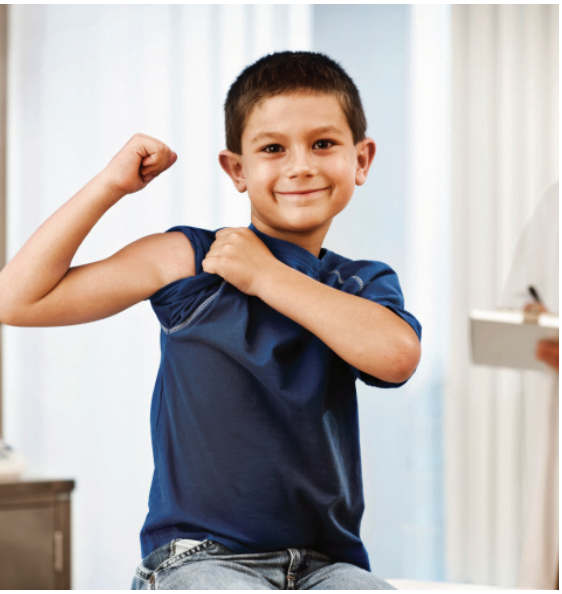
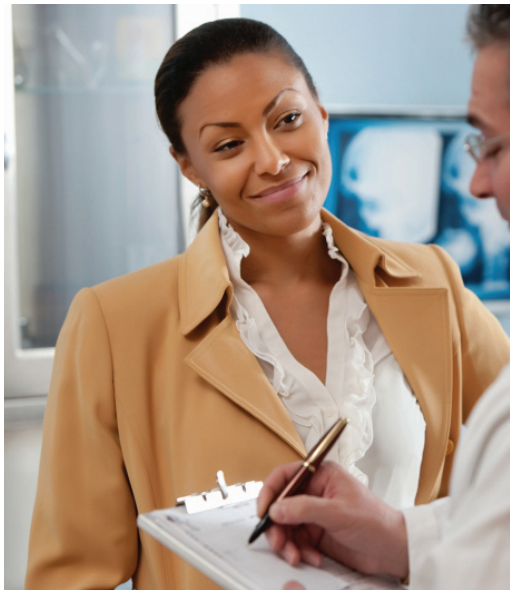
Partners in Prevention

Implementing a Lifetime Prevention Plan





A Policy Paper by BC's Physicians | June 2010

BRITISH COLUMBIA MEDICAL ASSOCIATION

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Partners in Prevention:

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The BCMA Council on Health Economics and Policy (CHEP) reviews and formulates policy through the use of project-oriented groups of practising physicians and professional staff.

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Introduction

Policymakers understandably prefer to fund programs and policies that use the fewest resources to deliver the best services to the most people. In the case of health care, the evidence points overwhelmingly to the value of preventive services. Years of research have demonstrated that clinical prevention services such as childhood immunizations and smoking cessation advice deliver economic, social, and health benefits far beyond their initial costs. Most recently, researchers have found that those who adhere to a healthy lifestyle, for example by eating well and never smoking, can reduce their chances of developing common chronic diseases by nearly 80% (Ford et al., 2009). It is not surprising, therefore, that the provincial government has placed a renewed emphasis on clinical prevention and created a Clinical Prevention Policy Review Committee (CPPRC). The Committee is tasked with devising a lifetime prevention plan – a series of services paid for by the public health care system and provided to British Columbians over their lifetime to promote their health, detect disease early, and minimize disability. Indeed, much of the cited research and recommendations in this report draw upon the work of the CPPRC.

The key to the success of the lifetime prevention plan is partnership. Only through close collaboration can patients, policymakers, physicians, and other providers implement it effectively. In this paper, the British Columbia Medical Association (BCMA) calls on the provincial government to create a lifetime prevention plan, recognize the General Practitioner as the primary clinician responsible for delivering and/or coordinating the plan, and adopt the principle of "patients as partners" in the plan's development and implementation.

This paper is organized in four parts:

Part I begins by setting the scope of the paper and defining clinical prevention. Here, the BCMA offers its support for the lifetime prevention plan and the creation of a new Clinical Prevention System Working Group.

Part II is a discussion of how best to deliver the clinical prevention services offered in the lifetime prevention plan. This section articulates the role of GPs as the primary clinician responsible for the delivery and/or coordination of the lifetime prevention plan.

Part III builds on previous provincial government policy and direction in the area of primary care and presents the vital role of patients as partners in prevention.

Part IV, entitled "Pulling it Together," proposes additional steps to realize the vision of a successful lifetime prevention plan.

In addition to providing policy recommendations, this paper also announces a series of commitments from the BCMA with respect to clinical prevention. These commitments identify areas where the BCMA will act to further the development, implementation, and ongoing management of a provincial lifetime prevention plan. When acted on together, these recommendations and commitments will allow all of us to partner successfully for prevention.

Recommendations

In the context of clinical prevention, a lifetime prevention plan is defined as a series of services paid for by the public health care system and provided to British Columbians over their lifetime to promote their health, detect disease early, and minimize disability.

