Using (Reach and) Results Chains to Understand (Plan, Measure and Evaluate) Complex Multi-level Interventions

The Evaluation Centre for Complex Health Interventions

Steve Montague, Partner
Performance Management Network Inc.
steve.montague@pmn.net
Agenda

• The Problem – our mental models are too simplistic

• The (Proposed) Solution
  – (Reach and) Results Chains
  – Contribution Analysis
  – Results Planning
  – Multi-level Application
Theories of Change and Results Logic

• Describing policies and programs in terms of results logic is a 40 year (+) tradition

• Various formats used, but current ones tend to:
  – Be linear
  – Miss outside factors (context)
  – Focus on how and what (not who)
Logic Model Implications

• Start with issues / implications
• Recognize ‘communities’ / systems and behaviours in them
• Acknowledge ‘engagement’ and ‘feedback’ as key results elements
• How might an alternative logic model look?
The [International] ‘Classic’ Results Logic
– Rogers 2006

Certain resources are needed to operate your program. If you have access to them, then you can use them to accomplish your planned activities. If you accomplish your planned activities, then you will hopefully deliver the amount of product and/or service that you intended. If you accomplish your planned activities to the extent you intended, then your participants will benefit in certain ways. If these benefits to participants are achieved, then certain changes in organizations, communities, or systems might be expected to occur.

Your Planned Work

1. Resources/Inputs
2. Activities
3. Outputs
4. Outcomes
5. Impact

Your Intended Results
The [Canadian] ‘Classic’ Results Logic

Activities

Outputs

Immediate Outcomes

Intermediate Outcomes

Long-term Outcomes

Overall Long-term Objectives

steve.montague@pmn.net
Reach Defined

- Reach is defined as the target that a given program or organization is intended to influence, including individuals and organizations, clients, partners, and other stakeholders.
Logic Models and Frameworks Without Reach

1. Lack sensitivity to the impacts on different participant groups
2. Miss engagement as an important result
3. Do not recognize reach vs. results tradeoffs
4. Conspire against equity issues
Consider an Example

Activities
- Consultations / Promotions
- Assessments and Delivery of Funding

Outputs
- Information
- Grants

Outcomes
- Services used by target communities
- Community health improved

Impact

Contact: steve.montague@pmn.net www.pmn.net
The Findings From 3 Year Review

Activities

- Consultations / Promotions
  - Done on time – no complaints

- Assessments and Delivery of Funding
  - Assessments show compliance with pre-established protocols
  - Grants rolled out a bit slowly but within historical norms

Outputs

- Information
  - Rolled out information according to plans

- Grants

Outcomes

- Services used by target communities
  - Overall usage and user satisfaction a bit low but within norms

Impact

- Community health improved
  - No appreciable changes to overall health statistics (too early?)

steve.montague@pmn.net

www.pmn.net
Adherence, Averages and Aggregations
Hide the Reality and Hinder Analysis

• The information generated:
  – Quantifies process and speed
  – Averages and aggregates use and acceptance (e.g. satisfaction)
  – Gives broad statistics on longer term outcomes
  – These measures mask the real situation for key processes and results for key groups
  – A more precise implementation and results logic (with reach) can enlighten
A General Results Map

The long term desired outcome or ‘state’ relating to health

Immediate and intermediate outcomes, in terms of the engagement, awareness, take-up (use), capacity and actions of organizations, institutions, communities and individuals who are directly ‘in touch’ with the organization

Inputs, activities and outputs within the organization’s own sphere of control

**SPHERE OF INDIRECT INFLUENCE**

**SPHERE OF DIRECT INFLUENCE**

**SPHERE OF CONTROL**

‘The Terrain’

Conditions / Factors

- Socio-economic, political, technological, environmental factors
- Existing practices
- Existing capacity
- Current support ‘climate’
- Existing relationships
- Organizational, systems, activities and resources

‘Check Points’

Progress Indicators

‘State’ or level of health, disease, incidence etc.

