Developing robust indicators to measure programme outcomes

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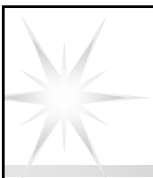School of Population Health
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Rationale for developing indicators of impacts - 1

- For many evaluations no suitable measure of intended programme impacts available
- Evaluation team often has to develop own customised measures
- Indicator development complex and time consuming
- Evaluation budget may not allow for systematic indicator development

Rationale for developing indicators of impacts - 2

- Indicators used for evaluating outcomes of social programmes often less than optimal
- Indicator development can be seen as a specialist area within evaluation
- Rare for indicators to be relevant across multiple social programmes and services
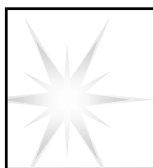
What are indicators?

- Direct and valid statistical measure which monitors levels and changes over time for social concerns (OECD, 1976).
- Performance indicators for specific projects and programmes
- Social indicators for larger social goals

Indicators: Domains of focus

- Family well-being
- Social capital
  - Social cohesion & trust vs alienation
  - Community identity & sense of community
  - Perceived efficacy & sense of competence
- Health
  - Physical and mental health
  - Improvements in health

Priorities for general indicators

- Available for use across diverse projects
- Comparisons with national data segmented by age, gender, ethnicity etc
- Culturally appropriate for multiple ethnic groups
- Suitable for use in NZ & Australia

Robust indicators

- Valid across diverse participants (e.g., education, ethnicity, gender, age)
- Consistent with known causal relationships
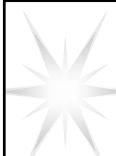- Remain valid over time

Relevant indicators

- Have content (face validity)
- Link to intervention goals & outcomes is plausible for multiple stakeholders
- Can show changes in time frame of intervention & evaluation
- Feasible for gathering data (cost, accessibility, intrusion)
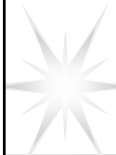
Potential indicators of family violence

- **Victimisation surveys** (self-reports)
- Admissions to A & E services which are identified as FV-related
- Number of clients at women's refuges
- Police call-outs to FV incidents
- Self reports of use of violence
- Social/community workers reports

Family violence in NZ
1996 survey - partner violence items

- Any partner **ever actually used force** or violence on you, such as deliberately kicked, pushed, grabbed, shoved **...**
- Any partner **ever threatened** to use force or violence …
- Any partner ever deliberately **destroyed or threatened to destroy** your belongings in a way that frightened you

- Any partner **ever used a weapon** against you such as a knife or gun
- Any partner ever **made you carry out any sexual activity** … by holding you down or hurting you ...
- Any partner ever made you carry out any **sexual activity** when you did not want to, by **threatening** you ...

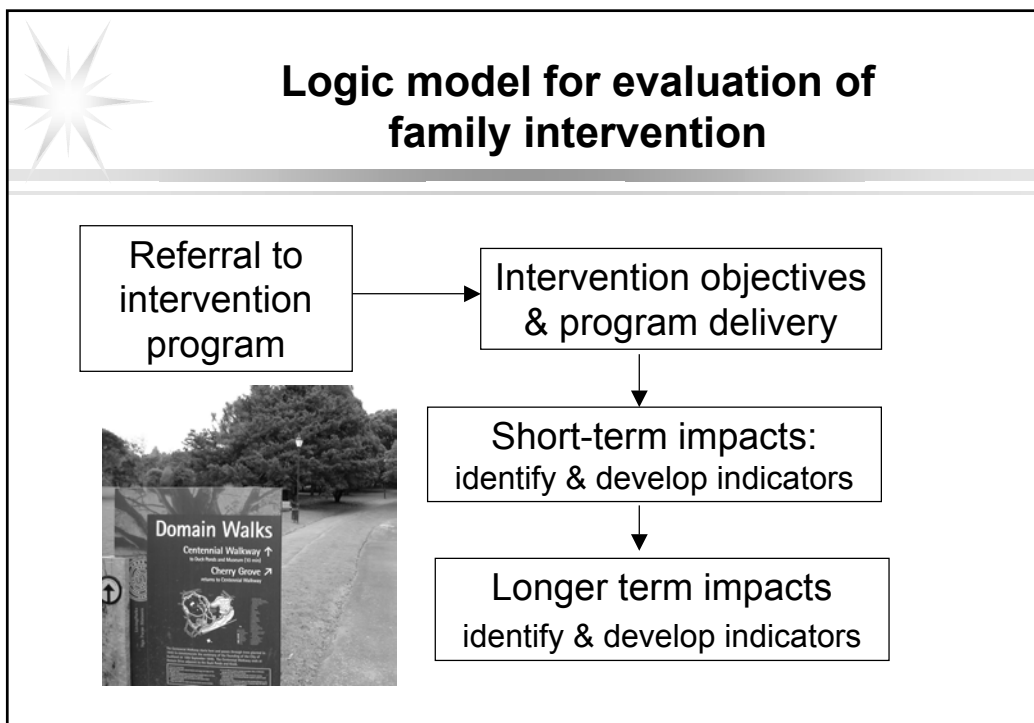Source: Young, W., Morris, A., Cameron, N., & Haslett, S. (1997). *New Zealand national survey of crime victims 1996*. Wellington: Victoria Link, Victimisation Survey Committee. Table 2.16

