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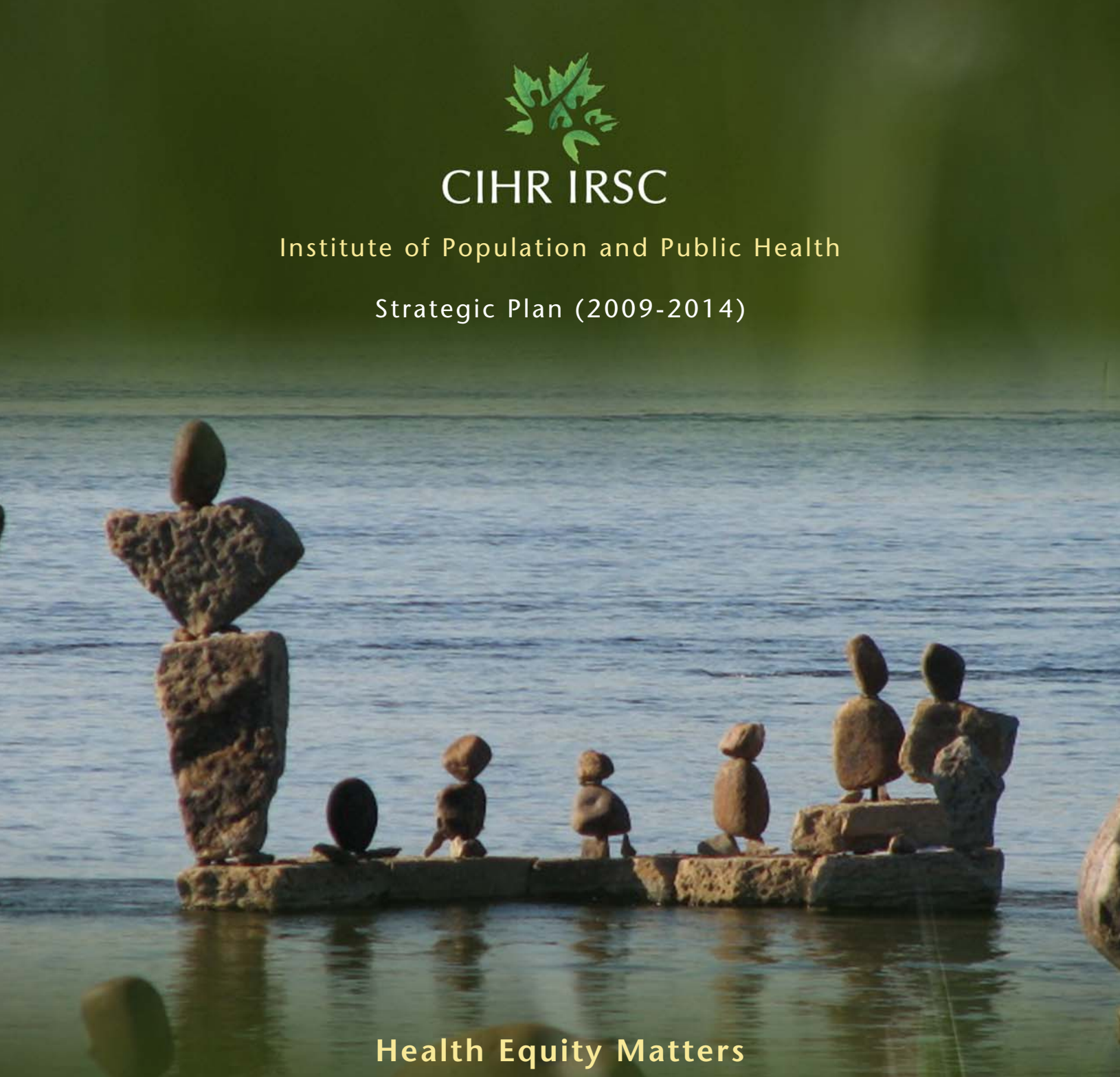
Institute of Population and Public Health

Strategic Plan (2009-2014)



Health Equity Matters

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CIHR Institute of Population and Public Health – Strategic Plan 2009-2014

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Table of Contents

Message from the Scientific Director

The Canadian Institutes of Health Research (CIHR) Institute of Population and Public Health (IPPH) has led a number of important research and knowledge translation initiatives, both nationally and internationally, over the past eight years.

I would like to thank and congratulate former scientific director Dr. John Frank and his team for their exemplary work and the vision they brought to the Institute's programs. They initiated important new models for research in Canada: most notably, the Centres for Research Development, which have examined the impacts of the physical and social environments on health, and, more recently, the Applied Public Health Chairs program. The Institute also provided critical leadership for the Global Health Research Initiative, a partnership involving five Canadian agencies, and established exceptionally strong external and internal partnerships for knowledge generation and use.

This strategic plan builds on these important foundations for population and public health research. Many challenges remain, however, that can only be tackled through the joint efforts of researchers, policy-makers, and front-line practitioners. In the past few months, for example, we have been reminded of the threats posed by pandemic flu and witnessed the indirect effects of climate change. Chronic diseases continue to take a foothold in our communities, threatening to claim even more lives this generation than last.

