

Diabetes Care Program Nova Scotia

2014-2019 Strategic Planning Collaboration

Respectfully Submitted By

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Contents

Executive Summary	3
Background	4
Introduction	5
Goals of the Strategic Plan Process	5
About the Public Engagement Strategy.....	6
Level of Participation.....	6
Engagement Tools	7
Vision, Mission, Values Results	8
Vision.....	8
Mission	9
Core Values.....	9
SWOT Analysis.....	9
Focus Group Results	10
Data and Information Management	10
Leadership, Collaboration and Advocacy	11
Diabetes Management and Education	11
Focus Group Summary	12
Key Informant Interview Results	12
Collaboration.....	12
Leadership	12
Integration.....	13
Primary Health Care	13
Education.....	13
Standards.....	13
Enforcement.....	13
Evidence-Based	13
Sub-Populations	14
Data	14
Governance Structure	14
Key Informant Interview Summary	14
Electronic Survey Results	14

Survey Participant Demographics	15
Survey Questions.....	16
Strategic Direction #1:.....	16
Strategic Direction #2:.....	17
Strategic Direction #3:.....	18
Strategic Direction #4:.....	20
Summary of Qualitative Comments	20
Partners in Implementation	20
Survey Evaluation	21
Summary of Electronic Survey Results	22
Council Session Results	22
Recommendations and Next Steps	24
Appendix 1 - Emerging Trends	25
Appendix 2 Participant Descriptions	29
Appendix 3 - SWOT Results	31
Appendix 4 - Focus Group Data.....	35
Appendix 5- Key Informant Interview Data.....	39

Executive Summary

WHAT DCPNS WANTED:

The existing strategic plan of the Diabetes Care Program of Nova Scotia (DCPNS) expired in 2013. To better prepare for the future while maintaining the many projects, ideas, initiatives, and goals that had led to a successful Provincial Program, the plan had to be refreshed. DCPNS agreed to include a comprehensive public participation strategy to gather meaningful input from internal and external stakeholders across Nova Scotia. This work was guided by the International Association for Public Participation (IAP2) framework and philosophy. Methods for participation included the following: sessions with the DCPNS Advisory Council and/or staff, DCPNS small working group input, information document creation, focus groups, key informant interviews, and an electronic survey.

This document describes how DCPNS engaged individuals, employees, volunteers, providers, community groups, government, and non-government organizations in the formation of the 2014-2019 Strategic Plan. It also presents the results of these engagement activities, including the final strategic directions.

WHAT DCPNS DID:

- 4 sessions with staff and the Advisory Council were held to gather input and feedback.
- 4 focus groups were formed with 30+ individuals that represented various sectors within Nova Scotia including DHW policy makers and staff, diabetes educators, district managers, provincial program managers and more.
- 12 key informant interviews were conducted with partners and health care leaders.
- 120 responses were received from a survey designed to gauge support and agreement for DCPNS strategic directions and key activities.

WHAT DCPNS HEARD:

Individuals agreed with the direction that DCPNS identified in its strategic plan. They were happy to be consulted and felt that they were heard throughout the process. They believe that DCPNS is a leader in the province regarding diabetes and wanted to help strengthen that role in the new political, social, economic, and technological environments. The following 4 strategic directions were discussed and reflect feedback gathered during the strategic planning process and have been approved by the DCPNS Advisory Council.

Strategic Direction #1: Create and share knowledge through collaboration in the development, implementation, and evaluation of comprehensive standards and guidelines for diabetes care, education, and service delivery across the many settings in which care is provided.

Strategic Direction #2: Lead the development of an integrated system of diabetes management aimed at reducing and delaying the development and/or progression of diabetes complications.

Strategic Direction #3: Use complete, accurate, and accessible local and provincial data to set targets, make informed decisions, and take action to improve diabetes outcomes in NS.

Strategic Direction #4: Work collaboratively across Provincial Programs and with other departments/agencies/organizations to support the prevention and management of diabetes and other chronic diseases.

Key activities for each strategic direction were also developed and approved. They are found on pages 22 & 23.

