Implementing evidence-based practices in reproductive health

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Background

- Clinical research is consistently producing new findings that may contribute to effective and efficient patient care

- The findings of such research will not change population outcomes unless health services and health care professionals adopt them in practice.

Grimshaw, Ward, Eccles. *Oxford Handbook of Public Health.*

Background

- Consistent evidence of failure to translate research findings into clinical practice
  - 30-40% patients do not get treatments of proven effectiveness
  - 20–25% patients get care that is not needed or potentially harmful
- Increased interest in knowledge translation activities to promote evidence based practice

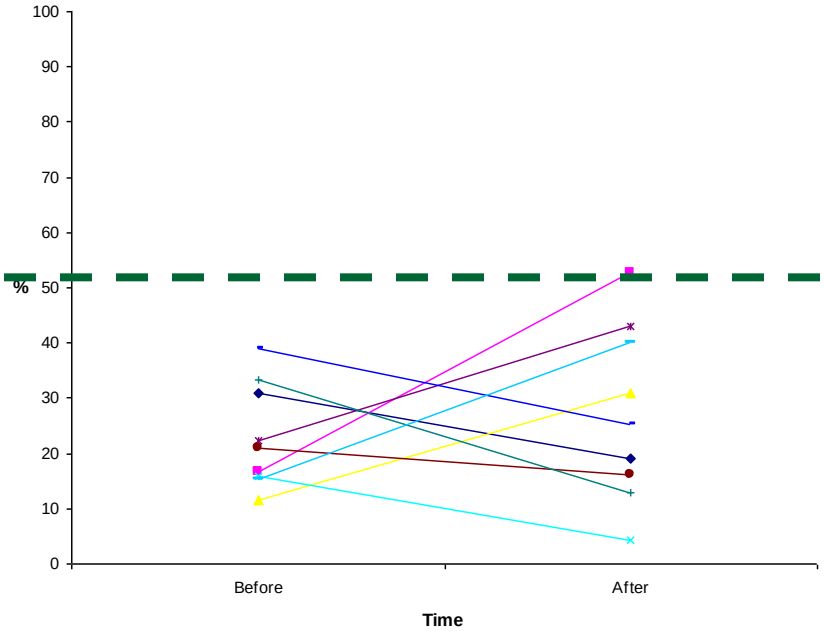
Schuster, McGlynn, Brook (1998). *Milbank Memorial Quarterly*

Grol R (2001). *Med Care*

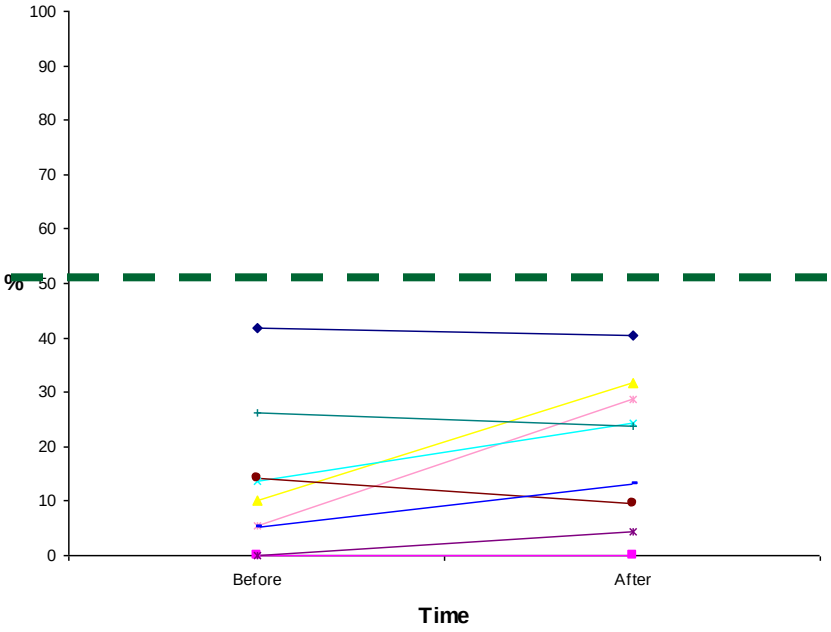
Knowledge management is insufficient

- Health care professionals still have limited time to read
- Health care professionals only recognize a minority of information needs
- Health care professionals need to make multiple decisions daily
- Decisions are largely based on heuristics (‘rules of thumb’)
- Health care professionals work in chaotic surroundings

