

How to find out what works: *an exploration of key methodologies*

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Overview

- ◆ Sceptical about conventional approach to evidence base practice and the research underlying it
- ◆ Approaching this by exploring the perspective of the user of research
- ◆ Covering:
 - ◆ Systematic Reviews
 - ◆ Randomized controlled trials
 - ◆ Realist approaches
 - ◆ Ongoing feedback

My Perspective

- Interested in how research can help practice and policy be better
- EBP specifically interested in understanding causal relationships – whether service X produces outcome Y
- Mistake to situate EBP at the level of the individual practitioner – generalisable knowledge best for service level decisions
 - How would an individual practitioner use evidence on what intervention to use? Or interpret a specific risk factor?
- EBP is about how services use evidence to deliver good practice

Is there a mismatch between the evidence
we produce and what is needed?

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This workshop takes perspective of a research user

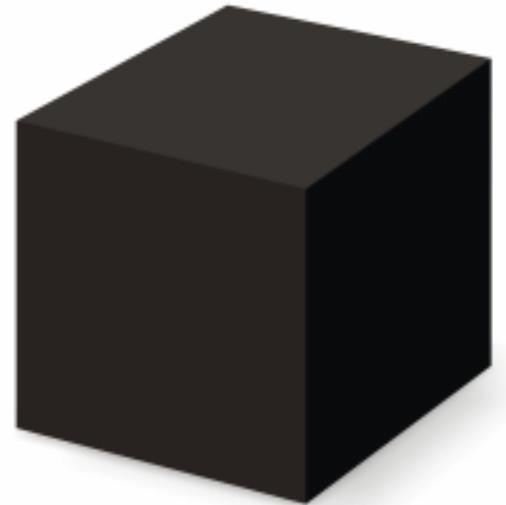
- 🔴 You are the head of a service for vulnerable families in Hong Kong
- 🔴 Concerned increasing numbers of children being removed from their families
- 🔴 Wondering whether more could be kept at home
- 🔴 What should he or she do?

This workshop takes perspective of a research user

- You look at the website of Centre for Interdisciplinary Research in Evidence Based Practice...
- Realise need a Systematic Review
- Find a Scoping Review of all the literature on what works to reduce the need for care
- And related to that a Meta-analysis of a positive intervention – Intensive Family Preservation Services

Intensive Family Preservation Services

- Service aimed at keeping children at risk of serious harm at home
- Crisis intervention model:
 - A crisis an opportunity to change
 - Very intense, short term work
 - Using multiple methods – from practical help to family counselling



Summary of the Meta-analysis of IFPS

- ◆ Before and after studies found 80-100% remained at home
- ◆ Large Randomized Controlled Trial (RCT) found... no difference
- ◆ But subsequent RCTs and quasi-experimental studies tended to find a positive difference
- ◆ Though a very complicated and varied pattern of results – seems it tends to work but often does not

First Task:

What are the strengths and limitations of using this Review in deciding whether to set up the service in Hong Kong?

Strengths and limitations of the systematic review

Strengths:

- ◆ Shows that IFPS can work – somewhere at sometime
- ◆ This is important... a good starting point

But...

- ◆ Why do the outcomes vary so much?
- ◆ Could it be quality of implementation?
- ◆ Would it work here in Hong Kong? Why might it? Why not?
- ◆ What happens to the “service as usual” group?

