SBI delivered simultaneously in multiple settings: cost-effective but can it influence community-level outcomes?

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Aims

- Model current practice for SBI delivery by GPs and pharmacists in 10 regional communities in Australia (AARC project)

- Conduct scenario analyses to identify the most CE method of increasing the proportion of GP and pharmacist patients who reduce alcohol consumption to low-risk as a result of GP/pharmacist S or BI or SBI

- Compare the cost/patient (ICER) for achieving reductions in drinking from GP and pharmacist SBI with a hospital ED-based SBI implemented in the same communities

- *Could SBI delivered simultaneously in multiple settings be a cost-beneficial strategy for reducing risky drinking and alcohol harms at a community-level, as well as a cost-effective strategy at an individual patient-level?*

Alcohol Action in Rural Communities - AARC

Randomised controlled trial to reduce alcohol-related harm at the community-level

20 communities in regional NSW, Australia (10 experimental)

1. Selection criteria:
   - Population approximately 5,000 – 15,000
   - At least 100km from a regional / metro centre

2. 10 matched pairs in NSW:
   - population size
   - age and gender distribution
   - proportion indigenous

3. One of each pair randomly allocated to experimental condition

AARC

4. Measures
   - Routinely collected: crimes, traffic crashes, inpatient hospitalisations
   - Self-report (2005 survey & 2010):
     * Consumption & perceptions of harm;
     * Frequency of visits to GPs & pharmacies and experience of SBI

5. Interventions (N=13)
   - Engagement with communities
   - Feedback of data/results to key stakeholders
   - Media advocacy (feedback to communities)
   - High-school interactive session on alcohol harms
   - Identifying and targeting high-risk weekends
   - SBI: GPs, pharmacies, hospital EDs, AMSs, web-based
   - Good Sports in clubs
   - GP feedback on prescribing
   - Workplace policy & training

Alcohol Action in Rural Communities

Methods

- GPs:
  - 2005 survey identified 17,030 risky drinkers in 10 exp comms (AUDIT score 8-19)
  - Pathway: 74% visit a GP, 14% get screened, 1% get BI, 0.7% reduce consumption
  - Scenarios: increase in S, BI or SBI (10% and 20% increase in SBI)

- Pharmacists:
  - 2005 survey identified 17,030 risky drinkers
  - Pathway: 99% visit a pharmacist, 3% get screened, 0.04% get BI, 0.01% reduce cons
  - Scenarios: increase in S, BI or SBI (10% and 20% increase in SBI)

- EDs:
  - RCT in 5 EDs from the 10 AARC experimental communities in NSW
  - Ok to screen, but impractical to deliver SBI in 'real time' in ED
  - Intervention: mailed feedback to at-risk patients (AUDIT ≥ 8)

Results - GPs

Navarro et al., Addictive Behaviors, in press

- 19% of all risky drinkers in a community who visit a GP reduce their drinking to low-risk levels, of which 0.7% do so because of GP SBI.
- Increments of 10% and 20% in GP SBI would further reduce the % of risky drinkers in a community by 2.1% and 4.2%.
- The most CE outcome per additional risky drinker reducing their drinking, relative to current practice, would be to screen all patients (ICER of A$197).

Results - pharmacists

Navarro et al., Social Science in Medicine, under review

- 23% of all risky drinkers in a community who visit a pharmacist reduce their drinking to low-risk levels, of which 0.01% do so because of pharmacist-delivered SBI
- Increments of 10% and 20% in GP SBI would further reduce the % of risky drinkers in a community by 0.49% and 1.64%
- The most CE outcome per additional risky drinker reducing their drinking, relative to current practice, would be to screen all patients (ICER of A$29)

Results – ED based SBI

Havard et al, Alcoholism: experimental and clinical research, in press

- For patients with an alcohol-involved ED presentation, approx 50% reduction in drinks per week at 6-weeks (24 to 12 standard drinks/week)
- No effect for patients with a non-alcohol involved ED presentation
- For patients with an alcohol-involved ED presentation, reduction in drinking achieved at a cost of A$5.55/patient or 48c for each unit reduction in weekly consumption (cf. $197 for GPs and $29 for pharmacists)

Results - community-level impacts of SBI

- If all risky drinkers in a community who visit a GP get SBI, 36% would reduce their drinking to low-risk levels

- If all risky drinkers in a community who visit a pharmacist get SBI, 34% would reduce their drinking to low-risk levels

- Is SBI just cost-effective 'treatment' or can it be cost-beneficial 'prevention'?

- SBI delivered in multiple settings simultaneously. Possible settings:
  - EDs;
  - community D&A;
  - school counsellors;
  - ambulance / paramedics;
  - inpatient wards; etc

Community-level trial ?

- Multiple baseline design (alt to cluster RCT): fewer comms, less $, faster to do
- Multi-site trial to improve generalisability
- Comm-level outcomes (inpatients, EDs, paramedics, crime, crashes, other?)
- Cost-benefit analysis across whole community (not just CEA)