



## MELBOURNE SCHOOL OF POPULATION AND GLOBAL HEALTH

# Building capacity for evidence utilisation in Victorian local governments

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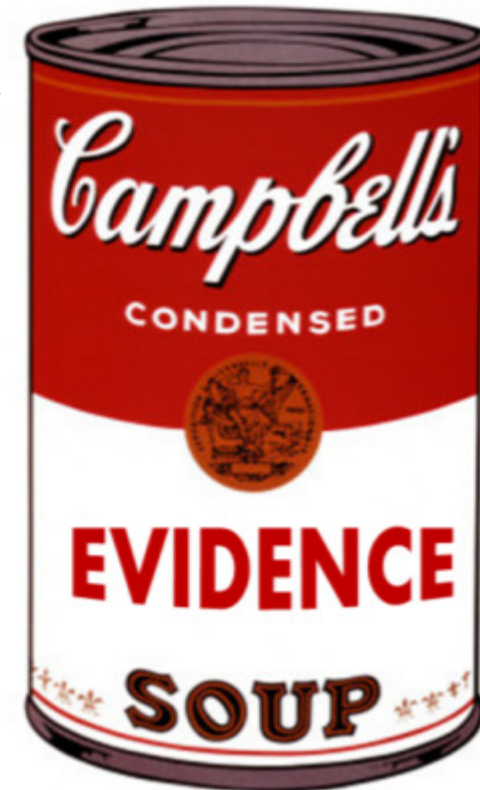
2nd annual NHMRC Research Translation Faculty Symposium, Sydney NSW  
2-3 October, 2013

The Jack Brockhoff Child Health and Wellbeing Program,  
McCaughey VicHealth Centre for Community Wellbeing



# background

- Many barriers, facilitators to EIDM Innvaer 2002; Orton 2011
- KTE proposed to facilitate EIDM
- But do KTE efforts make a difference?  
Bero 1998; Grimshaw 2001, 2002, 2004; Thompson 2007;  
Dobbins 2009, Perrier et al 2011, LaRocca et al 2012
- One RCT in public health departments Dobbins et al 2009
  - Tailored targeted messages by Knowledge broker more effective in org's where research use culture low
  - Need for strategies to address org. culture
- Recent international efforts
  - Health Systems Evidence – Lavis et al, KT Canada platforms
  - CIPHER – Sax Institute (NHMRC CRE)
  - TROPIC – Deakin University & C-POND Fijian Nat. University



# barriers to EIDM

International and local research with decision-makers & practitioners suggest a lack of :

Time  
Trust  
Access to evidence  
Accessibility of evidence  
Access to researchers  
Timeliness  
Evidence

Innvaer 2002; Orton 2011

## KT strategies for EIDM

### Push

Generally linked to dissemination strategies e.g. Systematic reviews, clearinghouses, websites

