Approaches for Improving Practice in Detection and Treatment of Unhealthy Alcohol Use in Primary Health Care

Systematic review

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CRE INDIGENOUS HEALTH AND ALCOHOL

THE UNIVERSITY OF SYDNEY
Acknowledgement of country

The Muwinina people and today's Tasmanian Aboriginal community

Gathering logo based on artwork by Max Mansell, created for the CRE Indigenous Health and Alcohol
Low uptake in PHC
Better versus 

- ≥ 12 months
- Combination of org levels
- Multifaceted
- Alcohol-specific

versus 

- <12 months
- Clinician only
- Single strategy
- Broad prevention

Anderson et al 2004, Keuhorst et al 2015
Continuous Quality Improvement

- Systematic data-guided activities to identify problems and achieve improvement
- Designing with local conditions in mind
- Iterative development and testing

(Reubenstein et al 2014)
Systematic review: aims

– Describe strategies to improve screening and treatment for the full spectrum of UAU and their outcomes
– Identify gaps
– To what extent are the three CQI elements used?
– How do papers with all CQI elements compare with other studies?
**Key eligibility criteria**

<table>
<thead>
<tr>
<th>Included:</th>
</tr>
</thead>
<tbody>
<tr>
<td>– Pragmatic PHC setting</td>
</tr>
<tr>
<td>– Initiative designed to improve alcohol screening or treatment</td>
</tr>
<tr>
<td>– Quantitative outcomes</td>
</tr>
<tr>
<td>– Primary data</td>
</tr>
<tr>
<td>– Jan 1990 to Sep 2018</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Excluded:</th>
</tr>
</thead>
<tbody>
<tr>
<td>– Self-reported outcomes unless validated measures and quantified change</td>
</tr>
<tr>
<td>– Specialist PHC e.g. diabetes, drug health</td>
</tr>
<tr>
<td>– Emergency department</td>
</tr>
<tr>
<td>– Rehab</td>
</tr>
</tbody>
</table>
Distribution of papers across time
### Setting (N=56 papers)

<table>
<thead>
<tr>
<th></th>
<th>Number of papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>12</td>
</tr>
<tr>
<td>Developing countries</td>
<td>0</td>
</tr>
<tr>
<td>More than one country</td>
<td>5</td>
</tr>
<tr>
<td>Included rural/regional sites</td>
<td>12</td>
</tr>
<tr>
<td>Indigenous peoples PHC</td>
<td>4</td>
</tr>
</tbody>
</table>
What is being improved?

- Majority examined screening and/or BI
- 6 included pharmacotherapy
- None on psychosocial therapies (except via referrals)
Strategy components

NATIONAL

- Pay-for-performance
- Computer templates
- Grants for training

PRACTICE

- Training
- Written/e-materials
- Support
- Workflow changes
- Financial incentives
- Audit and feedback
- Involvement of non-clinicians
- Champions/committees
- Specialist staff
- Networking

CLINICIAN

- Training
- Telemarketing
- Letters to prescribers
- Academic detailing
- Written/e-materials
- Clinical prompts
- Audit and feedback
- Facilitation of referrals

PATIENT

- Patient activation by:
  - pre-appointment self-assessment
  - information/resource mailouts
Strategy components

**NATIONAL**
- Pay-for-performance
- Computer templates
- Grants for training initiatives

**HEALTH SYSTEM**
- Network meetings
- Audit and feedback
- Performance measures
- Changes to info systems
- Training
- Policy and leadership engagement
- Implementation committees

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**PATIENT**
- Patient activation by:
  - pre-appointment self-assessment +/− personalised feedback,
  - information/resource mailouts
Strategy components

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- Pay-for-performance
- Computer templates
- Grants for training initiatives

**HEALTH SYSTEM**
- Network meetings
- Audit and feedback
- Performance measures
- Changes to information systems
- Training
- Policy and leadership engagement
- Implementation committees

**PRACTICE**
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**CLINICIAN**
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- Written/e-materials
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- Audit and feedback
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**PATIENT**
Patient activation by:
- pre-appointment self-assessment
- (+/-) personalised feedback
- information/resource mailouts
Papers with CQI elements

- 22 had at least 1 element
- Most common: tailoring to local conditions
- 12 had all 3 essential CQI elements
Patient outcomes

Papers with 3 CQI elements (n=12)
- 1 with patient outcome = BP

Other papers (n=44)
- 4 with patient outcomes = drinking

No significant between group differences
## Duration of implementation (weeks)

<table>
<thead>
<tr>
<th></th>
<th>Papers with 3 CQI elements (n=11*)</th>
<th>Others (N=39*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median</td>
<td>52.0</td>
<td>21.7</td>
</tr>
<tr>
<td>Interquartile range</td>
<td>39</td>
<td>35.7</td>
</tr>
</tbody>
</table>

*Some data were missing due to lack of detail in papers
<table>
<thead>
<tr>
<th>Strategy characteristics</th>
<th>Papers with 3 CQI elements %</th>
<th>Other papers %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=12</td>
<td>n=44</td>
</tr>
<tr>
<td>Multifaceted</td>
<td>100</td>
<td>68.2</td>
</tr>
<tr>
<td>Alcohol-specific</td>
<td>41.7</td>
<td>68.1</td>
</tr>
<tr>
<td>Health syst. + clinic + clinician as target level</td>
<td>33.3</td>
<td>11.4</td>
</tr>
</tbody>
</table>
## Service delivery outcomes

<table>
<thead>
<tr>
<th>Clinical action</th>
<th>Papers with 3 CQI elements (n=12)</th>
<th>Other papers (n=44)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Examining action</td>
<td>Increase in utilisation (%)</td>
</tr>
<tr>
<td>Screening</td>
<td>11</td>
<td><strong>81.8</strong></td>
</tr>
<tr>
<td>Brief Intervention</td>
<td>9</td>
<td><strong>66.7</strong></td>
</tr>
<tr>
<td>Pharmacotherapies</td>
<td>2</td>
<td>50.0</td>
</tr>
<tr>
<td>Referral</td>
<td>4</td>
<td>0.0</td>
</tr>
</tbody>
</table>
The first review on

- Strategies to improve screening and treatment for the full spectrum of UAU

AND

- Use of CQI methods within these
Conclusions

- Dearth of studies on implementation of treatment for dependent drinkers
- Significant improvement in patient outcomes is yet to be shown
- Studies with all CQI elements included effective features, showed increased utilisation more often
- More implementation studies for pharmacotherapies & treatment of full spectrum of UAU
- Study designs need to consider the ultimate goal of improvement in patient outcomes
- CQI – promising approach - warrants further investigation in alcohol field
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