INFORMATION PATHWAYS TO POLICY DEVELOPMENT: THE EXCHANGE AND TRANSFER OF KNOWLEDGE IN PUBLIC HEALTH DECISION MAKING

by

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To Myles and Iris

without whose support and cooperation

this would not have been possible.

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List of Abbreviations Used

AWOL	Absent Without Leave
CDC	Center for Disease Control [US]
CDHA	Capital District Health Authority
CIHR	Canadian Institute for Health Research
ECFH	East Coast Forensic Hospital
KT	Knowledge Transfer
KTE	Knowledge Transfer and Exchange
NDP	New Democratic Party
NSHRF	Nova Scotia Health Research Foundation
RCT	Randomized Control Trials
SPOR	Strategy for Patient-Oriented Research

Abstract

Is public health policy based on scholarly evidence? With the manifold variables that policy makers must consider, is evidence-based policy even realistic? While strategies exist to translate research into policy, a need to understand better how that can play out in real-life remains. Using interviews from informants occupying a range of positions, and considering the atmosphere created by media reports, this study examines the case of smoking privileges at East Coast Forensic Hospital. After a patient committed murder while on leave, apparently to smoke, public pressure over public safety, a relative lack of relevant scholarship, ethical considerations, and the divergent voices of stakeholders created challenging circumstances for policy makers. Through the use of case study methodology, this project identifies the kinds of information that are employed in the creation or modification of policy and offers insights concerning how the influences exerted on policy makers determine how information is employed.

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Chapter 1: Introduction

A recent and controversial policy decision related to smoking on the grounds of East Coast Forensic Hospital brought the issue of public health policy, and the information used to inform it, into public consciousness. The decision was made in response to the tragic murder of a community leader by a forensic hospital patient on a community access pass which had apparently been granted in order that he might smoke outside the facility's non-smoking regulation zone (see below). A review was made of the circumstances under which community access passes were granted, and one of the outcomes was the reverse of an anti-smoking policy which had been formulated on the basis of the scientifically established dangers of smoking and exposure to second-hand smoke. This led to the question: if a heavy weight of evidence established through rigorous scholarship supported the anti-smoking policy, what information was used to overturn it? The case provided the opportunity to consider what kinds of information are used in the development of public health policy, how it is used, and what are the factors that influence the process of using information in policy creation.

Case: The murder of Raymond Taavel

On April 17, 2012, residents of Halifax, Nova Scotia awoke to the shocking news that a prominent activist on behalf of the gay community had been brutally beaten to death outside a bar on Gottingen Street (Morrow, 2012). Raymond Taavel was well-respected as a leader of

courage and integrity, and beloved as a man of kindness and empathy. His prominence as a gay activist fueled speculation that his murder was a hate crime, undoubtedly heightening the emotional tension in the immediate aftermath of his slaying (Morrow, 2012). Both friends and family of Mr. Taavel and his assailant's lawyer were quick to put a damper on this suggestion, however, when the mentally ill assailant was identified within hours of the killing (Fairclough, 2012; MacDonald & Patten, 2012).

Mr. Taavel allegedly met his death at the hand of Andre Denny, but responsibility for the tragic crime was not easy to assign (Fairclough, 2012). Mr. Denny was a patient at the East Coast Forensic Hospital (ECFH), absent without leave after failing to return to the facility after leaving with a one hour, unescorted pass (Lee & Mellor, 2012). He suffers from schizophrenia, and his family and lawyers were quick to assert that not only was Raymond Taavel's murder not a hate crime, but that Mr. Denny was not criminally responsible for Mr. Taavel's death because he was not in command of himself, or capable of understanding what he was doing at the time of the assault (MacDonald & Patten, 2012).

The murder of a well-liked, peaceable man in a random and brutal manner awakened public anger and fear. It soon became known that his assailant had a long and disturbing history of perpetrating violent crimes while suffering from uncontrolled bouts of his illness (MacDonald, 2012). The family and friends of Mr. Taavel publicly accepted that Mr. Denny's mental illness absolved him of criminal responsibility, and directed blame

at the system that failed both men the night of Mr. Taavels's death (Fairclough, 2012; Tutton, 2012). A review of the policies surrounding the granting of community access to forensic patients was soon undertaken, with outside experts invited to participate (Hoare & Mellor, 2012).

Eighteen recommendations, largely focused on the processes and procedures for assessing risk and granting leave, were included in the report produced by the joint review of the East Coast Forensic Hospital's community access privileges and wholly accepted by the Department of Health and Wellness. (Jackson, 2012). Representatives from the provincial Department of Health and Wellness, Department of Justice, and Capital District Health Authority (CDHA) were participants in the review (Jackson, 2012).

While the experience and academic credentials of the reviewers was thought to ensure that the recommendations are sound measures that will result in substantial benefit with respect to the protection of the public, there is little in the report in which general members of the concerned public might sink their teeth. There is one major exception: smoking will be permitted on the premises of East Coast Forensic Hospital, which is under the jurisdiction of CDHA and previously subject to the CDHA-wide smoking ban. This is information that comes with visible change, easily observed, and seemingly offers a clear response to the circumstances immediately surrounding the death of Raymond Taavel: Andre Denny had been granted a one hour pass to smoke, apparently in

order to smoke. Since the smoking ban and decision to allow patients community access in which they might smoke was at the forefront of public dialogue around the joint review, it conveyed the information that observable change would be made, and the public would be safer.

But the decision to allow smoking at ECFH, mentioned in the report of the joint review, did not come from the reports of assessors, which are included as appendices. In fact, when a CBC reporter asked the two outside consultants about their opinions of the decision to permit smoking on site at ECFH, one explicitly said that he did not support a lift of the smoking ban, and the other said that he did not make mention of it at all (Grisdale, 2012). The decision came down from the Minister of Health and Wellness, overruling the prerogative of the CDHA, whose CEO publicly disagreed with the decision in the same CBC report (Grisdale, 2012).

Explanation of Terms

The discussion in this study involves use of terms with specific meanings that might not be familiar or appear natural to all readers.

- **Forensic psychiatry**. This is a branch of psychiatry concerned with "patients and problems at the interface of the legal and psychiatric systems" (Forensic psychiatry, 2008, para. 1). The alleged killer in this case, Andre Denny, has a history of mental illness and criminal behavior. At the time of his arrest, he was a patient at East Coast Forensic Hospital after a 2011 arrest on several criminal charges (Hoare & Lee, 2012). The

hospital typically treats offenders from the adjacent correctional facility as well as patients who by reason of mental illness are unfit to stand trial or found not criminally responsible for their actions (MacDonald & Patten, 2012).

- **Information flow**. This term generally refers to the "the distribution of information within an organisation" (Information flow, 2006). In this study, the term refers broadly to the processes by which information is obtained, evaluated, and transferred between and among institutions in the course of research and decision-making with respect to public health policy.
- **Information environment**. In this study, this term refers broadly to the factors that impact information flow or usage in any way. This includes what information is known and can be known, how it is used, how it is interpreted, and how it is communicated (Libraries, public, 2003).

Evidence-based Policy

Consideration of how information is used in policy creation must consider the practice of "evidence-based" policy. The past two decades have seen an increased interest in "evidence-based" or "evidence-informed" policy as researchers have attempted to determine how well policy makers are able to make use of scholarly research when formulating policy and making policy decisions (Bambra et al., 2010; Brownson, Chriqui, & Stamatakis, 2009; Fielding & Briss, 2006; Fielding & Briss, 2006; Hunter, 2009; Innvær, Vist, Trommald, & Oxman, 2002; Lomas, Adalsteinn, & Brown, 2009; Kiefer et al, 2005; National Forum on Health, 1998). This has often been done with an eye towards advising

how scholarship can be made more relevant and accessible to policy makers (Bambra et al., 2010; Cochran, Montgomery, & Bell, 2012; Davis, Peterson, Bandiera, Carter-Pokras, & Brownson, 2012; Martin-Matthews, 2009; McIntyre, 1996; Mendelssohn, Ethier, Arrington, Pisoni, & Port, 2006; Olsan, Bianchi, White, Glessner, & Mapstone, 2011). To the casual observer, it may seem self-evident that policies that aim to promote or ensure public health should be based on evidence. After all, great investment of tax-payer money and the energies of many people might be invested in a program or promotion that arises from a policy. At the same time, researchers in a variety of fields, from sociology to epidemiology to cardiology and beyond, are conducting research and publishing studies whose results have implications for public health. Yet in practice, a symbiotic relationship one might expect to find between research and policy is largely lacking. Critics of this situation contend that too much research is produced in a vacuum, that the questions raised and answers sought are determined by researchers with little consideration as to how the information they generate with their studies might be applied successfully to real world circumstances and converted into action (Dobbins, Jack, Thomas, & Kothari, 2007; Hunter, 2009; Martin-Matthews, 2009; Morgan, 2010; Raphael, 2009).

In the realm of public health policy, the association with medical professionals who espouse the practice of evidence-based medicine can create further confusion and miscommunication between the researchers who generate evidence and the policy makers who strive to create evidence-based policy (Lomas et al., 2009). This point of difficulty and misunderstanding between

medical researchers and health policy comes from the conflation of "evidence-based medicine" with "evidence-based policy." Evidence-based medicine, as the term implies,

> is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients…By best available external clinical evidence we mean clinically relevant research, often from the basic sciences of medicine, but especially from patient centred clinical research into the accuracy and precision of diagnostic tests (including the clinical examination), the power of prognostic markers, and the efficacy and safety of therapeutic, rehabilitative, and preventive regimens… (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996, pp. 71-72).

While clinical expertise is an acknowledged partner of evidence—one cannot stand in the place of the other and each is essential (Sackett et al., 1996)—the emphasis on continual consultation of the most up-to-date clinical evidence serves as an explicit challenge to established practice and distinguishes evidence-based medicine from a more traditional approach. The positivism that underlies this approach to evidence in medicine has also been widely applied to public health policy (Bryant, 2009), though there is not universal agreement on its appropriateness, as "attempts by some researchers to apply without reflection the lessons of evidence-based medicine to policy have not been successful" (Lomas et al., 2009, p. 905). The problem of modelling evidence-based policy on evidence-based medicine is evident in several ways. On a practical level, the standardization of education, training, tools, and

practices that facilitate a more direct use of scholarly evidence in the development of clinical policy and medical practice are largely not present in the world of public policy-making. The conflation of "evidence-based medicine" with "evidence-based policy" can create unrealistic assumptions as to how evidence can be defined and used in the creation of public health policy (Black & Donald, 2001; Lomas et al.,, 2009).

A more methodological concern sees that the positivism that prevails in the clinical research that informs evidence-based medicine removes context from inquiry into a phenomenon, which misleads researchers into ignoring the complex social circumstances that may contribute to it. Yet as we shall see, the context and specific circumstances that surround a health policy decision are factors that require consideration. Such positivism is also charged with failure to "consider the importance of power relations in shaping social reality and policy development" (Bryant, 2009, p.40). For this reason, a wholly positivist approach to evidence and policy does not necessarily play out well in real life circumstances. Ultimately, what constitutes evidence is different in the policy-making context from the clinical context:

> The policymaker needs evidence of the values and interests of the constituency concerned (for these form the objectives to any decision), of the relative efficacy of treatments or procedures, and of the actual costs and the costs the constituency will have to bear. Each piece of information offered as evidence will need to be assessed by the standards of the discipline concerned (National Forum on Health, 1998, p. 284).

Budgetary considerations, consultations with constituents, and the need to consider each piece in a specific context, and as part of a specific discipline are requirements different from the circumstances of clinical decision-making that is the objective of evidence-based medicine (Lomas, 1990).

Recognition of the challenges inherent in applying scientific, empirically established research in the real life context in which policy is actually made has led to a semantic shift from “evidence-based policy” to “evidence-informed policy.” This shift recognizes the legitimacy of factors in the policy-making process that do not fall under the strictest definitions of evidence (Black & Donald, 2001). This distinction helps clarify the differences between the practice of incorporating evidence into the process of health policy creation and the practice of “evidence-based medicine.” Instead of seeing evidence, that is peer-reviewed scholarship which constitutes the evidence used in “evidence-based medicine”, as prescriptive in the formulation of policy, it is instead an element used to inform a view, or create a lens with which to solve a problem (Black & Donald, 2001). The evidence of “evidence-informed policy” colors the perspectives of decision-makers as they negotiate the manifold considerations that contribute to a policy decision; it is not necessarily a direct source or cause at the foundation of a policy decision.

This Study

While a shift in understanding from evidence-based policy to evidence-informed policy might represent a more realistic understanding of how evidence contributes to policy decision-making, the appreciation of the information environment of policy-making and how scholarly evidence is employed remains incomplete (Mitton, Adair, McKenzie, Patten, & Perry, 2007). For that reason, this study will explore information flows in the health policy-making process. This will be undertaken in order to identify effective practices or areas where better information management strategies might result in greater effectiveness in the use of information obtained through academic research and disseminated in peer-reviewed publications. Though there may be increased interest in using scholarly evidence as the basis of policies that impact public health and safety, to what degree those involved in policy-making are interested or have capacity to make evidence-based policy decisions varies widely. Many variables, including the amount of time available for research, the information resources and amount of information available, and political pressures, among other factors, can impact the process (Howlett, 2009). For that reason, I have chosen to use a case study design that looks at smoking policy at East Coast Forensic Hospital, a facility under the management of the Capital District Health Authority (CDHA, often referred to as “Capital Health”) which will provide a “real-life” view into how information was used by decision makers in Nova Scotia in real time circumstances, where the degree of pressure from public and media scrutiny was

high, the amount of time available was short, and the amount of published, directly relevant scholarship was limited.

This case offers a rich opportunity to explore the dynamics of policy decision-making and the use of information in an environment replete with competing pressures, interests, and responsibilities. The health dangers and associated costs of smoking and exposure to second-hand smoke are well documented in academic as well as popular literature (Bell, Salmon, Bowers, Bell, & McCullough, 2010). A general trend towards restricting exposure to tobacco smoke in public places and private businesses open to the public has resulted from widespread acceptance of this information (Cummings et al., 2004; Sari, 2013). In Nova Scotia, the Smoke-free Places Act (2002, c.12, s 1) effectively banned smoking in all indoor workplaces and public places, including the outdoor licensed areas of restaurants. Exceptions for residential care and other health-care facilities allowed by this act were partly closed in the CDHA by its policy (CH80-050) which made almost all facilities, grounds, and parked cars on CDHA properties smoke free.

Despite the hazards of smoking, and the increasing difficulty in indulging smoked tobacco in public areas, the habit of smoking and addiction to nicotine are not easily eliminated. Individuals who suffer from mental illnesses, such as schizophrenia, have higher rates of smoking than the general population (Campion et al., 2008; Lawn & Campion, 2010). As a result, smoking bans at psychiatric facilities present particular challenges, and CDHA’s smoke free policy

was sorely tested at East Coast Forensic Hospital until it was reversed following the review of patient community access privileges (Jackson, 2012).

In light of the trend away from permitted tobacco use, and well established data linking tobacco smoke with a range of serious health problems, this seems a surprising decision. It thereby begs the question, what information was used to make it? How were different pieces of information weighed in the decision-making process? What were all the factors involved in making this decision? By examining the information flows in this case, this study will illuminate the relationship between information and public health policy decision-making.

Consideration of the general practices of policy development reveals a myriad of considerations and factors that come into play, with no one pattern to guide researchers or decision makers. In examining media reports that surround the Taavel murder, it is clear that the information environment in which the joint review took place is one that conveyed a heightened sense of risk to public safety, and general anger over a perceived lack of appropriate measures on the part of the government. At the same time, peer-reviewed scholarship did not appear to provide clear answers for the information needs of the participants in the joint review. Instead, the available evidence was interpreted and filtered according to the lenses, agendas, and biases of the various participants.

Chapter 2: Literature Review

Knowledge Transfer

Of particular interest to this study is Knowledge Transfer (KT), also called Knowledge Translation (KT) or Knowledge Mobilization, which considers the push of evidence from researchers to policy makers. Knowledge Transfer and Exchange (KTE), sometimes called Integrated KT, is a variation that considers communication between researchers and policy makers to be more complex and multi-directional, involving end users of knowledge in the process of generating it, in the formulation of research questions, for example. Such communication is to ensure and facilitate the use of research in policy creation (Bellman, Webster, & Jeanes, 2011; Browman, 2012; Mitton et al., 2007; Ward, Smith, House, & Hamer, 2012).

In the case of publicly funded research in Canada, there is a particularly strong impetus to ensure that research is made available for the public good. The Canadian Institute for Health Research (CIHR) was founded in 2000 by the Canadian Institutes of Health Research Act with the stated objective, "to excel…in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products and a strengthened Canadian health care system" (Canadian Institutes of Health Research, 2013a; Canadian institutes of health research act S.C. 2000, c. 6). Publications that result from research funded by the CIHR are required to be made available, free of charge, to any interested party either through publication in an open access journal or through an open access repository within twelve months of publication

(Canadian Institutes of Health Research, 2013a). Commitment to open access is a key aspect of CIHR's mandate to promote both research and KT, as ensuring the widest possible availability prevents relevant research from being left out of consideration due to a lack of access to it.

While making sure that research results are readily available to those in a position to use it in real life applications, such as public health policy, ensuring access is only one element of effective Knowledge Transfer or Knowledge Translation. KT strategies seek to overcome a range of barriers that hamper the implementation of evidence by policy makers.

One commonly recognized barrier is the existence of time constraints which limit or eliminate opportunities to seek or read journal articles or other sources of peer-reviewed scholarship (Dobbins, DeCorby, & Twiddy, 2004). As a result, KT strategies have attempted to address the time-consuming aspects of finding and using evidence. Among the recommended strategies by scholars of KT for making evidence more quickly accessible, the information must be stated efficiently, omitting or condensing aspects of a study, such as details of its methodology, which are not of immediate concern. The information must also come from sources of established and trusted reliability, so that time is not wasted determining if information is worth considering (Brownson, Chriqui, & Stamatakis, 2009; Colby, Quinn, Williams, Bilheimer, & Goodell, 2008; Dobbins et al., 2004; Dobbins et al., 2007; Fielding & Briss, 2006; Hunter, 2009; Lavis, 2006; Morgan, 2010).

In order to be used effectively, information presented to policy makers must be current, with clear applicability to the problems the policy maker seeks to address (Dobbins et al., 2004). To meet the needs of policy makers, Dobbins et al. (2004) have suggested a mechanism that delivers summaries of systematic reviews, created by experts and delivered consistently and predictably in a manner customized by the users.