WHAT DCPNS WANTS TO DO NEXT:

DCPNS wants to build a plan to prioritize and implement the strategic plan over the next 5 years. This will include involvement from stakeholders and partners within Nova Scotia and beyond. With strong leadership and collaboration, DCPNS can achieve its mission and help those living with or at risk of developing diabetes in Nova Scotia.

Background

Established in 1991, the Diabetes Care Program of Nova Scotia (DCPNS) is one of 9 Provincial Programs funded by the Nova Scotia Department of Health and Wellness. The DCPNS mandate is to develop, promote, and monitor adherence to standards and guidelines; recommend service delivery models; collect, distribute, and use diabetes data in Nova Scotia; provide support, services, and resources to diabetes care providers; and participate in program evaluation.

In its early years, the DCPNS was tasked with standardizing and optimizing the care delivered through Diabetes Centres across the province. This was accomplished through the development of standardized documentation forms for the adult, pediatric, and pregnant populations; development of guideline documents/recommended practice approaches; creation of knowledge transfer/exchange opportunities; as well as implementation of the DCPNS Registry and a common statistics-keeping framework. Efforts have been focused on building and maintaining expertise at the local level (as close to home as possible) where people with diabetes live, work, and play.

In the most recent 5 years, the DCPNS has:

- Helped to develop the Nova Scotia Insulin Pump Program (NSIPP) launched September 2013.
- Worked in partnership with the Drug Evaluation Alliance of NS (DEANS) as well as Dalhousie University's Departments of Continuing Pharmacy Education and Continuing Medical Education on a variety of topics including hypertension, insulin therapies, and self-monitoring of blood glucose (SMBG). Have introduced decision-support tools (including videos) in support of consistent across-discipline approaches and messaging related to SMBG in specific populations.
- Released guidelines and resources aimed at specific complications as well as specialty populations including elderly residents living in long-term care facilities, pregnant women, and children/youth/young adults. Have focused on successful transition of adolescents/young adults from pediatric to adult care and standard processes for insulin pump initiation in the pediatric population that have recently been translated to the adult population. A Foot Risk Assessment form, risk stratification algorithm, and standardized provider and patient tools are also in use across the province.
- Established, in conjunction with Cardiovascular Health Nova Scotia (CVHNS) and the Nova Scotia Renal Program (NSRP), a Joint Advisory Group to address common risk factors, participate in joint surveillance activities to better understand issues of multi-morbidity, and explore across disease initiatives. The *My Blood Pressure* Initiative is but one example of the work of this collaboration.
- Encouraged innovation and fostered partnerships at the local level using DCPNS grants aimed at quality and patient safety as well as joint hypertension grants funded in partnership with CVHNS and NSRP.

- Worked collaboratively with NB and PEI in the adoption of the DCPNS Insulin Dose Adjustment Policies and Guidelines Manual.
- Facilitated the adoption of the DCPNS Physical Activity and Exercise Toolkit by the Canadian Diabetes Association for national dissemination.
- Continued to support diabetes care providers in Diabetes Centers and additional settings. Offered networking and knowledge translation opportunities through provincial and regional workshops, the DCPNS newsletter (Diabetes Care in Nova Scotia), telehealth sessions, etc.
- Released diabetes statistical reports for the province, the DHAs, individual Diabetes Centres.
- Continued to improve and support the use of the DCPNS Registry in all DHAs and the IWK.
- Embedded Clinical Practice Guideline recommendations into DCPNS tools and resources, including assessment/documentation forms.
- Supported the work of the Public Agency of Canada (PHAC) through contributions to the Canadian Chronic Disease Surveillance System.
- Collaborated in province-wide initiatives focused on Chronic Disease Prevention and Management, including self-management and self-management support.

