

Raising the standard of evidence

Tools and techniques to improve
implementation and measure impact

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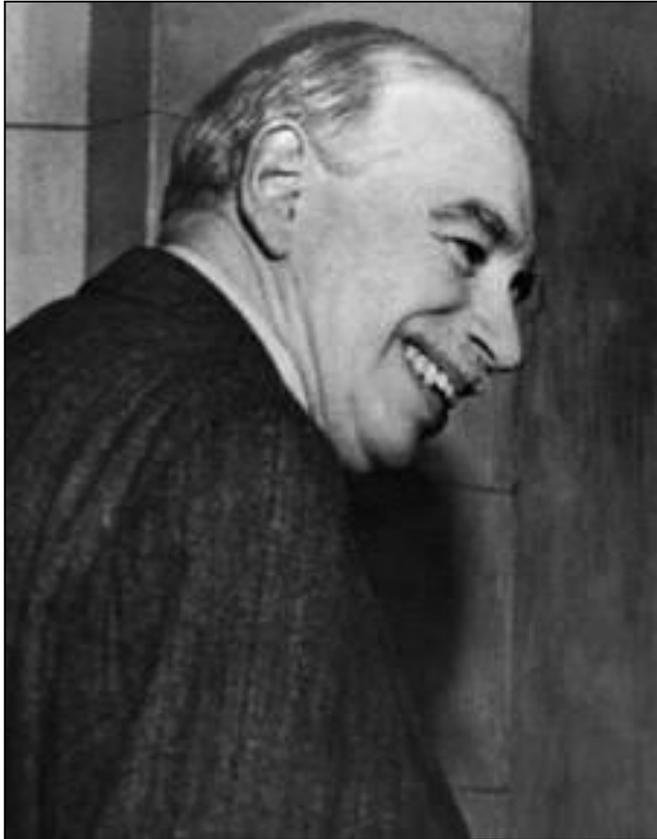
Raising the standard of evidence

Task

On each table:

- Introduce yourselves and your project
- Select one project to use as an example

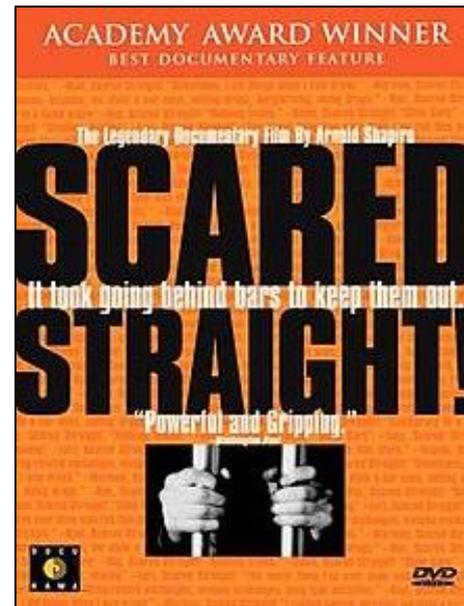
Reviewing your evidence base



John Maynard Keynes

“There is nothing a politician likes so little as to be well-informed.”

“It makes decision making so complex and difficult.”