To create more usable research, Hunter (2009) calls for greater collaboration in the research process, with policy makers and researchers working together to formulate questions and methodologies that will result in studies of immediate practical value. Other recommendations include creating publications targeting non-specialists and non-academics that present data in a brief and easily digested format (Bambra et al., 2010; Brownson et al., 2009; Colby et al., 2008; Hunter, 2009; Morgan, 2010).

The transfer or translation of research-generated knowledge requires interaction and exchange between those producing the knowledge and those who would apply it. Ready accessibility of information is of no value if that information does not provide answers to policy makers' questions. For research to be useable, it must have immediate relevance and application potential, and the goals and expectations of researchers and policy makers must be in alignment. Recognition of this interaction has caused some scholars to adopt the term Knowledge Transfer and Exchange (KTE) in order to emphasize the interactive quality of the process. In order to address the need to make research relevant for real life application, one of CIHR's strategic initiatives is the Strategy

for Patient-Oriented Research (SPOR), which states its goal as, “to better ensure the translation of innovative diagnostic and therapeutic approaches to the point-of-care, as well as to help the provinces and territories meet the challenge of delivering high quality, cost-effective health care” (Canadian Institutes of Health Research, 2013b). In pursuance of this goal, the initiative strives to identify gaps in research needed for the treatment of patients and providing support for research undergone to address specific patient needs. The impact of such research has the potential to impact clinical policy and guidelines, and public health policy as well.

Though a considerable body of material has been generated on this topic in recent years, Mitton et al. posited that there was insufficient evidence behind evaluation of KTE in the context of policy making. This assessment came after a review of literature that considered the challenges to KTE and recommendations to overcome those challenges. The researchers found that those recommendations are not themselves evidence-based, but supported by anecdotes and rhetoric (Mitton et al., 2007). In other words, there are many ideas as to how KTE should work, but little evidence as to how it actually does work. More research is needed in a variety of settings to understand better KTE processes and produce recommendations that might reliably reduce failure. Key to that research is a better understanding of how policy researchers do their research, as “relatively little is known about the ‘nuts and bolts’ practices of professional policy-making researchers” (Bell, 2009, p. 2).

Challenges of Evidence-Based or Evidence-Informed Policy Making

A number of recommendations attempt to address the disconnect from both the researchers' and policy makers' perspectives, and these frequently involve addressing the process of Knowledge Transfer, addressed above. Of course, researchers are not able to overcome all obstacles to evidence-based policy making on their own. The Brownson et al. (2009) study of legislative policymakers found that too few were sufficiently trained to evaluate the quality of data and were vulnerable to manipulation and misuse of data by interested groups. It is clearly critical that those who make policy and support the policy-making process have the training to evaluate the quality of the information available.

If researchers might be accused of creating their research as if in a vacuum, with too little regard for context, the opposite might be said of policy analysts and policy makers, who not only evaluate research through their own ideological lenses, but might be subject to considerable pressure from interest groups (Jewell & Bero, 2008; Kirk, Sim, Hemmens, & Price, 2012; Lomas, 1990; McIntyre, Glanville, & Hilchie-Pye, 2011). Jewell and Bero's 2008 study is quite critical of recent publications that examine the interaction between researchers and policy makers for failing to consider the breadth of variables in the policy makers' environments that might stymy efforts to employ evidence. Jewell and Bero's study, like Lomas' earlier one (1990) focuses primarily on legislative policy makers, and it is hardly surprising that elected officials feel pressured to act in accordance with the wishes and values of their constituents. For non-elected

individuals, a variety of other variables in their environments may compromise the use of evidence. These include fragmentary structures of their organizations which hamper communication and collaboration, budgetary considerations, pressure from interest groups and political values (Jewell & Bero, 2008). A tangle of relationships exists between sponsors, researchers, regulators and the public, all of which present their own pressures and influences on the process, from the research question to the formation of policy (Graham, 2008). Balancing the sometimes opposing needs and points of view of different stakeholders can be a significant challenge (Aarons, Wells, Zagursky, Fettes, & Palinkas, 2009; Choi et al., 2005). For policy analysts specifically, the amount of time available to compile briefing notes can present significant challenges (Berryman, 2006; Howlett, 2009).

A further factor that can confound efforts to implement evidence based policy is persistent biases in the evidence available. While the value of systematic reviews of randomized control trials (RCTs) for evidence-based policy making is noted by policy makers, their ultimate value is only as good as the quality of the information they contain (Dobbins et al., 2007; Fielding & Briss, 2006). This is as true of the gold standard Cochrane Reviews as with any other. A tendency to avoid publishing negative or negligible results of a particular intervention or therapy can dramatically shift assessment of that intervention (Rodwin & Abramson, 2012). Likewise, reviews can be compromised by including trials that were not sufficiently rigorous or by assembling the review too

early, before significant trials can be completed and published (Humaidan & Polyzos, 2012).

Evidence from Expertise?

These problems draw our attention to the fact that connecting the wealth of existing knowledge with the relevant policies can be a formidable challenge in itself, and there remains another vital problem. Despite that abundance of scholarship, clear evidence does not always exist in answer to all policy needs, and not all policy questions can be answered by systematic reviews of sound clinical trials. The experience and testimony of experts is seen by policy makers to be of tremendous value in such situations, and “research indicates that expertise contributes to favorable outcomes in the workplace, including effective decision making and high job performance” (Dane, 2010, p. 579). There is a recognized draw-back to expertise, however, and that is the possibility of losing flexibility in the way one approaches a problem, such as an inability to consider problems from the perspectives of others (Dane, 2010). There is now recognition of the value of voices whose expertise does not arise from formal credentials, but how to assess and include the information provided by such “experts” is difficult and leads to further, significant challenges (Collins & Evans, 2002; Graham & Jones, 2010; Jones & Graham, 2009). As Collins and Evans asked,

> Should the political legitimacy of technical decisions in the public domain be maximized by referring them to the widest democratic processes, or

> should such decisions be based on the best expert advice? The first choice risks technological paralysis: the second invites popular opposition (Collins & Evans, 2002, pp. 235-6).

On the one hand, people impacted by decisions in a democratic society feel entitled to a voice in decision making, and politicians may feel that such claims are both just and politic, enhancing the democratic process. Yet, as too many chefs can spoil the sauce, there exists a danger that expanding the pool of voices confuses the definition of expertise unless clear parameters for understanding expertise are defined and enforced (Collins & Evans, 2002).

The Education and Training of Policy Analysts

Studies that consider the roles of policy analysts in the process of developing evidence-based policy in Canada have found the capacity of these players to find, assess, and synthesize peer-reviewed evidence to be uneven (Bédard & Ouimet, 2012; Howlett, 2009). This is undoubtedly, in part, a result of a fairly broad definition of policy analysts and the wide range of contexts and issues with which they may work. Policy analysts also come to their jobs from a range of educational backgrounds (Bédard & Ouimet, 2012). Even graduates of professional programs in public administration, which commonly provide courses intended to train policy analysts, offer a range of emphases which will impact students' skill sets and approaches to their positions (Gow & Sutherland, 2004). Gow's 2004 survey of Canadian public administration programs found that while there was a variety of elements that formed the heart of different programs, one general trend was a focus on theory, even though it is not an accreditation

requirement. Precisely how that or other foci impact the effectiveness of the programs in the professional lives of their graduates was not considered in the study. Indeed, while recent studies have looked closely at the work of policy analysts in Canada, little has been done to understand the connection between educational background and the work they do, on the one hand, and the capacity to promote evidence-based policy on the other (Bédard & Ouimet, 2012).

Organizational structure and specific local interests also impact the process of policy development. Edwards' 2008 study of prenatal records found that variation across provinces suggested variations in local decision-making environments. In turn, a study of HIV testing policy illustrated the necessity of understanding the specifics of the community affected by policy development, underscoring the need for policy analysts to respond to and adapt to their environments—a one-size-fits-all approach to decision-making is not appropriate (Gahagan, Fuller, Delpech, Baxter, & Proctor-Simms, 2010).

In an effort to explore how effective policy is developed and define best practices, Nova Scotia's Policy Excellence Initiative studied the environment and circumstances of policy development through surveys of government employees and compiled a document in 2007 with recommendations for various areas of public service. Other provinces, such as Ontario and British Columbia, have promoted similar initiatives (Howlett, 2009).

Searching Behavior and Information Literacy

A further variable in understanding how policy makers use evidence is how they find it—to what sources do they turn and how do they go about their

searches? Google has placed an unfathomable quantity of information at the disposal of anyone with an internet connection and the ability to type keywords in a search box, but that is often far from the most reliable and efficient way to obtain evidence, especially evidence of high quality. Indeed, Google has arguably created a false sense of security among researchers by allowing the ease of performing a search to suggest that the searcher is an expert at finding information (Gross & Latham, 2012; Rowlands et al., 2008). Confusion can also exist about the resources available to Google searches. Despite the fact that a search may provide an astronomical number of results, none of these are from the "hidden" or "deep" web, which is not free, and includes most scholarly publications which must be accessed only through paid subscriptions. At the same time, with more results generated than one can reasonably sort, a Google search can also leave the impression that consultation of further sources is unnecessary (Williams, 2007). This may be particularly the case with Google Scholar searches.

The library and information studies literature of at least the past ten years has alerted librarians and information managers of the problem that digital literacy and information literacy do not automatically go hand-in-hand (Eisenberg, 2010; Gross & Latham, 2012; Marcum, 2002; Rowlands et al., 2008; Swanson, 2005; Tenopir & Ennis, 2005; Williams, 2007). Much work needs to be done to facilitate the development of information literacy, and this work is hampered by the mutually reinforcing circumstances: a narrow interest in the problem among information professionals and a lack of understanding that the problem exists

outside of information management and related disciplines. In part, this may be due to the confusion between digital comfort and information literacy. "The information literacy of young people, has not improved with the widening access to technology: in fact, their apparent facility with computers disguises some worrying problems" (Rowlands et al., 2008, p. 295). These problems include an ability to formulate effective searches and determine appropriate search results (Rowlands et al., 2008; Zimerman, 2012).

Another problem is that while programs are in place to address information literacy, these are primarily library-based, in the same way that studies of information literacy are primarily concerned with library programs and (academic) library users. A call has been made for a broader, multi-disciplinary approach to information literacy that makes it a component of every academic program of study, but this call remains to be fully answered. Furthermore, much more study needs to be done to address questions of how professionals outside of academia search and utilize information (Sokoloff, 2012).

When it comes to seeking information for policy, a gray area of expertise is gray literature. When not catalogued with academic literature and lacking its cachet, important and relevant studies undertaken and funded by government agencies can be overlooked by policy researchers who either do not appreciate its value or do not know where to find it.

MacDonald et al.'s work (2007) on the information diffusion in gray literature provides a demonstration of the way in which the medium of information might hinder its use or reception. Though the documentation that accompanies

the policy-making process is largely unavailable to outsiders, their study did show that analysis of citations can be used to consider the impact of publications on policy. The researchers found that relevant gray literature frequently suffers from limited accessibility or misperceptions about its quality. As a result, policy makers are not making use of meaningful research (MacDonald, Cordes, & Wells, 2007).

Smoking Bans in Psychiatric Facilities

In the first decade of the twenty-first century, smoking bans in psychiatric hospitals became a popular topic in scholarly literature, following the trend of decreasing tolerance of smoking in workplaces generally, and hospitals in particular. Such bans are based on the documented dangers of smoking and exposure to second-hand smoke. Bans on smoking in psychiatric or forensic hospitals present particular challenges, as the mentally ill have higher smoking rates than the general population (Campion et al., 2008; Lawn & Campion, 2010). The impact of tobacco smoking on brain chemistry is not well understood, but it is also part of the culture of the mentally ill in an institutional setting—some start smoking while staying in group homes or hospitals (Rauter, de Nesnera, & Grandfield, 1997).

Despite the risks to their own health posed by exposure to second-hand smoke, staff members at psychiatric and forensic hospitals have also been found to be less supportive of smoking bans because cigarettes and smoking privileges can be used as a reward or a means to coerce behavior. Ethical considerations have also been raised by hospital staff, as smoking is often one of the few

pleasures available to a psychiatric or forensic patient who may be hospitalized against his will. Patients in hospital are also understood to be in a fragile and vulnerable state for whom smoking is a comfort and nicotine withdrawal a severe, added stress (“Smoking bans on psychiatric units”, 2008; McNally et al., 2006).

Many of the studies that looked at smoking bans in psychiatric or forensic facilities are case studies, which examine a particular set of policies related to smoking bans in a specific context. This means that the results themselves may not be directly generalizable. Reviews do exist, however, and these have found that the degree to which staff were themselves smokers, and how well they were trained and educated about the risks of smoking and second-hand smoke, the use of nicotine replacement therapy, and how to address smoking-related patient distress has varied across studies, though these proved to be critical factors in determining the success of a non-smoking policies (Campion et al., 2008; Ratschen, Britton, Doody, Leonardi-Bee, & McNeill, 2009).

A recent systematic review of the literature on bans in these challenging circumstances finds mixed success. A general trend observed from systematic review is that the greatest success of smoking bans comes with those that are simple, complete, and consistent. Gradual or partial implementations, where a patient might be able to smoke, create distractions from therapy and heighten hostility towards staff. For that reason, “half-way” measures are associated with greater policy failure in the form of rescinded policy or increased problems at the facility (Campion et al., 2008; Lawn & Campion, 2010; Ratschen, Britton, Doody,

& McNeill, 2009). Long term planning and increased training for staff were also associated with greater success (Lawn & Campion, 2010).

Public Perception of Risk and its Impact on Policy Making

It is incumbent on the government to reduce risk to the health and safety of the public and its property. Indeed, that is a critical justification of government, and thus the government is held responsible for breeches to public health and safety even in circumstances in which it was not directly involved (Halachmi, 2005). Because the public's perception of government's effectiveness at mitigating or controlling risk is linked with government's legitimacy, public opinion influences policy (Jeleva & Rossignol, 2009). That opinion is largely formed on the basis of perceptions of risk. The greater the perceived risk, the greater the tolerance of policy aimed to control or limit that risk (Gerber & Neeley, 2005; Gray & Ropeik, 2002).

Perceptions of risk and appropriate policy responses are influenced by a variety of variables. Culture and pervasive local values on the balance between personal autonomy and collective responsibility factor into how people perceive risk and believe risks should be managed (Hirsch & Baxter, 2011). The novelty of a risk can also heighten insecurity and increase the perception of risk, as can the pervasiveness of media accounts of particular risks. When a sniper terrorized the areas surrounding Washington D.C., the degree of fear experienced by people in that region was not based on statistical estimates of risk, but was nevertheless natural and expected given their information environment which was saturated with coverage of and about the sniper attacks

(Coppola, 2005). People tend to exaggerate the risk of issues frequently in the news, in part because there is seldom reliable information about risk presented in the popular media. Instead, the frequency and tone of reporting are used when calculating risk, which does not necessarily reflect statistical probabilities (Ackerson & Viswanath, 2010).

Nevertheless, widespread publicity regarding a risk is not in itself sufficient to win support for a policy action. A critical variable is trust. Trust is essential not only in the policymakers and their mechanisms and agencies, but the information about the risk itself must come from a trusted source and authority (Jeleva & Rossignol, 2009). This need to maintain trust can be, under some circumstances, a decisive factor in policy-related decision-making. The importance of maintaining public trust in action can be seen in the example of the rise and fall of the vaccine RotaShield in the United States. RotaShield was developed to fight Rotavirus, a common cause of gastro-intestinal infection. Though the virus causes few fatalities in the United States and other developed countries, it is a significant cause of infant death in the developing world. In the late 1990s, public trust in the safety of vaccines was at an all-time low. Andrew Wakefield’s now discredited article in *The Lancet* linking vaccination to autism was published in 1998, while concerns over the safety of thermasol excited further suspicion over vaccine safety at that time (Schwartz, 2012). Such fears ignited distrust of pharmaceutical companies, physicians, and the government agencies tasked with ensuring safety. As a result, that time period saw increased incidence of parents refusing to vaccinate their children against

serious diseases with high health risks—a matter of great concern to the agencies responsible for public health and safety. At the time, a slight but serious and unanticipated risk associated with RotaShield resulted in its manufacturer pulling the vaccine from the market in anticipation of the US Center for Disease Control (CDC) withdrawing recommendation for use. The CDC statement was made in such absolute terms that use of the vaccine was effectively ended, even in areas of the developing world where the risk of death due to the Rotavirus was many times greater than the risk of complications of the vaccine. Years later, some observers and participants in that example of decision-making admitted that the decision made, and the manner in which it was executed, was far more in response to the need to maintain public trust in vaccination programs among Americans than about controlling the risk of RotaShield (Schwartz, 2012).

Likewise, publicity alone does not necessarily correlate with support for policies that address a much-publicized issue. A study of underage drinking in Louisiana found that there was an inverse correlation between publicity and legislative success, suggesting that in circumstances where vested parties have an interest in preventing policies that threaten their interests, media attention may serve to open a dialogue that splits public opinion (Harwood, Witson, Fan, & Wagenaar, 2005).

This is not to suggest that a clear divide is always present between the policy makers and scientists on the one hand, and the general public on the other. As we have seen above, the scientific and policy making communities are

not necessarily one and the same, and do not necessarily communicate effectively with one another. At the same time, policy makers themselves are exposed to the same influences within their environment as the general public. Personal values and ideology, media reports, and the degree to which a risk is perceived as personally threatening potentially impact them in much the same way. A study in Sweden found that there was little discrepancy in how policymakers and members of the general public assess risk. Where differences were observable, it was when a significant minority of policymakers favored policy that prioritized the public's sense of safety over actual lives saved (Carlsson, Daruvala, & Jaldell, 2012). Again, the issue of trust, and the legitimacy of government, can be a significant variable in policymaking.

Conclusions

A wide range of factors contribute to what kind of information is incorporated into the policy making process, and to what use that information is put. Not all of these factors are under the control of those researching or formulating policy, but instead illustrate the complex web of variables that contribute to the flow and implementation of information.

Chapter 3: Methodology

Naturalistic or Constructivist Inquiry

This study is influenced by naturalistic or constructivist inquiry, which focuses on the "in-depth study of people, situations, and events" (Mellon, 1990, p. 1). Its value for this study is the concentrated attention not on circumstances on the whole, but the actual lived experience of specific individuals in a particular situation under consideration. In that, it differs markedly from some more traditional, particularly quantitative research which uses large numbers of examples or subjects in order to establish general, predictable trends.

