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Community-based responses to alcohol harm: do they work and where next?

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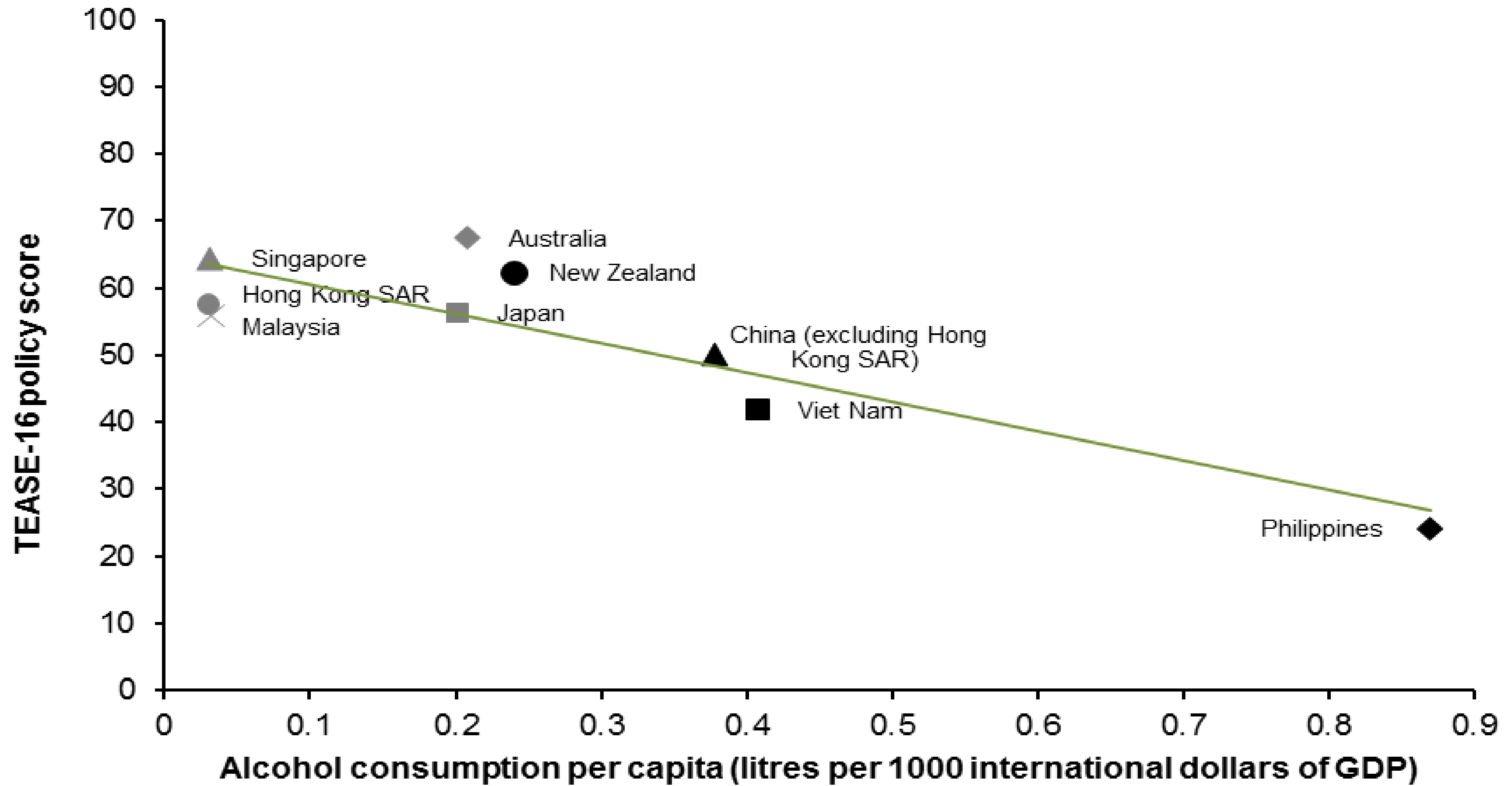
Background to community-based approaches

