

Business 9301

Research Project: Phase One

Evidence-Based Policy and Practice

Submitted to: Dr. D. May

Submitted by: Gillian Janes

Student Number: 9876475

Date: December 4, 2002

Introduction

In its most basic sense, evidence-based practice involves understanding and explaining “what works for whom, in what circumstances” (Sanderson, 2002, p.2). Indeed, the notion of “evidence-based” policymaking has grown significantly over the last decade and has been adopted in various disciplines, including health, education, urban planning, and public administration, to name a few. The UK, in particular, has been a world leader in developing and implementing the evidence-based approach to public policy. Other areas of Europe, North America, Australia, and New Zealand have also taken hold of various aspects of the approach, however changes to policymaking appears to be slow-moving and the approach is not well adopted into practice. Despite the wealth of literature and theory on the concept of evidence-based practice, most policy makers (including those within our own province) struggle to comprehend its meaning, let alone implement the practice.

The evidence-based approach to decision-making and policy development is a powerful management tool in that it helps managers identify the best alternatives to bring about the most effective results. Such an approach is attractive for all sectors: private, voluntary community-based and, most importantly, public. In most every jurisdiction throughout the world, fiscal resources are limited and demands on public services are enormous. A policy approach that identifies the best uses of public funds should certainly be adopted so as to minimize waste and avoid duplication. This is certainly the case in Newfoundland and Labrador, and the writer will discuss the local situation throughout this research paper.

The writer is completing a three-phase research project that will outline the evidence-based approach to decisions and policy making. The first phase of this project will involve the theoretical aspects of evidence-based practice and background information regarding its

development. Phase two will entail identifying a local problem and actually implementing the evidence-based approach to begin addressing the problem. Phase three of the research project will involve outlining the lessons learned about implementing the evidence-based approach and also provide an overview of some of the practical challenges involved. The role of management will be highlighted as much as possible throughout all phases of this research project, as the purpose behind the evidence-base movement is to change the way managers make decisions and develop policy in all sectors.

As the first of phase of this research project, the purpose of this current paper is to define the evidence-based approach to decisions and policy-making and describe its various aspects. As well, the writer will provide an overview of the development of the approach and make some comparisons with traditional approaches to policy making. The writer will also outline the importance of research and evaluation in the evidence-based approach and then outline some models of evidence-based practice that merit further investigation in order to promote the approach at the local level. Lastly, the writer will provide a preliminary overview of how to implement the evidence-based approach to address a local problem/need within Newfoundland and Labrador. This last section will be a direct link to Phase Two where the implementation process will be described in greater detail.

Defining “Evidence-Based”

In order to provide an overview of the evidence-based approach, it is first necessary to define the concepts of “evidence” and “evidence-based”. As indicated above, the evidence-based approach involves an understanding of “what works”, however this approach to decision-making and policy development is very broad since it spans so many disciplines and sectors. In

addition, there are various schools of thought as to what constitutes evidence. For example, Solesbury (2001) relies on an Oxford Dictionary definition of evidence: “the available body of facts or information indicating whether a belief or proposition is true or valid” (p.8). A more detailed explanation as to what can be considered good evidence in policymaking is summarized by Nutley and Webb (2000) based on information abstracted from Britain’s Cabinet Office (1999):

The raw ingredient of evidence is information. Good quality policy making depends on high quality information, derived from a variety of sources – expert knowledge; existing domestic and international research; existing statistics; stakeholder consultation; evaluation of previous policies; new research, if appropriate; or secondary sources, including the Internet....In any policy area there is a great deal of critical evidence held in the minds of both front-line staff in departments, agencies and local authorities and those to whom the policy is directed. (p. 23)

Evidently, this broader definition is very forward thinking since it involves so many sources and stakeholders – particularly those stakeholders who are likely the most affected by the policy.

The term evidence-based is also defined in several different ways. In the medical field, Sackett, Rosenberg, Gray, Haynes, and Richardson. (1996) define evidence-based practice as “the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients” (p. 71). Porter and Matel (1998) further elaborate on this definition in saying that:

...*conscientious* means evidence is relevant and is applied consistently; *judicious* means evidence is combined with clinical expertise to obtain a balance of risk and benefit for the

patient, client or customer; and *current best evidence* means evidence is up-to-date, and we know the difference between what is strong evidence and what is not. (p. 404)

In a similar way, MacDonald (2001) indicates that the evidence-based approach involves being “transparent, accountable, and based on a careful consideration of the most compelling evidence we have about the effects of particular interventions on the welfare of individuals, groups and communities” (p. xviii).

While there are certainly many variations of the terms “evidence” and “evidence-based”, Davies et al. (2000) sum up the concepts best in saying that “perhaps the unifying theme in all the definitions is that the evidence (however construed) can be independently observed and verified, and that there is a broad consensus as to its contents (if not its interpretation)” (p. 2).

Having defined the terms, it is now necessary to provide background information as to how the approach has evolved over the years.

Development of the Evidence-Based Movement

For certain, the health sciences field has been a frontrunner in using this approach, particularly in the UK. Lloyd (1999) succinctly describes the history of the evidence-based movement in Britain that essentially began when Dr. Archibald Cochrane, an epidemiologist, published *Effectiveness and Efficiency* in 1972. Lloyd describes this work as “a sustained polemic against [Cochrane’s] profession’s ignorance on health care – an ignorance that stemmed from the inability of the researcher, doctor or nurse to have at their command the latest research findings on the problem before them” (p. 12). Another source, Dochterman and Grace (2001), refer to Cochrane as being ahead of his time, as approximately 20 years after his book was published the Cochrane Collaboration was established. The authors describe the Cochrane

Collaboration as a group that maintains and distributes research information and includes a library that houses both the Database of Systematic Reviews and the Database of Abstracts of Reviews of Effectiveness. Sanderson (2002) further describes the Cochrane Collaboration as having a mandate “to bring evidence from reviews of the effects of healthcare interventions to bear upon decision making” (p.2). The impact of Cochrane’s work has obviously been far reaching, as the collaboration initiative has been emulated in the areas of educational and social policy through the establishment of a second such British initiative, the Campbell Collaboration, in 1999 (Solesbury, 2001).