# or % of entities or individuals showing (intended) actions / adoptions

Level (%, #) of participation by key stakeholders, and their constructive early ‘reactions’ (e.g. take-up, expressed feedback)

# of outputs (information, $, service transactions)

Delivery milestone achievement

Level of expenditure

www.pmn.net

steve.montague@pmn.net
Conditions-Results-Indicators: A G&C Program to Improve Health of At Risk Group

SPHERE OF INDIRECT INFLUENCE

The long term desired outcome or ‘state’ relating to the health impacts

SPHERE OF DIRECT INFLUENCE

Improved health practices in specific at risk group

Improved ability to cope in specific at risk group

Improved support climate for specific at risk group

Improved relationships between groups and participation in program offerings

SPHERE OF CONTROL

Inputs, activities and outputs within Ministry / Department / Agency sphere of control: investment and delivery of new (improved) programming

Conditions / Factors

Determinants of Health

1. Income & social status
2. Social support networks
3. Education & literacy
4. Employment & working conditions
5. Social environments
6. Physical environments
7. Healthy child development
8. Biology & genetic endowment
9. Health services
10. Gender
11. Culture

12. Personal health practices & coping skills

Existing practices
Specific gaps in health practices
Gaps in existing capacity
Gaps in coping skills
Current support ‘climate’ gap
Gaps in existing awareness of resources, relationships and program participation
Organizational, systems, activities and resources

Expected Results ‘Terrain’

‘State’ or level of health, disease, incidence etc. Improved health status in target group

# or % of entities or individuals showing (intended) actions / adoptions / adaptions to address gaps and cope

Level (%), #) of participation by key stakeholders, and their constructive early ‘reactions’ (e.g. take-up, expressed feedback)

# of outputs (information, $, service transactions)

Delivery milestone achievement

Level of expenditure

Progress Indicators

Progress Indicators

# or % of entities or individuals showing (intended) actions / adoptions / adaptions to address gaps and cope

Level (%), #) of participation by key stakeholders, and their constructive early ‘reactions’ (e.g. take-up, expressed feedback)

# of outputs (information, $, service transactions)

Delivery milestone achievement

Level of expenditure

steve.montague@pmn.net

www.pmn.net
An Example [Quasi-Hypothetical]

The Problem:
Information suggests that a key segment of the Canadian population faces a preventable health risk. There are both science related knowledge gaps and gaps in the policies, practices and programming of intermediary groups (including policy makers and program delivery agents at various levels of government and in related non-government organizations).

The Solution:
A Information and Support Program to Improve the Health of an ‘At Risk’ Group

A health promotion / disease prevention program is initiated to reach a key “at risk” community to help them achieve health improvements. This can be represented as a logical sequence as follows:

1. Consultations are held with both science and public health intermediaries
2. Initial information on the program is provided to organizations / institutions eligible to deliver in conjunction with / on behalf of the Agency
3. Consultation / information is provided to target ‘at risk’ community
4. Organizations / institutions eligible to deliver services to target community appropriately apply for funding
5. An agreement is signed and appropriate resources are used by organizations / institutions deemed eligible and deserving of assistance from the Agency
6. Assisted delivery organizations demonstrated the capacity, ability, skills competence, capability and commitment to deliver appropriate services to target community
7. Service delivery is integrated, coordinated and appropriately targeted to the ‘at risk’ community
8. Target community members become better aware of risks and / or key factors and available supports and resources
9. Target community members (in sufficient #s, appropriately) use resources and services
10. Target community members gain the ability, skills competencies and ultimately the ‘capability’ to cope and to take actions to reduce their risks
11. Target community members adopt and / or adapt actions to lower their health risks
12. Health is improved in target community

steve.montague@pmn.net
The Logic of the Problem (preventable harm, risk or threat)

Key segment of the Canadian population faces health risk

- **Science Community**
  - Gaps in knowledge and knowledge base re: specific risk and appropriate preventative practices
  - Gaps in sources of intelligence on the risk
  - Gaps in consistency of data and infrastructure regarding the specific risk

- **Public Health Intermediaries**
  - Gaps in policies, programs and protocols to reduce the health risk
  - Gaps in public health intermediaries capacity (knowledge, abilities, aspirations) policies, protocols, SOPs and programs re: specific risk

- **Individuals / Target Communities**
  - Target communities are ill-informed about the health risk, unprepared, subject to mistaken prevention practices

Consultations, information exchange, coordination, facilitation, direct support ($ and service), regulatory instruments

Research and Science, synthesis / analysis, capacity building, promotion / communication

Program Investment and Activities (including internal services that support them)
The Logic of the Solution (a support program to reduce harm)

**Science community** provides information, intelligence, guidance, advice and support

- **Appropriate surveillance information available**

**Public health intermediaries** take actions (policies/programs/services etc.) coordinated, integrated and targeted at “at risk” community

- **Show capacity to address / respond to target community needs**
- **Sign service agreements with Agency and use resources**
- **Apply for support**
- **Gain awareness of and use Agency information / knowledge products**