The World Health Organization Commission on Social Determinants of Health, the Chief Public Health Officer's Report on the State of Public Health in Canada, and the Bamako Global Ministerial Forum on Research for Health have all implored us to reduce the inequities that exist within and between nations. In essence, the authors of these and many other reports have concluded that health equity matters. It will take a significant effort, both in the realms of knowledge generation and knowledge translation, to tackle these inequities.

The process of identifying new strategic directions for the IPPH began before I took the Institute's helm in July 2008. I would like to thank members of the Institute Advisory Board for their insightful contributions and the invaluable support they provided during this planning process. In addition, I would like to thank the many individuals who provided input at consultation meetings and through our on-line survey. Your guidance and suggestions have helped shape the strategic directions defined in our new plan.

We still have a long, steep road to climb. But there is no doubt that we have the talent and the momentum to address critical issues in the arena of population and public health. The ongoing renewal of this capacity is vital to our success. IPPH staff and I look forward to working with you and our many partners over the next five years to foster excellence in research and to support significant progress in translating this knowledge into action.

Nancy Edwards, RN, PhD, FCAHS

Introduction

The Canadian Institutes of Health Research

The Canadian Institutes of Health Research (CIHR) is Canada's major federal funding agency for health research. Its objective is to excel, according to internationally accepted standards of scientific excellence, 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.

In order to achieve this objective, the CIHR integrates research through a unique interdisciplinary structure made up of 13 virtual institutes, which are distributed geographically. Each institute is dedicated to a specific area of focus and supports and links individuals, groups, and communities of researchers who are pursuing common goals in its area.

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Each CIHR institute is led by a scientific director, who receives assistance from an advisory board. Both the scientific directors and advisory boards work under the guidance of the CIHR Governing Council.

The Institute of Population and Public Health

The Institute of Population and Public Health (IPPH) was created with a very broad and inherently integrative mandate. While there are many national institutes of public health in the world, the IPPH is the only one that also encompasses population health. This dual focus is critical to the Institute's strategic plan.

To bring further focus to the implementation of this plan, the IPPH has revised its vision, mission, and values to align them more closely with its new strategic directions.

The new **vision** of the IPPH is to be recognized as a world-class institute that demonstrates excellence, innovation, and leadership in the generation and application of population and public health evidence to improve health and promote equity in Canada and globally.

The IPPH's new **mission** is to improve the health of populations and promote health equity in Canada and globally through research and its application to policies, programs, and practice in public health and other sectors.

The Institute has identified the following **values** to guide its research and knowledge translation initiatives:

- Excellence, relevance and innovation of funded research
- Evidence-based approach to knowledge translation that bridges learning across regional, provincial/territorial, national and international settings
- Reciprocal and respectful partnerships that span the cycle of knowledge production to knowledge use
- Leadership to mobilize and foster commitment for population and public health research in Canada and globally
- Transparency and accountability

Context

The Changing Landscape

The landscape of population and public health in Canada has changed considerably since the IPPH was created. The introduction of new masters of public health graduate programs and the establishment of schools of public health and the six National Collaborating Centres for Public Health are but a few examples of the renewed interest in and commitment to public health in this country.

Since 2001, the IPPH and its partners have made a number of strategic investments to strengthen research capacity in the area of population and public health, both across Canada and around the world. Noteworthy achievements include the following:

- Establishing seven centres for research development that have a substantive focus on social and physical environments and health and are aimed at building research, knowledge translation, and infrastructure capacity; fostering an interdisciplinary environment; and creating linkages among researchers and with research users

- Co-funding several strategic training initiatives in health research to develop innovative training and mentorship activities in support of graduate and post-graduate education

- Providing support for a number of master's of public health, doctoral, and post-doctoral awards and 15 mid-career public health chairs with the Public Health Agency of Canada and other partners

- Supporting interdisciplinary training opportunities, including the annual Summer Institute for doctoral and post-doctoral students (in co-operation with the Institute of Health Services and Policy Research) and the annual Global Health Summer Institute (organized by the Canadian Coalition for Global Health Research)

- Co-funding of the Teasdale-Corti Team Grants, developed by Global Health Research Initiative partners to help teams with Canadian and low- and middle-income country partners undertake research, capacity building, and knowledge translation programs

Through multi-stakeholder collaboration, the IPPH has also played a leadership role in several efforts to address strategic priorities of Canadian and global importance. Since 2001, the Institute has represented the CIHR as a founding member of the Global Health Research Initiative, just one example of its contributions toward addressing the health and health system problems of low- and middle-income countries. The initiative brings together the knowledge, experience, and resources of five federal agencies: the CIHR, the International Development Research Centre, the Canadian International Development Agency, Health Canada, and more recently the Public Health Agency of Canada.

The IPPH also provides leadership and secretariat support to the Population Health Intervention Research Initiative for Canada to help strengthen and bring coherence to relevant existing and emerging initiatives. The initiative's goal is to increase the quantity, quality, and use of population health intervention research in Canada.

The IPPH is committed to building on this solid foundation in the coming years, in partnership with other organizations in Canada and other parts of the world.