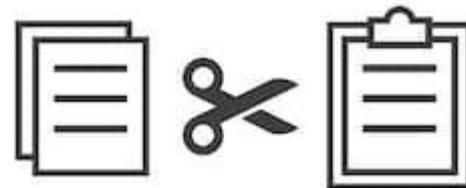


Reviewing your evidence base

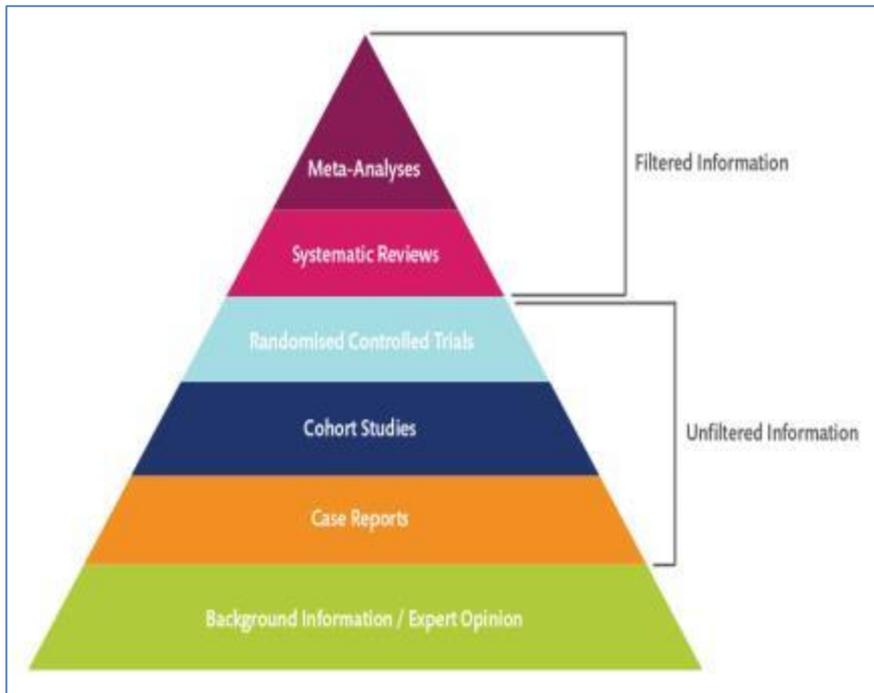
“What works?”

Watch out for:

- Cherry picking
- Cut and paste



Reviewing your evidence base



Campbell Policy Brief No.4
November 2017

The effects of sentencing policy on re-offending A summary of evidence from 12 Campbell systematic reviews

Over 10 million people around the world are in penal institutions. That number has increased by 20% since 2000, faster than the rate of population growth. Politicians in many countries continue to call for policies which are tough on crime: more and longer sentences, and harsher prison regimes. Do such policies achieve a safer society? Or does prison have a criminogenic effect, making it more likely that ex-prisoners will continue a life of crime?

Overall the evidence shows that recidivism by offenders given non-custodial sentences is no higher, if not lower, than those given custodial sentences. The evidence from

The brief in brief

Prison populations are growing around the world. However, custodial sentences do not reduce recidivism by any more than non-custodial approaches, which are cheaper and have fewer consequences for offenders' families. Diverting offenders before they enter the system is likely to produce less offending. Harsh prison regimes such as boot camps are not effective. Evidence also shows that programmes focused on specific issues such as drug use and sex offenders reduce recidivism.

- Centre for Ageing Better: www.ageing-better.org.uk
- College of Policing: www.college.police.uk
- Early Intervention Foundation: www.eif.org.uk
- Education Endowment Foundation: www.educationendowmentfoundation.org.uk
- National Institute for Health and Care Excellence: www.nice.org.uk
- Wales Centre for Public Policy: www.wcpp.org.uk
- What Works Centre for Local Economic Growth: www.whatworksgrowth.org
- What Works Centre for Wellbeing: www.whatworkswellbeing.org
- What Works Scotland: www.whatworksscotland.ac.uk

What
Works
Network

Reviewing your evidence base

Systematic Review

Rapid Evidence
Assessment

Ad hoc searching



Most rigorous

Least rigorous



REAs compared with SR:

- Less exhaustive search
- Narrower inclusion criteria
- Limited critical appraisal

But:

- Can be done in a matter of weeks
- More rigorous than ad hoc searching

Reviewing your evidence base

Task

Thinking about your project:

- How strong or weak is the evidence base?
- Where would you look for evidence about what has worked elsewhere?
- If you need to commission a review of the evidence, who would you ask?

Impact and process evaluation

Evaluation Questions

Impact

- Did our smoking cessation service work?
- How many people stopped smoking as a result?