**Target communities and individuals** adopt practices which reduce health risk

- **Gain knowledge and capacity (and commitment) to address / respond to risk**
- **Use (equitable, in sufficient #s and appropriate) to resources and services**
- **Become aware of risk factors / knowledge of available resources and services in target “at risk” community**

**Reduction of health risk for key segment of Canadian population**

**Constructive engagement of stakeholders (coordination / collaboration)**

- **Consultations held with science, public health and other intermediaries**
- **Consultations and information provided to “at risk” community**

**Health promotion (disease reduction) program**

- **Gain awareness of and use Agency information / knowledge products**

---

**Legend**
- **Direct Influence**
- **Control**
- **Contributing Influence**

---

steve.montague@pmn.net
Making it Practical for Monitoring and Evaluation

• O.K. That shows us systems and non-linear relationships....

BUT

• I like my straight lines and boxes!
• Can we acknowledge ‘systems’ while keeping it (relatively) simple?
Government Department (funding agency) determines need.

Government Department (funding agency) invests in program(s).

1. Consultations are held with both science and public health intermediaries

2. Initial information on the program is provided to organizations / institutions eligible to deliver in conjunction with / on behalf of the Agency

3. Consultation / information is provided to target ‘at risk’ community

4. Organizations / institutions eligible to deliver services to target community appropriately apply for funding

5. An agreement is signed and appropriate resources are used by organizations / institutions deemed eligible and deserving of assistance from the Agency

6. Assisted delivery organizations demonstrated the capacity, ability, skills competence, capability and commitment to deliver appropriate services to target community

7. Service delivery is integrated, coordinated and appropriately targeted to the ‘at risk’ community

8. Target community members become better aware of risks and / or key factors and available supports and resources

9. Target community members (in sufficient #s, appropriately) use resources and services

10. Target community members gain the ability, skills competencies and ultimately the ‘capability’ to cope and to take actions to reduce their risks

11. Target community members adopt and / or adapt actions to lower their health risks

12. Reduced health risk / health is improved in target community

---

A. Appropriate information, understanding and analysis of problems convert into appropriate investment

B. Sufficient, appropriate and consistent funding and program assistance

C. Agendas remain consistent with key co-deliverers, groups are able to understand each other

D. Support climate allows for clear, timely accurate useful information on nature of risk and options to address it to be shared and understood

E. Economic, management and political circumstances allow for appropriate (health and other) sector and community involvement / participation

F. Key sector proponents have the capacity and commitment to apply for targeted assistance

G. Proponents have ‘will’ and ability to carry through on commitments

H. Delivery organizations and others have the appropriate context and conditions to cooperate and coordinate on services

I. Messages / information / supports are ‘attractive’ and compelling to target communities / users in at risk community given their context and conditions to follow through on use of resources and services

J. Target groups have broad economic, social, policy and sector supports and conditions to support and use

K. Target groups have social, policy and other supports and capacity to continue to use services and to gain capabilities

L. Target groups have the appropriate support network, ‘will’ and means to translate capacity into action

M. Net benefits to target communities occur from adopted behaviours, no mitigating or compensating factors occur
Making it Practical for Results Planning

• O.K. That’s fine for evaluation, how can I use this to change planning?
• Can complex systems needs, reach and results chains be part of planning?
• Can we address multi-levels?
Case: The Canadian Cancer Society

- Fund raises for own operations (Very low dependence on Government $)
- Huge volunteer base (both core and occasional)
- Prevention, Advocacy, Information, Support Services + Research (funding large institute)
- Facing high complexity + diversity in terms of mandates, issues and challenges across Canada
Monitoring and Evaluation (M&E)

• Support to Carver Policy Governance
• Multiple Contexts (from policy/advocacy to direct service delivery)
• Board ends reporting (often a business culture) mixed with public health ‘operational improvement’ culture
• Strong evaluation tradition – applied at the program level by outside academically based organization
A Basic Results Chain With Key Questions

Program (Results) Chain of Events (Theory of Action)

1. Inputs
2. Activities and outputs
3. Engagement / involvement
4. Reactions
5. Knowledge, attitude, skill and / or aspirations changes
6. Practice and behavior change
7. End results

Key Questions

1. How much does our program cost? ($, HR etc)
2. What do we offer? How do we deliver?
3. Who do we reach? Who uses / participates?
4. Are clients satisfied? How do people learn about us?
5. What do people learn? Do we address their needs?
6. Do we influence [behavioural] change?
7. What is our impact on 'ends'?