### Pull

Support DMs to seek out evidence e.g. Workforce development, IT access, DM tools

### Exchange

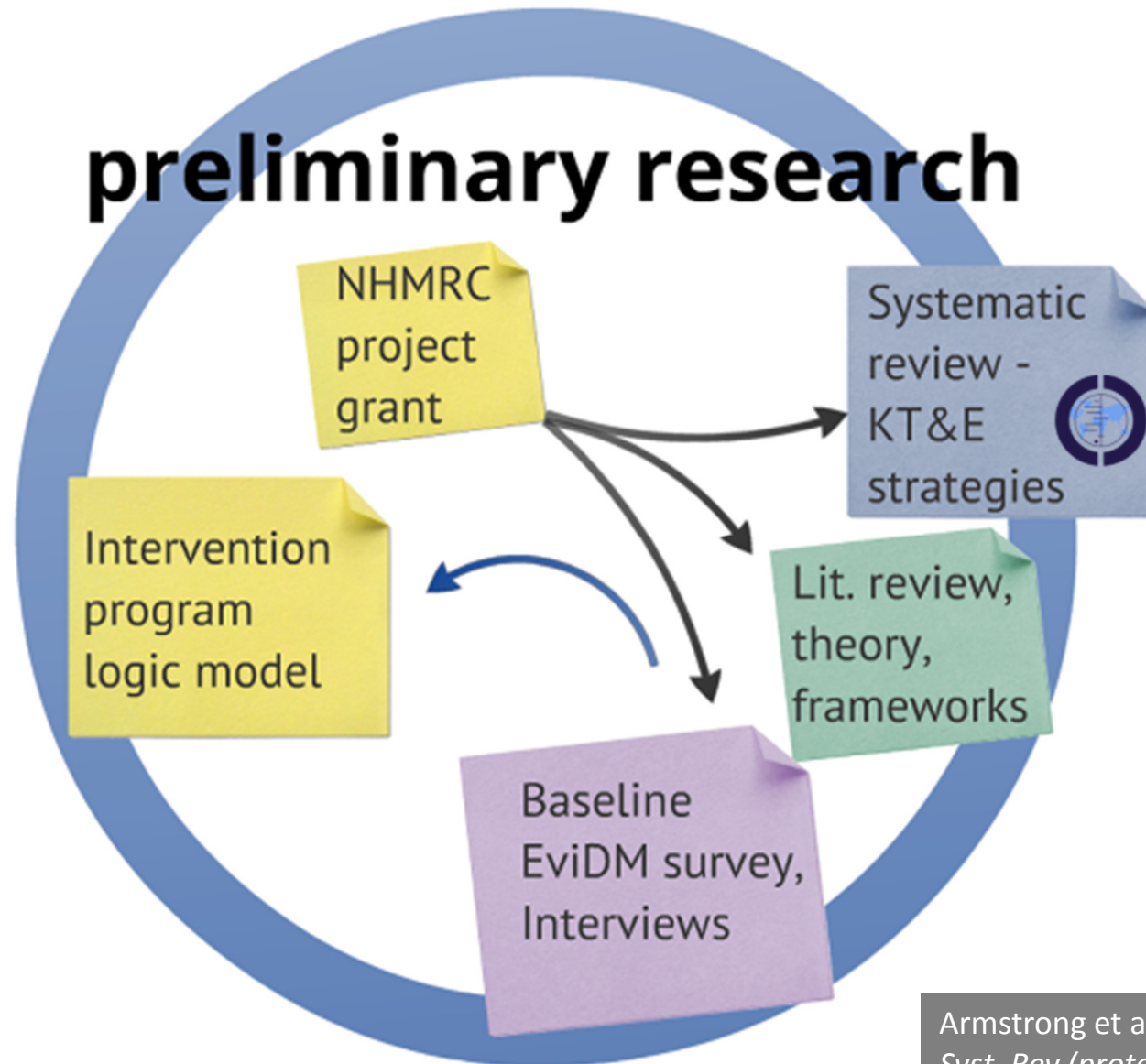
Meaningful and reciprocal relationship

Lavis, Lomas, Hamid, Sewankambo 2006

#### Effectiveness of KT strategies:

Bero 1998; Grimshaw 2001; Grimshaw 2002; Grimshaw 2004; Thompson 2007; Dobbins 2009, Perrier et al 2011, LaRocca et al 2012

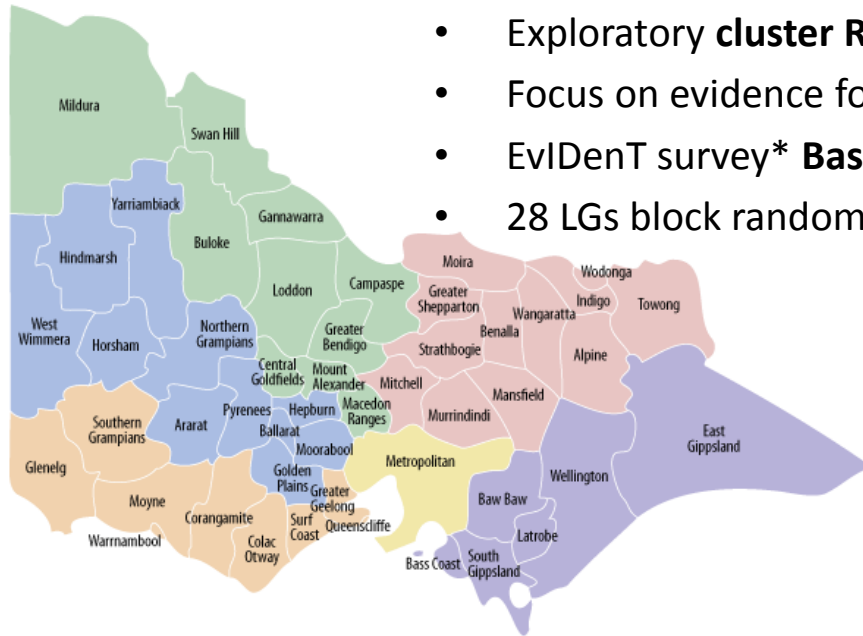
# preliminary research



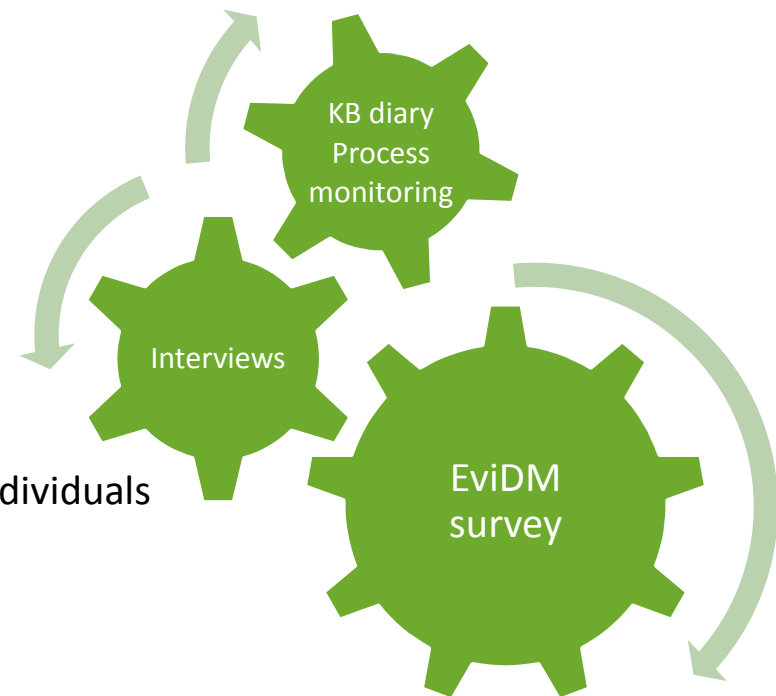
Armstrong et al 2009 *Cochrane Database Syst. Rev (protocol)*  
Armstrong 2011 PhD thesis  
Waters et al 2011 *BMC Public Health*