Dochterman and Grace (2001) further describe how the evidence-based movement has grown in the UK since the early 1990’s, mainly through the National Health Service’s move toward providing health care based on “evidence of clinical effectiveness....within the resources available” (p.61). Indeed, basing decisions on evidence been well established in the field of health sciences for many years. In other disciplines, however, the approach has essentially only begun to catch on within the last decade. Again, the UK is the most advanced in adopting this approach as the standard way of conducting business in the public sector. Presently, in the UK, evidence-based practice has expanded within a broad range of disciplines, most notably education, criminal justice, social services, welfare policy, housing, transportation, and urban planning (Davies et al., 2000).

Prior to the adoption of the term evidence-based, however, the general demand for increased accountability and proof that programs and services are working increased dramatically over the last several decades. Numerous sources (e.g. Coalition for Evidence-Based Policy, 2002; Nutley and Webb, 2000) cite how the general public has increased its expectations around such aspects as accountability and access to information for several key reasons. First,

the general public is now much better educated than previous generations, thus there tends to be more awareness around such factors as policy implications and fiscal constraints. People are generally better able to challenge leaders and bureaucrats and ask pertinent questions for which they expect intelligent answers. As well, the general public has become more knowledgeable on any number of issues through easy access to information via 24-hour television, the Internet, and countless other databases and resources. Hence, the need to rationalize and/or defend policies and procedures has subsequently grown in prominence, including the need for evidence as to what works.

Perhaps the most obvious way in which the demand for an evidence-based approach has grown is through studying and evaluating the effects of various past public interventions – particularly those that have failed. The Coalition for Evidence-Based Policy in Washington, D.C illustrates this point well in saying that since no such evidence-based approach to economic and social programs exists in the United States, “government programs often are implemented without regard to rigorous evidence, wasting billions of dollars and failing to address critical needs in our society” (2002, p.1). While this source cites an American experience, this is undoubtedly the situation throughout most every jurisdiction. In Canada, for example, Lewis, Battista, Lomas & Ross (1998) argue that Canada has a “rich tradition of academic activity....Despite the wealth of information, it is striking how often local and larger policy decisions are made without clear reference to the best available research-based evidence” (p.210).

Indeed, many citizens have become skeptical - if not cynical - about program and policy effectiveness when they fail to see any considerable changes over time. People are concerned about how, where, and why their tax dollars are spent and they want assurance that such taxes

are spent in ways that will provide the most return or benefit. This appears to be the case throughout all disciplines, as the following excerpt from Solesbury (2001) summarizes well:

It may be that this new interest among professionals in bringing impartial evidence to bear on their practice is related to the loss of public confidence that most have suffered in recent years. Traditionally, professionals operated like a priesthood, reliant on the unquestioning faith of their followers. But patients, parents, students, clients, customers of all kinds are less and less inclined to take professional views on trust. Their 'informed consent' is needed to any intervention which means that professionals must be ready to explain not just what they advise and why it is appropriate, but also what they know of its likely efficacy. (p.6)

In the traditional approaches to public policy development information tends to be centralized, usually within governments. There is generally a "top down" method that does not involve much adaptation to address local needs. In contrast, the evidence-based philosophy involves sharing information widely and communicating more effectively so that various stakeholders can more readily access information about what is known to work (Nutley & Davies, 2000). In keeping with this demand for more accountability and access to information, research and evaluation have also taken on more prominence in recent years, as will be described later in this report.

Various Aspects of the Evidence-Based Approach

Having defined the concepts of evidence and evidence-based, it is now necessary to outline the main aspects for implementation. The writer notes here that an introduction to these theoretical concepts is necessary in order to provide background information and set the stage for

addressing a local problem in the research phases that follow. The main aspects to be outlined below are: needs, objectives, root causes, activities, inputs, outputs and outcomes. The writer will also briefly touch on the concepts of Cost-Benefit Analysis (CBA) and Net Social Benefits.

Needs and Targets/Objectives

First, in implementing evidence-based practice, **needs** must be clearly identified. That is to say that needs assessments must be based not just on anecdotal or qualitative evidence but also on quantitative evidence as much as possible. Mark, Henry and Julnes (2000) discuss several challenges to needs identification that include the fact that needs and values can change over time. According to the authors, needs change as societies evolve and people become more educated. Further, the authors convey that it is often difficult to set priorities from the vast array of needs identified and that needs can often conflict.

In terms of quantitative information, The Newfoundland Statistics Agency (NSA) points out that social indicators and benchmark data related to these indicators can help in quantifying the extent of needs (1999). For example, data analysis on education indicators such as rate of high school completion can help to identify areas of need if comparisons indicate higher rates in some regions or communities over others. The NSA also suggests that once needs are identified, both qualitatively and quantitatively, **targets** should be set. Targets are defined as “the change in the benchmarks that...managers hope to achieve over time to reduce or eliminate social needs” (p.75).

Needs are closely linked to objectives, as Nutley and Webb (2000) point out in describing the first stage of using evidence in one model of policy making: “A problem which requires action is identified. The goals, values and objectives related to the problem are set out” (p. 25).

In a similar way, Sanderson (2002) contends that there are two aspects of policy making that tend to get little attention: evidence of problems or needs and also **objectives**. He articulates that “rationality is enhanced by being clear about the objectives we wish to achieve and by evaluating the extent to which the policy as implemented actually achieves these objectives” (p. 5). Thus, much time and effort must be put into clearly identifying needs and setting appropriate objectives to move forward in addressing those needs. Again, this approach differs from traditional approaches that tend to rely on indirect evidence, which is generally anecdotal and fragmented (Maclure & Potashnik, 1997).

