

# A Report on Shared Care

(Part of the Primary Health Care  
Shared Care Network Development Initiative)

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*Province-wide solutions.  
Better health.*

**Report prepared for Provincial Health Services Authority:**

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# Executive Summary

This report seeks to shed light on the concept of shared care and provide a basis for system-wide discussions on shared care as a model for improved service delivery and coordination of health services in the Province of British Columbia (BC).

This report consists of three sections. Section One examines formal definitions of shared care and presents examples of shared care models in primary care, secondary care, community, and those specific to mental health. Shared care models are shown to vary by:

- (a) level of complexity (i.e., they can be as simple as a physician/nurse duo or as complex as a team of multidisciplinary providers),
- (b) “lead” (i.e., the person or agency that initiates or assumes responsibility for the shared care arrangement), and
- (c) disease state (e.g. chronic diseases, infectious diseases, mental health, cancer and palliative and prenatal care).

This is followed by a report on common characteristics across shared care models. These include joint provision of clinical services, provider role differentiation, shared responsibility for patient care, information exchange, flexible working arrangements, and patient and family inclusion in health care planning and decision making.

Section One continues with a discussion about benefits associated with shared care. Some benefits include: improved care coordination, strengthened links between primary and secondary care, increased patient and provider satisfaction, and increased access to healthcare services. Professional territorialism, increased time requirement, and limited measurement capacity represent challenges to shared care approaches. Section One closes with a discussion on and examples of “navigation,” which is associated with shared care, and typically refers to negotiating a path through the health system to facilitate integrated patient care.

Section Two considers shared care in BC. It presents the findings of interviews with BC healthcare leaders who offer examples of shared care initiatives currently underway in BC, both at the Provincial and Health Authority level. When asked about factors that facilitate or encourage shared care, interview participants identified the following: alignment of shared care tasks with provider payment, focus on quality improvement, willingness to work together, information technology, physician endorsement, and professional education in shared care. Factors that challenged shared care included a lack of overall leadership for shared care, a health system that is focused on episodic vs. chronic care, and extra requirements for documentation and paper work.

Section Two also reports on ways that the BC Ministry of Health and Health Authorities could support shared care. The Ministry could, for example, fund information technology, adjust physician payment to align with shared care, and develop policy that signals shared care as a provincial priority. Health Authorities could support shared care by providing physical space that allows providers to work in close proximity, funding networking opportunities, and reviewing and disseminating shared care literature and/or research. Besides the Ministry of Health and Health Authorities, interview participants identified other groups or agencies that should support shared care. These included: professional associations and governing bodies, community and non-profit agencies, other Ministries, Health Canada, specialty clinics, unions, consumers and the private sector.

Section Two continues with a discussion about the impact of shared care. On a scale of 1 (low) to 7 (high), BC healthcare leaders rated the potential of shared care to:

- a) Strengthen links along the health care continuum (mean score 6.1)
- b) Improve service coordination/integration (mean score 5.9)
- c) Yield cost savings/efficiencies to the health system (mean score 4.7)
- d) Enhance working relationships among health providers (mean score 6.0)
- e) Increase patient access to care (mean score 5.9)
- f) Improve health outcomes (mean score 6.2)
- g) Improve patient satisfaction (mean score 6.2) and
- h) Improve provider satisfaction (mean score 6.1).

Section Two closes with “lessons learned” from those involved in shared care initiatives. These included the need to engage champions, define roles and responsibilities, establish sound communication and information systems, be patient, align payment with care tasks, co-locate providers, and institute sound evaluation methods.

Various tools to support the development, implementation, management and evaluation of shared care are discussed in Section Three. Examples of a wide range of tools, which vary in scope and complexity, and come from jurisdictions around the world, are grouped into six categories. First, *information sharing systems* are discussed, and include examples such as shared care records, structured shared care letters, and physician information packages. This is followed by a discussion about *communication platforms*; including telephone based platforms (e.g. tele-health), computer or electronic based systems (e.g. computerized patient record), and communication platforms in the form of disease-specific registers. *Mapping tools* are described next, with several examples drawn from BC. This section continues with a discussion about *guidelines* - national, provincial and system guidelines; as well as *protocols*, which focus on narrower aspects of care or care delivery such as assessment, follow-up and medication prescribing. *Community-based tools* for shared care follow, and include, for example, shared care outreach clinics, community nursing teams, and home-based shared care activities. Section Three concludes with examples of various types of *quality improvement processes* that support shared care. These consist of university-based training programs, continuing medication education for practicing providers, networks, and structured collaboratives.

The broad-based acceptance of shared care approaches can be attributed to the value that shared care adds to patients, providers and the health care system. This report closes with a summary of shared care contributions. Shared care facilitates or contributes to the following: a clear definition of provider tasks and responsibilities, robust lines of communication between providers and agencies, improved knowledge transfer and best practice dissemination, appropriate level and targeting of patient care, improved information-related technologies, “whole-person” and patient-centred approaches to care, enhanced patient self management, and improved job/professional satisfaction among health providers.

## **Preface**

Health planners, providers and payers are continually seeking new ways to provide the best possible care for patients and transform the health system to support health improvement. As a result, several health delivery models have been developed to improve the integration of primary, secondary and tertiary sectors; provide seamless service delivery; and facilitate collaborative care that involves the full range of health providers. Recently, “shared care” has surfaced as a model to meet increasing calls for improved service delivery and coordination. Today, shared care is being applied along the health care continuum, for a number of health conditions, by various combinations of health providers, in jurisdictions around the world.

## **Purpose**

This report seeks to shed light on the concept of shared care and provide a basis for system-wide discussions on shared care as a model for improved service delivery and coordination of health services in the Province of British Columbia (BC).

This report consists of three sections. Section One examines the definition of shared care; describes the range of shared models applied in health care; and offers a summary of common elements, benefits, challenges and requirements associated with shared care. Section Two examines shared care in BC. It summarizes the findings of interviews with BC healthcare leaders with respect to shared care activities, factors that influence shared care, resource requirements for shared care, and the potential of shared care to impact health system, provider and patient outcomes. Section Three reports on various tools to support the development, implementation, management and evaluation of shared care.

# Section One: Shared Care Definitions And Models

Section One examines the concept of shared care. First, formal definitions of shared care are presented, followed by a description of shared-care models in the health field. This section includes a summary of common elements, benefits, challenges and requirements associated with shared-care arrangements and closes with a discussion on navigation, which is associated with shared care.

Peer-reviewed articles in academic journals were reviewed to define shared care and identify examples of shared-care models. Article abstracts that referenced the term “shared care” were extracted from the following health information databases: the Cumulative Index to Nursing & Allied Health Literature (CINAHL), MEDLINE, Health Reference Center-Academic, and PsychINFO, from the period 1990 to present. Additionally, articles including the term “navigation” and “navigator” were assembled in order to assess the relevance of this concept to shared care. Finally, a cursory search of the Internet was conducted to uncover additional information on shared-care models, and to support the collection of shared-care tools, the focus of Section Three of this report.

## 1.0 DEFINITIONS AND MODELS

While shared care is a popular term in today’s health lexicon, few formal definitions exist. Of the over fifty articles reviewed to support this report, three definitions of shared care surfaced:

The first definition by Moorehead (1995) takes a broad view of shared care:

*Shared care is an approach to care which uses the skills and knowledge of a range of health professionals who share joint responsibility in relation to an individual’s care. This also implies monitoring and exchanging patient data and sharing skills and knowledge between disciplines.*

A definition by Hickman, et al, (1994), assumes a narrower approach, focused on general practitioners (GP’s) and specialists:

*Shared care is the joint participation of general practitioners and specialists in the planned delivery of care for patients with a chronic condition, informed by an enhanced information exchange, over and above the routine discharge and referral letters.*

Finally, a definition emerged from the mental health field, a leading discipline in the development and implementation of shared care models (Penrose-Wall, J., et al, 2002):

*Share care is both systematic cooperation, about how systems agree to work together... and operational cooperation at local levels between different groups of clinicians.*

These authors went on to differentiate shared care from “collaborative care.” Collaborative care, they argue, is more “general in nature,” is “oriented toward relationship building,” and as such, “is, perhaps, a precursor to shared care.” In today’s discourse, “planned care” and “managed care” are sometimes used interchangeably with shared care. Generally, planned care implies the application of integrated care pathways which aim to “have the right people doing the right things, in the right order, at the right time.” Managed care,” like shared care, is grounded in

interprofessional practice, but is principally focused on the provision of quality health care through service utilization monitoring and cost containment ([www.insweb.com/learningcenter/glossary/health](http://www.insweb.com/learningcenter/glossary/health)).

## 1.1 SHARED-CARE MODELS

This section provides a description of the range of shared-care models that have been applied in health care over recent years. While most models originate from formal research studies, some are drawn from real-life projects based in practice. The pages that follow offer twenty examples of shared-care models. They represent exemplar initiatives that can be grouped into three broad categories: those (principally)<sup>1</sup> based in primary care, those based in secondary care, and those centered in the community.

### (a) Shared-Care Models in Primary Care

General Practitioner, Nurse Specialist, Practice Nurse (Smith, S., Campbell, N., 2004)

A shared-care service in diabetes was introduced in Dublin, Ireland in the late 1990's. Between 1998 and 1999, a local diabetes nurse specialist conducted meetings on diabetes care in general practice for primary care physicians and asked their participation in a diabetes shared-care project. Soon, a comprehensive shared-care program was developed, and involved the following:

- (i) participation by general practice physicians (GP's) and practice nurses in a six-week distance learning course on diabetes care,
- (ii) appointment of a community-based diabetes nurse specialist, and
- (iii) locally agreed-to clinical practice and referral guidelines.

In terms of patient relations, an annual diabetes review was performed by a specialist team at a diabetes out-patient clinic, and routine patient reviews were undertaken every three months by the GP and practice nurse. Additionally, a fast-track referral system was initiated by the primary care team as needed. Finally, patient record cards were instituted to monitor progress on care targets and communicate such across the primary-secondary interface. This shared-care initiative combined joint professional development with evolving technology to support care for diabetic patients in the primary care setting.

General Practitioner, Nurse Specialist and Multidisciplinary Team (Vrijhoef, H., et al, 2002)

As part of another shared-care program for diabetes in the Netherlands, the general practice physician refers patients with type 2 diabetes to a nurse specialist who provides regular patient consultations at the GP's practice. The nurse specialist cooperates closely with other providers in diabetes care and refers patients to the dietician, diabetes community nurse, podiatrist, ophthalmologist or endocrinologist, as required. The principal role of the nurse specialist is to direct patient care, coordinate and organize care, and educate patients and other providers on diabetes care. The role of the GP is confined to performing one annual consultation, being available for demanding or irregular

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<sup>1</sup> Please note that blurring of boundaries exists between categories: models principally based in one sector (e.g. primary care) may involve aspects of other sectors (i.e., secondary or community care).

cases, and maintaining overall responsibility for the management of diabetes care. Finally, an endocrinologist serves as a consultant in diabetes care to both the nurse specialist and GP. Practice guidelines developed by the Dutch College of General Practice Physicians on the management of type 2 diabetes mellitus are used as a reference for a jointly formulated protocol in which tasks, activities and responsibilities of all care providers, as well as their interrelations, are fully defined.

Mental Health Worker, General Practitioner and Community (Malcolm, H., 2002)

In addressing the need for mental health services related to suicide prevention in rural Australia, a shared-care model, led by a mental health worker (psychiatric nurse), was developed to work locally with general practitioners, patients and the community. Patients at risk of suicide could self-refer (the service was widely advertised as a “free counseling service” in local media), or be referred by physicians, other health professionals or family. The mental health worker conducted home and hospital-based counseling, led regular tutorials and case conferences with the GP’s, liaised with psychiatrists in the larger urban center, and spoke to local community agencies about mental health issues. Through this shared-care arrangement, mental health services for people in rural areas were made available where there was no previous support.

General Practitioner, Obstetrician and Midwife (Lombardo, M., Golding, G., 2003)

The state of Victoria, Australia developed a shared-care antenatal program. Jointly developed by GP’s, midwives and obstetricians, the program sought to improve standards of maternity care. Women could choose from among the following options: shared care between the hospital outpatient department and the GP, midwife, or family birthing unit midwife or consultant only care (in high-risk pregnancies). The decision to enter the shared-care program was a mutual decision made by the woman, her GP and the obstetrician, all of whom share responsibility. All providers were required to participate in educational meetings on antenatal and postnatal care, including postnatal depression. The program was characterized by a patient held record designed to aid communication between the GP, patient, midwife and hospital clinic staff. Practice guidelines were developed for the provision of shared maternity care between the hospital, GP’s and midwives. Additionally, regular meetings of midwives, obstetricians and hospital personnel were held to “iron out” any difficulties and to make appropriate changes to the protocols. Overall, this shared-care arrangement in antenatal care was well accepted by health providers and patients alike.

**(b) Shared-Care Models in Secondary Care**

Specialist Team and General Practitioner (Hobbs, H., Wilson, J., 2004)

A shared-care initiative for psychosis in Hamilton, Ontario, the “Alumni Program, involved a specialist psychiatric team and family practitioners. The program sought to provide continuity of care to patients and their families over the entire course of mental illness. This was accomplished by delivering the appropriate intensity of psychiatric treatment for acutely ill patients when they required it most, and a less-intensive level of care when symptoms were less severe.

The specialist psychiatric team was principally responsible for client care during the early stages of acute care and subsequent phases of rehabilitation. However, the locus of aftercare gradually shifted back to the family practitioner as client treatment and rehabilitation objectives were met. Clients moved in a goal-directed manner, at their own pace, to the point of “graduation” from specialty clinic involvement to care provided by their primary care physician. Alumni Program clients attended the clinic for check-up appointments every 6 to 12 months, as negotiated. Between visits, the specialist treatment team was available as psychiatric “backup” for the family physician, if a crisis occurred. If clients had an acute problem, they were rapidly accessed back to the acute care stream and provided care by the same treatment team. Clients and their families were welcomed to return to the psychiatric specialty clinic for renewed treatment as the need arises. This program is characterized by appropriately targeting care within the context of strong and enduring partnerships among the parties involved.