The Evolution of the Science

Research in population and public health draws from a range of disciplines and fields such as health promotion, social sciences, health sciences, epidemiology, and occupational and environmental health. The science of population and public health continues to evolve and mature, fueled, in part, by interdisciplinary efforts and the melding of complementary theoretical and methodological approaches. The following areas of scientific endeavour offer particular promise to the IPPH in addressing its strategic priorities:

- Compelling data from many countries and about many populations highlights persistent socio-economic gradients in health status. Some of these gradients reflect unfair, yet avoidable, inequities in health status. There have been increasing calls for scientists to address these inequities and develop strategies for mitigating them (Minkler, Vasquez, Tajik, & Petersen, 2008; Nixon & Forman, 2008; Rauh, Landrigan, & Claudio, 2008; Starfield, 2007; Wilkinson & Pickett, 2009).

- Our understanding of social and physical health determinants and their interactions provides a solid foundation for examining the impact of coherent, multi-level population health interventions and implementation systems in health and other sectors. The impact of population and public health interventions on health inequalities and inequities has been identified as another essential component of future research in this area (Petticrew et al., 2009).

- Policies are often an important component of population health interventions, either as intervention strategies under the control of the investigator or as contextual influences. Comparative studies that systematically examine the influence of these policies are an important area of study (Houweling, Kunst, Huisman, & Mackenbach, 2007; Stahl, Rutten, Nutbeam, & Kannas, 2002).

- Research studies examining the effectiveness of interventions have produced evidence of promising and proven public health interventions. While more evidence is needed, a new paradigm for these studies is emerging that draws on adaptive systems science and examines the influence of context on interventions. As such, there are increasing calls for population and public health science that interrogates complex interventions within complex adaptive systems (Best et al., 2003; Hawe, Shiell, & Riley, 2009; Nutbeam, 2004; Rickles, Hawe, & Shiell, 2007; van der Wal & Globerman, 2008).

The IPPH Strategic Plan

Overview

The shifting state of population and public health science—from understanding social and physical determinants of health to examining the health and health equity impacts of multi-level program and policy interventions—requires that researchers and other stakeholders investigate pathways to health equity. Moreover, it reinforces the need to understand how these interventions are best implemented within both complex adaptive systems and socio-cultural and political contexts. Innovations in methods and theories are required to support research in this field.

Recognizing these needs, the IPPH strategic plan focuses on enhancing capacity for population and public health research and knowledge translation in Canada. Built on achievements and partnerships the Institute has developed over the past few years, it was developed in consultation with the Institute Advisory Board and researchers and decision-makers from across Canada (the planning process is described in more detail in Appendix A).

Strategic Research Priorities

As a result of these consultations, the IPPH has identified the following four strategic research priorities, which address emerging issues of concern to both Canadians and international partners in the field of population and public health (see Table 1):

1. Pathways to health equity
2. Population health interventions
3. Implementation systems for population health interventions in public health and other sectors
4. Theoretical and methodological innovations

These priorities will foster excellence and innovation in population and public health research that aims to improve population health while reducing inequities in Canada and globally. They will also contribute to the CIHR's overall strategic goals.

Selection Criteria

The strategic research priorities were selected using the following criteria:

- To support research that is forward-thinking and positioned to address tomorrow's population health issues
- To be a "best fit" for the IPPH's functions within the larger set of internal and external partnerships (e.g., existing and potential; provincial/territorial, national, and international)
- To build on existing foundations (e.g., partnerships, capacity, state of science) and momentum, both nationally and internationally
- To use Canada's comparative research advantage, while extending links to other global partners
- To have high potential for direct or indirect impact on the health of vulnerable populations in Canada and in low- and middle-income countries

Table 1: Emerging Population Health Issues

- Climate change is having direct impacts on human and environmental health.
- The built environment, including the design of homes, workplaces, playgrounds, and transportation corridors, is having direct and persistent effects on health.
- Exposures to indoor and outdoor air pollutants, such as particulate matter, volatile organic compounds, and lead, are producing poor health outcomes.
- Urban densification is changing the way populations live, eat, and work.
- Demographic shifts are becoming more pronounced as baby boomers approach retirement. Migration contributes to such shifts and is expected to increase as a result of impending water shortages (caused, in part, by climate change), changes in the economy, and displacement due to poverty, natural disasters, and conflicts.
- Shifts are occurring in the burden of disease. While emergent infectious diseases (e.g., West Nile and H1N1) require ongoing vigilance, increased rates of chronic disease reflect the intersection of many factors, including an aging population; the built environment; changes in the production, supply, and preparation of food; and shifts in the way people spend their time.
- Technological innovations and the changing economy are influencing our workplaces, modes of transportation, and communication.
- Job loss and other results of social and economic upheaval are affecting the mental health of populations in disproportionate ways.
- Public health infrastructure, training, surge capacity, and preparedness are fragile.

Priority 1: Pathways to Health Equity

Health equity suggests that all people can reach their full health potential and should not be disadvantaged from attaining it because of their race, ethnicity, religion, gender, age, social class, socio-economic status, or other socially determined circumstance (Dahlgren & Whitehead, 2006).