Root Causes

Another integral aspect of the evidence-based approach involves understanding the **root causes** of problems so as not to treat just the symptoms without removing the underlying sources of problems. It is important, as pointed out in the province’s Strategic Social Plan document entitled *People, Partners and Prosperity* (1998), to address root causes of social problems “within the context of the communities and the broader socio-economic setting in which people live” (p.8). After all, if we do not know types the circumstances in which people live or the types of situations they face on a regular basis, how can we begin to truly understand where their problems stem from?

Possible Interventions: Activities, Inputs and Outputs

The next aspects of evidence-based practice to consider are **interventions**. As the term implies, interventions involve possible **activities** undertaken to intervene and address an identified need. In the sense of public policy, an activity can be defined as “an operation or work

process internal to an organization” (Treasury Board of Canada Secretariat, 2002a, p. 1). For instance, heart health interventions in recent years involve activities such as public awareness brochures that outline the benefits of healthy eating and regular exercise or workshops on how to prepare and cook “heart healthy” foods.

According to the NSA, **inputs** are “resources that an agency or department uses to deliver programs or provide services” (2000, p. 78). Thus, inputs involve such aspects as the actual dollar amounts, human resources, and supplies needed for activities to take place. Michael Quinn Patton (1997) highlights some of the key questions to ask when taking what he refers to as an “inputs focus: What resources (money, staff, facilities, technology, etc.) are available and/or necessary?” (p.193). Asking such questions facilitates the identification of more tangible factors needed to get a program or policy off the ground.

Outputs, on the other hand, are “direct products or services stemming from the activities of a policy, program or initiative, and delivered to a target group or population” (Treasury Board of Canada Secretariat, 2002a, p. 3). For instance, the number of young people trained in a particular program for a particular year or the number of workshops provided during a certain time period are both outputs. Outputs are “short-term, end of project deliverables” (Patton, 1997, p. 237) and should not be confused with outcomes, which are outlined next.

Outcomes

Perhaps the most important aspect of evidence-based practice is **outcomes**. Outcomes are the results or consequences of policy and programs and include those both intended and unintended (Mark et al., 2000). For instance, an intended outcome of a pre-employment program for marginalized persons may be to improve their employment skills, however an unintended

(yet positive) outcome that results from program participation might be increased self-esteem of participants.

Outcomes can also be thought of in terms of their impact and should be clearly defined at the outset (Patton, 1997). That is to say that when a particular program, service, or policy is being put into effect it should clearly state what the desired outcomes are and how these outcomes will impact on people involved. When intended outcomes are clearly articulated, their impacts are much more easily identified.

Outcomes can also be considered in the sense of *effectiveness*, which is, essentially, the crux of evidence-based practice. Finding the *proof* that a policy or program is effective and that the outcome was beneficial is the core of evidence-based practice. As Davies et al. (2000) contend, “Interventions are delivered with the hope of achieving some outcome. Whether such interventions ‘work’ in terms of achieving the desired outcomes (and avoiding deleterious side effects) is paramount” (p. 9).

Pawson & Tilley (1997) argue, as well, that one needs to understand *what* the outcomes of a particular intervention are and *how* they are produced. To them, outcomes provide evidence to evaluators when making recommendations to continue or modify a program. This last point is key: just because a initiative or policy is not as effective as intended, that is not to say that it cannot be modified in order to better meet identified needs or meet new needs that emerge over time.

The above, then are the main aspects of the evidence-based approach. These aspects will be described further in Phase Two of this research project as the writer implements the evidence-based approach to address a local need.

Cost-Benefit Analysis and Net Social Benefit

In outlining the evidence-based approach, one would be remiss not to make mention of cost benefit analysis (CBA) and net social benefit (NSB). While these concepts will be elaborated upon further in Phases Two and Three of this project, an introduction is required in this current paper in order set the context and better link with the later stages.

In essence, CBA involves trying to “monetize” the benefits of public policy/intervention for the good of society as a whole. Boardman et al. (2001) describe CBA as “a policy assessment method that quantifies in monetary terms the value of all policy consequences to all members of society” (p. 2). The authors further describe the two main types of CBA that can be done either while a policy is being considered (*ex ante*), to help in deciding whether “scarce resources” (p. 3) should be allocated to a particular policy or project, or after a project has finished (*ex post*) to help learn whether the project was worthwhile.

To further clarify the concept of CBA, the writer refers to Townley (1998) who states that the key question cost benefit analysts must answer is: “Would the construction of a particular public-sector project (or the implementation of a particular policy) make society better off?” (p.77). The author also adds that analysts must be aware that even though cost-benefit analysis tools can be powerful, they are, nonetheless, limited. Both the power and limitations of the approach will be outlined further in the research phases to follow.

As for net social benefit (NSB), this is another term used to quantify the *value* of a particular public policy to society as a whole. To again refer to Boardman et al. (2001), NSB can be calculated using the following formula: $NSB = B - C$, where **B** represents social benefits and **C** represents social costs. While Townley (1998) does not use the term NSB as such, he does

contend that one needs to take into account whether overall social well-being is enhanced or diminished when a certain public policy (or project) is implemented.

Another key factor of CBA and the corresponding NSB is the concept of willingness to pay. In brief, willingness to pay involves calculating the monetary value that citizens would willingly pay to either “gain outcomes they see as desirable...[or] to avoid outcomes that they view as undesirable” (Boardman et al., 2001, p. 70). Desirable outcomes, of course, would be considered benefits, while undesirable ones would be costs. Certainly, calculating willingness to pay is a difficult undertaking, as people’s level of wealth is generally linked to such willingness to pay. Although the average person may not be able to afford to pay for a particular service if forced to do so (health care being a prime example), he or she can still have a very high willingness to pay since the benefits of such a service are well known and well accepted by members of society.