Introduction

The environment in Nova Scotia is changing and DCPNS needs to be prepared to adjust to new realities, including governance, fiscal, and operational changes. DCPNS wanted to connect with partners and partnering organizations to get a deeper understanding of their perspectives on how DCPNS can prepare for the future. DCPNS wanted to include a public engagement/participation strategy to gather meaningful input from individuals and organizations. Its last strategic plan expired in 2013. The 2008-2013 plan offered a great deal of success in terms of implementation and understanding. Therefore, DCPNS decided to refresh this strategic plan and align it with existing opportunities. To engage partners, stakeholders, funders, and frontline support, DCPNS used a variety of methods to gather input and find ways to connect with these individuals on an ongoing basis. Key individuals for interview were selected with the help of DCPNS Advisory Council members, the Director of ATC, and the small strategic working group. Other individuals and groups were selected for the focus groups and the e-survey in a similar manner with the intent to gather input from across the system—those familiar (direct stakeholders) and less familiar with the DCPNS but with a growing interest and role in diabetes/chronic disease management.

Goals of the Strategic Plan Process

The staff and advisory council of DCPNS agreed that the 2014-2018 strategic plan will:

- ▶ Integrate and align the overall work of the organization
- ▶ Build and sustain a vision for the future (2014-2019)
- ▶ Provide the basis for difficult strategic decisions
- ▶ Guide annual business and operational planning at the management level
- ▶ Focus on longer-term outcomes
- ▶ Be a road map for the organization
- ▶ Involve the voices of the various stakeholders by using methodology that includes meaningful participation (IAP2)

- ▶ Inform the various stakeholders of the key activities of DCPNS developed from evidence and internal input
- ▶ Identify future partnerships for implementation of the strategic plan
- ▶ Refresh the previous strategic plan directions rather than starting from scratch

Although there are many levels to a planning process, it was agreed that this Strategic Plan will stay at a broader “corporate” level that influences subsequent plans and work levels. This will ensure that any analysis remains at a broad strategic level and is not meant to capture specifics for work plans or operational plans.



About the Public Engagement Strategy

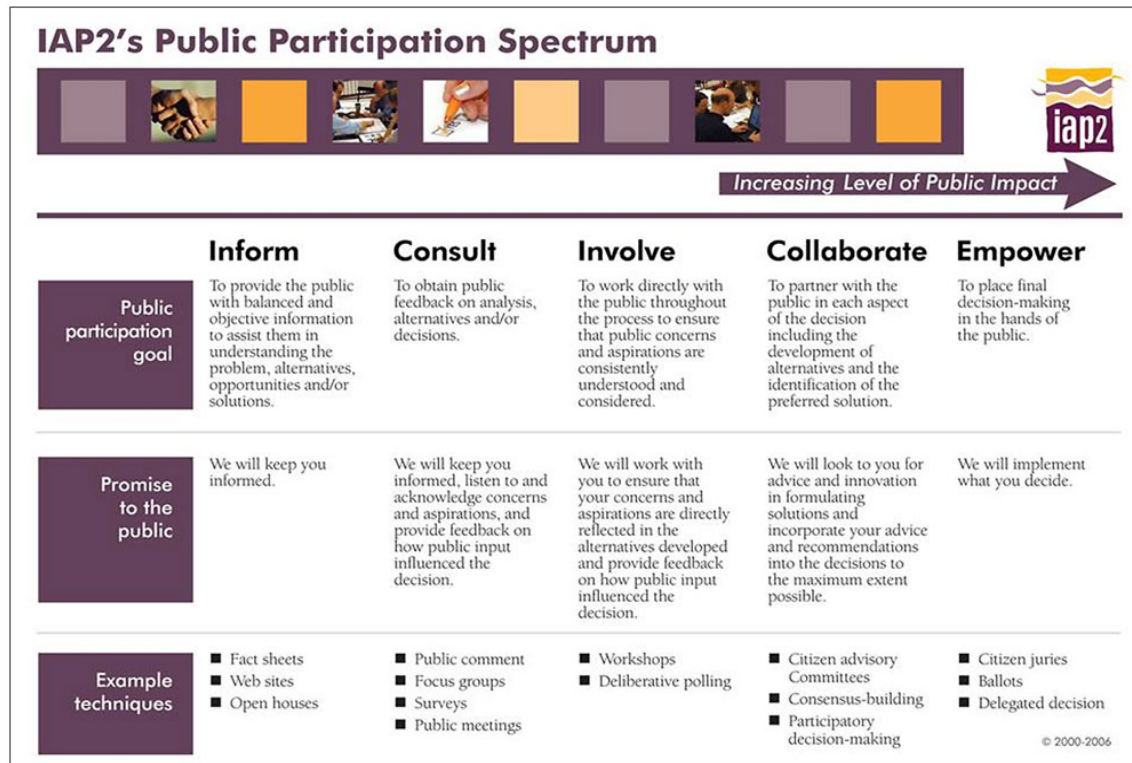
This document describes how DCPNS engaged individuals, employees, volunteers, providers, community groups, government and non-government organizations, and other provinces in the formation of the 2014-2019 Strategic Plan. It also presents the results of these engagement activities, including the final strategic directions.