The British Columbia Medical Association recommends the following:

1. The provincial government should establish a multi-stakeholder Clinical Prevention System Working Group to develop, implement, and manage the lifetime prevention plan for British Columbians. This group must include as members practising physicians who are representative of, and accountable to, their professional colleagues. This group should regularly issue a public report charting the progress of the implementation of clinical prevention initiatives.
2. The design and implementation of the lifetime prevention plan should rely on the best practices and the best available scientific data. Additionally, the patient experience of care, population health outcomes, and practical considerations of the feasibility and appropriateness of implementation and delivery of a particular service all need to be considered.
3. The provincial government should develop and implement the information technology strategy for the lifetime prevention plan in collaboration with the BCMA. This strategy should arrange for appropriate linkages with public health information technology systems in a manner consistent with professional ethical standards around patient privacy and confidentiality as well as accepted privacy and security legislation.
4. The provincial government should partner with the General Practice Services Committee, the Specialist Services Committee, and the Shared Care & Scope of Practice Committee in the identification, development, implementation, and coordination of any clinical prevention services that can be delivered by physicians.
5. The Ministry of Health Services should recognize the GP as the primary clinician responsible for the delivery of clinical prevention services offered under the lifetime prevention plan where appropriate. The Ministry of Health Services should provide the necessary supports and infrastructure to support this role.
6. The Ministry of Health Services should recognize the GP as the coordinator of the lifetime prevention plan. Coordinator refers to the clinician who maintains and manages the data relevant to the lifetime prevention plan.
7. The Clinical Prevention System Working Group and the lifetime prevention plan that it develops must explicitly adopt the principle of patients as partners, as articulated in the BC Primary Care Charter.
8. Membership on the proposed Clinical Prevention System Working Group must include persons who represent the interests of patients.
9. The provincial government should fund the lifetime prevention plan primarily through the General Practice Services Committee, the Specialist Services Committee, and the Shared Care & Scope of Practice Committee, where appropriate.

10. The provincial government must work together with the BCMA via the General Practice Services Committee, the Specialist Services Committee, the Shared Care & Scope of Practice Committee, and the proposed Clinical Prevention System Working Group to develop and adopt the relationships, incentives, supports, and quality measures necessary to ensure the success of the lifetime prevention plan.

Commitments

With respect to the development, implementation, and management of a provincial lifetime prevention plan, the BCMA will:

1. Support the creation of a multi-stakeholder Clinical Prevention System Working Group, composed of members from the provincial government, health professions, academia, and other expert groups, that relies upon the best available scientific evidence and its appropriate application to determine the design and content of a lifetime prevention plan for British Columbians.

2. Support an approach to the identification, classification, and design of delivery mechanisms for clinical preventive services offered under the lifetime prevention plan that is appropriate, systematic, and incorporates best practices and the best available scientific evidence.

3. Support the provincial government's efforts to develop an information technology strategy for clinical prevention services as part of the lifetime prevention plan.

4. Support the General Practice Services Committee, the Specialist Services Committee, and the Shared Care & Scope of Practice Committee in determining the optimal delivery platform and implementation approach for clinical prevention services.

5. Work with the provincial government, the General Practice Services Committee, and the Shared Care & Scope of Practice Committee to ensure that clinical prevention services are delivered and/or coordinated by a GP. The BCMA will also work with the Specialist Services Committee to identify those clinical prevention services suitable for delivery by a specialist physician. In all cases, the BCMA will collaborate to identify mechanisms for the funding and quality measurement of clinical prevention services.

6. Support the integration of the philosophy of "patients as partners" in the design, implementation, and management of the lifetime prevention plan.

7. Collaborate with the provincial government at the proposed Clinical Prevention System Working Group, the General Practice Services Committee, the Specialist Services Committee, and the Shared Care & Scope of Practice Committee to design, implement, and manage the lifetime prevention plan.

8. Continue the BCMA's commitment to health promotion and prevention advocacy.

List of Abbreviations

BCMA	British Columbia Medical Association
CP	Clinical Prevention
CPPRC	Clinical Prevention Policy Review Committee
GP	General Practitioner
GPSC	General Practice Services Committee
LPP	Lifetime Prevention Plan
MSP	Medical Services Plan
PSP	Practice Support Program
SSC	Specialist Services Committee
SCSPC	Shared Care & Scope of Practice Committee
USPSTF	United States Preventive Services Task Force

I. Defining and Prioritizing Clinical Preventive Services

Nearly anything that prevents, delays, or reduces the impact of disease and disability can be defined as "prevention." With such a potentially broad scope, defining the narrower category of clinical prevention (CP) is especially important for setting realistic boundaries and actionable objectives for policymakers. The literature currently recognizes five levels of "prevention": primordial, primary, secondary, tertiary, and quaternary (Exhibit 1).