#### Hospital and Specialist Clinic (White, J., 2001)

In London, England, shared care is provided for children with HIV infection to improve their quality of life. Care is shared between a specialist center in a large urban center and hospitals in smaller, rural centers. The specialist clinic shares its knowledge and expertise with local providers, while local providers identify the most approach range of services in the community to meet patient needs. The keys to success of this shared-care model were robust lines of communication between the specialist clinic, local hospitals and community groups committed to improving care for children patients and their families.

#### Nurses In-Hospital (Webber, S., Wills, T., 1997)

An initiative in England encourages registered nurses (RNs) and registered mental health nurses (RMNs) to share knowledge and collaborate in the care of hospitalized patients who have both mental and physical problems. Mental health and general care wards are jointly managed, allowing greater collaboration between RMNs and RNs, and each ward undertakes an interdisciplinary nursing assessment. Joint training and staff exchanges are used to encourage this shared-care arrangement. Focus is directed on how collaboration between RMNs and RNs leads to valuing the unique skills, strengths and approaches of each discipline. This new system allows patients with mental health problems to remain in familiar environments. As a result, patients have reduced cognitive confusion, and an increased level of personal comfort, as they receive nursing care from familiar faces.

### **(c) Shared-Care Models in the Community**

#### Nurse and Family (Lindsay, G., et al, 1998) and (Schirm, V., 1998)

Lindsay, et al, describe a nurse-led, community-based shared-care arrangement that was designed in a Scottish community for patients with heart disease while they were on a waiting list for coronary artery bypass surgery. The intervention centered on monthly family-centered health education and counseling sessions.

Nurses worked with patients and their families to develop a counseling plan based on individual patient need. Patient counseling sessions were carried out alternately by a home care nurse in the patient's home and a primary practice nurse in the practice clinic. This shared-care arrangement, with a focus on home care, prepared patients for subsequent admission to hospital.

Schirm describes another home based share-care arrangement that was highlighted in a US study with functionally impaired elderly who lived in their own homes. Elderly patients received care with personal needs and daily activities from both family members (informal caregiver) and professional nurses. Key to this arrangement was the need for functional assessment to determine if the elderly person could be feasibly maintained at home. Once this was determined, care tasks were delineated to those which family could assist with and those which required skilled nursing care. Key to this program was shared learnings between family members and health practitioners which resulted in the ability of elderly loved ones to remain at home.

#### Between Agencies (Sweeney, P., Kisely, S., 2003)

Over the past decade, Australia (and other countries worldwide) have drifted away from secondary and tertiary models of care in mental health. The state of Western Australian conducted an assessment of barriers to mental health management and identified the following: confusion about the role of mental health services, differences in working practices, and communication problems between services. As a result of these findings, mental health workers launched a multi-agency shared-care program to improve care delivery. They believed that closer alliances between agencies within a shared-care model would contribute to a greater understanding of each agency's services, clarify professional roles within agencies, reduce the community perception that mental health services were isolated from other services, and lead to greater acceptance and understanding of mental health amongst the community-at-large. This shared-care arrangement rested on a Memorandum of Understanding (MoU) to facilitate improved communication between agencies with respect to referral, feedback, team approaches to assessment, and issues of privacy and confidentiality.

#### Home and Hospice (Andrews, F., Hood, P., 2003)

A program in Great Britain illustrates a multidisciplinary approach to shared care for children requiring palliative care and their families. A hospice team works in partnership with other professionals giving support and help to the family in both the hospice and within their own home. When a child is referred to the Hospice at Home Team, the needs of the child and family are assessed by the staff and strategies are implemented to meet those needs. The team is able to provide teaching and support for family members to undertake care tasks for which they have no previous knowledge or experience. Key principles that underlie this shared-care program include: respect among health professionals of individual caring roles; a family-centered approach that fully engages parents and other family members; a whole-person approach that considers physical, social, emotional and spiritual needs of the child and family, and effective and ongoing communication. On the last point, communication and liaison between

professionals and family was critical to the provision of flexible and sensitive care relevant to families who participated in this initiative.

**(d) Shared-Care in Mental Health in Canada**

A significant amount of work in shared care has taken place in the mental health field in Canada. Across the country, communities and provinces are exploring ways to incorporate shared care in their service planning. The emphasis is on strengthening links between mental health and primary care services.

In 1996, a Collaborative Working Group on Shared Mental Health Care, a joint initiative of the Canadian Psychiatric Association and the College of Family Physician of Canada produced a document entitled, *Shared Mental Health Care in Canada: A Compendium of Current Projects*, (Kates, N., Ackerman, S., eds.), a compilation of examples of shared-care mental projects in Canada. It provides an extensive overview of shared-care initiatives related to organizational collaboration, clinical collaboration and improved access, mental health services in primary care, underserved areas, collaborative progress to meet the needs of specific populations, and training and continuing education programs. Additionally, the compendium offers examples of program evaluation, epidemiological studies, needs assessments and research projects aimed at evaluating current shared-care models. For the purposes of this report, three examples of shared-cared initiatives in mental health are highlighted here: two are based in primary care and one is centered in the community.

Winnipeg Shared-Care Project (Kates, N., Ackerman, S., eds.)

This shared-care initiative is centered in an inner city community clinic staffed by 6 to 8 family physicians, social workers, nurses, dietitians and outreach workers. A psychiatrist provides consultation to the physicians for three hours bi-weekly. On the mornings when the psychiatrist visits, two new consults are seen and one follow-up appointment is scheduled. Patients are seen alone by the psychiatrist. Consultations are only taken from the family physicians on site. Teaching and case discussions are provided to the family physicians by the psychiatrist on an informal basis, often during patient no-shows. A formal written consult with psychiatric findings, diagnosis and suggestion for treatment is left on the chart. On some occasions, especially if the case is unusual or complex, the consultation is discussed with the family physician. Approximately half of all patients are followed by the psychiatrist for a short period of time. This initiative demonstrates that the model of service provided by psychiatry must be tailored to the unique needs of the practice of the primary care clinic.

Shared Mental Health Care in Nova Scotia (Kates, N., Ackerman, S., eds.)

In Nova Scotia, each primary health center has a mental health worker (predominately registered nurses or MSWs) who is an integral part of the primary care team. The mental health worker will see any patient deemed by primary care staff to require mental health assessment and/or support. Interventions are generally short term with an emphasis on providing access to appropriate community supports. A consulting psychiatrist visits each centre for one half-day per week and is available in times of crises, to provide consultations and for case

discussions. Consulting psychiatrists also take part in education activities (informal and formal) and provide backup support for the mental health workers. Primary care staff members maintain pivotal roles in patient care, providing ongoing treatment to patients along with consultation and support to mental health staff. The program also offers Family Medicine and Psychiatry residents from Dalhousie University a chance to develop skills relevant to future practice and to see first-hand the benefits of collaboration between primary care and mental health services.

Calgary Urban Project Society (CUPS) Shared-Care Mental Health Program  
(Kates, N., Ackerman, S., eds.)

This shared-care arrangement comprised a physician, nurse practitioner, registered nurse, licensed practical nurse, mental health nurse, consulting psychiatrist and social worker. The mandate of the Calgary Urban Project Society Shared Mental Health Team is to provide mental health services to people suffering from mental illness among the homeless population living in Calgary's inner city. Multi-level health services are provided to four sets of clients: (i) clients requiring transient care (individuals who have access to mental health services elsewhere but require assistance with documentation and referral), (ii) clients requiring primary care (individuals seeing a regular, continuous source of primary health and mental health care), (iii) clients in need of selected care (individuals who require specialty care), and (iv) clients requiring outreach (at-risk individuals living in inner city shelters). Program emphasis is on working collaboratively to provide holistic care for this population group. At a broader level, this shared care-initiative seeks to improve access to care and better service coordination at the health authority and provincial levels.

## 1.2 FINDINGS ACROSS MODELS

The examples discussed above, demonstrate that shared-care models both differ along various dimensions as well as share common elements. These are summarized below.

### (a) Variations in Shared Care

Shared-care models vary across the *health continuum*. They can be (principally) based in primary care, secondary care or in the community; and often, involve more than one sector.

Share care models vary in *complexity*. Some are simple in nature, involving, for example, a primary care physician and nurse in the GP practice setting. Others can be very complex, involving multiple health providers from various disciplines, a variety of agencies, and all levels of the health system.

Similarly, shared-care models vary by "*lead*," that is, the person who initiates and/or assumes responsibility for the shared-care arrangement. Examples offered in this report show that the lead role may be assumed by a general practice physician, specialist, or specialist team. In the event of shared-care arrangements for specific diseases, nurse specialists (such as a diabetes nurse specialist or psychiatric nurse) commonly take the lead role.

Shared-care models vary by **disease state or health condition**. This report includes examples of shared care from diabetes care, maternity care, HIV infection, cardiovascular disease, functionally impaired elderly, palliative care, and mental health problems such as suicide, psychoses, and mental health issues among homeless people.

**(b) Common Elements in Shared Care**

Shared-care models also display a number of characteristics in common with respect to inter-professional relations and patient management.

*Inter-Professional Relations:*

- Joint provision of clinical services by health providers from a variety of health disciplines.
- Shared responsibility for patient care by shared-care team members.
- Clear differentiation of roles among health providers which is typically outlined in a shared-practice guideline or memorandum of understanding.
- Regular face-to-face contact between shared-care providers.
- Commitment to regular, high quality communication and information exchange among all providers involved in patient care.
- Ongoing, collaborative professional education that seeks to increase understanding among shared-care team members of each other's professional skills, knowledge and abilities.
- Endorsement and support for shared-care approaches by healthcare leadership.

*Patient Management:*

- Development of a shared strategy for patient care that is based on explicit, individualized patient goals.
- Inclusion of patient and family in care planning and decision-making.
- A patient-centered focus that integrates aspects of patient self-management.
- Flexible working arrangements that ensure coverage of patient care under all circumstances, including when key members are absent.
- Methods to ensure confidentiality of patient records and medical history.

**(c) Benefits and Challenges Associated with Shared Care**

The increased interest in shared-care models in BC and elsewhere is attributable to the benefits associated with this approach; keeping in mind that new approaches to health care delivery often face challenges or barriers that need to be addressed if they are to succeed. Benefits and challenges associated with shared-care models which emerged from the review of the literature are summarized below.

Benefits	Challenges
<ul style="list-style-type: none"><li>▪ Reduced fragmentation of care; that is, a better integrated, more continuous <i>system</i> of care</li><li>▪ More efficient use of scarce resources and related cost efficiencies</li><li>▪ Strengthened links between primary, secondary and tertiary sectors</li><li>▪ Improved working relationships between providers</li><li>▪ Improved satisfaction among patients and providers</li><li>▪ Increased patient access to care</li></ul>	<ul style="list-style-type: none"><li>▪ Power and status differences between health providers (e.g. between nurses and GP's, or GP's and medical specialists)</li><li>▪ Professional territorialism and perceived threat to professional autonomy and/or scope of practice</li><li>▪ Current funding arrangements that require the GP to see each patient in order to receive service payment/reimbursement</li><li>▪ Dedicated time and personnel to implement and manage shared-care</li><li>▪ Limited methods to measure shared care</li></ul>

**(d) Requirements for Shared Care**

Finally, the literature reveals that, for shared care to flourish, several factors need to be in place. There needs to be an emphasis on shared-care methodologies in the training of future health practitioners. They need to be taught and shown how to incorporate shared-care principles into daily practice. Furthermore, shared-care initiatives need to be based on best practices from all the health-related disciplines that are part of the shared-care mix. This requires ongoing and rigorous evaluation of shared-care approaches to determine what does and does not work. Then, "lessons learned" need to be actively disseminated to all parties involved to increase the success potential of shared-care initiatives. Finally, shared-care approaches need to be supported at all levels of the health care system. This includes financial and infrastructure support from the federal government, provincial ministries and health authorities.

**1.3 NAVIGATION**

"Navigation" is a construct associated with shared care." While it is not as richly displayed in the published literature as shared care, navigation generally refers to negotiating a path through the health system. Linked to navigation is the term "navigator," which typically refers to a health care professional charged with facilitating the coordination and integration of patient services. Other terms used to communicate the navigator role are primary care liaison, general

practitioner liaison, liaison worker, case manager and community monitor. The following describes case examples of navigation/navigator, how it is defined in the literature, and how it relates to shared care.

#### Navigator in Cancer Screening (Hiatt, R., et al, 2001)

A study to examine interventions to enhance community-based cancer screening for underserved (mainly foreign born) women in California included a “patient navigator,” who identified women from health clinics and county hospitals with an abnormal mammogram or Pap cervical smear in the past year. The patient navigator assisted these women with completion of their diagnosis and treatment plan. The most valuable aspect of the navigator-patient relationship was support from a professional who understood the health system during a time when the patient was both physically and emotionally challenged. This study points to the potential utility of navigators as a mechanism to improve patient care, especially among people women who require additional support (e.g. those who are new to the country or are not fully literate) and are often left alone to negotiate the health care system.

#### Navigator For the Medically Uninsured/Underinsured (Lemak, C., et al, 2004)

The Miami-Dade Community Access Program was launched in 2000 to develop integrated, community-wide systems for people without health insurance and people who were underinsured, with the overall vision of, “providing better health for more people for less cost.” Central to this initiative was the creation of a new interorganizational role, the “health navigator,” who was responsible for communication and coordination of services for this population. The health navigator worked to increase access to care among people who were otherwise disenfranchised. Core responsibilities of the navigator included: identifying community clinics for potential client referral, determining how appointment setting and walk-in systems worked in each clinic, addressing patient eligibility issues with clinic staff, directing patients to appropriate locations that could serve them, and following up with both the patient and the clinic. The navigator was viewed as an “integration mechanism” who helped to overcome barriers to care and coordinate services for the medically uninsured who had limited previous experience with a complex health system.

#### Navigator in Substance Abuse (King, L., 1997) and (Dey, P., et al, 2002)

King (1997) describes a project in England demonstrated the concept of navigator using a “structured GP liaison” for substance misuse. A client-led, community and residential service for people with drug and/or alcohol-related problems hired GP liaison nurses to develop links with local GP’s and primary health staff, build partnerships for effective health care, increase GP confidence and commitment to work with this group, develop effective and appropriate communication channels, and promote the concept of shared care. To meet these goals, the GP liaisons visited local GP’s and practice staff to describe their roles and discuss any difficulties the primary team may have working with this patient group. They also encouraged GP’s to make contact with them (the GP liaisons) at any time, sent information posters to all GP practices in the community, and developed a guide for GP’s on how to deal with the needs of this population. Key to the program were consistent positive messaging and promoting flexibility in approach so that the shared-care arrangement could effectively accommodate people with substance abuse problems.