The strategy was grounded in the International Association for Public Participation (IAP2) framework, sometimes referred to as engagement. Public participation is any process that involves the public in problem solving or decision making and uses public input to assist in making decisions. *The public is any individual or group of individuals, organization, or political entity with an interest in the outcome of a decision. They often are referred to as stakeholders.* Internal stakeholders (individuals who work for or with the decision-making organization) are also part of the public (Source: IAP2, 2006). DCPNS held a session that identified various stakeholders that might be interested in the strategic plan outcome.

Public participation does not necessarily mean consensus but involves seeking broad agreement for the organization’s decision. By involving key publics in creating the DCPNS strategic plan, it will ensure that their values, interests, needs, and desires are considered. It can also facilitate the public’s understanding of the problem and the available options. This philosophy and its benefits guided the development of the new strategic plan.

Level of Participation

The IAP2 framework includes various levels of participation that include promises and methods. DCPNS agreed that the majority of the methods used will fall into the *Inform* and *Consult* levels. However, some of the methods may fall into higher categories depending on the participation goal. It is also recognized that the strategic plan is just a starting point and that the implementation of the key activities may include a much higher level of participation depending on the initiative, goal, and partner. (Source: IAP2, 2007)



Engagement Tools

There was a variety of engagement processes and tools used to gather input from individuals and groups in order to ensure meaningful participation. These processes were not mutually exclusive. In fact, individuals were sometimes encouraged to participate in as many, or all, of the methods, if desired. Given that each method provided a different form of participation and confidentiality and were at different stages of the strategic plan development, it was sometimes desirable to be involved in more than one process. Engagement tools and processes included:

- 1) Engagement session with the Advisory Council to review the mission, vision, and values of DCPNS.
- 2) DCPNS staff engagement session to identify strengths, opportunities, weaknesses, threats and refresh the strategic directions and key activities.
- 3) Council engagement session to identify strengths, opportunities, weaknesses, threats and refresh the strategic directions and key activities.
- 4) Input from the small DCPNS working group on modifications to the strategic directions and key activities before release.
- 5) Development and circulation of an emerging trends and key successes document to inform individuals of the past activities and future consideration for the DCPNS (Appendix 1).
- 6) Focus Groups with various stakeholders to review the strategic directions and key activities and provide input on the future of DCPNS.
- 7) Key informant interviews/confidential conversations about where DCPNS should head into the future.
- 8) Electronic survey to gain support from a broader anonymous stakeholder group around the DCPNS strategic directions and to identify future partners for implementation.

- 9) Presentation of results to the DCPNS Advisory Council and make final decisions on the strategic plan and directions.

Each method involved a different level of participation on the IAP2 spectrum and a different goal. The following table identifies the IAP2 level and the participation goal for all of the above methods.

Method	IAP2 Level	Outcome
Council session on reviewing vision, mission, and values	Consult	Council has input into the foundation of the organization.
Staff session on SWOT and refreshing of strategic plan	Collaborate	Staff feel they have input into shaping the organization's direction.
Council Session on SWOT and refreshing of strategic plan	Collaborate	Council feels that it has accountability and understanding of the direction of DCPNS.
DCPNS Working Group Review of strategic directions	Consult, Empower	Individuals feel they have input at an important stage.
Key Informant Interviews	Consult	Individuals feel their input was desired and valued for informing the strategic plan.
Focus Groups	Inform, Consult	Individuals learn more about DCPNS and have input into the future around implementation.
E-Survey Testing	Involve	Individuals feel their input is desired and valued to test the survey.
E-Survey	Inform, Consult	Individuals feel that they are heard and are informed about the future.
Session with Council	Inform, Consult , Collaborate	Council feel that they can live with and support the plan.
Presentation of Final Plan	Inform,	Staff, partners, and others see the level of input and clearly see the direction.