As mentioned above, the writer will elaborate further on CBA and NSB in Phases Two and Three that follow, however it is helpful to begin considering evidence-based policy and practice within the context of CBA and NSB. It is necessary to point out, here, that CBA is not well practiced in the public sector, either locally or in many other jurisdictions. For example, Davies et al. (2000) refer to public sector cost-effectiveness and cost-benefit analyses as being in their infancy and contend that there is a “relative paucity of activity in this area” (p. 3). Nugent, Sieppert, and Hudson (2001) add to this contention in stating “despite its enormous appeal, cost benefit analysis has been exceedingly difficult to accomplish in the human services and will continue to be so until we begin to understand and use the concept of measured change...” (p. 7). Indeed, in the public sector, it is much more difficult to weigh costs and benefits since the costs to society are not always clear and the benefits may not be viewed in the short term.

Environmental issues are often cited as examples of the challenges to public CBA since the loss of a species, for instance, is difficult to quantify and its effects on the ecosystem may not be directly evident in the short term.

The preceding section outlined the main aspects of the evidence-based approach. What follows is a discussion as to the importance of research and evaluation in implementing the approach.

Why Research and Evaluation are Necessary

It should go without saying that in order to base decisions on evidence, supportive research and evaluation of program/policy effectiveness are essential. First, the writer will outline the reasons for sound research.

The evidence-based approach involves two levels of research: one that pertains to *establishing* evidence (i.e., primary research) when it is currently lacking and another that entails using existing worldwide research and literature (i.e., secondary research) (Davies, 1999). While Davies is referring to the field of education, the principles are universal. In every discipline, primary research and development are essential in order to gather the proof or evidence of what works – the core of the evidence-based approach. While research methodology is well established in some fields, especially medicine and health sciences, it is relatively newer in others and must be better developed as a foundation for evidence-based policy development. As with any profession, these specific skills may involve years of training and experience before they are mastered. As such, it is essential to encourage and support primary research as an integral component of the evidence-based approach.

Secondary research is also an essential part of evidence-based practice. Solesbury (2001) highlights the importance of secondary research in describing how systematic reviews and secondary analysis of existing studies are helpful to avoid duplication of efforts. Sanderson (2002) echoes the importance of this issue in stating, “There is a need to ensure that all the currently available relevant research and evaluation evidence is thoroughly reviewed and synthesized and used to inform policy thinking and appraisal” (p.14). Since a major aspect of evidence-based practice involves implementing what is proven as effective to avoid needless expenditures, it would only make sense to build on the research that has already been conducted rather than trying to “re-invent the wheel” with every new study.

In keeping with this notion of building on existing research, it is important to mention here that one way in which the UK has made advances over other countries is through the development of its Economic and Social Research Council (ESRC), founded in 1999 and based on the former the Social Science Research Council (Sanderson, 2000). According to their website (2002), the ESRC’s mission involves promoting/supporting applied research and postgraduate training in social sciences, advancing knowledge, providing trained social scientists to contribute to public policy, serving an advisory role in the social sciences, and also disseminating knowledge. Such support and promotion is needed in numerous disciplines in Canada, as well, to promote the evidence-based approach, as pointed out by Mowat and Hocklin (2002): “There is a need for better tools (and the supporting inventories, indexes, etc.) to search for and capture information, and to integrate, analyze, and present it” (p.19). While some organizations like the Canadian Council on Social Development do exist, there is a need for more promotion and capacity building to widely adopt evidence-based practice, which will be outlined further in this report.

As with research, evaluation is an integral component of evidence-based practice. Simply put, evaluation allows one to determine whether or not policies or programs are effective and to what extent they achieve intended results. Sanderson (2002) contends that the purpose of evaluations is to answer two main questions: “first, ‘does it work?’; and, second, ‘how can we best make it work?’” (p.10). While the writer would agree that these two simple questions are fundamental, proper evaluations should provide extensive information and feedback for organizations that, ultimately, should form the basis of key strategies and decision-making. In essence, evaluation is about what Mark et al. (2000) refer to as:

...sensemaking about policies and programs through the conduct of systematic inquiry that describes and explains the policies’ and programs’ operations, effects, justifications, and social implications. The ultimate goal of evaluation is social betterment, to which evaluation can contribute by assisting democratic institutions to better select, oversee, improve, and make sense of social programs and policies. (p. 3)

In addition to this definition, the writer would note that both qualitative and quantitative methods are both important aspects of evaluation. According to Patton (1997), quantitative approaches focus on factors that can be counted and data that can be analyzed statistically. Such data are derived from tools like tests and surveys. Qualitative approaches, on the other hand, involve acquiring information from participants through such measures as interviews. This type of data involves such aspects as descriptions, direct quotations, and case histories through open-ended questions. There are arguments on both sides as to whether quantitative or qualitative information is stronger, however in implementing evidence-based practice a combination of the two appears to be most effective. As Patton contends, a combination of both methods should be used in most circumstances, as both have their strengths and weaknesses: “qualitative data offer

detailed, rich description, capturing variations between cases; quantitative data facilitate comparisons because all program participants respond to the same questions on standardized scales within predetermined response categories” (pp 273-274). This information is consistent with that provided earlier in this report regarding needs identification.

Despite the wealth of information that can be gathered through evaluations, unfortunately, they are not always conducted regularly, particularly at the provincial government level. Thus, many programs and services continue for years on end without any pertinent feedback as to whether they have the impact they were originally intended to achieve. In one of the few sources on this topic pertaining to Newfoundland and Labrador, Ross (2001) relays that up until recently the provincial government had no formal policy on project evaluation unless conducted as part of a federal government program requirement. While the situation is improving, particularly through the development of the province’s Strategic Social Plan (outlined further below), the importance of evaluation does not appear to be as high a priority as it could or should in provincial government departments.