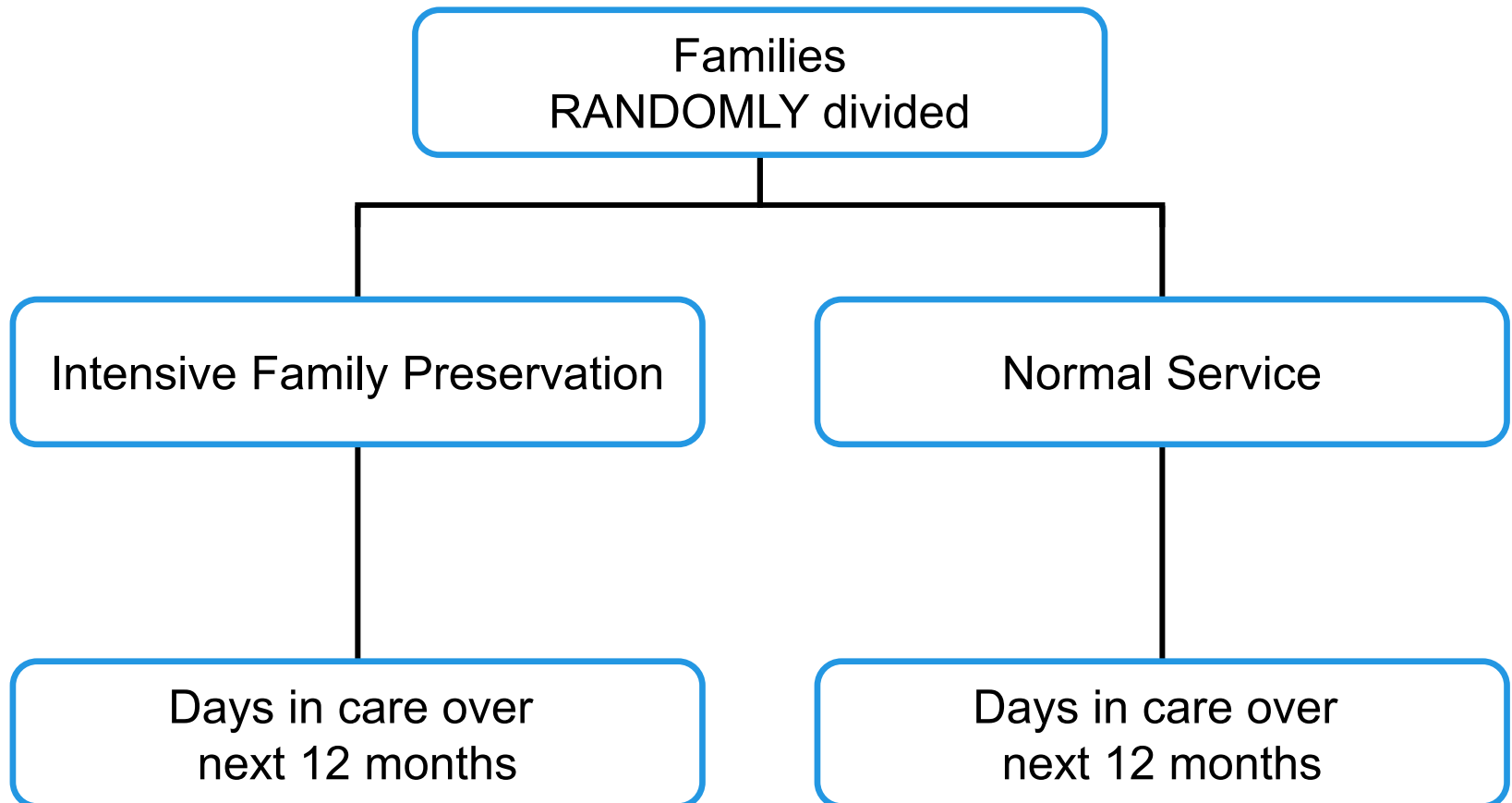
Next step... an RCT in Hong Kong

Excited about the potential of IFST – but concerned it may not work in HK you decide to set up IFST but carry out an RCT on it