# Methods



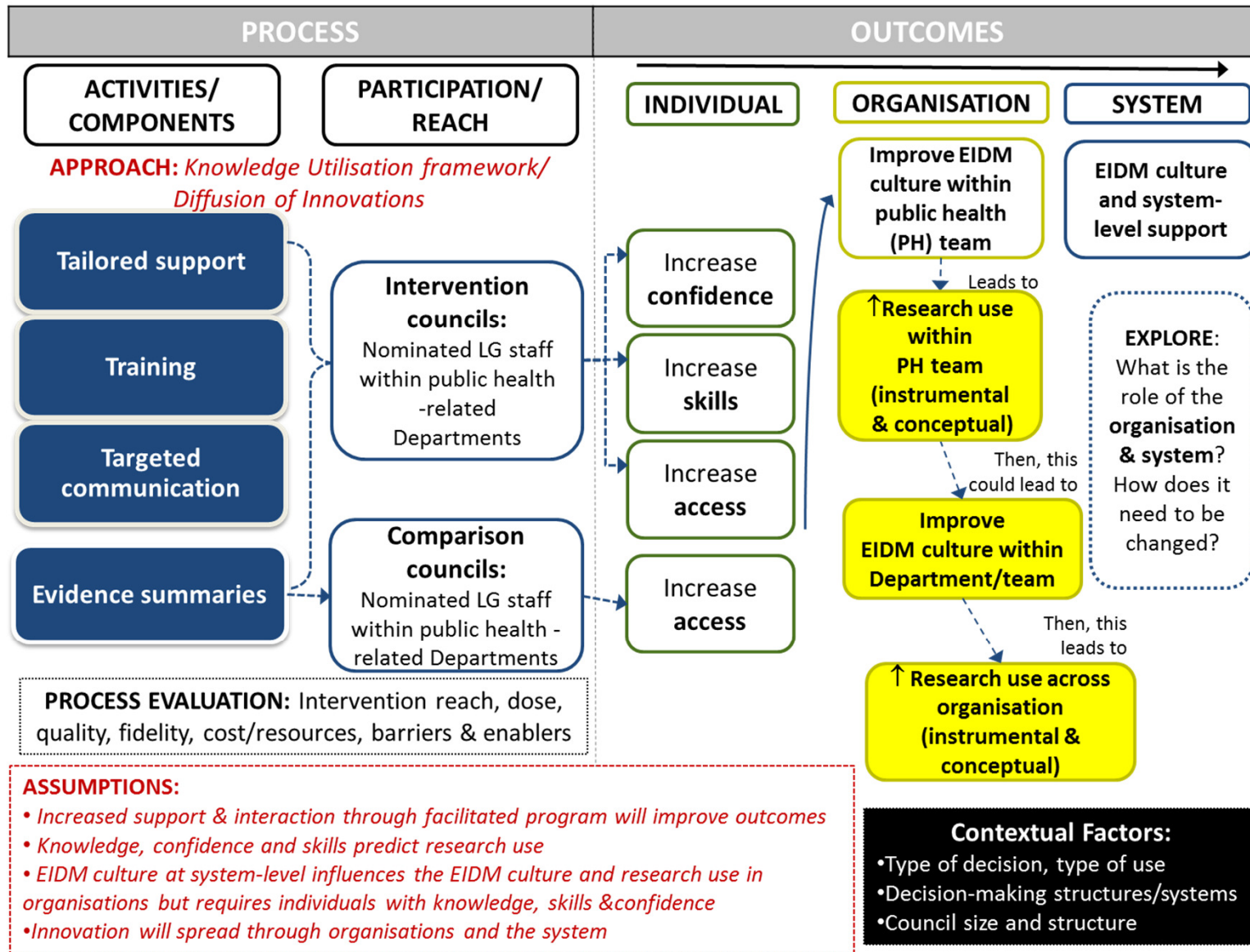
- Exploratory **cluster RCT** in Victorian local government (LG) 2 years 2009 – 2011
- Focus on evidence for obesity prevention – public health planning
- EVIDenT survey\* **Baseline**: 45 LGs; n=135 individuals
- 28 LGs block randomized by budget tertile (14 Intervention; 14 Comparison)



- Mixed methods Process & Impact Evaluation
  - EVIDenT survey\* **post-intervention** 28 LGs; n=76 individuals
  - Interviews with council staff, managers, CEOs
  - KB reflective diaries, database of contacts
  - Training evaluations

\*Armstrong, Waters, Moore et al. Development of an outcome measurement tool for evidence informed public health. *Submitted Aug 2013.*

\*Armstrong, Waters, Moore, et al. Understanding evidence 2: a statewide survey to explore evidence-informed public health decision-making in a local government setting. *Submitted Aug 2013*



# Intervention components

## Tailored support

- **Knowledge broker**
- Monthly contact: Scheduled
- Support-response, tailored messages
- Visits, meetings: ad hoc



## Group Training

- **Group training** for skills development and networking
- Biannual, all councils invited
- Skills: **ask, access, assess, apply** research evidence

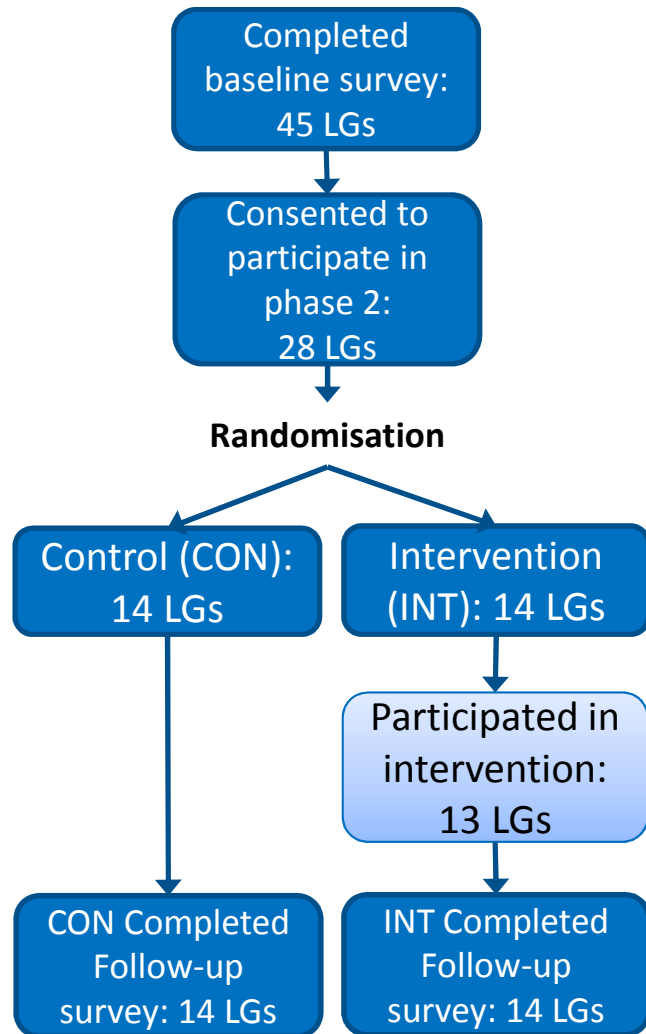


## Targeted communications

- **Evidence summaries** for Local Govt & Obesity prevention
- Developed through broad consultation
- Published on CO-OPS



