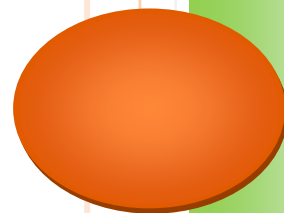APPENDIX A

PROGRAM DESIGN AND PLANNING MANUAL

GOVERNMENT OF THE NORTHWEST TERRITORIES

TABLE OF CONTENTS

INTRODUCTION

If you ask 100 people what the purpose of government is, they will likely respond:

- To protect the rights of its citizens;
- To protect us from ourselves or others;
- To promote prosperity;
- To promote equality;
- To shape society; and,
- To help people.

One of the most important tasks of any government is to demonstrate effective and efficient government programs. Not only does the government have to consider if it *should* be involved in a program, but it must assess how well the program operates and if it produces results.

As performance measurement has grown and evolved during the past 25 years, so too has the theory on how programs are set up in order to obtain results. The framework for program design was meant to help document all major operational aspects of a program prior to the program being initiated in order to ensure that government resources would be deployed efficiently and the program would be implemented in a proper manner.

What is program design?

Within the Government of the Northwest Territories the term "program" is generally (but not always) used to refer to activities which serve the public, and "service" is generally used to refer to activities which serve other government departments. (It should be noted that in the old Financial Information System (FIS) the term "program" is used to refer to a department of the GNWT.)

The program design is a series of questions and considerations which guide a proposal writer through the design process of a new or re-engineered program. Spending time at the front end in design and theory application will increase the chance that the program will succeed. It will also save time, money and frustration for those on the delivery end of a program by anticipating problems before they occur. Items included in the planning framework include:

- Context of the program;
- Problem identification;
- Program logic model and rationale;
- Program implementation considerations like human, financial and infrastructure needs, etc,;
- The basics of evaluation and monitoring so that the capture of information can take place right from the start.

These are guidelines. We recognize that many of these items and considerations will not fit with every program, but we encourage you to use the elements presented here that fit within the scope of the work that you are planning to do. The principle of using the public's money in the smartest way possible in order to give a community or individual client the most effective program, applies to every effort that the government undertakes.

Why Use Design? Blunders, Bloopers and Bad Ideas

Despite the attitude of a few conspiracy theorists, government in North America rarely intends for a program to fail. But, there are cases where a program has been around so long that people get used to seeing it and no longer question it, and sometimes a key design element has been ignored and the program flops. Here are a few classic cases:

- A program offered by the United States many years ago where 200 physicians were trained to go to Africa to offer birth control services and pap smears in a region of high economic instability and population increase. No one showed up. Why? Because the doctors were all male. The region was Muslim. According to cultural beliefs, no Muslim woman would let a male doctor lay their hands on her person.

- How about the case of famine in Eastern Africa? Food supplies were delivered. It was pork. The majority of the population were Muslim. It is taboo for Muslims to eat pork.

- The story has been told (but not yet verified) that one staff person had been hired around the year 1588 to light fires across the White Cliffs of Dover in case of an attack by the Spanish Armada. The Armada was defeated that same year. The Dutch broke Spanish dominance at sea in 1639.The position however, wasn't eliminated after World War Two.

- One must feel sorry for Bruce Blair. He admitted that "I feel like that person in the old movie who writes in lipstick on the bathroom mirror, "Stop me before I kill again." However in my case the legend should be, "Stop me before I steal some more". His job was checking the weather in Russell, Kansas every hour and reporting to the Federal Aviation Administration. It was used to warn planes about bad weather in the area. Bruce saw just two landings in more than a year at his night shift, and he felt that he was stealing his salary. Yes, there are machines that do this kind of work, and they were on-site, but at the time the FAA had not eliminated the need for human staff.

- Did you hear that the United States Department of Agriculture had an office in downtown Manhattan? It had one staff. It had been there since the 1800's when New York had vast tracts of land used for farming. Everyone overlooked the fact that the city had changed around it. What we don't understand is the diagram on the following page:

What you see below are farm subsidies in downtown New York City. The larger red blobs mark people receiving more than a quarter of a million dollars in farm subsidies annually. There are no farms in New York City.

In 2007 the Democrats passed a farm bill that would continue giving Manhattan millionaires farm subsidies. The income of the "farmer" who requested the subsidy, could not be over 1 million dollars a year. Happily, if your income was over 1 million dollars a year there were still loopholes that could help you . The Bush administration has proposed sharply reducing the income threshold to $200,000 a year and ending many of those loopholes. That would reduce the number of subsidy recipients to less than 40,000 (of the current million or so recipients)—though it might put some rooftop gardens on Park Avenue out of commission. Why is the American taxpayer paying for this?

The Philosophy of Intervention

Before you begin design, you must be clear **IF** this is something that government should get involved with. Even though a problem may exist the question must be asked, *"Is this something that the government should be dealing with?"* Does it fall within the mandate or mission of the department? Is government the best agency to implement a solution? Is there a current program that could be re-engineered to be suitable to handle the situation? Are there other agencies better equipped and more familiar with the situation that could do a better job than government?

There ways to decide where the solution to the problem should be housed. One way is to look at the program by itself, and follow through on the grid on the next page. This may help in decision making, but be forewarned; this chart will not help if the decision has to be a political one, and the political realities must be taken into account.

Considerations for Making the Decision to Invest in a Program

1. *What are the outcomes we desire? Are they in line with our organization's Mission?*

2. *Should government play a role in producing those outcomes?*
    If not, abandon, sell, or give away the existing asset, or eliminate the existing policy, regulatory, service-delivery, or compliance function.

3. *Can the organization that handles this activity be given incentives and consequences for performance?*
    The options include:
    - Enterprise management
    - Managed competition
    - Performance management
    - Pay for Performance
    - Reinvestment of budget savings

4. How can the organization be accountable to its customers for this activity?

5. Should it be the government that operates this activity?

If not, what arrangement would be best? There are alternatives to public service delivery that policy managers sometimes use to achieve their goals. We have boiled these down to these options:

- Contracting out
- Regulation of private sector activities
- Devolution to point of closest contact with the customer
- Tax incentives or disincentives
- Franchising
- Subsidies to producers (grants, loans, equity investments, favorable procurement policies)
- Subsidies to consumers (vouchers, tax credits)
- Policies allowing use of public property
- Risk sharing (insurance, loan guarantees)
- Technical assistance
- Demand management through fees or taxes
- Persuasion/education/social marketing
- Catalyzing voluntary activity
- Public-private partnerships

6. If so, which level of government should operate the activity?

National   Regional   Territorial   Community

7.   Where should control of resources and operations lie?

- With front-line program managers
- With HQ Program Managers
- Central administrative agencies
- With the organization's top managers
- With work teams within the organization
- With the community
- With some combination of the above

8.   Will a change the organization's corporate culture be required?

9.   What administrative systems need to change in order to accommodate these changes?

- The budget and finance system
- The HR system
- The procurement system
- The auditing system
- Reporting structure

CHAPTER 1

Problem Assessment

1. **Program Cycle**

2. **Problem Definition**

3. **Fishbone Diagram**

Every program has a life cycle. It will move through different stages of development as the years or months go by. Some programs last for years. Some just for a few months, but if properly managed they will cycle through the same phases. Knowing where the program is in it's lifecycle, (if it is an existing program) will help you to focus in on the right approach for re-design or program evaluation. As you will see from reading through this manual, all of the components of the program cycle will be addressed in the program 's design. This will help you plan all of the stages.

Simple Program Cycle

Identify community Issue → Plan and Budget → Implement → Monitor and Evaluate → Report, Feedback and Improve → (Identify community Issue)

Before you start designing your program …

It will be necessary to document the need for an intervention and to assess what has given rise to the problem. If the intervention ignores the root cause of the problem, there is a tendency to treat the symptom which does nothing to solve the underlying difficulty.

For example, teenagers taking drugs is a problem. The program managers may know that it is a problem and may have statistics to show that there is cause for alarm. A program may be designed to educate the teens about drugs and their effects. This may be fine for some teenagers, but the root cause of the drug taking may not have been addressed. It could be that there is a severe incidence of depression or boredom, family or self esteem issues amongst teens. In either case, education alone is not likely to work. Simply describing the problem is not the best way to plan an intervention. The assessment must take into account what is leading up to the problem in the first place. Quite often there are many factors, which lead to social problems, and a good assessment will help to focus solutions on root causes.

There are some cases, especially where the public's safety is concerned, that the symptom itself is so destructive that the designer may wish to intervene on more than one level.

Drunk driving is an example. If the RCMP catches someone driving while under the influence, they can charge them, suspend their license or the courts may throw them into jail, which will make the roads safer for everyone else. However, why this person chose to drink and drive may be a result of a long-standing problem with alcohol and drugs, which in turn resulted from childhood trauma, family, school, or job situations, or even economic disadvantage. This may also require intervention at the level of personal counseling or treatment.

What does the problem look like?

Describe the problem: Who has this problem? How many people have this problem?
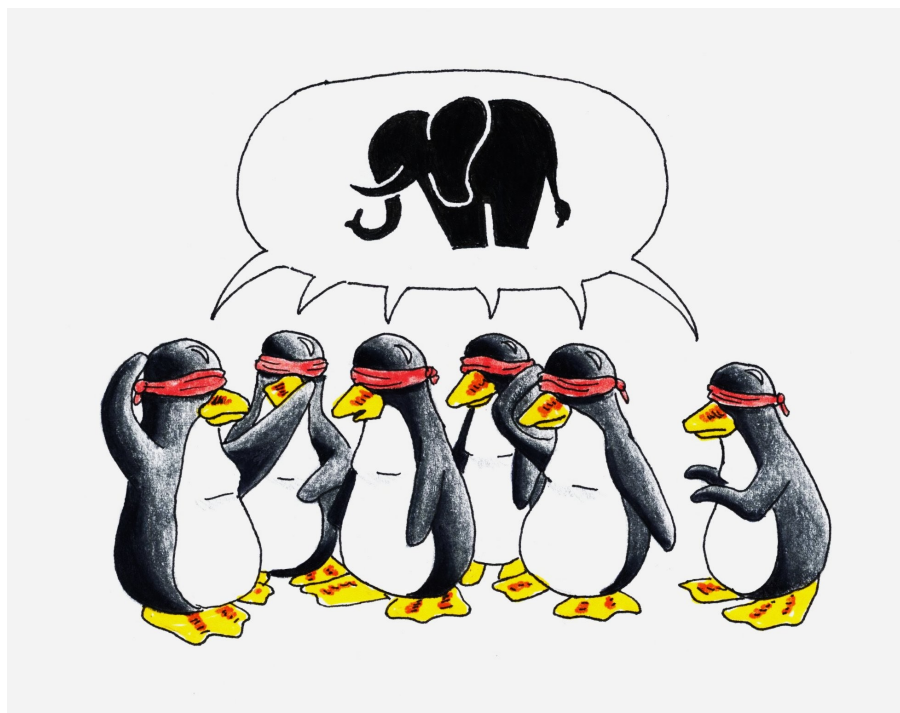
Remember that different people may experience this problem in different ways and service providers might deal with different aspects of the same problem.

What is the extent of the "problem"?

Does it affect their family: spouse, children, parents or grandparents? Is it a community, regional or territorial problem or is it confined to a small but significant number of people?

How does it affect the person/community?

Does it affect their work? Does it affect their self-esteem, self-worth and/or health? How does it affect the environment, the culture and the community?

What causes this situation?

Are the causes economic, medical, environmental, cultural or social? What are the symptoms of this problem?

Underlying Problems

If the Department of Health and Social Services decides to do something about obese children, they may use this type of diagram to help them decide where to place their efforts. For example: What is the problem with lifestyle? People lead laid-back (sedentary) lifestyles. Why? They don't exercise. Why do they not exercise? There are a variety of reasons.

1. Weather
2. Expense
3. No Facilities
4. Family patterns
5. Technology
6. No coaches
7. Disability
8. Attitude
9. No babysitter

Perhaps another reason that children are obese is because of poor choices. Many people make poor choices because of ignorance; they are ignorant because they have no information or have bad information. Perhaps they just don't care. Perhaps chubby children are considered healthy and strong in their eyes. Once you have exhausted all of the potential reasons and causes for obese children, you need to verify your hypothesis through data collection and then decide where you can intervene to have the greatest impact.

So, of all of these groupings, which agency in the community is best prepared to deal with this problem? Is what you propose to do the same as they are already doing, or is your intervention complementary? Where would your most effective partnerships be?

Type of problem

Community   Agencies
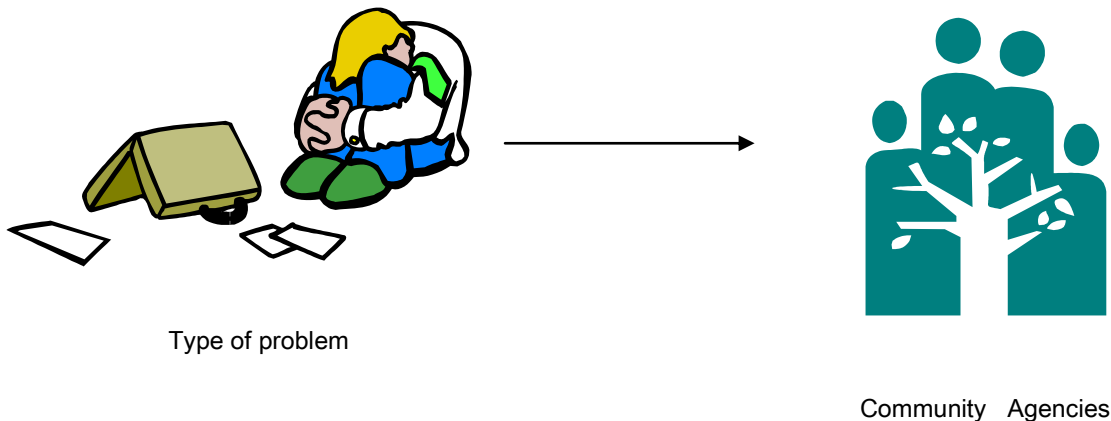
Underlying Problems

A fishbone diagram is a simple way to look at a complex problem. It has been used for many years to lay out a situation so that a designer can get a snapshot view of all of the factors at play.