Corticosteroids before 34 weeks

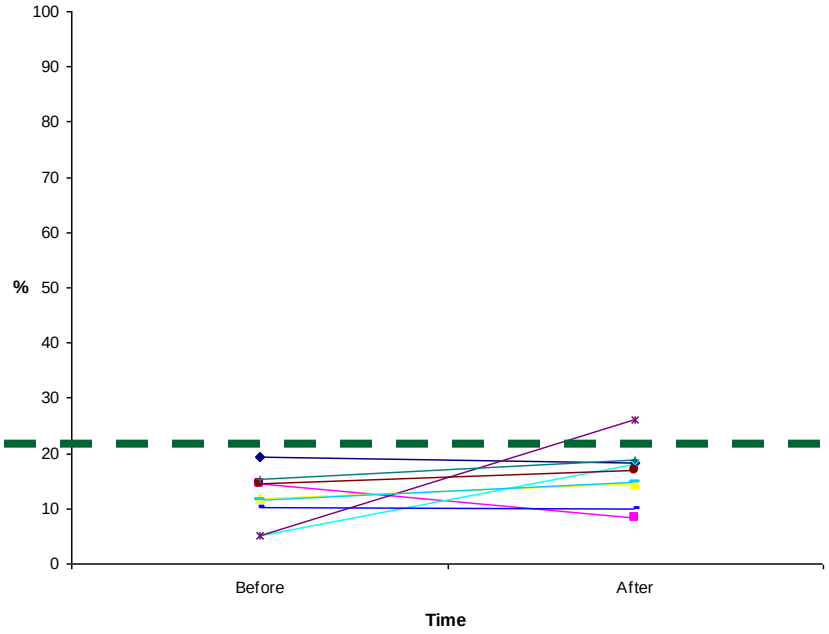


Intervention

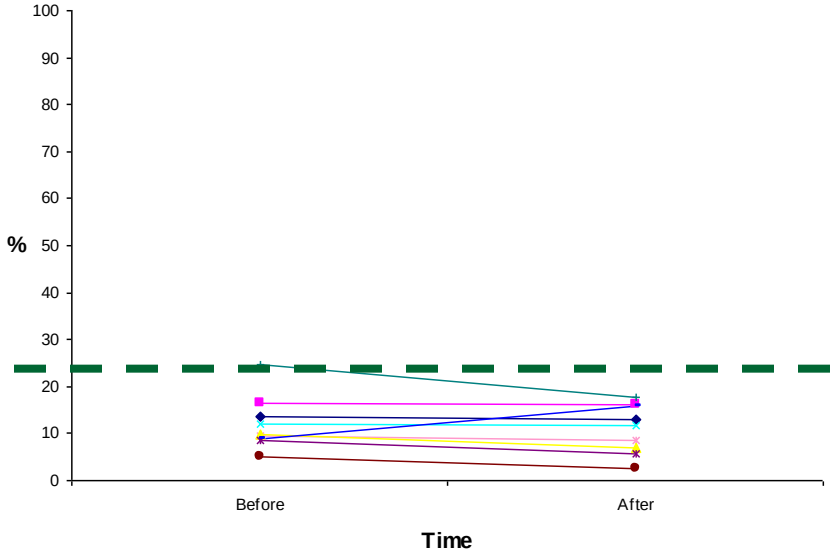


Control

No episiotomy with spontaneous vaginal birth

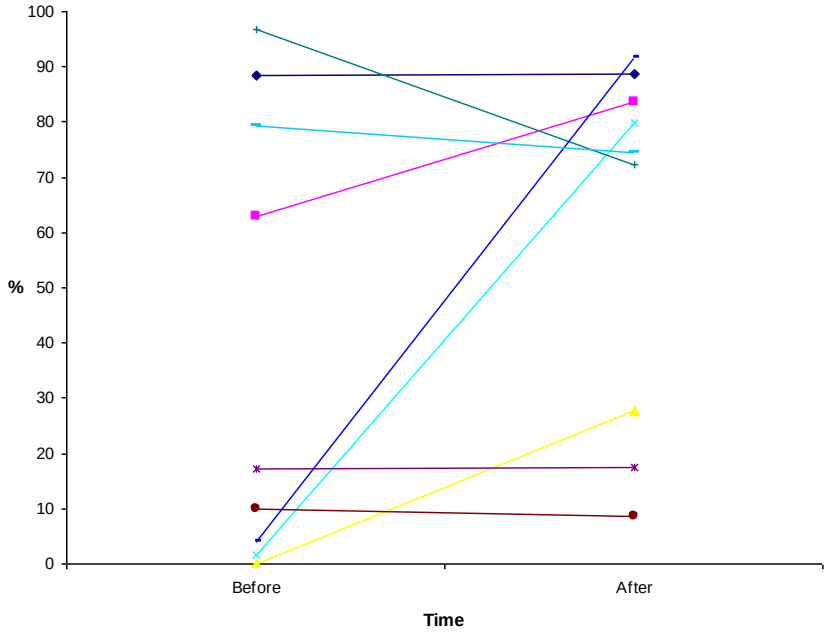


Intervention

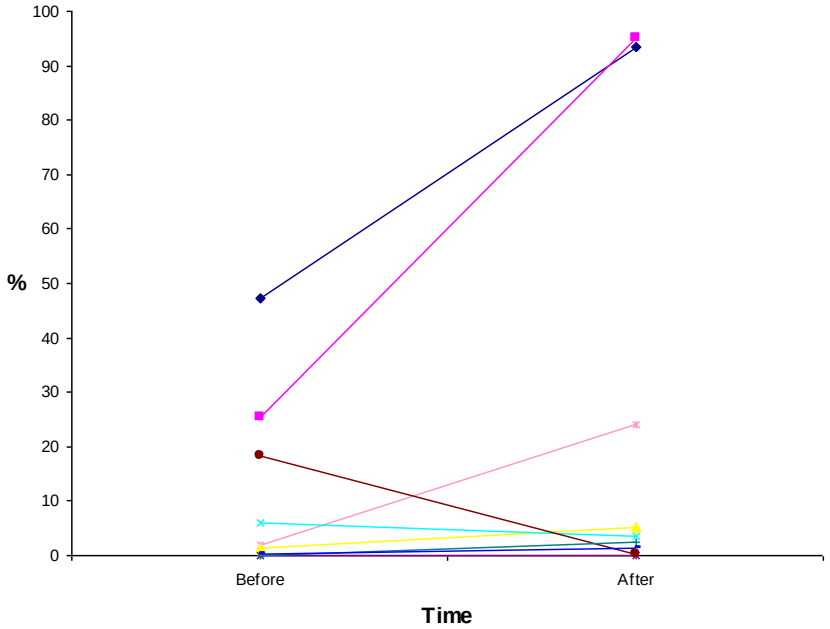


Control

Antibiotics at caesarean section

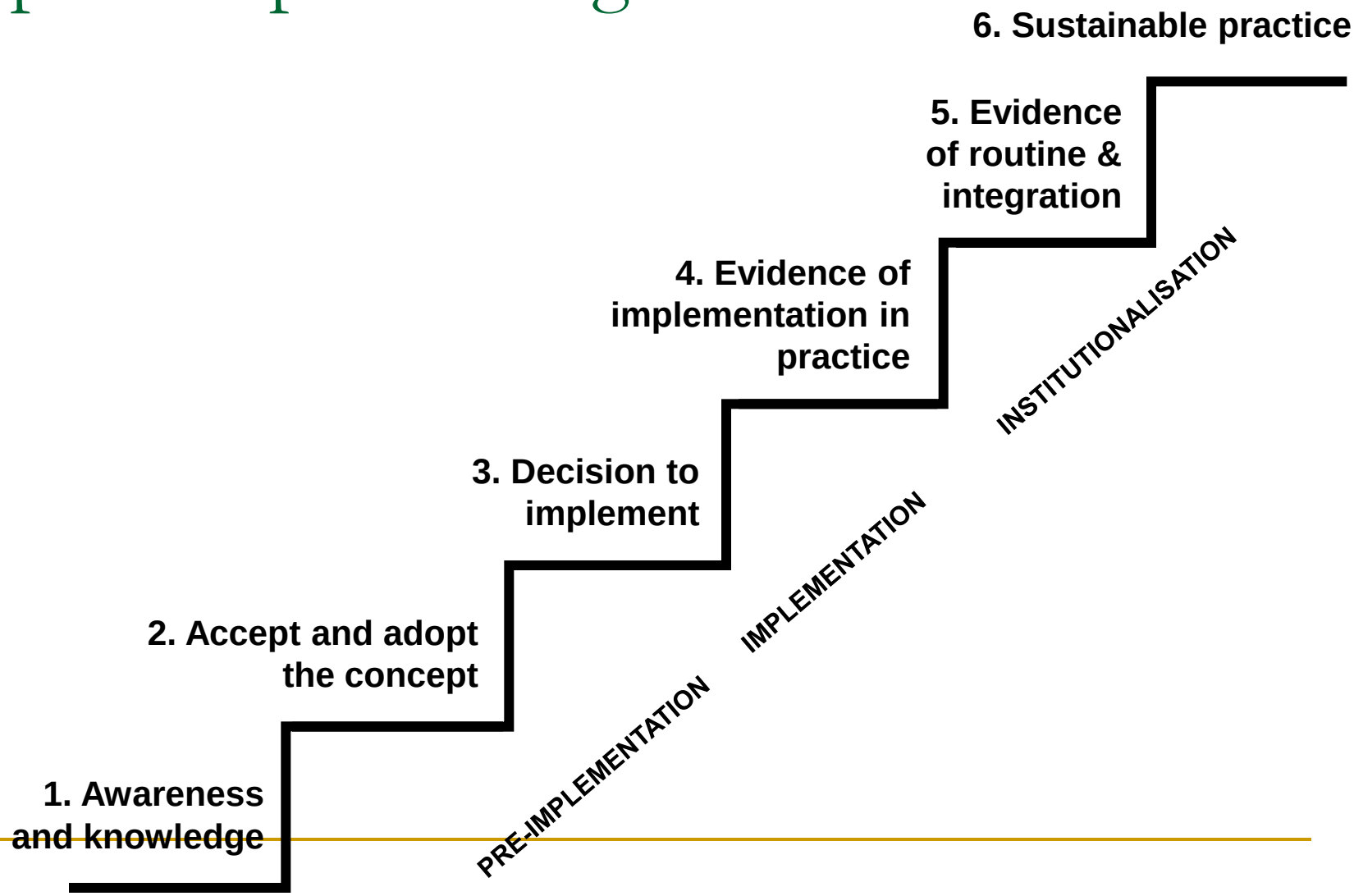


Intervention

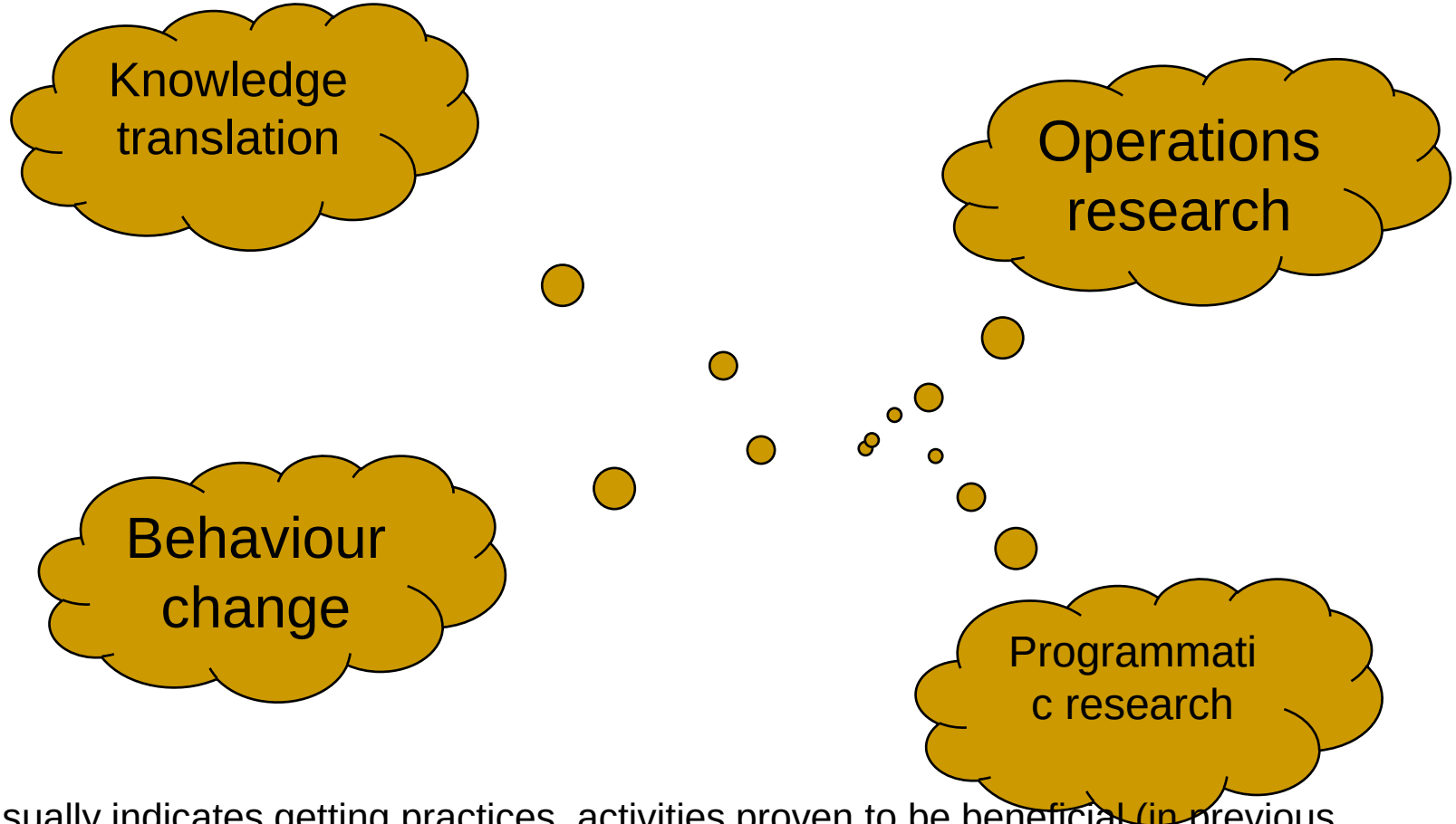


Control

Steps in implementing research evidence



Implementation research – is it something new?



Usually indicates getting practices, activities proven to be beneficial (in previous effectiveness research) into use

Potential barriers to evidence based practice

- Structural (e.g. financial disincentives)
- Organisational (e.g. inappropriate skill mix, lack of facilities or equipment)
- Peer group (e.g. local standards of care not in line with desired practice)
- Individual (e.g. knowledge, attitudes, skills)
- Professional - patient interaction (e.g. problems with information processing)

Changing provider behaviour

- Commonly educational approaches have been used in attempts to change provider behaviour.
- These assume that key barriers relate to individual professionals' *knowledge, attitudes and skills*.
- Usually there is more than one barrier operating at multiple levels.

Interventions to change behaviour