This strategic priority focuses on understanding the pathways or interrelated factors that produce a shift toward health equity and improvements to the health of populations and population sub-groups, both within and between countries. Pathways that operate at all system levels, from micro to macro, are of interest, including those that intersect with individual transitions (e.g., stages in the life course) and societal transitions (e.g., demographic and economic shifts and urbanization). Furthering our understanding of the pathways that produce equities and inequities in population health is fundamental to the design of effective population health interventions in developed and developing country contexts.

The foundation for this priority is the substantial body of research that describes how health inequalities are produced (Butler-Jones, 2008; CSDH, 2008). Health inequalities include avoidable and unavoidable differences in health status among population sub-groups. These differences in health status involve exposures to a wide range of etiological factors, including those from the physical, chemical, biological, and social environments. Extensive research conducted in a variety of settings and on many health-related issues provides evidence of persistent socio-economic health gradients (Lynch et al., 2004; Mackenbach, Kunst, Cavelaars, Groenhof, & Geurts, 1997): that is, people with lower incomes and less education consistently have worse health status and a lower life expectancy than those with higher incomes and more education.

A growing body of research suggests, however, that this health gradient is the result of more than material deprivation. For example, while people living in poverty in societies with greater socio-economic inequalities experience worse health consequences (Wilkinson & Pickett, 2009), these same inequalities have been shown to generate worse health outcomes across all social classes (Wilkinson & Pickett, 2006). Some of the biological pathways that explain these effects have been well documented, such as how stressors affect cortisol responses (Dickerson & Kemeny, 2004).

Health inequities call into question our societal value judgements and ask us to consider whether observed differences in health status are unjust, unfair, and avoidable. Better understanding of the dynamic interplay between proximal (e.g., behavioural) and distal (e.g., policy) influences and between contemporary (e.g., economic downturn) and historical (e.g., longstanding social structures ensconced in legislation) influences and their impact on health inequities is needed.

Qualitative, quantitative, mixed methods studies and natural experiments are required to address this priority, along with comparative national and international policy studies. The development of innovative analytical tools, measurement approaches, and research designs, and the development and refinement of ethical frameworks are also needed and will be supported through the strategic research priority on Theoretical and Methodological Innovations, described on pages 17-19.

Goal:

- To further our understanding of pathways to health equity

Objectives:

- To support research that examines how the interplay of biological, social, cultural, and environmental determinants affects health and how this interplay changes across the life course at multiple levels of social aggregation and through significant societal transitions
- To foster studies to investigate how intersections of micro- and macro-environments enhance equities or reduce inequities in the health of populations

Priority 2: Population Health Interventions

Population health interventions are often complex and can include policy, program, and resource-distribution approaches. Their complexity arises from the fact that they are frequently aimed at more than one system level, involve the use of multiple strategies, and require implementation both within and outside the health sector. In addition, population health interventions are introduced into systems that are in and of themselves dynamic and complex.

An extensive analysis of methodologically sound multiple-intervention (i.e., multi-level and multi-strategy) experimental and quasi-experimental research has provided some indication of why many such studies have yielded negative results (Merzel & D'Afflitti, 2003). A lack of community engagement in the design of the interventions, the short period of time they are given to take hold, and a focus on behavioural rather than policy strategies appear to have contributed to these negative results. These problems have been noted in multiple-intervention studies of diverse health issues, including heart health, tobacco, and physical activity.

Despite the failures of many multiple-intervention trials to demonstrate effectiveness, some population health initiatives have yielded impressive improvements in health status over longer periods of time. For example, tobacco-control strategies are considered a population health success story because significant declines in smoking rates have resulted from the introduction of behavioural, normative, media, and policy interventions (Friend & Levy, 2002; Petersen, Handel, Kotch, Podedworny, & Rosen, 1992; Richardson et al., 2009; Wright, Pahel-Short, Hartmann, Kuller, & Thorp, 1996).

Key characteristics of these successful population health initiatives include their adaptability to context; responsiveness to "policy windows" that open (often unpredictably) at more than one system level and in more than one sector; momentum for change built through strategic alliances; and long time-periods for implementation. While emerging evidence indicates that these types of population health interventions are leading to overall health improvements, persistent disparities in the health benefits resulting from these initiatives are of concern (Bauld, Judge, & Platt, 2007; Mohan, 2005; Victora et al., 2003).

As such, this priority research strategy has two major focuses: to address complex population health interventions that are characterized as context relevant and adaptable to dynamic contexts and that involve working across sectors and system levels; and to examine how population health interventions do or do not improve health and health equity.

Population health interventions that build on our understanding of pathways to health equity will be supported, with research expected to reveal critical information on how contextual conditions may intersect with population health interventions to reduce health inequities. The prioritization of substantive health issues targeted for funding will be carried out in consultation with other funding partners and the research community.

IPPH priority initiatives on theoretical and methodological innovations are expected to yield novel measures, research designs, and frameworks that will guide population health intervention research. Promising study designs include comparative inter-jurisdictional policy studies, natural experiments of multi-level and intersectoral interventions, and comparative in-depth case studies in Canada and in low- and middle-income countries.

