Purpose

To be an interactive session that provides an opportunity to discuss the practicalities of:

1. Measuring local change in practice
2. Using and generating evidence in TIS work
3. Gaining access to support on these subjects

In particular, we will aim to understand and use methods for measuring change due to TIS work.
Part 1: Introduction to measuring change
TIS: Key principles

- Outcomes-based
- Place-based
- Evidence-based
- Partnership-building
- Population reach
- Modelling the message
- Monitor and measure
What do we mean by ‘evidence’?

Locally Relevant Services

- Research; studies, surveys, etc.
- Professional experience and insight
- What the target population is showing and telling us

Adapted from Rycroft-Malone et al. 2004
The role of evidence

Evidence influences:
- Professional behaviour
- Organisational behaviour
- Systems behaviour

Services and methods
### Monitoring and measuring for TIS: Key terms

<table>
<thead>
<tr>
<th><strong>Data</strong></th>
<th>Information of any kind that helps us measure changes due to TIS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measure</strong></td>
<td>Ways to show progress toward desired changes</td>
</tr>
<tr>
<td><strong>Data collection</strong></td>
<td>Process used to gather information</td>
</tr>
<tr>
<td><strong>Impact</strong></td>
<td>Desired long-term changes</td>
</tr>
<tr>
<td><strong>Methods</strong></td>
<td>Ways to collect data</td>
</tr>
<tr>
<td>Output</td>
<td>Outcome</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>• What the project produces</td>
<td>• Result and impact</td>
</tr>
<tr>
<td>Native Title agreement</td>
<td>Quality of life improvements from access to country</td>
</tr>
</tbody>
</table>
### Examples: Outputs vs. Outcomes

<table>
<thead>
<tr>
<th>Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoke-free workshops delivered to 100 workers in 10 community organisations</td>
<td>• 85 workers have increased knowledge of benefits of smoke-free workplace and increased commitment to being smoke-free at work</td>
</tr>
<tr>
<td></td>
<td>• 8 Organisations are smoke-free</td>
</tr>
<tr>
<td>Brief intervention training provided to all staff (N=20) in grant recipient organisation</td>
<td>• 20 staff have increased skills to support TIS activities</td>
</tr>
<tr>
<td></td>
<td>• Most staff describe increased confidence when working with community members</td>
</tr>
</tbody>
</table>
Measuring outcomes of TIS

**Output**
- TIS activities

**Outcome**
- TIS impact
As practical examples, we have included three case studies:

- Alive and Kicking Goals
- Apunipima Baby Baskets
- Wadeye Communities for Children

Please can we read them and draw out key points, including differences and similarities (I will explain the aspects to look at carefully)
Part 2: Measuring change in TIS
Levels of measuring change in TIS

National Outcomes

National Indicator 1

National Indicator 2

National Indicator 3

National Indicator 4

National Indicator 5

Local level

GR1

GR2

37

GR3...

CIRCA

National outcomes and process
Steps for measuring change

1. Consider National Indicators
2. Develop Action Plan
3. Work out local measures
4. Decide on methods
5. Collect data
6. Then analyse and present it

What do we want to measure?
How do we want to measure it?
### Effective local measures for TIS

- Measure outcomes, not just outputs
- Use mixed methods
- Represent local TIS strategies
- Align with national indicators (KPIs)
- Cost effective
Identifying local measures for TIS

Local Priorities

National Indicators
National Indicator 1

Quality and reach of community engagement

- Geographical reach
- No. and type of contacts across the population
- No. of meeting groups for specific people e.g. pregnant women
- No. and quality of partnerships

Examples of local measures
Organisations involved in tobacco reduction in the region

No. and quality of partnerships

Quality of networks

New initiatives with other organisations

Formation of coalitions and alliances

Examples of local measures
National Indicator 3

Building capacity to support quitting

- No. and effectiveness of ambassadors, advocates, etc.
- School-based knowledge and support
- No. and effectiveness of brief interventions
- No. and effectiveness of Yarning Groups

