11
Sign

Office use only:

- | | | |
|--|---------------------------------------|----------------|
| <input type="checkbox"/> Sample Received | <input type="checkbox"/> Urine | Lab label here |
| <input type="checkbox"/> Condoms Given | <input type="checkbox"/> Anal swab | |
| | <input type="checkbox"/> Vaginal swab | |

Form Processed & Checked by



CHLAMYDIA GUIDELINES IN PRIMARY CARE

CHLAMYDIA RISK FACTORS – TEST PATIENT IF:

- They are sexually active under-25 year olds
 - and more than 2 partners in past year
 - or has had an STI in last 12 months
 - or a sexual partner has an STI.
- They are at increased risks of complications eg pregnancy, pre-TOP / IUD insertion
- They have signs or symptoms suggestive of Chlamydia;
Female: IMB / PCB / pelvic pain / vaginal discharge / dysuria (urethritis)
Male: Dysuria / discharge / testicular pain.

PRE-TESTING INFORMATION

Verbal consent, offer information leaflet, how to get results

RECOMMENDED SAMPLES FOR CHLAMYDIA TESTS

- Female:** A cervical swab if undertaking a speculum examination.
A self-taken vaginal swab if asymptomatic & no other tests required.
NB; first catch urine has a lower sensitivity in women,
- Male:** First catch urine (> 1 hour since last passed urine)

Treat immediately if high index of suspicion of Chlamydia, symptoms &/ or signs, or contact of index case. Start treatment for patient and sexual partner(s) without waiting for lab results.

LABORATORY

POSITIVE

NEGATIVE

SAFER SEX ADVICE & OFFER CONDOMS

TREATMENT

- Azithromycin 1g stat – Pregnancy Category: B1
- Or Doxycycline 100mg BD 7days – not in pregnancy
- Or Amoxycillin 500mg TDS 7 days Alternative in pregnancy
 - NB; in pregnancy test of cure after 5 weeks

MANAGEMENT:

- Treatment takes 1 week to work
- Advise to avoid having sex, or use a condom, for 7 days after their treatment and/or 1 week after their partner(s)' treatment.

PARTNER/CONTACT MANAGEMENT:

- Be clear about language; 'partner' implies a relationship – all sexual contacts in the last 60 days should be advised so they can be tested & treated.
- Contacts should be treated without waiting for their test results but ideally should be tested too; if positive, then their recent contacts need to be informed as well
- Most choose to tell contacts themselves; giving written information for partners is helpful
- Notifying all contacts may not be possible eg if there is insufficient information or a threat of violence

FOLLOW-UP (PHONE OR IN PERSON) 1 WEEK LATER:

- No unprotected sex 1 week post treatment?
- Completed/tolerated medication?
- Notifiable contacts informed?
- Any risk of re-infection?
- Test of cure only needed if pregnant (treatment may be less effective in pregnancy)
- NAAT tests can detect traces of dead organisms – wait at least 5 weeks before re-testing
- Re-infection is very common; offer repeat Chlamydia test in 3-6 months

CLINICIAN HELP LINE 021 883703

SEXUAL HEALTH GUIDELINES AND PATIENT INFORMATION GO TO: www.ashs.org.nz

Evaluation

- The evaluation was conducted in two parts:
- A quantitative comparison of testing volumes and uptake pre and post-pilot.
- A qualitative evaluation of practitioners' experience of the pilot and focus groups of young people were conducted post-pilot
- Results of the qualitative evaluation will not be presented today as insufficient time.