Goal:

- To examine the impact of complex population health interventions on health and health equity

Objectives:

- To foster research that examines the impact of population health interventions on health and health equity
- To support the application of novel measures, research designs, and frameworks in studies of population health interventions

Priority 3: Implementation Systems for Population Health Interventions in Public Health and Other Sectors

Within the health sector, the public health workforce usually holds primary responsibility for implementing population health interventions. These interventions, however, often require implementation, either in whole or in part, through other sectors. For example, school health programs are implemented in the education sector, while occupational health initiatives must engage unions as well as the particular sectors in which the populations are employed.

In order for interventions to have an impact on the health of populations, they must be scaled-up: that is, efforts must be made to increase their impact to benefit more people and to foster policy and program development (Simmons, Fajans, & Ghiron, 2007). Equity and sustainability are considered critical elements of an effective scale-up approach.

Research on intersectoral initiatives remains scarce, despite the fact that academic scholars and those working in government have consistently called for intersectoral collaboration on health issues (Keon & Pépin, 2009; Nutbeam, 1994). A recent comparative analysis of country case studies (Barr, Pedersen, Pennock, & Rootman, 2008) revealed important insights into the processes that underlie successful intersectoral efforts; however, a great deal more research is needed in this area.

Relatively little attention has also been paid to the implementation systems required for the successful scale-up of interventions. A number of challenges have been identified that could be the subject of further study, including inadequate attention to governance, failure to address pro-poor strategies (i.e., policies intended to bring benefits to the poor) (Gwatkin, 2009; Simmons et al., 2007), and underestimation of system and absorption capacities in the areas of health human resources and legal, administrative, and financial systems (Hanson, Ranson, Oliveira-Cruz, & Mills, 2003; Huicho, et al., 2005; Nyonator, Awoonor-Williams, Phillips, Jones, & Miller, 2005; O'Connor, 2002; WHO, 2006).

In summary, this strategic research priority focuses on implementation systems for population health interventions within and outside the health sector, with an emphasis on intersectoral implementation and scale-up. Factors influencing such systems include interorganizational, intersectoral, and interjurisdictional governance structures; leadership support; system absorption capacities; and information-exchange mechanisms. Given that implementation systems may strengthen or mitigate the potential impacts of population health interventions on health and health equity, these reciprocal influences are also of interest.

Goal:

- To examine how implementation systems for population health interventions may strengthen or weaken the impact of population health interventions on health and health equity

Objectives:

- To support research that contributes to our understanding of scaling-up processes for population health interventions that enhance health and health equity
- To foster research that examines intersectoral implementation options for population health interventions and features of these implementation systems

Priority 4: Theoretical and Methodological Innovations

There have been significant advances in theoretical and methodological innovations for the study of population and public interventions and the examination of health inequalities. Of note are the bridging of methods from ecologically and individually oriented studies (e.g., multi-level analysis), the use of tools that describe the natural and built environment (e.g., geographic information systems), the application of simulation models to public health problems (e.g., the integration of network analysis theory in infectious disease simulation models), and the use of health impact assessment approaches for decision-making.

Similarly, advances in knowledge-synthesis techniques, such as the application of metanarrative, integrative, and realist reviews (Pawson, Greenhalgh, Harvey, & Walshe, 2005), rapid review techniques (Best, Riley, & Norman, 2007), and equity measures within quantitative systematic reviews (Petticrew et al., 2009) have demonstrated utility. Promising approaches to support knowledge translation, such as deliberative dialogues (Culyer & Lomas, 2006) and realist reviews to summarize the evidence (Pawson, 2006), are also noteworthy. Theoretical innovations include the integration of systems science, complexity theory, and socio-ecological frameworks in population health interventions (Leischow et al., 2008).

Further theoretical and methodological innovations informed by diverse disciplines are required, however, to address the first three strategic priorities. Examples of the types of innovations required for the field of population and public health include measures of health equity that can be routinely captured in health status reports and used in population health intervention studies; analytic procedures for mixed methods research designs that enable us to understand how temporal shifts in context influence the outcomes of public health interventions; and integrative theories that describe how the scale-up of interventions takes hold both vertically, through levels of the system, and horizontally across sectors. These innovations will need to be incorporated into knowledge generation, synthesis, and integration initiatives.

Ethics, as applied to population and public health, can also benefit from methodological and theoretical innovation. Ethics are fundamentally values reflected in the paradigms of science, policies, programs, and practice. They underlie our perspectives on factors that influence individual choice, approach to intervention design, priority-setting criteria and resource-distribution choices, and knowledge translation efforts. While bioethical approaches have served us well and shaped many clinical interventions in the health sector, they are grounded in an approach that primarily considers individual rights, benefits, and risks. The field of population and public health, on the other hand, considers how the greatest benefits and gains may be achieved for the collective, even if some individuals may not receive direct benefits as a result and some individual liberties may be threatened (Caulfield, Brown, & Meslin, 2007; Daniels, 2006).