Dey, et al (2002) describe another initiative in substance abuse demonstrated that a “primary health care liaison worker” significantly increased the number of patients in shared-care arrangements. This was brought about by the following: meetings between liaison workers, GP and other members of the primary health care team; shared review of client drug use problems; and continuing support and training for by liaison workers on drug-related issues. This initiative demonstrated that liaison workers who took on a navigation role facilitated shared care amongst substance abuse problems which did not exist before.

#### Navigator in Mental Health (McCann, T., Baker, H., 2003)

In Australia, community mental health nurses and general practitioners share a pivotal role in the provision of mental health care in the community. A recent study examined two models of GP-nurse collaboration with clients experiencing an early episode of psychotic illness: the Shared Care model and the Specialist Liaison model.

In the Shared Care model, nurses maintained close contact with GP’s throughout the episode of acute care. In the Specialist Liaison model, the community mental health team assumed overall responsibility for care and treatment throughout the acute episode of illness; contact with GP’s throughout the episode of care was, at best, intermittent. Shared care was characterized by two-way communication between the nurse and GP, shared information and responsibility, good respect for and good understanding of respective roles, and a shared understanding of clients’ needs among all relevant primary care workers. Shared care supported both personal (individual level) and organizational (systems level) continuity of care.

Under the Specialist Liaison model, clients had tenuous links with GP’s and long periods of attachment to the case manager. Given that nurses had limited contact with GP’s, there was reduced opportunity to collaborate with physicians or other primary care providers. The Specialist Liaison model, therefore, was more consistent with personal continuity of care. Although personal continuity is highly valued by clients, there is no formal organization framework that supports the link between the nurse and the GP, leaving the goal of improved overall service coordination at risk of being achieved.

## **SECTION ONE: SUMMARY**

In closing, Section One sought to expand our understanding of shared care. It presented formal definitions of shared care and described the range of shared-care models in use today. Additionally, common elements, benefits, challenges and requirements associated with shared care were discussed. Finally, the role of navigation and its relationship to shared care was explored.

## Section Two - Shared Care Interviews with Healthcare Leaders in British Columbia

Section Two examines the following: shared-care activities currently underway or planned in BC, factors that encourage and challenge shared care, resource requirements for shared care, the potential of shared care to impact health system, provider and patient outcomes, and lessons learned that can inform future shared-care initiatives in BC.

This section is based on interviews with fifteen healthcare leaders with experience in shared care in BC. Interview participants were drawn from the Ministry of Health, Health Authorities, provincial agencies and hospitals. Interviewees spanned the continuum of care and represented health providers as well as individuals involved in health planning and policy.

Interviews were conducted by telephone during the month of February 2005. Each participant received a copy of the interview questions in advance of his or her scheduled interview. While all participants were encouraged to answer each question, some participants responded to less than the full slate of questions. Interviewees were assured that the information they provided would remain confidential, and that no individual or organization would be specifically identified in the findings. All interviews were audio-taped and transcribed to support subsequent data analysis and report writing.

This section presents the findings of the interviews. It is organized around the ten questions that comprised the interview guide. For each question, results are presented in ranked order; i.e., those items most frequently referred to by respondents are listed first, followed by items less frequently referenced. To further quantify the frequency of response, the number of respondents citing a particular item is noted in parenthesis following that item. To illustrate findings, direct or paraphrased respondent comments<sup>2</sup> are included throughout the section. Please note that the nature of the interview questions has resulted in some redundancy of response.

### 2.0 SHARED CARE DEFINED

#### Question 1: Based on your experience in health care, how would you define shared care?

Interview participants responded to this question in three ways, by (a) offering their own “formal definition,” (b) defining key features of shared care, and (c) describing the shared-care arrangements between parties involved.

#### (a) Definitions

Three respondents offered a formal definition of shared care.

*“Shared-care is allied health, specialists and other health care experts supporting the primary health care provider at the point of care.”*

*“Shared care is a distributed care model with co-management of patients.”*

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<sup>2</sup> Direct comments refer to exact quotations from interview participants; paraphrased comments have been adjusted to enhance meaning or reduce word volume.

*“Shared care is (characterized) by an independence of action whereby health providers take responsibility for their own scope of practice, but work together... to develop a more comprehensive and integrated journey of (patient) care.*

**(b) Key Features**

In their effort to further define shared care, interview participants shared their views on key characteristics of shared care: Reminder: Number in parenthesis represents the number of interviewees who cited a particular item.

*Shared Care:*

- Involves multiple health professions working in teams. (5)
- Works across the health continuum (i.e., primary, secondary, tertiary/acute care). (4)
- Is based on shared responsibility for patient care. (3)
- Is driven by joint decision making.
- Involves shared communication between health providers. (2)
- Increases access to care (e.g. specialist visit/consultation to GP's in rural or remote areas). (2)
- Involves clear definition of roles. (1)
- Requires mutual respect between healthcare providers. (1)
- Is patient focused. (1)

**(c) Shared-Care Arrangements**

Interviewees identified several ways that health professionals work together in shared care.

- |                                      |   |
|--------------------------------------|---|
| <i>GP - Specialist</i> (5):          | Family physicians working with one or more specialists.   |
| <i>GP - Health Care Team</i> (4):    | Family physicians working with other primary health care providers such as nurses, physiotherapists and dieticians.   |
| <i>Specialist - Team</i> (3):        | Specialists working with other primary health care providers.   |
| <i>Health Provider -Patient</i> (3): | Largely, reflected in the provision of self-management support.   |
| <i>Health Provider - Other</i> (3):  | Health providers working with non-health professionals (e.g. teachers), parents (especially with respect to health care for children), and community agencies (e.g. advocacy groups). |

It is interesting to note that “key features” and “shared-care arrangements” identified by interview participants here paralleled those uncovered in a review of the published literature which were set forth in Section One of this report.

## 2.1 CURRENT AND PLANNED INITIATIVES

### Question 2: What types of shared-care initiatives are currently underway or planned in your agency/Health Authority?

This question was not intended to illicit an exhaustive listing of shared-cared initiatives in BC. The extent of shared-care projects reported here reflects the size and nature of the interview sample. Ongoing and future shared-care initiatives are presented below. Shared-care activities that are provincial in scope are presented first, followed by shared-care initiatives in each of the health authorities.

#### (a) Provincial Shared-Care Initiatives

##### *BC Autism Network*

- The BC Autism Network is a collaborative effort between Sunny Hill Hospital, the Ministry of Health, the Ministry of Children and Family Development, and the Health Authorities.
- The objective of the network is to educate health providers on ways to access autism services in each Health Authority so that children in rural areas do not have to travel to a central, distant location.
- The network has developed guidelines and standards to ensure various health providers are using the same assessment tool to confirm the presence of autism and assess service requirements.

##### *Cardiac/Kidney/Diabetes Multi-Disease Clinic*

- The Provincial Renal Agency has partnered with various groups to support the development and evaluation of a multi-disease clinic for individuals with cardiac, kidney and diabetes conditions.
- The goal of the initiative is to determine the effectiveness of integrating clinical care as well as various organizational aspects of care delivery.

##### *Multi-Disciplinary Care for Patients with Kidney Disease*

- Similarly the Provincial Renal Agency worked together with others to support the development and evaluation of a vascular access clinic for clients with kidney disease.
- Rather than visiting health professionals individually, clients are seen by a nephrologist, surgeon, radiologist and nurse in a single setting.
- Similar to the above, the goal of the initiative is to determine the effectiveness of care integration.

##### *Care Outreach to Local Regions*

- The Children and Women's Health Center of British Columbia is working to enhance health care, primarily in oncology and cardiology, within local regions.
- Specialists travel to communities to consult and train primary care physicians, technical staff and nurses in these specialty areas.

#### *Provincial Child Network*

- The Children and Women's Health Center of British Columbia has established the Provincial Child Network. The Network brings together health professionals from across BC to coordinate and streamline standards and guidelines regarding children's access to secondary and tertiary care.

#### *Innovation Through Integrated Demonstration Projects*

- The BC Center for Disease Control funds demonstration projects attempting to integrate disease prevention and care.
- Many projects focus on Hepatitis since care access is limited in rural areas.
- Local communities use a community development model to engage physicians, nurse managers, and medical health officers to develop strategies to coordinate services for patients with Hepatitis B and C.

#### *Screening and Treatment of Gynecological Cancers*

- The BC Cancer Agency has established a shared-care model which encourages collaboration among health care professionals who work across the health continuum – from primary cancer screening to tertiary care.
- Initial gynecological cancer screening is conducted by family practitioners and results are read by specialists at the BC Cancer Agency. If remedial steps are necessary, cases are referred to specialist gynecologists.
- In the future, the BC Cancer Agency expects to apply this model to the treatment of muscle-skeletal sarcomas.

#### *Spectrum Clinic in Vancouver*

- Associated with the BC Centre for Excellence in HIV/AIDS, located at St. Paul's Hospital, the Spectrum Clinic is an AIDS clinic located in downtown Vancouver. Four general practitioners and a multi-disciplinary team (social worker and pharmacist) consult and provide care for approximately two-thirds of all HIV/AIDS patients in BC.

#### *Western Cardiac Network*

- Established by the Children and Women's Health Center of British Columbia, the Western Cardiac Network involves four western provinces.
- The network shares information and education on cardiac care via a steering committee which consists of cardiologists, cardiovascular surgeons, nurses and health educators.
- This initiative demonstrates shared-care that extends beyond provincial borders.

### **(b) Shared-Care Initiatives in the Health Authorities**

#### **(i) *Vancouver Coastal Health Authority***

##### *Geriatric Psychiatric Outreach Team*

- Mental health specialists in Vancouver Coastal Health Authority (VCH) work with primary health care providers from two community health centers as well

as the Children and Women's Health Center of British Columbia to share care for geriatric patients.

- The program ensures appropriate referral and access for geriatric patients to mental health services. It also provides a training/mentoring program for physicians to increase their understanding of mental health issues and conditions.

#### *Mental Health Network at UBC*

- The UBC Mental Health Network has an initiative planned for the future which aims to increase capacity among primary care physicians (at the point of care) to address mental health issues. Consultation support is provided by mental health experts.
- This work builds on practice guidelines developed as part of the Vancouver Island Health Authority Depression Collaborative.

#### *Primary Health Care Networks*

- The Vancouver Coastal Health Authority is working to develop a more comprehensive care network across the health continuum. Its initial focus is the Family Practice Network.
- A core support group works with 28 practice teams, most of which are participating in structured collaboratives. They strive for practice improvement at the point of care which will lead to improved health outcomes, as well as provide learnings to advance other shared-care initiatives.
- The Chronic Care Model serves as the change management framework.
- The Primary Health Care Networks have produced several documents to create the readiness to move forward with shared care, including: the VCHA Primary Health Care Information Technology Strategy and Primary Health Care Network Strategic Plan.

#### *South Community Birth Program*

- The South Community Birth Program is a maternity care program dedicated to meeting the needs of Vancouver's low-risk childbearing population.
- Family physicians, midwives, doulas/birthing assistants, and a community health nurse work in a community setting to provide prenatal care for women which includes: prenatal assessment, education and increasing access to community support.

#### *Ravensong Teen Pregnancy Program*

- Ravensong is a community-based teen pregnancy program supported by a multi-disciplinary team of health care providers. An obstetrician, family physicians, dieticians, social workers, community health nurses and doulas work together in a community setting to provide services for teens facing pregnancy.

## **(ii) Fraser Health Authority**

### *Mental Health Shared-Care Initiative*

- Fraser Health Authority's Mental Health Shared-Care Initiative is characterized by a collaborative working relationship between a mental health team (psychiatrist and mental health worker) and general practitioners. The mental health team meets with family physicians, in the physician's office, to provide treatment and support for clients who are severely depressed.

### *Aggasiz Community Health Center*

- The Aggasiz Community Health Center reflects a shared-care model where primary healthcare providers - family practitioners, a public health nurse and dietitian – work together with patients for improved overall health.
- In the future, the health center expects to engage in a shared-care arrangement with the BC NurseLine to increase access to pharmacy support.

## **(iii) Northern Health Authority**

### *General Practitioner-Specialist Collaboration*

- General Practitioners with special training in mental health, work with specialist psychiatrists, to deliver care to clients in northern rural communities.
- General practitioners receive support by telephone from an outreach team of specialists in geriatric psychiatry and geriatric medicine based in Vancouver. In addition, specialists travel from Vancouver to various northern communities twice a year, to provide education and support to local physicians.
- This model is also being applied in oncology where a Vancouver-based oncologist consults an internist specializing in oncology in one northern community. In the future, this program may be expanded to include HIV-AIDS.
- Future consideration is also been given to instituting chronic disease clinics where specialist nurses provide consultation to nurses who have limited knowledge or experience in the management of chronic conditions.

## **(iv) Vancouver Island Health Authority (VIHA)**

### *Primary Health Care Transition Fund Project for Chronic Disease Management*

- Thirty physicians are participating in a chronic disease management program, supported by the Primary Health Care Transition Fund, which provides multidisciplinary, collaborative care to patients with chronic illnesses.
- Physicians work with other primary care practitioners such as nurses, pharmacists and dieticians; they also involve medical office assistants to provide information and coordination support.
- Specialists are also engaged. With respect to the diabetes initiative, an endocrinologist participates in the management of diabetic patients along side family physicians, in the physician office setting.
- In the near future, this project is expected to expand from the current thirty to seventy physicians.

### *Chronic Depression Initiative*

- VIHA is collaborating with physicians in a mental health initiative focused primarily on depression.
- VIHA compensates psychiatrists to work with general practice physicians. In a series of four sessions, psychiatrists provide GP's information on depression diagnosis, medication issues and patient self-management.
- In the future, VIHA hopes to extend the shared-care model beyond depression to other mental health conditions such as anxiety disorders, personality disorders and addiction problems.