- Oscillation between:
  - Focus on individual responsibility and dependence
  - Environmental role in excessive drinking and harms
- Need to respond to both the needs of individuals and interrupt the structures that promote unsafe drinking
- Systems approaches can do both:
  - Modify/control environments (legislation and community action)
  - Individual treatment
  - But have to be tailored to the needs and characteristics of different communities and different individuals

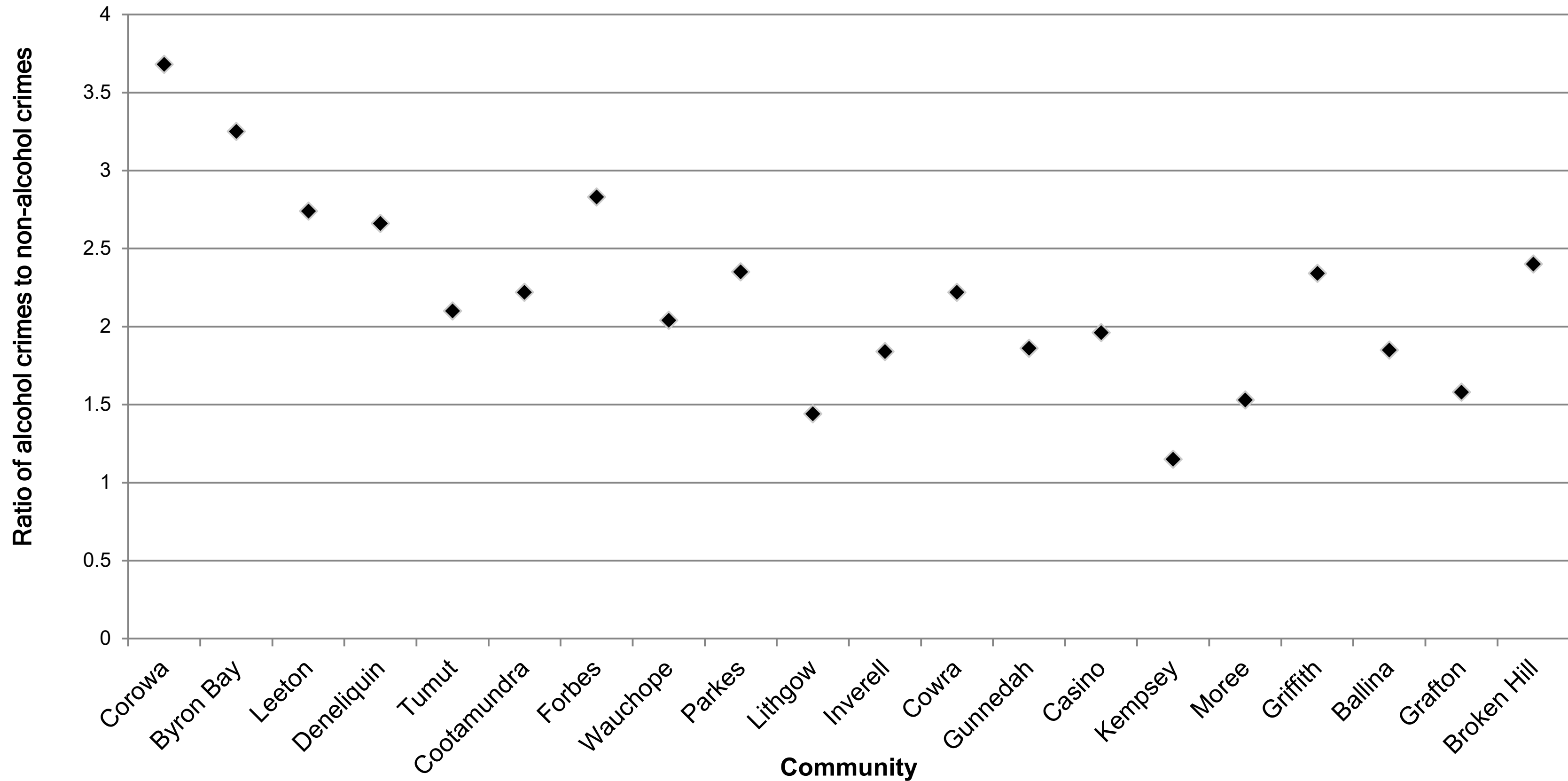
Does legislation work? Yes

Carragher, Shakeshaft et al. 2014, WHO Bulletin



Does legislation work? Yes, but not evenly:

Alcohol-related crime, Breen, Shakeshaft et al. 2011



Data source: NSW BOCSAR

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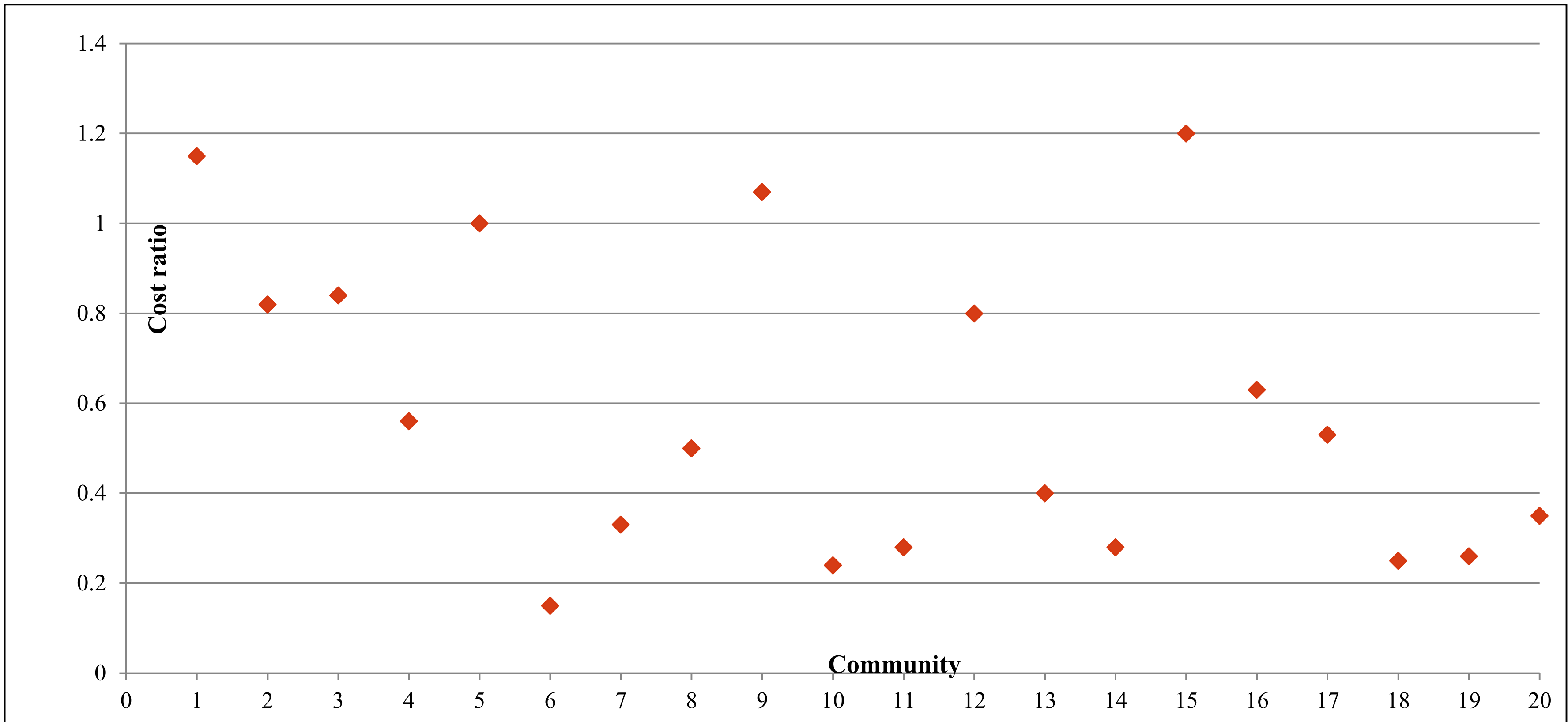
Does legislation work? Yes, but not evenly:

Alcohol-related traffic crash costs, Czech, Shakeshaft et al. 2011



Data source: NSW RTA

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Why community-based approaches?

- International support – WHO:

  "All members of a community are responsible for action because the burden of alcohol harm is spread across multiple settings"

  Global strategy to reduce the harmful use of alcohol, 2010

- Australian govt support:

  "Binge drinking among young people is a community-wide problem that demands a community-wide response..."

  Australian Health Minister, August 2011

- Community support:

  86% of respondents to a community survey (N=3,017) supported community action

  Czech, Shakeshaft et al., 2010

- Because that's where the harm is…

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Do community-based approaches work?

- Maybe, probably…

- Few examples of high quality evaluations of community approaches:
  - 7 randomised trials
  - 6 in USA
  - Unit of randomisation & intervention: 4 schools, 2 campuses, 1 communities

- 1 non-US, community randomised cluster RCT: AARC in Australia
  - Shakeshaft *et al.*, *PLoS Medicine*, 2014

AARC – only RCT to date

•AARC implemented 13 interventions in 3 categories, 2005 - 2009:

1. Better use of data (routinely collected and survey):
   - Engage with communities and agencies (eg. DET, LHDs, AMSs)
   - Provide ongoing feedback to key stakeholders on progress
   - Provide ongoing feedback to communities through local media advocacy
   - Target high-risk weekends (mayor, local media, police, pubs/clubs)

2. High-risk groups / settings:
   - Workplaces
   - High schools
   - Sports clubs
   - Alcohol dependent drinkers (via GPs)

3. More frequent screening and brief/early intervention:
   - GPs
   - Pharmacies
   - Hospital emergency departments
   - Aboriginal Medical Services
   - Web-based

AARC – only RCT to date

- Main outcomes

Outcomes likely due to AARC (≥ 94% chance)	Outcomes probably due to AARC (≥ 90% chance)	Outcomes unlikely due to AARC (< 90% chance)
20% reduction in average consumption	30% reduction in single occasion risky drinkers	14% and 9% reductions in alcohol-related assaults and malicious damage
42% reduction in alcohol-related verbal abuse	31% reduction in long-term risky drinkers	Alcohol-related traffic crashes
33% reduction in alcohol-related street offences		Hospital admissions for alcohol dependence
58% *increase* in hospital admissions for alcohol abuse		