A framework for population health ethics makes explicit the principles and values for reducing inequity and improving equity. While some work has been undertaken to define a code and stewardship framework for public health ethics (Nuffield Council on Bioethics, 2007; Thomas, Sage, Dillenberg, & Guillory, 2002), gaps in our understanding, conceptualization, and application to the field of population and public health remain (Daniels, 2009). Given the IPPH's strategic directions, it is timely to develop and refine population health ethics frameworks to guide the selection and application of population and public health interventions that aim to reduce inequities while improving health in Canada and the global arena.

Goal:

- To stimulate theoretical and methodological innovations in knowledge generation, knowledge synthesis, and knowledge integration for population and public health

Objectives:

- To foster development and refinement of theories and methods for the examination of population health interventions and implementation systems to promote equity and reduce inequities in health
- To foster the development and refinement of ethical frameworks for population health interventions in Canada and globally

Knowledge Translation, Partnerships, and Capacity Building

The Institute will address each of these strategic research priorities by fostering excellence in knowledge translation, mobilizing strategic and innovative partnerships, and strengthening capacity for research excellence.

Partnerships are at the heart of all knowledge generation and translation activities, which are underpinned by effective exchanges between researchers and users to appropriately integrate the latest and most relevant research in decision-making. To deliver on its mission, the IPPH must build on the strengths of others in this field, create synergies, and learn from existing experience and best practices. To do so, it will partner with regional, provincial/territorial, national, and international organizations that are actively engaged in fostering the generation and translation of knowledge about population and public health.

Goals:

- To support and accelerate the translation of research on population health interventions and implementation systems into practice, programs, and policies within the health and other sectors
- To build on existing and establish new strategic partnerships that support knowledge generation and translation efforts by researchers and decision-makers working in the field of population and public health in Canada and globally
- To respond to emerging needs for knowledge generation and knowledge translation (including synthesis, dissemination, exchange, and ethically-sound application of knowledge) that are related to the protection or promotion of the health of the population

Capacity-building initiatives are typically aimed at the individual, team, organization, network, or system level. They have primarily included personnel awards programs targeted at individual researchers and, in some cases, practitioners and policy-makers at different stages of their careers; infrastructure funding for strategic training programs; and support for summer institutes. Many of these capacity-building initiatives also address knowledge translation objectives.

A continued focus on capacity building will be undertaken with partners in the Institute's strategic priority areas.

Goal:

- To increase the capacity of the Canadian health research community to lead and collaborate on cutting-edge population and public health research and knowledge translation, both nationally and internationally

The Road Ahead

This strategic plan will guide the IPPH's research, capacity building, and knowledge translation initiatives for the next five years. The Institute will review the plan and its priorities annually to ensure that they are aligned with emerging health challenges and opportunities, as well as with evolving federal policies and priorities.

An annual operational plan will communicate detailed activities, projects, and targets that support the IPPH's strategic priorities, and performance indicators will be identified for each of its strategic goals and objectives. Progress will be evaluated and reported in the CIHR Annual Report and the Departmental Performance Report (both of which are tabled in Parliament) to ensure transparency and accountability.

In keeping with its commitment to organizational excellence and its context within the broader array of internal and external organizational structures aimed at improving health, the IPPH has identified five key functions for itself (see Table 2). Indicators for these functions will be developed as part of the Institute's monitoring and evaluation strategy.

Table 2: Key Functions of the IPPH

1. The **breakthrough** function fosters the emergence of new ideas, methods, and science. It involves providing the intellectual space to stimulate innovation in the field of population and public health.
2. The **incubation** function nurtures the development of new scientific ideas, approaches, and methods and assesses their broader application. On the program side, it focuses on new funding mechanisms and other tools to support knowledge generation and translation in the field of population and public health.
3. The **sustainability** function focuses on ongoing funding and support for select programs and initiatives developed and launched by the IPPH and its partners. It also determines where, when, and how sustainability infrastructure should be built.
4. The **scaling-up** function concerns ways to increase and expand the benefits of innovation and how to foster policy and program development arising from it. In partnership with other organizations, IPPH will support and help provide the evidence required for scaling-up innovations in public and population health. The scaling-up function is particularly pertinent to capacity-building efforts, knowledge translation, and methods development undertaken by the Institute.
5. The **stewardship** function involves working in partnership with CIHR colleagues to ensure that a population and public health perspective is a strong focus within CIHR programs over both the short and long term. This function also involves stimulating ongoing discussion and consideration of global health issues within CIHR programs.

References

Barr, V., Pedersen, S., Pennock, M., & Rootman, I. (2008). *Health equity through intersectoral action: An analysis of 18 country case studies*. Public Health Agency of Canada and World Health Organization.

Bauld, L., Judge, K., & Platt, S. (2007). Assessing the impact of smoking cessation services on reducing health inequalities in England: Observational study. *Tobacco Control, 16*(6), 400-404.

Best, A., Moor, G., Holmes, B., Clark, P. I., Bruce, T., Leischow, S., et al. (2003). Health promotion dissemination and systems thinking: Towards an integrative model. *American Journal of Health Behavior, 27 Suppl 3*, S206-16.

Best, A., Riley, B., & Norman. C. (2007). Evidence Informed Public Health Policy and Practice through a Complex Lens: A Rapid Review. Ottawa, ON: Public Health Agency of Canada.