Vision, Mission, Values Results

A session was held with the Advisory Council to review the existing vision, mission, and values. This was led by the Program Manager. Input was received from an in-person session and an email response. While there were some suggestions to wording and format, it was agreed that these changes were not substantial and significant enough to change the current vision, mission, and values. There was recognition that keeping these the same could be beneficial for staff and stakeholders rather than having to educate individuals on new statements. The current vision, mission, and values are stated below.

Vision

The Diabetes Care Program of Nova Scotia (DCPNS) is a trusted and respected program that values partnerships and supports integrated approaches to the prevention and management of diabetes. We envision a Nova Scotia where there are fewer cases of diabetes, complication rates for those with diabetes are reduced, and where all Nova Scotians with diabetes have access to the resources they need to live well.

Mission

To improve, through leadership and partnerships, the health of Nova Scotians living with, affected by, or at risk of developing diabetes.

Core Values

The following values guide the decisions and actions of the DCPNS. We believe in:

- Excellence
- Collaboration
- Responsiveness
- Inclusiveness
- Evidence-informed decision making
- Integrity
- Accountability

SWOT Analysis

Small groups of staff and members of the DCPNS Advisory Council discussed the Strengths, Weakness, Opportunity and Threats of the 2008-2013 strategic plan. The intention was to identify opportunities for improvement that would result in a new set of Strategic Directions and/or modifications to the existing plan. The results are found in Appendix 2. Items in bold were mentioned by several participants. The statements at the beginning are an attempt to summarize most of the comments but are not meant to be exhaustive.

A clear strength of DCPNS is the knowledge, expertise, and information shared, retained and available to others within this Provincial Program. In addition to being a highly-respected and well-used resource for the province, educators and clinicians, DCPNS has an *“ability to create guidelines and tools that are not available elsewhere (foot care, long-term care, pregnancy)”*, and create a “Provincial Vision” that allows everyone to participate in a standardized way to manage diabetes across disciplines, roles and government departments.

It was also clear that DCPNS is strong in building both internal and external relationships. For over 20 years, DCPNS has created a reputation of being a resource for frontline staff, having mutually respected partnerships with academia (Dalhousie, Acadia, Dal CME/Academic Detailing) and the Public Health Agency of Canada. DCPNS also has a reputation across other provinces, other Provincial Programs, and departments/groups such as Long-Term Care, DEANS, etc.

In contrast, one identified weakness is the decreasing ability of DCPNS to drive its own agenda while collaborating and respecting the need for across Provincial Program joint work (JAG) and helping to meet the needs/interests of Department of Health and Wellness (DHW) priorities and new/emerging initiatives. Ever changing program/portfolio boundaries and expectations from a broader provincial point of view often require DCPNS to set aside identified agenda items to move the priorities of others forward. Aside from playing havoc with workloads, these sudden changes in priorities or projects create strains in budgets and human resource allocation. It should come as no surprise that a lack of resources was identified as a weakness within the Provincial Program.

Furthermore, not knowing its place in larger organizational structures/interest areas (i.e., DHW, District Health Authorities [DHAs], Chronic Disease Prevention and Management, Primary Care) due to restructuring and re-aligning of priorities and responsibilities is seen as a threat to both internal and external folks in the DCPNS community. There also exists some confusion or misunderstanding around its role within the DHW and, of course, within the new health authority structure.

This ever-changing governance and priority setting also threatens the highly celebrated Information Management and Technological Support that providers, stakeholders, and partners rely on.