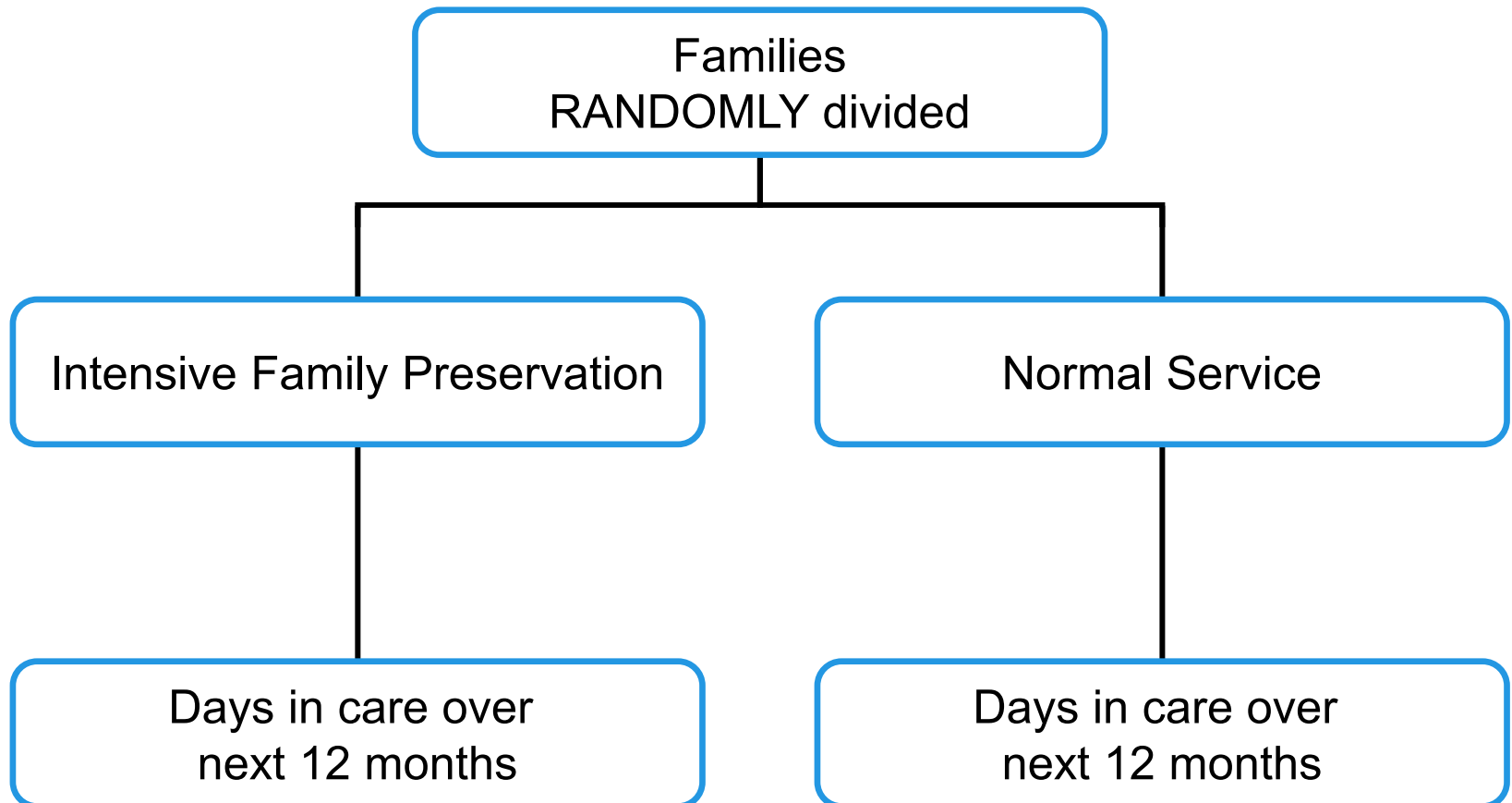
You approach the excellent Centre at Shue Yan University to conduct that with you

The RCT takes the following form....