Indirect Influence
Direct Influence
Control

A Related Sequence of Needs / Problems

A related sequence of problems:
Summary: Thousands of members of Community Y put themselves at risk of skin cancer due to excessive exposure to the sun’s UV rays. This can be shown as a sequence of issues as follows:

- The incidence of sun-related cancers is rising in Community Y.
- Community Y shows self-assessed ratings of sun-safe precautions (e.g. clothing, sunscreen etc.) for given UV exposures which are lower than the national average.
- Community Y does not currently have a shade policy for public spaces.
- Market research data shows that X% of Community Y members are unaware of what appropriate precautions to take at ‘high’ or ‘medium’ levels of UV exposure.
### Defining the need - Sunsafe Example

<table>
<thead>
<tr>
<th>Levels (from the Results Chain)</th>
<th>Problems from an Environmental Scan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>7. Conditions</strong></td>
<td>• The incidence of sun-related cancers is rising in Community Y.</td>
</tr>
<tr>
<td>What is the current ‘state’ of cancer? (Health-incidence, mortality, morbidity, quality of life, social, technological, economic, environmental, political [S.T.E.E.P], trends) What broad need or gap can / should CCS be trying to fill?</td>
<td></td>
</tr>
<tr>
<td><strong>6. Practices</strong></td>
<td>• Sunsafe precautions taken by members of Community Y are below the national average.</td>
</tr>
<tr>
<td>What are the current (problematic) practices in place re: cancer prevention and / or support in the target communities of interest?</td>
<td>• Tanning bed use – especially among young adults – continues to suggest risks of inappropriate exposure.</td>
</tr>
<tr>
<td><strong>5. Capacity</strong></td>
<td>• Community Y does not currently have a shade policy.</td>
</tr>
<tr>
<td>Are there gaps in delivery support? What gaps exist in the CCS’s target communities in terms of knowledge, abilities, skills and aspirations?</td>
<td>• X% of Community Y members are not aware of the appropriate precautions to take at given UV levels.</td>
</tr>
<tr>
<td><strong>4. Awareness / Reaction</strong></td>
<td>• X% of Community members are aware of the risks of UV and the risks of tanning bed exposure. This is low compared to possible levels (reference: Australia)</td>
</tr>
<tr>
<td>Are there gaps in terms of target community awareness of and / or satisfaction with current information, support services, physical support, laws and regulations, or other initiatives to support needs? What are the perceived strengths and weaknesses?</td>
<td></td>
</tr>
<tr>
<td><strong>3. Participation / Involvement</strong></td>
<td>• Groups of concerned citizens or professionals have not yet been mobilized in this community.</td>
</tr>
<tr>
<td>Are there problems or gaps in the participation, engagement or involvement of groups who are key to achieving the CCS’s desired outcomes?</td>
<td>• No other group has yet picked up this cause.</td>
</tr>
<tr>
<td><strong>2. CCS Activities / Outputs</strong></td>
<td>• Media attention has not been given to this subject.</td>
</tr>
<tr>
<td>Are there activities or outputs which the CCS does which represent barriers or gaps to achieving its objectives?</td>
<td>• CCS has not focussed attention on this area, other than distributing pamphlet information.</td>
</tr>
<tr>
<td><strong>1. CCS Resources</strong></td>
<td>• Minimal human and $ support has been invested in this area.</td>
</tr>
<tr>
<td>What level of financial, human and technical resources are currently at the CCS’s disposal? Are there gaps?</td>
<td></td>
</tr>
<tr>
<td>Needs / Situation</td>
<td>Desired Results</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Conditions</strong></td>
<td><strong>End Result</strong></td>
</tr>
<tr>
<td>• Increasing incidence of sun related cancer</td>
<td>• Reduced rate of sun related cancer</td>
</tr>
<tr>
<td><strong>Practices</strong></td>
<td><strong>Practice and behaviour Change</strong></td>
</tr>
<tr>
<td>• Problematic level of unsafe sun and tanning</td>
<td>• Improved / increased ‘Sun safe’ behaviours</td>
</tr>
<tr>
<td>behaviours</td>
<td>• Reduced risky tanning practices</td>
</tr>
<tr>
<td></td>
<td>• Shade policies implemented for public areas</td>
</tr>
<tr>
<td><strong>Knowledge, Abilities, Skills and Aspirations</strong></td>
<td><strong>Knowledge, Abilities, Skills and Aspirations</strong></td>
</tr>
<tr>
<td>• Key segments do not know appropriate Sun</td>
<td>• Understanding of what precautions to take at various UV levels</td>
</tr>
<tr>
<td>safe precautions for various UV levels</td>
<td></td>
</tr>
<tr>
<td><strong>Awareness / Reactions</strong></td>
<td><strong>Reactions</strong></td>
</tr>
<tr>
<td>• Lack of awareness / reactions to UV warnings</td>
<td>• Improved awareness of UV levels and their implications</td>
</tr>
<tr>
<td>• Lack of apparent awareness of need for shade in public spaces</td>
<td>• Pick-up of need for shade messaging by media and various public institutions</td>
</tr>
<tr>
<td><strong>Engagement / Involvement</strong></td>
<td><strong>Engagement / Involvement</strong></td>
</tr>
<tr>
<td>• Lack of public / institutional / other related agency involvement in Sun safe promotion</td>
<td>• Media pick-up of Sun safe messaging</td>
</tr>
<tr>
<td>• Lack of opportunity for concerned group involvement</td>
<td>• Involvement of physicians groups in sun safe cases</td>
</tr>
<tr>
<td><strong>Activities</strong></td>
<td><strong>Activities</strong></td>
</tr>
<tr>
<td>• Gap in promotional / educational activities</td>
<td>• Promotional / educational activities and information / communication to key target groups</td>
</tr>
<tr>
<td><strong>Resource Inputs</strong></td>
<td><strong>Inputs</strong></td>
</tr>
<tr>
<td>• Gaps in resources committed to area</td>
<td>• Level of people, skills, knowledge, $ applied to Sun safe area</td>
</tr>
</tbody>
</table>