During SWOT analysis, opportunities are often identified within, or because of, the weaknesses and threats; this exercise was no exception. Restructuring and re-aligning opportunities with the DHW was identified as a chance to set targets, trends, and priorities to both guide and protect the work of DCPNS. Specific IT/IM opportunities were also identified and can be found with the raw SWOT data in Appendix 2. On a few occasions, relationships that could be strengthened were named to improve how DCPNS works and maintain the reputation it holds within the province and the country.

- Joint Advisory Group/ DCPNS Positioning
- Relationship with Adult Endocrine Divisions, QEII
- Linkage to vulnerable populations of First Nations, African Nova Scotian
- Improve collaboration with Family MDs & Pharmacy
- Improve functionality for end users of the DCPNS Registry (DCs using own data) without having to request queries from DCPNS
- In-patient diabetes care/management

The SWOT analysis also offered an opportunity for participants to make editorial suggestions to the 2008-2013 Strategic Directions, paving the way for a new set of amended and refreshed Strategic Directions. These were then used as the basis for the other participation methods.

Focus Group Results

A total of 4 focus groups were conducted that brought together 30+ individuals from the Department of Health and Wellness, Provincial Programs, DHA staff (Diabetes Educators, Diabetes Centre Managers, etc.) and collaborative practice team members. The questions asked during the focus groups were as follows:

- Q1: What do you know about DCPNS and its work?
- Q2: What is DCPNS doing well or what should it keep doing?
- Q3: What should DCPNS do that it might not be already doing?
- Q4: What should DCPNS do less of?
- Q5: What should DCPNS look like in 5 years?

Notes were taken to qualitatively identify major themes or ideas. The intention was to analyze the information at a strategic level, not at the operational level. However, when very specific comments or implementation ideas were given, they were collated and given to the Program Manager to be considered by the working group. The themes identified by the focus groups are provided below.

Data and Information Management

DCPNS is well known locally and provincially and has received national recognition for its DCPNS Registry. Comments about the DCPNS Registry included opinions on data entry/use, information support, reporting, and implementation of the DCPNS Registry.

Support: Several participants made note that they need support from DCPNS to fully “*embrace technology to network, teach, and improve data collection and transfer.*” There were several who asked if DCPNS could help with software/hardware support in the Diabetes Centres.

Reporting & Implementation: There were a number of suggestions on how DCPNS, through the DCPNS Registry, *“provide stats at a local level so we can make a decision to help our patients.”* Some participants wondered if the DCPNS Registry could be put to better use, by improving training, removing duplicate entry, increasing implementation and or access to the data at a local level.

Leadership, Collaboration and Advocacy

When participants were asked what they know about DCPNS and why DCPNS work is important, several “character traits” were identified repeatedly. As a Provincial Program, DCPNS has demonstrated Leadership, Collaboration and Advocacy in a variety of settings and within different levels of care. Furthermore, others feel that DCPNS is a leader in its approach to collaborative care and partnerships. This leadership has created an expectation that DCPNS could lead greater linkages between Provincial Program and work with Primary Care and Chronic Disease Management.

Leadership: One participant said that DCPNS is known *“For tackling complex issues like obesity and high risk factors like chronic diseases”*. Others said there is “national recognition that we have DCPNS so that makes us a lucky province.” This sentiment was echoed by 5 others.

Collaboration: *“DCPNS is taking the lead and doing consultations like this focus group for their Strategic Planning; they always seek education and documentation advice”* is one participant’s comment. It sums up the appreciation for how successful DCPNS is when collaborating with care providers, other Provincial Programs, and health care partners to care for persons with diabetes in Nova Scotia.

Advocacy: One type of advocacy that was mentioned over and over is the way DCPNS advocates for patients directly. Others mentioned that a huge advocacy need filled by DCPNS is the support it offers to diabetes educators. This role raised concern and hope that DCPNS will continue to collaborate and advocate at the programming and management levels as well as for individuals (educators and patients) in the province without losing its focus or momentum despite all of the governance changes.

Diabetes Management and Education

An element of DCPNS work that perhaps has the most impact on patient care is the education and support they provide and implement around diabetes management.