Exhibit 1: Levels of Prevention

Definition of Prevention: Actions aimed at eradicating, eliminating, or minimizing the impact of disease and disability, or if none of these is feasible, retarding the progress of disease and disability.	
1. **Primordial prevention**	Preventing the emergence of predisposing social and environmental conditions that can lead to causation of disease.
2. **Primary prevention**	Protection of health by personal and communal efforts, such as enhancing nutritional status, immunizing against communicable diseases, and eliminating environmental risks such as contaminated drinking water supplies.
3. **Secondary prevention**	A set of measures available to individuals and communities for the early detection and prompt intervention to control disease and minimize disability, e.g., by the use of screening programs.
4. **Tertiary prevention**	Measures aimed at softening the impact of long-term disease and disability by eliminating or reducing impairment, disability, and handicap; minimizing suffering; and maximizing potential years of useful life.
5. **Quaternary prevention**	Action taken to identify patients at risk of over-medication (e.g., poly-pharmacy and over-medication among the elderly, patients with severe mental illness), to protect them from new medical interventions.

Sources: Starfield, B., et al., The concept of prevention: a good idea gone astray? J Epidemiol Community Health, 2008. 62(7): p. 580-3; Robinson, S. and T. Hancock, Draft Interim Report, Clinical Prevention Policy Review Committee, Editor. 2009, Ministry of Health Services. p. 70; Gervas, J., B. Starfield, and I. Heath, Is clinical prevention better than cure? Lancet, 2008. 372(9654): p. 1997-9.

The critiques of this classification have implications for CP. Starfield et al. argue that the expansion of the definition of prevention, which now includes the concept of risk factors at the quaternary level, makes its meaning unclear (B. Starfield, Hyde, Gervas, & Heath, 2008). First, the increased focus on particular diseases and risk factors may supplant the focus on ill health in general. Second, expanding definitions place clinicians and patients at the centre of a tug-of-war between the goals of individual-based medical and preventive care and the principles of population-based care. For example, when confronted with evidence

of a risk factor from clinical trial data, clinicians may be willing to prescribe or offer preventive care (and patients willing to receive it) even if data from population-based studies show a lower likelihood of disease from the same risk factor. Finally, Starfield and colleagues note that the progressive lowering of thresholds for pre-disease (e.g., hypertension, serum cholesterol, and blood sugar) and the accompanying conflation of risk factors with disease further blurs the lines between prevention and cure.

Although physicians have an interest in all aspects of prevention, those preventive services that fall into levels 2 through 5 above relate most directly to the practice of medicine. For purposes of this paper, we focus on levels 2 and 3 and use Krueger's definition of CP developed for and with the CPPRC (Exhibit 2) (Kreuger, 2007).

Exhibit 2: Definition of CP Services

Manoeuvres pertaining to primary and early secondary prevention (i.e., immunization, screening, counselling and preventive medication) offered to persons based on age, sex, and risk factors for disease, and delivered on a one-provider-to-one-client basis, with two qualifications:
1. The provider could work as a member of a care team, or as part of a system tasked with providing, for instance, a screening service; and
2. The client could belong to a small group (e.g., a family, group of smokers) that is jointly benefiting from the service.

Source: Krueger, H. (2007). Part II: How Best to Implement? Literature Review Prepared for the Clinical Prevention Policy Review Committee, BC Ministry of Health. Vancouver: Centre for Health Services and Policy Research.

However, even this narrower definition encompasses a broad range of items including vaccinations, various screenings, counselling services (e.g., aiding patients with early signs of mental health and substance abuse problems) and risk assessments. Offering all of them to patients presents an enormous challenge to providers, since these additional "necessary" services compete with an already overloaded menu of services offered. As the number of recommended prevention strategies grows with each passing year, providers find themselves with less and less time to implement them (Pimlott, 2005). Yarnall et al. calculated that providing all CP services recommended for the United States as of 1996 would require the average GP 7.4 hours per working day – a clearly unrealistic goal (Yarnall, Pollak, Ostbye, Krause, & Michener, 2003). The challenge is, therefore, to prioritize and offer those services that provide the greatest value.

There are several approaches to use in deciding which CP services should be prioritized and, therefore, offered as part of a lifetime prevention plan (LPP), based on factors such as clinical effectiveness, clinically preventable burden, and cost-effectiveness. The methodology employed by the United States Preventive Services Task Force (USPSTF) (Guirguis-Blake et al., 2007; Maciosek et al., 2006), acknowledged as the methodological "gold standard" (Campos-Outcalt, 2005), was replicated by Krueger for the CPPRC using

Canadian data (Krueger, 2007). The resulting rankings did not vary substantially from those based on US data (Exhibit 3).

Exhibit 3: Rankings Based on Clinically Preventable Burden and Cost-Effectiveness[1]

Clinical Preventive Service	Ranking	
	Based on BC Data	Based on US Data
Discuss daily aspirin use – men 40+, women 50+	1	1
Smoking cessation advice and help to quit – adults	2	2
Alcohol screening and brief counselling – adults	3	3
Hypertension screening and treatment – adults 18+	4	5
Colorectal cancer screening – adults 50+	5	4
Influenza immunization – adults 50+	5	6
Cholesterol screening and treatment – men 35+, women 45+	7	10
Pneumococcal immunizations – adults 65+	8	7
Cervical cancer screening – women 20-75	9	9
Breast cancer screening – women 40+	9	7

1 The purpose of Exhibit 3 is to illustrate an application of the USPSTF methodology, not to express the BCMA's support for any particular CP service. Rankings of CP services and the composition of the LPP can and should change over time as knowledge of prevention develops.