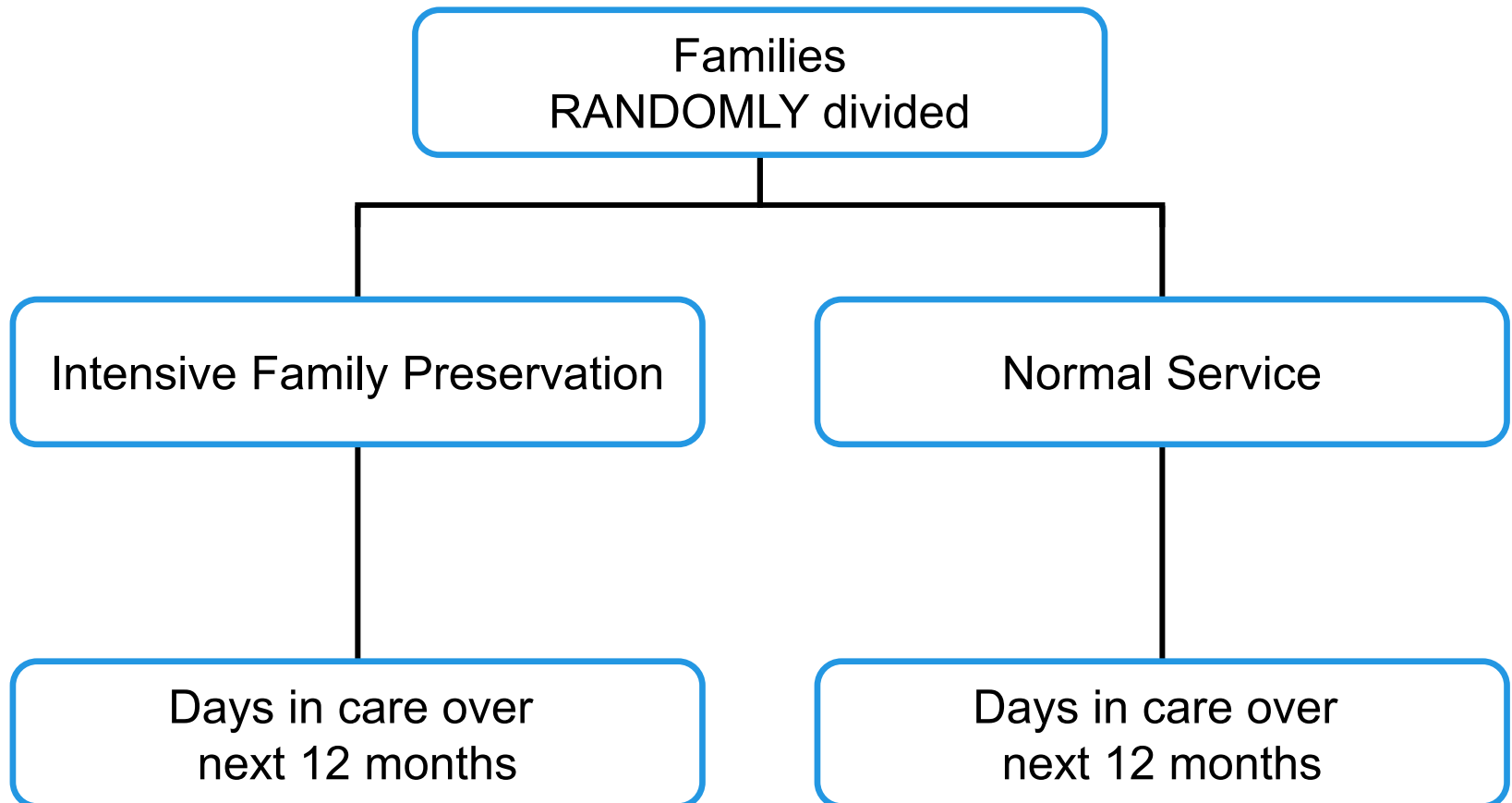
The Hong Kong IFPS RCT



What are pros and cons of this design?



Pros: establishes causality – tough test of effectiveness



Quite a few cons

- ◆ Is it ethical? (clinical equipoise or rationing)

The biggest ones are interpreting the results:

- ◆ If you get a no difference – or no statistical difference – result... what would that mean?
- ◆ If you get a positive result – what would that mean?