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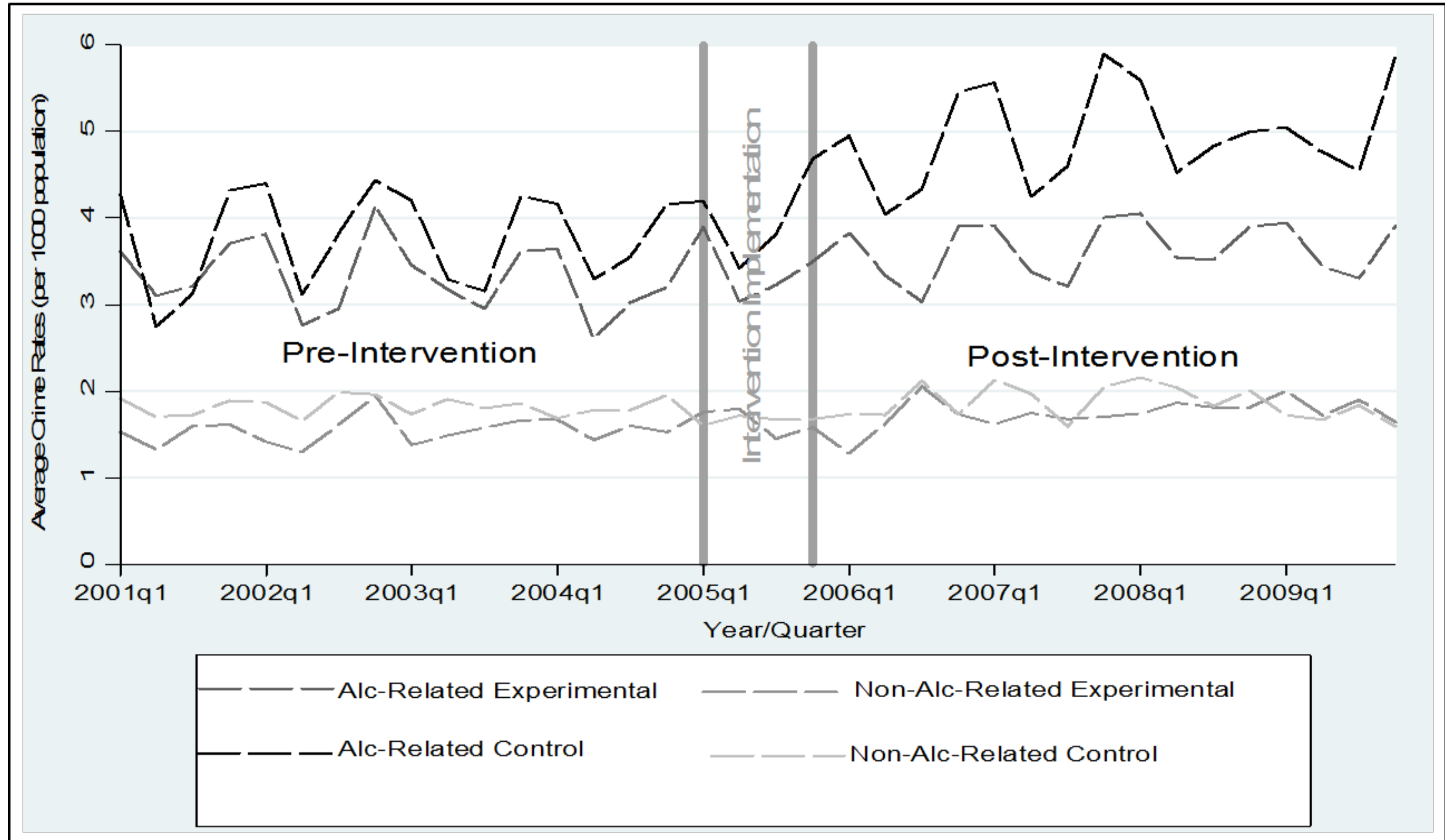