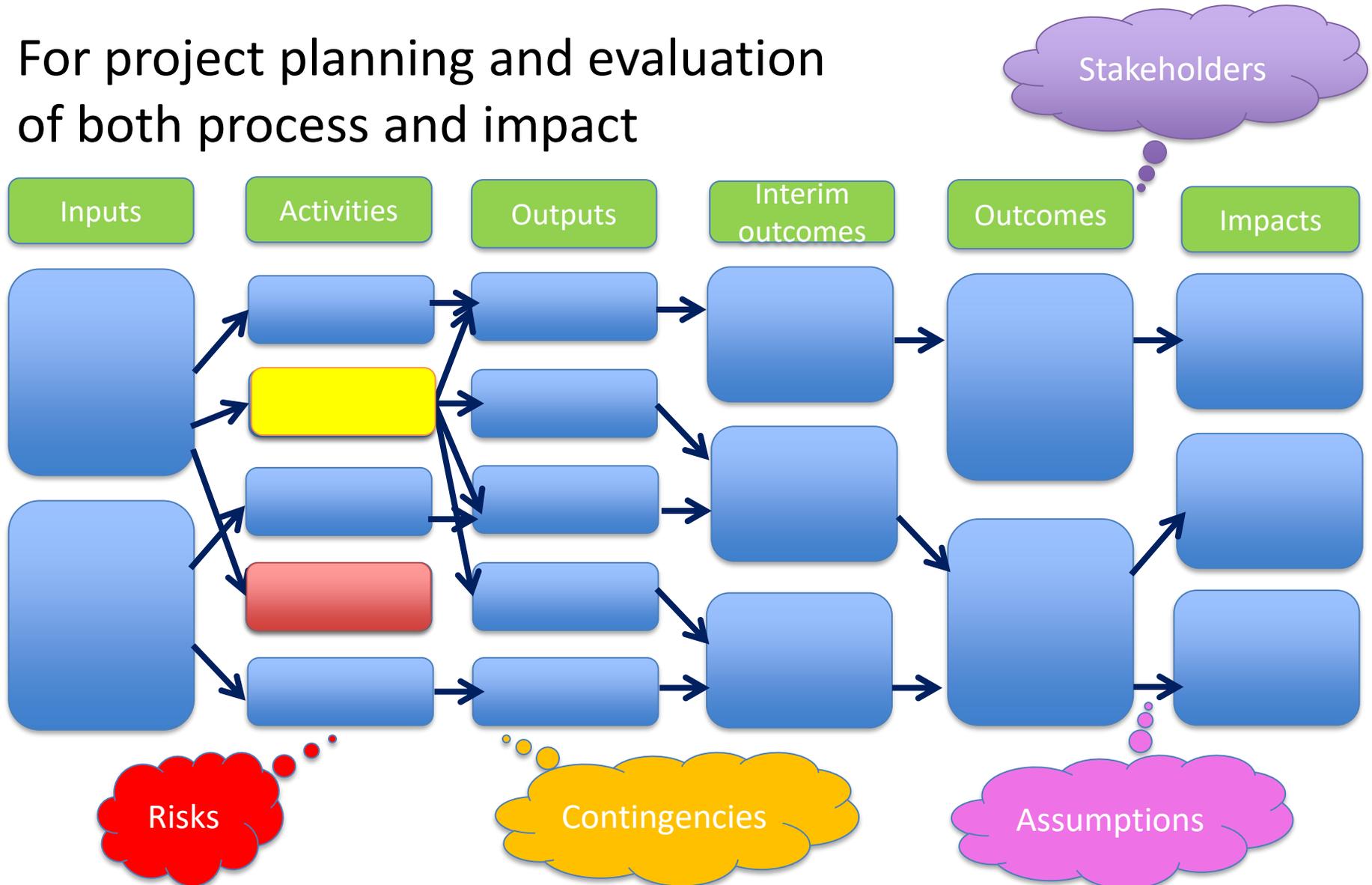
Process

- Was the service implemented as planned?
- What are the barriers and enablers?
- How can we improve implementation?

Use in combination

Theory of Change

For project planning and evaluation of both process and impact



Assessing implementation

Implementation

The **process** by which an intervention is put into practice

Why evaluate implementation?

- Context is important
- Formative, ongoing and iterative
- Identify enablers and barriers to achieving impact
- Powerful combination of Y/N with how & why
- Distinguish a poor idea from poor implementation

Process evaluation

Implementation

- What activities are delivered? [Quantity of activity]
- How are they delivered? [Quality of activity]
- Who received the intervention? [Reach of activity]

Mechanisms of impact

- How did participants interact with the intervention?
- Did the intervention lead to anticipated outputs?

Understanding the context

- Are there any contextual factors that we had not considered or anticipated?
- How did these affect implementation or mechanism of impact?

Process evaluation: exploring multiple perspectives

Participants

- Service users, beneficiaries
- Perceived strengths and weaknesses of intervention
- How intervention brought about change (or not)

Implementers

- Practitioners
- Extent to which training is implemented as intended
- Barriers and enablers

Gatekeepers and stakeholders

- Senior management & broader stakeholders
- Identify broader / institutional barriers and enablers

Implementation assessment methods

	Quantitative	Qualitative
Active	Self-report questionnaires	Focus groups / In-depth interviews
Passive	Analysis of routine data	Observation

There is no one best way

Assessing implementation

Task

- How will you assess the **implementation** of your intervention (i.e. the link between activities and outputs)?
 - Who will you collect data from?
 - At what stages will you collect it?
 - How will the data be analysed and used?