### *Psychiatrist-Physician Collaboration*

- At Saanich Peninsula Hospital, a psychiatrist provides consultation services to family physicians on a "drop-in" basis for one-half a day, every two weeks.

## **(v) Interior Health Authority**

Five models of shared care networks are underway in Interior Health.

### *Primary Health Care Networks*

- These networks create a community-based, interdisciplinary healthcare team and provide a range of services at a single site.
- There are currently 10 sites in operation, or under consideration, including: Chase & District Health Centre, Logan Lake PHC Centre, Kamloops Downtown Health Centre, Enderby Community Health Centre, Slocan Community Health Centre (New Denver), Victorian Community Health Centre of Kaslo, Kimberley Health Centre, Sparwood Health Care Centre, PHC Organization for Seniors in Ponderosa Lodge (Kamloops), and Ski Resort Communities PHC Project (Sun Valley).

### *Chronic Disease Health Improvement Networks*

- These networks are characterized by a multiple disease orientation (holistic approach), an interdisciplinary team, and the provision of patient education while promoting self-management skills.
- There are currently six Chronic Disease Health Improvement Networks, at different stages of development, throughout Interior Health, including: Cardiovascular Risk Reduction Clinic in Alumnae Tower (Kamloops), Vernon Health Improvement Network, COACH Cardiovascular Risk Factor Reduction Program (Kelowna), Penticton Integrated Health Clinic, Kootenay Boundary Chronic Disease Health Improvement Network (Nelson), and East Kootenay Health Improvement Network (Cranbrook).

### *Primary Health Care Intersectoral Network*

- This network is a collaboration to provide co-located service delivery to the community.
- One of these networks currently exists – the Boundary Integrated Service Model which involves collaboration between: the Ministry of Health, Ministry of Education, Ministry of Children and Family Development, and non-

governmental organizations. It provides service delivery for children and families through seven Family Resource Centres in the area.

#### *Primary Health Care Shared-Care Networks*

- These networks facilitate knowledge brokering between more specialized services and GP's. Protocols address: increased scope of practice for GP's, premise for consults, and when patients should be referred to specialized service.
- Four shared-care networks are currently underway across Interior Health in the areas of mental health and addictions, obstetrics and rheumatoid arthritis.

#### *Integrated Care Networks*

- These networks are focused on providing seamless care and timely access to services across all sectors of the health care continuum.
- They take a systematic and cooperative approach for managing access, risk, and delivery of care
- Clinical, operational, and information strategies are maximized by case managers or liaison workers to navigate and follow patients across all access points in the continuum of care.
- The networks are recruiting care navigators from a variety of disciplines including, for example, social work, nursing, respiratory therapy and occupational therapy.

### **(c) Summary Statement**

This section provided a cursory review of ongoing and planned shared-care initiatives in BC. It demonstrated significant variation in scope and approach. We see, for example, shared-care projects that varied across the **health continuum**, from primary to secondary to tertiary care. Projects varied also by **lead**, i.e. the health provider/group that initiated and/or assumed responsibility for the shared-care arrangement. Additionally, shared-care initiatives differed by degree of **complexity**; some are simple in nature, involving a family physician and nurse in the GP practice setting, while others involved multiple providers, representing various disciplines, from agencies across the health system. Finally, shared-care initiatives varied by **disease state or health condition** including, mental health conditions, chronic diseases, infectious diseases, cancer and prenatal care.

It is interesting to note that the variation in shared-care approaches identified by interview participants reflect similar findings that emerged from a review of the published literature presented in Section One of this report.

## 2.2 FACILITATING FACTORS

### Question 3: Overall, what factors or conditions facilitate or encourage shared care?

Findings are presented as a summary statement, followed by a fuller accounting, often with respondent comments in a table format.

**(a) Summary Statement**

Interview participants were asked to identify factors and conditions that support or encourage shared care. “Alignment of policies and payments” was the most frequently cited factor, followed by “focus on quality improvement,” “professional attitude,” “defined roles and responsibilities,” “information technology,” “patient characteristics,” “physician endorsement” and “professional education.”

**(b) Presentation of Findings**

Table 1 provides more information on participant responses related to these factors.

**Table 1: Factors that Facilitate Shared Care**

Frequency	Factor	Description / comments
Most frequently cited  ↓  ↓  ↓	Align payment with shared-care practices(10)	<ul style="list-style-type: none"> <li>▪ Respondents believed that shared care requires an alignment of payment and policies.</li> <li>▪ This includes adjusting MSP payment policies for physicians: <i>“We need policy level support for shared care so that there is compensation through MSP or some alternative funding for physicians to work in a different model.”</i></li> <li>▪ Shared care can be further encouraged by accommodation for specialist participation: <i>“Specialists are funded largely by fee-for-service... we need to have a look at what incentives need to be there for them to get involved.”</i></li> <li>▪ Finally, respondents identified a need to develop payment policy that supports allied health professionals within a shared-care model.</li> </ul>
	Focus on quality improvement (7)	<ul style="list-style-type: none"> <li>▪ Respondents believed that shared care is facilitated by the adoption of best practices and a commitment to quality improvement: <i>“We need to get people involved in initiatives that look at improvement across the continuum.”</i></li> <li>▪ Respondents also identified a need for tested/established shared-care models: <i>“We need to ensure that there are models to support what we are doing in shared care.”</i></li> <li>▪ Additionally, embedding shared care within clinical practice guidelines was seen as a way to facilitate its implementation.</li> </ul>
	Professional attitude (6)	<ul style="list-style-type: none"> <li>▪ Respondents acknowledged the role of health providers’ attitudes in shared care. This included</li> </ul>

Frequency	Factor	Description / comments
↓		<p>provider willingness to work collaboratively toward common, global interests: <i>"It works when there is a willingness to see a systems view, rather than 'this is my little world and my turf.'"</i></p> <ul style="list-style-type: none"> <li>▪ Shared care is also supported by health providers' willingness to be innovative: <i>"I think you need an engaged team who are ready to try different ways of supporting patients... you have to believe that you can work together in a different kind of relationship."</i></li> <li>▪ Additionally, respondents identified a need for mutual respect: <i>"For shared care, there has to be deep ingrained respect for the expertise of others."</i></li> </ul>
↓	Defined roles & responsibilities (3)	<ul style="list-style-type: none"> <li>▪ Clear definition of roles and responsibilities was identified as another factor that encouraged shared care.</li> <li>▪ Respondents recognized that shared care draws on the expertise of various providers and that understanding where one provider's scope of practice ends and another's begins is important in collaborative work: <i>"Who is doing what and who is responsible for what... and where are the boundaries... these are important issues."</i></li> </ul>
↓	Information technology (3)	<ul style="list-style-type: none"> <li>▪ Respondents identified shared communication &amp; information systems as a facilitating factor: <i>"I think it would be helpful for shared care if we had access to the same charts and documents so that the same message gets across to increase continuity of care."</i></li> </ul>
↓	Patient characteristic & experience (2)	<ul style="list-style-type: none"> <li>▪ Respondents associated the complexity of patient care, often associated with co-morbidities, with a shared-care approach: <i>"Complexity of patients and the need for complex care is driving this thing."</i></li> <li>▪ Additionally, understanding the patient experience and his/her journey through the health system further encourages shared care: <i>"We need to start thinking about the patient experience and doing things that match that."</i></li> </ul>
↓	Physician endorsement (2)	<ul style="list-style-type: none"> <li>▪ Respondents acknowledged that involving physicians promotes a shared-care approach: <i>"It is really a matter of getting the docs on board."</i></li> </ul>
↓	Professional education (2)	<ul style="list-style-type: none"> <li>▪ Ongoing professional development (e.g. Continuing Medical Education Credits [CME's] and inclusion of shared-care education in university curricula were identified by respondents as key to advancing shared care: <i>"There should be education about what shared care is...including within university systems."</i></li> </ul>
Least frequently cited		

Section One of this report documented “requirements for shared care” which surfaced from a review of the published literature (see page 9). Three of these (published) requirements were acknowledged by interview participants as a part of this exercise. These included:

- Adoption of incentives and payment schedules that support shared care.
- The need for best practice models to help practitioners incorporate shared care principles into daily practice.
- The need to incorporate shared-care methodologies in the training of health practitioners.

## 2.3 CHALLENGING FACTORS

### Question 4: Overall, what factors or conditions challenge or serve as barriers to shared care?

Respondents identified barriers to shared care that represented the “flip side” of the facilitating factors addressed above, including: existing professional education that does not emphasize collaboration among health disciplines, existing professional relationships and referral patterns between GP’s and specialists, and a fee-for-service payment method which requires the patient to be seen by the physician.

Additional barriers to shared care surfaced from participant interviews:

- A lack of leadership for shared care. *“There is no one who is ultimately saying that this is the direction we should be going.”*
- Orientation of the health system which is principally focused on acute care in the face of “a forever burgeoning group of chronic diseases.”
- Requirements for additional documentation and paper work associated with shared care.

## 2.4 MINISTRY AND HEALTH AUTHORITY SUPPORT FOR SHARED CARE

### Question 5: What support or resources for shared care could/should be provided by the (a) Ministry of Health and (b) Health Authorities?

Table 2 presents participants’ responses to this question. (Note: Some redundancy in response exists here; however, to ensure thoroughness in reporting, all participant responses are included below.)

**Table 2: Support for Shared Care**

Ministry of Health	Health Authorities
<ul style="list-style-type: none"> <li>▪ Support/fund information technology development, including electronic medical records, as well as standard setting for such (7)</li> <li>▪ Adjust physician payment mechanisms to correlate with their role in shared care (5)</li> </ul>	<p>Respondents identified some overlap in support that could be provided by the Ministry of Health and Health Authorities:</p> <ul style="list-style-type: none"> <li>▪ Support information technology (2)</li> </ul>

Ministry of Health	Health Authorities
<ul style="list-style-type: none"> <li>▪ Provide funding support for allied health professionals to work within a shared-care model (5)</li> <li>▪ Develop policy that signals shared care as a provincial priority, and make shared care a requirement in Health Authorities through performance agreements (4)</li> <li>▪ Develop a provincial framework to guide shared-care initiatives (2)</li> <li>▪ Evaluate shared-care projects and disseminate information on the challenges and positive impacts of this approach (2)</li> <li>▪ Increase access to data, especially patient information at the point of care (2)</li> <li>▪ Implement methods to share data across the health continuum (2)</li> <li>▪ Support quality improvement initiatives (1)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provide funding support for allied personnel who contribute to share care initiatives (2)</li> <li>▪ Provide access to data/patient information at point of care (1)</li> </ul> <p>Other ways to support shared-care at the Health Authority level were as follows:</p> <ul style="list-style-type: none"> <li>▪ Design and provide physical space that allows health providers to work in close proximity of each other (3)</li> <li>▪ Fund networking opportunities for people to meet to exchange information and lessons learned (2)</li> <li>▪ Foster an acceptance of shared-care approaches among Health Authority leadership (2)</li> <li>▪ Serve as a “knowledge broker” by reviewing and disseminating literature/research on shared care and its potential contributions to patient care (1)</li> <li>▪ Support innovative practices that support shared care, such as: patient group visits with interdisciplinary teams (1)</li> <li>▪ Build accountability into shared-care initiatives (1)</li> </ul>
<p>Beyond commenting on Health Authorities as a whole, interview participants suggested ways that the PHSA, specifically, could support shared-care in BC. These included the following:</p> <ul style="list-style-type: none"> <li>▪ Provide expertise to health authorities with respect to shared-care implementation and evaluation.</li> <li>▪ Fund methods to encourage specialists to share care with GP’s (e.g. cover the costs associated with site visits and teleconferencing).</li> <li>▪ Continue to explore the “patient navigator” function within primary health care as a way to advance shared care.</li> <li>▪ Contribute to information technology to support shared-care approaches.</li> <li>▪ Meet with Health Authority leaders to describe PHSA’s mandate and strategic priorities - relative to shared care - for the near and longer term.</li> </ul>	

## 2.5 OTHER SUPPORT AGENCIES

### Question 6: Are there any other partners who could/should provide support for shared care in this province?

Besides the Ministry of Health and Health Authorities, interviewees identified other groups that could support shared care.

**Table 3: Other Sources of Support**

Group / Agency	Support
Professional associations and governing bodies (5)	<ul style="list-style-type: none"> <li>▪ Engage British Columbia Medical Association (BCMA) and professional colleges to back changes in fee schedules that support share care</li> <li>▪ Adopt policies that encourage health providers work within a multidisciplinary, shared-care model</li> <li>▪ Provide professional development opportunities in shared care for allied health providers (e.g. CME sessions)</li> </ul>
Non-profit and community agencies (4)	<ul style="list-style-type: none"> <li>▪ Draw on community agencies that could contribute to shared-care practices (e.g. the Victoria Order of Nurses to assist patients in their transition from acute to home care)</li> <li>▪ Involve community-based groups in wellness and health promotions programs (e.g. community physical fitness programs)</li> </ul>
Other Ministries (2)	<ul style="list-style-type: none"> <li>▪ Especially support from the Ministry of Children and Family Development and Ministry of Education with respect to shared care for children</li> </ul>
Health Canada / Federal Agencies (2)	<ul style="list-style-type: none"> <li>▪ Support for shared-care information systems and knowledge transfer (e.g. InfoWay, a federally funded initiative for electronic health records)</li> </ul>
Specialty clinics (2)	<ul style="list-style-type: none"> <li>▪ Increase access to clinical expertise/ specialists by health practitioners based in rural and remote communities (e.g. via tele/video conferences)</li> </ul>
Unions (2)	<ul style="list-style-type: none"> <li>▪ Accommodate different types of work arrangements that enable providers to work within a shared-care model (e.g. through labor agreements)</li> </ul>
Consumers (2)	<ul style="list-style-type: none"> <li>▪ Solicit opinion on public expectations of the health system relative to shared care</li> </ul>
Industry / private sector (1)	<ul style="list-style-type: none"> <li>▪ Provide seed money for innovative shared- care initiatives</li> </ul>

## 2.6 IMPACT POTENTIAL

**Question 7:** On a scale of 1 (low) to 7 (high), how would you rank the potential of shared care to: (a) strengthen links along the health care continuum, (b) improve service coordination/integration, (c) yield cost savings/efficiencies to the health system, (d) enhance working relationships among health providers, (e) increase patient access to care, (f) improve health outcomes, (g) improve patient satisfaction, and (h) improve provider satisfaction?

