While concepts that underlie good public health and population approaches to health go back a long way, renewed recognition that health is dependent on more than the ability to treat has given new impetus to a more comprehensive approach to thinking about and planning for health and human services. This paper offers a reflection on how we conceptualize population approaches to health. Recognizing our current understanding of health determinants and dynamics, the paper explores moving from "avoiding disease" to to "pursuing health." It then examines the pragmatic balancing act of science, art, beliefs and politics, with attendant traps. It concludes with a way of framing action on population health and translating theory into practice.

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Si les concepts qui sous-tendent les bonnes approches en santé publique et en santé de la population ont des racines profondes, une reconnaissance renouvellée du fait que la santé est tributaire de plus que la capacité à traiter a fourni une nouvelle impulsion à une approche plus globale pour penser et planifier les services de santé et sociaux. Cet article propose une réflexion sur la façon dont nous conceptualisons les approches de la santé de la population. Reconnaissant notre compréhension actuelle des déterminants et des dynamiques de la santé, l'article explore le mouvement d'une approche qui cherche à éviter les maladies à une approche qui a comme objectif la santé. Il examine ensuite l'équilibre pragmatique entre la science, l'art, les croyances et les politiques et quelques-uns des pièges qui y sont liés. Il conclut avec une façon de situer l'action en fonction de la santé de la population et par une traduction de la théorie en pratique.

Applying a Population Health Approach

David Butler-Jones

In 1762, Rousseau was able to say, with little threat of contradiction, that "One half of children born, die before their eighth year. This is nature's law, why try to contradict it?" Average life expectancy at birth had at that time changed little since the Bronze Age - about 30 years. By the early 1900s, it had increased to 50 years, and now runs in the high 70s for most developed countries.

It is well recognized that most of these improvements derived from attention to basic supports for health such as improved nutrition, adequate housing, smaller families, sanitation and clean water, pasteurization, immunization and also the addition of some good basic health care, antibiotics and the like. More recently, recognition that additional health inequities cannot be attributed to differences in access to or quality of health care has furthered the interest in understanding how the various determinants of health influence the death, injury and illness rates of individuals and populations.

Many authors have explored some of those factors commonly called determinants. These include income and social status, social support networks, social cohesion, social and income inequality, education, employment and working conditions, physical environments, healthy child development, personal health practices, coping skills, health care and others.2 It is not the purpose of this paper to review this evidence other than to suggest that we are still early in developing an understanding of influences on health. Our current understanding of the influences on health and a

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population health perspective may be comparable in scope and limitation to the early days in the development of germ theory and understanding the influence of microbes on health.3,4

While the terms Population Health and Population Health Promotion have some currency in Canada and elsewhere, it is acknowledged to be a language without common definition. For the purpose of this paper, Population Health loosely encompasses our knowledge of the various dynamics and determinants of the health of populations and individuals and the programs and policies necessary to support

As our understanding of influence and causation continues to develop, the context we provide to the application of that work will then determine our abilities to effect change. What follows are some reflections that may be helpful as we work to translate population health into practice, providing a context for how we think through problems. These reflections represent in part a philosophy of how we approach these issues and concepts with varying degrees of scientific evidence currently in place to support them. They are intended to further spark thought and discussion and to encourage program development and research in support of (or to refute) our current understandings of the determinants of health.

Avoiding disease or pursuing health

One aspect of working with communities and individuals that often perplexes health care providers is that people often do not share the same understanding of health and its primacy. When we consider the challenge of making personal change ourselves, even when we know the risks, some humility may be warranted in dealing with others.

It is worth acknowledging then that we conceive health to be more than the absence of disease or infirmity. The pursuit of health should, therefore, include an increasing understanding of other contributors to a broadly defined 'good health', of aspects over which the individual and community have influence in a constructive way. These include, among others, 1) the development of supportive communities, what some have termed "civic society," 2) involvement in arts and music with creative and health-enhancing benefits to both participant and observer, 3) an active lifestyle, both physically and mentally, to whatever extent individuals are capable, 4) voluntarism and the giving of oneself to others, in the process receiving the intangible benefits that contribute to well-being, 5) friends and family, who provide support and counsel in both good and bad times, and 6) spirituality and faith, which represent having a belief in something greater than oneself and a supportive faith community, both of which may encourage health.

The Population Health balancing act

Professional, policy, and programmatic approaches to address population health needs inevitably involve tradeoffs if they are to be doable and sustainable.

We live and operate in a realm of mixed perspectives and abilities with respect to Science, Art, Values and Beliefs. Values are not all universally shared, and not all dilemmas are answerable by science. Thus there is continual reflection on what is known, or likely, and how we think about questions and shape answers. The political process requires an understanding not only of what is ideal but also a pragmatic view of what is doable and acceptable given existing levels of immediacy and importance. As benefits and liabilities of changes often accrue differently, there are a range of tradeoffs that require consideration.

While there are multiple considerations, of which only a few are alluded to here, there are additionally two underlying questions that need to be considered. First, we should be clear about decisions and the process that underlies them. That is, are

the actions being taken with, for, or to those affected? Second, given that successful population approaches may require substantial social or cultural change, are there compromises to be made or aspects given up on in order to reach the ultimate goal? In colloquial terms, are we willing to lose a few battles in order to win the war?