Constructivist inquiry allows for the construction of multiple, legitimate realities, which allows each of the informants of this study to present a valid truth, even if in contradiction to one another (Erlandson, Skipper, Allen, & Harris, 1993). The value of constructivist research is described in terms of its trustworthiness and authenticity over validity, to better reflect the subjective or unique nature of the results which are not easily compared to any kind of objective standard. The goal is to ensure that the research is meaningful and able to serve as the basis of effective action (Manning, 1997).

Ultimately, this study employs a variety of methods in order to explore in-depth a particular, lived experience related to a single instance of decision making, while at the same time employing more traditional concepts of validity to its methodologies.

Study Design

Other studies have shown the limitations of broad or strictly theoretical approaches to understanding knowledge transfer in the real world context of policy-making. Policy is not created in a vacuum; many variables constitute its context and these have the potential to influence or contribute to policy decisions (Dobbins et al., 2007; Hunter, 2009; Jewell & Bero, 2008; Martin-Matthews, 2009; Mitton et al., 2007; Morgan, 2010; Raphael, 2009). As a goal of this study was to examine differing ways that information is used in a specific context, with careful attention paid to the contextual details in order to understand, what, if any roles the circumstances play in the policy making process, a case study method was chosen. Case study allows for these contextual conditions to be the subject of consideration (Yin, 2003). In this case study, I consider the way information was gathered and evaluated in order to come to the decision to change the smoking policy at East Coast Forensic Hospital. In order to uncover what policy actions were taken in response to this event and why, I collected information from a variety of sources to shed light on the problem from a range of perspectives.

One critical source of information was obtained from participants through interviews. I interviewed several key informants who participate in, or have knowledge of, the policy making process. These are the subjects of my inquiry, and were able to provide me with insights into several questions, including the role of information and information pathways, what types of information were

taken up and which were not, who are the creators, drivers, and users of information, and what was the impact of this use of information.

Additionally, I performed content analysis of media reports in order to appreciate the atmosphere and public pressures that may have contributed to the decision making process. In this, I considered what information was conveyed in the reports, including the selection of facts, the perspective used to present them, and how they were or were not contextualized for the reader.

Interviews

In order to gain insight into the information flows that are involved in policy-related decision-making, it was essential to speak to people actually involved in this process. The interview participants were themselves the subjects of study, and the goal of each interview was to allow them to speak freely about their habits and attitudes with respect to information.

Ethics Review

Ethics approval for this research was obtained from the Dalhousie University Social Sciences and Humanities Research Ethics Review Board in November, 2012.

Study Population

The study population is those people intimately familiar with the processes involved in making policy decisions. The population includes senior members of the provincial Department of Health in Nova Scotia and Capital District Health Authority.

Sample.

Participants in the interviews were selected purposefully because of their familiarity with the policy-making process and their knowledge of the case under consideration. They were intentionally chosen in order to present a variety of perspectives of, a) policy development generally, and b) the case under consideration.

Four people affiliated with the Department of Health and Wellness, the Office of Policy and Priorities, and Capital District Health Authority were interviewed for their perspectives on the role of information in health policy decision making. Informants were asked to respond to open-ended questions. The sample size, though relatively small, was confirmed to be adequate by the appearance of redundancy in the information and themes that emerged from the interviews (Patton, 2002).

Recruitment.

Potential informants were contacted by telephone or email to inquire into their willingness to participate or their recommendation of a designate who was equally well-informed from their organization's perspective. A transcript for this initial contact is provided as Appendix A. A follow up letter was sent by email, or traditional mail if preferred, that provided details of the study (Appendix B) as well as the informed consent form.

Participants were asked to:

1. Read and sign the informed consent form, if they agreed to participate.

2. Answer open-ended questions in a telephone or face-to-face interview. These where intended to take no more than one hour.
3. Review transcripts that were submitted for approval and correction.

Ethical Considerations

Informed consent.

All individuals invited to participate were provided with information about the study, including its objectives, methods, and potential risks to participants, and then asked to sign a consent form allowing the interview to be recorded, their information to be used in the study, and additional contact to be made by the researchers in order to obtain approval for the interview transcript. See Appendix C for the form.

Anonymity and confidentiality.

Given that this is a case study, examining specific events and actions, it was not possible to maintain confidentiality and anonymity for the participants. The particular perspectives offered about specific issues or incidents rendered it likely that the identities could be inferred by readers of this study. Therefore, no pseudonyms are used. This choice also served to protect other individuals in the small pool of possible participants from being inaccurately supposed to be informants of this study. In order to protect informants from any untoward consequences of participating in this study, all participants were provided with a full transcript for approval or correction. After making any changes they chose to make, the transcripts were returned to the author and these were the basis for

study. Earlier versions of the transcripts were destroyed. To avoid unnecessary distraction, informants are referred to by their initials.

Potential risks and risk mitigation.

Because of the well-known health hazards associated with smoking, there is some controversy associated with the decision to reverse the smoking ban at East Coast Forensic Hospital. Those professionals affiliated with hospital administration, Capital District Health Authority, or the Department of Health and Wellness may be exposed to criticism for any remarks they make on the smoking ban or its reversal.

To mitigate the risks posed by this research, no quotations have been attributed to any individual without first providing that person with a transcript for approval or correction. No interview content is used without prior consent.

Assumptions

The integrity of this study relies on two assumptions:

1. This study assumes that key informants were able to describe the pathways of information in their organizations from their own perspectives.
2. This study assumes that the choice of case study will lead to new understandings of pathways of information in policy development and amendment.

Limitations

Application of this study may be limited by the following:

1. A case study may not be representative of policy making generally in Nova Scotia. Case study is, by definition, limited to one single

example. The nature of case study means that interprovincial applicability will not be likely.

2. Because this case was extremely recent, with some of its repercussions yet to be determined, it was more difficult than expected to find informants with direct knowledge of the case willing to speak on the record. Though both the Capital District Health Authority and the Nova Scotia Department of Health and Wellness are represented in the informants, these were senior members who may not represent the perspectives of policy analysts or others who may have assisted in the process. Media reports which quote other individuals involved in the response to the Raymond Taavel case are sometimes used to flesh out the story. In addition, examples of other cases were discussed with all informants to shed light on the information flows surrounding policy in general.
3. The lack of anonymity and the fact that legal action may yet arise from the case may have prevented the participants from speaking as frankly as they might have done under other circumstances.

Data Collection

One interview was conducted with each of four informants in January 2013. These took place in their offices according to the preference of each informant.

Before each interview, I went over the information provided in the Interview Information and Consent Form (Appendix C), which had been

previously emailed. Informants were reminded that they could choose to end their participation in the study at any time, and asked to grant permission for the interview to be recorded and follow-up contact to be made. The interview commenced when the form was signed, and lasted about one hour.

The data was collected using an audio-recorder and hand-written notes. Recordings were transcribed for analysis and saved as Microsoft Word files. The transcripts were then subject to analysis to identify themes in the content, using the same methods described below for media reports.

Interview guide.

The interview guide (see Appendix D) consisted of open ended questions designed to encourage participants to describe what kinds of information are used to make policy related decisions, what are the sources of that information, and how and why value judgements are made about different pieces or types of information and the information gathering and decision making processes. More general questions about usual or typical habits related to information use were followed with more specific questions about information use and the smoking policy decisions at East Coast Forensic Hospital.

Informal Interviews

In order to gain a broader perspective from which to understand the information and points of view presented by the formal participants in this study, I spoke informally with members of the Department of Health and Wellness and Dalhousie University's Faculty of Medicine. My goal was to obtain a more frank assessment of how peer-reviewed research is employed in policy-making from

both the point of view of policy makers and researchers. The informants who participated in these informal conversations are referred to as “Informal Informants” to reflect the impromptu nature of the conversations, which were not recorded or prefaced by the signing of informed consent documents.

Ethical Considerations

Informal informants were approached with an explanation of the nature of the project and a request to provide their perspectives. They did not sign informed consent forms and are anonymous in this study, identified only by their employers. No direct quotations are attributed to informal informants.

Data Collection

Meetings with informal informants were not recorded and transcribed, and thus were not subject to content analysis. Instead, information was recorded in hand-written notes and was employed in the analysis of the data obtained through the formal interview process.

Questions asked included:

- Does consideration for KT impact research? If so, how? Does it impact the research question or the choice of publication?
- Who is the intended audience of research?
- Do you see research evidence regularly employed in policy making? Why or why not do you think that is the case?

Content Analysis

News media sources

In this case study, it is important to understand the information environment in which policy workers were selecting and using different types of information. The story of the death of Raymond Taavel had resonated widely, and was the subject of multiple local news stories, editorials, and investigative reports as each phase of the legal and policy response to the murder emerged.

Sample.

A purposive sample of items from the *Chronicle Herald*, *Globe and Mail* and CBC news were selected for this study. A search for items on thechronicleherald.ca, theglobeandmail.com, and cbc.ca was conducted using the following search terms:

- East Coast Forensic OR Capital Health AND smoking
- East Coast Forensic Hospital AND smoke
- Andre Denny
- Raymond Taavel

Items were eliminated on the basis of redundancy. The popularity of the story was such that the details were retold at length whenever any new bit of information was added, so only the fullest examples were chosen in cases where much the same story was repeated. After reading through the search results, twenty-two stories were selected for analysis, these included news items and editorials, as both would have been of interest and available to involved researchers and decision makers as well as the general public and thus

contributed to the information environment in which the process of responding to the event was established and decisions were made.

Evernote, a note-taking application, was used to save the URLs and capture the content of each story so that they would continue to be available for study even if they became no longer available on the news organization’s website. In the act of saving each item to Evernote, I assigned general tags based on a scan of the contents:

- Capital Health
- criminal history
- hate crime
- mental illness
- policy
- politics
- public safety
- review
- smoking ban
- Taavel family
- Taavel friends
- violence

These tags were employed to indicate the focus of the articles’ content and serve as a reminder of noteworthy features. They were intended to serve as a preliminary basis of organization and classification of the documents, but not a comprehensive system of codes or categories.

Data Analysis

Transcribed interviews and media stories were subject to content analysis, performed manually by the researcher, with the goal of identifying key concepts and their relationships to one another (Berryman, 2006). Using a conventional content analysis approach and also influenced by constructivist inquiry, I did not approach the works with predetermined categories (Hsieh & Shannon, 2005). Instead, the texts were read multiple times. An initial reading was done to get a sense of the whole. On subsequent readings I captured terms that identified key concepts, which became the initial coding scheme. Codes were then examined to consider relationships to one another, and they were then grouped into categories and clusters. In the case of the news media stories, these were put in chronological order, all sources together, and read through consecutively in order to observe any patterns in theme or mood that developed in the course of time.

Validity.

Following the example of Brownhill and Hickey (2012) who employed constructivist inquiry, my methodological approach is informed by examples from oral history, where much work has been done on the trustworthiness and reliability of interviews. The consistency of information gained from interviews with other sources of information offers reassurance of reliability. Furthermore, the unique perspectives, the biases, and distinct motivations of every player as an individual and representative of his institution are themselves part of the subject of my inquiry. As with Brownhill and Hickey’s work on food security policy, these interviews,

> …allow for some insight into a subjective analysis. Because of the singular nature of each interviewee's narration, the data are reflective of them as 'subjects' within their institutions. The views expressed are 'partial,' or subjective; but they also reflect a certain overlap between the individual and institutional experience, or between the interviewees' subjectivity and the institutional and wider social relations within which they are embedded (p. 373).

The information obtained through interviews was triangulated with media reports and informal interviews with anonymous informants within the Department of Health and Wellness and the Dalhousie University Faculty of Medicine who are familiar with public health policy making within the provincial government. This triangulation of sources served to ensure the validity of the findings (Patton, 2002). This is not to say that a completely consistent picture was presented by all sources, nor was it expected to do so. Nevertheless, there was "consistency in the overall patterns of data from different sources or reasonable explanations for the differences in data from divergent sources [which did] contribute significantly to the overall credibility of findings" (Patton, 2002, p. 560).

Chapter 4: Results

Content Analysis of Media Reports

On April 17, in the early hours of the morning, prominent community leader and gay rights activist Raymond Taavel was beaten to death outside a bar on Gottingen Street, apparently after attempting to break up a fight. His assailant was Andre Denny, a patient at East Coast Forensic Hospital who had been given a one hour unsupervised community access pass the previous evening, and failed to return. Mr. Denny was apprehended a short time later near the scene.

Mr. Taavel was greatly respected and well known for both his courage and his kindness and compassion. His high profile as a community leader ensured broad media coverage of his tragic death and public interest into the responses of law enforcement and the government agencies who allowed Mr. Denny onto the street.

Twenty-two articles from the thechronicleherald.ca, cbc.ca, and theglobeandmail.ca were purposefully sampled for analysis. These were organized in chronological order and the printed text was color-coded according to thirteen themes that emerged from reading them through in order. These preliminary results were then assembled into an Excel spreadsheet in order to identify their frequency and any patterns that emerged chronologically. See Appendix F.

Subsequent readings established the relationships between these themes, presented in the table below (Figure 1). Four major classes emerged to identify the relationship between the various themes found in the articles. One focused on the personalities of the two protagonists in the tragic conflict. “Fear” unifies the fears expressed in the news reports. As illustrated, some themes served under more than one topic. “Blame” for Mr. Taavel’s death in another class, while “Procedures” having to do with how Mr. Denny was allowed on the street and how the government made policy changes in response is the fourth class.

<table>
<tr><th>Personalities</th><th>Fear</th><th>Blame</th><th>Procedures</th></tr>
<tr><td colspan="3">Andre Denny’s mental health</td><td></td></tr>
<tr><td colspan="3">Sympathy for Andre Denny</td><td></td></tr>
<tr><td></td><td colspan="2">Andre Denny’s criminal history</td><td></td></tr>
<tr><td></td><td></td><td>Blame “system”</td><td></td></tr>
<tr><td colspan="2">Raymond Taavel’s sexuality / Possible hate crime</td><td></td><td></td></tr>
<tr><td></td><td>Public safety</td><td></td><td></td></tr>
<tr><td colspan="2">Raymond Taavel’s compassionate nature</td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td>Gov’t review</td></tr>
<tr><td></td><td colspan="2">Politics</td><td></td></tr>
<tr><td></td><td></td><td colspan="2">Community access</td></tr>
<tr><td></td><td>Concern for mentally ill</td><td></td><td></td></tr>
<tr><td></td><td></td><td>Acknowledgement of complexity</td><td></td></tr>
<tr><td></td><td></td><td colspan="2">Smoking issue</td></tr>
</table>

Figure 1. The thirteen major themes of media stories united under four unifying classes.

Personalities

It is not surprising that the personalities of the two men who engaged in the tragic encounter on April 17 feature in the media reports. After all, a sense of personal investment in the story might reasonably inspire more involvement in

the story and an interest in following subsequent reports. Getting the public to read their stories is the goal of the written news media, print or electronic. Nonetheless, involving the public in the personalities of Andre Denny and Raymond Taavel shaped the broader narrative about their encounter.

The compassion of gay rights activist Raymond Taavel.

Raymond Taavel was seldom mentioned in newspaper stories without being described as a prominent gay rights activist. This is not inappropriate given that Mr. Taavel did have a high local public profile for that reason. There was also a report that Mr. Denny uttered homophobic slurs in the course of the altercation (Lowe, 2012). Arguably, however, the reminder of Mr. Taavel's sexuality served to keep alive the suspicion and fear that his death was a hate-crime and heighten anxieties in the reading public who were not touched by Mr. Taavel's death personally.

Another aspect of Mr. Taavel's life that was striking in the newspaper accounts was that his kind and compassionate nature was such that his friends and family believed he would extend forgiveness and understanding to his own attacker. "Raymond died helping someone and had he lived, would have forgiven his assailant," wrote Mr. Taavel's family to his friends in Halifax (Tutton, 2012, para. 25). Carol Millett, described by *The Chronicle Herald* as a friend and co-worker of Mr. Taavel's, was quoted in that paper stating that Mr. Taavel, "was all about love and compassion. He would have hugged Mr. Denny's family today because that's the kind of person Raymond was. He would have been sympathetic, I think" (Fairclough, 2012, para. 24). Another friend, Tynette

Deveaux stated, “Raymond would be understanding of this individual and he would feel badly that the system, the psychiatric system, the mental health system, had failed Andre Denny as well as the community of Halifax” (Fairclough, 2012, para. 21). With this statement, and similar ones echoed in other stories, the lack of blame attributed to Mr. Denny by those closest to the victim served from early on to channel blame towards the “system” which had allowed Mr. Denny on the streets of Halifax unsupervised, and away from the man who struck the blows.

The kindly nature of Andre Denny and violence of his illness.

Mr. Denny’s lawyer, Pavel Boubnov, was quick to describe his client as someone whose ultimate nature is friendly and peaceable when his illness is controlled by medication. However, without appropriate treatment, his illness determines his action, “He’s a very, very sick man” (MacDonald & Patten, 2012, para. 8). Mr. Boubnov further told reporters that Mr. Denny should never have been given an unescorted community access pass, given the severity of his illness (Hoare & Mellor, 2012).

The picture Mr. Boubnov paints of a deeply troubled, out of control man is consistent with news reports in general that routinely mention Mr. Denny’s diagnosis and history of disturbing, violent crimes for which courts have deemed him not criminally responsible. The sum effect of the accumulated descriptions of Mr. Denny’s actions and behaviors is a frightening picture of a man helpless under forces he cannot control, and failed by those who did have the power to control them—the authorities under whose care he was being treated. That

failure was one with implications not only for Mr. Taavel and those personally touched by his death, but the public at large who might have innocently crossed Mr. Denny's path when he was set loose on the unsuspecting city.

Fear

The senseless, tragic death of a beloved and respected member of the community in a random act of violence lends a sense of danger to the environment of the community. What happened to Mr. Taavel could have happened to anyone. With the sense that the violent impulses of Mr. Denny's illness were controlled neither by him nor by the authorities, sources quoted in the newspapers voiced fears likely echoed in the minds of readers—who or what is ensuring public safety?

Public safety and its political implications.

The safety of the general public was an often voiced concern in media reports. Mr. Taavel's friend, Tynette Deveaux suggested that the streets are unsafe when people who constitute a danger to the public are not kept away (Fairclough, 2012). Leslie Lowe said in a column from *The Chronicle Herald*, "it could have been any of us" (Lowe, 2012, para. 3).