Information on needs should always inform the setting of expected / desired results.
### Sunsafe Example

**AREA OF CCS MISSION / OBJECTIVES:** Reduce incidence and mortality from cancers associated with U.V. exposure

<table>
<thead>
<tr>
<th>WHY?</th>
<th>Results Chain</th>
<th>Needs-Results Plan Worksheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. &quot;End&quot; Result</td>
<td>Increasing incidence of sun related cancer</td>
<td>• Reduced rate of sun related cancer</td>
</tr>
<tr>
<td>Describe the overall trends with regard to the CCS mission and Board Ends.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WHAT</th>
<th>WHAT?</th>
<th>WHAT?</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Practice and Behaviour Change</td>
<td>Problematic level of unsafe sun and tanning behaviours</td>
<td>• Improved awareness of UV levels and their implications</td>
</tr>
<tr>
<td>Describe the practices and behaviour of individuals, groups, and partners over time.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Knowledge, Ability, Skill and / or Aspiration Changes</td>
<td>Key Segments do not know appropriate sunsafe precautions for various UV levels</td>
<td>• Pick-up of need for shade messaging by media and various public institutions</td>
</tr>
<tr>
<td>Describe the level of knowledge, abilities, skills and aspirations / commitment of individuals, groups, and/or communities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Lack of awareness / reactions to UV warnings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Reactions</td>
<td>• Lack of apparent awareness of need for shade in public spaces</td>
<td></td>
</tr>
<tr>
<td>Describe feedback from individuals, groups, and partners: satisfaction, interest, reported strengths and weaknesses.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Lack of public / institutional / other related agency involvement in sunsafe promotion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Engagement / Involvement</td>
<td>• Lack of opportunity for concerned group involvement</td>
<td></td>
</tr>
<tr>
<td>Describe the characteristics of individuals, groups, and co-deliverers: numbers, nature of involvement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WHOM?</th>
<th>HOW?</th>
<th>HOW?</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Activities / Outputs</td>
<td>• Gap in promotional / educational activities</td>
<td>• Promotional / educational activities and information / communication to key target groups</td>
</tr>
<tr>
<td>Describe the activity: How will it be implemented? What does it offer?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Inputs / Resources</td>
<td>• Gaps in resources committed to area</td>
<td>• Level of people, skills, knowledge, $ applied to sunsafe area</td>
</tr>
<tr>
<td>Resources used: dollars spent, number and types of staff involved, dedicated time.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