Range and mean scores for each of these dimensions are offered below.

**(a) Strengthen links along the health continuum**

Range: 4 – 7

Mean: 6.1

Score: 1 to 7 (n=15)							
1	2	3	4	5	6	7	Mean
Number of Respondents Per Score							
			1	1	8	5	6.1

**(b) Improve service coordination/integration**

Range: 4 to 7

Mean: 5.9

Score: 1 to 7 (n=14)							
1	2	3	4	5	6	7	Mean
Number of Respondents Per Score							
			2	3	3	6	5.9

**(c) Yield cost savings/efficiencies to the health system**

Range: 2 to 7

Mean: 4.7

Score: 1 to 7 (n=15)							
1	2	3	4	5	6	7	Mean
Number of Respondents Per Score							
	2	2	3	2	4	2	4.7

**(d) Enhance working relationships among health providers**

Range: 4 to 7

Mean: 6.0

Score: 1 to 7 (n=15)							
1	2	3	4	5	6	7	Mean
Number of Respondents Per Score							
			1	3	6	5	6.0

**(e) Improve patient access to care**

Range: 5 to 7

Mean: 5.9

Score: 1 to 7 (n=15)							
1	2	3	4	5	6	7	Mean
Number of Respondents Per Score							
				5	6	4	5.9

**(f) Improve health outcomes**

Range: 5 to 7

Mean: 6.2

Score: 1 to 7 (n=15)							
1	2	3	4	5	6	7	Mean
Number of Respondents Per Score							
				3	6	6	6.2

**(g) Improve patient satisfaction**

Range: 4 to 7

Mean: 6.2

Score: 1 to 7 (n=15)							
1	2	3	4	5	6	7	Mean
Number of Respondents Per Score							
			2		6	7	6.2

**(h) Improve provider satisfaction**

Range: 4 to 7

Mean: 6.1

Score: 1 to 7 (n=15)							
1	2	3	4	5	6	7	Mean
Number of Respondents Per Score							
			1	3	5	6	6.1

## 2.7 EVIDENCE

### Question 8: In your view, what do you believe is required in the form of evidence to advance shared care in the province of BC?

Interview respondents demonstrated significant consensus on this issue. Overwhelmingly, they believed that evidence in the form of **measurable outcomes** needs to drive shared care. They supported outcome evaluation at three levels:

#### *Patient Level*

- Improved patient/clinical outcomes (4)
- Improved patient experience/satisfaction (2)
- Increased patient access to care (1)

#### *Provider Level*

- Improved provider/professional satisfaction (3)
- Greater alignment with best practices in shared care (2)
- Increased application of practice guidelines (1)

#### *Systems Level*

- Demonstrable cost savings and/or cost-efficiencies (2)
- Increased coordination between primary, secondary care and tertiary levels of care (2)
- Decreased health service utilization (i.e. hospital and emergency visits) (1)
- Payment schedules that encourage a shared-care approach (1)
- Increased capacity of the health system to manage chronic disease (1)

Additionally, interviewees encouraged a review of shared-care approaches in jurisdictions worldwide in order to draw on lessons learned from the international experience. One respondent suggested a “*shared-care repository*” for BC, where “*made in BC models could be registered and made available for others to access.*” One respondent believed that enough evidence currently exists in support of shared care and encouraged providers to move into action and “*just do it.*”

## 2.8 LESSONS LEARNED

### **Question 9: Based on your experience with shared care, what lessons have you learned that you would like to convey to others?**

Several “lessons learned” were identified by interview participants

- Identify and engage champions to lead and “spread” shared-care initiatives: “*I would take physician champions or nurse champions or pharmacy champions and get them to sell it to others.*” (4)
- Define roles and responsibilities for partners in shared care, so that each partner/discipline understands and respects the contribution of others: “*You need to define the boundaries in this new way of working.*” (4)
- Establish sound communication and information systems that ensure easy and regular flow of information. Computerized/electronic medical records and patient registries were most often identified. (3)
- Start from a clear understanding of what shared care is and draw on an established framework to guide shared-care initiatives. Participants offered the Expanded Chronic Care Model as a foundation for shared-care work. (3)
- Be patient, recognize that shared care takes time, and celebrate small successes as you go along: “*I think the lesson is that it is not easy.... It takes time to learn how to do shared care properly and for people to be comfortable with that way of working.*” (3)
- Align payment with shared care practices and processes: “*The budgeting has to be set up in a way that allows various groups to work in partnership.*” (2)
- Strive for co-location where health practitioners are able to work in close proximity of each other: “*We need group practice with co-located care to make shared care really work.*” (2)
- Provide support to health authorities to design and implement shared-care projects. (2)
- Institute sound evaluation methods to monitor and track the challenges and progress of shared-care initiatives: “*Have an evaluation of the shared-care project.... how it worked and what could be done better the next time.*” (2)
- Build interdisciplinary teams that are grounded in cooperation versus competition.” “*We need to avoid competition.... We have to work together to enhance care.*” (1)

## 2.9 FINAL COMMENTS

### Question 10: In closing, do you have any final thoughts or comments related to shared care that you would like to convey?

Participants offered the following final thoughts:

*“I think this work is absolutely crucial.”*

*“Shared care is not simply a way to get a quick consultation from a specialist to a general practice office.... I think that the main benefit of shared care between primary care and specialist is building the capacity of family doctors.....and building capacity in the primary health care sector. “*

*“I think it is important for PHSA to decide that they are facilitating the implementation of shared-care models..... PHSA should be the inventory control of what share care initiatives are underway, what is working and what is not, and helping people to share the information and the tools.”*

*“Good luck!”*

## SECTION TWO: SUMMARY

In closing, Section Two summarized the results of interviews with healthcare leaders with experience in shared care in British Columbia. It presented information on shared-care activities that are currently underway or planned for the future. It considered factors and conditions that both encouraged and challenged shared-care. It identified resource requirements for shared care. Additionally, this section examined the potential of shared care to positively impact health system, health provider and patient outcomes. Section Two closed with participant views related to the evidence required to move forward with shared care and lessons learned to inform shared-care initiatives in the future.

## Section Three - Tools to Support Shared Care

Section Three reports on various tools to support the development, implementation, management and evaluation of shared care.

Peer-reviewed articles in academic journals were reviewed to identify tools to facilitate shared care arrangements. Article abstracts that cross referenced “tools” with “shared care” were extracted from the following health information databases: the Cumulative Index to Nursing & Allied Health Literature (CINAHL), MEDLINE, Health Reference Center-Academic, and PsychINFO, from the period 1990 to present. Additionally, people who were interviewed for the second phase of this initiative (BC health leaders in shared care) were asked to forward any tools they were using or had access to. Finally, a search of the Internet was conducted to uncover additional information on shared care tools. It is important to note that the literature and Internet search did not seek clinical tools outside the context of shared care; rather, only those tools directly linked to shared care in the literature “qualified” for inclusion into this report.

The search for information on shared care tools revealed a selection of tools which can be grouped into six broad categories. These include: information sharing systems, communications platforms, mapping, guidelines, protocols, community resources, and quality improvement processes. Examples of a wide range of tools, which vary in scope and complexity, and come from jurisdictions around the world, are offered in the pages that follow.

### 3.0 INFORMATION SHARING SYSTEMS

When care is jointly provided by health providers from a variety of professional disciplines, sharing information becomes an important function. Information sharing systems can take the form of (a) shared care records, (b) structured shared care letters, and (c) physician information packages.

#### (a) Shared Care Records

Typically, shared care records are small, hand-held documents that summarize key patient health and health service information. The record is often maintained by the patient who takes it along to health provider appointments, where it is routinely updated. Shared care records are commonplace for both adult and child patients (managed by the parent). Two examples of shared care records are offered below.

##### Shared Care Records in Mental Health (Essex, B., et al, 1999)

- A study in England developed and evaluated a record of shared care to be held by the patient which was designed to increase the effectiveness of long-term care of patients with severe mental illness. Evaluation questionnaires were completed by medical staff, community psychiatric nurses, and patients. Patients were drawn from general practices, a psychiatric outpatient clinic, and a mental health resource centre.
- Information contained in patients’ shared care record included: (i) patient name, address, telephone number, next of kin, GP, psychiatrist, community psychiatric nurse, and social worker; (ii) the psychiatric and other relevant diagnoses, (iii) medications, (iv) specific patient services such as

rehabilitation, day centre or occupational therapy; (v) patient information related to who is caring for him or her, when to worry about the illness, what to do, and who else might help; (vi) observations made at follow-up; and (vii) the patient's own observations.

- Patients found the shared care records very acceptable and were enthusiastic about their use.

*"I can see the pattern of treatment, and how I am doing over time... and, my doctors take what I say seriously, and write it down."*

They saw the record as a way to track their own experience. They valued being consulted about what was recorded and found the record of their treatment and progress useful. Patients also thought that they were in a better position to "challenge" or question their physician. As a consequence, patient self-management skills were encouraged and reinforced.

- At the provider level, communication among health staff was greatly improved by the shared care record, and it facilitated the identification of potentially dangerous drug interactions.
- Overall, shared care records were accepted by patients with severe mental illnesses, increased patient autonomy, and improved communications and the effectiveness of care.

#### Child Shared Care Record (Hooker, L., Williams, J., 1996)

- A specialist center in England defined shared care as "the collaboration between primary, secondary and tertiary services" which is fundamental to the development of integrated child health services.
- Parent-held shared care records were introduced at a pediatric hematology/oncology centre as a way to facilitate communication, teamwork and family involvement.
- The shared care record was developed during a multidisciplinary professional development to ensure that the design of the record met the needs of each health discipline represented on the multidisciplinary team. Before formally incorporating the shared care record into regular clinical practice, it was piloted with a group of families.
- The shared care record has proven to be an accepted part of the service provided for families and professional involved in shared care. The record helped to increase family access to clinical information and encouraged active participation in their child's health care and decisions making.
- At the provider level, the child shared care record helped to define the roles and actions of the various professionals, supported multidisciplinary teamwork, and clarified legal accountability issues.

*"Parent-held records can make a valuable contribution by simplifying the management of shared care for children and providing a means to improve communication."*

## (b) Structured Shared Care Letters

Letters that adopt a structured format support shared care.

### Structured Letters (Rawal, J., et al, 1993)

- In London, England, one-hundred randomly chosen general practitioners were sent two different letters about a fictional consultation between a pediatrician and GP and asked to indicate which letter they preferred.
- Letter A, the structured letter, contained both a problem list and a list of management proposals.
- Letter B had the same problem list but the management proposals were included conventionally in the text of the letter.
- Nearly all the GP's preferred the structured letter. In their view, the structured letter had four advantages over conventional letters:
  - (i) It obliged the writer to state concisely what he or she thinks the patient's problems are and how they should be managed
  - (ii) The reader can see at a glance what the writer's views are
  - (iii) It was shorter in length
  - (iv) GP's can transfer information more easily from structured letters to computerized patient records
- Overall, the study indicated that general practitioners prefer letters from hospital physicians that both list problems and management proposals, and structured letters improve communication between these groups.

*"We believe that the first three of the four advantages listed (here), mean that structured letters summarize cases better than do conventional letters. "*

## (c) Physician Information Package

### Information Package (Nielsen, J., et al, 2003)

- A hospital oncology department in a Danish hospital had no standard procedure for informing GP's about newly diagnosed cancer patients. Generally, a discharge summary letter was sent to the GP at the end of the treatment period. The discharge letters did not follow any guideline, and sometimes several months could pass before the GP received any information.
- A shared care program was introduced which consisted of three elements: knowledge transfer/information package, communication channels, and patient involvement, as described in Table 1 below.

**Table 1: Elements of Shared Care Program**

<p><b>Knowledge transfer</b></p> <ul style="list-style-type: none"><li>- Discharge summary letters following predefined guidelines</li><li>- Include specific information on the disease and its treatment</li><li>- Provide general information about chemotherapy</li><li>- Provider general information about radiotherapy</li><li>- Provide general information about pain management</li><li>- Provide information about treatment of induced nausea and sickness</li><li>- Provide information about some acute oncological conditions</li></ul>
<p><b>Communication channels</b></p> <ul style="list-style-type: none"><li>- Include names and phone numbers of physicians and nurses responsible for the patient during hospital stay</li></ul>
<p><b>Patient involvement</b></p> <ul style="list-style-type: none"><li>- Patients received oral as well as written information about the information package that was sent to their GP</li><li>- Patients were encouraged to contact their GP when problems arose</li></ul>

- Overall, patients in the shared care intervention group had significantly more frequent contacts with their GP's than controls. Additionally, the shared care program, and related information sharing, had a positive influence on patients' attitudes toward their GP (e.g., intervention patients rated GP's higher on knowledge and care/treatment), and the healthcare system (e.g. intervention patients had less feelings of "being left in limbo"). Additionally, intervention patients rated collaboration among health professionals higher than patients in the control group.

### **Conclusion**

Compared to more technologically-sophisticated alternatives, the information sharing systems discussed here are simple interventions that do not attract much attention. This section shows, however, that they are well accepted by patients and providers alike. Overall, information sharing systems such as shared care records, structured letters and physician packages, simplify shared care by providing a means of improving communication amongst professionals and between professionals and patients. In this way, information-sharing systems facilitate the management of shared care.

### **3.1 COMMUNICATION PLATFORMS**

Similar to the information sharing tools above, communication platforms assist information exchange among health providers and between providers and patients. They differ, however, by the degree to which they incorporate technology. Examples of telephone-based communication platforms, computer-based communication platforms, and patient registers are offered below.

#### **(a) Telephone-Based Communications**

Telemental Health Service (Kates, N., Ackerman, S., eds.)

- Telepsychiatry was identified as a strategy to help meet the need for psychiatric services in rural Alberta.