Discussions of public safety inevitably have political overtones. Ultimately, it is government, through its various agencies, which is responsible for public safety. Arguably, ensuring basic peace and safety on the streets is a fundamental justification of government and the Taavel/Denny case called into question the current New Democratic Party (NDP) government's guardianship of public safety and offered an opportunity for criticism. Tory Leader Jamie Bailey

said, “It is important that we learn the lessons that arise from his [Taavel’s] death, starting with why there was such a horrible breakdown in public safety” (Hoare & Mellor, 2012, para. 18).

The incident also drew attention to broader criticisms on the mental health services offered by the government. In a column in *The Chronicle Herald*, Marilla Stephenson wrote,

> This is serious business for the provincial NDP government. There have been complaints for years by users of the mental health system that services are inadequate and that too many patients do not receive enough treatment and/or support… The government has also been under fire for its failure to deliver a promised mental health strategy (Stephenson, 2012b, para. 10-11).

Implications for treatment of mental illness and the mentally ill. Another fear that arose from the tragic encounter between Mr. Taavel and Mr. Denny was the media reports of Mr. Denny’s uncontrolled violent impulses that arise from his illness would lead to a general fear of the mentally ill and less compassionate policies and treatment. Dalhousie University law professor Archie Kaiser explained, “My major concern in this case is a harsh and punitive reaction that could be damaging to the public’s understanding of mental illness and could set the law and policy in a backward direction” (MacDonald & Patten, 2012, para. 27).

Stephen Ayer, the executive director of the Schizophrenia Society of Nova Scotia felt compelled to assert in a statement that, “Many, many people live very

well with schizophrenia and it is very sad for us to see this happen" (Lee & Mellor, 2012, para. 22). Dr. Aileen Brunet, the clinical director of East Coast Forensic Hospital also agreed that the murder of Mr. Taavel and fears for public safety might result in stigmatization of the mentally ill (Lee & Mellor, 2012). Similar concern was voiced by a Moncton, NB psychologist who spoke with CBC News, "Psychologist Charles Emmerys says it's natural for people to hear about Taavel's tragic death and want to keep those who suffer from mental illness locked up longer. But he argues that's not the answer" ("Psychologist urges calm", 2012, para. 4).

Blame

Most news accounts of the murder included a catalog of Mr. Denny's past crimes hand-in-hand with descriptions of his history of mental illness. An article posted the day of the murder entitled, "Slaying suspect has history of mental-health woes, run-ins with law," consisted solely of a catalog of his disturbing history. Among the accounts was a physician's statement found in court documents that described Mr. Denny as "'grossly psychotic' with a 'history of aggressiveness'" (Hoare & Lee, 2012, para.8). The phrase was repeated in another column in *The Chronicle Herald* as one of the few facts the author could offer to the many questions surrounding the death of Raymond Taavel (Lethbridge, 2012). As readers could readily conclude, Mr. Denny's actions suggested a dangerous man; his illness suggested he was out of control. The confirmation of a medical diagnosis, the fact that he had been found not criminally responsible for past offenses, and the urging of Mr. Taavel's friends

and family not to condemn Mr. Denny for actions he could not constrain meant that someone else was to blame. The question that quickly arose, according to individuals quoted in stories, was why was Mr. Denny allowed to go about freely? Mr. Taavel's friend Tynette Deveaux told *The Chronicle Herald*, that from what she knew, "this man has some serious psychological problems, and what he was doing out on an hour-long pass makes no sense to me" (Fairclough, 2012, para. 29).

Another article published two days later entitled, "Review board deemed Denny a safety risk" began with the statement,

> A review board began granting a man accused of murdering a gay activist this week conditional leaves from a psychiatric hospital in Halifax two months ago, even though the board considered the mentally ill man a 'significant risk' to public safety (MacDonald, 2012, para. 1).

The implications of this statement are that the board's decision was inexplicable and nonsensical, casting doubt on its ability to make sound judgements and consequently jeopardizing public safety. However, as the article progresses, the author's point of view appears to shift dramatically. Several paragraphs down, Dalhousie law professor Archie Kaiser is cited to explain the legal significance of the designation "significant risk." In this context, "the term is used when the board wants to retain control over an individual as they are integrated back into society, he said. Without the designation, the law would have required the board to set Denny free with no conditions" (MacDonald, 2012, para.11). Such specific

usage is at odds with how the phrase is understood in general parlance, thus rendering the opening sentence and headline of the article misleading.

The same article goes on to provide further nuance to understand the board's decision, including the establishment that Mr. Denny's profile was not unlike that of other patients, he was responsive to treatment, and the conditions that accompanied the grant of short-term leave. Thoughtful readers of the full article might come away enlightened as to the complexity of the issue surrounding the decision to allow Mr. Denny community access, but the headline and opening of the article undoubtedly cast long shadows of blame on the review board. While the article does go on to explain why such blame might not be entirely fair, it does not provide an alternative as to who else should be held responsible.

Procedures

In the case of a senseless tragedy, it is natural to ask how it happened, what went wrong? At the same time that a picture of Raymond Taavel emerged as a merciful man who would have forgiven his assailant and Andre Denny emerged as a man helpless to overcome the impulses driven by his illness, accounts in the media implied that Mr. Denny's criminal history not only marked him as dangerous, but a danger which had been brought to the attention of the authorities and was thus their responsibility.

What went wrong and what to do about it?

The earliest reports included the information that Mr. Denny was absent without leave from East Coast Forensic Hospital at the time of the crime, after

having failed to return from a one hour leave granted the previous evening. The police had been alerted to look for him shortly after his leave expired. In the days that followed, *The Chronicle Herald* posted new stories that explained in more detail that unescorted leaves were commonly granted as part of a gradual reintegration of patients into the community. One hour leaves were sometimes used to go to a nearby bus shelter for a cigarette or across the street for a cup of coffee (Lee & Mellor, 2012). Such leaves were considered privileges for good behavior, according to sources that emailed the paper. The same story also published an outline of the procedure for obtaining a pass and leaving the facility as well as the protocol for when a patient fails to return, which was provided by East Coast Forensic Hospital (Hoare, 2012).

The day after Mr. Taavel's death, the government of Nova Scotia announced that it would conduct an investigation into the circumstances that led to Mr. Denny's community access. The investigation was to be conducted by the deputy minister of the Department of Health and Wellness, the deputy minister of the Department of Justice, as well as the CEO of Capital District Health Authority in order to assess whether protocols were followed and whether those protocols are adequate. Justice Minister Ross Landry stated, "What we want to do from a governmental perspective is have an independent look at this and do it in a timely way that gets some objectivity into the process" (Hoare & Mellor, 2012, para. 6).

Announcement of the review did not satisfy the forces pressuring the government for action. *The Chronicle Herald* columnist Marilla Stephensen

retorted the following day, “News flash to the minister: a review by the departments involved is not an independent review” (Stephenson, 2012b, para. 9). Suspicion over the objectivity of the review was also voiced by Liberal and Progressive Conservative leaders. Eventually bowing to that pressure, the province brought in two forensic mental health experts to assist in the review (Shiers & Jackson, 2012).

The joint review.

The promised joint review of existing policies and protocols with recommended changes was made public in mid-September, 2012, five months plus one day after the violent encounter between Andre Denny and Raymond Taavel. The gist of the report was relayed by *The Chronicle Herald* while providing a link to the provincial government’s website where the full document and appendices, including the individual reports made by the outside consultants, were easily accessible to the public (Nova Scotia, 2012). The website was also easily found through Google searches. The report provided eighteen actions that were to be taken by the province and Capital District Health Authority. While there were no egregious problems found in existing policies and procedures, some changes were recommended. Perhaps one of the most significant was that preliminary hearings which might grant leaves before a full Criminal Code review board hearings would no longer be allowed (Jackson, 2012).

Absent without leave – a smoking policy issue?

Another finding that raised considerable consternation in the media was the high rate of patients who went absent without leave (AWOL) after being

granted community access on a temporary pass. Both external reviewers commented on the problem in their individual reports (Brinck, 2012; Jackson, 2012; Simpson, 2012) and Dr. Brinck quoted a hospital staff member who said, "AWOL has become a culture in the hospital" (54).

Several of the recommendations in the report address the problem of AWOL, including more structured assessment of the risk of AWOL and consistent responses to its incidence (Nova Scotia, 2012). A more concrete recommendation was given brief treatment in the report. Under the seventh recommendation, which limited the community access of patients still waiting a hearing by the review board, a sub-recommendation was listed to the effect that the Minister of Health and Wellness was to direct that smoking facilities be provided, despite existing policies banning smoking on all CDHA properties.

Perhaps because it was a concrete measure whose impact might be more easily understood by the general population, the exception to the smoking ban extended to East Coast Forensic Hospital garnered disproportionate attention, compared to other, largely procedural recommendations. CBC Radio broadcast two lengthy, and fairly critical stories about the issue. The controversy was fed by the fact that the CEO of Capital Health, Chris Power, publicly voiced dissent on the issue (MacLeod, 2012). Ms. Power expressed pride in Capital Health's record of making its facilities smoke-free and further saw that allowing smoking on Capital Health property was contradictory to the district's mandate to promote health. Ms. Power made the point that one hour passes were granted to patients as part of their reintegration into the community and they might undertake a

variety of activities while given that community access. Smoking, in her view, was a red herring. *The Chronicle Heral*d columnist, Marilla Stephenson, agreed,

> Despite a high rate of patients not returning on time from unescorted leaves, nothing was done to review or tighten up the process. The smoking policy implemented in 2003 at the hospital—no smoking on the grounds—was deemed to be the culprit
>
> In fact, it was a culture of bureaucratic inaction in response to a recognized problem – AWL patients – that created the risk that led to Taavel's death (Stephenson, 2012a, para. 12).

With both the Department of Health and Wellness and the Capital District Health Authority uncomfortably positioned to receive the blame for the circumstances that led to the murder of Raymond Taavel, this public disagreement is jarring. How could two related parties with similar investment in the review process and its outcome have two diametrically opposing estimations of the significance of the smoking factor? Investigating this question provides an opportunity to explore how the decision was made, and ultimately, reveal some of the underlying factors and considerations that contributed to this policy decision.

Interview Results

Four formal, recorded interviews were conducted in which the informants were provided with detailed information about this study and signed informed consent forms. Two are employed by Capital Health, two by the government of Nova Scotia in the Department of Health and Wellness and the Office of Policy and Priorities. In addition, two informal consultations with members of the

Department of Health and Wellness and three with Dalhousie University's Faculty of Medicine were held in order to obtain an off-the-record (and perhaps more candid) perspective of the policy making process, both from those who make policy and from those who provide research for the benefit of policy makers. A list of the informants and their affiliations is provided in Figure 2.

Informant	**Affiliation**
BH	Capital District Health Authority
SW	Capital District Health Authority
TB	Department of Health and Wellness
JH	Office of Planning and Priorities
Informal Informant 1	Department of Health and Wellness
Informal Informant 2	Department of Health and Wellness
Informal Informant 3	Faculty of Medicine, Dalhousie U
Informal Informant 4	Faculty of Medicine, Dalhousie U
Informal Informant 5	Faculty of Medicine, Dalhousie U

Figure 2. List of informants and their affiliations

A series of open-ended questions was used in the interviews to elucidate information about how each informant played a role in policy development, his or her understanding of what constituted the sort of evidence needed to make policy decisions, and what factors contributed to the way information was used. Those informants with first-hand knowledge of the case at East Coast Forensic Hospital and the Joint Review were asked specific questions about the information flows related to that policy decision. Though the same interview guideline was the basis of each interview (see Appendix D), the open-ended nature of the questions resulted in a relatively free form narrative, and all questions were not necessarily addressed or addressed in the same order. Those who did not participate in the joint review were not asked questions that specifically pertained to the joint review, but did discuss other cases.

Because the case under consideration by this study was a recent one, with the potential consequences of the joint review and the event that sparked it still yet to be determined, it was more difficult than originally anticipated to find informants with direct knowledge of the process who were willing to speak on the record. Those with whom I did speak were wary, and came from the perspective of senior positions within the Capital District Health Authority and the Department of Health and Wellness.

As all informants were invited to present additional examples of cases to illustrate the use of information in public policy-making, those will be employed to help fill out the picture of what happened in the case of the joint review. The other informants without direct knowledge of the joint review were used to create a general picture of the process, issues, and approach to the use of information that is part of policy-making which might be compared and contrasted with the circumstances of the joint review and decision-making around the smoking policy issue.

Taking the interview protocol as a guide, the basic topics that we addressed in the interviews were:

1. Evidence – how defined, how found, how used
2. Decision making – what factors contribute to how information is used
3. Examples – the process of information gathering and decision making in action. These include both the main case of the smoking policy at ECFH as well as other examples.

The interview transcripts reveal a web of inter-related themes, challenges, and issues that are part of the process of assembling information that determines policy, as presented in Figure 3.

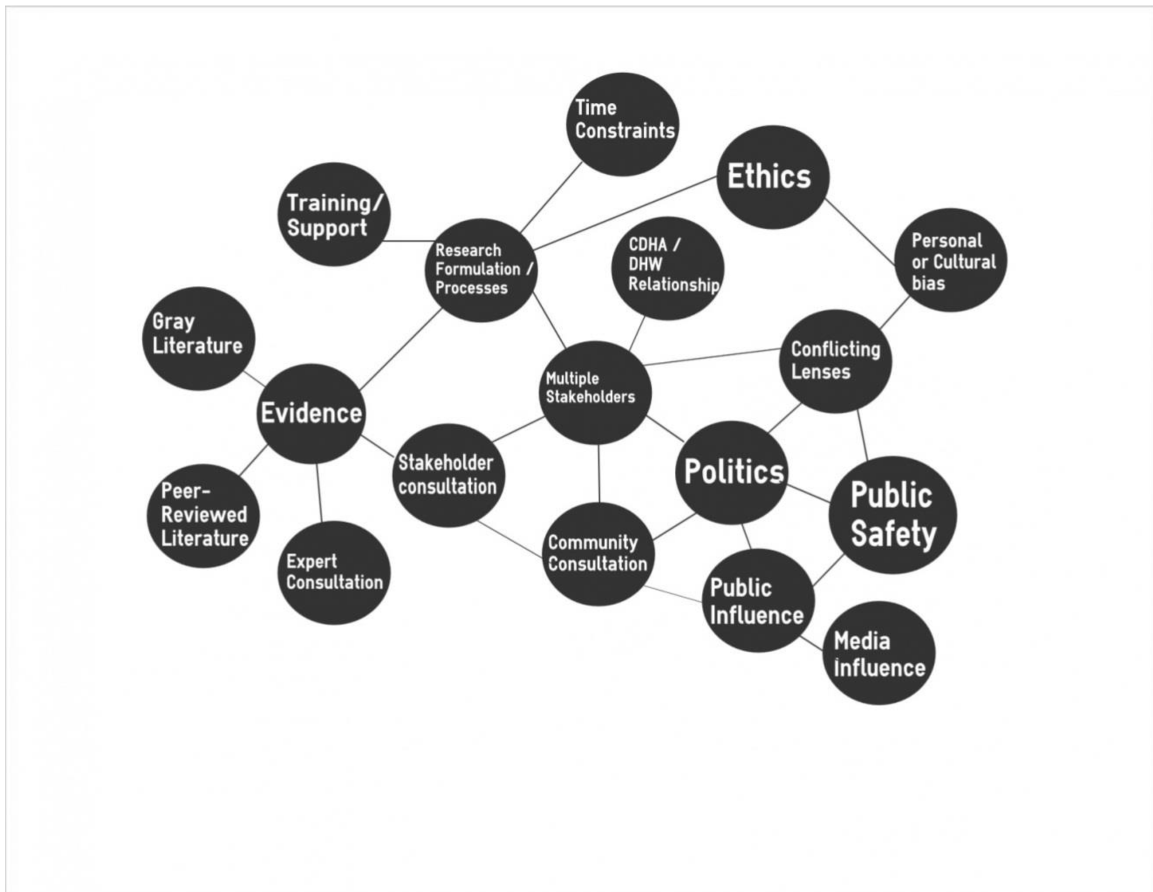

Figure 3. Themes from the interviews presented as a web or network.

Eighteen key themes were identified and color-coded in the interview transcripts and then charted on an Excel spreadsheet, each theme represented on a row with the relevant page numbers for each informant listed underneath (Appendix G). This method of organization allowed for quick reference to specific passages in any transcript and allowed the researcher to visualize the absolute and relative frequencies of each theme within a single transcript. In

addition, it allowed for comparison to be made between informants and frequently mentioned themes to be identified as such easily.

After charting the initial results, these were organized in a list, naming broader topics and sub-themes, seen in Figure 4. This served to identify the relationships between the themes present in the interviews, but should not be understood as implying a hierarchy between them. As Figure 3 illustrates, the factors and influences involved in information usage in policy research and decision making are better understood as a network or web than a linear, hierarchical series.

Evidence

General procedures

Quality Control

Problems with evidence

equivocal

appropriate to context

Types of evidence

Academic, peer reviewed

Gray literature

canvassing experience

Expert consultation

Stakeholder consultation

Consultation with **Multiple Stakeholders**

Conflicting lenses/goals

Public Safety

Personal/cultural biases

political considerations

CDHA/DHW relationship

Evidence about smoking policy specifically

Decision Making

Time constraints

to research policy

to improve training

Ethics

Training/support in use of resources

previous training

on the job training

Public Influence

community consultation

public pressure

Media influence

Figure 4. Themes and subthemes derived from interviews.

Evidence

After learning each informant's role in his or her organization, the early interview questions focused on evidence, in particular, was he or she familiar with the terms "evidence-based policy" or "evidence-informed policy," and if so, to

what degree did those ideas relate to the work that each did, and what constituted evidence as they performed their work.

What is evidence?

All informants were familiar with the terms evidence-based and evidence-informed policy, and each suggested that the policy work that he or she did was indeed evidence-based. All informants provided a broad range of kinds of information and information sources into what constituted the "evidence" used in policy creation.

Scholarly, or peer-reviewed evidence.

Scholarly, peer-reviewed evidence was named as a critical and reliable kind of evidence. JH specifically named randomized control trials as an example of a highly reliable kind of evidence, and TB asserted that staff in the Department of Health and Wellness have access to thousands of journals, stating, "certainly part of the research component is looking for vigorously peer-reviewed data."