On the positive side, even though evaluations do not take place as often as they ideally should, the importance of their role has gained widespread recognition in recent years. Numerous independent societies, private-sector organizations and government bodies throughout the world have developed and increased the capacity to conduct evaluations, no doubt in direct response to the general demand for more accountability. Among these is the Canadian Evaluation Society (CES), which has a chapter in Newfoundland and Labrador. According to their website (2002), the CES is a non-profit organization whose mission involves advancing both the theory and practice of evaluation and whose vision is to be a leader and major contributor in evaluation.

In addition, the Government of Canada recently revised their evaluation policy to include the following two main purposes:

- to help managers design or improve the design of policies, programs and initiatives; and
- to provide, where appropriate, periodic assessments of policy or program effectiveness, of impacts both intended and unintended, and of alternative ways of achieving expected results. (Treasury Board of Canada Secretariat, 2002b, pp.1-2)

The federal government has also established the Results-based Management and Accountability Framework (RMAF) through the Treasury Board of Canada Secretariat. The RMAF is described as a blueprint to help federal public service managers measure and report on outcomes of policies and programs. The main objectives of the RMAF include developing a solid structure of governance, a results-based logic model, a sound performance measurement strategy and also ensuring reports on outcomes (Treasury Board of Canada Secretariat, 2002c).

From a local perspective, Newfoundland and Labrador, through the development of its Strategic Social Plan (SSP) announced in 1998, has been in the forefront in terms of moving forward with adopting the evidence-based approach. Although the SSP is still relatively new for this province, its main strength involves developing evidence-public policy as well as a Social Audit. As reported by the Newfoundland Statistics Agency and Cabinet Secretariat (2000), this Social Audit will report on:

...what is working, why, how, and for whom. It will include the following:

1. An assessment of the status of the population for each of the key outcome areas identified and the extent of the progress achieved.

2. An analysis of the status of the population of particular client groups (e.g. children, youth, women, people with disabilities, unemployed persons, seniors).
3. An assessment of the impact of major social programs and services on several of the social indicators. (p. 4)

The writer must highlight, here, that it is ironic that the provincial government, on the whole, is leading the country (and other parts of the world) through the development of its SSP and innovative Social Audit, yet within its own departments and programs evaluation is not widely practiced. However, this issue is recognized by NSA as follows:

In developing the Social Audit framework, we realize that benefit-cost and cost-effectiveness analysis are not now routinely carried out in the public sector. But we are also keenly aware that such analysis will be much more common in the years ahead...The challenge is to use limited resources as effectively as possible in the attempt to secure the vision and goals of the SSP. (p. 111)

Lastly, in discussing evaluation, it should be noted that there are some limitations to evaluation. While a more lengthy explanation of the limitations to evaluation will be outlined in later phases of this research project, it is necessary at this point to highlight one particularly key issue: in terms of public policy, longer-term evaluations are often needed in order to adequately measure policy impacts. That is, many public policies are implemented whose impacts may not be evident until many years have passed. Thus, without longitudinal studies it is difficult (if not impossible) to evaluate the effectiveness of a particular policy. Longer-term evaluations are needed not just for existing policies but for new policies once they are put in place so as to gather baseline data and make comparisons in future (Sanderson, 2000) and pilot programs are one method of testing program or policy's effectiveness before expanding further (Boardman et al,

2001). Effective evaluations generally involve many aspects: quantitative and qualitative methods; short-term and long-term studies. Whatever the limitations, as Davies et al. (2000) argue, “An evidence-based approach requires the implementation of current evidence to be carefully balanced and integrated with ongoing evaluations of effectiveness” (p. 7).

Encouraging a Culture of Evidence-Based Practice

Evidently, the evidence-based movement has been firmly rooted in the UK over the last number of years and some gains are being made in both Canada and Newfoundland and Labrador. For example, Gray (1997) points out that the federal government appears to understand that “a culture of evidence-based decision-making will not happen on its own (1997, p. 1748) and one such move toward promoting this “culture” was the establishment of the Health Services Research Foundation in the late 1990’s. Again, the health sector has tended to be in the forefront in applying evidence-based methods, however, as indicated throughout this paper, a broad range of disciplines in numerous sectors are adopting such methods.

A major component that this country and, certainly, this province could explore in developing a “culture” of evidence-based practice is through the establishment of a centre for evidence-based practice. The writer has referred to several such initiatives throughout this report, such as the Cochrane Collaboration, and there are certainly other centres that bear mentioning as well. The following is an outline of some of the better-known centres of evidence-based practice that could serve as models for this country.

One such centre to consider is the Coalition for Evidence-Based Policy in Washington, D.C. This coalition is sponsored by the Council for Excellence in Government, which reportedly is an influential, respected organization that promotes good government. The coalition’s website

(2002) describes its mission as promoting public policymaking based on thorough evidence of effectiveness. In addition, the organization's main agenda is as follows:

...to work with key policymakers in the federal agencies and Congress to incorporate the 'evidence-based approach', comprised of the following two components, into social and economic programs:

- (1) Allocation of government resources -- *Government funding or other benefits should be allocated to activities that either (i) have been shown to be effective through rigorous empirical studies, or (ii) as condition of funding (or other benefits), will undergo an independent, rigorous evaluation.*
- (2) Government R&D investment -- *The government should undertake, or otherwise advance, a systematic R&D effort to identify and/or develop effective government interventions. This R&D effort should use rigorous study designs, such as the randomized controlled trial. (p.1)*

Both points pertaining to evaluation and research certainly link with themes outlined previously in this report, as both factors are essential to evidence-based practice.