FISHBONE DIAGRAM
Example: Obese Children

Genetics

Don't understand poor food choices

Poor Choices

diabetics

Lactose intolerance

Don't understand overeating

Ignorance

Brown fat

Don't care

Lack of skills

Obese Children

Unable to harvest traditional food

Boredom

Societal Safety

Lack of creativity

Weather

Programming

Money for equipment

Media Marketing

Food is old

Too lazy & tired to cook

Wildlife

Nothing for kids

Convenience Food

Eating habits

Changing family structure

Healthy food too expensive

No Exercise

Family Pattern

No facilities

Cultural Acceptance

Environment

No choices in store

Family Pattern

Technology (games & TV)

Lifestyle

Draw a line and state the presenting problem. For example, "obese children" or "children are becoming obese". From this then ask, "why?" One reason - lifestyle. This would branch off the main line. OK - so what is the problem with lifestyle? People don't exercise. This line branches off the lifestyle line. Fine. Why don't children exercise? Add all of the reasons kids don't exercise. Each reason gets its own line and from each reason, you can ask "why" again and then branch off each reason. Use this for design, it really helps to decide where in this complex situation you can intervene.

Consider the following:

What gap in existing programs will be filled?

Has the proposal been developed in response to a demand or expressed need by a particular stakeholder or interest group?

Does the proposed program address a commitment established in policy or legislation?

Does the proposed program support any priorities and strategic initiatives from Cabinet or the GNWT?

Have you established the root cause of the problem through solid research, and not just the opinion of stakeholders or beneficiaries.

WHAT IS THE COST OF *NOT* DOING THE PROGRAM

CHAPTER 2

Design

1.   **Setting the context**

2.   **Writing Goals**

3.   **Program Theory/If-Then Relationships**

4.   **Hierarchy of Outcomes**

5.   **Program Logic Models**

6.   **Program process**

7.   **Asset Maps**

Where to Start the Design

So far you should have a good understanding of the problem and laid out the potential avenues of intervention through the fishbone diagram. It might be wise to conduct a literature search to give ideas on how the problem is being approached in other jurisdictions. There may be evaluation or audit reports that point out what works well and what needs improvement. Now the design can begin.

1. Describe the context and the operating environment in which the program will be situated . This includes the reasoning behind the decision to proceed, clients, and demographic. This is generally background information.

2. Write the program goals-Engineer the goals into the actions that you decide will prompt the best results.

3. Formulate and substantiate your program theory: The program theory is the mechanism that causes the program to produce the results that you are looking for. Even if this is an entirely new idea, there must be some theory of change that leads the designer to think that the idea will work. This will lead to the hierarchy of outcomes that measures will be based on.

4. Chose the most appropriate program logic model :The logic model will use the work produced through the program theory and follow through with the factors needed for success at each stage of the change effort.

5. Chart out program process and asset maps: The program process will lay out the sequence of events to production of an outcome. This is important as a check on standing policy and to help identify potential bottlenecks. Even if the idea and theory is sound, if the operating procedures are flawed the program may fail to achieve the results that were hoped for. Asset maps help to view the resources that the office or the community have to contribute to the program.

6. Begin writing the Terms of Reference for the program. Start writing the terms of reference to document the program from its inception. Mission drift can occur over the years and the original intent of the program gets lost. The document will also act as a communication tool whereby everyone has the same understanding of the approved program and its objectives.

Setting the Context

Why are you developing this program?

Give the background as to how the problem was presented and then verified. Document the root causes leading to this problem. It is helpful to include comparisons to programs in other places as a part of background exploration. This is the initial work in establishing the need for the program.

Client Body

Your examination of the problem should give you verification of who your client is. Be clear on who will be receiving the services and who the beneficiaries will be.

For example if you run an alcohol and drug program, the person with the addiction may come to you as a client for detoxification, but their family may be a secondary client, because they benefit from the help that the primary client is receiving. This is important because you may need to decide where to place your efforts. If you only have so much money, the primary client will come first and then what you have left over may be offered to others.

If your approach to addictions is a "systems" one, you may decide that treating the whole family is the best way to go which means that you may not have the money for detoxification in your budget. Here, it is not the person with the addiction that becomes your client but the family as a group.

Government at times assumes that everybody is a stakeholder. While a community at large may benefit from a program, the program designers have to be careful not to spread their efforts over such a large area that the primary concern gets lost.

Demographic

Your exploration of the problem may tell you things that might help you to really focus your efforts; for instance, if you are working with people, how old are they? Are they male or female? Does their education play a role? Is their health important? What do they do for a living? Are they in school? You might be able to tailor your program to a particular group of people who have similar characteristics.

Writing Program Goals

What do you want the future to look like?

Writing down the goals is the first step towards achieving them. This short and simple statement should clarify for your public, clients and staff what the program aims to achieve. Somehow having things in writing really makes them seem more important to most people. It will also make it easier to make the plans needed to reach your goals. Here are some tips.

Do not make goal statements that over-reach the program

Don't make the mistake of overreaching the goal to the point where it has no attribution. Pull in your goal statement to impact on the target population which then may transfer over to a community benefit, but keep the goal in line with the mandate of program.

Make the goal realistic and achievable

There are times that government writes their goal statements so high that they lose all meaning for the people in the program. It can be depressing when the goals are so "pie-in-the-sky" that they cannot possibly be achieved. By all means have a vision statement that can be a touchstone, but remember that you may test against these goals so make them realistic.

Make the goal measurable

Making the goal realistic and achievable will help with its measurability.

The goal should be something that you have some influence on

You may find that the broader that the goal , the less influence you can have on it. Even if you cannot control the problem that you are trying to solve, you must be able to have some influence on it.
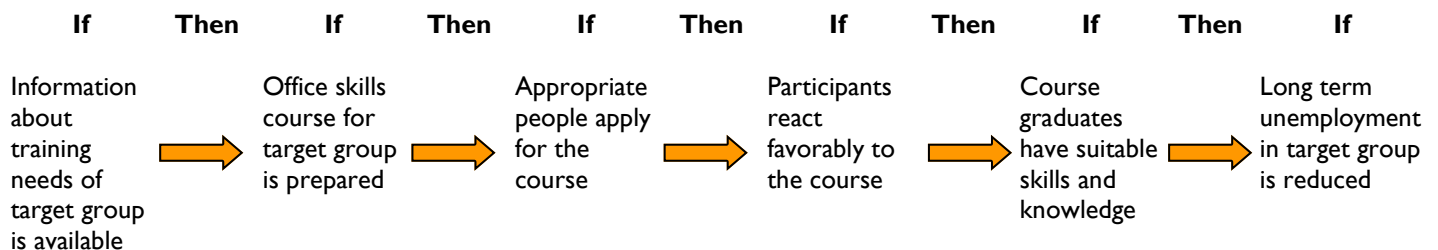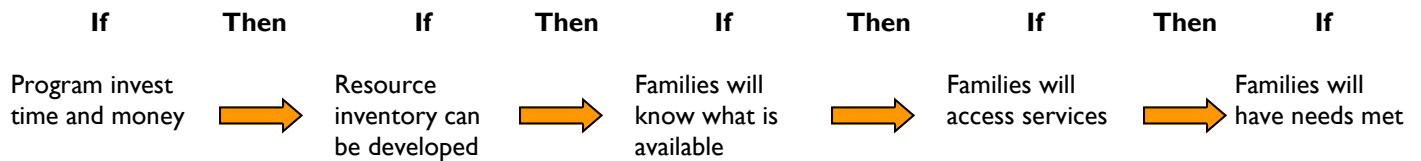
Write your goals as a statement of accomplishment

The goals should be written with the end results in mind, not as a statement of intent.

Program Theory

The program theory is an explanation of the mechanism that will cause the change in the presenting problem. Why will your proposal work? In other words, if you do X then Y should happen. These are the underlying assumptions about why the program should work.

At the heart of the program theory is to apply the theory in a linear sequence of events. The one key element that all formats have in common is the clarification of objectives or outcomes - i.e., what is the change that we are trying to bring about through this intervention, and why do we think that certain activities will bring about this change. This will then drive decisions regarding the appropriate resources and activities, which can be tested for plausibility.

If	**Then**	**If**	**Then**	**If**	**Then**	**If**	**Then**	**If**
Program invest time and money	→	Resource inventory can be developed	→	Families will know what is available	→	Families will access services	→	Families will have needs met

If	**Then**	**If**	**Then**	**If**	**Then**	**If**	**Then**	**If**	**Then**	**If**
Information about training needs of target group is available	→	Office skills course for target group is prepared	→	Appropriate people apply for the course	→	Participants react favorably to the course	→	Course graduates have suitable skills and knowledge	→	Long term unemployment in target group is reduced

This is the explanation of the "If-Then" relationship: This cause and effect chain is called an <u>outcomes hierarchy</u>. The logic assumes that each lower outcome has to be achieved before the next higher outcome can take place. An outcomes chain is best drawn up at the start of a programme, and concurrent to the design of the 'logframe' if one is being used. It will help you better understand the way your outcomes interact and the dependencies between them, as well as to set realistic timeframes to measure progress.
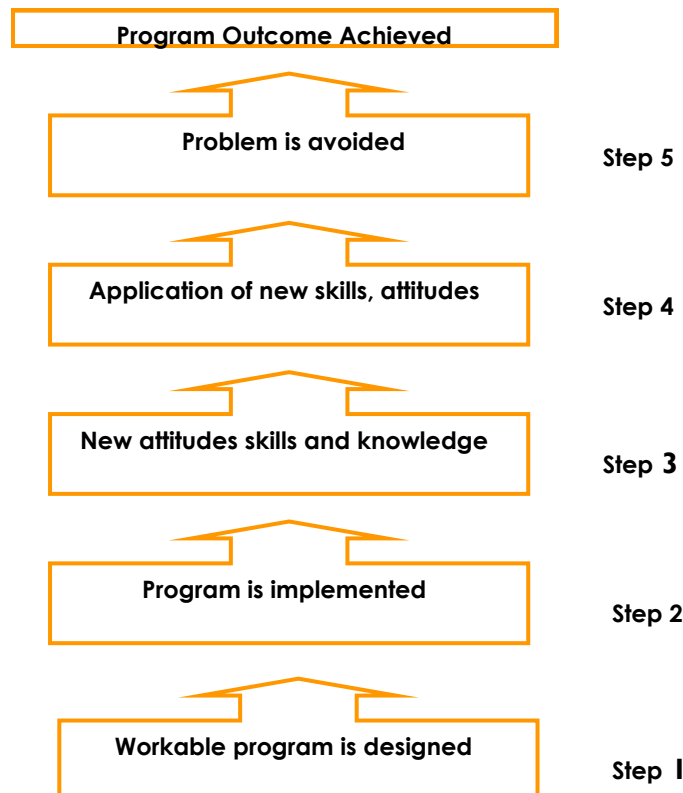
Hierarchy of Outcomes - Examples
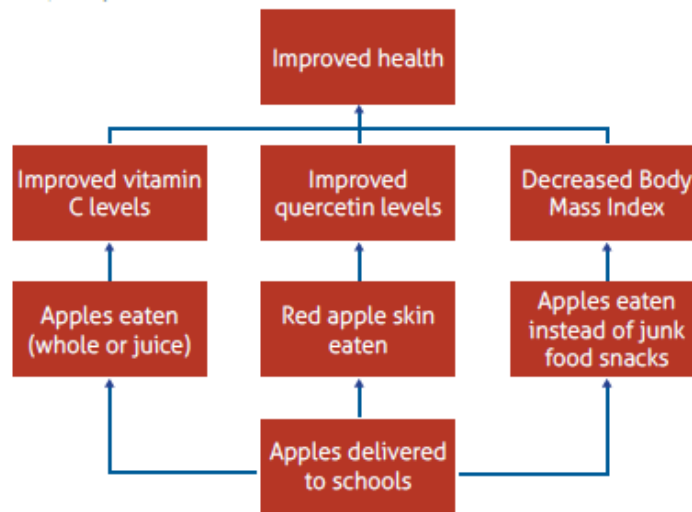
(Funnell, S. and Rogers, P. (2011) *Program Theory: Effective Use of Theories of Change and Logic Models San Francisco, CA: John Wiley & Sons*

An outcomes hierarchy for 'an apple a day' program showing possible different causal paths. An outcomes hierarchy shows all the outcomes (from short-term to longer-term) required to bring about the ultimate goal of an intervention. Unlike results chains, it does not show the activities linked to these outcomes. To figure out if X will cause Y, the theory behind the diagram needs to be laid out. What is the sequence of events that will lead to your outcomes? You need to test your theory. A generic model looks like this:

Program Outcome Achieved

Problem is avoided — Step 5

Application of new skills, attitudes — Step 4

New attitudes skills and knowledge — Step 3

Program is implemented — Step 2

Workable program is designed — Step 1

Hierarchy of Outcomes - Example

Quit Smoking Program

Outcomes
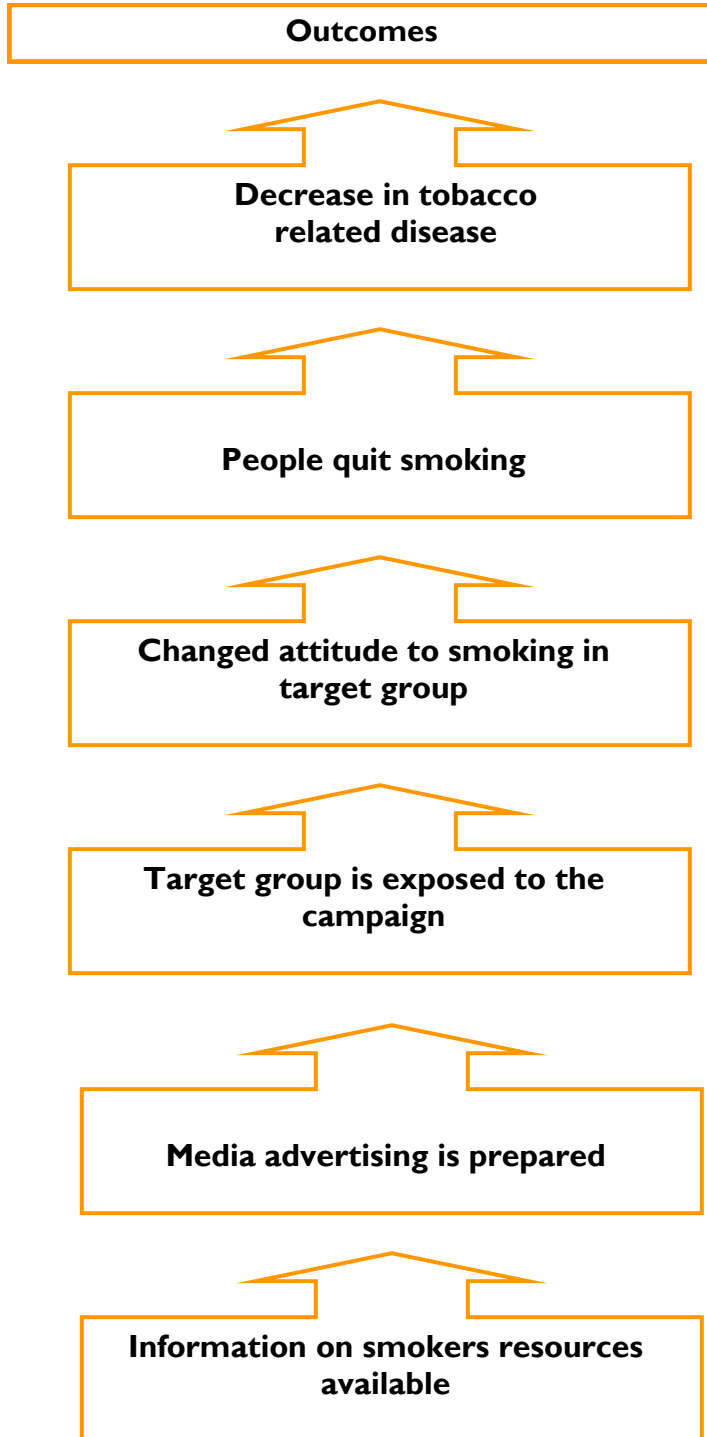
Another example of a hierarchy would be laid out as such:

The quit smoking program is a public education campaign run through the media. It aims to influence people's behavior using educational strategies.