![steve.montague@pmn.net](www.pmn.net)
### SUNSAFE EXAMPLE

**AREA OF CCS MISSION / OBJECTIVES:** Reduce incidence and mortality from cancers associated with U.V. exposure

<table>
<thead>
<tr>
<th>WHY?</th>
<th>Needs-Results Plan Worksheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>T0 [Current Needs]</td>
<td>T1 [Desired]</td>
</tr>
<tr>
<td>7. ‘End’ Result</td>
<td>• Increasing incidence of sun related cancer</td>
</tr>
<tr>
<td>Describe the overall trends with regard to the CCS mission and Board Ends.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WHAT</th>
<th>BY</th>
<th>WHOM?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the practices and behaviour of individuals, groups, and partners over time.</td>
<td>Describe feedback from individuals, groups, and partners: satisfaction, interest, reported strengths and weaknesses.</td>
<td>Describe the characteristics of individuals, groups, and co-deliverers: numbers, nature of involvement</td>
</tr>
<tr>
<td>• Problematic level of unsafe sun and tanning behaviours</td>
<td>• Lack of awareness / reactions to UV warnings</td>
<td>• Lack of public / institutional / other related agency involvement in sunsafe promotion</td>
</tr>
<tr>
<td>• Key Segments do not know appropriate sunsafe precautions for various UV levels</td>
<td>• Lack of apparent awareness of need for shade in public spaces</td>
<td>• Lack of opportunity for concerned group involvement</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HOW?</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Activities / Outputs</td>
</tr>
<tr>
<td>Describe the activity: How will it be implemented? What does it offer?</td>
</tr>
<tr>
<td>• Gap in promotional / educational activities</td>
</tr>
<tr>
<td>• Promotional / educational activities and information / communication to key target groups</td>
</tr>
<tr>
<td>• Promotional / educational activities and information / communication to key target groups</td>
</tr>
</tbody>
</table>
## Sunsafe Example

### AREA OF CCS MISSION / OBJECTIVES: Reduce incidence and mortality from cancers associated with U.V. exposure

<table>
<thead>
<tr>
<th>WHY?</th>
<th>Results Chain</th>
<th>Needs-Results Plan Worksheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Increasing incidence of sun related cancer</td>
<td>T0 [Current Needs]</td>
<td>T1 [Desired]</td>
</tr>
</tbody>
</table>

### WHAT

<table>
<thead>
<tr>
<th>BY</th>
<th>WHAT</th>
<th>WHOM?</th>
<th>HOW?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Problematic level of unsafe sun and tanning behaviours</td>
<td>6. Practice and Behaviour Change</td>
<td>Describe the level of knowledge, abilities, skills and aspirations / commitment of individuals, groups, and/or communities.</td>
<td></td>
</tr>
<tr>
<td>• Lack of awareness / reactions to UV warnings</td>
<td>4. Reactions</td>
<td>Describe feedback from individuals, groups, and partners: satisfaction, interest, reported strengths and weaknesses.</td>
<td></td>
</tr>
<tr>
<td>• Lack of public / institutional / other related agency involvement in sunsafe promotion</td>
<td>3. Engagement / Involvement</td>
<td>Describe the characteristics of individuals, groups, and co-deliverers: numbers, nature of involvement</td>
<td></td>
</tr>
<tr>
<td>• Gap in promotional / educational activities</td>
<td>2. Activities / Outputs</td>
<td>Describe the activity: How will it be implemented? What does it offer?</td>
<td></td>
</tr>
<tr>
<td>• Gaps in resources committed to area</td>
<td>1. Inputs / Resources</td>
<td>Resources used: dollars spent, number and types of staff involved, dedicated time.</td>
<td></td>
</tr>
</tbody>
</table>

### WHY?

7. ‘End’ Result

Describe the overall trends with regard to the CCS mission and Board Ends.

### WHAT

6. Practice and Behaviour Change

Describe the practices and behaviour of individuals, groups, and partners over time.

5. Knowledge, Ability, Skill and/or Aspiration Changes

Describe the level of knowledge, abilities, skills and aspirations / commitment of individuals, groups, and/or communities.

### BY

4. Reactions

Describe feedback from individuals, groups, and partners: satisfaction, interest, reported strengths and weaknesses.

### WHOM?

3. Engagement / Involvement

Describe the characteristics of individuals, groups, and co-deliverers: numbers, nature of involvement.

### HOW?

2. Activities / Outputs

Describe the activity: How will it be implemented? What does it offer?