Measuring outcomes

- Are we making a difference?
- How big is the difference?
- Should we scale this up?
- **Combine with a process evaluation** → Not seeing the anticipated changes in outcomes?
May be due to implementation issues



Measuring outcomes

Before and after comparisons



How would we know that any changes observed were due to our intervention, and not other factors?

Establish a counterfactual

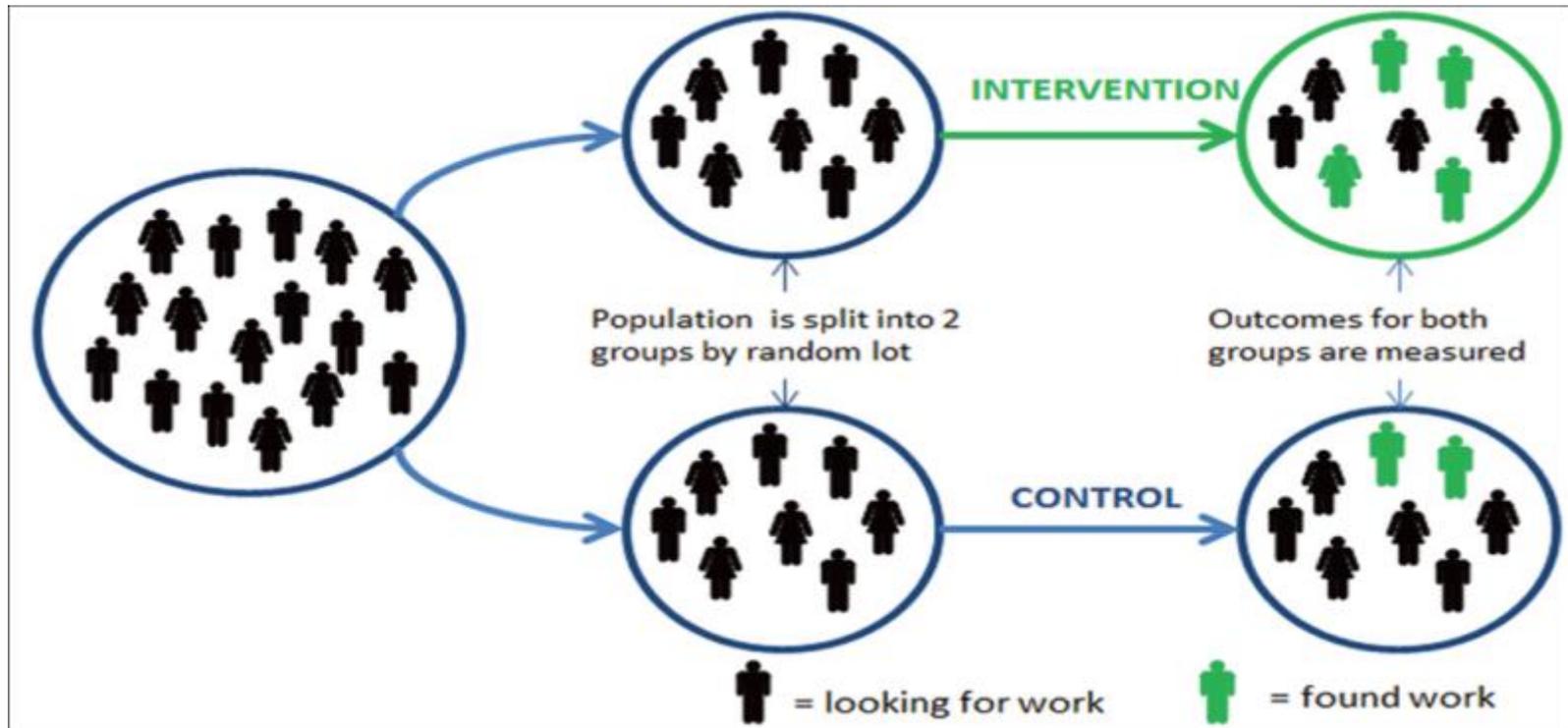
Randomised Control Trials

- Participants randomly assigned to **control** or **intervention** group



- Why randomise?
 - Should create statistically identical groups
 - Only difference is one gets intervention and the other doesn't