Source: Adapted from Krueger, H. (2008). Summary and Technical Report. Vancouver: Centre for Health Services and Policy Research.

The BCMA recommends that a new, multi-stakeholder Clinical Prevention System Working Group be established to determine which CP services should be included in the LPP. This working group would base its decisions on the best-available scientific evidence in a manner similar to the methodology used by the USPSTF, taking into account clinical effectiveness, potential population health impact (i.e., clinically preventable burden), and cost-effectiveness. To ensure effective implementation, any such working group should not only rely on the best available scientific data, but also take into account the patient experience of care, population health outcomes, and practical considerations of the feasibility of implementation and delivery of a particular service. Finally, to ensure that any such working group functions with the full support of the physician community, the BCMA recommends that the provincial government include as members practising physicians who are representative of, and accountable to, their professional colleagues.

Recommendation 1: The provincial government should establish a multi-stakeholder Clinical Prevention System Working Group to develop, implement, and manage the lifetime prevention plan for British Columbians. This group must include as members practising physicians who are representative of, and accountable to, their professional colleagues. This group should regularly issue a public report charting the progress of the implementation of clinical prevention initiatives.

Recommendation 2: The design and implementation of the lifetime prevention plan should rely on the best practices and the best available scientific data. Additionally, the patient experience of care, population health outcomes, and practical considerations of the feasibility and appropriateness of implementation and delivery of a particular service all need to be considered.

Commitment 1: Support the creation of a multi-stakeholder Clinical Prevention System Working Group, composed of members from the provincial government, health professions, academia, and other expert groups, that relies upon the best available scientific evidence and its appropriate application to determine the design and content of a lifetime prevention plan for British Columbians.

II. How Best to Deliver CP Services

Just as important as the question of what clinical preventive services should be provided is the question of how best to deliver them. Indeed, the example of tobacco control shows that the challenge of CP services is not our knowledge of the relative benefits and harms of the intervention (e.g., the health and economic benefits of smoking cessation have been known for decades now), but rather our ability to implement such programs effectively (Fiore, Jaen, & Baker, May 2008).

This section addresses the question of how best to deliver CP services. The evidence on CP services delivery is reviewed, followed by a discussion of the role of physicians in delivering CP services and helping to implement the LPP. The BCMA recommends that the GP be recognized as the primary clinician responsible for the delivery of clinical prevention services offered under the lifetime prevention plan, where appropriate. Further, the Ministry of Health Services should recognize the GP as the coordinator of the LPP. Coordinator refers to the clinician who maintains and manages the data relevant to the lifetime prevention plan. These conclusions are based on the best available evidence on the delivery of CP services, the need for clinical judgement, patients' preferences to work with physicians, and the growing literature on the importance of a regular source of care.

Evidence on the Delivery of CP services

The diversity of CP services has led to the use of several delivery models. In a report prepared for the CPPRC, Krueger identifies three broad categories of service delivery (Kreuger, 2007):

- The medical care setting. This encompasses secondary and tertiary care and allied care providers such as pharmacists, laboratory staff, and dentists.
- The mixed health care setting. This includes any platform involving systematic or centralized screening and interventions of a specialized nature (e.g., invitation to mammography screening).
- The non-medical care setting. Any CP services delivered by public health staff in community contexts.

Krueger further identifies 30 studies in his literature review of CP services in these three settings. Twenty-six of these focus on the medical care setting, one on the mixed health care setting, and three on the non-medical care setting. With respect to specific CP services, Krueger identifies only one area – childhood series vaccinations – as having an "extensive" volume of literature. The remaining areas have moderate, very limited, or no literature (Exhibit 4).

Within this limited literature, however, the vast majority of evidence comes from services provided by physicians or in physician-led practice settings (e.g., multidisciplinary practices), most often in primary care settings. Indeed, the relationship between good primary care and the receipt of preventive services has been known for over a decade (Flocke, Stange, & Zyzanski, 1998). Among the 30 studies identified by Krueger, 21 examine CP services that are delivered by physicians or in physician-led settings, 5 examine CP services delivered by multiple providers or are unclear about the type of provider, and the remaining 4 concern services delivered by non-physicians (e.g., smoking cessation advice given by dentists or trained counsellors).

