Dr Werner Leber

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Integrating HIV testing into General Practice

Can rapid HIV screening improve detection of early disease?

Dr Werner Leber
On behalf of the RHIVA 2 study team
BHIVA (2008) & NICE (2011) guidelines on HIV testing are a "good fit" for General Practice

- Access to a large number of untested patients
- Opt out services routinely offered in General Practice
- Considerable scope for health care workers to undertake testing

RHIVA 1 pilot study

- Rapid HIV testing offered in the new patient health check is feasible and acceptable (Prost et al., 2009)
Research Questions

Can rapid HIV testing at first presentation in General Practice

• Reduce the proportion of people diagnosed with HIV very late, defined as CD4 <200?

• Increase the proportion of people with HIV diagnosed with a CD4 >350?

• Increase identification of HIV?

- Successful TB screening trial (Griffiths et al., 2007)

Educational outreach to promote screening for tuberculosis in primary care: a cluster randomised controlled trial. Griffiths et al., Lancet, 2007
Cluster randomised controlled Trial in General Practice (RHIVA 2)

**Intervention:**
- INSTI™ rapid HIV test at New Patient Health Check
- Staff capacity building
- Specialist referral of confirmed INSTI cases

**Control:**
- Information on BHIVA HIV testing guidelines

**All participating Hackney surgeries:**
- Standard of care for HIV testing continues
- Support throughout the study
Minimisation criteria for Randomisation

• Practice list size
  • $< 5000$, $5000 – 7000$, or $> 7000$

• Male HIV testing rate
  • $< 7$ or $\geq 7$

• Index of multiple deprivation score
  • $< 47$ or $\geq 47$
Results to date – Surgery participation

19/04/2010 – 31/01/2012 (21 months)

• 40/45 Hackney GP surgeries taking part
  • 3 no response to repeated approach
  • 2 HIV not a priority/or too busy to participate

• 17/20 intervention surgeries are actively screening
  • 1 withdrawal - too busy
  • 1 withdrawal – high declined rate in an Orthodox Jewish catchment area
  • 1 closed new registration to adults

• 20 control surgeries.
Results to date – Intervention arm

Computerised central EMIS (Egton Medical Information Systems)

Web searches:

19/04/2010 – 31/03/2012

<table>
<thead>
<tr>
<th></th>
<th>N=</th>
</tr>
</thead>
<tbody>
<tr>
<td>New registrants</td>
<td>32,794</td>
</tr>
<tr>
<td>Rapid HIV tests offered</td>
<td>8,027  (24%)</td>
</tr>
<tr>
<td>Rapid tests declined</td>
<td>4,266  (53%)</td>
</tr>
<tr>
<td>Rapid tests performed</td>
<td>3,761  (47%)</td>
</tr>
<tr>
<td>Reactive tests confirmed positive and entered secondary care</td>
<td>8/8 (100%)</td>
</tr>
</tbody>
</table>

New patient health check data currently not available.
Rates of rapid testing in EMIS intervention surgeries

No. of rapid HIV tests

Trial quarter

1
2
3
4
5
6
7

0
100
200
300
400
500
600
700

REC approves shorter consideration period and testing in 1st consultation

NICE guidelines
Serological and rapid HIV testing in EMIS Intervention surgeries

Oct - Dec 2011
How safe is rapid HIV testing in General Practice?

- Quality assurance
  - Bimonthly assessment using external serum controls

- Monthly electronic data monitoring of rapid test results
  - 16/40 reported abnormal were clinically relevant:

<table>
<thead>
<tr>
<th>Rapid test result</th>
<th>N=</th>
<th>Serology</th>
<th>N=</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactive</td>
<td>8</td>
<td>Positive</td>
<td>8</td>
<td>True reactive</td>
</tr>
<tr>
<td>Reactive</td>
<td>2</td>
<td>Negative</td>
<td>2</td>
<td>False reactive</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>6</td>
<td>Negative</td>
<td>5 (1 declined)</td>
<td>NA</td>
</tr>
</tbody>
</table>

Expected false reactive results: N=24
- INSTI specificity = 99.28%, prevalence of undiagnosed HIV = 2/1000.
What has gone well...

- Successful cooperation and collaboration between primary care teams, public health, academic researchers and secondary care HIV teams

- Rapid HIV testing is safe when combined with GP education, quality assurance and data monitoring

- All patients diagnosed by rapid testing in General Practice have transferred to specialist services.
Challenges ahead...

- Trial data remains statistically inconclusive - planned extension to autumn 2012

- The RHIVA team is collaborating on the specification and implementation of training for roll out of HIV testing in General Practice across Hackney

- Qualitative analysis and process evaluation to better understand service user & surgery needs and obstacles to testing.
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