Randomised Control Trials

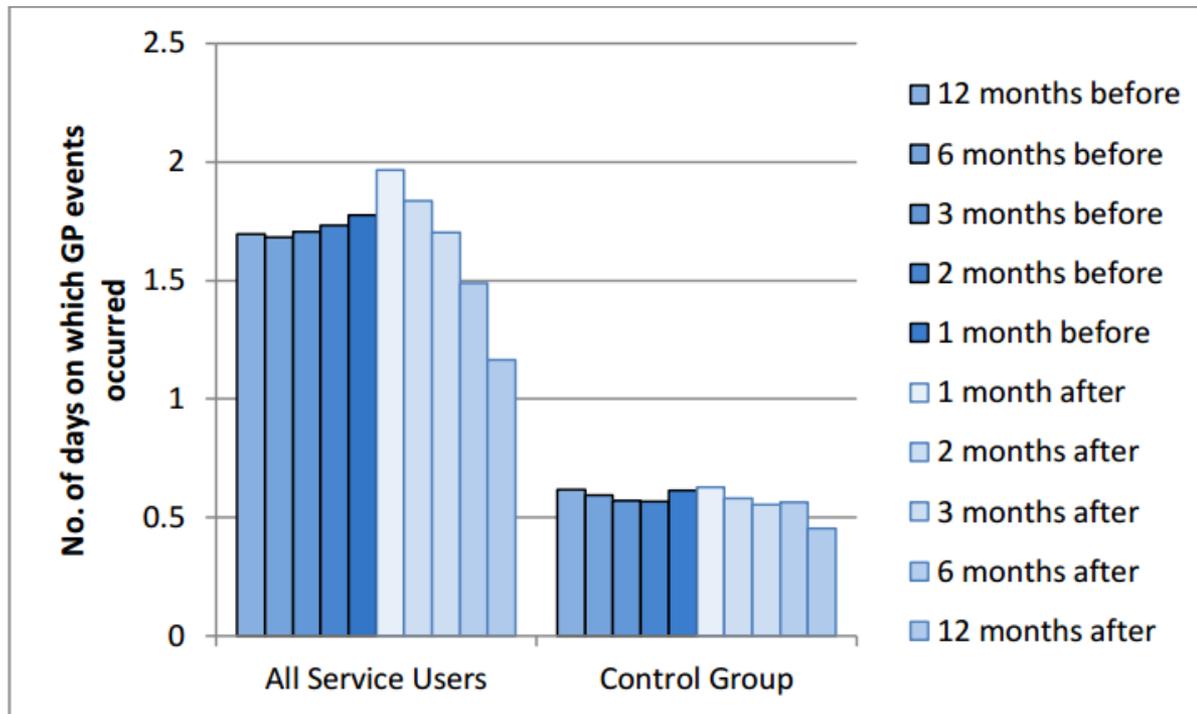


1. **Randomise** population into groups A and B
2. **Pre-test:** collect baseline data for groups A and B
3. **Intervention** given to group A
4. **Post-test:** collect data for groups A and B (any differences observed between the two groups due to intervention)
5. **Follow-up tests** at 6 and 12 months: Were differences in outcomes sustained over time?

Finding a control group

- Those who don't quite meet the threshold to receive intervention
- Individuals with similar characteristics in other geographic areas

Chart 7.1 Number of days on which GP events occurred per record in the months before and after being referred to Supporting People



Measuring outcomes



When to collect data

Pre, post and follow up measures

Pre and post measures

Post-intervention measure

Estimating the counter-factual

Randomise participants into intervention and control groups

Participants and find a 'quasi' control group

Participants only



Measuring outcomes

Task

Thinking about your project:

- How could you estimate the counterfactual?
 - Control group?
- At what points in time could you collect outcome data?
 - Pre, post and follow up?

The start of a journey...

Will you need further support?

Can Data **Cymru** (and other national partners) help?

Our current thinking

- Develop some simple guidance on evaluation – we'll publish this shortly
- Provide advice and guidance on collecting, sourcing and using data effectively
- Helping you with your qualitative data needs
- Helping you make sense of your data
- Providing bespoke local support for planning and delivering your evaluation

What else?

Resources

Data Cymru evaluation guidance

<http://data.cymru>

What works network

<http://www.gov.uk/guidance/what-works-network>

Designing experiments for public services

<http://ylab.wales/>

Research practice guide

<http://www.nesta.org.uk/toolkit/using-research-evidence-practice-guide/>

DECIPHER (evaluating health interventions)

<http://decipher.uk.net/>