Starting at the bottom each activity ripples upwards until the outcome "Decrease tobacco related disease" is achieved.

Decrease in tobacco related disease

People quit smoking

Changed attitude to smoking in target group

Target group is exposed to the campaign

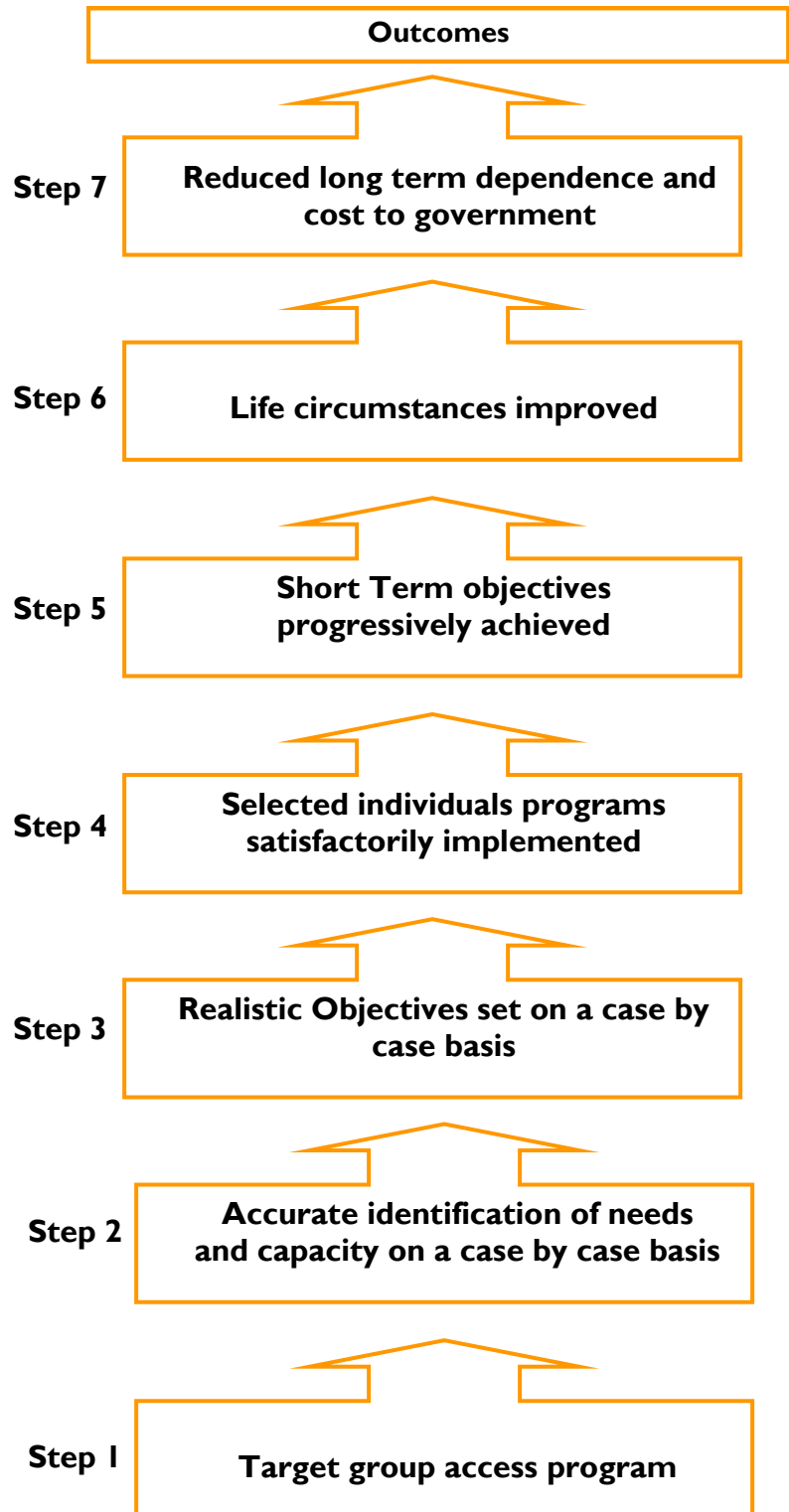| Media advertising is prepared |
| --- |

Information on smokers resources available

Hierarchy of Outcomes - Example

Case Planning

A case management program aims to influence people's behavior to achieve it's overall objectives.

It uses strategies which treat each case (person or group) individually, and sets objectives on a case by case basis.

The assumption behind a case management program is that as each individual achieves his/her own objectives, the circumstance of all of the target group will improve, and the overall program objective will be achieved.

Outcomes

Step 7 — Reduced long term dependence and cost to government

Step 6 — Life circumstances improved

Step 5 — Short Term objectives progressively achieved

Step 4 — Selected individuals programs satisfactorily implemented

Step 3 — Realistic Objectives set on a case by case basis

Step 2 — Accurate identification of needs and capacity on a case by case basis
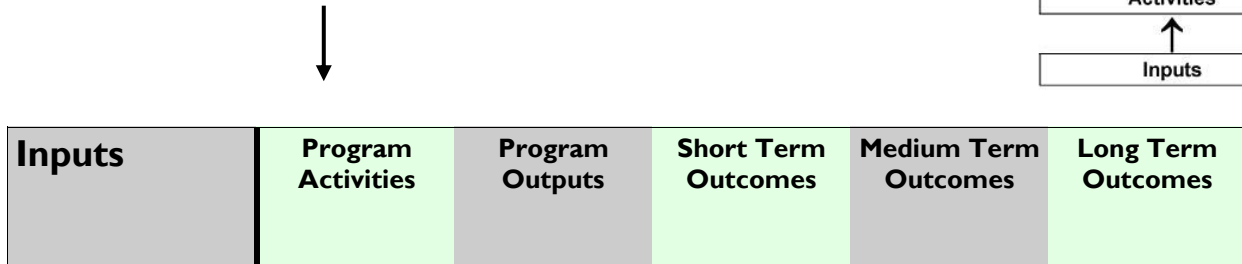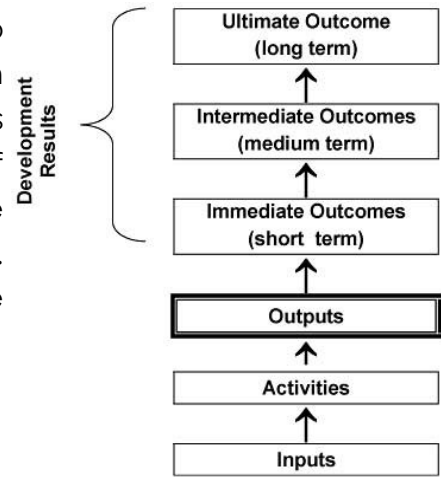
Step 1 — Target group access program

Results Chains and Program Logic Models

The development of a program logic model is designed to provide a map of what a program is intended to do (Owen with Rogers 1999). Various authors have used slightly different terms to describe this concept: Patton (1997) proposes a "chain of objectives"; Funnell (1997) refers to a "program logic matrix"; the Treasury Board Secretariat of Canada uses a "results chain". There is some confusion around the terms and how they are used. Results chains look like this:

Inputs	Program Activities	Program Outputs	Short Term Outcomes	Medium Term Outcomes	Long Term Outcomes

These are not logic models. There is no program theory included that explains the connection between the levels of attainment (the outcomes.)

A program logic model is used to conceptualize a program and to provide a basis for monitoring and evaluating performance. Adaptation and adjustment of the logic model may be required as a program evolves. Regardless of the format, all logic models are based on a series of "if-then" assumptions. The notion of a logical "if-then" relationship between actions and outcomes is intrinsic to the definition of the program, which can be thought of as "*an intervention aimed at addressing a perceived problem or meeting a perceived need in society*". Most programs cannot be expressed as simple two-element "if-then" relationships, but require a chain of "if-then" relationships to describe the intricate linkages among actions, outputs, and a series of outcomes.

Types of Logic Models

The most common logic model format is a matrix or chain which includes several of the following key components: inputs (resources and activities), outputs (activities and/or products), stakeholders or audience, outcomes (generally presented as a short-term, interim, and long-term or impacts), and assumptions. These are connected by either an outcomes hierarchy or the application of program theory. The selection of the appropriate format depends on a number of factors; chief among these is the stage of program development. There is no set format— it all depends on how the program will be set up to produce results.

Program Logic Models

- **Activities** refers to actions undertaken as part of program implementation (resources are a component of activities);
- **Outputs** - refers to tangible products and services that result from the activities;

- **Outcomes** – refers to specific changes in program participants' behavior, knowledge, skills, status and level of functioning. For the purposes of this paper, no distinction will be made between short-term and intermediate outcomes, and all outcomes will be considered to be "outcomes of interest" as defined by Mohr. These will become the focus of the proposed impact evaluation framework.

- **Ultimate outcomes** – refers to the fundamental change occurring in communities or systems, at least in part as a result of program activities, over the longer term. Ultimate outcomes cannot be attributed directly to program activities, as other societal factors will also influence their achievement.

Program logic models can be described in narrative form, presented as simple or complex matrices, as simple line diagrams, as cascading lines of text, or as intricate flow charts. Graphic illustrations may flow vertically or horizontally. The components of program logic models also differ, depending on a number of factors - including the preferences of the evaluator, the complexity of the program, the stage of the program at which the model is being developed, and the intended audience.

Examples:

1

Outcome Hierarchy	Indication of Success	Factors	Performance Information

2

			OUTCOMES (Based on Program Theory)		
Inputs	Activities	Participation	Learning	Action	Impact

3

Inputs	Activities	Participation	Reaction/ Knowledge	Attitude Shift/ Changed Behavior	Impact

Example 1

Outcome Hierarchy	Indication of Success	Factors	Performance Information

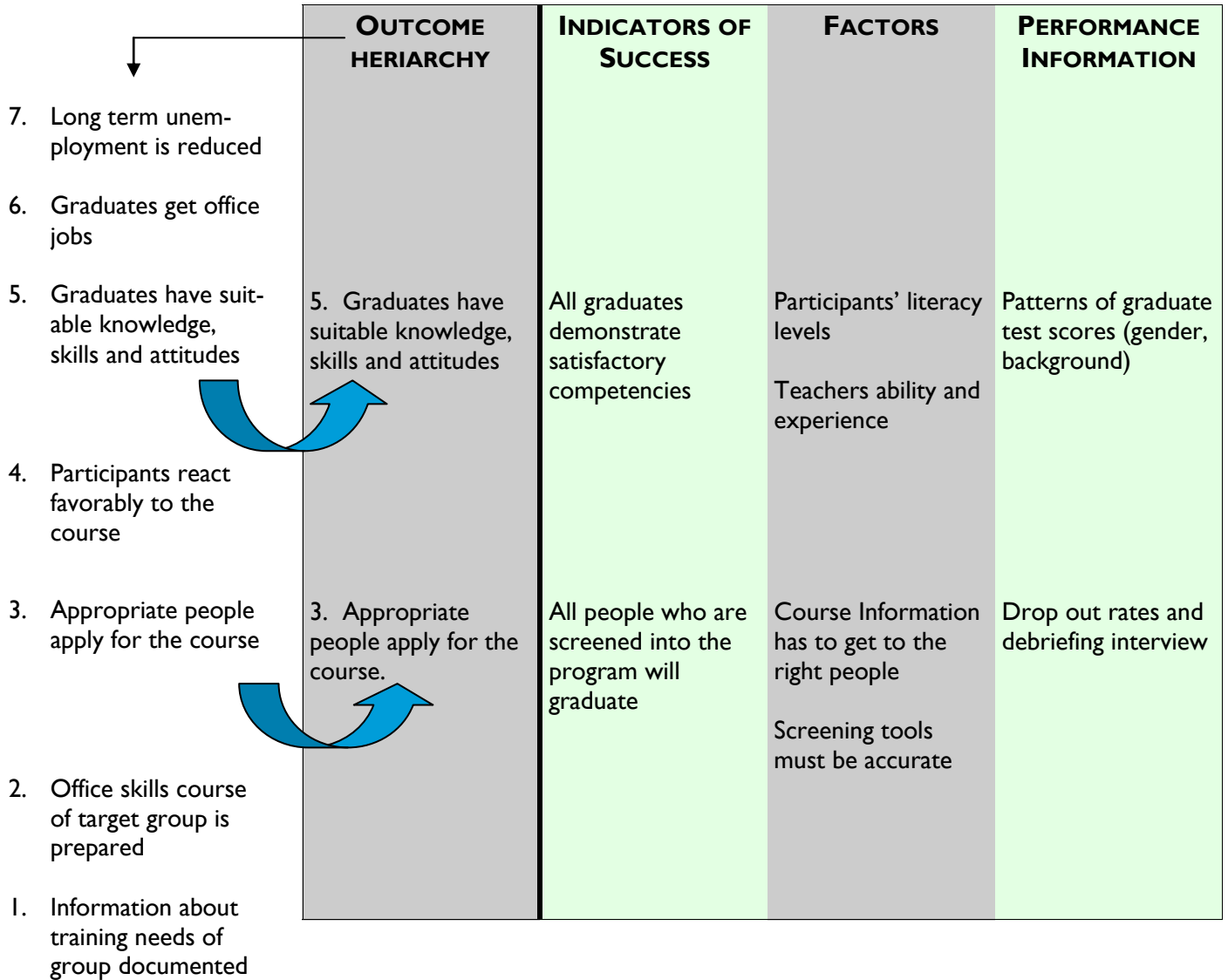↑ (Outcome Hierarchy)   ↑ (Indication of Success)

1. Info about training needs of target group available

2. Office skills course for target group is prepared

3. Appropriate people apply for the course

4. Participants react favorably to course

5. Graduates attain office skills

6. Graduates get office jobs

7. Long term employment in target group is reduced

Each outcome in a hierarchy will have attributes or indicators of success. These are items that you will use as judgements of the success of that particular outcome. So far each outcome has only been described by a brief statement. It is helpful to identify specific characteristics of a successful outcome. These characteristics are called attributes or indicators of success for the outcomes. They describe what the outcome is expected to look like if the program is operating successfully. For example:

All graduates demonstrate satisfactory competencies

All graduates feel confident to apply for office jobs.

