Research
Department of Primary Care and Population Health (PCPH)

Who we are and what we do

18 November 2016
PCPH – who are we?

- In the Institute of Epidemiology and Health Care.
- Head of department – Prof Elizabeth Murray
- ~110 staff
- Includes:
  - Methodologists (health economics, statistics, epidemiology)
  - Qualitative researchers
  - Clinicians with a research interest including GPs
  - ~23 PhD students
- Part of National Institute for Health Research (NIHR):
  - School for Primary Care Research
  - School for Public Health Research
PCPH – who are we?

Health Economists in PCPH:
- 3 full time research associates in health economics (Caroline Clarke, Rachael Hunter and Monica Panca)
- 2 PhD students (Yifeng Liu and Fabian Sailer)
- A number who dabble

Departments we work closely with
- Division of Psychiatry
- Department of Statistical Sciences
- Department of Applied Health Research
- Infection and Population Health
- Institute for Clinical Trials and Methodology
Disciplines in PCPH

Primary Care

Population/Public Health
Primary Care
Trials, EHR, Decision models

Aging
Trials, EHR

Mental Health
Trials, Decision models, Outcomes

Infection control
Trials, Decision models, Outcomes

E-Health
Trials, Decision models, EHR

Population/Public Health

EHR = Electronic Health Records
Example of our work: THIN

- The Health Improvement Network (THIN) database
- Electronic medical records of 11.1 million patients collected from 562 general practices in the UK, covering 5.7% of the UK population.
- Data from GPs electing to join the THIN Quality Data recording scheme using Vision practice management software
- Used THIN to evaluate impact of implementing annual health checks (AHCs) in Primary Care for patients with learning difficulties.
- Aim: Do AHCs cost more & quantify impact on NHS.
- Before and after study comparing practices that did and did not conduct AHCs
Example of our work: THIN (2)

- Patients’ medical records identified (n=208) came from 12 general practices

<table>
<thead>
<tr>
<th></th>
<th>No AHC</th>
<th>AHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of patients</td>
<td>102</td>
<td>106</td>
</tr>
<tr>
<td>Age (SD)</td>
<td>39 (16)</td>
<td>42 (16)</td>
</tr>
<tr>
<td>Gender (Male) (%)</td>
<td>61%</td>
<td>51%</td>
</tr>
<tr>
<td>Severity of LD (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mild</td>
<td>27%</td>
<td>15%</td>
</tr>
<tr>
<td>Mild/moderate</td>
<td>7%</td>
<td>12%</td>
</tr>
<tr>
<td>Moderate</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Severe</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Unclear</td>
<td>57%</td>
<td>64%</td>
</tr>
<tr>
<td>Missing</td>
<td>9%</td>
<td>7%</td>
</tr>
<tr>
<td>AHCs (no and %)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 AHCs</td>
<td>61 (58%)</td>
<td></td>
</tr>
<tr>
<td>3 AHCs</td>
<td>14 (13%)</td>
<td></td>
</tr>
<tr>
<td>4 AHCs</td>
<td>2 (4%)</td>
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</table>
Example of our work: THIN (3)

- Costed based on read codes and prescriptions in medical records from 1\textsuperscript{st} April 2008 – 31\textsuperscript{st} December 2011.
- Mean cost per health check was £142.60

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th>After</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO AHC</td>
<td>£480.2</td>
<td>£778.8</td>
<td>£298.6</td>
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<tr>
<td>AHC</td>
<td>£931.1</td>
<td>£1,055.4</td>
<td>£124.3</td>
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Future Collaboration

Analyses using
• Electronic health records
• Trial data beyond the main economic evaluation
• Decision modelling