Prevalence of partner violence -
Ever experienced 1 or more types

Pakeha (European) male   6.8%

Pakeha (European) female   14.6%

Maori male   11.9%

Maori female   26.9%

Source: Young et al 1997, Table 2.16

Logic model for evaluation of family intervention

Referral to intervention program → Intervention objectives & program delivery

↓

Short-term impacts: identify & develop indicators

↓

Longer term impacts identify & develop indicators

Domain Walks
Centennial Walkway ↑
Cherry Grove ↗

Developing indicators for interventions with at-risk families

Programme objectives	Possible indicators
Family members have competencies to cope with signif. life events	Family members rate strengths & coping at acceptable level. Sense of control over everyday events
Family attend to health needs in a timely manner	Use medical services when needed. Reductions in smoking Reduction in chn exposed to smoke
Parent-child relationships	At least one parent has caring relationship with the child Use appropriate child management
Social contact & support	Amount of contact with family & friends Someone to talk to about personal things

Modelling change over time

- **Lead indicators** – predict future level on other indicators (truancy->youth crime)
- **Coincident indicators** – indicate current state of phenomena
- **Lagging indicators** – delayed outcomes from earlier events (childhood obesity resulting from dietary patterns and physical inactivity)
  (cf Armstrong & Francis, 2003, p. 22)

## Examples of indicator development in NZ

- Quality of life: Six NZ Cities (BigCities)
  - Mostly telephone surveys
- The Social Report 2001, 2003 (MSD)
  - Multiple sources includg Census & MoH survey
- NZ National Health Survey 1996/97
  - SF36 physical and mental health
- NZ Health Information System

The Social Report 2003:
Safety: 4 indicators

- child abuse and neglect
- criminal victimisation
- safety perceptions
- road casualties
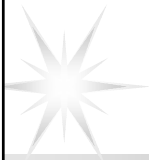
The Social Report 2003
Social connectedness - Description

- People enjoy constructive relationships with others in their families, whanau, communities, iwi and workplaces.
- They are able to participate in society through sports, arts, and other recreational activities.
- Contributions to social connectedness through unpaid work and caring are valued.
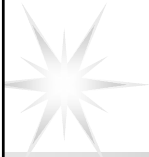
The Social Report
Social connectedness – 4 Indicators

- participation in family/ whänau activities and regular contact with family/friends
- membership & involvement in groups.
- unpaid work outside the home
- access to the internet

Social connectedness & Community cohesion

Social Rpt – Soc Con

- Unpaid work
- Participation in family/ whänau activities
- Membership and involvement in groups
- Access to the internet

BigCities Com. Cohes

- Unpaid work
- Contact with neighbours
- Community works together & support each other
- Recognition of diversity

The Social Report
Cultural identity – 4 Indicators

- participation in cultural & arts activities
- proportion of Mäori language speakers
- proportion Mäori & Pacific chn receiving Mäori/Pacific medium education
- local content on television

The Social Report 2003:
## Health indicators

- Independent life expectancy
- Life expectancy at birth
- Dependent disability
- Suicide
- Cigarette smoking
- Obesity

Quality of life - Six NZ Cities 2001
Health Indicators

- Infant mortality
- Birth weights
- Immunisation
- Suicide
- Mental illness
- Physical activity
- General practitioners per 100,000 population
- Meningococcal disease & tuberculosis
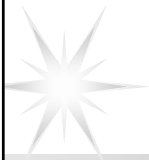
Comments on national social indicators development

- Useful start in providing regional and national data on small number of indicators
- What should be strategic priorities for inclusion of specific indicators?
- What new indicators need to be included?
- Role of social & health researchers in developing & promoting specific indicators

Features needed for general indicators for evaluating interventions

- Sensitive to short term change
- Theoretical links to several key aspects of well-being/quality of life
- Suitable for use with small projects and groups (resource costs reasonable)
- Relevant to main ethnic groups

## Culturally appropriate indicators for Maori & Pacific peoples

- Most NZ services & programmes have clients from multiple ethnic groups
- Existing mainstream measures need cultural assessment for Maori and Pacific groups (e.g., SF36, Scott et al)
- Maori-specific measures of key indicators may be useful for mainstream evaluations

  (e.g., Kingi & Durie: *Hua oranga - mental health outcome indicators*)

Conclusions about indicators - 1 Use multiple levels if feasible

- General, national
  - (e.g., SF36, Euroqual, social capital)
- Domain specific - examples
  - violence prevention -> victimisation
  - substance use – smoking rates
- Programme specific (investigator developed)
  - greater sensitivity, less generalisability
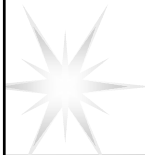
Conclusions about indicators - 2
Communication among users groups

- Monitoring & feedback to indicators groups
  - Social Report (MSD)
  - BigCities group
- Communication among evaluators and other users of indicators
- Sharing of specific measures relevant for Australia and NZ
- Database role for Ministry of Social Development?
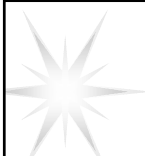
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