While peer-reviewed scholarship was seen as the most respected kind of evidence by all informants, it was also seen to be limited in its ability to inform policy making fully. This was both due the perceived inherent limits of this kind of evidence to address specific problems in particular circumstances, but also because of the other factors the informants believed had valid input in the decision making process. With respect to the former, published evidence could be inadequate to address the specific needs of researchers. This might be because it was simply lacking, or because the circumstances of the study called their applicability into question. TB particularly pointed out that the context of

published studies, and the assumptions made by researchers need to be evaluated carefully before that research should be applied to local policy decisions. Also, the peer-reviewed research often does not provide clear answers, or provides contradictory ones, in which case consideration of a broader range of information was considered appropriate. This included both assessment of the prevailing trend of accumulated research, if one could be determined, and consideration of the other variables that are part of the policy making process that will be discussed in detail below.

While each of the informants asserted that scholarly evidence served as a foundation for policy when available, there was also general consensus that it could be utilized to an even greater degree, and that the varying degrees of expertise in finding scholarly research among policy analysts could present obstacles to most effective application of peer-reviewed sources. At both the Department of Health and Wellness and Capital Health, policy is developed by individuals with widely varying backgrounds and experience in performing scholarly research. At Capital Health, policy that passes through SW's hands is required to provide appropriate citations so that the source of the information is clear; those without are sent back. BH, also at Capital Health, sees that the younger generation is more in tuned to the importance of providing evidence,

> BH: I believe there's more rigor and people have been trained more now in making sure that there's good references and there's evidence-based policies. So, any clinical policy, and as much as possible, any administrative policy…has to cite the sources of evidence.

As part of the trend of increased importance attached to evidence, s/he has noted an increasing trend to providing references in situations where they are not strictly required, at the end of PowerPoint presentations, for example.

At the same time, quality control is ad hoc. There is no specific procedure for evaluating the quality of peer-reviewed evidence used. SW admitted that sometimes she wonders about the quality of the evidence that goes into policies, but her role and resources do not allow her opportunity to investigate. Instead, according to SW, the need to consult appropriate sources is identified in Capital Health's policy on policies (Capital Health, 2012), and SW further asserts it is up to the individuals who create policy to take responsibility for the quality of the information that informs them. In the Department of Health and Wellness, responsibility similarly rests with the researcher or analyst to ensure the quality of the evidence that he or she consults, though TB adds, "the evidence is looked at as part of the Policy Review Committee and any cabinet submissions. Furthermore, each analyst and their respective manager are expected to critically review the evidence they are relying on."

Whatever the degree of experience a researcher brings, combing through the quantity of information available can be a daunting task. As JH said, "There's so much information now, the trick is to get the right stuff."

Evidence of experience: Gray literature and consultation.

In the absence of peer-reviewed evidence that sheds direct light on the problem addressed by a proposed policy, consideration of other sources is valuable. As BH pointed out, "…for community based things, there's not always

that kind of evidence [i.e. objective, scientific studies], so what is the qualitative evidence?" Other sources of information included gray literature, consultation with other jurisdictions, consultation with experts, consideration of previous, related decisions or issues as well as input from stakeholders.

Gray literature that illuminates the solutions posed by other jurisdictions to similar situations is of value, as well as direct consultation with representatives of other jurisdictions. SW describes the policies she sees identifying their sources obtained from, "[a] literature search or they've done an environmental scan to see what other organizations—primarily in Canada, but others—have done." To help with that kind of information, she makes use of an online network, "Canadian Policy and Procedure Network," (CPPN Canadian Policy & Procedures Network, n.d.) in which administrators in not-for-profit healthcare organizations can exchange advice and the benefit of experience. When other sources of information are lacking, a call for help can be put out over the network, sometimes resulting in useful input,

> SW: We can freely share anything that we have, and … it can be a good resource, and I offer it to people in the organization who are developing policies and want to see what other places have [done]. I can send out [a request] and we can see what we get. Sometimes we get lots, sometimes we get nothing, sometimes we get some things, so we have those resources for providing evidence.

At the provincial level, similar consultations take place through personal networks of administrators that build through the use of formal meetings. Other

Canadian provinces offer a potential testing ground for policy solutions from which one can learn from the mistakes and disappointments of other provinces. Previous experiences within the province are also of value.

Consultations can also be undertaken with people who are thought to possess relevant expertise. This might be done formally, as when outside experts were brought in to assist in the joint review of community access privileges, but it might also be undertaken informally, as part of the process of evidence gathering. Such informed opinion may help to provide valuable insights in the problem at the heart of the research that cannot be obtained from other sources. As JH explained,

> JH: Evidence that comes really from canvassing informed opinion, canvassing opinion of subject matter experts and…cataloging it, that's somewhere else down the spectrum. It's not as "rigorous" as a randomized control trial study, but that's still evidence. Those types of evidence will just help you understand the likely outcomes if you pursue policy option A instead of B or C, and that's very useful information to have when you make a decision, I think.

Who constitutes an expert worthy of consultation can vary according to circumstances. Academics might be obvious examples, but others who might bring the benefit of practical experience might be useful as well. TB provided an example from Nova Scotia, where the Department of Health and Wellness was seeking to serve better elderly members of the province's small Acadian

community and was aided by an organization called Réseau Santé which is dedicated to representing the health care interests of that community.

While informants tended to rank the significance and importance of various kinds of evidence, with peer-reviewed scholarship ranked above gray literature, expert consultation, and community consultation, there was also agreement that such sources of information were not secondary considerations only consulted when the preferred kind of evidence was insufficient. In the context of public health or administrative policy (as opposed to clinical policy, which was sometimes touched on in interviews but not the focus of this study) peer-reviewed scholarship, no matter how abundant for the question at hand, was not in itself sufficient because of the great unlikelihood that any study would thoroughly address all of the circumstance of a policy decision made at a specific place and time. As TB said, "you can sit down and look at something on paper and that should work, and you can have good research applied to it, and good thinking—and then it gets out there in the world, and it doesn't go at all like any of you had expected from it." JH voiced a similar sentiment,

> JH: This would be my advice: you want to seek out that knowledgeable, trustworthy person to say, "based on my literature search and other things, here is sort of what I think the issue is, and what the options are where maybe we should go. What do you think?" Because there is nothing like long experience in a field to give someone a good perspective to make sure that, "well yeah, in theory that's great, but you know what, we tried

that it didn't work. Or, there has actually been a breakthrough but it hasn't been published yet, so I can tell you about it."

Community involvement, public opinion, and evidence.

One valuable source of information emphasized by all informants was input from stakeholders, including the general public. One group mentioned at length by all informants was the general population or patients as a subset of the general population who are impacted by policy decisions. How this consultation comes about can vary according to circumstances. In some cases, as TB noted, advertisements in the newspaper are used to notify the general population of public meetings in which their voices can be heard. In other cases, as JH explained, such input may be less actively sought, but brought to the attention by interest groups writing to the department or the minister.

As the party directly affected by many policies, all understood citizen opinion to be a legitimate factor in policy decisions and as such, a valid form of evidence. At Capital Health, BH called this the "patient voice," which was characterized as one of many "pieces" that needs to be considered. While BH did not explicitly describe the process of information gathering and decision making as a puzzle, the use of the term "piece" implies as much and offers a useful analogy for appreciating the interconnectedness of different kinds of information in policy making and the value of each.

Input from community stakeholders could come from either informal channels, though unsolicited contact from concerned individuals or advocacy groups, or directly solicited for study through an organized community

consultation. JH, acknowledges that this source of information is problematic in a world that privileges evidence of academic rigor, but nonetheless asserts that the subjective input of members of affected communities is of real value. "…if in fact they just say, here's my opinion, just here's my opinion, that's evidence of a sort." Here "evidence" is used to describe a legitimate consideration when it comes to decision-making. The importance attached to community input stems in part from an ethical sense that people have the right to influence decisions that impact them. This sentiment was echoed by BH, "you can't usually make changes that effect people in their minds, in a negative way, without having consultation." The respect for community input also arises from the sense that it provides valuable information not found from other sources. JH goes on to say that community input, "is very important to people making ultimate decisions because, well, who knows best what's good for them - arguably, the people who will be most affected."

This is not to suggest that the patient voice of itself trumps other factors in decision making. SW provided an example in which Capital Health was unable to accommodate a request from medical marijuana advocates to allow the use of the Volcano Vaporizer in its facilities because the patient voice was simply not powerful enough to change policy on its own. Likewise, Capital Health's unpopular healthy food policy was not changed in response to complaints (see below for details of both cases).

TB agreed. The degree to which community involvement is solicited and welcomed depends on the nature of the question under consideration. Where an

objective solution to a specific problem exists, consultation is not a considerable factor. Other questions, however, lend themselves to public involvement,

> TB: How we get at physical activity in children, is something that we've consulted [on] very broadly. So with Thrive, the childhood obesity strategy, we did everything from targeted consultations to broad scale community open houses…because we did want to shape that strategy and the policy tools we intended to use with the public's input.

All of the informants agreed on the value of such engagement, and a testament to its importance is the existence of the Public Engagement Support Unit in the Office of Policy and Priorities. According to JH, "Their job is purely to assist with public engagement. Informing people is good in and of itself, so they understand what's going on in their world." A back-and-forth communication between government and community is a central element to a functional democracy.

Case: The Volcano Vaporizer

> When developing the policy for allowing the use of medical marijuana in Capital Health facilities, the decision was made that only non-smoked versions were permissible, due to the non-smoking policy among other concerns. Then, the committee who had formulated the policy became aware of a vaporizing device called the volcano vaporizer which heats the product sufficiently to allow the release of medicinal ingredients, but not to the point of combustion. A patient advocacy group touted the volcano vaporizer and provided a demonstration for the committee that

included explanation as to why it would be beneficial. On hearing the testimonies of individuals who suffered from a lack of access to medical marijuana while in the hospital, the group from Capital Health wanted to provide them with that access and gave careful consideration to the device and attendant issues. However, the fact that the device was not approved by Health Canada, and the dearth of formal research to prove the device's safety for other patients in the hospital prevented the group from going forward with any policy that would allow the use of the device in the hospital.

Case: The healthy food policy.

The healthy food policy at Capital Health took fryers out of the cafeterias and limited the kinds of food available at Capital Health facilities from private vendors such as Tim Hortons. The policy was not popular—as BH said, "We took a real beating from staff and from patients who say, 'it's about our choice.' Okay, as a health organization, what do we stand for? …Your policies should align with your values and your mission." In addition to being controversial, the health food policy was not cost effective. According to BH, Capital Health is losing money in the cafeterias because healthy food is more expensive to provide. In this case, the policy decision was made based on ethical principles—that a health care facility should promote healthy lifestyle choices and refrain from providing unhealthy ones. What constituted "healthy" choices were those backed by data derived from scholarly research on the health

impact of different types of food, not what patients or staff wanted to have available to them.

Decision Making

Consulting the evidence, however defined, is only one pieces of the puzzle that is the development of a public health policy. A number of practical or logistical variables also factor into decision making.

Time.

Unsurprisingly, the amount of time available to research a question and assemble the evidence into coherent recommendations has a tremendous impact on the process. While one always wants to check thoroughly all the available sources for all relevant evidence, the amount of time available is a challenge. The presence of deadlines, whether they come from external factors or are set within the organization, means that the ideal of collecting all available sources of evidence may not be met in real life.

Research expertise.

At both Capital Health and the provincial government, policy analysts and those in a more senior position along the policy making process approach their work from a variety of backgrounds. Some have extensive formal training conducting research, using databases, assessing quality, while others has less experience in their educational background. This is an area that TB acknowledges leaves room for improvement,

TB: So some folks come in that have had in-depth capacity in that area, and others haven't. So within the department you tend to have a

> combination of clinicians that may or may not have been heavy on the research side. Then you have researchers, whether they're health specific researchers or from some other social policy area in their background…Right now we don't have any kind of mechanism where we standardize that and make sure that there's at least a minimum baseline [of competence], and then run the risk, of course, of getting information from those individuals that you assume to be [from] good, credible sources, but maybe when you dig into them, you wish they had been a little tighter.

Deficiencies in research capacity can be addressed through the use of outside consultants. The Nova Scotia Health Research Foundation (NSHRF) is of value in that capacity as an organization that might link the government to useful researchers, and in some cases experts might be directly approached to assist in researching and advising on a particular question. In-house assistance is limited. Of course, not every research question will merit the expense of time and money on outside consultation. A librarian used to be present in the Department of Health and Wellness, but that position no longer exists, due to budgetary considerations. On the one hand, a single individual would have limited capacity to offer research assistance to a department of about 470 people, but as TB said, the training she offered was valuable. JH acknowledged that not just finding evidence, but sorting through an overabundance of it could pose a real challenge to non-experts. SW, speaking at Capital Health about policies developed by staff members whose responsibility for writing policy arose

out of other aspects of their work said that, “I think it’s very few people who have those really good skills in searching the literature and finding the best evidence and…determine, ‘is this good quality?’” She saw the services available from librarians as being very helpful in that regard.

Multiple lenses.

Within a single organization, a multiplicity of imperatives can create decision making difficulties. As BH described the difficulty of dealing with multiple perspectives,

> BH: What lens are you looking at things through? So if you’re looking at things through a patient lens, or an individual versus a population health lens—with the population health lens you’re interested in the health of the herd, not the individual—those are two different lenses, and they come into conflict, often in health care. Capital Health has a mandate for population health as well as individual health and those often come into conflict. When I was in the [provincial] government, the conflicting lenses were healthcare and economic development…so there’s a socioeconomic lens that has to be put on, so all these things come into play.

When multiple stakeholders become involved, the number of lenses multiplies, as seen when technological advances in clinical practice were seen as threats to a local economy due to job loss (see below).

Case: Technology versus the economy.

BH recalled a conflict that occurred when hand-held devices for providing test results replaced an on-site laboratory in a small community. The new

devices improved health care services by providing quicker results for more tests, but for some people within the community, their ultimate priority was not the quality of local health care, but their region's shrinking economy. More significant to those individuals than the improved care was the loss of the laboratory technologist position. For them, the facts and the data behind the decision were understood, but they were nevertheless persuaded that the switch to the new technology was a negative thing, because the lens through which they saw the situation placed more weight on the economic impact on the community rather than quality of medical care.

Balancing the variables.

It may be tempting to envision stakeholders as radiating from a central problem like a bull's eye, with proximity to the center reflecting relative level of perceived impact, but while it is true that some stakeholders are more directly and more closely involved in any given problem than others, this visualization of the various parties perhaps provides a misleadingly uncomplicated schematic for stakeholder relationships. A more valid representation might look more like a venn diagram with overlapping circles providing no clear indication of hierarchical value by which one might weigh the importance of one over another, as seen in Figure 5. These points of overlap do not indicate shared perspectives or needs, but separate agendas and points of view with potentially equally important claim on the outcome of the problem. Not only might multiple stakeholders have equally significant voices and opinions, but they may in fact be quite distinct,

even diametrically opposed to one another (Aarons et al., 2009; Choi et al., 2005). SW has encountered this kind of difficulty when she sent policies out for review, “I’ve had times when there’s been policies…with conflicting feedback from ethics and legal, which are two major stakeholders.”

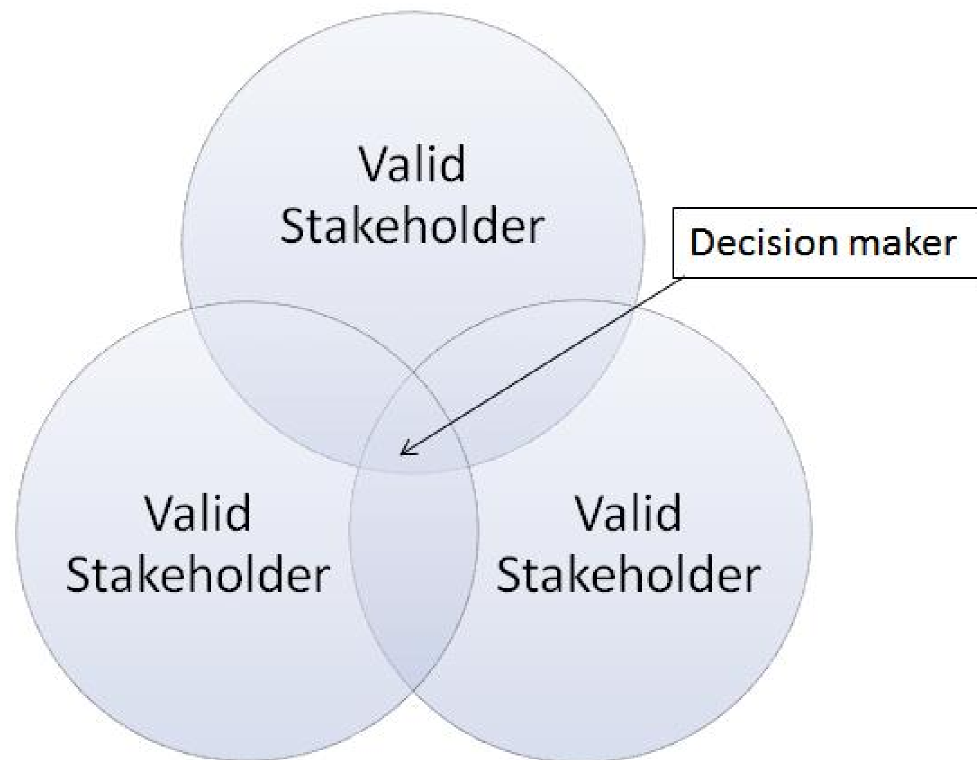

Figure 5. The decision maker amidst overlapping stakeholders.

Ideally, objective information might be available to guide decision makers in weighing the merits of conflicting requirements of various stakeholders, but in the absence of that, a variety of various kinds of subjective, qualitative information must be combined to make that assessment. In the case mentioned by SW above, when all the parties were able to communicate directly, they were able to find common ground. “Oftentimes you just need to bring the groups together in a face to face meeting and discuss the issues, and the majority of the time they can come to an agreement, something they can both live with.” In this

example, the agreement was undoubtedly facilitated by the fact that all the parties were part of the Capital Health organization. While they may have viewed a policy through different lenses, they shared the priority of making sure that the organization functions smoothly and that whatever problem the policy sought to address was in fact addressed appropriately.

No single formula exists for balancing the information that comes from the various sources of information if time has permitted all the recommended sources to be consulted. How that judgment is made is generally ad hoc. The policy analyst, or whoever is conducting the initial research, essentially gathers what evidence he or she can, summarizes it, weighs the various factors in his own mind, and makes his recommendations.

An example of the various factors coming together harmoniously came when the province was forced to come to a decision with respect to emergency department services in rural areas, an example mentioned by several informants (See below).

Case: Emergency care for rural areas.