Exhibit 4: CP Services Delivery by Type of Setting and Provider

Area of Study	Setting		
	Medical	Mixed	Non-medical
Immunization	**Shefer (2006)** **Jacobson Vann (2005)*** *Gyorkos (1994)*	*Grabenstein (2006)*	
Childhood Immunization	**Kimmel (2007)** **Rand (2007)** **Walton (2007)** **Fiks (2006)** **Kempe (2005)** *McInerny (2005)* **Minkovitz (2001)**		
Underserved	*LeBaron (2004)* **Szilagyi (2002)**		
Adult	*Santibanez (2002)* **Siriwardena (2002)**		
Tobacco Cessation	**Sherman (2007)** **Twardella (2007)** **Larson (2006)** **Pholig (2006)** **Soria (2006)** **Litt (2005)** Albert (2004) **Roski (2003)**		Low (2007) Bauld (2005) Abdullah (2004)
Colorectal Screening	**Klabunde (2007)** **Liberman (2007)** **Walsh (2005)** **Patel (2004)**		

Source: Authors' analysis, adapted from Krueger, H., Part II: How Best to Implement?, in Establishing Clinical Prevention Policy in British Columbia, H.K. Associates, Editor. 2007, Centre for Health Services and Policy Research: Vancouver. p. 64.

Bold text: Study examines CP services delivered by a physician or in a physician-led practice setting. Normal text: CP services delivered by a non-physician. *Italic text:* Unknown or multiple provider(s).

* Study is a meta-analysis of 47 studies of which 33 were in a physician or physician-led practice setting.

This systematic approach to the identification, classification, and design of delivery mechanisms for CP services represents the first such systematic attempt in British Columbia, and in adopting such an approach, the provincial government would place BC in a leading position in CP policy relative to other jurisdictions. To maximize the probability that implementation of the LPP is successful, the provincial government should also identify specific providers of CP services under the LPP. This will provide both providers and policymakers with greater clarity and focus when delivering and funding CP services under the LPP.

Commitment 2: Support an approach to the identification, classification, and design of delivery mechanisms for clinical preventive services offered under the lifetime prevention plan that is appropriate, systematic, and incorporates best practices and the best available scientific evidence.

Finally, in addition to deciding who should deliver CP services under the LPP, the provincial government will also have to address a variety of issues related to the delivery setting (i.e., medical, non-medical, or mixed). Broadly speaking, these issues include the provision of CP services in a systematic way across the province, adopting an evidence-based approach in the selection of delivery settings, developing an information technology (IT) strategy to support the delivery of CP services in those settings, and selecting appropriate partners with whom to implement the LPP. Exhibit 5 provides some specific suggestions in these areas. These are derived largely from recommendations of the CPPRC.

Exhibit 5: Guidelines for the Choice of Delivery Mechanism for CP Services (Adapted from the CPPRC)

Systematic provision of CP services	Provide all the services in the LPP in a systematic way within the province, recognizing the need to tailor the intervention to specific circumstances.
Evidence-based approach	Ensure that all delivery approaches are based upon evidence and best practice and are implemented using a proven quality improvement approach.
Develop an IT strategy	Develop an IT strategy to support CP services that may include: 1. Appropriate enabling IT infrastructure within providers' offices, including mechanisms to enable the flow of clinical prevention data from multiple providers to the patient's electronic medical record (which is held by the physician, as opposed to an electronic health record, which is accessed by multiple providers), consistent with existing privacy and security legislation; 2. Review of current physician electronic medical record requirements to ensure consistency with prevention objectives; 3. Mechanisms to enable physicians to identify those who are eligible for a given service; and 4. Automatic patient recall and physician reminder systems for the services included in the LPP.
Examine the business case	Ensure the optimal delivery of existing CP services that are part of the LPP by seeking business cases from the respective organizations regarding their strategy to improve rates and reach those not currently receiving the service.
Partner with Joint Committees	Partner with General Practice Services Committee, Specialist Services Committee, and Shared Care & Scope of Practice Committee to determine the optimal delivery platform and implementation approach for the CP services.

Source: Adapted from Robinson, S. and T. Hancock, Draft Interim Report, Clinical Prevention Policy Review Committee, 2009, Ministry of Health Services. p 70; and authors' analysis.

Linking this strategy with public health IT systems consistent with professional ethical standards around patient privacy and confidentiality as well as accepted privacy and security legislation will ensure protection of the public's health through appropriate flows of information. The success of the General Practice Services Committee (GPSC), combined with the primary-care focus of the LPP, suggests that the provincial government should envision a broad partnership with the medical profession that includes collaboration via the GPSC, the Specialist Services Committee (SSC), and the Shared Care & Scope of Practice Committee (SCSPC).

Recommendation 3: The provincial government should develop and implement the information technology strategy for the lifetime prevention plan in collaboration with the BCMA. This strategy should arrange for appropriate linkages with public health information technology systems in a manner consistent with professional ethical standards around patient privacy and confidentiality as well as accepted privacy and security legislation.

Recommendation 4: The provincial government should partner with the General Practice Services Committee, the Specialist Services Committee, and the Shared Care & Scope of Practice Committee in the identification, development, implementation, and coordination of any clinical prevention services that can be delivered by physicians.

Commitment 3: Support the provincial government's efforts to develop an information technology strategy for clinical prevention services as part of the lifetime prevention plan.

Commitment 4: Support the General Practice Services Committee, the Specialist Services Committee, and the Shared Care & Scope of Practice Committee in determining the optimal delivery platform and implementation approach for clinical prevention services.