- Telepsychiatry is a system of videoconferencing which links together telephone networks, computers, television screens and video equipment to provide interactive, face-to-face communication.
- The focus of the service was the provision of psychiatric consultations to clients referred by GP's; physicians were able to attend video consultation appointments with their patients.
- A consultative service model was selected to provide support and assistance to GP's in the management of their patients. Additionally, "virtual luncheons" were arranged to discuss the service and treatment model with referring physicians.
- Services included general psychiatry, pediatric psychiatry, psychogeriatrics, brain injury rehabilitation and addictions. Psychiatrists were available by telephone to discuss issues; other disciplines and teams were also accessible as required.
- Besides patient consultations, the service was also used to provide CME educational presentations on a variety of mental health topics via videoconferencing.
- An evaluation of the Telemental Health Service showed that 95% of referring physicians reported being either very satisfied or satisfied with the service, and 87% reported that the service had improved their ability to manage psychiatric patients locally.
- Since its launch, the Telemental Health Service has been expanded to 30 sites across rural Alberta.

#### Patient Helpline (Mitchell, K., 2000)

- Typically, patients with rheumatoid arthritis (RA) in the United Kingdom received their hospital care via regular follow-up appointments with rheumatologists in an out-patient clinic setting.
- The demands of RA mean that patients often require rapid access to the clinic, and often appointments have to be moved up. This required contacting their GP, writing for him to write to, or telephone, the clinic to make the appointment change.
- To address this challenge health professionals caring for people with rheumatoid arthritis initiated a shared care program that centered on access to a telephone helpline.
- GP's cared for their patients on a day-to-day basis, with the option of a rapid referral to a rheumatologist and specialist multidisciplinary team.
- To provide rapid access to the rheumatology clinic, the patient or his/her GP could request an appointment via the telephone helpline service, whenever the patient felt it necessary to seek specialist care from a rheumatologist.
- This project demonstrated that patients felt empowered to take more responsibility for their disease and its management, and providers acknowledged that patients understood their own disease, especially those who had RA for a long time.
- Overall, when given access to rapid access telephone helplines, patients use it, make appointments for good reasons, and are better equipped to deal with their condition.

## **(b) Computer or Electronic-Based Communications**

Increasingly, computer or electronic-based communication platforms are being used to support information sharing among the various health providers who contribute to patient care. A few examples are offered here.

### Computer-Based Patient Record (CPR) (Linnarsson, R., Nordgren, K., 1995)

Swedestar, a computer-based patient record (CPR) system, was developed for use in primary health care in Sweden. Its principal aim is to support continuous quality improvement through improved information handling, decision-making, and procedures for quality assurance. The Swedestar system is based on three key factors:

- (i) Sound system design
  - Includes structured data entry based on an extensive controlled vocabulary.
  - Includes advanced search and query functions, and based on proven query language.
- (ii) Shared problem-oriented patient record
  - All problems for a patient, recorded by different members of the care team, are displayed on a single problem list.
  - Problem follow-up can be made, one problem at time, or for several problems simultaneously.
  - This makes it possible to get an integrated view, across provider categories, of all health challenges associated with each patient, which provides a basis for primary care team work.
- (iii) Integrated decision support for quality assurance
  - Decision support centres on a drug prescribing module and a care protocol module.
  - The drug prescribing module is integrated with the patient records and includes an on-line check of the patient's medication list for potential interactions and data-driven reminders concerning major drug problems.
  - Care protocols have been developed for the most common chronic disease, such as asthma, diabetes, and hypertension.
  - Patient records can be automatically checked according to the care protocols.

Over the past 10 years, the Swedestar computer-based patient record system has been implemented in primary care that services over 30,000 inhabitants. It has been used by all primary team members: general practitioners, nurses, physiotherapists, and others. Evaluation of the system shows that it has improved quality of care as follows:

- Improved clinical follow-up of individual patients
- Facilitated follow-up of aggregated data such as practice activity analysis, annual reports and clinical indicators
- Assisted with automated medical and concurrent audits

Computer-Assisted Shared Care, GP and Hospital (Hickman, M., et al., 1994).

In the UK, shared care is facilitated by establishing a circle of information from general practice to the hospital and back to general practice, after each patient visit. Specifically,

- An agreed data set is collected by the participants and entered into a hospital computer with the results of any biochemical or serological tests order in general practice or by the hospital.
- The hospital specialist examines the results of each visit and updates the computerized patient record.
- The record is sent back to the GP along with standardize letters, which may contain advice and recommendations for the GP with regard to alterations in therapy.
- If the circle of information is broken (e.g. if patient does not visit GP or hospital as planned), the coordinating personnel are alerted and action can be taken to ascertain the reasons for the failure, correct it, and get the information moving again.

SharePoint (Provincial Health Services Authority, 2005)

In British Columbia, the Provincial Health Services Authority (PHSA) is undertaking the Shared Care Network Development Initiative which aims to develop infrastructure to support network development. The networks seek to improve integration, coordination and continuity of care by linking specialists, primary health care physicians and other providers such as nurses, dieticians, physiotherapists and social workers. SharePoint has been adopted as the communications platform to support this initiative. Currently, four “proof of concept” sites are implementing SharePoint, using the PHSA portal, training and toolkit.

Other features of SharePoint are as follows:

- Is a web-based communication tool for groups of health providers working towards a common goal.
- Allows teams to create Web sites for information sharing and collaboration and contains common workspaces for document development and revision.
- Concentrates resources and provides a single point of access to all documents, e-mail links, schedules, reference library, document library, meeting minutes and network information. Clinical care tools such as practice guidelines, protocols, care maps and paths, and resource maps are also accessible.
- Allows access through a pass code and network members identify what goes on the network and who has access to it.
- Has security levels that can potentially provide access for patients and families.
- Is not a clinical information system, but with required security levels, could allow for the transfer of clinical data in the future; does not currently connect systems (e.g. various databases, EMR or EHR).
- Can be applied to thousands of sites within a region or organization.

In early 2006, SharePoint will be evaluated to assess its capacity and potential as a communication mechanism to further develop and advance networks in the province of BC.

**(c) Patient Registers**

Shared care is becoming increasingly applied in the treatment and management of people with chronic conditions such as diabetes, heart disease, arthritis, dementia, and chronic lung disease. Patient registers represent a tool that providers can use to address patients with chronic illnesses who have complex care needs. An essential step in managing or reviewing the management of patients with chronic disease is to build a register of patients. Registers can be at a population, provincial or practice level.

Provincial Registers (<http://www.healthservices.gov.bc.ca>)

The Ministry of Health is developing two forms of provincial registers: complete registers and partial registers.<sup>3</sup>

*Complete:*

- Complete provincial registers can be developed once the administrative records are complete - usually a year or more after the end of the period.
- Complete registers are used to estimate performance; for example, the proportion of patients with diabetes who receive tests such as HbA1c in a year. The actual value of any measure must be interpreted with caution because of limitations of the registers. However, changes in the measures over time and variation among regions can be very useful in the evaluation of programs intended to improve care.
- Currently, there are complete provincial registers for several chronic conditions in BC, including: congestive heart failure, diabetes, cancer and renal.

*Partial:*

- Partial provincial registers use current, though incomplete, administrative records and attempt to be as current as possible at the risk of being even less accurate than the complete registers. Their value is that they are the most current list of patients and can be used by physicians as an aid to building their own practice registers.

Practice Registers

Practice Registers are accurate listings of patients with certain disorders, developed by physicians from their own practice records.

- Family physicians are encouraged to develop their own registers of patients with chronic disorders. These registers are needed to provide planned, proactive care to patients with chronic diseases. They assist in ensuring that patients receive recommended care at appropriate intervals, with reminder

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<sup>3</sup> The BC Ministry of Health cautions that Provincial Registers are probabilistic. They are developed from those administrative records of paid services that are statistically likely to indicate individuals who suffer from a chronic disorder. The identification is not certain the case definition used may exclude some individuals who do have the disorder, and may include a few who do not. In aggregate, the registers are estimated to be about 90 percent accurate, but they cannot be relied upon to be accurate for any individual.

systems. The registers help physicians perform audits of their practices as part of quality improvement processes.

- The Ministry makes available each physician's portion of the provincial registers on a secure web site. The physician's portion of the provincial register is determined by assigning individuals on the register to the physician who provides the greatest number of services to that individual.
- Thus, physicians who have registered with the secure web site can obtain their portion of the provincial registers to assist them with developing their own practice registers.

## **Conclusion**

Shared care is situated within a context of multiple providers, often located some distance from each other. Communications platforms provide methods for information and data exchange.

Telephone-based technologies provide treatment and follow-up flexibility for both providers and patients, increase access to care, and support patient self management. While they vary in utility and sophistication, electronic communications will continue to grow as a mainstay feature in healthcare communications in the years to come. Patient registers can be relatively simple at the level of the solo physician practice, or very complex at the provincial, aggregate level. They offer a valuable platform for the proactive tracking of care for patients with complex, chronic conditions. While telephone and computer-based communication platforms support the implementation and management of shared care, patient registers facilitate shared care evaluation.

## **3.2 MAPPING**

Shared care seeks to provide a seamless healthcare system with continuity of care. Mapping techniques such as process mapping, patient pathways and care maps, organize care around an understanding of “patient flow,” and the “patient journeys” through the system. Patient journey mapping is described in summary below, followed by a selection of local (BC) mapping initiatives.

### Patient Journey Process Mapping Technique Described (National Health Service Modernization, 2002)

Process mapping has been used extensively in the UK as a method for multidisciplinary teams to understand health service delivery problems from the patients' perspective.

- It engages health professionals and service staff involved in all aspects of patient care to work together to chart out the patient journey through the system.
- It is an interactive process that gets people involved and talking.
- It is facilitated by a mapping expert, conducted over a series of one or two sessions, and is based on logic modeling and problem solving.
- It requires each health provider to recognize how they/their processes contribute to problems and then identify specific actions to overcome them.
- The end product is a map of the patient's journey which will:
  - Serve as a starting point for quality improvement projects
  - Align with the groups own needs

*“Process mapping is a really simple exercise. It is one of the most powerful ways for multidisciplinary teams to understand the real problems from the patients' perspective, and to identify opportunities for improvement.”*

- Foster ownership and accountability among members of primary, secondary and tertiary care
- Help staff to understand, often for the first time, how complicated the system can be for patients (e.g., how many visits patients have to make to multiple locations)

#### Mapping – BC Initiatives (Clarke, H., 1996)

- Recently, Langley Memorial Hospital developed and implemented evidence-based clinical pathways that support an interdisciplinary model of collaborative/shared practice. Nurses consulted other agencies and disciplines - dietetics, occupational therapy, physiotherapy, social work, health records, and hospital administrators – to plan, standardize, deliver, and document high quality patient care. Today, clinical pathways for improved patient care have been successfully implemented at both the hospital and regional level.
- Peace Arch Hospital’s “Getting to the Heart of Quality,” initiative sets forth a framework for measuring and management the organization’s performance with respect to service quality, impact, effectiveness, and service integration. An interdisciplinary, team approach was used to implement critical pathways in order to decrease unnecessary practice variation and monitor and improve client outcomes. Today, critical pathways are supported by multiple providers involved in patient care.
- “Timelines,” developed by the Lion’s Gate Hospital, is similar to the patient care map concept. It has resulted in the development of care maps for various areas, including: postoperative care, chemotherapy, long-term care geriatric admissions, post partum, and IV therapy in the hospital. Team leaders believe that that the process to develop the care maps may have been more important than the finished product, as it brought providers from various disciplines together in constructive ways to support shared care. In their experience, care maps have helped to improve service consistency and quality of care, and thereby, enhance the well being of their patients.

*“It is imperative for all members of the health care team to be involved in the (mapping) process.”*

#### **Conclusion**

Mapping clarifies processes and unravels health service delivery challenges so that patients are better served. To ensure all key features of the patient experience are considered, mapping engages the full spectrum of people who participate in the care of the patient. Mapping can be used in conjunction with other strategies to facilitate the management and evaluation of shared care.

### 3.3 GUIDELINES

Guidelines are systematically-developed statements to assist provider and patient decisions about appropriate health care for specific health conditions. This section discusses key features of guidelines, and then provides examples of national, provincial and system guideline processes.

#### (a) Key Features

Typically, guidelines:

- Are based on a consensus of “expert opinion” and systematic review of the scientific evidence.
- Adopt a multidisciplinary point of view and include task distribution.
- Include intended indicators of the quality of care.
- Reflect local capacities, cultures and traditions.
- Serve as an exchange of information about care at the primary and secondary interface.
- Involve the same group of people in their development as in their dissemination and application.
- Are time and resource-demanding.

#### (b) National Guidelines

While most developed countries undertake the development of national guidelines, Scotland stands out as a leader, not only in the number of guidelines they produced, but in their level of consultation with multidisciplinary providers.

Scottish Intercollegiate Guidelines Network (<http://www.sign.ac.uk>)

- The Scottish Intercollegiate Guidelines Network (SIGN) is supported by the Royal Collage of Physicians of Edinburgh and is part of the NHS Quality Improvement Scotland.
- SIGN membership includes all medical specialties, nursing, pharmacy, dentistry, professions allied to medicine, patients, health service managers, social services and researchers.
- SIGN has developed 79 evidence-based clinical guidelines, many of which reflect NHS priority areas. Guidelines are part of a range of complementary activities to translate research into practice, set and monitor standards, and promote clinical excellence.
- Any group or individual can propose a topic for a guideline. To be considered, there must be evidence of variation in practice, effectiveness, and potential benefit to patients.
- Each guideline is the basis for a National Open Meeting. These meetings are widely publicized and open to all, providing an opportunity for health care providers, patients and others to comment on draft recommendations.
- Once developed, SIGN guidelines are distributed throughout the NHS in Scotland via a network of Guideline Coordinators in each NHS Board which is also responsible for guideline implementation.

**(c) Provincial Guidelines**

British Columbia Guidelines and Protocols Advisory Committee

The Guidelines and Protocols Advisory Committee (GPAC) oversees practice guideline development in BC. It is co-chaired by the BCMA and the Medical Services Plan (MSP), and most members are practicing physicians. GPAC chooses topics, approves draft guidelines for external review, and approves final guidelines for submission to the Medical Services Commission (MSC) for approval and adoption in B.C. It also coordinates strategies to implement and evaluate guidelines and protocols. Finally, GPAC adheres to the following principles: (i) to encourage appropriate responses to common medical situations, (ii) to recommend actions that are sufficient and efficient, neither excessive nor deficient, and (iii) to permit exceptions when justified by clinical circumstances.