Provincial Conference: Several participants mentioned profound appreciation and support for the provincial education conference. Recognizing that while the actual conference is hosted every second year, there is need for yearly educational and networking opportunities. Perhaps, alternative education opportunities could be explored (online, self-directed studies or local “peer” study groups with DCPNS staff). It was also mentioned that with the change in the DHAs structure, educational and networking opportunities will change.

Standardized Resources and Reference Material: Without a doubt, participants value highly the types of references, resources and guidelines provided by DCPNS as they directly impact patient care. Nearly every participant commented on the work DCPNS does around setting standards, creating practice guidelines and manuals/forms to ensure patients receive consistent care across the province regardless of their location within. *“DCPNS has done a great job in creating material for the public and care providers that match and give the same message; other programs admire that.”*

Educator and Care Provider Support: DCPNS directly supports diabetes educators. It works with “educators to ensure all clients get the same level of care regardless of where they live”. According to participants, DCPNS provides support that allows educators to confidently provide the latest clinical care and tools in diabetes management. *“They keep us up-to-date on the latest treatments because clinical stuff keeps us so busy we need to know someone is working on the big picture.”*

A few concerns were expressed about the kind of education other care providers who work with persons with diabetes receive (i.e., those working in primary healthcare or chronic disease). Folks wondered if people who have not received training from DCPNS are *“as knowledgeable about diabetes as Diabetes Educators are.”* There seems to be a question and or a need that *“everyone has the same training, knowledge and can give patient standard care.”* Working with primary care and those in chronic disease is an overarching theme throughout the focus groups and the other methods of engagement.

Focus Group Summary

Many individuals came together to talk about how DCPNS can strengthen its place in the province over the next 5 years. Comments were consistent with what was included in the key activities and they further validate that DCPNS is on the “right” strategic path. Comments on specific changes to the strategic directions including wording and formatting were gathered and provided to the Program Manager for use at a later time.

Key Informant Interview Results

Key informant interviews were conducted with 12 individuals in various roles across the province (See Appendix 2 for list of key informant interviewees). These individuals were selected purposefully given their professional role and/or interest in diabetes care. The questions asked of these individuals were the same as those in the focus groups. Individuals were sent the emerging trends/key accomplishments document and the draft version of the strategic directions/key activities prior to the telephone interview.

Results from the key informant interviews are very similar to the focus groups. Considering the number and variety of respondents the same concerns, comments, and opportunities were shared.

Collaboration

The individuals identified a real strength in how the program collaborates across the province with various stakeholders. They also mentioned that the collaboration could be strengthened by reaching further into and beyond the healthcare system such as into chronic disease management and primary care, educational areas, and facilitates where persons with diabetes are also receiving support like community pharmacies and other agencies. In addition, inviting people to participate earlier in discussions was seen as an opportunity. *“They collaborate very well with a core group of people but could look at other organizations and resources beyond the healthcare system.”* again suggesting DCPNS collaborates with physicians and other health care providers but could think differently about who should be at the table.

Leadership

The individuals identified that DCPNS provided real leadership around diabetes and chronic disease management across the province and is well-respected at national tables as well. They said that Nova Scotia is seen as a leader when it comes to diabetes work and is often referred to as being ahead of the curve. *“They take leadership in rolling out new programs and guidelines and keep patients and providers informed. They do a great job at this.”*

Integration

While DCPNS has had great success in various venues over the past number of years, the individuals pointed to a need to integrate with other chronic disease programs in the future. There was a notion that while this is important, the diabetes program cannot be absorbed into one chronic disease system either. The individuals felt that given limited resources, this will likely be a major part of the future. This concern about a loss of focus echoes what was discussed in the focus groups as well.

Primary Health Care

There was mention about the specific need to reach further into primary healthcare by working with family-physician teams and other diabetes care providers. The change in how and where diabetes care is delivered needs to be considered in future collaboration and education opportunities. It was mentioned that the focus cannot solely be on the family doctor as the gatekeeper. Other professionals in primary care including pharmacists, dietitians, nurse practitioners, family practice nurses and others need to be brought into the discussions of diabetes management early and used to their full potential.