The Role of Physicians

Physicians have a central role to play in the delivery of CP services. Because these services are, by definition, "delivered on a one-provider-to-one-client basis" (Kreuger, 2007), it makes sense to have a single provider responsible for these services to the greatest extent possible. Of course, no one particular provider can or should deliver all recommended clinical preventive services. However, the GP – as the best-trained generalist with ultimate responsibility for patient care, the steward of the medical record (paper or electronic), and the most-accessed primary care provider in the province – serves as the logical choice to be the primary clinician responsible for coordinating the lifetime prevention plan. "Coordinator" refers to the clinician who maintains and manages the data relevant to the LPP. Such a role is supported by the available evidence on CP services delivery, the need for clinical judgement in the provision of these services, patients' preferences to work with physicians, and the growing literature on the importance of a regular source of

care (Hollander, Miller, MacAdam, Chappell, & Pedlar, 2009).

Available evidence on the delivery of CP services. As the literature reviewed in the Krueger study demonstrates, the vast majority of research on the delivery of CP services at the micro-level is of services delivered by a physician or in a physician-led setting. Despite the admitted limitations of the literature, the best available evidence concerning effectiveness of delivery models comes from physician-based settings (Exhibit 4).

Clinical judgement. As the definition of CP continues to expand, some have questioned its appropriateness, effectiveness, and value (B. Starfield et al., 2008). Although a defined LPP would provide clinicians with important guidance on what CP services should be offered when and to whom, it needs to be supplemented by clinical judgement. Clinicians will always be faced with the challenge of trying to adhere to recommendations while "taking into account different biological, cultural, social, and economic contexts, patients' preferences, the natural history of the disease, co-occurring risks, relative, attributable, and absolute risk, and prevalence in the population" (Gervas, Starfield, & Heath, 2008). GPs have the necessary skills and training to address this challenge effectively.

Patient preferences. Patients prefer to receive clinical prevention services from a physician. A 2001 survey of British Columbians found that a majority of respondents prefer using a program through their doctor to help them quit smoking (CGT Research International, 2001). That same survey found that half of smokers had been asked about their smoking habits, and three-quarters of these respondents had been advised by their doctor to stop (Bass, 2002). A subsequent survey of physicians found that nearly two-thirds (64%) ask patients every visit or most visits about their smoking habits, suggesting that physicians themselves respond to this preference (CGT Research International, 2003). Most recently, 2010 survey data of the BC population from Ipsos-Reid reveals a strong patient preference for physicians' involvement in clinical prevention. Among the survey's key findings are the following (Braid, 2010):

- 93% of respondents support clinical prevention services;
- 59% of respondents want to receive these services from their family doctor (nurse practitioners, mentioned by 11% of respondents, were the next most common provider); and
- 66% want their GP to coordinate their clinical prevention services (nurse practitioners, mentioned by 6% of respondents, were the next most common provider).

Accessibility and continuity of care. A growing literature has emphasized the importance of a "medical home" that provides high quality primary care that is accessible, family centered, coordinated, comprehensive, continuous, compassionate, and culturally effective ("The medical home," 2002; Barbara Starfield, 1998; B. Starfield & Shi, 2004). Although originally envisioned as a way to improve care for children with special health care needs (Sia, Tonniges, Osterhus, & Taba, 2004), the medical home concept has been applied across the spectrum of primary care services (Rogers, 2007). This position is supported by evaluations of medical home models, which have shown that a patient's identification with a medical home is associated with improved quality, reduced errors, and increased patient satisfaction (Rosenthal, 2008). A survey of health care stakeholders in Canada found that support for public funding was weakest for those

services offered outside of the medical home (Deber & Gamble, 2004).

The medical home is also linked, more specifically, to better access to CP services. Starfield reports "good evidence" that identification with a specific person or place of care leads to better prevention (Barbara Starfield, 1998). In a study of vaccination coverage among low-income American children, Smith et al. reported that those children with a medical home were more likely to be up to date with their vaccinations than those without a medical home. Further, among those children with a medical home, those who received all of their vaccinations from their medical home were significantly more likely to be up to date than those who did not receive all their doses from their medical home (Smith, Santoli, Chu, Ochoa, & Rodewald, 2005). Allred et al. also found that children receiving primary care in the medical home have significantly higher vaccination coverage than those who received primary care from other sources (Allred, Wooten, & Kong, 2007). In a study of health care quality in the US, researchers at the Commonwealth Fund found that when adults had a medical home their receipt of routine preventive screenings improved substantially. The same study also reported that 65% of adults with a medical home received reminders for preventive care visits, compared to 52% of adults with a regular source of care (but not a medical home) and only 22% of adults with no regular source of care (Beal, Doty, Hernandez, Shea, & Davis, 2007).

The medical home literature provides strong evidence that having a regular source of care leads not only to better preventive care, but also to increased patient satisfaction, lower costs, and higher quality. By placing responsibility for LPP in the hands of physicians, who in turn would be supported to deliver and/or coordinate the CP services encompassed in the LPP, policymakers would take a big step toward effectively implementing the LPP. In short, physicians' practices are already equipped to provide a range of interventions that would allow the provision of most clinical prevention services, not only under one roof, but often in the same visit – a situation not shared by many other delivery models of clinical prevention.