Outcome Hierarchy	Indication of Success	Factors	Performance Information

↑ (Factors)   ↑ (Performance Information)

In order for you to get the success that you want, what needs to be in place? What conditions must be present for each outcome to be realized? Once important factors are identified, program managers can plan strategies to deal with them. **Each** outcome in the hierarchy will have factors that influence it's success. For example, Instructors have identified literacy as a student weakness "You can't expect all the kids to get office skills when half of them cannot read or write properly!" Factors might be:

Literacy levels of the students

Suitability of the teachers

For the final part of the model we need to work out what information we will need in order to see whether the outcome is being achieved. What measures can be used to tell you that you got results? Are your expectations being met? How will you measure the indications of success? For example: Indication of success - All graduates feel confident to apply for office jobs. This leads to performance information— 80% of students have applied for office positions.

Bringing all of these elements together results in a framework that looks like this: (only 5 and 3 were filled in because of space)

Example 1

	OUTCOME HERIARCHY	INDICATORS OF SUCCESS	FACTORS	PERFORMANCE INFORMATION
7. Long term unemployment is reduced				
6. Graduates get office jobs				
5. Graduates have suitable knowledge, skills and attitudes	5. Graduates have suitable knowledge, skills and attitudes	All graduates demonstrate satisfactory competencies	Participants' literacy levels Teachers ability and experience	Patterns of graduate test scores (gender, background)
4. Participants react favorably to the course				
3. Appropriate people apply for the course	3. Appropriate people apply for the course.	All people who are screened into the program will graduate	Course Information has to get to the right people Screening tools must be accurate	Drop out rates and debriefing interview
2. Office skills course of target group is prepared				
1. Information about training needs of group documented				

Example 2

Another way to set up a logic model involves looking at changes in behavior. The theory is that a program imparts information to audience, the audience changes their attitude and then their behavior which then results in the impact or outcome that the program is trying to achieve. An educator by the name of Kirkpatrick developed a pyramid that shows the steps that people go through to learn something. As you can see, a person reacts to the information, they learn the content, it transfers over to their attitude, then behavior, and then once they change the behavior, results occur.

This model assumes that once learning occurs, a change in behavior, or action will be taken. These intervals in some programs, (not all) can be similar to short term medium term or longer term outcomes. There is no guide for estimating time. In other words, what is short term in one program may be medium term in another program. You must make these judgments yourself. The point to remember is that is progressive. "C" will not happen until "B" takes place. "B" will not take place until "A" happens.

Learning   Action   Impact

What do you think the participants will know, feel, or be able to do after the program?	How do you think the participants will behave or act different after the program?	What kinds of impacts (or outcomes) can result if the participants behave or react differently?
♦ Awareness created ♦ Knowledge gained ♦ Attitudes changes ♦ Skills developed ♦ Aspirations sparked	♦ Behavior changes ♦ Practice adopted ♦ Decisions made ♦ Policies changes ♦ Social action initiated	♦ Social impact ♦ Economic impact ♦ Civic impact ♦ Environmental impact

DESIGN

Give a person information

↓

The person reacts to the information

What is the theory of change for example 2?

↓

The information changes their attitude

↓

Changing the attitude will lead to a change in behaviour

↓

Changing the behaviour will result in a correction of the problem that you are trying to solve

			OUTCOMES		
Inputs	**Activities**	**Participation**	**Learning**	**Action**	**Impact**
What things do we need to achieve our goals	What do we have to do to ensure our goals met?	Who needs to participate? Be involved? Be reached?	How do we think participants will know, feel, or be able to do after the program?	What do we think participants will do after the program	What kind of impact can result of the participant reacts or behaves differently?
Staff Volunteer Time/Money Equipment Technology Partners	Workshops Meetings Camps Curriculum Publications Media Website Projects	Number Characteristics Reactions	Awareness Knowledge Attitudes Skills Aspirations	Behavior Practice Decisions Policies Social Action	Social Economic Civic Environmental

Example 3

Search and Rescue Training –note that this would be only one of the activities of such a program

| Inputs	Activities	Participation	OUTCOMES		
			Reaction/ Knowledge	Attitude/ Behavior Change	Results
3 staff 100k budget Access to search aircraft 1000 sq ft office space GPS Landsat link ups 5 training elders Survival equipment	Promotion and delivery of training	Yearly training for children in grade school "hug a tree program"	Children have to have fun in course Children learn why they should stay in one place Children learn how to keep themselves safe until rescue.	Less fear results in less panic for the child Child will stay closer to last known position (LKP) and easier to find. If the child stays in one place they do not expend their energy trying to get out they will be less susceptible to hypothermia. Children learn how to pack for a hike (food , water, whistle and layered clothing)	Less panic means the child will use the lessons learned and ultimately there will be fewer deaths for children getting lost in the woods. When the LPN is known different modalities for search can be used effectively (aircraft, boats, snowmobiles, trackers) resulting in finding the child quicker avoiding fatalities. Equipment that the child carried may improve their chances of survival. Death is avoided.

28
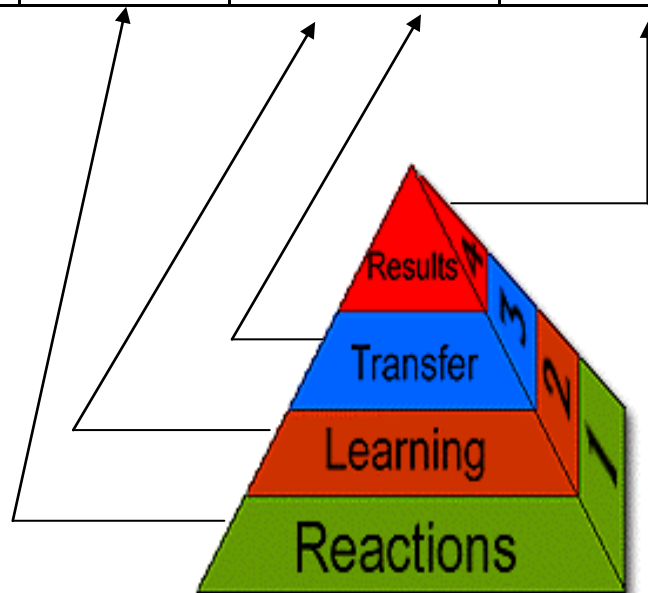
CHAPTER 3

Implementation

1. **Policies**

2. **Procedures and Process**

3. **Impact on Other Programs**

4. **Design Considerations**

   - **Budgeting**

   - **Culture**

   - **Timing**

   - **Communication**
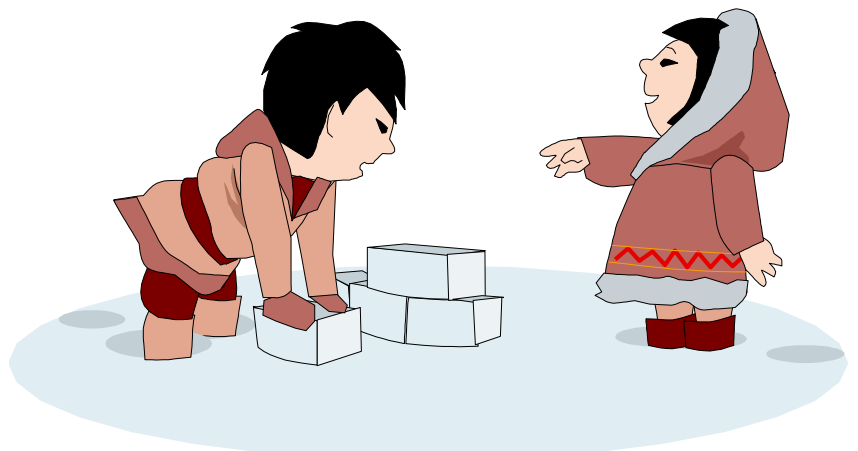
   - **Documentation**

Policies

Drafting your own policy

You will have to have some operating policies to assist those who have to make program decisions. In some cases standard operating procedures would be more appropriate. Be aware that your policies can cause unintended impacts for your clients or for other programs. Try to anticipate the reach of the policy and the potential benefits and drawbacks of each policy statement.

For example eligibility—If you review the purpose of your program and use the data collected in the examination of the original problem, eligibility criteria should become apparent. Describe these criteria in detail along with the basis for their development. If eligibility criteria are similar to those applied in other programs, there may be an opportunity to streamline administrative processes. Will access to the program be limited? If so, will a procedure will be used to establish priority among applicants? If access is not limited, how will this affect the estimated costs?

Is there a possibility that an appeals process will be needed? Who will adjudicate the appeals and what criteria will be used?

You will also have to ensure that your program policies and procedures are in agreement with all GNWT policies and legislation. If you work for the GNWT, you should acquaint yourself with the Collective Agreement and the Human Resource Policies that might affect your staff.

Sustainable Development

The principles and provisions of the Sustainable Development Policy (51.05) apply to all GNWT decisions and actions related to resource development. The policy identifies Sustainability Guidelines and Sustainable Development Objectives.

FAM

If a social welfare type program or any program that gives away money, both will likely be needed. It is highly recommended that consultations take place on these matters before instituting them. Check with the Audit Bureau or the Department of Finance's Accounting Division or Management Board Secretariat to make sure that your procedures are proper. At the very least, you should also be sure to check the Financial Administration Manual for information concerning money transactions.

	IMPLEMENTATION

Policies

Code of Conduct

How you treat your clients and behave in the work place is a very important matter. If your work for the GNWT you should acquaint your staff with the GNWT Code of Conduct, and if you work for a third party outside of the government you might want to review the agency's code of ethics or code of conduct.

Anytime you work with a vulnerable population, (the sick, elderly, the very young, species at risk) you must make sure that you have policies to protect what ever it is that you are trying to assist. Not only is it important your staff know how to behave and act, but your clients are informed as to what their rights are. Everyone should be treated with dignity and respect.

If you deal with sensitive or personal client information, you will need to have a mechanism in place to guide your staff in how to deal with sensitive or confidential information. Here are some suggestions:

- If you have client files with personal information, they should be stored in a locked cabinet.
- Remind your staff that discussing client issues or sharing their information is a public setting is unacceptable.
- Confidentiality must be ensured at all times.
- Don't leave client files lying around.

Traditional Knowledge

Two of the principles of the Traditional Knowledge Policy (51.06) should be reflected in program planning:

- "Government programs and services should be administered in a manner consistent with the beliefs, customs, knowledge, values and languages or the people being served"; and,
- "Traditional knowledge should be considered in the design and delivery of Government programs and services".
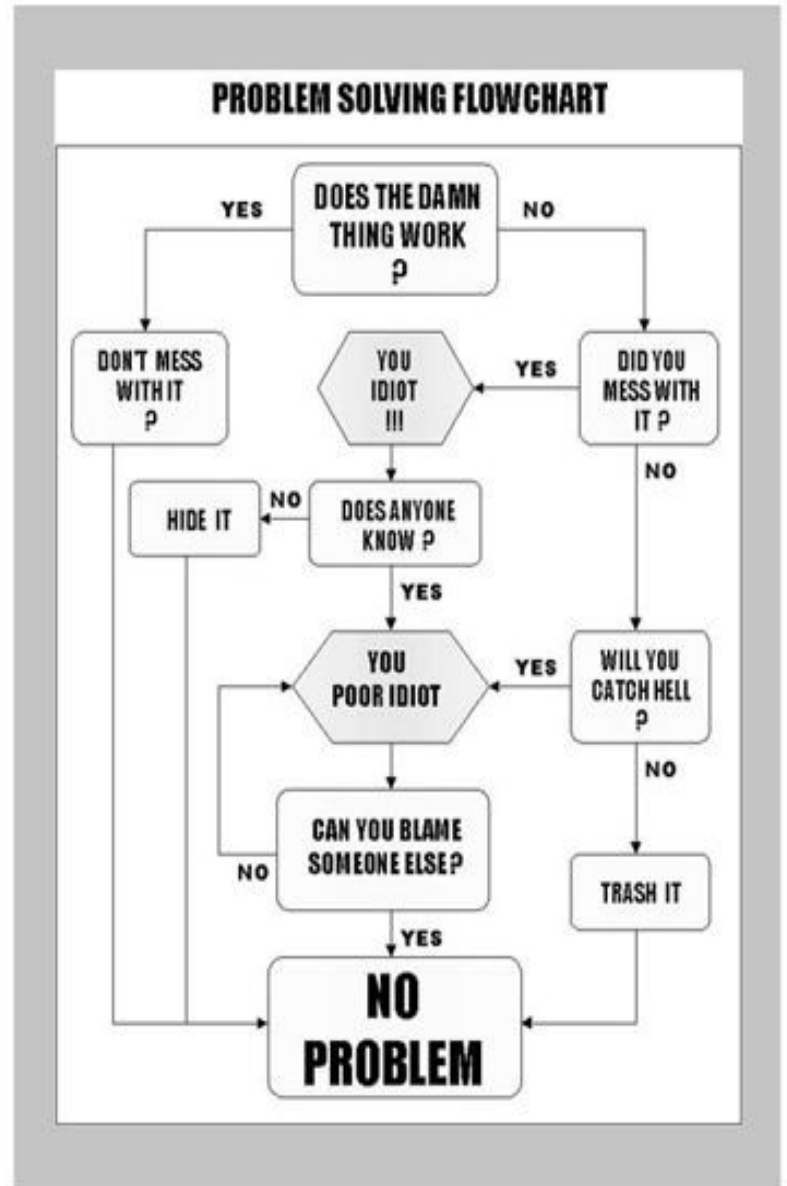
Procedures and Process

Your procedures need to outline the mechanics of your program. This makes sure that everyone will be treated in the same way, plus it will help your staff to get started in running the program. The process needs to be charted out. A flow chart can help, especially in circumstances where application or registration procedures are involved.