# Participants



	Baseline 2009		Follow-up 2011	
<i>n</i>	INT	CON	INT	CON
<b>Gender</b>	24=F, 18=M	62=F; 31=M	27=F, 7=M	35=F, 10=M
<b>Age (median)</b>	40-49	40-49	40-49	40-49
<b>Job title (median of 7 categories)</b>	Prog Mgr	Planner	Prog Mgr	Prog Mgr
<b>Education level (median of 8 categories)</b>	GrDip	Bach	GrDip	GrDip
<b>Years in Local Govt (mean, range)*</b>	12.9 0.5 - 33y	9.4 0.1 - 33 y	9.9 0.5 - 25 y	10.9 1- 35 y
<b>Years in current position (mean, range)</b>	4.5 0.1 - 12 y	3.5 0.1 - 30 y	4.1 0.5 - 15 y	4.1 0.5 - 17 y

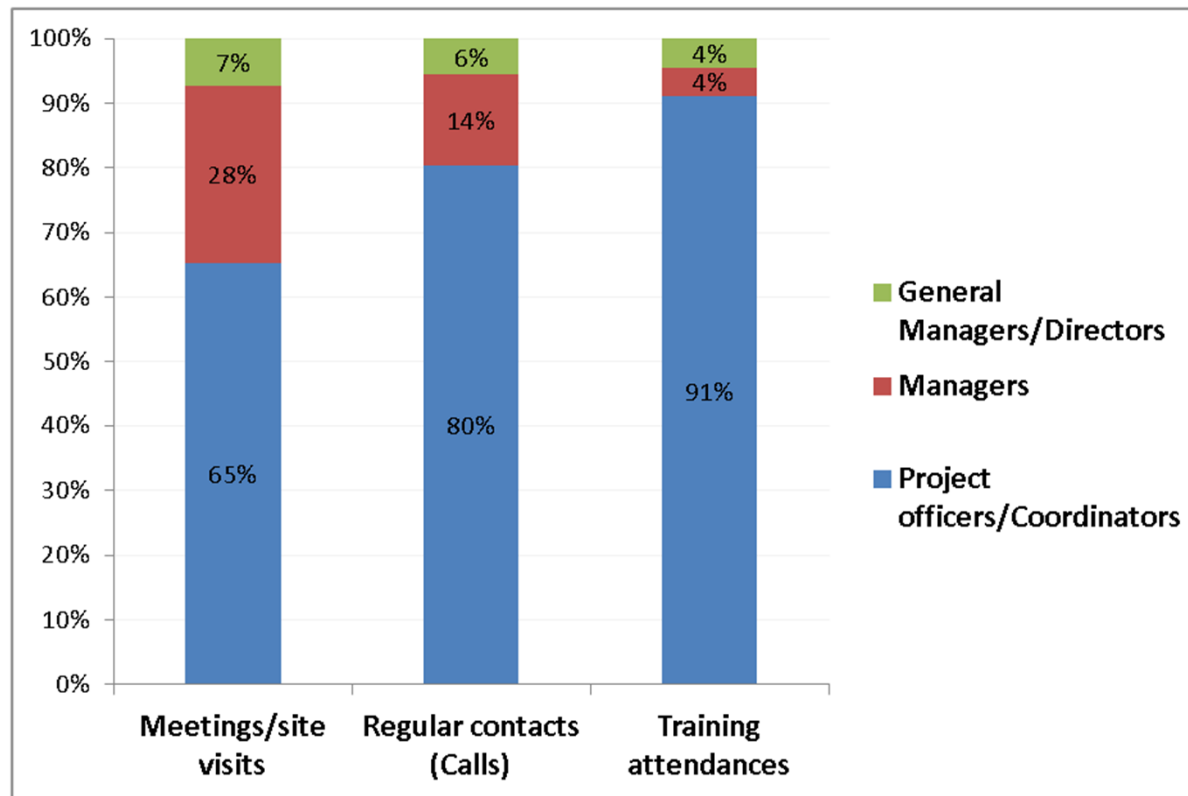
\*statistically different between INT and CON at baseline