1. Inputs / Resources

Resources used: dollars spent, number and types of staff involved, dedicated time.
## Sunsafe Example

### Results Chain

<table>
<thead>
<tr>
<th>WHY?</th>
<th>7. “End” Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the overall trends with regard to the CCS mission and Board Ends.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WHAT</th>
<th>6. Practice and Behaviour Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the practices and behaviour of individuals, groups, and partners over time.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WHOM?</th>
<th>5. Knowledge, Ability, Skill and/or Aspiration Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the level of knowledge, abilities, skills and aspirations / commitment of individuals, groups, and/or communities.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HOW?</th>
<th>4. Reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe feedback from individuals, groups, and partners: satisfaction, interest, reported strengths and weaknesses.</td>
<td></td>
</tr>
</tbody>
</table>

### Needs-Results Plan Worksheet

<table>
<thead>
<tr>
<th></th>
<th>T0 [Current Needs]</th>
<th>T1 [Desired]</th>
<th>T2 [Desired]</th>
<th>T3 [Desired]</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHY?</td>
<td>Increasing incidence of sun related cancer</td>
<td></td>
<td></td>
<td>Reduced rate of sun related cancer</td>
</tr>
<tr>
<td>WHAT</td>
<td>Problematic level of unsafe sun and tanning behaviors</td>
<td></td>
<td></td>
<td>Improved / increased ‘sunsafe’ behaviors</td>
</tr>
<tr>
<td></td>
<td>Key Segments do not know appropriate sunsafe precautions for various UV levels</td>
<td></td>
<td></td>
<td>Reduced risky tanning practices</td>
</tr>
<tr>
<td></td>
<td>Lack of awareness / reactions to UV warnings</td>
<td></td>
<td></td>
<td>Shade policies implemented for public areas</td>
</tr>
<tr>
<td></td>
<td>Lack of apparent awareness of need for shade in public spaces</td>
<td></td>
<td></td>
<td>Understanding of what precautions to take at various UV levels</td>
</tr>
<tr>
<td></td>
<td>Lack of public / institutional / other related agency involvement in sunsafe promotion</td>
<td></td>
<td></td>
<td>Improved awareness of UV levels and their implications</td>
</tr>
<tr>
<td></td>
<td>Lack of opportunity for concerned group involvement</td>
<td></td>
<td></td>
<td>Pick-up of need for shade messaging by media and various public institutions</td>
</tr>
<tr>
<td></td>
<td>Increased awareness of UV levels and their implications</td>
<td></td>
<td></td>
<td>Media pick-up of sunsafe messaging</td>
</tr>
<tr>
<td></td>
<td>Gap in promotional / educational activities</td>
<td></td>
<td></td>
<td>Involvement of physicians groups in sunsafe cause</td>
</tr>
<tr>
<td></td>
<td>Promotional / educational activities and information / communication to key target groups</td>
<td></td>
<td></td>
<td>Involvement of physicians groups in sunsafe cause</td>
</tr>
<tr>
<td></td>
<td>Promotional / educational activities and information / communication to key target groups</td>
<td></td>
<td></td>
<td>Involvement of physicians groups in sunsafe cause</td>
</tr>
<tr>
<td></td>
<td>Gaps in resources committed to area</td>
<td></td>
<td></td>
<td>Promotional / educational activities and information / communication to key target groups</td>
</tr>
<tr>
<td></td>
<td>Level of people, skills, knowledge, $ applied to sunsafe area</td>
<td></td>
<td></td>
<td>Promotional / educational activities and information / communication to key target groups</td>
</tr>
<tr>
<td></td>
<td>Level of people, skills, knowledge, $ applied to sunsafe area</td>
<td></td>
<td></td>
<td>Promotional / educational activities and information / communication to key target groups</td>
</tr>
<tr>
<td></td>
<td>Level of people, skills, knowledge, $ applied to sunsafe area</td>
<td></td>
<td></td>
<td>Promotional / educational activities and information / communication to key target groups</td>
</tr>
</tbody>
</table>

---

**Steve Montague** | **www.pmn.net**
High Level Application to tell a Performance Story: Visual Mapping of Canadian Tobacco Advocacy Control 1950-2009

End Result (Outcome)
- Canadian Lung Cancer Rates per 100,000 (both sexes)
- % Smokers in Canada 15+

Systematic Behavioural Change

Knowledge, Ability, Skills and Aspirations

Reactions and Support
- C242 non-smoking sections in buses, planes, trains does not get first approval

Stakeholder Engagement
- Media pick-up and report on CCS presentations on hazards of smoking

CCS Activities / Outputs
- Various messages on cancers related to tobacco use

1985
- 58/100,000
- 35%

Key Legend:
- direct link established
- ‘contribution’ strongly suggested
- Negative change
- Positive change

Canada’s smoking rate among highest in the developed world. Half of all Canadians smoked in 1985.