You need map out each step in the process from start to finish and examine it for bottlenecks, or tie-ups. If you can combine two activities while handling one sheet of paper, do so. If you have unnecessary steps, eliminate them. If functions can be combined, combine them. If you can get something safely done in a fewer number of steps, you are more efficient. Look at the length of time it takes to get something processed, and see if it is a reasonable amount of time. If not, then start over. Also, look at the physical environment to see if it facilitates efficiency. If your receptionist is expected to file and his/her desk is on the first floor while the filing cabinets are on the third floor, you will lose efficiency because of your office layout.

How the proposed program will be delivered needs to be addressed. It needs to have operational considerations on:
a. How the program will be delivered
- Application procedures
- Personnel involved in actual delivery
- Where the program will be housed
- The accountability chain - who answers for what
- Public relations requirements

PROBLEM SOLVING FLOWCHART

- Procedures for monitoring and reporting results
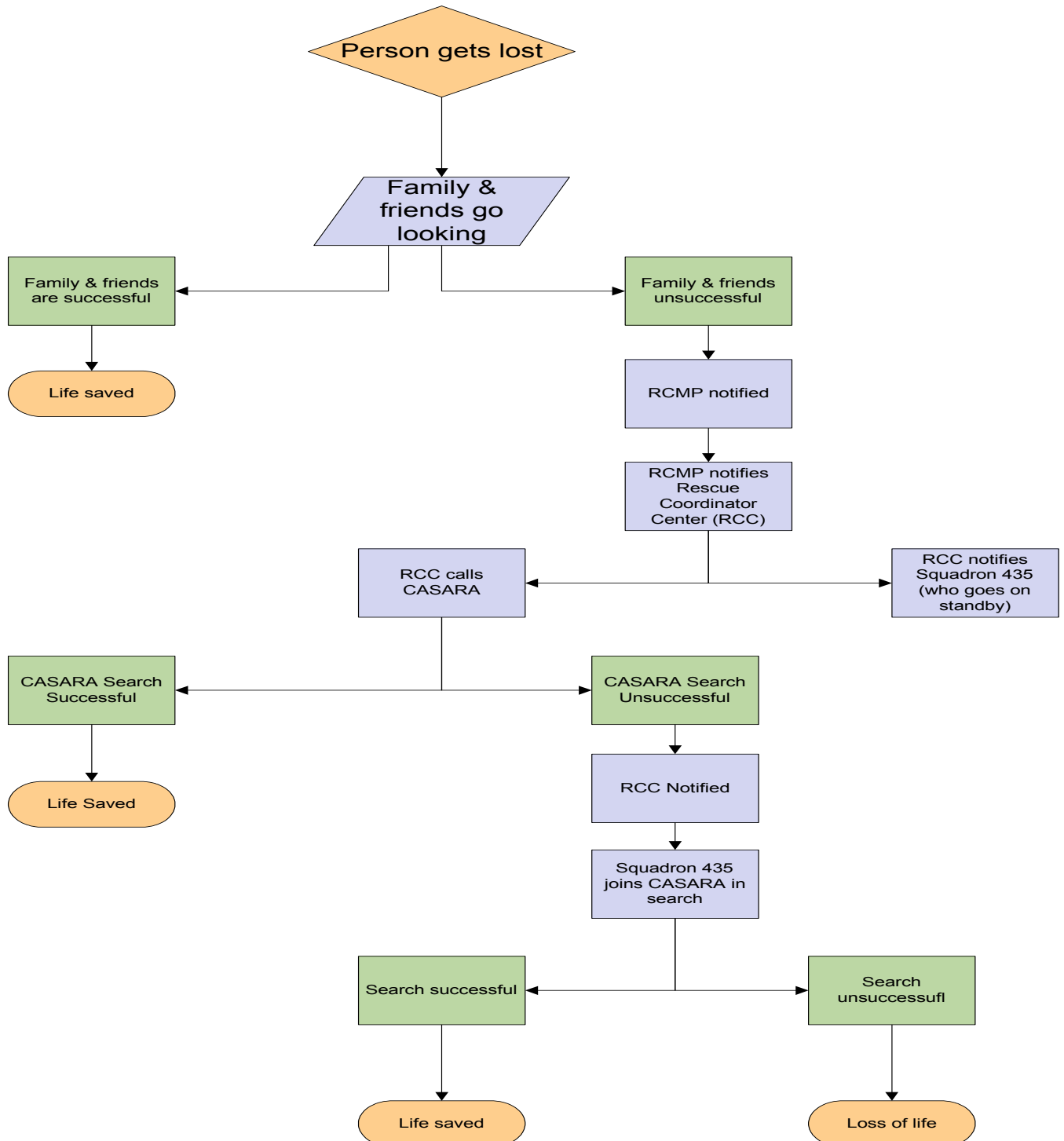- Major roles and responsibilities

b. Program design should ensure that the organization's structure for program delivery can accommodate possible future transfers to community governments or other groups.
- Are there minimum standards for this kind of program?
- Can any resources be shared?

Example: Search Procedure Process

This is a typical example of what happens in a Search and Rescue operation. If something goes wrong in a search operation, a diagram like this can help pinpoint the trouble area so that an appropriate solution can be found.

```
                          Person gets lost
                                |
                         Family & friends
                           go looking
                         /             \
        Family & friends            Family & friends
        are successful              unsuccessful
              |                            |
         Life saved                   RCMP notified
                                           |
                                   RCMP notifies Rescue
                                   Coordinator Center (RCC)
                                      /            \
                           RCC calls CASARA      RCC notifies Squadron 435
                              /        \          (who goes on standby)
                  CASARA Search      CASARA Search
                  Successful         Unsuccessful
                       |                   |
                  Life Saved          RCC Notified
                                           |
                                    Squadron 435 joins
                                    CASARA in search
                                      /          \
                           Search successful    Search unsuccessfl
                                |                     |
                           Life saved            Loss of life
```

Example: Process for Judicial Reform in China

Arrest-to-Trial Process in China
with Location of 5 Reform Teams

Police take suspect into custody

Up to 48 hours

Police Detectives conduct *preliminary* interrogations

Reform Team One

Reform Team Two

Police interrogators take over case

Police Interrogators conduct *formal interrogations*

Up to 37 days from initial detention

Police "arrest" suspect with approval by procuracy

Prosecutors review case while police continue investigation and interrogation

Up to 6 months

Reform Team Three

Reform Team Four

Reform Team Five

Prosecutors file charges in court

Defendant notified of charges at least 10 days before trial commences

Up to 2.5 months

Trial completed before 3-Judge Panel

John F Kennedy School of Government, Harvard University examples of Reform process in China for Justice Department.

There is no one correct way to lay out your diagram. It can be done in a linear fashion as the search and rescues diagram shows, in a spiral or even a zig zag pattern. How ever you choose to visually represent the process, it should be explicit enough to show bottle necks, deployment of resources and can even be assigned timings that will follow the activities. (Such as 10 days from point a to point b, etc).

Example: Manufacturing Process for Abbott Nutrition

Abbott Nutrition has laid out their manufacturing process in a diagram that is simple and visually pleasing. It includes their loop for quality control. Again there is no correct pattern to follow , but your procedure must be adequately represented.
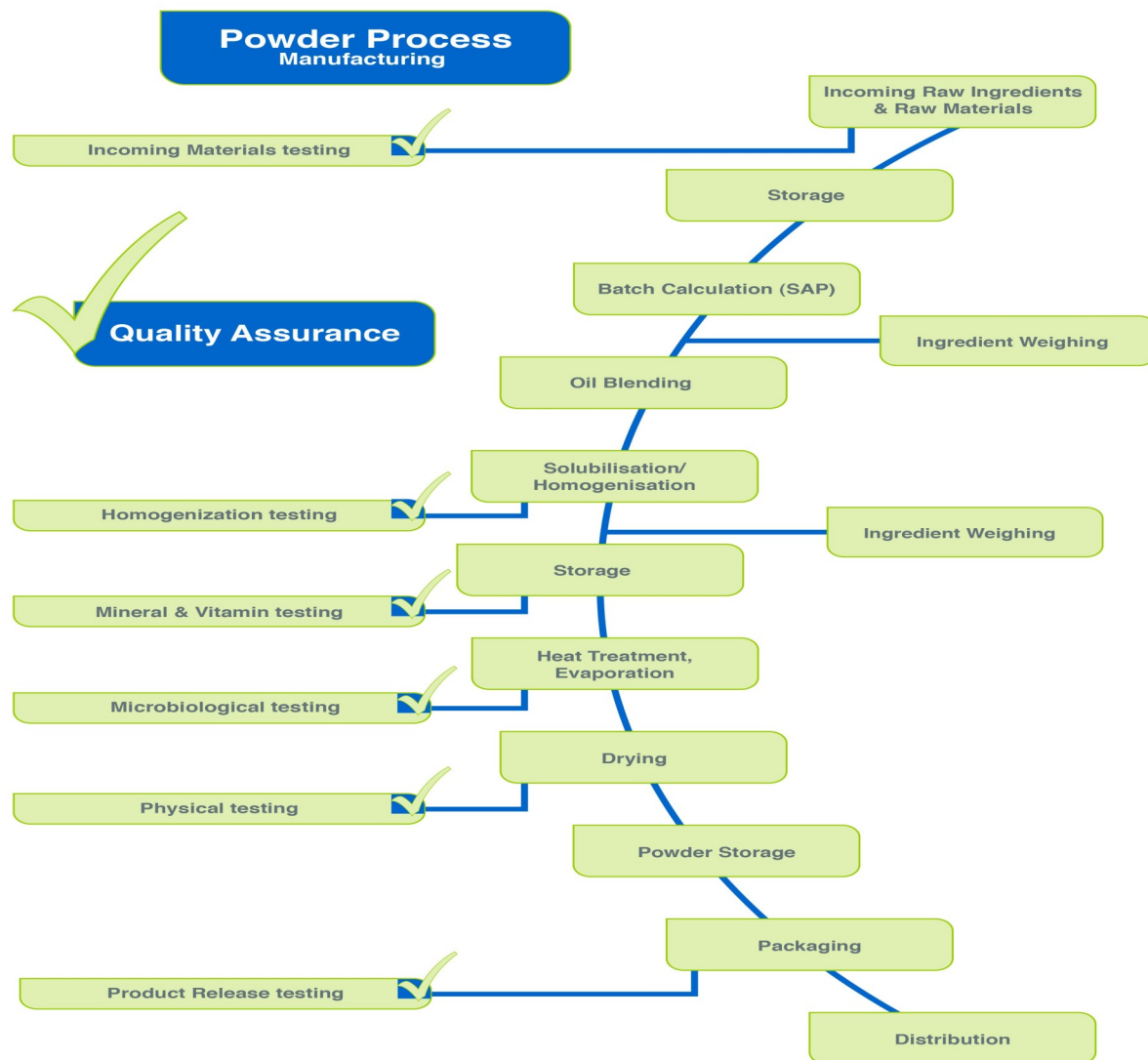
Asset Maps—Community

There are two ways that asset maps are used. It will be up to the designer to decide if their use is appropriate. The first kind of asset map is a community asset map, the second is a basically a resource inventory. A community asset map is a portrayal of the assets (skills, knowledge, talents and resources) that the members of a community and community organizations can bring to the table to solve a problem or to take advantage of an emerging opportunity. The use of this process can lead to community mobilization and empowerment. They can be organized like the following:

This process has been used successfully in the north for many years and in 1990 the (then) Department of Health went into each community to document what was available. The Legislative Library still has these Community Profiles.
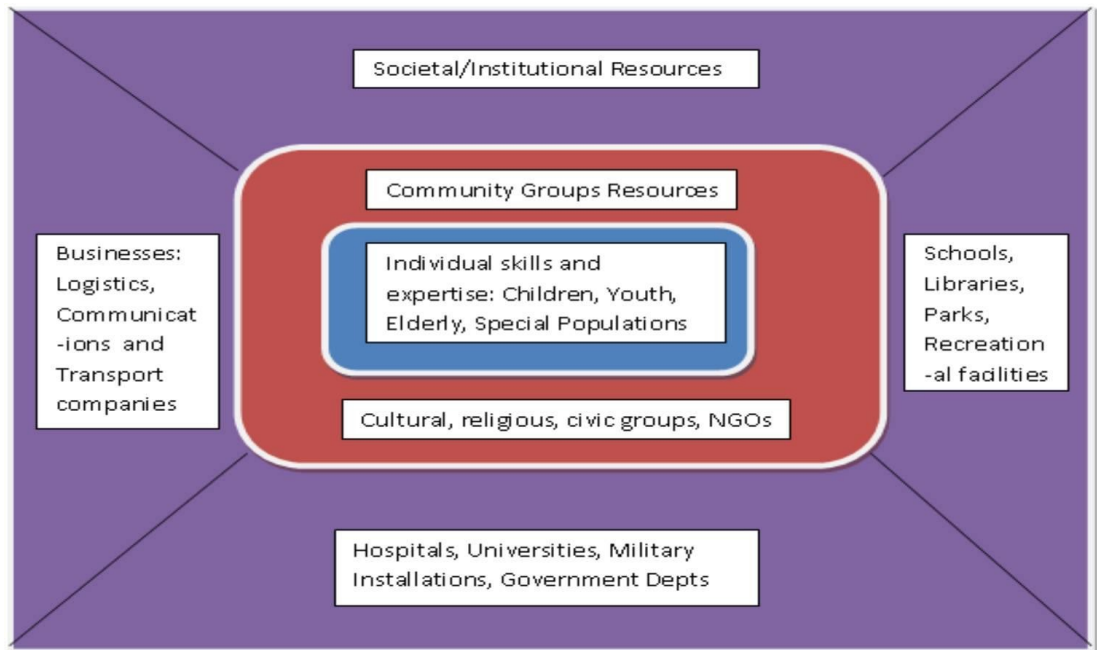
Figure 1 Disaster Management: **Strengths and Community Perspectives` *Journal of Global Social Work Practice*, Volume 2, Number 1, May/June 2009 Ngoh Tiong Tan Professor of Social Work Augsburg College, USA Figure 2 University Outreach and Extension University of Missouri System and Lincoln University**
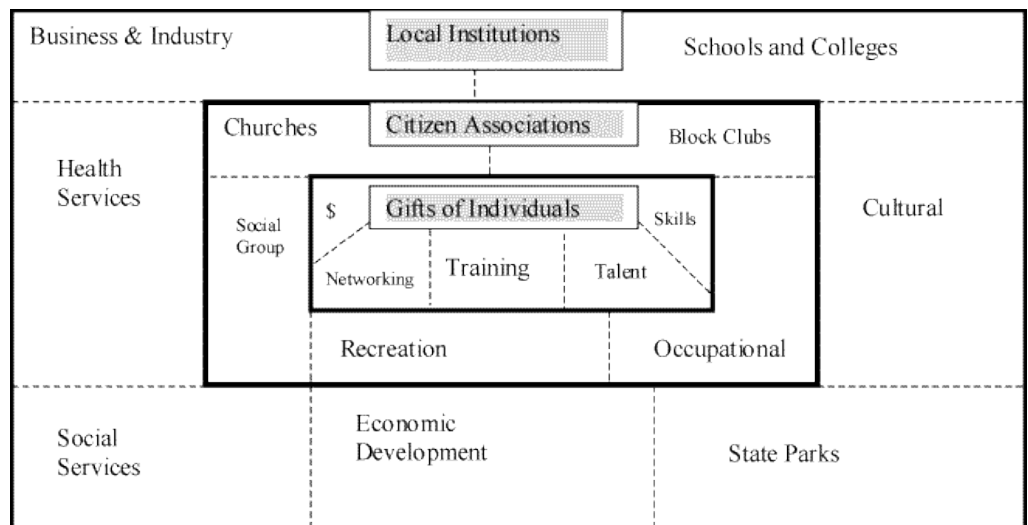
Asset Maps (Resource Inventory)

Networks and Partnerships
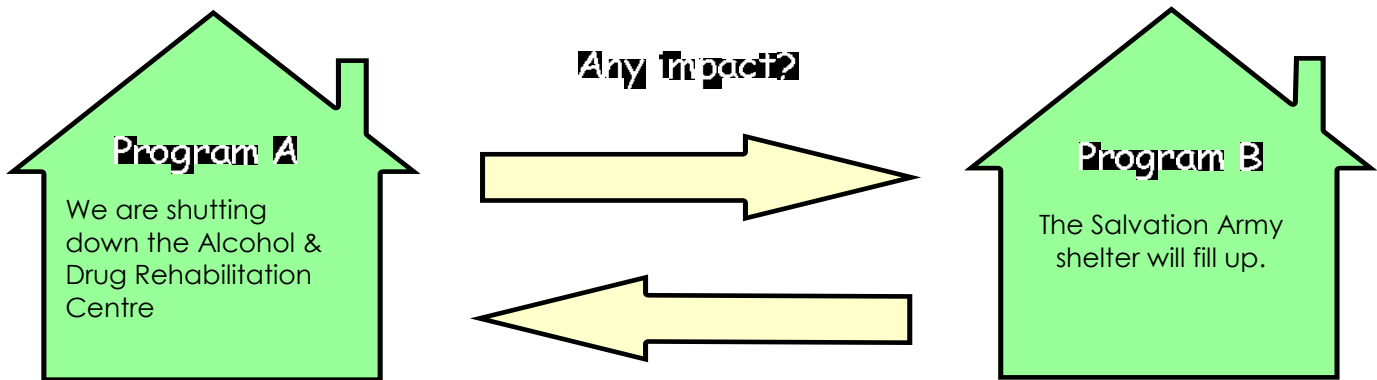
Supply chain network
NGO partners
Other GNWT departments
Local Private sector
Federal Departments
Professional associations
Public institutions
Retailers
Mass Media/Social Media

Equipment

Office equipment
Specialized heavy duty equipment
Building / Maintenance Supplies
Mainframes/special software
Specialized electronic technology

Human Resources

Staff and their skill sets
Professionals/technicians
Volunteers
Mentors
Lobby groups

Budget and Revenue

Training time
Advertising
Consultant time
Publishing
Honoraria
Mail out costs
Travel costs
Photocopying
Translation
Food
Long distance calls
Computer time
Backfill
Pay and Benefits
Insurance

Infrastructure

Office space
Vehicles (fleet)
Buildings
Sheds, parks, community space
Transportation—roadways, air strips etc
Water, power lines
Raw materials

Look for opportunities to share resources with other programs, (like splitting overhead costs). Consider administrative efficiencies like "one window" application procedures, etc.

Impact on Other Programs

Any Impact?

Program A

We are shutting down the Alcohol & Drug Rehabilitation Centre

Program B

The Salvation Army shelter will fill up.

It will be important to look holistically at the program and its impact on other programs and services that are offered by government and third parties. These might include corresponding reductions in needs for to other programs, increased demand on related programs, or increased infrastructure demands. Where such an issue is identified, consultation should be undertaken with affected GNWT departments or other parties. Be sure to remember the indirect financial impacts, which may arise as a result of program implementation. Will there be an impact by your program on other local organizations or programs? Consider the following:

- ❐ Schools
- ❐ Church
- ❐ Business
- ❐ Nursing station
- ❐ Detox centre
- ❐ Recreation leaders/Centres
- ❐ Government office maintenance
- ❐ Seniors homes
- ❐ RCMP
- ❐ Daycares
- ❐ Wellness coordinators

Design Considerations

Timing

What time of year is it? Is there anything going on in the community during the first few weeks of your program's start date that you need to be aware of?

Have you considered:
♦   Hunting season
♦   People out on the land
♦   Events in the community
♦   Christmas
♦   School break
♦   End of school year
♦   Elections
♦   Other surveys underway
♦   Fiscal year end
♦   Winter roads/ transportation issues

Are you introducing a new program along side an existing program during busy season? What do you think that program can handle at that particular time? Look at community and town websites, sometimes civic events are posted.

What might be good for your clientele? Is there a particular time that might be harder for your client group? There will be times in a small community that introducing a new program will not be a good idea. If the community has just experienced a death, a suicide, a tragic accident, or other loss, the community people will be grieving. Entering your program may be the last thing on their mind. Talk to the Band Council - they may be able to give you good advice. Might there be an opportunity to unveil the new program during a particularly exciting time?

Design Considerations

Communication

How can you get people to participate? You can invite them by letter, referral, personal invitation, radio, or newspaper, depending on the program. Remember that if the program you are promoting is very personal, people may not be comfortable in stepping forward. Referral agencies work well here - so you must be ready with a communications strategy to inform them about your plans. Make sure to communicate plans in the language that the audience will understand. This might mean working with translators.

Who needs to receive the information?
♦ Your stakeholders
♦ Your clients
♦ Referral Agencies
♦ Community groups
♦ Funding bodies
♦ The public
♦ Community leaders
♦ People who do what you do in other jurisdictions

Let your community know what you are planning to do. Support for your efforts may come in from a variety of sources and good community relations are extremely valuable. Good communication helps to relieve people's fears. Remember that when there is poor communication, rumors start, so you have to be open about what you are doing.

How about delivering a message through:
♦ Advertising/Radio/TV
♦ Newspaper
♦ Letters
♦ Reports
♦ Phone Calls
♦ Posters/Flyers
♦ Internet
♦ Community meeting
♦ Presentations

There are different ways to get your message across. It depends on your audiences. Think about them when you design your communications plan.

Design Considerations

Culture and Language

The way in which we see the world is influenced by our environment, our family, our community, our schooling and our culture. Each culture has its own way of interpreting the world. Most times, it is difficult to tell where an influence is coming from. Is it our attitude? Our values? Is it tradition, age, or gender? Maybe it is our professional or corporate culture? Sometimes there are conflicts between any two of these influences which will make decision making difficult. It is very difficult to tell where one influence ends and another begins. For some people, culture is the most important factor, for other people it may be their family, the church, or even television.

With social programming, the designer needs to be aware and if necessary, seek advice on the set-up, operation and rationale of the program within the cultural community that it is serving. For example, confidentiality in a tiny isolated community of 300 people is going to be an issue.

Some programs or services do not consider culture at all. Highway grading, vehicle registration, contract services or taxation in the NWT have legal requirements that processes take place in a certain manner. The point is that when designing your program be aware of the cultural, traditional, religious, or community environments which may influence the success of your program.

Language should be considered. It is important to remember that English might not be the first language of the client . With tourism, health, or the justice system, language can be key to successful understanding between two parties.

Design Considerations

Documentation

One of the first things that will save you grief and frustration is to set up an information retrieval system. You need to consider 4 areas;

Operational files

These are the organization's files for running the place. This includes contracts, bills, courier services, Xerox warranties, sick leave forms- that kind of day-to-day paper. Be sure to check what is required for the set up of your financial files. Your organization may have requirements that have to do with accounting when it comes to setting up these files.

Historical files

Some day when the program has been operating for a long time, you may get a question on why things were done a certain way, or you might want to someday go back to what you had set out to do to see if you are on track. Sometimes, a program operates for years with out any kind of review of the founding documents that can act as a touchstone to keep you grounded and on course. There is always the chance too, that someone will say "What were you thinking….? Keep all of the documentation of when the program was set up. You need to formalize the program by writing a terms of reference explaining the program so that in the event that you are criticized for being off track, you can pull the original documentation to show what all of the parties had agreed to.

Program Files

These are the files that relate to the program's activity. They should include things like work plans, contacts, research, briefing notes, important memo's to file, letters about your program and such. They can also include client files. Make sure if you keep client files that they kept are under lock and key with restricted access.

Performance information

We are not only talking about office files here but information retrieval systems that can help you to track activity and accomplishments. Once you have set up the logic model and outlined measures and targets you need to sit down and consider where your data will come from, how often it comes in and who will do the analysis. Set this up from the start. Once the program is up and running chasing after data can become labor intensive. As far as possible have numerical data entered on to electronic spreadsheets so that the data can be managed and interpreted.

CHAPTER 4

Monitoring and Evaluation

1. Program Cycle

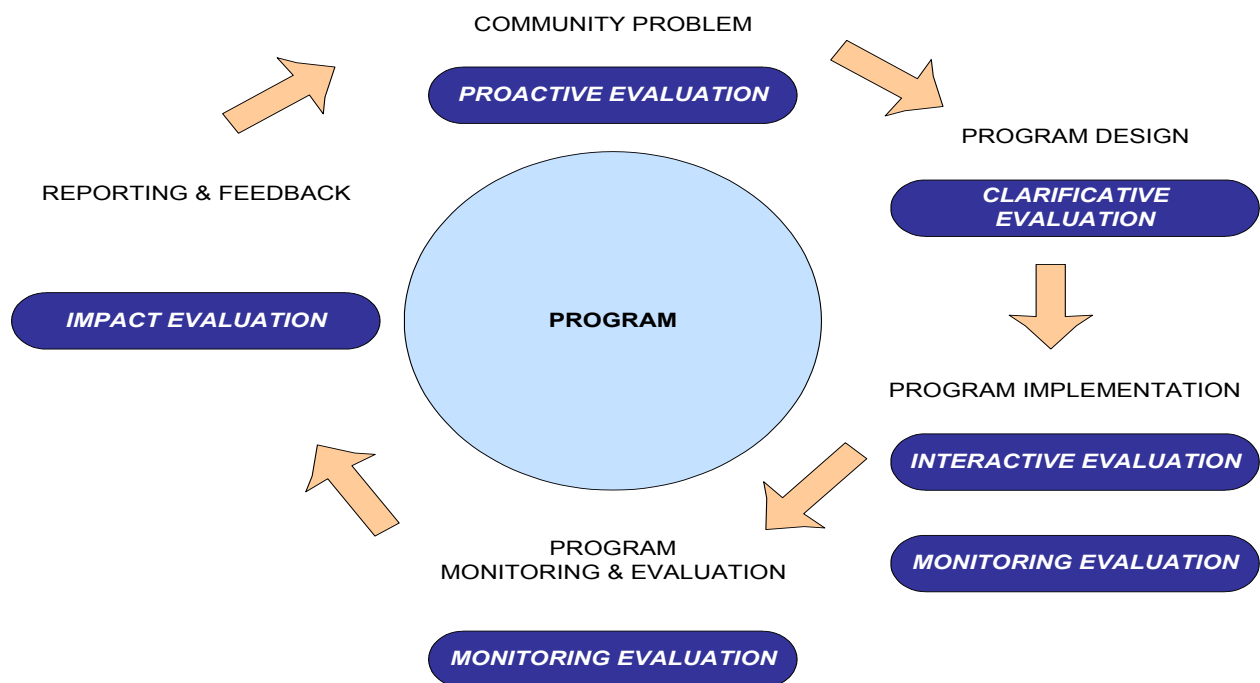2. Design and Forms of Evaluation

3. Logic Models and Evaluation

4. Monitoring and Measures
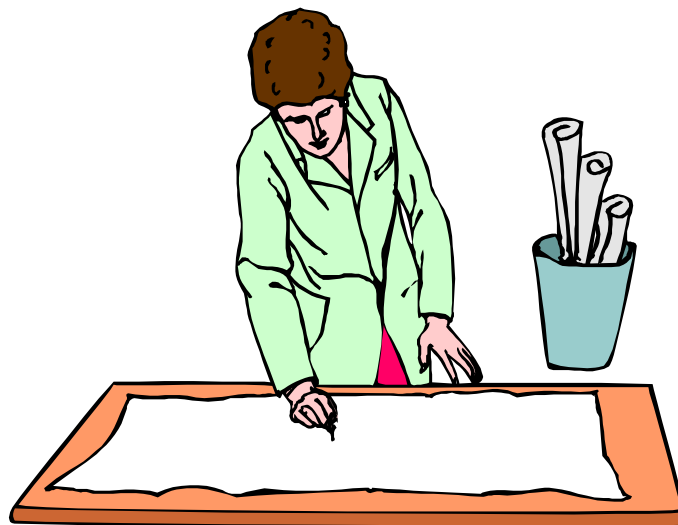
Program Cycle

At the end of your program design you will want to consider how the evaluation will take place and give thought to the kinds of data that should be in place for your monitoring and evaluation. Your program measures will be set up when you are reviewing the program logic, but for a full scale program evaluation a few other items like the program cycle will have to be considered.