Recommendation 5: The Ministry of Health Services should recognize the GP as the primary clinician responsible for the delivery of clinical prevention services offered under the lifetime prevention plan where appropriate. The Ministry of Health Services should provide the necessary supports and infrastructure to support this role.

Recommendation 6: The Ministry of Health Services should recognize the GP as the coordinator of the lifetime prevention plan. Coordinator refers to the clinician who maintains and manages the data relevant to the lifetime prevention plan.

Commitment 5: Work with the provincial government, the General Practice Services Committee, and the Shared Care & Scope of Practice Committee to ensure that clinical prevention services are delivered and/or coordinated by a GP. The BCMA will also work with the Specialist Services Committee to identify those clinical prevention services suitable for delivery by a specialist physician. In all cases, the BCMA will collaborate to identify mechanisms for the funding and quality measurement of clinical prevention services.

Nonetheless, the successful coordination of the LPP by GPs, and the delivery of CP services by GPs, specialist physicians, and other providers, is far from automatic. The following section articulates a vision for the LPP, highlighting some of the barriers to its implementation and offering suggestions on how to overcome them.

III. Patients as Partners

Increasingly, patients are rightly recognized as partners – some might say the most important partner – in their care (e.g., the "Stanford model") (Holman & Lorig, 2000). Although the relationship between physicians and patients has continued to evolve over the past several decades, it is only recently that the formal elements of the health care system have come to acknowledge and act on this in an explicit manner.

In British Columbia, the most obvious example of this trend is the Primary Health Care Charter, which not only recognizes patient partnerships as the central prerequisite of clinical transformation, but also states that such partnerships are part of the basic philosophy for infrastructure initiatives (Ministry of Health Services, 2007). At a practical level, this philosophy is being realized by the creation of the position of Director, Patients as Partners, in the Ministry of Health Services, and by Impact BC, a Ministry of Health Services-funded organization that provides support to both the collaborative Practice Support Program and the Integrated Health Networks. Impact BC's patient- and family- centered principles include (ImpactBC, 2007):

- People are treated with respect and dignity,
- Healthcare providers communicate and share complete and unbiased information with patients and families in ways that are affirmative and useful,
- Individuals and families build on their strengths through participation in experiences that enhance control and independence, and
- Collaboration among patients, families and providers occurs in policy and program development and professional education, as well as in the delivery of care.

These principles are jointly shared by the provincial government and the BCMA. It is difficult to imagine an effective LPP, much less one where "informed and activated patients understand the value of the lifetime prevention plan and the value of clinical prevention services" (Robinson & Hancock, 2009), that does not integrate the philosophy of patients as partners in most of its major components. Many of the arguments in support of patient self-management of chronic disease in primary care (Bodenheimer, Lorig, Holman, & Grumbach, 2002) are equally applicable to CP services. Research on prevention confirms the obvious: the most effective way to change health behaviours is to change patients' perceptions of risk (Richens, Imrie, & Copas, 2000). Without this change in perception and the subsequent desire to change behaviour, no CP program or policy is likely to be effective. Working closely with patients at multiple levels (e.g., through a patient advisory group with government and the BCMA, using the Patient Voices Network, incorporating the Stanford model in clinical practice), therefore, will give the provincial government and physicians the ability to move away from offering preventive services for patients to creating preventive partnerships *with* patients.

Recommendation 7: The Clinical Prevention System Working Group and the lifetime prevention plan that it develops must explicitly adopt the principle of patients as partners, as articulated in the BC Primary Care Charter.

Recommendation 8: TMembership on the proposed Clinical Prevention System Working Group must include persons who represent the interests of patients.

Commitment 6: Support the integration of the philosophy of "patients as partners" in the design, implementation, and management of the lifetime prevention plan.

IV. Pulling it Together – Steps to Realizing the LPP

As with any large-scale, province-wide initiative, developing and implementing an LPP will require that all stakeholders work together to overcome barriers and seize opportunities. This section addresses two specific areas where physicians can contribute to the success of the LPP: funding the LPP and developing an implementation strategy to maximize physician participation.

Funding the LPP

BC's Medical Services Plan (MSP) provides for services defined by the Medical Services Commission as "medically necessary." However, sections A.4.5 and B.4.a.ii of the preamble to the Guide to Fees exclude "routine periodic health examinations, including routine eye examinations" as covered benefits (British Columbia Medical Association, 2009). This raises two important issues. First, funding CP services via the MSP requires changing the language in the Guide to Fees. Second, in discharging its responsibility in selecting the CP services that comprise the LPP, the proposed Clinical Prevention System Working Group might be perceived as making decisions of medical necessity. Aside from running contrary to BCMA policy (British Columbia Medical Association, 2007), this latter issue is particularly problematic since the proposed Working Group is designed to present and review clinical evidence, not to make decisions about the MSP coverage status of various services.