These considerations overlay national, provincial and regional structures and the variability of motivations, interests and needs that exist. One then faces the reality that inputs and outcomes are moving targets. Policy and resources in the political arena are dependent on a mix of pressure and evidence, and scientific evidence sometimes takes a low profile. There is a complex web of influences and interactions that require both understanding and attention. Ultimately, one might expect durable success to involve comprehensive, flexible, and adaptable approaches.

Traps and snares

As we come to understand the enormity of the influences on health of the determinants, there are at least two potential responses that can be dysfunctional and worth addressing as they effectively sabotage needed changes. "Macro Avoidance" occurs when we focus on the many factors beyond our control, therefore deemed unaddressable, or we assume these factors are someone else's to deal with, so that we cannot act (i.e., we cannot recognize the trees as we are overwhelmed by the forest). "Micro Paralysis" occurs when we get so caught up in detail that we miss the underlying issues (i.e., we cannot see the forest for the trees).

There are two particular issues facing health care today as the past catches up with us: "Health Imperialism" describes the situation wherein health practitioners come to recognize the importance of nonhealth sectors in affecting health and thus make efforts to direct others' programs or increase their accountability for health. Given health's dominance in government budgets and a relative lack of collaborative action with other sectors, such imperial assertions are sometimes greeted with resentment and scepticism. For example, those in a non-health sector who have been trying to address social determinants for decades, while hospitals are up the budgets, might say, "where have you been?"

The "Hungry Elephant" recognizes that the current system of health is insatiable. There will never be enough money and resources to satisfy potential needs in a system focussed mainly on treatment. Governmental focus on investing in health only after the problems or needs of the health care elephant are met means that the future of the next generation (and the system) is in peril.

"Health Determinism" is perhaps the greatest trap, however, as it reflects a deterministic way of thinking that ignores the complexity of relationships and potential adaptations. This view assumes that the determinants are immutable - i.e., "you are poor therefore you are ill." Data provide tools for understanding and challenges for needed changes and more appropriate accommodation. We risk being judgemental or exclusionary, however, if we underestimate the capacity of human adaptation, variability and ability to overcome adversity. As such the determinants should be considered more as predisposing than predictive.

Influencing the determinants

Recognizing the importance of the determinants and the limitations of health services in affecting them is, however, not enough. There is abundant need for translation of population health frameworks and evidence into forms which health professionals or organizations can actually use to affect or influence health and its determinants. This has proven difficult as understanding has seldom been translated into consistent action. A recent study of selected health care decision makers in Saskatchewan (Kahan et al., this volume) identified that the way in which population health is conceived varies and the ability to articulate strategies is inconsistent at times. While public health and health promotion have had some focus on population approaches, most of the health system has been focussed on acute care. As such it is not surprising that in these relatively early days, new attitudes, reflections and approaches are variable and effective implementation is still in the development stage.⁵ In part this results from snares such

as those outlined above, and in part it reflects a problem in conceptualizing approaches of where and how one can act.

The following categorization may prove helpful in discerning what can be done to translate theory into practice. (PACEM)

Partner: To address the determinants effectively, we require a broad intersectoral approach. This can range from the collaborative work of health boards and government departments with other community and government agencies, through to the components of health promotion that can fit into a busy clinical practice as a complement to community efforts. Tools, simple interventions, reinforcing advice: each can support other community-based actions. While individuals or groups alone may not be able to effect significant policy or program changes, working together complements strengths and maximizes effectiveness.

Advocate: Recognizing how social determinants or other factors influence the health of clients or patients can be a powerful motivation for advocacy. Health professionals have always had as part of their repertoire the role of champion, articulate spokespersons on issues of concern with respect to health in the community. The need for advocacy is also not lost on health boards who increasingly recognize how lack of attention to addressing social and other determinants impacts on their ability to deliver effective services within their budgets.

Cheerlead: Sometimes what may be most helpful are a few well-placed words of, encouragement, and non-obstruction of others working towards improving conditions for health. Keeping physicians informed of activities - through brief notes in a newsletter from the local medical health officer (public health) or in the medical association bulletin, for example is a simple strategy to improve levels of awareness. Moving beyond turf issues between professions and agencies requires both humility and an ability to see beyond personal interest to collective goals.

Enable: We might work to enable those activities that build local capacity for the understanding and promotion of health and affecting determinants. An important part of the management of health care is to ensure that services are efficient and effective and that we have an appropriate balance of promotion, prevention, protection, treatment and care. There are simple measures that can help to facilitate this. Two examples from the Province of Saskatchewan are: 1) a binder for physicians that contains indexed sections, including recommended treatment protocols for some infectious diseases, immunization, and reporting requirements as well as information on available programs and services which can be added to or updated as needed. This provides in one place a range of useful information normally scattered in drawers or elsewhere. 2) Many new programs and research are focussed on the process of dissemination and local capacity building, whether it be population health promotion approaches to heart health and diabetes, or understanding of how the provision of health and social benefits encourages and assists lowincome families.

Mitigate: One of the health sector's important traditional roles has been to mitigate the effects of other determinants. For example, while hepatitis A in northern communities is largely a function of crowding and sanitation, hepatitis vaccine can be provided to at least address this disease in advance of longer-term efforts directed at underlying social conditions. Mitigation has been health care's usual contribution toward improving health. Part of the challenge for health professionals and administration is to not only more effectively identify and modify subsequent risks, but also to engage in activities that address the underlying determinants and dynamics.

CONCLUSION

This brief paper has touched on aspects that provide a context for addressing population health in the health sector in particular. As our knowledge and understanding increase, it is hoped that this and other reflections on principles and approaches will assist the translation of theory into practice.

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