Examples of local measures
National Indicator 4

Referrals to appropriate quitting support

- No. and effectiveness of referral pathways
- Outreach to new groups eg in disability and mental health
- Availability and quality of local quitting support
- Effective partnerships with clinical services

Examples of local measures
National Indicator 5

Supporting smoke-free environments

Population reach

Effectiveness of advocacy on smoke-free places

No. of smoke-free homes, cars and workplaces

Compliance with smoke-free agreements

Examples of local measures
Choosing reasonable measures

You are not expected to measure all possible outcomes. When choosing what to measure, it is important to be reasonable in terms of:

**Number**
- How many measures
- What is a reasonable set of measures to include? How can we best decide that?

**Reach**
- What is being measured
- Example – You may not be able to measure whether a school program prevents smoking, but you may be able to observe quality of engagement (KPI1)
Exercise: Choosing local measures

Let’s draw on the whiteboard the ‘expected outcomes’ and ‘Measuring change/impact’ columns of approved or draft Action Plan.

Then we will discuss options the number and approach to each measure, depending on the progress you have already made.
Part 3: Designing data collection
Data that tells a story

**Quantitative**
Numbers that tell us a little about a lot of people

**Qualitative**
Conversation that tells us a lot about a few people

**Mixed methods**
Both reach and detail
Making use of existing data

How can you draw from existing data to tell a story of change?

• What are useful sources of information?
• How are they relevant to your local TIS activities?
• What connections can we make between different data we collect?
• Where are the gaps?
# Data collection methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>Using <strong>existing data</strong></td>
<td>Efficient but needs access</td>
</tr>
<tr>
<td>(eg. referrals, sales of cigarettes)</td>
<td></td>
</tr>
<tr>
<td><strong>Surveys</strong>, including online and social media</td>
<td>Flexible, adaptable but questions need care</td>
</tr>
<tr>
<td><strong>Case studies</strong> (eg. Janine’s story of reducing and quitting)</td>
<td>People-centred, based on relationships</td>
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<tr>
<td><strong>Focus groups</strong> (eg. school students or mums and bubs)</td>
<td>In-depth and enables opinions and subtle changes to be picked up</td>
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<td><strong>Interviews</strong> (eg. council workers, AHWs, school principals)</td>
<td>Enables a community focus</td>
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Key considerations for collecting data

- Community research fatigue
- Sample sizes
- Ethics (‘do no harm’)
- Population coverage
- Judgement needed

Community research fatigue
Sample sizes
Ethics (‘do no harm’)
Judgement needed
Population coverage
Choosing and combining methods

**Quantitative**
- **Numbers** that tell us a little about a lot of people
- **Survey** about smoke-free homes
  - Large sample size and reach, but gives limited information

**Qualitative**
- **Conversation** that tells us a lot about a few people
- **Focus group** at parent support meeting
  - Small sample size and reach, but rich data

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Data that tells a story
Ethical Considerations

- Conflicts of Interest
- Informed Consent
- Social Research
- Cultural appropriateness
- Monetary incentives

See also: Ethics Guidelines from the Australasian Evaluation Society
Do I need ethics approval?

Does the activity pose a risk to:

- Privacy or well-being of participants?
- Professional reputation of providers or organisations?

Then YES. For further info

- [Link: Human Research Ethics Committees with focus on Aboriginal and Torres Strait Islander populations](#)
Exercise: Designing data collection

Returning to the examples of monitoring in practice

- Alive and Kicking Goals
- Apunipima Baby Baskets
- Wadeye Communities for Children

What could data collection methods look like for your TIS program?
Problem-solving in design for data collection

Examples for discussion:

- We want to do lots of interviews after an event, but only three staff are available.
- We can’t seem to get people to respond to our survey.
- We are finding it hard to understand how well we are reaching men/women.
Part 4: Measuring change in practice
Using research methods

- Surveys
- Interviews
- Focus groups
- Case studies
Focus Groups

- Small samples
- Enable variety of questions and exploration of answers
- Rich, complex data
River of time method for focus group discussions
Surveys

- Reach (and require) large samples
- Limited exploration of answers
- Simple to analyse, but limited data
- Can be done online and via social media (i.e. Survey Monkey)
Interviews

- Very small samples
- Very rich data
- Time intensive
- Can be done via phone/skype
Case Studies

Examine stories, e.g.