> Staffing rural emergency departments with physicians during overnight shifts was a substantial challenge, and the rate of usage argued against drastic monetary investment to address the problem, from the point of view of the province. For residents in communities affected, however, fear that their quality of care in emergency situations would be inadequate sparked anger at the possibility of compromise. In order to determine the best course, an outside consultant headed an extensive study that

included thorough search of relevant literature, assessment of the use of emergency services by the affected communities in past years, and consultation with community stakeholders. Ultimately, a combination of respectfully listening to the concerns of the community and keeping open lines of communication about what solutions were being considered and why brought opposing viewpoints together and solidified support. The combination of solid evidence that addressed multifold concerns, including the budget, quality of care, and concerns of stakeholders resulted in recommendations largely adopted by the province. This is a success story that came about in part because of the diligence of the parties involved who were willing to engage with stakeholders with a variety of perspectives in order to come to a common vision of what every party desired—good quality care.

Decision Making for East Coast Forensic Hospital

The factors and issues described by informants in previous sections came into play in the aftermath of the murder of Raymond Taavel. At that time, there was an immediate need to find out what had gone wrong in the system that allowed the tragedy to happen and what changes needed to be made to ensure that it would not happen again.

The process.

Both informants with direct knowledge of the review process emphasized the highly unusual circumstances in which it took place. According to BH at

Capital Health, “It was different because of the circumstances…this didn’t come from our request to have us review that policy.”

TB agreed that the case was an unusual one, though added that that is not to suggest there is necessarily a usual or typical pattern for modifying a policy decision. In response to a question as to how the public and media scrutiny impacted the process of the review, TB said that the amount of time available in order to undertake the review and the access to resources were both different than they would have been otherwise,

> TB: We may not have gone to external experts as quickly as we did, because we wanted this to be transparent and we made commitments early that everything we got would be released and was part of all the appendices of that fairly beefy report. Probably accessing those experts—no thought to cost, we just did what needed to be done quickly—that would have looked a little different if it had been an internally triggered review…We may have had more time to do more of that research ourselves, but in this case, there wasn’t research to gain access to.

The evidence.

One of the many challenges to the review was finding evidence, according to those who participated in the review. TB said, “The first three days after that incident [the murder of Mr. Taavel], myself and two others did sort of a flurry of what’s out there, what can we find, what’s even accessible…very little.” Peer-reviewed, scholarly evidence of relevant topics was largely lacking. As TB

described it, “There was some on the clinical nuance, but the overall….operations review of forensic mental health facilities just didn’t exist.”

In the absence of that kind of evidence, the external experts were considered to be valuable resources. As TB described them, the practical experience of both of these consultants in forensic hospitals was a key component of the expertise that made them valuable, as well as their academic credentials. In addition, the fact that they were coming to the review process familiar with publicly funded healthcare system was also a critical point of knowledge.

> TB: Both of these gentlemen had run facilities, they’d been speaking on forensic health for fifteen, twenty years each, and in a number of different publicly funded countries…they were just the right folks. I don’t know if there were other folks. I think we had a short list of people ourselves [at the Department of Health and Wellness] and Capital did too. It was a pretty short list.

Speaking specifically about the issue of permitting smoking on the premises of East Coast Forensic Hospital, BH, referring to the established negative health effects of smoking said, “We put forward lots of information that didn’t support that recommendation.” But at the same time, acknowledged that smoking policies in the context of mental health facilities raise complicated issues, “What you have to understand is that this is an issue all across Canada right now, so there’s not a clear cut...single gold standard, there are diverging opinions.”

What there was, however, was fear. BH contrasted the public's interest in the joint review versus its interest in the healthy food policy established by Capital Health. While the policy that removed unhealthy food items from the cafeterias and counters of private vendors was not popular, the widespread knowledge about the impact of diet on health tempered the response. In contrast, there is less public understanding about mental health issues and widespread fear for public safety. "Nobody thought that anybody was going to be dangerous if they didn't get their bacon or their doughnut, whereas I think there was a feeling, that somehow if people at East Coast Forensic Hospital were allowed to smoke, that that somehow lessened the danger."

Various lenses.

Both informants agreed that the working relationship between the different organizations who participated in the joint review was a largely positive and productive one. BH said,

> BH: If you take out the smoking issue…there was enormous agreement on the rest. It was amazing at how we really all saw the issue through the same lens, and really the smoking issue was the only one that we …we really struggled with coming to some resolution.

TB agreed. She said of the participants in the review,

> TB: Everybody was committed. When you start out with that sort of disaster as your platform, everybody walked into the room committed, and committed to moving it along quickly…we agreed on findings, we agreed

on shared literature. We shared literature reviews with each other, almost off the bat.

Yet, while the agendas of the organizations involved were closely aligned, they were not identical, and nor were the lenses through which they viewed the issues and solutions. As BH said,

> BH: especially in mental health and forensic health, there's always a balance between the health agenda—which is to help people get well, just like any other disease—versus public safety. Those two issues are in constant tension with one another, and have played themselves out in other provinces in different ways.

This tension was witnessed in the conflict over permitting smoking at East Coast Forensic Hospital, as BH continued, "I think that [public safety] would be what our government would have felt was their first obligation, our first obligation would obviously be the health of our citizens, so there is going to be tension from time to time."

TB agreed that public safety was a decisive issue from the perspective of the Department of Health and Wellness, "The intent [of anti-smoking legislation and policies] was to have employers reduce the exposure of their employees to second hand smoke. It was not to punt public safety out of the room."

The final decision.

Though the representatives of both Capital Health and the Department of Health and Wellness acknowledged the value of the other's stated primary concerns, commitment to a smoke-free environment and ensuring public safety

respectively, each perspective was informed by the different organization's understanding of their objectives and responsibilities. Ultimately, the difference of opinion regarding the smoking policy at East Coast Forensic was settled by the Minister of Public Health and Wellness, who, under the Health Authorities Act (Health authorities act, SNS 2000, c 6), had the authority to issue a directive that made East Coast Forensic Hospital an exception to the Smoke Free Places Act (Smoke-free places act, SNS 2002, c 12) and compelled Capital Health to provide smoking facilities on their property. Using this authority was an unusual step, and TB emphasized that,

> TB: He's not going to [use that authority] every time Capital disagrees with him…We really hoped that we could come to a place where there was agreement on the approach and on the balance of public safety and the liberties of the patient, and in the end, we weren't. The Minister made the choice to issue a directive in the public interest.

Conclusion

While nearly every informant indicated that the case of policy decision-making revolving around the tragic death of Raymond Taavel at the hand of Andre Denny was highly unusual, it nevertheless illustrates many of the factors, variables, and difficulties involved in public health decision making generally.

In this case, the limited capacity of published, peer-reviewed evidence to provide clear answers, the multiplicity of vocal stakeholders, public and political pressure to provide a solid solution to a complex problem, and the varied priorities and lenses of the parties involved all contributed to a solution that was

less than perfect, for one reason or another, from nearly every point of view. Ideally a science informed by careful consideration of facts, policy making is often an art, involving a difficult balancing act that includes subjective weighing of unquantifiable forces, pressures, and conflicting needs.

Chapter 5: Discussion

Knowledge Transfer in Public Health Policy Making

One of the goals of this research was to gain a better understanding of if and how information and knowledge derived from scholarly research is taken and transformed into policy. Among the factors that were revealed through the interviews with informants was their perception of the limit to which scholarship was strictly applicable to policy making. Not only is a multitude of factors needed to be taken into account when making policy decisions, but successful utilization of peer-reviewed scholarship depends both on the availability of appropriate studies and the skills and capability of researchers to find and apply that evidence.

Support: Finding and Evaluating Information

Arguably, the process of incorporating peer-reviewed scholarship into policy involves the following factors:

1. Acknowledged need or desire to use peer-reviewed scholarship as evidence in policy
2. An understanding of what peer-reviewed evidence is and why it is valuable
3. Access to the evidence in the forms of searchable databases and easy availability of content
4. The skill to search those databases effectively
5. The skill to evaluate the information presented in scholarship—in other words, are the conclusions valid and meaningful. This

includes consideration of factors such as methodology, sample size, assumptions of researchers, and statistical significance of results.

6. The ability to employ that information when creating a policy to address a specific problem. This may include translating results into another context.

All the interview informants were familiar with the terms "evidence-based" and "evidence-informed" policy. All saw scholarly-peer reviewed evidence as the best kind of evidence (though not the only kind), and all agreed that policy should be created using and citing the best evidence available to address policy issues. All reported that the resources to do that were available within their organizations. Both Capital District Health Authority employees and those of the Department of Health and Wellness have broad access to research databases and online journal content. The first three requirements listed above are thus fulfilled, according to the informants.

The final three requirements are fulfilled more unevenly, as was generally acknowledged. All informants related that those involved in the process of researching or creating policy came from a variety of backgrounds; some had more and others less formal training in conducting research and evaluating evidence. The informants did not generally think that finding information was a problem in the era of Google, but finding the right information by weeding through an overwhelming number of results was identified as a greater challenge.

One of the databases mentioned by name by an informant was PubMed, a robust database that can also be daunting and difficult to use without training. A PubMed search can easily yield thousands of results, and sifting through these for valuable studies is an overwhelming challenge—especially when time is short. Additionally, PubMed is primarily a database of medical publications. Some content can be found that is more explicitly focused on policy questions over strictly clinical ones, but on the whole, without a well-formulated search strategy, a policy researcher would not necessarily find information obtained through PubMed searchers to be applicable to policy questions directly. Google presents similar difficulties in the overwhelming number of results, many of which would not be from reliable sources. The latter problem is less significant if Google Scholar is used, but the problem of managing the large number of results remains.

This type of challenge can be a significant obstacle to employing evidence in policy development. Studies by librarians of the general population have shown that people think they are good at finding information because they can do keyword searches in Google. However, finding an abundance of results needs to be distinguished from finding the best, most appropriate and useful results (Gross & Latham, 2012; Rowlands et al., 2008). Having subscriptions to 40,000 journals is only of value if the contents of those journals can be mined effectively. Likewise, evaluating the quality of scholarship presented in an article is a skill, and one that informants suggested was not held in equal measure by all policy analysts and others involved in policy making. Yet, determining what relevant

studies have been done and accessing the text is of limited value if the researcher is not capable of evaluating the quality of the information or appreciating its applicability to different contexts. The implications of this lack of skill is that it may translate into a lack of comfort and confidence with these types of resources and a bad habit of dismissing what is not easily understood. This is an especial danger when other sources of information are also considered legitimate ones and time to weigh different kinds of evidence is limited. Access to information and information literacy are not the same thing. There was some acknowledgment of this from the informants, but not a clear sense that it was a particularly troubling situation, though in an ideal world, it would hopefully be corrected.

Questions of Culture and Attitudes to Evidence

In addition to the basic preconditions for successful creation of evidence based or informed policy, other factors are certainly involved. Certainly the question of culture and attitudes plays a part. Informal Informant 1 at the Department of Health and Wellness suggested that “evidence-based” or “evidence-informed” policy were more buzz-words than truly guiding principles in the development of policy because so many other factors, some more legitimate than others, were also part of the process and too frequently, evidence from scholarship took a back seat to other concerns. Those informants who spoke on the record, it must be noted, disagreed with the more cynical assessments of those who spoke off of it, although the sample size is too small to establish a

definitive pattern. Faced with conflicting testimony, it is worth looking at what the organization actually does, as opposed to what people say.

TB did mention programs to be put in place to assist in training employees in evaluating evidence, and mentioned a base-line of competence in that skill as a future goal. All of this speaks to a diversity of opinions within the organization, perhaps reflective of a gradual change taking place within it. Even a researcher outside of the department, Informal Informant 5, disappointed with the lack of dedication to evidence-based policy s/he has witnessed, agreed that within the last few years, things are changing for the better with respect to greater use of scholarly research evidence as the foundation of policy decisions. It is possible, then, that we might be witnessing a gradual change in attitude that may eventually be reflected in more formal support in the form of standards of competency and research protocols.

Other aspects related to culture and attitudes are less easily described. Informal Informant 2 expressed concern and dismay over what s/he saw as a general habit of dismissing studies solely on the basis that they were not conducted in Nova Scotia. This may stem from a parochial sensibility that arises from the economic, social, and political history of the province which then contributes to a general sense that local problems are sufficiently unique that they cannot be addressed productively by research conducted elsewhere. This observation offers an interesting window for understanding how broader cultural attitudes may influence the way scholarship is addressed and the degree to which it is considered relevant. Where a sense that studies that are not local are

not useful exists, the relatively small size of the province of Nova Scotia and the proportionate amount of research it can generate will result in a perpetual shortfall of scholarly evidence (Moreira, 2009). This, in turn, can influence attitudes to that kind of evidence, and the degree to which a professional or an organization feels the need to dedicate resources to mastering finding and evaluating that kind of evidence. It is a vicious circle, illustrated in Figure 6:

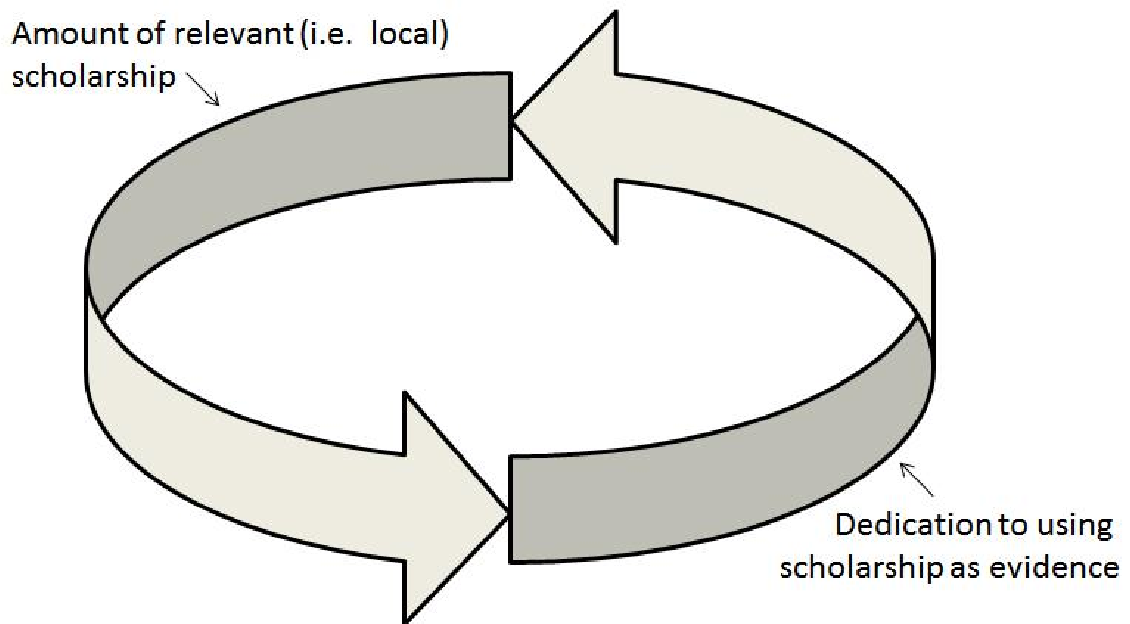

Figure 6. The vicious cycle that may stymy interest in developing greater capacity for evidence-based policy.

This circumstance is well described as a vicious circle because the assumption that Informal Informant 2 mentioned, that only studies conducted in identical circumstances (i.e., in Nova Scotia) are of value, is a false one that may be perpetuated by lack of training in evaluating resources. TB’s point that the context of studies needs to be evaluated before its conclusions are applied to another context is absolutely a valid one. Indeed, a one-size fits all model is not

appropriate, and policy makers very much have to consider local variables within communities impacted by policy (Gahagan et al., 2010). However, Informal Informant 2 suggests that this evaluation is not always being done.

Experience: A double-edged sword?

In the real world environment of policy research and decision making, experience is of great value because solutions on paper do not always work out in practice. It is no stretch at all to acknowledge that people learn from their experiences and the wisdom thus gained is of great value in securing the success of future endeavors. In describing the background of workers in the Department of Health and Wellness, TB described those with practical work experience who then earned master's degrees in public administration as getting a particularly rich experience from their graduate education, because they could apply what they learned in the classroom to what they also learned outside of it.

However, in the confusing mix of different kinds of evidence and the weighing of varying, sometimes conflicting priorities, it is perhaps possible, as Informal Informant 5 suggests, that people involved in the policy making process might over-rely on the instincts and authority that comes with experience instead of committing more fully to scholarly evidence.

The generally older and senior level informants of this study suggested that people like themselves may also have had less formal training in information literacy, including performing research and thinking about research evidence. All formal interview informants suggested that the younger generation was generally better trained on the use of electronic databases and the evaluation of evidence,

although it is not clear if a general comfort level and degree of experience in using technology might be inappropriately conflated with expertise.

Interdisciplinarity: Applying One-Dimensional Research to Multidimensional Questions

A major complication in the utilization of scientific, research-based knowledge on public health policy development is the extremely interdisciplinary nature of the questions required. As BH described the question of permitting smoking at East Coast Forensic Hospital,

> BH: The Department of Health and Wellness would never interfere, I believe, in a clinical guideline policy, where … all the hard experts agreed on something...But this is, I think, seen as more of a social policy than a health policy.

With this statement, BH identified a major obstacle in applying frequently positivistic scientific health research to the contextual circumstances of public health questions.

This is not to say that there is not good research done on topics pertaining to public health policy or health research applied to a social context, but the many specific variables to a specific place in time may limit the degree to which such research may be wholly useful. This may be especially true when policy researchers are not well prepared to find and evaluate this kind of research, particularly when it is more qualitative than quantitative (Bryant, 2009). Nonetheless, the onus for applying scholarship to policy does not rest entirely with the policy makers. Sometimes policy makers found good evidence in

scholarship and applied it. Sometimes, as in the case during the joint review, highly competent researchers searched thoroughly and found gaps in published scholarship.

Sometimes, undoubtedly, useful scholarship is overlooked or unused for any number of reasons. From the point of view of the health research community, this third scenario represents deficiencies on the part of health policy researchers and decision makers. But, it may also stem from a lack of understanding or due respect to the circumstances in which health policy decisions must be made.

Real World Decision-Making

Public health policy is not created in a lab, or in a vacuum, under ideal conditions in which the only concern is applying scholarship to a problem and the only stakeholder the scholar who produced the research. However skilled a policy researcher may be, and however abundant suitable peer-reviewed publications may be, other factors will always demand attention in the policy making process. How each is weighed in the final decision is a delicate balancing act, and each one is as unique as its questions and circumstances.