Guidelines and protocols are designed to apply to common conditions and to provide flexibility for physician judgment in uncommon situations. They aim to improve patient care by developing recommendations for clinical practice in B.C. Topics for consideration are based on the following selection criteria: (i) high volume or high cost, (ii) high variability in practice patterns, (iii) opportunity for improvement in practice, and (iv) support and interest of physicians.

GPAC's subcommittees and working groups develop guidelines through an iterative process that involves:

- Topic choice and scope definition
- Literature search (previous guidelines, critical literature reviews, randomized controlled trials)
- Consultation with experts
- Draft guideline development
- External review (random sample of general practitioners, random sample of relevant specialists, experts in the field, professional organizations)
- Additional consultation with experts
- Approvals (from BCMA, MSC)
- All guidelines and protocols are scheduled for review in the light of recent scientific literature two years after their initial distribution. They are reviewed sooner if warranted by new information.
- Provincial guidelines often draw on national consensus guidelines, if available, but are adapted to the local context and reflect the availability of human and economic resources.

**(d) System Guidelines**

Another type of guideline tool to facilitate the implementation of shared care has been referred to as a “system guideline” or “service framework.”

System Guideline for Chronic Obstructive Pulmonary Disorder (COPD) in BC  
(Chomik, T., 2005)

The BC Ministry of Health, in collaboration with the BC Lung Association, BC Thoracic Association, Health Authorities and clinical experts, anticipates the development and implementation of a system guideline for COPD in the future.

The system guideline will define best practices for COPD care across the health continuum. It will serve as a companion document to the newly-developed COPD clinical practice guideline. The new guideline includes: accurate diagnosis, smoking cessation, education and self-management, structured exercise and pulmonary rehabilitation, immunization, optimal maintenance therapy/pharmacotherapy, special attention to exacerbations, and end-of-life care. While the practice guideline focuses on general practitioners, the system guideline will articulate how all health providers will contribute to the care of people with COPD.

Specifically, the COPD system guideline will:

- Identify the range of disciplines/providers involved in COPD care including: respiratory therapists, physiotherapists, pharmacists, nurses, exercise specialists, dieticians and community workers.
- Identify how each provider will contribute to improving care in relation to the components of the Chronic Care Model: self-management, decision support, clinical information systems, delivery system design, organization of health care and community.
- Identify how each provider will contribute to improving care in relation to the recommendations set forth in the COPD practice guideline.
- Identify the measures that each provider will track and commit to achieving.
- Describe the role of the patient in self management.
- Identify actions for improved COPD care across primary and secondary levels of care. That is, demonstrate the linkage between community care, GP's, specialists and hospital; and indicate referral patterns and patient flow/care path.

*"The system guideline asks providers to consider the following: 'What can each of us do to impact care for people with COPD, and what measures do we need to have in place to demonstrate that we are making a difference.'"*

### **Conclusion**

Guidelines vary in scope. They can take a national, provincial or system-wide perspective. They strive, however, for a common purpose that centers on defining care requirements, based on best practice, across the health system. By clearly articulating the contribution of health providers in primary, secondary and tertiary care, guidelines support the development, implementation and evaluation of shared care.

### **3.4 PROTOCOLS**

While guidelines address comprehensive health issues and conditions, protocols typically take a narrower approach to focus on some aspect of healthcare or healthcare delivery. Examples of assessment, follow-up, and prescribing protocols are offered below. A coordinated care agreement is also highlighted.

#### Assessment Protocol (Neville, R., Higgins, B., 1999)

In the UK, the Royal College of Physicians called for a common assessment tool for asthma that would be equally acceptable to primary and secondary care, and could serve as the basis of shared care for audit purposes.

- After reviewing existing assessment tools, providers came to consensus agreement on the following core question that underpins the asthma assessment protocol: How often have you experienced cough, wheeze or breathlessness due to asthma in the past month?
  - (i) *at night* (0 =never, 1=some nights, 2=every week, 3=every night)
  - (ii) *in the morning* (0 =never, 1=sometimes, 2=every week, 3=every night)
  - (iii) *while exercising* (0 =never, 1=running, 2=walking, 3=at rest)
- These questions are then supplemented as required by a check on compliance and inhaler technique, peak flow measurement, and an estimate of days lost from work or school due to asthma.
- This assessment tool has been well-received due to its simplicity and ease of use at home, in a surgery unit or hospital. Additionally, it can be applied to both adults and children, and used by a variety of health professionals.

#### Follow-up Protocol (Baukje, M., et al, 2004)

To provide better follow-up care, a health region in New Brunswick advocated for a “transition of care” or shared care protocol between the acute cancer treatment provider and the family practitioner, especially in rural areas.

- A research team came together because of the experiences of health providers who saw some patients “fall between the cracks” of tertiary and primary care after acute cancer treatment had been completed.
- The protocol would reflect the overall goals of follow-up care, regardless of the type of cancer, and include the following:
  - (i) detecting the recurrence of cancer
  - (ii) detecting second primary cancers
  - (iii) monitoring for treatment complications
  - (iv) dealing with an altered physical status
  - (v) providing support for psychosocial problems arising from the cancer or its treatment
- The follow-up protocol would be shared with patients to keep them informed and alleviate fear of life after cancer treatment.
- By stipulating how the GP and specialist work together, the shared care follow-up protocol ensures that cancer patients have a clear understanding of where to turn for ongoing surveillance when they fear recurrence or need support.

*“One patient felt that he was left ‘drifting’ after acute treatment was completed; another felt she had no instruction at all, and had to ‘figure it out by herself’ once her treatment was over.”*

#### Prescribing Protocol ([www.wales.hhs.uk](http://www.wales.hhs.uk))

Shared care prescribing protocols are intended to provide clear guidance to general practitioners and hospital prescribers regarding the procedures to be adopted when clinical responsibility for a patient’s treatment is transferred from secondary to primary care.

- The underlying principles of a prescribing protocol are as follows:
  - (i) If the GP is not confident and competent to undertake the prescribing role, they are under no obligation to do so. In that case, the clinical responsibility for the patient for the diagnosed condition remains with the specialist.
  - (ii) If a specialist asks a GP to prescribe a drug, the GP should reply to this request as soon as possible.
  - (iii) The physician who prescribes the medication legally assumes clinical responsibility for the drug and the consequence of its use.
- Shared care prescribing protocols define the roles and responsibilities for the specialist, GP and patient. An example is offered in Table 2 below.

**Table 2: Shared Care Prescribing**

<p><b>Secondary Care Specialist Responsibilities</b></p> <ul style="list-style-type: none"><li>▪ Demonstrate the evidence base for this treatment</li><li>▪ Confirm the diagnosis and indication for the drug</li><li>▪ Discuss potential benefits and side effects of treatment with the patient</li><li>▪ Initiate treatment and ask the GP whether they are willing to participate in shared care</li><li>▪ Advise the GP of the information provided to the patient about the treatment</li><li>▪ Continue to prescribe for the patient after initiation of treatment until such time as the patient's GP agrees to accept prescribing responsibility and provide prescriptions for the patient</li><li>▪ Communicate promptly with GP about any changes in treatment</li></ul>
<p><b>General Practitioner Responsibilities</b></p> <ul style="list-style-type: none"><li>▪ Initiate treatment only on the advice of a specialist, and thereafter, continue prescribing and monitoring the effect of the drug in collaboration with the specialist</li><li>▪ Confirm that the therapy is not contra-indicated because of concurrent therapy for other conditions</li><li>▪ Discuss potential benefits and side effects of treatment with the patient</li><li>▪ Ensure clear arrangements are in place for back up, advice and support</li><li>▪ Monitor treatment</li><li>▪ Seek specialist advice promptly if signs/symptoms of changes occur</li><li>▪ Refer promptly to specialist if any clinical suspicions or loss of efficacy (disease progression) arise</li><li>▪ Stop treatment on advice of specialist, or immediately if intolerable side effects occur</li></ul>
<p><b>Patient Role</b></p> <ul style="list-style-type: none"><li>▪ Discuss potential benefits and side effects of treatment with the specialist and GP</li><li>▪ Share any concerns in relation to treatment with the medicine</li><li>▪ Report any adverse effects to the specialist or GP</li><li>▪ If clear understanding of treatment is not established, consult specialist or GP</li><li>▪ Participate in the monitoring of therapy and the assessment of outcomes, to assist health professionals to provide safe, appropriate treatment</li></ul>

- Experience shows that the shared care prescribing protocol should be written in clear language and all potential medication prescribers briefed its on content and provided an opportunity to discuss and ask questions.

Coordinated Care Agreement (Keks, N., et al, 1997)

In Australia, general practitioners and staff from community psychiatric services collaborate to care for people with chronic mental illness by using regular contact and an agreed management plan, often referred to as collaborative care agreement or memorandum. The agreement establishes joint management between parties providing care. Consent is sought from patients and the mix of providers who agree to participate in the care agreement.

- Typical components of a coordinated care agreement between a GP and community mental health services for patients with chronic psychosis includes the following:
  - (i) Names of and methods to contact general practitioner, responsible psychiatrist, case manager, emergency outreach team, and others involved.
  - (ii) Medication protocol for antipsychotic treatment – whether managed by GP or psychiatrist, reviewed at what frequency, symptoms and side effects targeted
  - (iii) Interventions available from community psychiatric services such as: crises assessment and treatment, consultation and continuing care, intensive assertive case management, community care units, hospital psychiatric units and homeless services.
  - (iv) Rehabilitation needs – from what provider, at what level
  - (v) Basic living needs – plans for accommodation, finances, safety

- (vi) Frequency of monitoring by case manager
  - (vii) Date for review of plan (e.g. six months later)
  - (viii) Plan for crises management – who is called; how to involve GP, case manager, crises outreach team
- A coordinated care agreement of this kind clarifies treatment-related issues and facilitates understanding between general practitioners and community care.

### **Conclusion**

Protocols clarify aspects of treatment and care. They often focus on a component of care or some aspect of the care delivery process such as assessment, follow-up, medication prescribing, or community liaison, as described here. Protocols support the development and implementation of shared care.

## **3.5 COMMUNITY RESOURCES**

Community-based providers or agencies can facilitate shared care “closer to home,” by moving cross-discipline service provision into the community in which people live. Community resources take the form of shared care outreach clinics, community nursing teams and home-based shared care.

### Shared Care Outreach Clinic (Smith, S., Campbell, N., 2004)

Because traveling for cancer treatment was taking its toll on patients in rural Scotland, shared care outreach clinics were established in remote areas. Patient care was shared between oncologists from central cancer centers and specialist nurses and GP’s. The central cancer centers were located in urban centers and provided the full spectrum of oncology services. The oncologists traveled to the outreach clinic at regular intervals. Key features of the outreach oncology clinics were as follows:

- Clinics were held once or twice a week in rural hospitals in 18 locations throughout Scotland. Most clinics had chemotherapy provision for common cancers only; others provided follow-up care, but no chemotherapy.
- Chemotherapy was mainly administered by specialist nurses at most of the clinics, although a few reported having ward and staff nurses trained in chemotherapy administration.
- GP’s visited patients on the wards in over half of the outreach locations. One outreach location had beds in the hospital, attached to a ward, reserved for GP’s to admit oncology patients if necessary. On one occasion a GP, after receiving instruction, administered chemotherapy to patients too sick to travel. On another occasion, GP’s were provided instruction over the phone on how to disconnect infusion pumps and flush Hickman lines because of severe weather affecting travel. Sometimes, GP’s would attend oncology clinics at the central location to learn and observe.
- Additionally, a palliative care specialist from a central/urban clinic made visits to the outreach clinics. In one location, volunteers were trained in palliative care by nurses to support patients and provide practical support for families.
- Main methods of communication between the central cancer centers and outreach clinics were telephone, letter, email and fax. Teleconferencing was used on occasion.
- By omitting the need for patients to travel long distances for oncology services, this initiative increased access to cancer care, and increased the capacity of local providers to deliver quality care that was otherwise unavailable.

### Community Children's Nursing Teams (Spencer, L., Battye, L., 2001)

With the view to improve community palliative care for children in South East England, a group of multidisciplinary health providers came together to define an exemplar program. It was based on the assumption that providing palliative care in the community involved multi-agency collaboration. Key improvements proposed by the health team included: better communication and liaison between all providers involved, clear allocation of roles and responsibilities, 24-hour availability of specialist advice on palliative care, faster access to social and psychology services at the community level, and continuity of nursing and respite care. One of the principal structures to support community palliative care for children with cancer was the "community children's nursing team" which featured the following:

- Teams were established in communities across England to service young patients.
- Teams varied in size, expertise and hours; they could be community or hospital based.
- All nurses had pediatric training, some had oncology qualifications.
- Besides nurses, most teams consisted of other professionals such as social workers, play therapists and child psychologists.
- Teams assumed much of the "hands on" care of children with cancer who required palliative care. They also played a key role in providing support to parents and coordinating services from other community agencies and other professionals.
- Pediatric oncologists, local pediatricians, GP's and outreach nurses who took part in this shared care project agreed that the local community children's nursing teams had greatly improved the quality of care for children with advanced cancer, enabling parents to cope and allowing children the choice to die at home.

*Children's community nursing teams played an important role in the management of pediatric palliative care cases in our community... and their services were highly regarded by all health professionals.*

### Home-Based Shared Care (Schirm, V., 1998)

In the US, a project examined the extent of care provided to functionally impaired elderly people residing at home by formal caregivers (i.e., community health nurses or home health aides who were supervised by nurses) and informal caregivers (i.e., relatives and friends). In order to elicit information about shared caregiving, caregivers were surveyed based on comparable questionnaire instruments. The Formal Caregiving Inventory (FCI) was developed to inquire about tasks that nurses did for patients, the Informal Caregiving Inventory (ICI) examined tasks that friends and relatives undertook. Both sets of caregivers were asked to supply details on care in the following areas:

- (i) Personal care tasks – eating, getting out of bed or a chair, dressing, bathing, toileting and continence.
  - (ii) Instrumental (daily living) care tasks – preparing meals, shopping, chores, laundry and housework, providing transportation, and managing money.
  - (iii) Skilled nursing care tasks – giving medicines, changing dressings, and performing treatments.
  - (iv) Making arrangements for services, supervising and monitoring care, and teaching the elderly person and other caregivers about care.
- Results were as follows:
    - (i) Informal caregivers were the primary source of help for all instrumental activities of daily living and giving medications, while formal caregivers were the predominant helpers for bathing and managing the supervision and teaching aspects of care.