There are several centres for evidence-based practice in the UK that are organized according to a particular field or department. One such centre that bears mentioning is the Centre for Evidence-Based Social Services in Southwest England. This centre is a collaborative approach between the local Department of Health and a number of Departments of Social Services. This centre aims to move the results of research into practice, disseminate research results to policy makers, practitioners, and even consumers and caregivers, and also commission new research where gaps exist (Centre for Evidence-Based Social Services, 2002). Given that

Canada's health and social programs are closely related to those of the UK, there are many aspects of this particular centre that could be emulated locally.

The most exciting model this writer has come across that shows tremendous potential for emulation in Canada is the ESRC UK Centre for Evidence-Based Policy and Practice. As mentioned previously, the ESRC was formed in 1999. According to Nutley and Webb (2000), only a small fraction of research commissioned by government (or other organizations) was being used by public policymakers at that time. In response, the ERSC developed the Centre for Evidence-Based Policy as a means of advancing the availability of research evidence. The Centre is based out of Queen Mary, University of London, and includes another seven teams of researchers throughout the UK. These teams, referred to as "nodes", are not only involved in research but also in developing conferences to further an understanding of the methodology and principals of evidence based research (Evidence Network, 2002b).

A major component of the UK Centre for Evidence-Based Policy and Practice is its website, the Evidence Network. This website describes the Evidence Network as:

- ❑ A starting point for accessing social science research publications relevant to policy and practice
- ❑ Open to users in the research community, the voluntary sector, local and central government, public agencies and commercial organizations
- ❑ Providing search tools and a referral framework to enable users to pursue their enquiries
- ❑ A forum for debate and discussion of issues and problems in relation to evidence-based policy (2002a, p.1)

This is, undoubtedly, an excellent resource in the development and implementation of evidence-based practice, both for the UK and the rest of the world since it is so readily accessible via the Internet.

From a Canadian perspective, it appears it would be most feasible to develop a national centre of evidence-based policy and practice that could include provincial and territorial links. That way, information could be more readily shared among jurisdictions for the benefit of all, yet provinces and territories could still rely on more localized information where appropriate. For instance, national studies relating to a health issue like drug treatments for AIDS patients would likely be applicable to all of the country, while a issue like depletion of cod stocks would be more appropriately dealt with at the provincial or regional level.

Of course, linking with international counterparts would definitely be an integral aspect of any national centre. Obviously, one of the principal reasons for establishing such a centre would be to share information, and this most certainly should include learning from counterparts in our so-called “global village”. At its core, the evidence-based approach involves diminishing the need to “re-invent the wheel”, so to speak, and while there are obvious differences in various cultures, political environments and economic climates, the aspects we share are far more numerous. In these times of innovative technology and easy transfer of information, the ability to share knowledge and learn from each others’ experiences should be all the more encouraged. Further, given the limited financial resources with which most every government struggles, centres of evidence-based learning should be all the attractive to avoid duplication.

It is important to mention here that, in the spirit of not reinventing the wheel, it would be best to build on existing organizations that have some experience in the area of evaluation and/or evidence-based practices rather than developing an entirely new system. A national, well-

established organization like the Canadian Council on Social Development or the Canadian Evaluation Society could be provided with additional supports to enhance existing structures and develop a national centre such as that described in the UK.

As a final point to mention in this section of the paper, the writer does not want to oversimplify the issue of implementing evidence-based management within the public sector in discussing centres of information. There are, surely, many challenges involved in adopting an evidence-based approach to management and merely sharing information is not the solution. The writer will address this and other related challenges to implementation in Phase Three of this project, however it is important to outline some of the potential models for evidence-based centres (as above) since this is a major component of the cultural shift required for widespread adoption of the approach. Nutley and Davies (2000) sum these challenges up well in the following excerpt:

It is tempting to provide specific recommendations about the ways in which structures, cultures, business systems and resources should be configured and deployed to encourage evidence-based practice and organizational learning. However, such recommendations would be speculative given that they would be based, at best, on a nascent evidence base. It is also unlikely that there would be one best configuration....Operationalising these in specific settings will require careful customization and subsequent empirical testing before the implementation of EBP [evidence-based practice] will itself be evidence-based. 'R&D strategies'...tend to emphasise dissemination as a core activity, suggesting that it is merely lack of knowledge/information at the right time in the right place that inhibits evidence-based policy and practice.... [S]uch a simplification both misrepresents the process and hampers the search for more effective implementation models. (p. 342)

Using Evidence-Based Practice to Address a Local Problem

Having provided a theoretical overview of the various aspects of evidence-based decisions and policy-making, the writer will now apply the methods to address a local problem: obesity in Newfoundland and Labrador. The writer notes that the information outlined in this first phase of the research project involves the preliminary research in identifying the need, and then Phase Two will provide much more detail. This last section, then, provides a link between Phase One and Phase Two and also provides an overview of some of the resources to be used in identifying the extent of the problem/need.

As outlined previously in this report, the first step in basing decisions and policy on evidence is to clearly identify needs. Also as noted, this should be done in both quantitative *and* qualitative terms and, as mentioned by Nutley & Webb (2000), information should ideally come from a wide range of sources. Starting the process should not be a complicated undertaking, however. In the case of identifying obesity as a need to address in this province, the writer essentially began by completing what in business terms is deemed an “environmental scan”. This can also be referred to as developing the “landscape” of the area and initially involves flagging issues for further examination.

The writer essentially started the landscaping process when issues of health, lifestyle and physical activity were raised in numerous professional settings. For example, the writer attended a public consultation concerning plans for a Child and Youth Advocate in early 2001 where the issues of obese children and the links with decreased physical education programs were mentioned by one participant. At another venue, the 2001 provincial health forums, issues of preventative health and the generally unhealthy lifestyle of Newfoundlanders and Labradorians were highlighted. During the same timeframe, the writer also began to take notice of more

written articles on these and related subjects, so much so that the broad topic of health and lifestyle appeared to be a potential topic for further research.