The Definition of Evidence

One point of divergence between academic researchers and policy makers in discussion of evidence-based policy is a definition of what constitutes evidence. Dalhousie University's Faculty of Medicine educates its students on the principles of evidence-based medicine, which privileges consultation of scientific research studies in determining clinical treatment options, and has an

explicit hierarchy of accepted evidence (Dalhousie University Faculty of Medicine, n.d.). This puts the meticulously researched Cochrane Reviews as the gold standard, followed by other systematic reviews, Randomized Control Trials (RCTs), and in the absence of those, other kinds of studies. Proponents of evidence-based medicine seek to correct practice based on conventional wisdom instead of facts derived from tightly controlled, scientific research carefully interpreted and applied. Evidence-based medicine does not deny the importance of clinical expertise, but sees its value as working in tandem with evidence, not instead of it (Sackett et al., 1996). Evidence-based medicine stands in contrast to more traditional medical practice that relies more upon experience and peer-consultation. Thus, in the world of clinical medicine, "hard" evidence from scientific research generally stands in contrast to more informal, experience-based methods of decision making. In practice they may not be mutually exclusive, given that not all problems will have systematic reviews or RCTs to guide decisions, but the hierarchy that values and privileges research evidence is explicit.

All of the formal informants interviewed for this study were aware of the distinction and relative respect accorded different kinds of evidence, and two of them listed an explicit hierarchy that privileged peer-reviewed scholarship, including RCTs as the most reliable, highest grade of evidence. Nevertheless, reserving the term "evidence" for this kind of information appeared to be a relatively meaningless semantic distinction from the policy making point of view, given the range of information that they considered to be valid considerations in

policy decision-making. In practice, the term “evidence” tended to refer to the full range of all those considerations, including input from members of the community and expert consultation (Graham & Jones, 2010).

Furthermore, even when scholarly evidence was available, it was clear that informants thought that consulting other forms of evidence might still be appropriate. Budgetary considerations could have a significant impact on a decision, since possible policy solutions to a given problem would be subject to cost benefit analysis. Academic researchers might be impatient with such vulgar financial considerations, but policy makers are obliged to be mindful of this real-world consideration in order to provide the best care to the tax-paying public that finite resources allow.

To the degree that people in the academic world do not see policy makers using “evidence,” there is some potential misunderstanding due to different definitions of the word. By “evidence,” researchers largely mean the sort of conclusions generated by the research that they do. A positivist stance sees research and the information it generates to be objective. To those involved in public policy, however, that definition is far too narrow. While also approaching evidence from a largely positivist perspective, the informants of this study acknowledged the value of peer-reviewed scholarship. Nonetheless, policy makers maintain that other kinds of information of a more subjective nature, including the opinions of the public, are a valid form of evidence.

Expertise can stand in lieu of other evidence, and the definition of expertise itself is fluid. The problem of expertise identified by Collins and Evans,

of solidifying political legitimacy in expanding the pool of voices in decision making while avoiding over-expansion (Collins & Evans, 2002) appears to be negotiated on a case by case basis. How broadly consultation may be sought often depends on the amount of room for negotiation or flexibility in a decision on the basis of perceptions formed early in the process. TB mentioned that consultation with the community is not sought in questions where the solution has essentially been arrived at, and multiple options really do not exist. At other times, much broader input may be sought. In other words, more voices are invited when there's room at the table. However, this fluid environment leaves open the possibility of expansion of expertise beyond desired boundaries. To continue the metaphor, the size of the table is not clearly defined, and uninvited guests might pull up a chair. The general public, directly and through the media, can involve themselves in decision making. This research has not directly investigated the question of whether public interest in the Andre Denny case impacted the decision made by the Minister of Health and Wellness to allow smoking at East Coast Forensic Hospital, but the flexibility of conceptions of expertise and legitimate evidence leave open the possibility that policy decisions can be based on what the public says.

Multiple Stakeholders, Multiple Lenses

The decisions made by policy makers are not made in hypothetical or ideal circumstances, but in a specific environment in response to real problems with multiple stakeholders with an investment, and potential voice, in the outcome. As seen in the previous chapter, different stakeholders might wield

varying degrees of power and influence, and the decision to permit smoking at East Coast Forensic Hospital in the wake of the joint review is a prime example of this. After reading media reports following the murder of Raymond Taavel and noting the voices that appear, a broad view of the stakeholders in the decision included the Department of Health and Wellness, the Department of Justice, Capital District Health Authority, administrators and staff at East Coast Forensic Hospital, patients at that facility, the families of patients, advocates for fair and just treatment of the mentally ill, the victims of crimes perpetrated by individuals not criminally responsible for their actions and their loved ones, politicians looking to protect or enhance the reputations of their own parties and diminish the perception of competence of the others, and the general public concerned about public safety. Individuals within each general category may have their personal agendas influenced by a variety of factors. Smokers may have different perspectives from non-smokers. Individuals with personal experience of mental illness may have a different perspective than those without. A staff member at East Coast Forensic Hospital may be motivated by desire for ethical treatment of patients, concern to protect the rapport established with patients as part of treatment, concern for his or her own physical safety when interacting with patients, in addition to others.

A multiplicity of concerns needed to be balanced in the recommendations put forward by the joint review. These included ethical treatment of forensic hospital patients and respect for their rights. This in turn included respect for their treatment and need to allow them community access as part of the process

of reintegration into the community. Providing a safe and healthy environment on hospital premises for both patients and staff was a consideration with many facets. Diffusing blame—and liability—was also surely a concern suggested by the media reports surrounding the story, if not directly addressed by the official informants. Protecting the public from future tragedies and receiving appropriate credit for doing so were also considerations for at least some of the parties involved.

As BH noted above, a fundamental difference between representatives of Capital Health and the Department of Health and Wellness was the lens through which each body viewed the task at hand. For Capital Health, enabling behavior that creates known health risks (i.e., smoking) was antithetical to the principles of the organization and counter-indicated by the scientifically established connections between smoking, morbidity, and mortality. On the other hand, the Department of Health and Wellness considered the pressures to allow patient smoking access as a component in the failure that led to the death of Raymond Taavel and decided that providing smoking facilities on the property of Capital Health would alleviate that pressure and therefore help protect public safety. The two different lenses through which the organizations viewed the problem and their own priorities did not allow for a mutual decision as to the best course of action.

The Legitimate Role of Politics and the Personal

To suggest that a decision was political or was influenced by politics is usually to suggest that a decision was subject to inappropriate influences or self-

serving considerations. The official informants for this study tended to avoid these suggestions. Yet this understanding of the political is perhaps an oversimplification, or at least an issue worthy of more consideration. It is not possible for this study to assess to what degree, if any, politics in the pejorative sense may have been involved in the review process or decision making. It is perhaps only to be expected that elected officials always have the security of their own jobs in the back of their minds as they go about their business. Yet on the other hand, public officials do have an obligation to hear the voices of their constituents and as much as possible, act and decide in ways that reflect the opinions and values of those they represent. There is not necessarily a clear line between a political decision and one that takes notice of the claims of legitimate stakeholders in the range of factors that are given weight and consideration.

Part and parcel with political element is the increased public engagement that is remarked on by all informants. Whether or not the public input is as valued in practice as the informants suggested, the very fact that it was consistently mentioned as something important and valid attests to their sense that the public should be informed and consulted on policy matters and their desire to present their organizations as fulfilling this expectation.

At the same time, it is also critical to remember that policy decision makers are also members of the public, and subject to some of the same influences in their assessment of risk, including the media reports considered in this study (Carlsson et al., 2012). Furthermore, the victim in this case, Raymond Taavel, was a public figure, well known in political circles. Former city councillor

Krista Snow was a vocal friend in the local media in the aftermath of Mr. Taavel's death, and MP Megan Leslie also remarked on the friendship she shared with him (Morrow, 2012; Tutton, 2012). I am unaware of any personal connection between Mr. Taavel and members of the organizations involved in the joint review, but the very fact that a prominent leader within the local community met such a brutal and unjust end may have heightened the perception of risk for decision makers the way it did for the general public. It is difficult to know to what degree assessment of risk was influenced by shock at the event and ensuing outcry. In the absence of objective studies providing a blue-print for guidance, decision makers ultimately viewed their choices through lenses that were consistent with other interests. In the case of Capital Health that one was concern for the mental and physical health of patients under the care of that system. For the Department of Health and Wellness, public safety was the forefront issue.

With respect to smoking policies, the examples of other forensic facilities in Canada did not provide a single, clear model. The Forensic Psychiatric Hospital in Coquitlam, BC, for example, is an entirely smoke-free facility that allows no smoking in buildings, grounds or parking areas (British Columbia Mental Health and Addiction Services, 2013). In contrast, the Forensic Unit at Alberta's Selkirk Mental Health Center does have a secure outdoor courtyard where patients can smoke, in addition to other designated smoking areas on the grounds that might be used by patients with off-ward privileges (J. Wasio, personal communication, April 11, 2013). Regarding the specific issues under

consideration in the joint review, scholarship was patchy and did not offer a clear answer to all questions. The scholarly evidence to support the decision to allow smoking at East Coast Forensic Hospital is weak or lacking. Scholarship on smoking bans at psychiatric or forensic hospitals largely takes the form of case studies and demonstrates mixed results. Additionally, literature on smoking bans at psychiatric or forensic facilities is inconsistent in how "smoking bans" are defined—some studies feature facilities that do provide outdoor smoking access, while others do not (McNally et al., 2006; Rauter et al., 1997). Thus, to the mixed results presented by such studies, the different variables among them added to the murkiness of lessons that might be gleaned, and added justification to the need to consider the broad array of local circumstances in determining a decision about the smoking policy.

Lacking too, was clear guidance from the scholarship on community access policies and protocols. Comparison with other Canadian jurisdictions found that the community access policies in place at East Coast Forensic Hospital were similar or better (Nova Scotia, 2012; Jackson, 2012), yet Department of Health and Wellness deputy minister Kevin McNamara was cited in *The Chronicle Herald* as saying the incidence of AWOL patients was greater than in other provinces—though there has been little formal study of that issue, as noted in the same article (Jackson, 2012). The hope expressed by Mr. McNamara was that allowing smoking at the facility would reduce that number (Jackson, 2012).

A recommendation based on a hope is in contrast to the scientific evidence representatives of Capital Health could bring to bear in support of their contention that permitting smoking on Capital Health property continues to be inappropriate. The evidence is clear that smoking and exposure to second-hand smoke dramatically increases risks to health. Nevertheless, the body of clinical evidence on the harm done by smoke cannot be unproblematically plugged into this decision making context. Nobody doubted that smoking is harmful, and it would be best if patients did not smoke. The question was whether smoking was a lesser evil in the specific circumstances under consideration, an answer not readily provided by scholarship but instead that required judgment and interpretation of a range of factors. While all policy makers understood the differences and relative scientific merit of different kinds of "evidence" and might even rank them in terms of their reliability or prestige, no one of the informants from the policy making world suggested that one kind could be systematically privileged without consideration of other "evidence" including contextual factors that bring to bear "evidence" of their own.

The Public, the Media and Risk

The blows that struck Mr. Taavel were allegedly dealt by Mr. Denny, yet the focus of blame in media reports is not on Mr. Denny directly, but on the authorities who allowed him onto the street. It could have gone another way. One witness to the fatal assault claimed that Mr. Denny uttered anti-gay slurs as he attacked Mr. Taavel (Lowe, 2012). *The Globe and Mail* article that first reported the crime in that paper was entitled, "Gay activist killed in Halifax

assault," opened with a story about an earlier encounter between Mr. Taavel and a homophobic man who insulted and then struck Mr. Taavel on the head as he walked down the street (Morrow, 2012). This story was set up as a parallel to the encounter that ended Mr. Taavel's life, which was also presumed by many to be motivated by homophobia when the assault was first reported. The story continues, "While the motive behind the 49-year-old's slaying is unclear, it has prompted a country-wide outcry against homophobia" (Morrow, 2012, para.3). Mr. Taavel's death looked like a hate-crime, and on the first day that the news of his murder was reported, that appeared to be the direction that the narrative surrounding his death would take. His prominence as a gay rights activist and community leader strongly suggested it. But while mention of Mr. Taavel's personality continued to focus on his compassion, dedication, and contribution to the gay community of Halifax and beyond, the story of his death quickly left behind the hate-crime theme.

The day after the murder featured an article in the same paper in which Mr. Denny's lawyer, Pavel Boubnov, refuted the suggestion that the attack was a hate-crime, claiming that there was no sign of homophobic prejudice in Mr. Denny's history. Instead Mr. Boubnov placed blame for the murder squarely on the authorities, claiming that Mr. Denny should never have been granted a community access pass (MacDonald & Patten, 2012). Other stories pursued that idea, and the prevailing theme in media accounts from shortly after the crime was that the government needed to be held accountable for what happened, or the public would not be safe.

How did that narrative shift take place? Mr. Denny's history of disturbing crimes, including a gruesome attack on a kidnapped puppy, were included as part of the story in early descriptions of him. With such a history behind him, it is perhaps natural that people would ask why such a dangerous person would be unescorted out among the general public. Also, Mr. Taavel's friends and family were outspoken and specific in where they assigned blame, and they absolved Mr. Denny of much blame on the basis of his illness and did not chose to take up the possibility of a hate-crime. Finally, Mr. Denny's lawyer's assertion that his client would not be homophobic because of his own status as an aboriginal person may not have been strictly logical, but it may have made accusing him of bigotry unpalatable or made it seem less likely (Fairclough, 2012). If Mr. Taavel's friends had been more inclined to see the murder as a hate-crime, and less understanding of Mr. Denny's illness, would the media pressure and scrutiny of the review process have been any different? It is not possible to say. What we do know is that great pressure and scrutiny did exist, and it did impact the process of the review.

In shifting the blame from the personal to the institutional, the risk to public safety could not be mitigated by any punishment or limitations imposed on Mr. Denny alone. The randomness of the crime, attributed to an institutional failure, not a single individual, meant that the risk to the public appeared elevated even though Mr. Denny was taken into police custody before the news of the murder had even broke. The government accepted this responsibility, with the announcement of a review of the events and procedures that had led up to the

tragic event, but that did not alleviate the pressure. The association between protection of public safety, and the responsibility to mitigate risk to the public is too intertwined with notions of the legitimacy of government itself (Halachmi, 2005; Jeleva & Rossignol, 2009). Action was required of the government, and that action had to fulfill the central requirement of maintaining the public's trust (Jeleva & Rossignol, 2009; Schwartz, 2012). The nature of the problem was explicitly political from the point of view of the government, as seen in both media reports that linked the Andre Denny case with provincial health (Stephenson, 2012b), especially mental health policies and services, and in the fact that both Liberal and Progressive Conservative party leaders expressed criticism of the NDP government's response to the tragedy throughout the review process, and ultimately of the review itself (Jackson, 2012; Shiers & Jackson, 2012).

Implications for Understanding the Joint Review

TB suggested that the review itself was impacted by that attention in both the length of time allotted for the review and the resources that were available to it. Perhaps the outside consultants would not have been brought in, or brought in as quickly. As it was, the initial review did not include outside consultants; these were brought in only after criticism in the media and by the political opposition. The two that were brought in to participate in the process were selected because they were considered unimpeachable experts in the strictest sense: each had both impressive academic credentials and extensive experiential expertise in forensic healthcare in Canada. The use of these experts answered a criticism of the process and was at the same time consistent with

general strategies of consulting experts when research in published scholarship left questions unanswered.

It is highly noteworthy that neither of the external assessors made the recommendation to permit smoking on site; nor did that recommendation come from examination of the scholarly literature, the two sources of evidence described as worthy of the most respect and weight in the decision-making process by all of the informants of this study. The recommendation came solely from the Department of Health and Wellness and over the objections of Capital Health (Grisdale, 2012). As both Chris Power, the CEO of Capital Health, and Marilla Stevenson, a journalist for *The Chronicle Herald* pointed out, the issue was not smoking itself, since the one-hour passes could be given to patients in order to pursue the activity of their choice, but the manner in which the decision to permit patients community access was made.

The report of outside consultant Dr. Brinck showed that at issue were the habits that contributed to a culture of seeing breaks as a reward for good behavior that put pressure on staff to allow those breaks (Brinck, 2012). In theory, putting new protocols and procedures in place should be sufficient counter measures to the expectations of patients that allow them to pressure staff, but as studies of smoking bans in psychiatric facilities have shown, any circumstance that allows for exceptions to smoking bans can heighten tensions in already delicate circumstances and lead to a failure of the policy (Campion et al., 2008; Campion et al., 2008; Lawn & Campion, 2010; Ratschen, et al., 2009).

It is easy to read the Department of Health and Wellness's decision as a public relations move, an attempt to provide concrete proof of action in a situation where a tangible, tragic reality—the death of Raymond Taavel—must largely be addressed by changes in protocol and risk-assessment that are unfamiliar to the general public. Indeed, in the wake of the publication of the joint review's report, *The Chronicle Herald* reported that the opposition to the current NDP government were critical of the review which they saw as largely bureaucratic. Surely, without the reversal of the smoking ban, this criticism would seem even more valid.

At the same time, is it fair to expect that those procedural changes would be sufficient to counter the reality of those pressures that Dr. Brinck described, and the culture that pressured staff to reward patients with the opportunity to smoke? From the Department of Health and Wellness's perspective, this question was considered in light of all the evidence available and weighed according to its need to both ensure public safety to the best of its ability, and for the sake of its own legitimacy, make it clear that that is what it was doing. In light of the way different factors and kinds of evidence are always weighed against each other in the process of making policy decisions, this decision itself was not extraordinary, only the circumstances around it were.

Conclusions

It may not be possible to generalize broadly from a very specific, and by all accounts unusual, case. At the same time, the more general habits related to

using information and evidence was reflected in the review process, however uncommon its circumstances might have been.

How is This Extraordinary Case Typical?

Informants were quick to point out that this case was an extraordinary one in several respects—the highly public tragedy that precipitated it, the degree of public scrutiny and pressure under which the review process was undertaken, the entities that were invested and involved, and the resources that were poured into the process. The time line for results was greatly accelerated; outside experts were brought in without thought of the cost. It was also unusual for the departments within the provincial government to involve themselves in the evaluation of district health authority policies – a circumstance that BH suggested would never have arisen if not for the review process brought about by the unusual and tragic event of Raymond Taavel's death.