# Reach

*Database, attendance records*

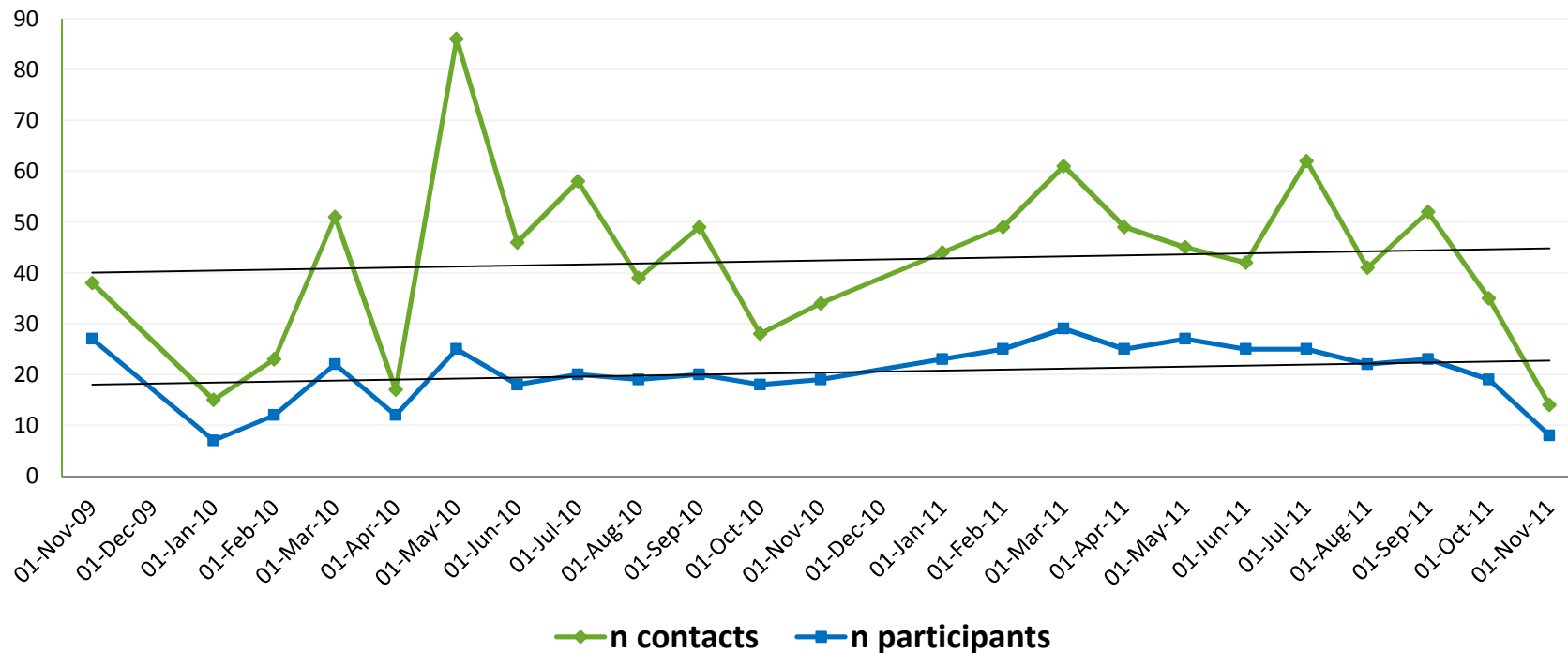
- 13 councils, 61 participants involved in monthly contact
  - began with 62: of those 30 remained in council; 32 new ppts joined (52% turnover)
- 123 attendances at biannual group training



# Dose , Fidelity

Database

contacts delivered and individual participants contacted (unique) per month

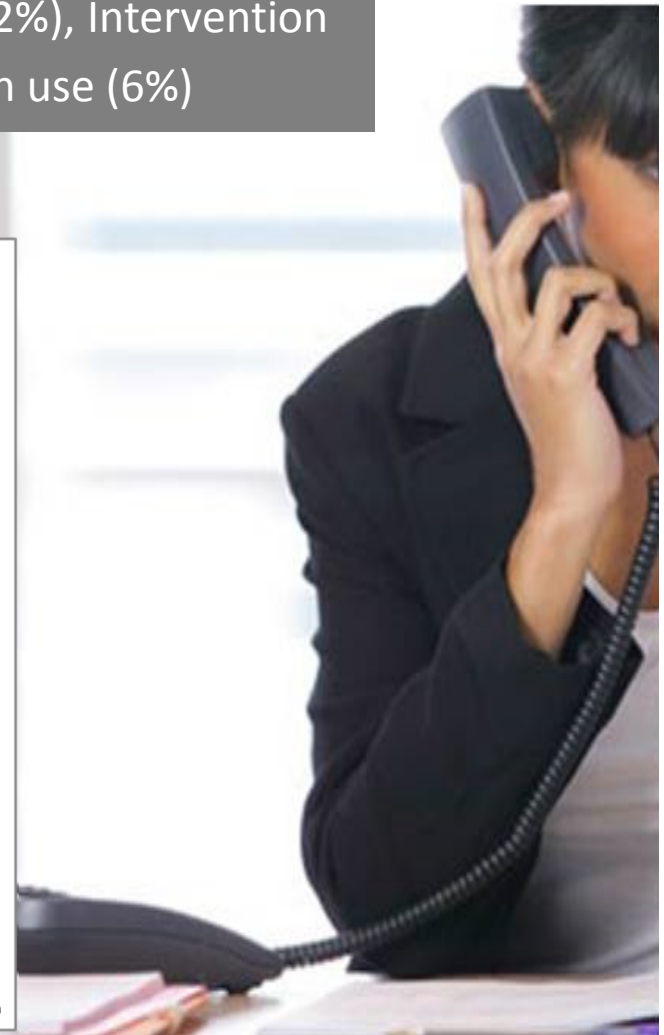
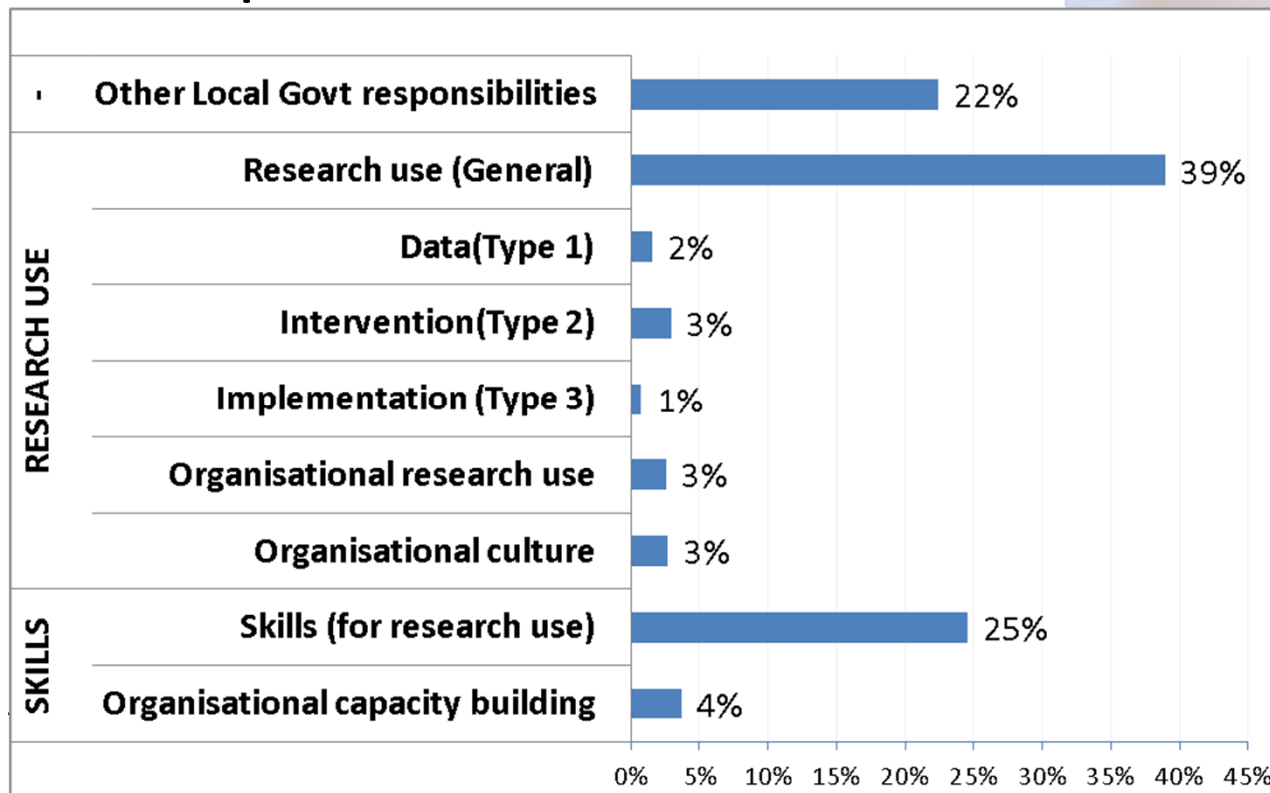