These problems can be avoided by funding the LPP through three joint government-BCMA committees: the GPSC, the SSC, and the SCSPC. Although the CP services under the LPP would be given fee codes just as with any other MSP-covered service, their funding instead would come via dedicated, negotiated funds administered by these committees. Because these services would be funded outside of the MSP, they would not be MSP benefits and there would be no need to change the MSP preamble or risk having the proposed Clinical Prevention System Working Group perceived as defining medically necessary services.

This strategy has the added advantage of linking the LPP more closely with the physicians tasked with delivering and/or coordinating CP services. Moreover, this would allow both the provincial government and the BCMA to work together through trusted mechanisms that have proven their ability to deliver, develop, and administer programs and services on a province-wide basis.

This arrangement does not preclude funding some CP services through other mechanisms (e.g., health authorities). The proposed Clinical Prevention System Working Group may decide to offer and fund a particular CP service through multiple channels (e.g., STD screening through a GP's office and specialized clinics). Indeed, as it selects which CP services of the LPP are to be offered by which clinicians, the Working Group would certainly work with the Ministry of Health Services and the BCMA to determine the optimal funding mechanism. Nonetheless, in keeping with the movement toward creating a medical home, fostering patients' attachment to practice, and the provincial government's intentions in creating the GPSC, SSC and SCSPC, we envision an LPP that is primarily funded through these three committees.

Recommendation 9: The provincial government should fund the lifetime prevention plan primarily through the General Practice Services Committee, the Specialist Services Committee, and the Shared Care & Scope of Practice Committee, where appropriate.

Maximizing Physician Participation

The past several years of collaborative effort between the provincial government and the BCMA have yielded important lessons on how best to manage a unique partnership for the benefit of patients. Among the most important of these lessons are the steps that the provincial government can take to encourage physician participation in programs like the LPP. The experience with joint government-BCMA committees, notably the GPSC, suggests four prerequisites for physician participation (MacCarthy, 2009):

1. **Relationships.** A trusting relationship built upon shared goals, a long-term commitment to success, and a culture of learning is essential to the success of collaborative programs between the provincial government and BCMA. In the case of GPSC, this was achieved through mutual agreement that the primary objective of the program was to improve the quality of care for patients, a long-term commitment to the collaborative process through the government-BCMA Master Agreement, and a willingness of both parties to use mistakes as opportunities for learning. By funding the LPP primarily through the GPSC, SSC, and SCSPC, the provincial government can leverage structures that have engendered trusting relationships with physicians to improve the likelihood of success.

2. **Incentives.** Both parties have learned that behavioural change is impossible without clearly defined incentives. Continuing to pay physicians the same amount in the same way will lead, predictably, to the same results. The adoption of various payments for the longitudinal care of complex patients in the current Guide to Fees has shown how carefully-crafted incentives, in combination with other factors, can lead to massive behavioural change among physicians and improvements in the quality of care for patients. Witness the increasing attachment of patients to their primary care practice (Hollander et al., 2009). Success of the LPP depends on the implementation of appropriate incentive structures for physicians to provide CP services. As the GPSC experience demonstrates, these structures can be created using the existing Guide to Fees. Part of the initial implementation of clinical prevention also could be BCMA-Ministry of Health Services collaborative programs that add clinical prevention to current CDM guidelines.

3. **Supports.** Incentives alone are inadequate to induce and sustain lasting change. Without assisting physicians to overcome the systemic barriers to adopting and managing new incentive structures, uptake will be limited. Moreover, those that do adopt new incentives may do so for only a short period of time if they are unable to adapt their practice patterns to new ways of doing business. For these reasons, the GPSC Practice Support Program (PSP) developed a number of modules that support practice and clinical change management. Creating one or more practice support modules for the LPP through the PSP likely will increase uptake of the program among physicians.

4. **Quality Measures.** By agreeing upon, adopting, and regularly reviewing quality measures for each new collaborative project, the provincial government and the BCMA can foster a culture of learning, achieve their common goal of a patient-centred health care system, and realize improvements in health services delivery and outcomes. Working in close collaboration with the GPSC, SSC, and SCSPC, the proposed Clinical Prevention System Working Group can play a critical role in the development and evaluation of these quality measures.

Finally, physician participation also takes place at the level of the medical association, where the collective efforts of the entire profession can be leveraged to further public health and prevention goals province-wide. Successful liaising with governmental, non-governmental, and community agencies has led to legislation limiting cell phone use while driving, mandatory helmet use by cyclists, and mandatory use of car seats for babies and children. By continuing such work, the BCMA will maintain its leadership role in health promotion.

Recommendation 10: The provincial government must work together with the BCMA via the General Practice Services Committee, the Specialist Services Committee, the Shared Care & Scope of Practice Committee, and the proposed Clinical Prevention System Working Group to develop and adopt the relationships, incentives, supports, and quality measures necessary to ensure the success of the lifetime prevention plan.

Commitment 7: Collaborate with the provincial government at the proposed Clinical Prevention System Working Group, the General Practice Services Committee, the Specialist Services Committee, and the Shared Care & Scope of Practice Committee to design, implement, and manage the lifetime prevention plan.

Commitment 8: Continue the BCMA's commitment to health promotion and prevention advocacy.

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Notes

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