TTANGO (test, treat and go); use of molecular point-of-care tests to detect and treat sexually transmissible infections in young Aboriginal people in remote communities

A/Professor Rebecca Guy and Corrine Swan on behalf of TTANGO investigators

World IUSTI/ISSTDR conference
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Why do we need a PCR POC test for chlamydia and gonorrhoea in Australia?

CHLAMYDIA

GONORRHOEA

Difficulties managing STIs in remote communities

- Relies on Aboriginal health workers and nurses
- Most people asymptomatic
- Far away laboratory
- ~20% untreated (Guy, Sex Health, 2012)
- Average time to treatment 21 days (Guy, Sex Health, 2012)

Randomised trial of molecular STI point-of-care

- TTANGO: Test, treat and go....
- NHMRC project grant
- Impact:
  - Uptake and timeliness of treatment
  - Re-infections
  - Acceptability
  - Cost-effectiveness

TTANGO design

TTANGO sites
Xpert POC Test for CT and NG

Training and resources
- Formal training package
- Competency
- POC training
  - Flexible approaches
  - Repeat sessions
- Wall charts, other resources

Other support systems
- Quality management framework
- Remote login learning and system support
- Processes for manually recording and transmitting of POC results

STI testing
- Guidelines 16-29 years
- Testing in people with symptoms or risk
- Opportunistic testing
  - ATSI health check
- Outreach

Providing treatment based on POC
- Ask patient to wait locally
- Recall patient next day
- Test sample at beginning of the consultation when doing health checks so POC result available at the end
- Contact tracing, re-testing

Preliminary POC testing and treatment outcomes
- 2486 CT/NG Xpert tests (July 2015)
- Data from 4 of 12 health services
- POC period: 120 positive CT/NG POC tests
- Before period: 93 positive CT/NG POC tests
- Median age of positive test: 24 years
Treatment based on the lab test result

<table>
<thead>
<tr>
<th>Overall (4 sites)</th>
<th>POC phase (n=120)</th>
<th>Standard phase (n=93)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Treatment uptake (95% CI)</td>
<td>96.7 (91.9 - 99.1)</td>
<td>90.3 (84.4 - 94.4)</td>
</tr>
<tr>
<td>Treatment intervals (days)</td>
<td>&lt;=1</td>
<td>92 (77%)</td>
</tr>
<tr>
<td></td>
<td>2-7</td>
<td>14 (12%)</td>
</tr>
<tr>
<td></td>
<td>8-14</td>
<td>5 (4%)</td>
</tr>
<tr>
<td></td>
<td>&gt;15</td>
<td>9 (8%)</td>
</tr>
<tr>
<td>Median time to treatment (days) [IQR]</td>
<td>0 [0-3.5]</td>
<td>11 [7-26]</td>
</tr>
<tr>
<td>Mean time to treatment (days)</td>
<td>5.4</td>
<td>30.1</td>
</tr>
</tbody>
</table>

* Symptomatic treatment = treatment given to client based on presence of symptoms or assessed as high-risk (e.g. contact of a positive case). ¥ Standard care phase: those treated on same day excluded as treatment given based on symptoms or high-risk assessment. †Data available for 3 sites.

Preliminary treatment outcomes

Conclusion

• Benefit for health service and community

• POC enabled patients to be treated quickly

• Ownership

• Important to have Aboriginal health workers and nurses involved in POC process

Next steps

• Final RCT analysis
  – Re-infection
  – Cost-effectiveness

• TTANGO2:
  – NHMRC partnership
  – WA Health, community organisations, laboratory
  – Sustainability
  – Does a multi-faceted sexual health program including POC reduce prevalence and reproductive morbidity?

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