- **Dose:** monthly contacts, 61 participants
- **Fidelity:** All components delivered as intended

# Activities (1)

- Knowledge broker's focus
  - Skills (23%); Access (20%); Instrumental research use (12%), Intervention evidence (9%); Confidence (6%); Organisational research use (6%)

- Participants' focus



# Activities (2)

- **Group training**
  - 123 participants, 72% completed evaluation forms
  - Free-text responses to questions, analyzed thematically
  - **Enjoyed most:** Skill development/acquisition (53%); interactive structure (25%)
  - **Plan to apply to practice:** Searching techniques/tools (51%); PICO (35%); applicability/transferability tool (28%); use of research in practice (22%)
  - **Training useful for informing practice?** Yes (75%)



“Very useful. Always good to be reminded/ re-motivated.

“Interactive group work. Helped to see how it can be applied to practical situations.”

“Group tasks were useful and adaptable to workplace.”

“These sessions are useful when they are practical and linked to real issues/challenges facing local government.”



# Cost, resources to implement

## Database

KB use of time	
% time spent on each activity (incl. preparation)	
Meetings/site visits	21
Participant Contact- phone	17
Participant support*	17
Data Collection/evaluation	16
Participant Contact- email	13
Miscellaneous administration	9
Training	5
Dissemination	1

Time spent – contacts & visits	
% time spent (mean ± SD)	
All calls continued, planned and unplanned	25 ± 12 min
Meetings and visits	76 ± 26 min
All calls <i>not</i> continued (missed, rescheduled)	6 ± 22 min

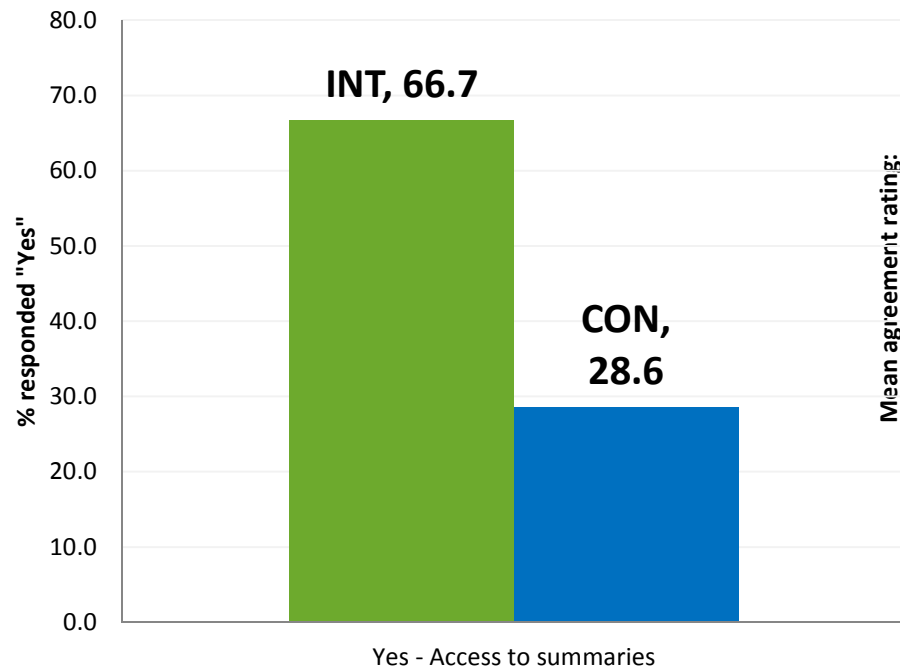
\*Accessing or summarising evidence, reviewing documents