As a next step, the writer began a more formal search of information and resources through the university library and the Internet on topics of health and lifestyle on a national level and, to some degree, an international level, to make comparisons. This preliminary search brought about interesting information and statistics. For example, an article from the *Medical Post* (May 1, 2001) entitled “Why are childhood obesity rates ballooning?” cites a recent CMAJ study whereby the incidence of obesity in Canadian children grew by 50% for ages six to 11, and by 40% in adolescents ages 12-17 over the previous 15 years. As well, a brief visit to the Health Canada website (2002) indicated that 63% of Canadians are not physically active enough “to gain health benefits” (p.1). In a less formal article, the September 2002 issue of *Reader’s Digest* compiled anecdotal accounts from teachers and other professionals about the impacts of reduced physical education programs on the health of Canada’s children and youth.

As much as possible, the writer attempted to gain a local picture on active living and general lifestyle in Newfoundland and Labrador, as national data and trends do not always apply to the local situation. One particularly helpful survey was that completed by the Canadian Fitness and Lifestyle Research Institute in 2001. This survey, entitled the 2001 Physical Activity Monitor, provides a very good profile of physical activity in this province, as will be detailed in Phase Two of this project (Canadian Fitness and Lifestyle Institute, 2002).

By far, the most exciting source of information on Newfoundland and Labrador, both in a general sense and for this particular research paper, is the Community Accounts website. According to the website (2002a), Community Accounts was developed as part of the Strategic Social Plan’s objective of measuring social progress. The accounts provide a wide range of

information on such topics as health, education, and income on a provincial, regional and community level. These accounts provide a wealth of data, including tables, graphs and analysis tools to facilitate policy and decision-making and make comparisons over time. Such information is invaluable in terms of setting a foundation for an evidence-based approach in this province.

In particular, the Health Account of Community Accounts provides excellent background information from both the 1995 and 2001 Adult Health Surveys. For instance, comparisons between both surveys indicate that the percentage of respondents considered overweight (i.e. with a Body Mass Index [BMI] greater than 27, Canadian Standard) was 39% in 1995 (Community Accounts, 2002a), while in 2001 the percentage increased to 43% (2002b).

The above examples provide preliminary information as the first step in implementing the evidence-based approach: gathering evidence of a local problem/need. Again, further data and analysis (both quantitative and qualitative) will be provided in much greater detail in Phase Two as the writer builds on the above-mentioned sources and numerous others. It is obvious from the preliminary information gathered to date that some issues must be flagged for further follow up as the landscape begins to take shape.

Conclusion

Throughout this first phase of the research project the writer has attempted to describe the various elements of evidence-based management in practical terms. This entails defining the actual concepts of “evidence” and “evidence-based”, explaining how the approach has developed in recent years, and also describing the various aspects of the approach, from identifying needs to

measuring outcomes. The concepts of cost-benefit analysis and net social benefit were also explored and will be elaborated upon further in Phases Two and Three.

In addition, the writer emphasized the importance of research and evaluation in the evidence-based approach, as well as the need for supports to encourage the adoption of evidence-based practice through models of existing centres. Finally, the writer began to actually implement the evidence-based approach to address a local problem: obesity. The writer commenced preliminary research to develop the local “landscape” in Newfoundland and Labrador and flag particular issues for further follow up. Essentially, the preliminary research outlined above serves as a transition from Phase One of this research project, which deals mainly with the theoretical aspects, to Phase Two, where the research project takes on the practical approach of implementation. It must be noted that Phase Three will link together the entire project by outlining lessons learned and suggestions for overcoming barriers and challenges to implementing evidence-based management.

As a final point, it should also be noted that the writer will emphasize the innovative nature and tremendous potential of the evidence-based approach to management throughout all phases of the research project. It is the writer’s opinion that the evidence-based philosophy is a movement is very forward-thinking management tool, particularly as it questions the status quo and generally involves stakeholder input that has not traditionally been factored into public policy formation. The benefits of the approach cannot be overstated even though many challenges to adopting the approach do exist. Implementing change invariably involves barriers since traditional methods, thinking and attitudes are challenged. However, the circumstances in which most every public service in the world finds itself nowadays dictates the need for change as governments face fiscal constraints and increased demands for accountability. This is

certainly the case in Newfoundland and Labrador where we can neither afford to fund programs that are not proven to be effective nor duplicate services due to a lack of information sharing. Hence the need for a management approach whereby decisions and policies are based on evidence of “what works”.

References

- Boardman, A.E., Greenberg, D.H., Vining, A.R., & Weimer, D.L. (2001). Cost-Benefit Analysis: Concepts and Practice (2nd. ed.). Upper Saddle River, NJ: Prentice Hall.
- Canadian Evaluation Society. (2002). Vision/Mission. [Online]. Available: http://evaluationcanada.ca/site.cgi?section=2&ssection=1&_lang=en
- Canadian Fitness and Lifestyle Research Institute. (2002). Results of the 2002 Physical Activity Monitor. [Online]. Available: http://www.cflri.ca/cflri/pa/surveys/2001survey/2001_nf.html
- Centre for Evidence Based Social Services. (November 2002). Welcome to the CEBSS Web Site. [Online]. Available: <http://www.ex.ac.uk/cebss/body.html>
- Coalition for Evidence-Based Policy. (October 2002). [Online]. Available: <http://www.excelgov.org/performance/evidence/full%20write-up.htm>
- Community Accounts (2002a). Strategic Social Plan. [Online]. Available: <http://www.communityaccounts.ca/communityaccounts/onlinedata/default.htm>
- Community Accounts (2002b). Health Accounts: Health Practices, 1995, Newfoundland and Labrador. [Online]. Available: http://www.communityaccounts.ca/communityaccounts/onlinedata/table_h3.asp?comval=p...
- Community Accounts (2002c). Health Accounts: Health Practices, 2001, Newfoundland and Labrador. [Online]. Available: http://www.communityaccounts.ca/communityaccounts/onlinedata/table_h13.asp?comval=...
- Cornwall, Claudia. (2002, September). Fat Kids, Failing Health. Readers's Digest, 50-56.