- Individuals who have quit
- Homes becoming smoke-free
- Workplaces staying smoke-free
- Partnerships and networks
Developing research questions

**Quantitative**

*Numbers* that tell us a little about a lot of people

Answer questions of:
- How many?
- How often?
- How much?

Useful for comparison

**Qualitative**

*Conversation* that tells us a lot about a few people

Target questions to gain information that is hard to gather from quantitative data:
- How?
- Why?

**Mixed methods**

Both reach and detail
Exercise: Using data collection methods

Let’s do some practice sessions for the methods, especially interviews, case studies and focus groups.

The TIS Portal will shortly have short videos showing examples.
**Discussion: Data Collection Methods**

Thinking about your local TIS program, what are the pros and cons of each method?

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Part 5: Analysing data for TIS
For TIS, analysis of data means...

Typical approaches to analysis

- Relationships
- Cause and effect
- Inconsistencies, outliers, etc.
- Trends

...so we can measure local change
Data analysis for TIS: Objectives

- Effectiveness of local TIS activities in relation to outcomes
- Performance on national indicators
- Performance on locally-specific indicators
- Telling the *story of change* – what is behind the indicator?
## Methods of analysis

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Descriptive</strong></td>
<td>Describes range, trends, and themes of responses</td>
<td>Example: How many people accessed NRTs following referral from TIS?</td>
</tr>
<tr>
<td><strong>Pre- and post-activity</strong></td>
<td>Measures change before and after intervention</td>
<td>Example: What did students know about tobacco-related risks before TIS school program? What did they know after?</td>
</tr>
<tr>
<td><strong>Content analysis</strong></td>
<td>Identify key themes that explain what the data tells us</td>
<td>Example: Group together key issues participants raise during a focus group using quotes and examples from the discussion</td>
</tr>
<tr>
<td><strong>Observation</strong></td>
<td>Evaluator attends an event and records what they see/hear</td>
<td>Example: Describe the reactions of people who blow into a smokerlyzer at a TIS event</td>
</tr>
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</table>
Interpreting data

As much art as it is science.

Example: if your data shows both high unemployment and high rates of tobacco use, concluding that unemployment causes smoking is overly simplistic.
## Data analysis in practice

<table>
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<tr>
<th>Method</th>
<th>Analysis</th>
</tr>
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<tbody>
<tr>
<td>Using <strong>existing data</strong> (eg. referrals, sales of cigarettes)</td>
<td>Descriptive, pre-/post-activity</td>
</tr>
<tr>
<td><strong>Surveys</strong>, including online and social media</td>
<td>Descriptive, pre-/post-activity</td>
</tr>
<tr>
<td><strong>Case studies</strong> (eg. Janine’s story of reducing and quitting)</td>
<td>Content analysis, observation (e.g. visits to quit-support groups)</td>
</tr>
<tr>
<td><strong>Focus groups</strong> (eg. school students or mums and bubs)</td>
<td>Content analysis, observation (e.g. body language), pre-/post-activity</td>
</tr>
<tr>
<td><strong>Interviews</strong> (eg. council workers, AHWs, school principals)</td>
<td>Content analysis, pre-/post-activity</td>
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Exercise: Analysing data

As with the previous exercise, let’s work through examples of how we can analyse information from surveys, interviews and focus groups in particular.

Again, if ready at the time of this workshop, the TIS Portal has some short videos on the subject.
Questions and discussion
Part 6: Presenting and reporting data
Purpose of presenting data

- Learn and share what works (and what doesn’t)
- Show accountability (→ sustain funding)
- Help improve the program
- Communicate achievements and challenges
- Celebrate progress
  - TIS team
  - Partners
  - Community
Reporting

Local measures

• Aligned with Action Plan

National reporting

• Using IAHP reporting template
Once information is collected, it can be presented in different ways according to local preferences.