Butler-Jones, D. (2008). *The Chief Public Health Officer's Report on the State of Public Health in Canada, 2008.* Ottawa: Public Health Agency of Canada.

Caulfield, T., Brown, R., & Meslin, E. M. (2007). Challenging a Well Established Consent Norm?: One Time Consent for Biobank Research. *Journal of International Biotechnology Law, 4*(2), 69–74.

CSDH. (2008). *Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health.* Geneva: World Health Organization.

Culyer, A. J., & Lomas, J. (2006). Deliberative processes and evidence-informed decision making in healthcare: do they work and how might we know? *Evidence & Policy 2*(3), 357-371.

Dahlgren, G., & Whitehead, M. (2006). *European strategies for tackling social inequities in health: Levelling up Part 2*. Copenhagen: World Health Organization.

Daniels, N. (2006). Equity and population health: Toward a broader bioethics agenda. *The Hastings Center Report, 36*(4), 22-35.

Daniels, N. (2009). Just health: Replies and further thoughts. *Journal of Medical Ethics, 35*(1), 36-41.

Dickerson, S. S., & Kemeny, M. E. (2004). Acute stressors and cortisol responses: A theoretical integration and synthesis of laboratory research. *Psychological Bulletin, 130*(3), 355-391.

Friend, K., & Levy, D. T. (2002). Reductions in smoking prevalence and cigarette consumption associated with mass-media campaigns. *Health Education Research, 17*(1), 85-98.

Gwatkin, D. (2009). Ensuring that the Poor Share Fully in the Benefits of Results-Based Financing Programs in Health. Technical Working Paper. Retrieved August 14, 2009, from http://www.rbfhealth.org/rbfhealth/system/files/RBF_Tech_Equity_03.pdf

Hanson, K., Ranson, K., Oliveira-Cruz, V., & Mills, A. (2003). Expanding access to priority health interventions: a framework for understanding the constraints to scaling-up, *Journal of International Development 15*, 1–14.

Hawe, P., Shiell, A., & Riley, T. (2009). Theorising interventions as events in systems. *American Journal of Community Psychology, 43*(3-4), 267-276.

Houweling, T. A., Kunst, A. E., Huisman, M., & Mackenbach, J. P. (2007). Using relative and absolute measures for monitoring health inequalities: Experiences from cross-national analyses on maternal and child health. *International Journal for Equity in Health, 6*, 15.

Huicho, L., Dávila, M., Gonzales, F., Drasbek, C., Bryce, J., & Victoria, C.G. (2005). Implementation of the integrated management of childhood illnesses strategy in Peru and its association with health indicators: an ecological analysis. *Health Policy and Planning, 20 Suppl. 1*, 32-41.

Keon, W.J., & Pépin, L. (2009). A Healthy, Productive Canada: A Determinant of Health Approach. The Standing Senate Committee on Social Affairs, Science and Technology Final Report of Senate Subcommittee on Population Health. Ottawa, ON: Senate Subcommittee on Population Health.

Leischow, S. J., Best, A., Trochim, W. M., Clark, P. I., Gallagher, R. S., Marcus, S. E., et al. (2008). Systems thinking to improve the public's health. *American Journal of Preventive Medicine, 35*(2 Suppl), S196-203.

Lynch, J., Smith, G. D., Harper, S., Hillemeier, M., Ross, N., Kaplan, G. A., et al. (2004). Is income inequality a determinant of population health? Part 1. A systematic review. *The Milbank Quarterly, 82*(1), 5-99.

Mackenbach, J. P., Kunst, A. E., Cavelaars, A. E., Groenhof, F., & Geurts, J. J. (1997). Socioeconomic inequalities in morbidity and mortality in Western Europe. The EU working group on socioeconomic inequalities in health. *Lancet, 349*(9066), 1655-1659.

Merzel, C., & D'Afflitti, J. (2003). Reconsidering community-based health promotion: Promise, performance, and potential. *American Journal of Public Health, 93*(4), 557-574.

Minkler, M., Vasquez, V. B., Tajik, M., & Petersen, D. (2008). Promoting environmental justice through community-based participatory research: The role of community and partnership capacity. *Health Education & Behavior : The Official Publication of the Society for Public Health Education, 35*(1), 119-137.

Mohan, P. (2005). Inequities in coverage of preventive child health interventions: The rural drinking water supply program and the universal immunization program in Rajasthan, India. *American Journal of Public Health, 95*(2), 241-244.

Nixon, S., & Forman, L. (2008). Exploring synergies between human rights and public health ethics: A whole greater than the sum of its parts. *BMC International Health and Human Rights, 8*, 2.

Nuffield Council on Bioethics. (2007). *Public health: Ethical issues*. Cambridge: Cambridge Publishers Ltd.

Nutbeam, D. (1994). Inter-sectoral action for health: making it work. *Health Promotion International, 9*(3), 143-144.

Nutbeam, D. (2004). Getting evidence into policy and practice to address health inequalities. *Health Promotion International, 19*(2), 137-140.