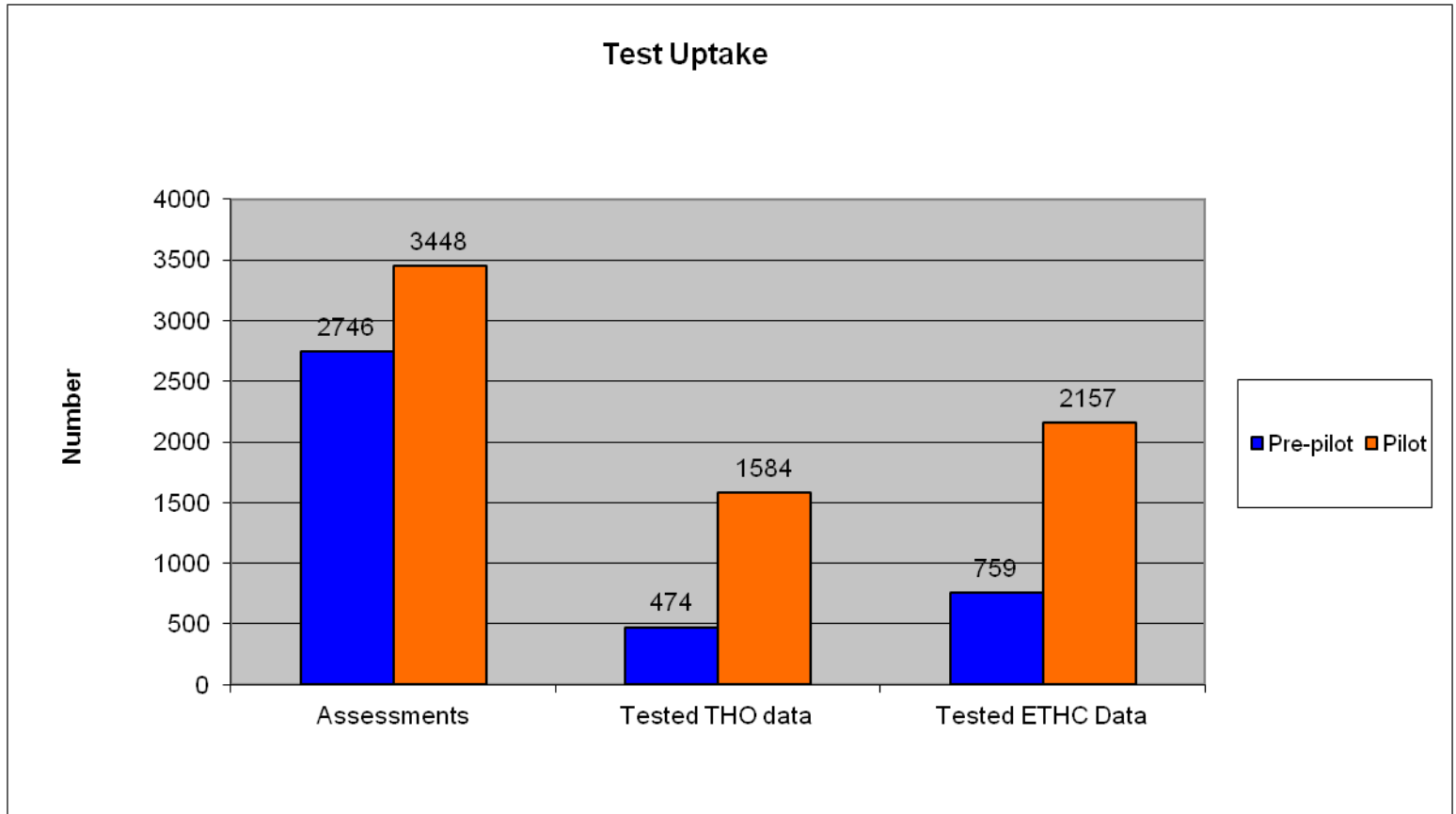
Laboratory Data

- The pilot commenced 6th December 2010 and concluded 31st March 2011
- Reference period was 1st December 2009 till 31st March 2010
- Laboratory data was requested from the community laboratory Labtests for the two time periods
- Data cleaning issues
 - Separating THO lab data from total ETHC lab data was difficult