Various messages on cancers related to tobacco use

CCS sponsored research on both health risks and then on social conditions affecting smoking

www.pmn.net
Canada's smoking rate among lowest in the developed world

1985
35%

1985
58/100,000

12% decrease in smoking in 1st 5 months of 1990

Youth smoking increases

Various Canadians increase awareness of issue

Various media reports of CCS Coalition efforts and messages (roadmap)

Lobby to ban smoking on planes

Various messages on cancers related to tobacco use

Media pick-up and report on CCS presentations on hazards of smoking

Lobbying for tax increase $4 per carton

Various voluntary bans in place

Tobacco Control Products Act struck down by SCC

Commitment by Minister

Various engagements by Minister Dingwell

Various media mentions of CCS and now others re: pronouncements on tobacco issues – CCS (R. Cunningham) prominent in media quotes

Key engagements and positive reactions noted by key Provinces re: public space ban, Division by Division mobilization + action

Coalition rendered various aggressive tactics

NCIC-CAPCA science connections

CCS lead fight on constitutional challenge

Major CCS advocacy efforts in each Division re: smoking bans

Influence FTCSC + Fed Prov policy

CPAC, CPCGC etc

Gov't of Canada goes from $200m to $291m over 5 years investing in policies advocated by CCS (2001-2006)

Canadian Lung Cancer Rates per 100,000 (both sexes)

End Result (Outcome)

Systematic Behavioural Change

Knowledge, Ability, Skills and Aspirations

Reactions and Support

Stakeholder Engagement

CCS Activities / Outputs

Youth smoking increases

Canada’s smoking rate among highest in the developed world. Half of all Canadians smoked in 1985

1985
58/100,000

Various voluntary bans in place

Tobacco Control Products Act passed, 1988

Tobacco Products Control Act & Non Smokers Health Act passed, 1990

Various media reports of CCS Coalition efforts and messages (roadmap)

Lobby to ban smoking on planes

Various messages on cancers related to tobacco use

Media pick-up and report on CCS presentations on hazards of smoking

Lobbying for tax increase $4 per carton

Various voluntary bans in place

Tobacco Control Products Act struck down by SCC

Commitment by Minister

Various engagements by Minister Dingwell

Various media mentions of CCS and now others re: pronouncements on tobacco issues – CCS (R. Cunningham) prominent in media quotes

Key engagements and positive reactions noted by key Provinces re: public space ban, Division by Division mobilization + action

Coalition rendered various aggressive tactics

NCIC-CAPCA science connections

CCS lead fight on constitutional challenge

Major CCS advocacy efforts in each Division re: smoking bans

Influence FTCSC + Fed Prov policy

CPAC, CPCGC etc

Gov't of Canada goes from $200m to $291m over 5 years investing in policies advocated by CCS (2001-2006)

Canadian Lung Cancer Rates per 100,000 (both sexes)

End Result (Outcome)

Systematic Behavioural Change

Knowledge, Ability, Skills and Aspirations

Reactions and Support

Stakeholder Engagement

CCS Activities / Outputs

Youth smoking increases

Canada’s smoking rate among highest in the developed world. Half of all Canadians smoked in 1985

1985
58/100,000

Various voluntary bans in place

Tobacco Control Products Act passed, 1988

Tobacco Products Control Act & Non Smokers Health Act passed, 1990

Various media reports of CCS Coalition efforts and messages (roadmap)

Lobby to ban smoking on planes

Various messages on cancers related to tobacco use

Media pick-up and report on CCS presentations on hazards of smoking

Lobbying for tax increase $4 per carton

Various voluntary bans in place

Tobacco Control Products Act struck down by SCC

Commitment by Minister

Various engagements by Minister Dingwell

Various media mentions of CCS and now others re: pronouncements on tobacco issues – CCS (R. Cunningham) prominent in media quotes

Key engagements and positive reactions noted by key Provinces re: public space ban, Division by Division mobilization + action

Coalition rendered various aggressive tactics

NCIC-CAPCA science connections

CCS lead fight on constitutional challenge

Major CCS advocacy efforts in each Division re: smoking bans

Influence FTCSC + Fed Prov policy

CPAC, CPCGC etc

Gov't of Canada goes from $200m to $291m over 5 years investing in policies advocated by CCS (2001-2006)

Canadian Lung Cancer Rates per 100,000 (both sexes)
Public (Health) Management: Conclusions

• Evaluators need to:
  – Facilitate evaluative activities
  – Facilitate evaluative learning
  – Create evaluative information
• Recognize reach as well as results
• Take a systems approach, but adapt it to linear culture
• Need to provide common:
  – Lense
  – Language
• Use common lens and language for multi level, complex initiatives planning, measurement, evaluation and management