- **Distribution of educational materials:** distribution of published or printed recommendations for clinical care, including clinical practice guidelines, audiovisual materials and electronic publications. The materials may be delivered personally or through mass mailings.
- **Educational meetings:** healthcare providers who have participated in conferences, lectures, workshops or traineeships.
- **Local consensus processes:** inclusion of participating providers in discussion to ensure that they agreed that the chosen clinical problem was important and the approach to managing the problem was appropriate.
- **Educational outreach visits:** use of a trained person who met with providers in their practice settings to give information with the intent of changing the provider's practice. The information given may have included feedback on the performance of the provider(s).
- **Local opinion leaders:** use of providers nominated by their colleagues as 'educationally influential'. The investigators must have explicitly stated that their colleagues identified the opinion leaders.

Interventions to change behaviour

- Patient-mediated interventions: new clinical information (not previously available) collected directly from patients and given to the provider, e.g. depression scores from an instrument.
- Audit and feedback: any summary of clinical performance of healthcare over a specified period. The summary may also have included recommendations for clinical action. The information may have been obtained from medical records, computerised databases or observations from patients.
- Reminders: patient- or encounter-specific information, provided verbally, on paper or on a computer screen, which is designed or intended to prompt a health professional to recall information. This would usually be encountered through their general education, in the medical records or through interactions with peers, and so remind them to perform or avoid some action to aid individual patient care. Computer-aided decision support and drugs dosage are included.
- Marketing: use of personal interviewing, group discussion ('focus groups'), or a survey of targeted providers to identify barriers to change and subsequent design of an intervention that addresses identified barriers.
- Mass media: (1) varied use of communication that reached great numbers of people including television, radio, newspapers, posters, leaflets and booklets, alone or in conjunction with other interventions; (2) targeted at the population level.

Guideline dissemination and implementation strategies

- Improvements in direction of effect in 86% of comparisons
- Reminders most consistently observed to be effective
- Educational outreach, audit and feedback and dissemination of educational materials may lead to potentially important effects
- Multifaceted interventions not necessarily more effective than single interventions

Improving evidence base of professional behaviour change

- The good news – changing physician behaviour is possible though current efforts
- Need to move away from one size fits all approach – different interventions needed depending on attributes of behaviour, provider and practice environment
- Need better understanding of:
  - Professional and organisational behaviour change
  - Causal mechanisms of interventions

Choosing interventions

- The bad news - Little empirical evidence to guide choice of intervention to address different barriers -considerable judgement needed!

Conclusions

- Evidence based practice is mediated through provider behaviour within the context of the provider – patient dyad.
- Interventions addressing barriers at different levels may influence provider behaviour.
- Evidence that it is possible to change provider behaviour although effects are modest.
- Poor theoretical understanding of provider and organisational behaviour.

Moving forward

- Set priorities
- Measure current practice
- Select intervention based on
  - Evidence from systematic reviews
  - Priorities and,
  - Barriers
- Evaluate interventions systematically