Quite a few cons

- ◆ No difference might mean:
 - ◆ Implemented badly
 - ◆ Did not fit HK – or was not adapted appropriately
 - ◆ Or adapted in ways that took out the effectiveness
 - ◆ Or alternative services work well already
 - ◆ Or the reasons children are removed are different in HK eg
 - ◆ Cultural differences
 - ◆ You only take action in very serious instances
 - ◆ Or... who knows

Quite a few cons

- ◆ A positive result means that IFPS caused a positive outcome during the study period
- ◆ But can we conclude it is working now the study is over... or in 12 months... Or when the charismatic manager has left... Or you have moved on from your leadership role?
- ◆ The problem is we still do not know why it “worked” – or understand why it might not work

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- ◆ RCTs prove causality at one point... But do they provide generalisable evidence?

Realist evaluation and the promise of mid-level theory

- Realist evaluation critiques the theory of causation embedded within EBP
 - Probabilistic
 - Deterministic
 - Atheoretical
- Without explaining causation we cannot make claims to generalisability

Realist evaluation and the promise of mid-level theory

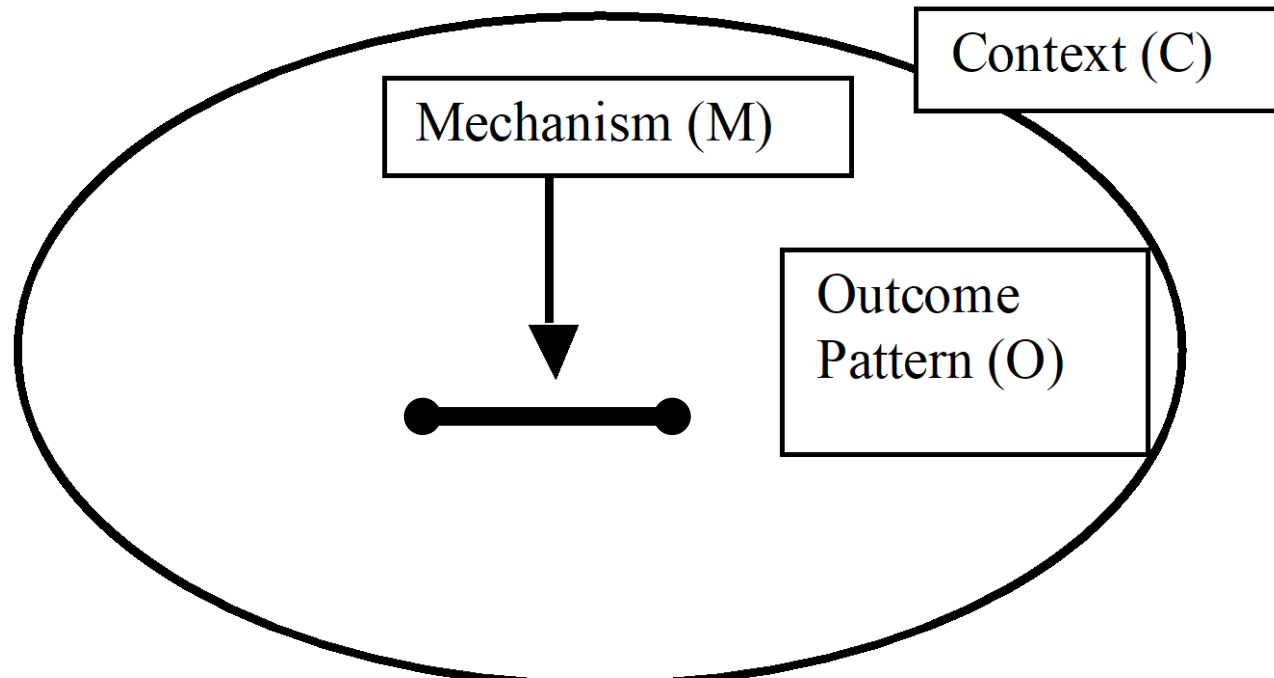
- Start not with method but with theory:

“It is the power of conceptual abstraction that provides investigative memory. It allows research to move from one context to another, one substantive area to another and still allows for learning and transferability as the same explanatory ideas are tested and retested, shaped and reshaped.”