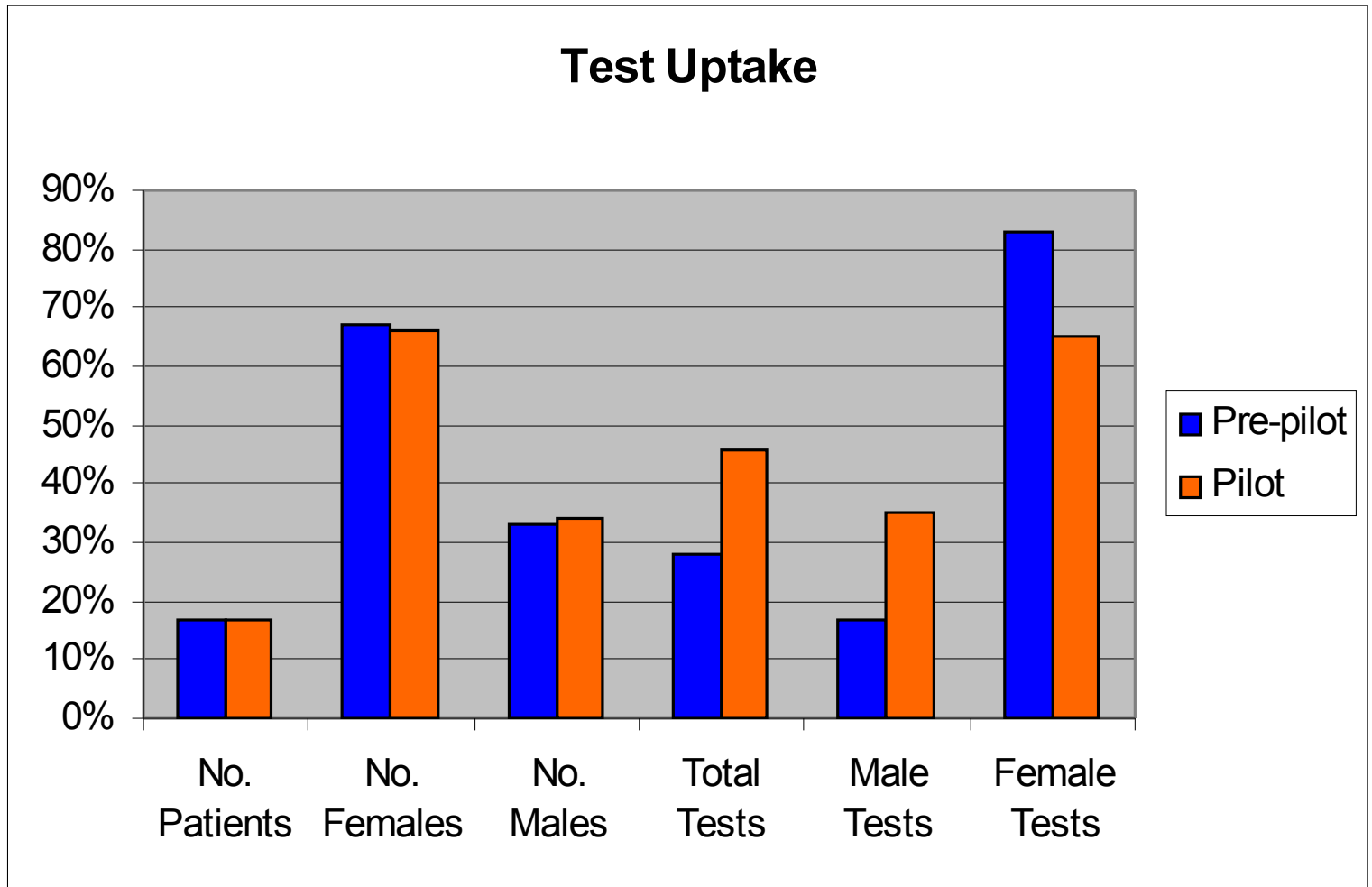
Comparison of Test Uptake

- Pre-pilot: 2746 patients (16.1%) of target group attended and approx 17% were tested
 - 82.3% (668) of total tests were in females
- Pilot period: 3448 patients in target group were assessed (17%) and 1584 were tested (46%)
 - 19% increase in numbers of registered patients
- 30% increase in test coverage