Where the program is in it's cycle will give you a good indication of the kind of evaluations that might be appropriate. It is important to think about the programs age - can you possible have long term outcomes after just 6 months of operation? How about the needs of the funder? What do they need in order to satisfy their accountability requirements? Are there legislative require-ments for reporting? Who is the evaluation being done for?

BASIC PROGRAM CYCLE

COMMUNITY PROBLEM

PROACTIVE EVALUATION

PROGRAM DESIGN

CLARIFICATIVE EVALUATION

REPORTING & FEEDBACK

PROGRAM

IMPACT EVALUATION

PROGRAM IMPLEMENTATION

INTERACTIVE EVALUATION

MONITORING EVALUATION

PROGRAM
MONITORING & EVALUATION

MONITORING EVALUATION

Program Design and Forms of Evaluation

Form	PROACTIVE	CLARIFICATIVE	INTERACTIVE	MONITORING	IMPACT
Orientation	Synthesis	Clarification	Improvement	Justification/ fine-tuning	Justification/ accountability
Key Approaches	• Needs assessment • Research review • Review of best practice (benchmarking)	• Evaluability assessment • Logic/theory development • Accreditation	• Responsive • Action research • Quality review • Developmental • Empowerment	• Component analysis • Performance measures • Devolved performance assessment • Systems analysis	• Objectives based • Process-outcome studies • Needs based • Goal free • Performance audit

Chapter 1

Chapter 2

Chapter 4

Chapter 4
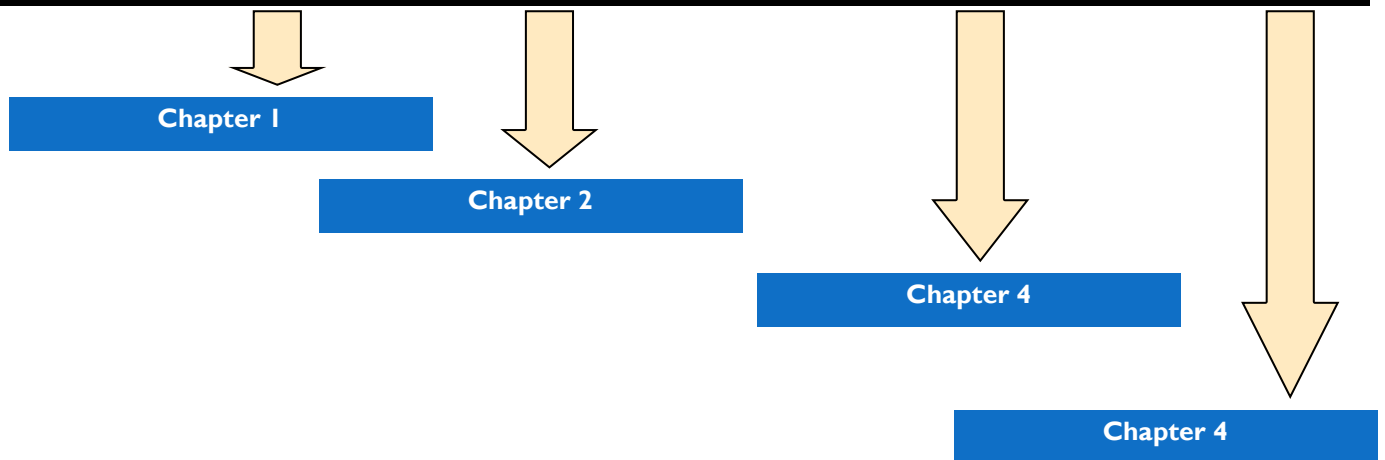
There are many forms of program evaluation. The one you choose will reflect the programs cycle, the questions that need to be answered, the clientele and program structure. Not all types of evaluation are reflected above, so it will be necessary to look at the information requirements and see how to most efficiently and ethically that you can collect the information. It is advisable to do a literature search and look at journals where programs similar to your shave been evaluated. You might be able to re-structure a past evaluation to suit your particular needs.   Remember these three key items:

1)   the value of the information that you collect has to be worth the time, effort and money spent to collect it;
2)   you should gear your evaluation into looking for change (not just documenting processes)
3)   multiple lines of evidence are good.

MONITORING & EVALUATION

WILL THE DESIGN OF MY PROGRAM DETERMINE THE KIND OF EVALUATION I CAN DO?

In the sense that your administrative systems need to be set up to collect and analyze data, your design will affect your ability to evaluate effectively but, as you can see from Owen's Forms and Approaches of Evaluation below there are many types of evaluation that can be used across the phases of a program's life. Notice the term "claricative". It is an evaluation method which contains many of the same steps as program design. It helps to sort out the programs goals and actions.

PROACTIVE	Before the Program, finding out if there is a problem and what the root of the problem is	Needs assessments, Research Reviews, best Practice Reviews
CLARIFICATIVE	To clarify what the program is supposed to be focused on, how it is supposed to be working, and if its internal logic is solid	Evaluability Assessments, Logic Models, Accreditation
INTERACTIVE	Improving the service, looking at the delivery of the service, is the service effective?	Action Research, Quality Reviews, Participatory, Empowerment, Process Re-engineering
MONITORING	Justification of the program, fine-tuning the details, looking at the volume of work	Component analysis, Performance Measurement, Trends Analysis
IMPACT	Justification, accountability, did the program make a difference? To whom?	Outcomes Based, Goal Free, Perform-ance Audit, Impact Analysis

If the designer has gone through this manual they are on their way to understanding an evaluability assessment. An evaluability assessment (EA) not only looks at the materials and information available to evaluators, but it examines the way the program works to produce the results. It helps in:

- Identifying the programme's objectives
- Identifying the intended activities to achieve the programme objectives
- Identifying incongruities between the programme's objectives and its intended activities
- Investigating field operations
- Comparing actual field operations to the programme's intended activities
- Providing management and evaluation options

Carol Weiss and Joseph Wholey are two good resource authors on this subject.

This table has been added to give the designer options on what the program will attempt to evaluate and when to evaluate in the program's life.

Performance Measurement and Program Evaluation

As part of program planning, a monitoring and evaluation framework should be developed which has at least the following components:
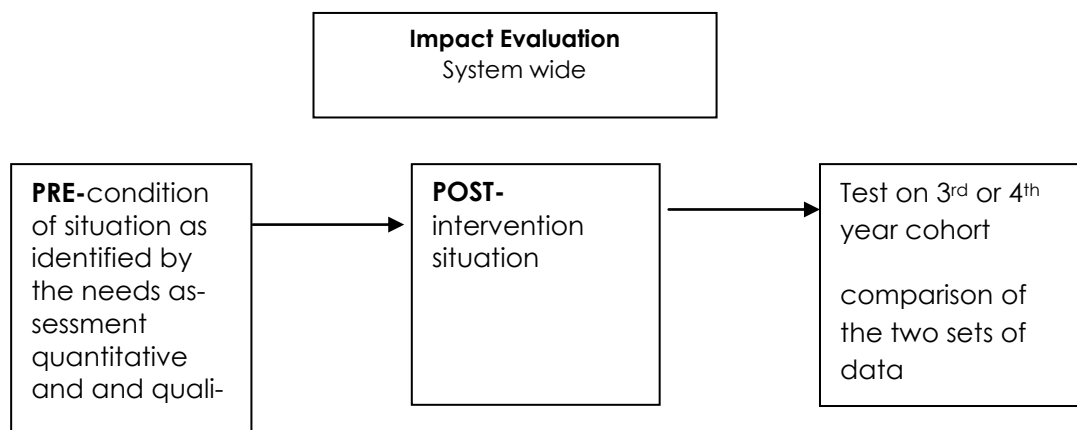
A Simple Evaluation Plan

What are the evaluation questions?	What is the best tool to answer these questions?	Who (or what) will give you this information?	When is the best time to collect this information	Who on your team will be responsible for collecting this information	Who will do the analysis?
1. 2. 3.	1. 2. 3.				

Get your data collection systems in place right from the start! The framework should identify anticipated evaluation questions/issues, and the information that will be required to address these issues . The schedule below gives an idea of how the program monitoring could be set up:
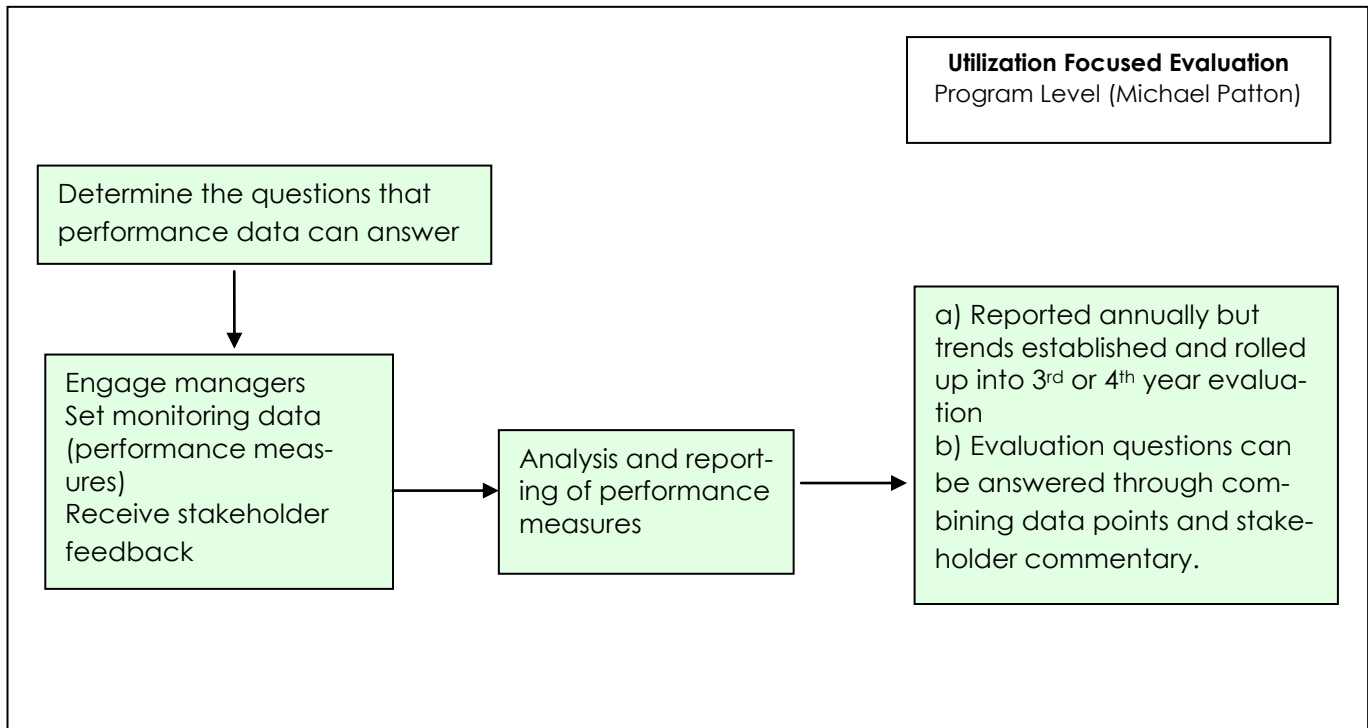
One approach to an evaluation:

OUTPUTS					
Output	Where is the data?	Who collects it?	When is it collected?	Whom is it sent to?	Who does the analysis?
# of participants	Instructor sign in sheet	instructor	Every morning	Course secretary	Manager
Reported Where:					

Impact Evaluation
System wide

PRE-condition of situation as identified by the needs as-sessment quantitative and and quali- → **POST-** intervention situation → Test on 3rd or 4th year cohort

comparison of the two sets of data

The secret? If you have followed the logic models as they have been outlined earlier, the building blocks for the evaluation framework , the major questions, and the measures are already in place.

Another approach combining monitoring data and evaluation:

Utilization Focused Evaluation
Program Level (Michael Patton)

Determine the questions that performance data can answer

Engage managers
Set monitoring data (performance measures)
Receive stakeholder feedback

Analysis and reporting of performance measures

a) Reported annually but trends established and rolled up into 3rd or 4th year evaluation
b) Evaluation questions can be answered through combining data points and stakeholder commentary.

Have a look at the evaluation and monitoring manual—it will lay out the process for an evaluation and setting up performance measures. But here are some pointers in the meantime:

Do
- Collect data in a consistent manner
- Collect data in a timely manner
- Have a database or data storage system set up
- Use different data sets to look at correlation
- Brush up on your statistics
- Pay attention to the reliability and validity of your data

Don't
- Collect data in a manner that you can't use
- Set targets that are not based on past performance
- Assume that your staff know how to do data analysis

Get help!

No one is good at everything so if you need advice or assistance call the program review office or the Bureau of Statistics for help in setting up your data systems or analysis!