Pawson, 2008

- “what works, for whom, in what circumstances and why”

Mechanism, Contexts, Outcome Patterns (MCO)



Generative causation

- 🔥 Explain mechanisms that cause patterns of outcomes
- 🔥 Causation is about human agency – or at least the reasons, feelings, ideas that influence what people DO
- 🔥 The mechanism explains what happens to influence people's thoughts, feelings, motivations etc.
- 🔥 Causal explanations are propositions – that mechanism/s, in particular contexts produce certain patterns of outcome
- 🔥 Realist evaluation is theory led, mixed method, usually iterative and can be co-produced

So let's imagine we did a Realist RCT

- ◆ As well as the RCT – we did Realist evaluation
- ◆ Understood why IFPS worked – and contextual factors
- ◆ Provides a rich picture of what is needed to make IFPS work, with two key elements:
 - ◆ Effective targeting children genuinely at risk of care
 - ◆ Very high focus on quality of service (which it specifies)

So – at last – are we doing
evidence based practice?

Can we now be confident that
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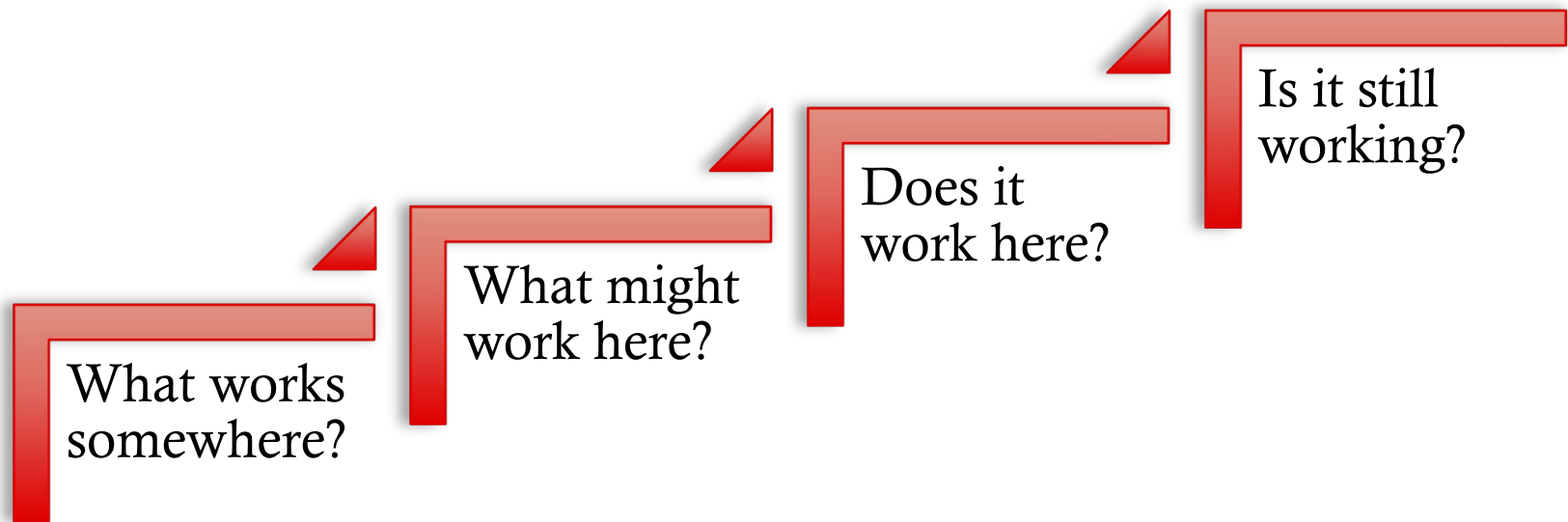
If not, what do we need to do!