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AARC – only RCT to date

- AARC is the only economic analysis to determine if benefits > costs

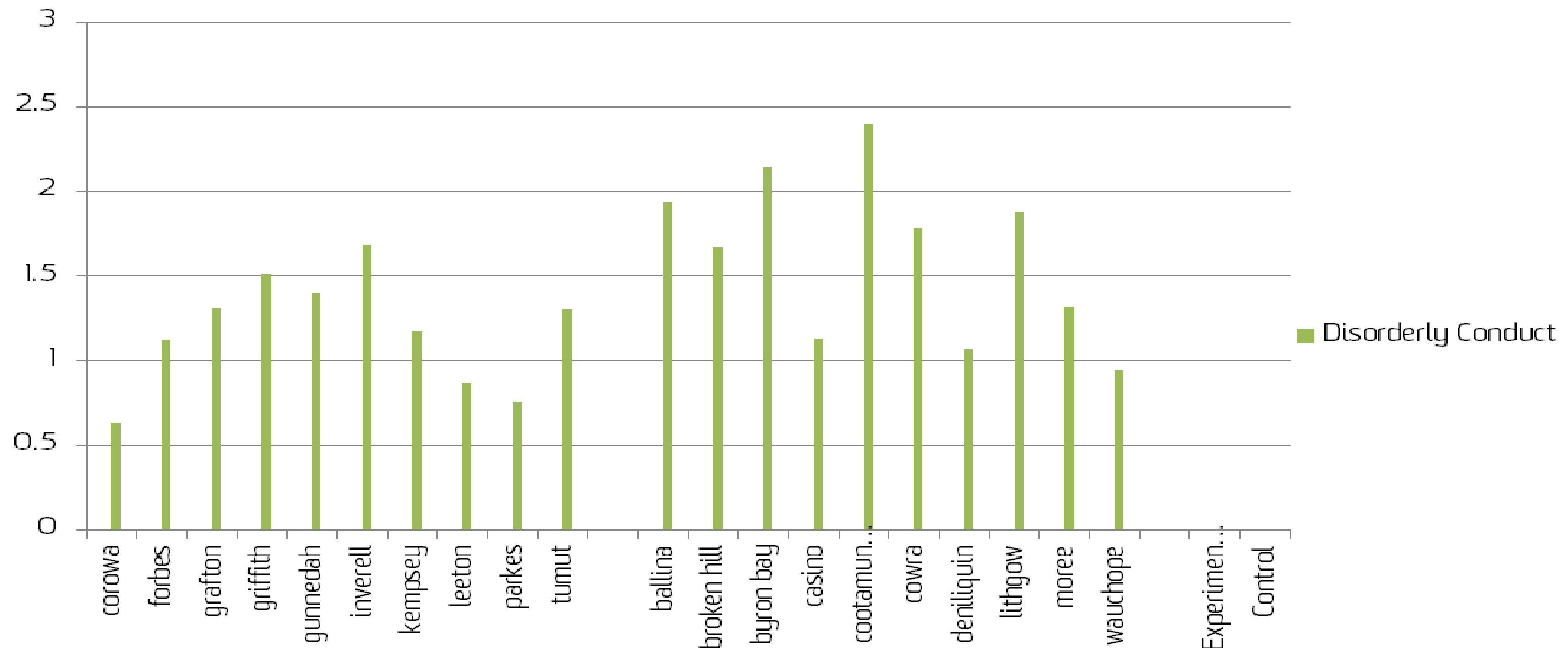
Benefits	Lower estimate*	Upper estimate*
Savings from reduced alcohol crimes + traffic crashes	$ 735,256	$ 735,256
Community willingness to pay (value) - survey data	$ 923,173	$1,394,009
Net benefit	**$1,658,429**	**$2,129,265**
Costs		
Cost of AARC interventions	$ 608,102	$ 608,102
Cost of additional alcohol-related hospital admissions	$ 605,910	$ 605,910
Net costs	**$1,214,012**	**$1,214,012**
Benefit - cost	$ 444,417	$ 915,253
Benefit cost ratio	**1.37**	**1.75**

*Households' willingness to pay for 10% reduction in alcohol harm: $10 payment scale (lower, $35.43pa) vs $25 payment scale (upper, $53.50)

Does community-action work?

- Maybe, but not evenly

- Significant differences in the extent to which communities responded to AARC (unpublished data: source NSW BOCSAR)