CHAPTER 5

Defending your Design

1. **Who Benefits and How They Benefit**

2. **Alternate Methods of Program Delivery**

3. **Program Compatibility**

4. **Cost-Effectiveness and Efficiency**

5. **Accepted Management Principles**

6. **Financial Feasibility**

7. **Feasibility of Implementation**

8. **Program Flexibility**

9. **Measurement and Program Evaluation Plans**

10. **Cessation Provisions**

Defending Your Design To Senior Management

Whatever the purpose of any public program, its logic and internal consistency can be exposed and analyzed using objective rational criteria. Once the program has been designed on paper, the following criteria should be discussed with policy officials, and/or senior management to ensure that all of these considerations have been covered.

← **HAVE YOU:**

1. Identified Who Benefits and How They Benefit

All program designs require clear, explicit identification of the primary beneficiaries and the specific benefits they can expect. Without this foundation, no rational program design methodology can be sustained. Programs designed to solve particular problems should be consistent with the missions of the agencies responsible. However, both the problems addressed and the missions pursued should always be framed in the context of who benefits.

Prioritize Beneficiaries. The public purposes and program goals must be defined in terms of benefits to individuals and/or groups. There are two levels of beneficiaries, primary and secondary, which must be reflected in a program's design. Primary beneficiaries benefit directly from a program. To illustrate, the Department of Veterans Affairs serves veterans; the programs it administers clearly define categories of veterans who qualify as beneficiaries. Other programs' intended primary beneficiaries are not as clear. Consider government programs allowing removal of trees from federal lands. In this latter case the class of primary beneficiaries may be the loggers--who would otherwise be unemployed--the logging companies, the domestic and foreign timber consumers, or the recreational users who object to despoiling the environment. Secondary beneficiaries are those individuals, groups of individuals, or organizations benefiting indirectly from a program. Finally, a class of interested parties, not strictly beneficiaries of a program, are stakeholders, such as taxpayers. The taxpayers deserve the most effective and efficient design possible to maximize the return on their investment in tax dollars.

Validate the Need. It is essential to verify that the need exists and will persist. The program designers must be able to document that the need is more than a short-term aberration. The program must avoid addressing obsolete problems or needs that are more effectively solved through community or local initiatives, through the private sector, or by non-profit organizations.
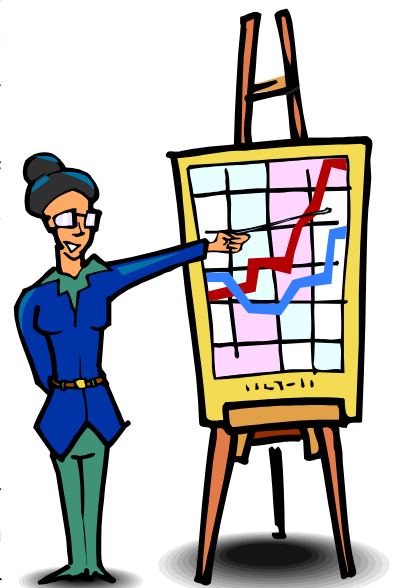
Determined Program Size and Scope.

Program designers must also determine the size and scope of the population to be served so the course of action matches the problem. How many people are affected? What are the eligibility criteria? What are the characteristics of the affected populations (geography, socio-economic factors, etc.)? What level of diversity exists among the populations affected? What is the minimum program size necessary to achieve the results required? If there is more than one problem to be addressed, the program designers must identify each need and prioritize solutions to avoid unbalanced or skewed designs.

Inspired Public Confidence.

Program design should give the program credibility with the public. There is a common perception that the political process does not always place program priorities on the appropriate beneficiaries. Without strong public confidence, programs are hindered from gaining approval and overcoming resistance during implementation. A federal program should appear to make sense both in intent and by design as a valid commitment of public resources.

2. Defined and Evaluated Alternate Methods of Program Delivery   ⟵ **HAVE YOU:**

After clearly defining program goals and beneficiaries, the designers should consider any alternate forms of program delivery. Not all public needs must be satisfied by direct delivery of services. Alternatives to direct government service include regulatory requirements, government sponsored enterprises, tax incentives, government guarantees, monitoring and enforcement, etc. Different program delivery methods can often attain similar ends, although costs and schedules are not likely to be the same. For example, some programs can be delivered in many forms such as direct cash payments, contributions to communities, block grants, tax exemptions, privatization, etc.

Reviewed Against Assumptions.

Alternatives must be reviewed explicitly against fundamental assumptions. What are the critical success factors identified by the beneficiaries? How has success been measured and how well does each program design address the needs identified? What is each design's ability to serve people, to adapt to emerging technology, and to use existing facilities? What are the possible unintended consequences or adverse effects of each design mechanism? How do they compare to the status quo?

3.   Examined Program Compatibility   ←   **HAVE YOU:**

It is rare that any new program is so independent and autonomous that it enters a domain totally unpopulated by pre-existing efforts. Consequently, program design should be mindful of compatibility and complementarity with related programs.

Comparative Advantage

What does this program do that is unique? Would another program or program design perform these functions better? What would beneficiaries lose if this program did not exist?

Complementarity

Does the program complement other programs that serve the same beneficiaries? Does the program needlessly duplicate or overlap other programs at the federal, territorial, or local levels? Does the program foster cooperation or does it create barriers between beneficiaries and administrators?

Harmony

Is the program consistent with the mission of the agency which would administer it? Does it create conflict in the agency? Is the program more compatible with another agency's mission? Are another agency's programs more interrelated and would that agency therefore be a better fit? How easy is it to add the program to an existing organizational structure? Will it replace one or more existing programs? Does it create or reduce redundancies?

Catalyst

Does the program foster competition or does it encourage monopolies? Does the program design result in the empowerment of people and communities so they have a vested interest in how the program is run? Is there positive leverage with other programs or destructive interference? Does the program encourage the right behaviour or do perverse incentives motivate dysfunctional behaviour?

4.   Assessed Cost-Effectiveness and Efficiency
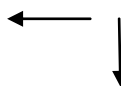
HAVE YOU:

Program designers should apply cost-effectiveness and efficiency criteria to the program as a whole and to specific program elements (including organizational structures, program delivery, and administrative support functions.) Program designers also should consider the program's social efficiency; i.e., how the program might be designed to achieve the greatest net benefit to society as a whole. Identifying major relevant impacts of the policy, including direct and indirect impacts on the program's direct beneficiaries, other affected groups, and society as a whole; categorizing costs and benefits for various affected groups; and quantifying dollar impacts. In principle, the design which is estimated to achieve the highest net benefit should be selected.

5.   Evaluated Consistency with Accepted Management Principles

While the field of management is not a precise science, it does represent an accumulation of knowledge useful in illuminating the strengths and weaknesses of public programs. Using generally accepted management principles to evaluate various program designs may help identify both inherent deficiencies and alternative remedies. Where violations of conventional wisdom are appropriate, the justifications should be clear and convincing. Among the numerous management principles applicable to program design to be given particular emphasis are those consistent with GNWT values such as:

- serving customers,
- empowering employees,
- empowering communities to solve their own problems, and
- fostering excellence.

6.   Ensured Financial Feasibility

The program cost must be known if the government is to avoid incurring unlimited liabilities. Among the alternate cost elements that may be relevant are: total life cycle costs: the full costs of creating, operating, maintaining, and terminating the program from inception to conclusion (where end points are reasonably defined); annual budget requirements: the amount that must be appropriated annually to sustain/maintain the program throughout its lifetime; risk of cost overruns: the probability that actual program costs will exceed approved budget levels including the expected cost of unbudgeted contingent liabilities; revenue generation: the expected income returns to the GNWT from the program's operation.

7.0   Determined the Feasibility of Implementation

Even the best-designed program will not be effective if fatal flaws of implementation are not considered during its design. Without effective implementation, program proponents will not see their goals successfully accomplished. Given the number and types of programs, it is unrealistic to formulate universal principles of implementation that apply exactly to all programs. Yet it may be instructive to identify a few common pitfalls to consider in the designs of many types of public service programs.

Foremost, **implementation should be embedded** in the program design. Therefore, the more that programs explicitly consider anticipated difficulties and conditions of implementation, the fewer the surprises and the more likely program success. Although detailed operational plans are not usually developed during the program design phase, at least some consideration in broad outline would be prudent management.

Secondly, it is imperative to identify clearly **who is ultimately responsible** for the program to anticipate their capacity to administer and to ensure accountability. We cannot know the barriers and impediments to success without knowing clearly who (which organization(s)) is charged with carrying out the program. An assessment of the capabilities of the agencies through which the program resources and responsibilities will flow could pinpoint potential roadblocks, sources of conflict, and choke points that might hamper implementation.

For programs to be implemented more effectively, we must ensure the following:

- those responsible for implementation earnestly strive to achieve the stated program goals and mission;
- policies and actions are decisively made and clearly transmitted; and decisions and policies encourage creativity, flexibility, and adaptability.
- an accurate description of the organizational network directly affected by the program would identify the critical relationships and points of coordination required or implied by program operations.

HAVE YOU:

Third, the **timing** of critical events is absolutely essential. Although many alternate sequences of activities are possible, key deadlines may not be discretionary (e.g., budget approvals, legislative requirements, awarding of contracts, etc.) and certain schedules offer distinct advantages over others. More programs suffer from overly ambitious timetables than from unduly conservative ones; effective implementation requires sufficient time.

Fourth, in designing programs, attention must be given to **resources.** However, due to various compromises or competing demands, sufficient resources may not be available to implement a program properly. Program designers may not be aware of inadequate resources or may choose to ignore the problem. There are several important components of resources critical to implementation, including:

- adequate staff with the appropriate knowledge (programmatic and managerial);
- sufficient information on how a program or decision is to be implemented and the support/approval of other necessary agencies and participants;
- necessary authority to permit the programs or decisions to be implemented; and
- facilities and equipment necessary to implement the program or decision.

Fifth, prudent experimentation before committing the government to a major public investment could help avoid expensive misadventures and illuminate the pitfalls in uncharted domains. While **pilot demonstrations** are not appropriate for all programs, they are highly desirable under a wide range of conditions such as:
- high risk programs--where the consequences of failure are catastrophic or life threatening;
- where the economic investment is substantial enough to justify small experiments;
- where there is significant complexity--either organizational or programmatic (e.g., health care, homelessness, economic renewal);
- where there is great uncertainty surrounding the proper solutions;
- where there is intense public controversy or low political consensus; and
- when there is no immediate urgency that precludes more deliberate exploration of alternate approaches.

## 8.   Made Provisions for Program Flexibility

Perhaps the only universal element in all program design is the certainty that even the most carefully formulated plans and policies will not be realized exactly as designed. Given the inordinately long gestation periods for many public programs, coupled with lengthy implementation periods, it may be as long as five years before a program may be mature enough to sustain a valid evaluation.

In the meantime, the conditions and constraints under which a program operates may have changed significantly from when it was first conceptualized. Therefore, the design of programs should permit enough management flexibility to allow agencies to adapt to external changes, unforeseen circumstances, variations in resource levels, and schedule changes. In addition, program designs should free organizations to tailor programs to local circumstances.

While no one can anticipate every possible contingency, the most likely changes (e.g., budget erosion, schedule slippage, personnel shifts) should not have catastrophic impacts on well-designed programs. Programs dependent on critical, highly sophisticated, specialized, or scarce resources (e.g., key individuals, unproven technology, rare expertise, unique facilities) are fragile because they are vulnerable to uncertainties in the availability, quality, and quantity of these essential resources. Programs should be designed to absorb reasonable schedule changes with minimal impact.

9.   Instituted Performance Measurements and Program Evaluation Plans

Program designs should incorporate feedback mechanisms enabling managers and policymakers to assess how well a program works in terms of both implementation and achievement of program goals. Of course, program designers first must sufficiently identify the program's goals and specific performance objectives to measure success. (see next chapter).
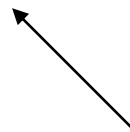
HAVE YOU:

10.   Build in Cessation Provisions

There is a common perception that some government programs and organizations outlive their usefulness yet continue to exist without rational purpose or tangible benefit. Government has often been criticized as being totally incapable of abandoning programs, despite success, failure, or lack of evidence of either. Many government programs do not explicitly provide for their conclusion or termination for any cause whatsoever. A program design which does not address the ultimate fate of the program is at best incomplete, at worst self- perpetuating. Although some programs have no expected expiration (e.g., Social Insurance Program), others do possess an ultimate end point (e.g., inoculation programs should cease when the disease is essentially eliminated, as in the case of smallpox). Determination should be made at the onset as to what marks the justified end of a program. When these benchmarks are established, it will be easier to decide when to redesign a program or just stop.

A case in point was the Helium Fund Program created in 1925 in the USA to ensure helium supplies for blimps. It has accumulated a 176-year supply of helium along with a $1.4 billion debt. All original objectives (except paying for itself) have been met. The obvious question is who are the primary beneficiaries of this program now that blimps are not critical to national security or commerce?
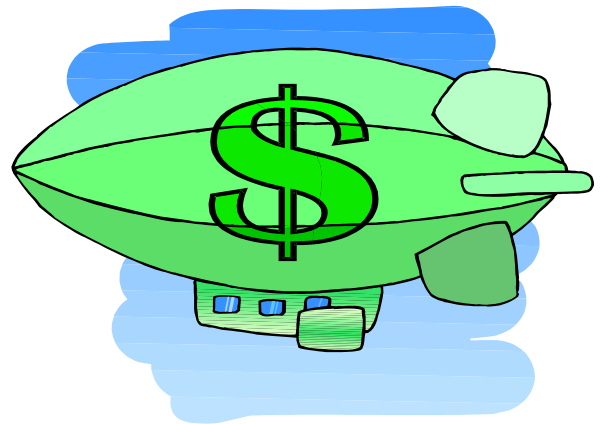
Program Design Checklist

- ❐ Problem definition researched

- ❐ Fishbone diagram completed

- ❐ Context documented

- ❐ Client body defined

- ❐ Goals - written/ approved

- ❐ If-Then relationships completed

- ❐ Hierarchy of Outcomes completed

- ❐ Program Logic Models drafted/ tested

- ❐ Procedures and Process diagrammed

- ❐ Asset Maps completed

- ❐ Impact on other programs assessed

- ❐ Policies developed

- ❐ Budget completed

- ❐ Timing - consulted on

- ❐ Communication methods chosen

- ❐ Documentation preserved

- ❐ Data collection system set up and evaluation framework in place

- ❐ Reporting schedule approved