Nyonator, F. K., Awoonor-Williams, J. K., Phillips, J. F., Jones, T. C., & Miller, R. A. (2005). The Ghana community-based health planning and services initiative for scaling up service delivery innovation. *Health Policy and Planning, 20*(1), 25-34.

O'Connor, D.R. (2002). Part One Report of the Walkerton Commission of Inquiry. Ontario Ministry of the Attorney General, Queen's Printer for Ontario. Retrieved August 13, 2009, from http://www.attorneygeneral.jus.gov.on.ca/english/about/pubs/walkerton/

Pawson, R. (2006). *Evidence-based policy: A realist perspective*. London ; Thousand Oaks, Calif.: Sage.

Pawson, R., Greenhalgh, T., Harvey, G., & Walshe, K. (2005). Realist review—a new method of systematic review designed for complex policy interventions. *Journal of Health Services Research & Policy, 10 Suppl 1*, 21-34.

Petersen, L., Handel, J., Kotch, J., Podedworny, T., & Rosen, A. (1992). Smoking reduction during pregnancy by a program of self-help and clinical support. *Obstetrics and Gynecology, 79*(6), 924-930.

Petticrew, M., Tugwell, P., Welch, V., Ueffing, E., Kristjansson, E., Armstrong, R., et al. (2009). Better evidence about wicked issues in tackling health inequities. *Journal of Public Health (Oxford, England),*

Rauh, V. A., Landrigan, P. J., & Claudio, L. (2008). Housing and health: Intersection of poverty and environmental exposures. *Annals of the New York Academy of Sciences, 1136*, 276-288.

Richardson, L., Hemsing, N., Greaves, L., Assanand, S., Allen, P., McCullough, L., et al. (2009). Preventing smoking in young people: A systematic review of the impact of access interventions. *International Journal of Environmental Research and Public Health, 6*(4), 1485-1514.

Rickles, D., Hawe, P., & Shiell, A. (2007). A simple guide to chaos and complexity. *Journal of Epidemiology and Community Health, 61*(11), 933-937.

Simmons, R., Fajans, P., & Ghiron, L. (Eds.). (2007). Scaling up health service delivery: from pilot innovations to policies and programmes. Geneva: World Health Organization.

Stahl, T., Rutten, A., Nutbeam, D., & Kannas, L. (2002). The importance of policy orientation and environment on physical activity participation—a comparative analysis between Eastern Germany, Western Germany and Finland. *Health Promotion International, 17*(3), 235-246.

Starfield, B. (2007). Pathways of influence on equity in health. *Social Science & Medicine (1982), 64*(7), 1355-1362.

Thomas, J. C., Sage, M., Dillenberg, J., & Guillory, V. J. (2002). A code of ethics for public health. *American Journal of Public Health, 92*(7), 1057-1059.

Victora, C. G., Wagstaff, A., Schellenberg, J. A., Gwatkin, D., Claeson, M., & Habicht, J. P. (2003). Applying an equity lens to child health and mortality: More of the same is not enough. *Lancet, 362*(9379), 233-241.

van der Wal, R., & Globerman, J. (2008). Interventions that improved a practice environment: "making a difference". *Healthcare Management Forum / Canadian College of Health Service Executives, 21*(3), 29-34.

WHO. (2006). World Health Report 2006: Working together for health. Geneva: World Health Organization.

Wilkinson, R. G., & Pickett, K. E. (2006). Income inequality and population health: A review and explanation of the evidence. *Social Science & Medicine (1982), 62*(7), 1768-1784.

Wilkinson, R. G., & Pickett, K. E. (2009). *The Spirit Level: Why More Equal Societies Almost Always Do Better.* London: Penguin (Allen Lane)

Wright, L. N., Pahel-Short, L., Hartmann, K., Kuller, J. A., & Thorp, J. M.,Jr. (1996). Statewide assessment of a behavioral intervention to reduce cigarette smoking by pregnant women. *American Journal of Obstetrics and Gynecology, 175*(2), 283-7; discussion 287-8.

Appendix A: The Strategic Planning Process

Work on the second IPPH strategic plan began in 2007 with an environmental scan and the establishment of several Institute Advisory Board working groups. These groups were tasked with reviewing progress on the 2002-2007 strategic plan and identifying preliminary priorities for the new one.

Several activities commenced in August 2008. IPPH staff updated the environmental scan by conducting an extensive web search of population and public health related research strategies and priorities to obtain reports from government, non-government, and private research funding organizations in Canada and internationally. Key documents, including public health legislation and standards and public health graduate programs across Canada, were also reviewed to identify emerging and relevant opportunities for research, capacity building, partnership, and knowledge translation.

In addition to holding a series of targeted consultations with stakeholders, the institute developed an on-line survey in order to consult more broadly with the community. The survey was disseminated to academic institutions, researchers, federal and provincial/territorial government and non-government organizations, and community agencies and elicited 231 responses.

Strategic priorities were revised based on this input and presented to members of the Institute Advisory Board in April 2009. They received unanimous approval.

Over the next five years, the strategic directions outlined in the plan will guide the IPPH in developing its funding opportunities, evaluation framework, and activities. They will also guide partnership development, capacity building, and knowledge translation.

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