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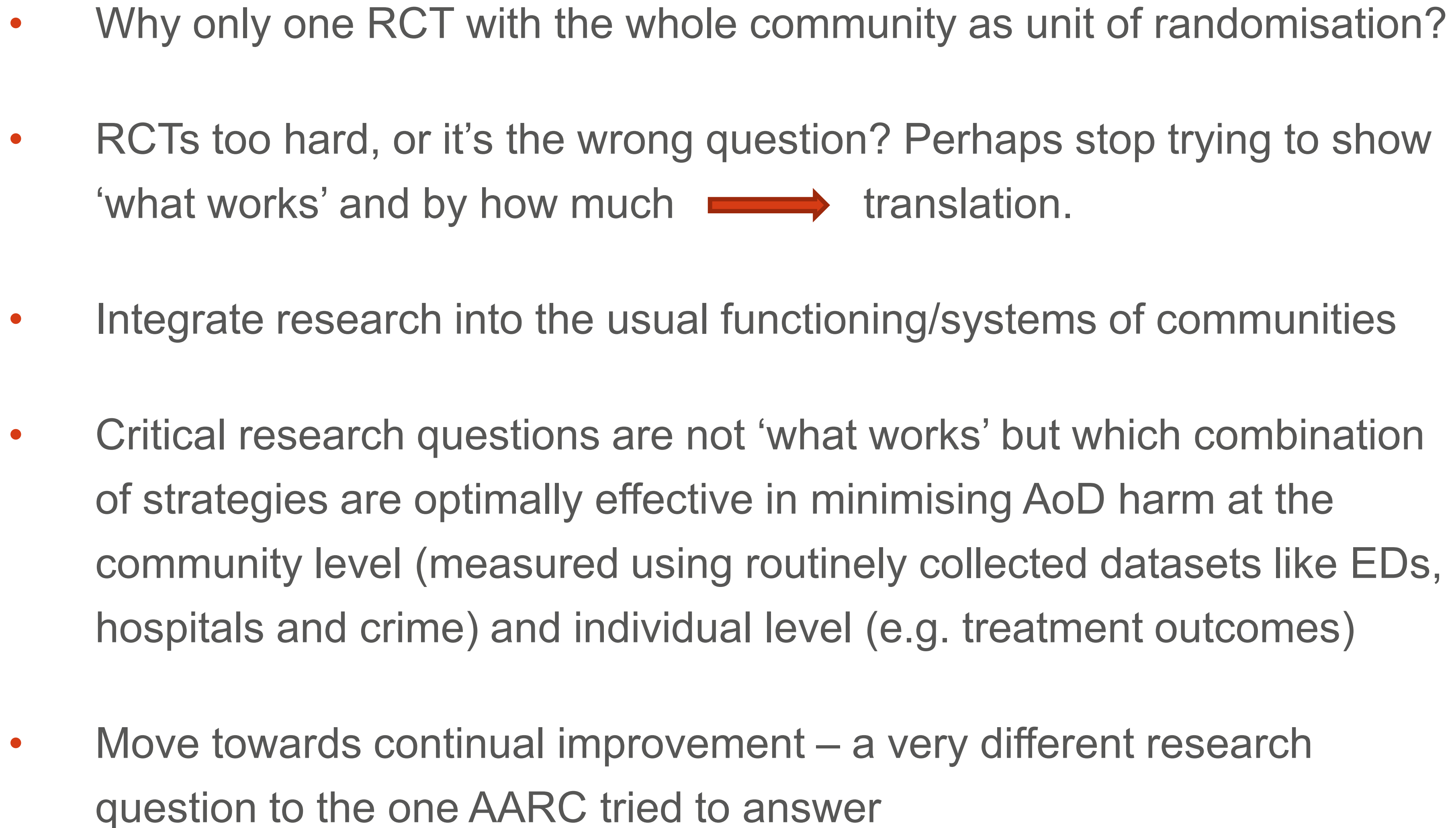
Where to from here?



Where to from here?

- Establish an evaluation framework which can be applied continually so that communities become ‘learning systems’

- What might a community ‘learning system’ (LS) look like?

1. The key stakeholders in a LS have to:
   a) identify meaningful knowledge gaps;
   b) identify possible solutions (interventions) for each knowledge gap;
   c) prioritise possible solutions; and
   d) quantify the counterfactual for the system
2. Different communities will engage with different questions depending on their need
3. The LS has to learn which communities are benefiting and which aren’t
4. The LS has to re-direct communities with low benefit and/or low value

Why bother?

"My question is: Are we making an impact?"