Raw Laboratory Data



Comparison Test Uptake



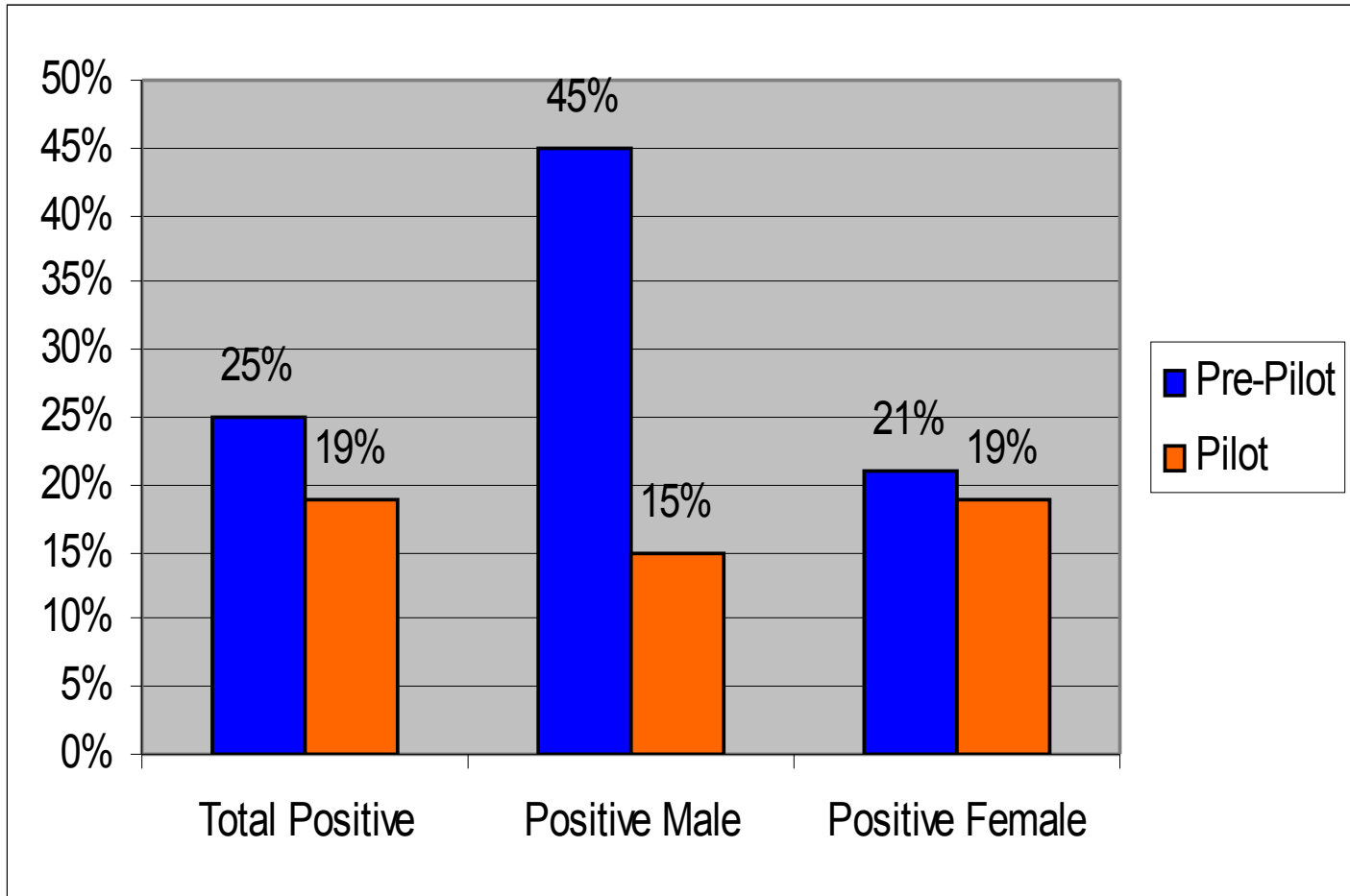
Test Positivity Pre-Pilot

	Gender			Age	
	<u>All</u>	<u>Female</u>	<u>Male</u>	<u>14–19</u>	<u>20–24</u>
Presentations	2746	1836	910	1153	1593
Tests requested	812	668	144	281	509
No. Patients Tested	760	630	130	254	484
No. Positive Tests	194	135	59	74	96
Test positivity rate	25.5%	21.4%	45.4%	29.1%	19.8%