We need to constantly evaluate...

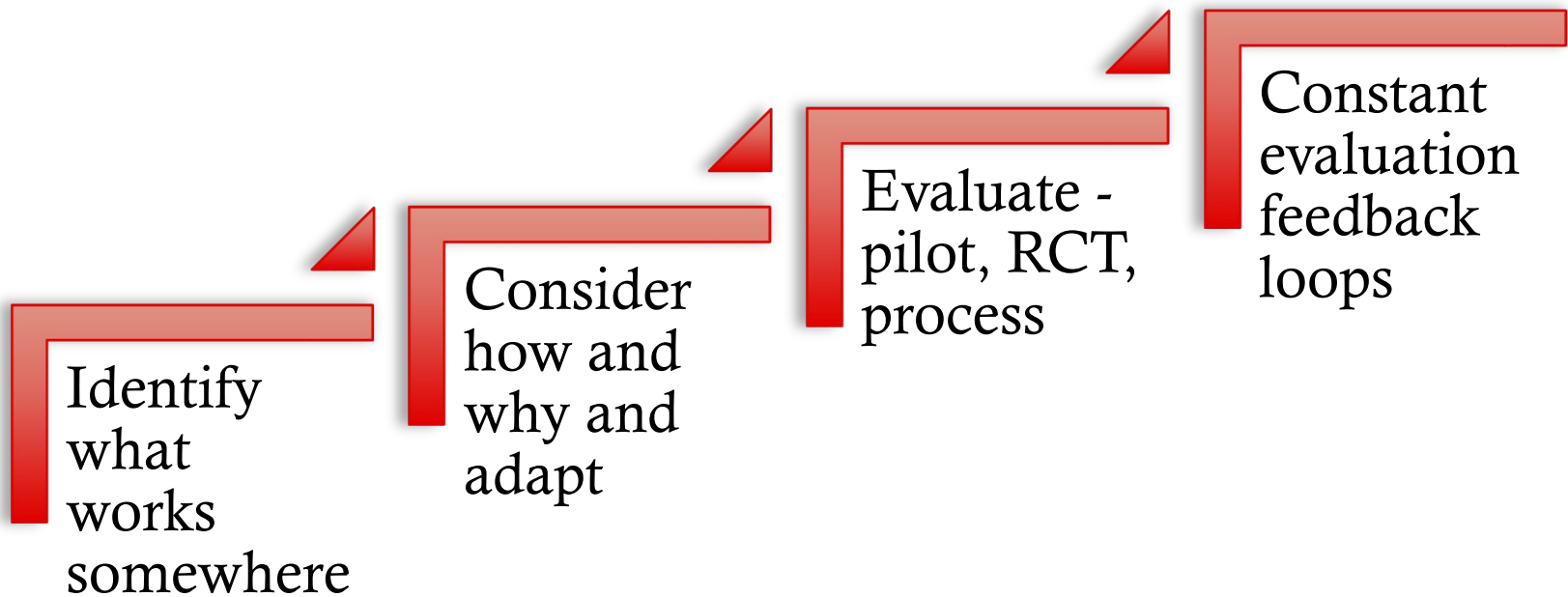
Constant evaluation of service quality involves:

- Testing quality of delivery (various ways)
- Outcomes (again, in various ways)

Stages of EBP



Stages of EBP



Concluding Comments

Evidence based practice is not the
move from unanswered questions
to unquestioned answers

It is not a simple or an easy “fix” with “off-the-
shelf” solutions

Concluding Comments

Rather it is a complicated discipline in which we seek to:

- ◆ Identify the best existing evidence
- ◆ Carefully assess its application to the setting we are in
- ◆ Evaluate the impact of changes we introduce
- ◆ Put in place ongoing monitoring of impact to inform service delivery

This seems the least the people we work with should be able to expect

References

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See also:

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