<table>
<thead>
<tr>
<th>Age</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children 0 – 4</td>
<td>286</td>
</tr>
<tr>
<td>Children 5 – 14</td>
<td>483</td>
</tr>
<tr>
<td>Young adults 15 – 24</td>
<td>420</td>
</tr>
<tr>
<td>Adults 25+</td>
<td>922</td>
</tr>
<tr>
<td>Total Population</td>
<td>2,111</td>
</tr>
</tbody>
</table>

Simple numbers

Bar chart

Pie chart
Example of a Dashboard

WADEYE
Stronger Communities for Children
Community Dashboard

1. Good Start
Children have a good start in life and grow up healthy.
1.1 Pregnant mums going to clinic for check ups.
   - 41%

1.2 Pregnant mums who don’t smoke.
   - 49%
   *This is the NT remote average as data for Wadeye is not yet available.

1.3 Mums aged 18 years and older.
   - 90%

2. School
Children engage with school and have success in their learning.
2.1 Children ready for school learning.
   Australian Early Developmental Index (AEDI) (2012) children aged 5 years.
   - 26%

2.2 Children needing special learning support.
   AEDI (2012) children aged 5 years.
   - 55%

2.3 Children attending school regularly.
   - 54%

2.4 Children keeping up with their school learning.
   - Literacy
   - Numeracy

2.5 Vocational Education and Training (VET) in school enrolments.
   There were 23 VET in school enrolments in 2012.

3. Safety
Children and young people are loved and safe.
- Percentage of kids 10-18 in trouble with the law
- Annual rate of repeat youth offending
- Annual rate of substantiated child protection reports
- Percentage of children in families where family violence is reported

What’s the local story?
Example of a dashboard adapted from Stronger Communities for Children

Pregnant mums who don’t smoke

Community = 49%
State average 82%

Don’t smoke
Smoke

Dashboards are a good way of showing progress over time
Tools and templates

MONITORING AND EVALUATION
Examples of charts and data visualisations

Link to templates on the TIS Portal:
Exercise: Presenting and reporting data

In this exercise, we are going to invent some typical data and then work out how best to present it using the methods shown in previous slides.

Then let’s describe the pros and cons of each method.
Questions and discussion
Part 7: Planning for local measurement
Next Steps

- Schedule for local measurement
- Dates for delivering local data
  Next national reporting date
- Further support needs?
- Follow-up contact with NBPU
  maria@communityworks.com.au
  [each of CW-NPBU team to replace my e-mail address with their own please!]
Additional online resources

- TIS Portal
- Community Toolbox
- Better Evaluation
Measuring progress in partnerships: The Three Frames

Relationship
• Safe, trusting environment for sharing insight

Performance
• Clear and measurable picture of what is needed to achieve goals

Alignment
• Identifies blockages within or between organisations that inhibit performance
Designing measures of gradual progress: Outcome Mapping

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision</td>
<td>• Large-scale change to which the program hopes to contribute</td>
</tr>
<tr>
<td>Mission</td>
<td>• Statement of how the program will support achievement of vision</td>
</tr>
<tr>
<td>Boundary Partners</td>
<td>• Key entities that will interact with the program to generate change</td>
</tr>
<tr>
<td>Outcome Challenge</td>
<td>• Description of how each partner would be behaving if the program achieved its full potential</td>
</tr>
<tr>
<td>Progress Markers</td>
<td>• Graduated set of indicators advancing from early expectations, to moderate influence, to profound influence</td>
</tr>
<tr>
<td>Strategies</td>
<td>• Actions taken by the program to generate outcomes</td>
</tr>
</tbody>
</table>
Choosing what to measure: Theory of Change

- Pathway for change
- Story of cause and effect
- Activities
- Risks and Assumptions
- Outcomes