## KB reflective diary

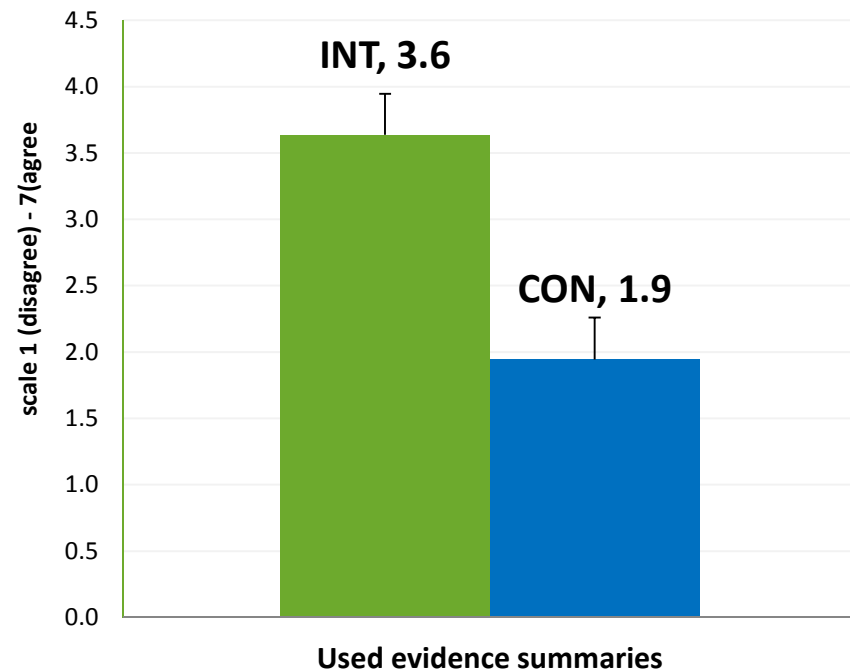
- Not enough time –more investment in establishing relationships, understanding context
- Breadth of focus put strain on time

# Evidence summaries

Have had access to the evidence summaries developed for the project



Have used the evidence summaries developed for the project to inform local program decisions



## So, what (do we think) happened

### Access:

Decreased mean  
differential change

### Culture:

Increased mean  
differential change

### Confidence:

Decreased mean  
differential change

Did **KT4LG influence** participants **perceptions** of these domains?