Pilot Lab Data

	Gender			Age	
	<u>All</u>	<u>Female</u>	<u>Male</u>	<u>14–19</u>	<u>20–24</u>
Presentations	3448	2295	1153	1666	1659
No. tests requested	1715	1124	591	617	1017
No. patients tested	1584	1034	550	490	907
No. Positive Tests	300	192	82	115	150
Test positivity rate	18.9%	18.6%	14.9%	23.5%	16.5%

Comparison of Test Positivity



Test Uptake by Ethnicity

	All patients seen	Tested
Pacific	61.4% (2117)	61.9% (1062)
New Zealand Maori	18.8% (649)	23.1% (396)
Asian	6.1% (212)	2.6% (45)
European	7.9% (274)	6.6% (114)
Other	4.4% (150)	2.0% (35)
Total	100% (3448)	100% (1715)

Test Positivity

Table 9: Test positivity rates by ethnicity THO data: pilot period

	Ethnicity					
	<u>All</u>	<u>Pacific</u>	<u>Maori</u>	<u>Asian</u>	<u>European</u>	<u>Other</u>
Presentations	3448	1962	605	202	259	147
Tests requested	1715	1062	396	45	114	35
Patients tested	1584	972	368	43	110	34
Positive tests	300	205	68	2	18	3
Test positivity rate	18.9%	21.1%	18.5%	4.7%	16.4%	8.8%

Laboratory Specimens

	2009–2010		2010–2011	
	<u>All</u>	<u>Female</u>	<u>All</u>	<u>Female</u>
Urine	22.5% (183)	13.3% (89)	37.6% (906)	15.0% (252)
Vulval/vaginal swab	2.7% (22)	3.3% (22)	6.5% (157)	9.3% (156)
Vulval/vaginal self-swab	0% (0)	0.0% (0)	12.5% (302)	17.9% (302)
Cervical swab	64.4% (523)	78.1% (522)	40.2% (968)	55.8% (939)
Urethral/urogenital swab	7.1% (58)	3.4% (23)	1.5% (36)	0.4% (6)
Other/not specified	0.4% (3)	0.3% (2)	0.7% (18)	0.8% (13)
Total	100% (812)	100% (668)	100% (2410)	100% (1684)

Laboratory Costs

Table 12: Tests conducted, people tested and testing costs for the 2010–2011 pilot

	Percent	Numbers
Total tests conducted	100%	2410
Total extra tests (including more than two for some patients)	11.8%	284
Patients tested	100%	2157
Patients tested more than once within 30 days	11.7%	253
Total costs of total tests conducted @ \$40.87 (GST inclusive)	\$98,496.70	
Cost of one test per person for pilot	\$88,156.59	
Costs of extra tests for pilot	\$11,607.08	

Partner Notification

- Pre-pilot there was no documentation of PN at all
- ASHS recommended a routine telephone call 1 week after treatment
 - Check adherence
 - Follow-up PN
 - Offer repeat test 3/12
- During the pilot the 300 positive cases were all followed-up I.e. treated
- 75(25%) indicated they had had UPSI
- Rest of FU data missing-have discussed this with THO

Summary

- The pilot resulted in greatly increased test uptake particularly for males
 - Opportunistic testing is acceptable in primary care settings
 - Free visits and easy access probably a key factor particularly for males
- Very high test positivity rates in under-25s
- Increased laboratory costs will impact on DHB budgets
- Further work needs to occur with respect to PN!

Key Pilot Recommendations

- Primary care based opportunistic chlamydia tests should be a nurse led programme.
- PHO KPI will be required to maintain continued momentum for opportunistic tests for chlamydia
- Need development of national chlamydia specific resources
- Practice Management Systems need to be programmed to support best practice and to enable robust and comparable data for evaluation and research.
- Management and documentation of partner notification remains a significant issue to be addressed in primary care settings
- A national laboratory price for chlamydia NAAT testing should be considered