Davies, H.T.O, Nutley, S.M., & Smith, P.C. (Eds.), What works? Evidence-based policy and practice in public services (pp. 1-11). Bristol, England: Policy Press.

Davies, H., Nutley, S., & Smith, P. (2000) Introducing evidence-based policy and practices in public services. In H.T.O. Davies, S.M. Nutley, & P.C. Smith (Eds.), What works? Evidence-based policy and practice in public services (pp. 1-11). Bristol, England: Policy Press.

Davies, P. (1999). What is Evidence-Based Education? British Journal of Educational Studies, 47 (2), 108-121.

Dochterman, J.M. & Grace, H.K. (2001). Current Issues in Nursing (Sixth Edition). St. Louis, MO: Mosby.

ESRC Economic and Social Research Council. (2002). Our Mission. [Online]. Available: <http://www.esrc.ac.uk/esrccontent/esrcgen/displaygen/mission.asp>

Evidence Network. (2002a). What is the Evidence Network? [Online]. Available: <http://www.evidncenetwork.org/mission.asp>

Evidence Network. (2002b). The Evidence Network Node Organisations [Online]. Available: <http://www.evidncenetwork.org/nodes.asp>

Government of Newfoundland and Labrador. (1998). People, Partners and Prosperity: A Strategic Social Plan for Newfoundland and Labrador St. John's, Canada: Queen's Printer.

Gray, C. (1997). Are the lean days for research funding finally coming to an end? CMAJ,156 (12), 1748-1749.

Health Canada. (2002). The Business Case for Active Living at Work: Executive Summary. [Online]. Available: http://www.hc-sc.ca/hppb/fitness/work/main_a_e.html

Lewis, S., Naylor, C.D., Battista, R., Champagne, F., Lomas, J., Menon, D., Ross, E. & de Vlieger, D. (1998). Canada needs an evidence-based decision-making trade show. CMAJ, 158 (2), 210-212.

Lloyd, J. (1999, October 4). A new style of governing. New Statesman, 12-13.

Maclure, M., & Potashnik, T.M. (1997). What is Direct Evidence-Based Policy Making? Experience from the Drug Benefits Program for Seniors in British Columbia. Canadian Journal on Aging/Canadian Public Policy (Joint Issue) (Suppl.), 132-146.

MacDonald, G. (2001). Effective Interventions for Child Abuse and Neglect: An Evidence-based Approach to Planning and Evaluating Interventions. Chichester, England: Wiley.

Mark, M.M., Henry, G.T., and Julnes, G. (2000) Evaluation: An Integrated Framework for Understanding, Guiding, and Improving Policies and Programs. San Francisco, CA: Jossey-Bass.

Mowat, D.L. & Hockin, J. (2002). Building Capacity in Evidence-based Public Health Practice. Canadian Journal of Public Health, January-February, 19.

Newfoundland Statistics Agency and Cabinet Secretariat. (2000). The Strategic Social Plan's Social Audit, Version 5.0. Unpublished manuscript.

Nugent, W. R., Sieppert, J.D., and Hudson, W.W. (2001). Practice Evaluation for the 21st Century. Belmont, CA: Brooks-Cole.

Nutley, S. & Davies, H. (2000). Making a Reality of evidence-based practice. In H.T.O. Davies, S.M. Nutley, & P.C. Smith (Eds.), What works? Evidence-based policy and practice in public services (pp. 317-350). Bristol, England: Policy Press.

Nutley, S. and Webb, J. (2000). Evidence and the policy process. In H.T.O. Davies, S.M. Nutley, & P.C. Smith (Eds.), What works? Evidence-based policy and practice in public services (pp. 13-41). Bristol, England: Policy Press.

Patton, M. Q. (1997). Utilization-Focused Evaluation. London: Sage.

Pawson, R., & Tilley, N. (1997). Realistic Evaluation. London: Sage.

Porter, C., & Matel, J.L. (1998). Are we making decisions based on evidence? Journal of the American Dietetic Association, 98 (4), 404-407.

Ross, A. Evaluation in Newfoundland: Then Was Then and Now is Now. The Canadian Journal of Program Evaluation (Special Issue), 101-106.

Sackett, D.L., Rosenberg, W. Gray, J.M., Haynes, R.B. & Richardson, W.S. (1996). Evidence-based medicine: what it is and what it isn't. BMJ,312, 71-72.

Sanderson, I. (2002). Evaluation, Policy Learning and Evidence-Based Policy Making. Public Administration, 80 (1), 1-22.

Solesbury, W. (2001). Evidence-Based Policy: Whence it Came and Where it's Going. [Online]. Available: <http://www.evidencenetwork.org/cgi-win/enet.exe/biblioview?404>

Taggart, K. (2001, May 1). Why are childhood obesity rates ballooning? Medical Post, 19.

Townley, P. G. C. (1998). Principles of Cost-Benefit Analysis in a Canadian Context. Scarborough, Canada: Prentice-Hall.

Treasury Board of Canada Secretariat. (2002a). Annex A: Lexicon, Results Based Management and Accountability. [Online]. Available: <http://www.tbs-sct.gc.ca/eval/pubs/RMAF-CGRR/rmaf-cgrr-06-e.asp>

Treasury Board of Canada Secretariat. (2002b). Evaluation Policy. [Online]. Available:

http://www.tbs-sct.gc.ca/pubs_pol/dcgpubs/TBM_161/ep-pepel_e.html

Treasury Board of Canada Secretariat. (2002c). Guide for the Development of Results-based Management and Accountability Frameworks. [Online]. Available:

http://www.tbs-sct.gc.ca/eval/pubs/RMAF-CGRR/rmafcgrr01_e.asp