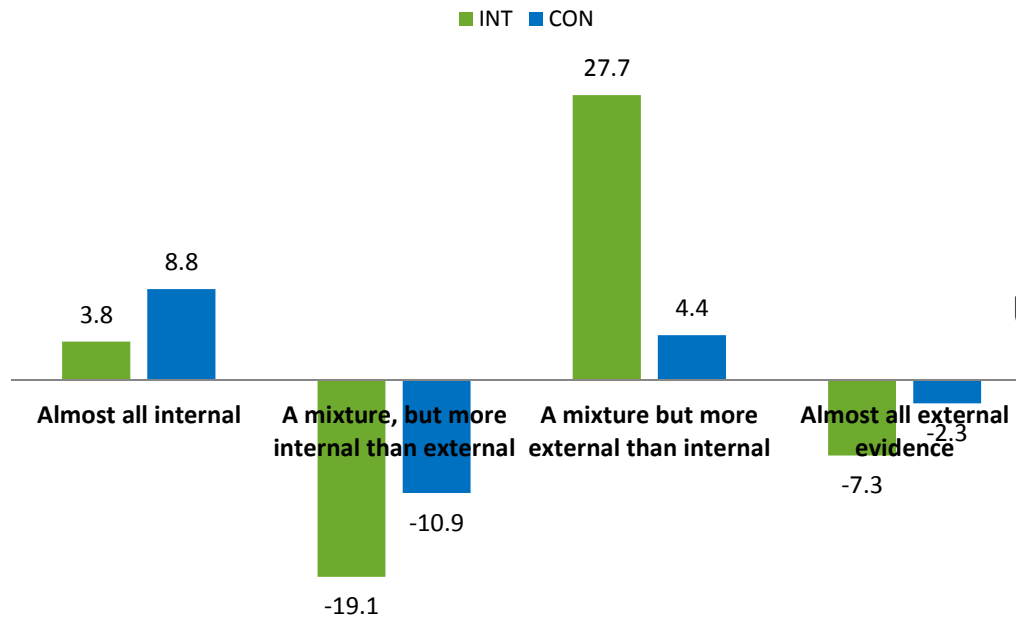
descriptive



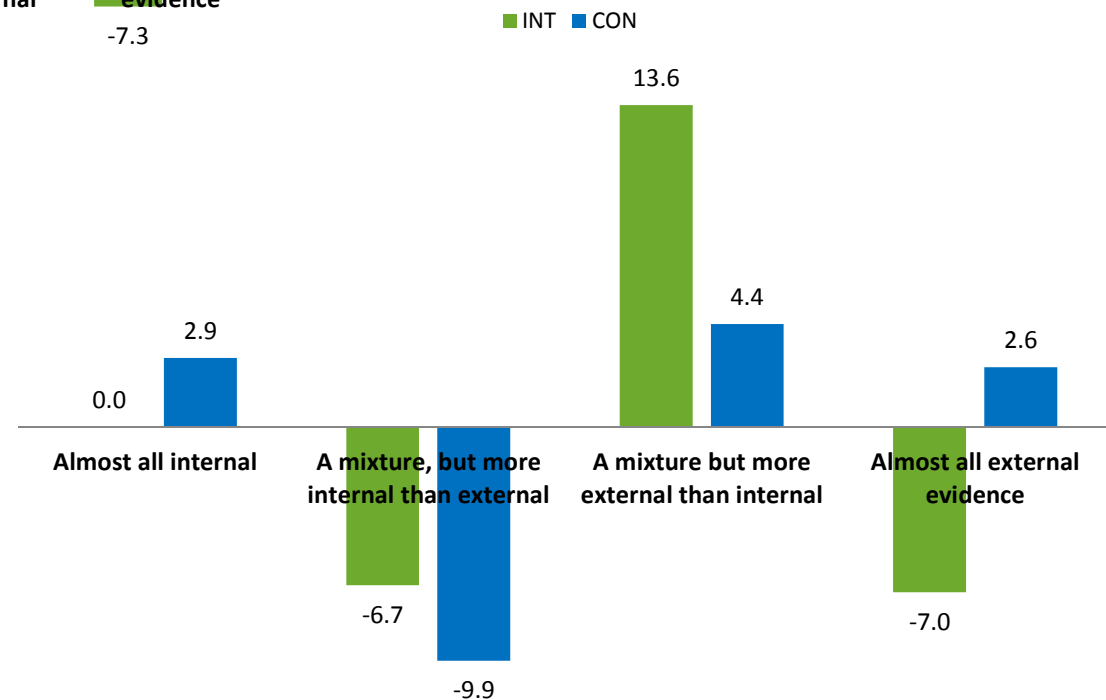
effectiveness

# Influence and Usefulness of evidence

**INFLUENCE overall change – baseline to follow up (%)**



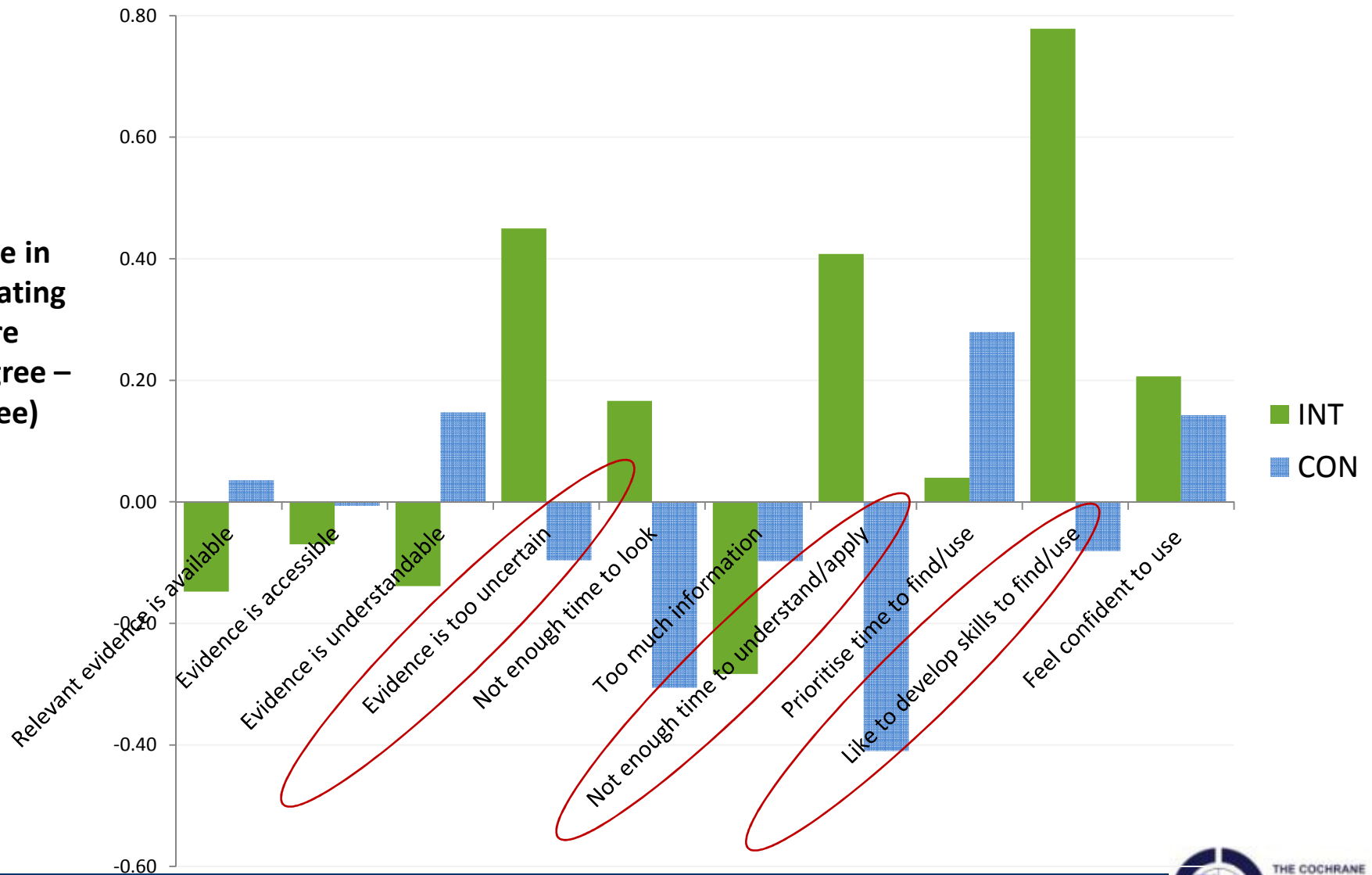
**USEFULNESS overall change – baseline to follow up (%)**





# EIDM barriers

**Change in mean rating score  
 (1 disagree – 7 agree)**



## Barriers



- Organisational **culture**  
e.g. **Time** to participate in an exchange, Time to apply research to context) – thus having to push, not build capacity for access  
e.g. **Senior staff /management** – lack of internal champions
- Need to respond to **policy/priority change**
- Workforce **turnover** (52% left council)
- Not having a “**way in**”, not knowing what would help

## Enablers



- Tools, processes development (systems) may assist with building organisation **culture**
- Training: confidence and skills
- Opportunity – new purpose when **priorities change**
- KB's ability to find a “**way in**”, learning their priorities e.g. evaluation methods
- Workforce – engaging the right people early and when **turnover** occurs

# Reflections – methods

- Cluster RCT feasible...but
  - Participants baseline  $\neq$  follow-up
  - Large sample size required
  - Different types of individuals
- Recommendations for new research
  - Embed ability to follow individuals longitudinally
  - Investment in outcome measurement
    - Individual, organisational, involve DMs



## Implementing KT strategies to enhance EIDM in public health decision-making

- Feasible, acceptable, willingness to pay
- Resources to implement, KB role
- Barriers and enablers, contextual challenges
- Organisational culture – development

## KT4LG is the first study of its kind in Australia

- KB role promising for ↑ access & ?use
- Effectiveness still uncertain, underpowered
- Shifts in access, confidence
- But needs organisational and system support/ incentive





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**Contact: Public Health Evidence & Knowledge Translation (incorporating Cochrane Public Health Group)**

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