- (ii) Care was shared by formal and informal care givers to some degree for all personal care tasks.
  - (iii) Some instrumental care tasks – meal preparation housework and laundry – were shared.
  - (iv) Four nursing care related activities were performed by both formal and information caregivers: arranging for services, supervision or doing nursing care, teaching elderly care recipients, and teaching others about the elderly person’s care needs.
  - (v) Findings also showed how care tasks for the elderly were distributed between the two types of caregivers when only one caregiver was providing help for the task.
- Overall, findings on the way care tasks were distributed among caregivers suggest a network of shared care, and confirm that home-based shared care of the impaired elderly was possible through the combined efforts of formal and informal caregivers.

### **Conclusion**

While most of the emphasis on shared care centres on the interface between primary and secondary care, community resources can play an important role. This section showed that community clinics, community teams and home care providers facilitate shared care arrangements for patients, young or old, in the communities where they live.

## **3.6 QUALITY IMPROVEMENT PROCESSES**

Various types of quality improvement processes support shared care. They can be simple or very comprehensive in nature, and include: university-based training, CME’s, networks and structured collaboratives.

### **(a) University-Based Training**

Integrating Child Psychiatry into Education for Family Practice Residents (Kates, N., Ackerman, S. eds.)

At the University of Western Ontario, family child psychiatrists work with family practice residents to (a) increase residents’ understanding about common mental health problems in children, (b) educate residents about when to refer children to mental health professionals, and (c) expose residents to interviewing children with mental health problems. This shared care education program involves the following:

- A child psychiatrist visits one of three family medicine practice centers once a month. The visits range from 75 minutes to three hours and are attended by family practice residents, family physicians, nursing staff and medical students.
- Learning sessions can take several forms. The family resident may (i) verbally present a case from his/her own practice, (ii) conduct a consultation with a child client behind a one-way mirror, or (iii) bring in a child from his practice to be interviewed by the psychiatrist.
- After each session, the residents, child psychiatrist, family physician and medical students review the learning session and discuss the child’s case with respect to diagnosis and treatment.

- The program has been well received by family practice residents and family physicians. It is seen as a way to increase access to mental health services for children with common mental health problems. It may also help to alleviate pressure on specialist care.

*“Since child mental problems are common and since there are very few child psychiatrists, teaching family practitioners to identify and manage children’s common mental health program will improve the mental health of children and make optimal use of referrals to child psychiatrists. “*

Interprofessional Education for Collaborative Patient-Centered Practice (www.hc-sc.gc.ca)

As part of its Health Human Resource Strategy, Health Canada has launched the Interprofessional Education for Collaborative Patient-Centred Practice (IECPCP) initiative. This program seeks to change the way health providers are educated to ensure they have the necessary knowledge and training to work effectively in interprofessional teams within an ever-evolving health care system. Through interprofessional education, health providers of all types learn, work and problem solve together, from a patient-centered perspective.

The specific objectives of the IECPCP program are as follows:

- To promote and demonstrate the benefits of interprofessional education as a way to provide patient-centered care.
- To increase the number of educators prepared to teach from an interprofessional collaborative patient-centered perspective.
- To increase the number of health professionals trained for collaborative patient-centered practice before, and after, entry-to-practice.
- To stimulate networking and sharing of best educational approaches for collaborative patient-centered practice.
- To facilitate interprofessional collaborative care in both the education and practice settings.

Recently, the University of British Columbia’s College of Health Disciplines has submitted a proposal for funding to implement the Interprofessional Education for Collaborative Patient-Centered Practice program in regions across BC.

## **(b) Continuing Medical Education**

Continuing medical education is also used to facilitate shared care – often as part of a larger quality improvement initiative.

Comprehensive Diabetes Shared Care Program (Smith S., Campbell, N., 2004)

In 2003, a comprehensive diabetes shared care service was introduced in Dublin, Ireland. Prior to the new service, general practice diabetes care was underdeveloped. No special diabetes training was available to primary care team members, GP practices did not initiate or participate in diabetes clinics, and there was no formal liaison between primary and secondary care other than the standard referral and discharge letters. The new shared care service was based

on a complex intervention with professional education in the form of CME representing an integral part of the program. Key features included the following:

- Participating GP's and practice nurses undertook a six-week distance learning course and attended three "skills sessions" relating to primary diabetes care.
- Appointment of a community-based diabetes nurse specialist to provide clinical support and training.
- Locally agreed to clinical and referral guidelines.
- Routine reviews carried out by the GP and practice nurse every three months.
- Annual diabetes review, performed by a specialist team in a diabetes out-patient clinic.
- Shared records cards and communication among primary and secondary practitioners.
- Access to a fast-track referral system which could be initiated by the primary team care as needed.

This program demonstrated that a comprehensive diabetes shared care program produced significant improvements in diabetes care delivery and in psychosocial outcomes for patients. It also improved information exchange across the primary-secondary care interface.

### **(c) Networks**

Networks are becoming a mechanism of choice for bringing together autonomous organizations that seek to achieve a common vision. Examples of a primary health care network and maternity care network in the Province of BC are offered below.

#### Primary Health Care Network (Vancouver Coastal Health, 2004)

VCH is developing a number of networks. The Primary Health Care Network is the first and most frequent point of ongoing client contact with the BC health system. It is an integrated network that has links to two other networks – Acute Care network and Community Care Network – to provide the patient with timely, appropriate and seamless care. Characteristics of the Primary Health Care Network are summarized below:

- Many points of entry and ongoing contacts, including: family physician, public health nurse, pharmacist, nutritionist or other primary care providers.
- Extended access – more hours for patients to access care.
- Health providers working in teams that reflect multiple disciplines and professions.
- GP coordination of services
- GP practices working closely and communicating regularly with other health providers who are sharing in the care of the patient so that each is aware of what the other is doing.
- Operational and electronic linkages among primary health care sites (and between sites and the other two networks) to decrease the need for repetitive testing and patient questions.

- Information technology to store patient health information and transfer clinical information across the health care system.
- Evidence-based guidelines to manage chronic conditions and prevent disease.

The anticipated outcomes of the Primary Health Care Network are to improve access to primary health care services, increase linkages with community based services, improve patient navigation through the system, increase emphasis on self care and disease prevention, decrease the need for hospital services, and sustainability of the healthcare system into the future.

#### Maternity Care Network ([www.healthservices.gov.bc.ca](http://www.healthservices.gov.bc.ca))

In British Columbia, the number of general practitioners providing obstetrical care has seen a dramatic decline in recent years. This is especially problematic in the province's rural areas, where fewer women are able to deliver in their own community. It has also resulted in professional and personal hardship for those physicians who have continued to provide this important service.

In recognition of and response to this problem, the General Practice Services Committee (a joint committee of the Ministry of Health, the BCMA, and the Society of General Practitioners of BC) has developed a maternity care enhancement program aimed at supporting a group practice approach to GP provision of obstetrical care. Under the Maternity Care Network Initiative, physicians forming their own shared care networks will work as a team so that at least one physician is always available to deliver their patients. Intended benefits of the Maternity Care Network Initiative include the following:

- Ensures that women across the province can access high quality obstetric care in their own community.
- Provides a financial incentive that supports a shared care approach to obstetric care.
- Supports GP's in providing high quality obstetric care.
- Encourages GP's to remain active in obstetrics by improving their quality of life.
- Creates a supportive working environment and peer group for mutual support and quality control.
- Enables sustainability for communities and practitioners.
- Encourages new family practice graduates to consider providing maternity care.
- Attracts those general practitioners who have recently left obstetrics to return.

The Maternity Care Network Initiative is a temporary program, serving as a bridging strategy until the Maternity Care Enhancement Committee (created under the 2004 Working Agreement between the BCMA and the Province of British Columbia) develops a long-term and sustainable maternity care strategy for BC.

**(d) Structured Collaboratives** ([www.healthservices.gov.bc.ca](http://www.healthservices.gov.bc.ca))

A structured collaborative is an interactive, comprehensive methodology that seeks to improve patient care and promote system change. Structured collaboratives have been used extensively in improving the management of chronic diseases, in the United Kingdom, the United States, Australia, and now in British Columbia.

Structured collaboratives bring together interdisciplinary teams of health providers to participate in a comprehensive training/quality improvement program, lasting 12 to 18 months. Health providers engage in interactive “learning sessions” on effective chronic care interventions, and then implement the interventions into their own practice with the benefit of coordinated coaching, networking and support. Structured collaboratives emphasize a team-based, shared care approach. Teams are typically physician-led and involve any number of health care professionals including specialists, nurses, medical office assistants, nutritionists, pharmacists, and others as required.

The Chronic Care Model (Improving Chronic Illness Care, [www.improvingchroniccare.org](http://www.improvingchroniccare.org)) developed by the Robert Wood Johnson Foundation, has been shown to be effective in improvement the management of chronic conditions. This model underpins the collaborative process. It rests on six key domains that are tested by teams participating in the collaborative. These include:

- Decision Support – is largely a function of practice guidelines.
- Patient Registers/Clinical Information Systems – includes the identification of patients with select chronic conditions within the practice, provider reminders, patient recall and follow-up.
- Patient Self-Management/Expert Patient – Includes methods to increase patient understanding and capacity to deal with their condition and provider support to facilitate self care.
- Delivery System Design – includes planned visits, patient follow-up and proactive care.
- Build Healthy Public Policy – centers on the development and implementation of policies designed to improve population health.
- Health System – includes the realignment of resources for chronic disease care and physician incentive programs that reward improved patient outcomes.
- Create Supportive Environments – entails working to generate safe and stimulating living and employment conditions.
- Strengthen Community Action – involves working with community groups to set priorities and achieve goals that enhance the health of the community.

To date, two provincial structured collaborative have been implemented in British Columbia: congestive heart failure (CHF) and diabetes. Others have been implemented at the regional or health authority level. Evaluation of the outcome data for the CHF Collaborative demonstrated very positive results, shared by health providers across the health system, as displayed in Table 3 below.

**Table 3: CHF Collaborative**

At the start of CHF Collaborative:	At the close of the CHF Collaborative:
<ul style="list-style-type: none"> <li>- 24% of patients on ACE-I/ARB medications</li> <li>- 21% of patients on B-Blockers</li> <li>- 22% had documented Ejection Fraction</li> <li>- 4% had established self-management goals</li> <li>- 15% had specific goals for diuretics</li> </ul>	<ul style="list-style-type: none"> <li>- 93% of patients on ACE-I /ARB</li> <li>- 89% of patients on B-Blockers</li> <li>- 75% had documented Ejection Fraction</li> <li>- 57% had established self-management goals</li> <li>- 56% had specific goals for diuretics</li> </ul>

**Conclusion**

Quality improvement processes can be narrow or comprehensive in scope. Shared care is developed and reinforced through university/academic training where health providers learn from each other, continuing medical education that teaches professionals to work as a team, networks that provide a mechanism for achieving a common purpose, and structured collaboratives which bring people together in interactive ways to improve care and promote system change.

**SECTION THREE: SUMMARY**

In closing, Section Three presented various tools to support shared care development, implementation, management and evaluation. Examples of shared care tools, drawn from jurisdictions around the world, ranged from very simple to very complex. It revealed a broad selection of tools, grouped into six categories: information sharing systems, communication platforms, mapping, guidelines, protocols, community resources, and quality improvement processes.

# Report Conclusion

This report consisted of three sections. Section One examined the definition of shared care; described the range of shared models applied in health care; and offered a summary of common elements, benefits, challenges and requirements associated with shared care. Section Two examined shared care in BC. It summarized the findings of interviews with BC healthcare leaders with respect to shared care activities, factors that influence shared care, resource requirements for shared care, and the potential of shared care to impact health system, provider and patient outcomes. Section Three reported on various tools to support the development, implementation, management and evaluation of shared care.

Shared care approaches have been applied within health systems around the globe. They have been used to improve care for people with diabetes, cardiovascular disease, mental health problems, functional impairment, renal disease, arthritis, hepatitis and HIV/AIDS. Shared care has also been widely applied in the areas of maternity and palliative care. The broad-based acceptance of shared care approaches can be attributed to the value that shared care adds to patients, providers and the health care system. Positive outcomes and contributions of shared care have been documented throughout this report. To bring this report to a close, they are reiterated in summary form below.

Shared care:

- Defines tasks, activities and responsibilities of all providers who contribute to patient care, as well as the inter-relationship between providers.
- Promotes understanding and respect among health providers. Providers learn to value the unique skills, strengths and approaches of each discipline participating in patient care.
- Facilitates robust lines of communication between health care providers, as well as between hospitals, specialist clinics and community groups. As such, shared care strengthens linkages between primary, secondary and tertiary care.
- Encourages knowledge transfer and dissemination of best practices.
- Promotes the application of new and evolving information-related technologies.
- Facilitates appropriate targeting of care. Based on patient need, shared care delivers the suitable level and/or intensity of care, by the preferred provider, at the appropriate time.
- Increases access to health care services, especially in rural and remote areas.
- Applies clinical tools (e.g. care maps, protocols) that support and advance evidence-based, quality care.
- When home-based, increases the length of time patients remain in their own home, better prepares patients for hospital stay, and increases learnings between family members and health practitioners. Additionally, shared care supports active participation by parents in children's health care and decision making.
- When community-based, improves communication between agencies with respect to referral, feedback, assessment, and issues of privacy and confidentiality; and reduces community perception that services operate in isolation of each other.
- Is based on a "whole-person" approach that, through interprofessional practice, considers the physical, social, emotional and spiritual needs of the patient/family.
- Encourages and reinforces patients' understanding of their disease, sense of control over their condition, and self management and ability to cope. As such, shared care promotes a positive perception of health providers and the health care system.
- Leads to increased job/professional satisfaction among health providers.

In closing, this report considered the definitions, models, benefits, challenges, requirements, common elements, current initiatives, impact, and tools associated with shared care. It adds to the understanding of shared care, and provides a basis for ongoing discussion about shared care as a model for improved health service delivery and coordination in the Province of British Columbia.

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