But, for all the many ways in which the circumstances of this case were unique or unusual, the general elements that are part of the policy making process—the types of evidence used and how they are applied, the consideration and weighing of multiple factors—came into play in this process as in others. The policy makers involved may have found themselves in an extraordinary set of circumstances, but they navigated it using familiar tools, knowledge, priorities, and assumptions. The need to negotiate a myriad of factors, including a range of stakeholders with a range of perspectives and priorities, gaps in the published, scholarly evidence that needs to be filled,

as well as the need to collect a variety of evidence from different sources may have been more intense than usual, but not unfamiliar to the process of any significant decision-making related to the development of policy. It could be that the stress of this case might bring to light ultimate assumptions and values that underlie other decisions less subject to scrutiny or conscious consideration.

The degree to which the decision about smoking at East Coast Forensic Hospital was informed by evidence is determined in large part by how one defines evidence. When it comes to this question, clinical health researchers and public health policy makers are not always speaking the same language. The real world environment in which policy is made requires that multiple variables, such as budgetary considerations and respect for the voices of impacted individuals be taken into account when making decisions. The fact that peer-reviewed scholarship cannot answer every policy questions means that those involved in the policy making process must be prepared to glean valuable information that will help to predict the success of a policy from a variety of sources.

At the same time, the shortcomings of scholarship on the one hand and value found in other sources on the other can have an unfortunate effect of creating too dismissive an attitude to a kind of evidence that sometimes one does well without. This can contribute to a vicious cycle whereby resources are not dedicated to making scholarly evidence available and accessible because they are not considered sufficiently important. This lack of investment then insures the relatively marginal significance of that evidence, because there is not

sufficient to be routinely useful. Informal Informant 5 from Dalhousie University's Faculty of Medicine suggested that policy makers were too accustomed to making decisions based on their own subjective judgements and thinking that they are good at it. They may well be good at it, indeed, they have to be at times. That is not to say they could not be better.

Information Management in Policy-Making in Nova Scotia

All in all, true dedication to evidence-based or even evidence-informed policy requires respect for information management. This is not to suggest that the individual informants involved in this study did not appreciate the value of research and evaluation skills, but the approach to ensuring a basic skillset for people involved in public health policy making was patchy, and reveals insufficient dedication within their organizations. The position of librarian at the Department of Health and Wellness was eliminated, a move that may signal a real problem within the organization with conflating access to information with the ability to employ it effectively. Perhaps the human resource decision-makers would be well served by recognizing that "librarians" in the 21st century are also experts in systematic reviews and gathering multiple types of "evidence" and find it in the publics' social and economic best interests to re-employ this sector.

The amount of formal support provided to supply deficiencies in skill level speaks to the attitudes found within the organization and its support to evidence-based/informed policy. While the lone librarian at the Department of Health and Wellness would have limited capacity to assist specific research endeavors in a department of nearly 500 people, the cut is hardly a testimony of respect for the

type of contribution such a position would make to the department. In fairness, though, given the recent, ruthless federal budget cuts of the Harper government aimed at libraries, archives, and other organizations of intellectual and cultural value, we would be wise to keep in mind that the loss of the librarian position is consistent with a broader trend and point of view.

Living in the world of Google leads people to believe that finding information is easy. It is. But one should remember that finding the right information, when information is everywhere, is harder than ever (Gross & Latham, 2012; Rowlands et al., 2008).

Questions for Further Study

One of the informants of this study, TB, noted that when serious questions require research, the Department of Health and Wellness takes advantage of outside researchers like those arranged through the Nova Scotia Health Research Foundation (NSHRF), for example. An area worth considering is what kinds of questions do policy makers ask of outside researchers, with a specific eye towards understanding what, if any, filtering or translation takes place between one organization and the other. In other words, do both organizations approach a research area with the same understandings of the goals and considerations of the research question? To approach this question it would be necessary to consider how often research questions tend to be of a strictly clinical nature, and how well does the information translate into public health policy decisions? To the extent that there is frustration between researchers and policy makers, is this a problem of “politics” or even miscommunication rooted in

different lenses for evaluating the legitimacy and weight of different kinds of evidence? Alternatively, might there be a problem with research that does not fit the needs of policy makers due to a failure of successful communication of what the research questions are or should be?

Another issue worthy of further investigation was the reported parochial attitude towards scholarship that resulted in dismissal of studies that were not of Nova Scotian provenance. This troubling observation has implications not only for the quantity and quality of evidence employed on any given problem, but for broader attitudes to the value of scholarship in general and the resources that might be made available to better employ it. An excess of caution born of a lack of skill and experience translating knowledge from one context to another may cause studies from other jurisdictions or different contexts to be dismissed too readily, without taking the time to discern if any relevant knowledge can be gleaned. This is a problem that can be corrected with education and training, but there must be a recognition that such a problem exists, and is important enough to merit the dedication of resources to address it. For that reason, future research should be undertaken to identify more definitively if this problem exists, how prevalent it may be, and how it impacts public policy research.

Finally, a critical issue raised by this study is the broad availability of research journals but the unpredictable skill levels of policy researchers for exploiting them. Little of the Library and Information Science research on search behavior focuses on policy workers, yet this is a significant area for understanding trends in evidence-based or -informed policy and recommending

changes. Information of how and where researchers conduct their searchers, what differences, if any, may exist between digital natives and other workers, and how different educational and work backgrounds might impact search behavior would be valuable information.

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Appendix A

Telephone Transcript to Request Participation

Good morning, Mr/Ms.__________. My name is Melissa Rothfus, and I am a graduate student in the School of Information Management at Dalhousie. I am contacting you in the hope that you will be willing to participate in an interview to help inform my thesis research.

My thesis investigates information flows and how information is found and evaluated to make decisions when creating policy. I'll be considering the smoking policy at East Coast Forensic Hospital as a case to ground my discussion. You have been recommended as an expert who could help me to understand how information was used in that circumstance.

I intend to conduct interviews that last no more than one hour during the month of December. The anticipated completion date of the thesis is in April, 2013. If you are willing to consider participating in the study, I will email a description of the research as well as a consent form, which I will ask you to read and sign if you are comfortable participating. This research project has been approved by the Research Ethics Review Board at Dalhousie University.

May I send you an email with further details about this?

Thank you.

Appendix B

Letter to Request Participation

January XX, 2013

Dear Mr./Ms. ,

My name is Melissa Rothfus, and I am a graduate student in the School of Information Management at Dalhousie. I am writing a thesis that examines how information is found and put to use in the course of formulating policies. As a case to ground my study, I will consider the smoking policy at East Coast Forensic Hospital. I am contacting you in the hope that you will be willing to participate in an interview that will help me to understand how information was used in that circumstance.

This research project is a case study that examines how and from where information is found, evaluated, and used in the process of determining policy decisions. I would like to learn what are the usual channels used to find information that informs policy making? What is the process of seeking information, what kinds are sought, and how are they used? What variables in the broader social, organizational, or political context impact that process?

To answer these questions, I would like to interview people who were involved or have knowledge of the stages of decision-making on this issue. Participation is voluntary, and no quotations will be attributed to you without first providing you with a transcript for approval or correction. The thesis will be available electronically through Dalhousie University Libraries, and I hope to publish the case in an appropriate professional journal.

I intend to conduct interviews that last no more than one hour during the month of December. The anticipated completion date of the thesis is in May, 2013. If you are willing to consider participating in the study, please read the attached description of the research as well as a consent form, which I will ask you to read and sign if you are comfortable participating. This research project has been approved by the Research Ethics Review Board at Dalhousie University.

Thank you very much for considering this request. I look forward to hearing from you.

Sincerely,

Melissa A. Rothfus
MLIS Candidate
School of Information Management

Appendix C

Interview Information and Consent Form

Study Title:	Information Pathways to Policy Development: The Exchange and Transfer of Knowledge in Public Health Decision Making.
Researcher:	Melissa A. Rothfus, Ph.D., MLIS Candidate, School of Information Management, Dalhousie University, 6100 University Avenue, Halifax, Nova Scotia, B3H 4R2, 494-36356, melissa.rothfus@dal.ca
Degree Program:	Master of Library and Information Studies
Supervisor:	Fiona A. Black, Ph.D., Dalhousie University, 6100 University Avenue, Halifax, Nova Scotia, B3H 4R2, 494-1901, fiona.black@dal.ca
Contact Person:	Melissa A. Rothfus, Ph.D. MLIS Candidate, School of Information Management, Dalhousie University, 6100 University Avenue, Halifax, Nova Scotia, B3H 4R2, 494-3656, melissa.rothfus@dal.ca If you have any questions or concerns about this study, a message left at 494-3656 will be returned as soon as possible.

Introduction

We invite you to take part in an interview conducted by Melissa Rothfus as part of thesis research for her Master of Library and Information Studies degree at Dalhousie University. Your participation in this study is voluntary, and you may withdraw at any time. Details of the study are described below. It is not likely that you will benefit directly from taking part in this study, but your participation may help others better understand information flows and decision making.

Purpose of the Study

This research project examines how and from where information is found, evaluated, and used in the process of determining policy decisions. As a specific example used to ground this discussion, I am considering the case of the smoking ban policy reversal at East Coast Forensic Hospital that came about after the joint review of community access privileges. I would like to learn what are the usual channels used to find information that informs policy making? What is the process of seeking information, what kinds are sought, and how are they

used? What variables in the broader social, organizational, or political context impact that process?

The objectives of this research are:

- To explore the intersection of information pathways and decision making in policy creation.
- To use a case study as a means of exploring the influence of information pathways on decision making.
- To determine what information flows exist within the decision making organization and how they may contribute to the outcome.
- To determine what was the impact of external influences and information flows on the eventual decision.

The intended outcome of this study is to determine what information and what information sources are used, and by whom, in the policy making processes. It is hoped that this information may identify effective practices or areas where better information management strategies might result in greater effectiveness.

What You Will Be Asked to Do

You are invited to answer some questions concerning how you find, evaluate, and use information that is used in policy-making processes. Interviews will be scheduled in person or by telephone, at your convenience, and will last no more than one hour. After the interview, you will be contacted within two weeks to look over the transcript of the interview and make any corrections or remove any material you do not want attributed to you. You are requested to return the amended transcript within two week of receipt. In the event that you make no response to the request to review the transcript, the content will be paraphrased without direct attribution but as described below, anonymity cannot be guaranteed. This contact will be done via email unless you prefer another means of communication.

Study Design

This is a case study, designed to understand information flows through the lens of one particular example. This is intended to provide a “real life” view into how information is identified and used in the policy making process. The study will involve collecting information in two ways. Interviews will be conducted with several people who participated in or had close knowledge of the case, and reports and media stories will be subject to content analysis.

Who Can Participate in this Study

Individuals with different insights in the details of the case are invited to participate. Four to eight individuals will be interviewed.

Who Will Be Conducting the Research

The principal investigator in this research is Melissa Rothfus, a graduate student at Dalhousie University, as part of a thesis for the Master of Library and Information Studies degree.

Possible Risks and Discomforts

There are no perceived physical risks due to participation in this study. Sharing of information and opinions may expose participants to criticism by readers of the study. Potential participants should consider whether such criticism may have further repercussions, such as jeopardizing professional reputation or employment.

Potential Benefits

There are no immediate benefits to participation in this study. Participation may provide benefit to others in that it may contribute to our understanding of information flows in policy making generally and to this case in particular.

Participation

Participation is voluntary. You may decide not to participate in an interview or you may withdraw from the study at any time during the interview.

Confidentiality and Anonymity

Given that this is a case study that involves examining specific events and actions, it is not possible to ensure confidentiality and anonymity for the participants. Therefore, no pseudonyms will be used. Several strategies will be employed to protect participants from untoward consequences of participation, however. 1) Participants will have the opportunity to review and amend the transcripts of their interviews. They may delete any material they do not want attributed to them. 2) Recordings will be stored as password protected digital files for a period of five years on a shared drive administered by Dr. Fiona Black. The server on which the files are stored is located in the Killam Library at Dalhousie University. 3) Any interview transcriptions or notes that exist in hard copy will be stored in a locked cabinet in the Kellogg Library at Dalhousie University at the completion of the study and for a period of five years. 4) Any information stored on the recording device or the password-protected server space of the researcher will be deleted at the study’s completion.

Questions

The researcher, Melissa Rothfus, is the primary contact person for this study. If you have any questions or concerns about this study you may email her at melissa.rothfus@dal.ca or call her at 494-4656. Messages left at that number will be returned as soon as possible.

Problems or Concerns

In the event that you have difficulties with, or wish to voice concern about any aspect of your participation in this study, you may contact Catherine Connors, Director, Research Ethics, Dalhousie University Research Services**, (902) 494-1462**, catherine.connors@dal.ca

Project Title: Information Pathways to Policy Development: The Exchange and Transfer of Knowledge in Public Health Decision Making.

Participant Consent

Please indicate if you agree to the following:

1) I consent to allow the interview to be recorded. Yes______No________

2) The researcher may contact me after the interview in order to review and correct the transcript to my satisfaction.

Yes, I may be contacted by email______

Yes, I may be contacted by traditional mail_________

No, I do want to be contacted after the interview__________

3) I have read the explanation of this study. I have been given opportunity to discuss it and my questions have been answered to my satisfaction. I hereby consent to take part in this study. I realize, however, that my participation is voluntary and that I am free to withdraw from this study at any time.

Participant Signature:__________________________ date:_________________

Signature of Person
Obtaining Consent:____________________________date:_________________

Appendix D

Interview Guide

1. Are you familiar with the term "evidence based policy"?
   Probe: If yes, can you describe what it means to you?

2. Would you say that the kinds of policy decisions you witness or participate in are evidence-based, to any degree?
   Probe: If yes, to what degree??
   If no, why do you say so?

3. What kinds of sources do you consult when doing research for a policy?
   Probe: What makes a good or reliable source?
   Probe: Do you think more use of scholarly research is desirable as a goal?
   Probe: Are there other variables that inevitably contribute to policy decisions?
   Probe: If yes, what other things *should* contribute to decision-making? Why or why not?

4. Can you describe the general process by which an issue or problem becomes a policy?
   Probe: I'm particularly interested in information flows. In other words, what information is gathered? From what sources? How it is found? How much is "enough" information to make a decision?
   Probe: What kind of variables might impact this process?

5. How many people tend to be involved in decision making for policy creation, and what are their roles?
   Probe: How is information communicated between them?
   Probe: Is effective communication ever a problem in this process? Why or why not?

6. When it comes to finding and evaluating information, is that something people who participate in the policy making process learn to do on the job, or do they come with any formal training?
   Probe: Do you ever wish you or other participants in the process had more formal training, or would that not be useful?
   Probe: What would you say is the relative value of training vs. experience in developing expertise?

7. Have you ever witnessed or experienced a situation in which it was difficult to find information needed to make a policy related decision?
   Probe: If yes, how was that problem handled?

8. Is sorting through contradictory information ever a problem?

Probe: If yes, what kind of strategies do you use to deal with that?

9. As a member of the general public, the recent smoking ban reversal at East Coast Forensic Hospital is an example of a policy change that I'm familiar with, as it received a lot of media coverage. Did the decision to reverse the smoking ban follow the usual pattern for modifying an existing policy?

Probe: What was the process involved in making that decision?
Probe: What information was used to make that decision?
Probe: Were alternatives considered? why or why not?
Probe: What sorts if decision-makers participated in the process? i.e. social workers, psychiatrists, lawyers, criminologists, policy analysts, assistant deputy ministers, deputy ministers, ministers,…..

10. This is an example of a decision made under an unusual degree of public scrutiny and media coverage. Did that influence the process at all?

Probe: If yes, in what way?

11. Do the news media ever function as a source of information used in the decision making involved in policy creation?

Probe: If yes, did that happen in this case?

12. In general, the trend has been to reduce or eliminate smoking in hospitals and hospital properties. Is there a possibility that the original smoking ban on Capital Health property might be restored in the future?

Probe: If no, why not?
Probe: If yes, what would be involved in restoring it? In other words, what types of information would be needed, by whom, and from what sources, in order to consider reversing the decision?

Thank you very much for sharing your time and speaking with me. As mentioned, I will contact you with a transcript of this interview for you to correct as you see fit. Is it alright to contact you by email, or would you prefer regular mail (and to what address)?

Appendix E

Request to Review Transcript

Dear Mr./Ms. __________,

Thank you once again for participating in my study. I have attached a transcript of your interview for you to review. You may make any corrections you wish to make and remove any material you do not want attributed to you.

If you do not object, please look it over and make any corrections you feel are necessary, then return the text in an email that includes the statement, “The following text may be attributed to me.”

Thank you very much for your time and assistance. It would be helpful if you could respond to this request by [date].

Best wishes,

Melissa

Appendix F

Themes from Media Reports

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
AD's mental health	X	X	X	X	X	X	X	X	X	X		X										
RT's sexuality	X			X				X	X	X	X	X	X	X	X			X				
Community access pass				X		X			X	X							X	X			X	
Gov't review				X	X			X							X	X	X		X			
AD's criminal history		X		X	X			X				X	X									
Public safety			X		X				X		X		X									
Blame on system			X									X						X		X		
Concern for mentally ill				X		X	X				X											
Political issue					X			X						X	X							
RT's com-passion	X		X	X									X									
Smoking																	X	X			X	X
Complexity of issue												X	X	X								
Sympathy for AD			X													X				X		

Articles are identified by letter and arranged chronologically. The gray bar indicates release of joint review. The themes are presented in the order of frequency, from top to bottom. Where two or more themes appear with equal frequency, they are listed alphabetically.

Appendix G

Themes from Interviews

Themes	BH	SW	TB	JH
Public pressure of influence	5,7,8	9,11,12,13	1,7,8,9,12,13,18	8,9,13,14,15
Grades of evidence	2,4	4,5,6,14,16	2,3,19	12
Multiple lenses	3,4,5,6,8,9,11	11,14,15	2,4,6,16	
Multiple stakeholders	3,4,8	8,9,15	2,7	5,8,14
Relationship CH and DHW	5,11,12	1,6	4,17,18,19	
Problems with evidence	2	5,8	5,15,16,19	12
Training/support to use evidence	13	1,5,7	2,4	11
Time/resource constraints		1,6,13,14	4,18	12
Media attention/influence	7	12,13,16,17	18	
Research process			2,3,6,11	12,13
Ethics	3	8,14	16,21	
Quality control		4,5,6	4,5	
Public Safety	6,7,9		16,20	
Improvement in use of evidence	2,13	13	2	
Personal/cultural bias	4,8,9			
Challenges of mental health policy	3	3,4		
Evidence re: smoking policy	6		19	

Numerals represent page numbers in transcribed text on which each theme appears on the official interview transcript of each of the informants identified in the top row. Themes are ranked according to frequency, with most frequently

mentioned appearing at the top, when two themes appear with equal frequency, they are listed alphabetically.