Education

The individuals repeatedly mentioned the education sessions provided by DCPNS for providers was a key element and support to frontline care. The education and training provided by DCPNS was seen as a real strength. The use of technology to make this education more easily accessed should be explored. The individuals in rural areas noted some challenges with travelling long distances for short meetings, sessions, etc. Some individuals also asked how testing or ensuring knowledge is maintained by individuals once back in practice could be considered.

Standards

As with the focus groups, the individuals noted the program's success around standardized education, programming development, and data collection. Every individual mentioned this as something to keep doing into the future. DCPNS is seen as a leader around creating guidelines and standard care provision across the District Health Authorities and geographic areas. *"They promoted new guidelines and treatment ideas. I really like how they tell us what is important and figure out ways to inform the province and implement those suggestions locally."*

Enforcement

There was discussion about the ability or opportunity to enforce or follow up on the implementation of the standards/guidelines. People saw the challenges in the governance of the Diabetes Centres in the DHAs in that DCPNS can only recommend that the changes are implemented but had no control over it. They wondered if in the new structure, DCPNS could have an enforcer role specifically, *"They [DCPNS] work towards standardizing care but don't close the loop."* *"There is no way to really enforce a standard or policy."*

Evidence-Based

Participants felt confident that DCPNS ensures guidelines, resources, and other tools are developed based upon best practice and valid information. They feel that DCPNS can be trusted in how it uses all valid and appropriate evidence. *"They use that evidence to inform practitioners to get the best care for patients. We have a high level of respect and dependence on them to provide that expertise."*

Sub-Populations

Some individuals did list various sub-populations that need consideration or inclusion into DCPNS work. There was particular mention of the aboriginal communities. Many noted that all populations seem to be vulnerable during age group transitions, i.e., as they transition from children to teens, teens to adults, adults to seniors, and seniors to elderly, and how diabetes management changes with each transition.

Data

There was mention of the DCPNS Registry. The individuals noted that it was comprehensive and well-respected across Canada. Some identified where it could be strengthened by linking with primary care, with physician offices, and a person's Electronic Medical Record.

Governance Structure

Due to the timing of the strategic plan consultations, it would have been surprising if the pending changes to NS health system structure did not come into the discussions. Individuals noted that these changes could be seen as real opportunities for consistency across the province and easier implementation of guidelines and programs. *"Infrastructure changes will give the Provincial Programs an exciting new reality and the work DCPNS does will compliment this structure."* People are unsure what the real impact of the new structure will be to the DCPNS program but are preparing for it to have a significant impact. There is concern that the changes may be felt more in the most rural parts of Nova Scotia once the one large district is implemented and changes happen to various programs or services like the Diabetes Centres.

Key Informant Interview Summary

Twelve individuals had an in-depth, confidential conversation about the role of DCPNS and the opportunities for improvement. They were well-prepared and their comments reflected the SWOT analysis conducted earlier by staff and the council. The results were not drastically different from the key activities listed. Individuals usually talked about these issues or items in greater detail or how they could be strengthened during the operational or implementation stage of planning. Again, it was a validation that these individuals were on the same path as DCPNS staff and Advisory Council. Saturation (the point at which repetition of major themes happens) occurred very quickly.

Electronic Survey Results

The e-survey served as an IAP2 level of Inform and Consult. Its purpose was to inform and seek validation of the strategic directions and seek initial reaction and feedback. A secondary purpose was to seek opportunity for future collaboration and implementation among the participants. The questions were developed after consultation with individuals from DCPNS and other strategic plans from across Canada. The survey was tested on various internal and external participants for length and understanding. It was open for 19 days during April and May. A distribution list was created by DCPNS and an email was sent out to these individuals asking them to participate (see Appendix 2 for groups of individuals contacted). In order to increase participation, reminders were sent out at 3 points and all emails asked individuals to forward the survey link to anyone else who might be interested. Over 120 responses were received, which is above industry standard for an e-survey of this length and one related to strategic planning. The survey also included a link to the program's emerging trends reference document and key accomplishments to help inform participant answers.

Survey Participant Demographics

Type of Organization

Response	Chart	Percentage	Count
Government		14.3%	16
DHA Administrative Offices		10.7%	12
DHA health care delivery such as hospital, long-term care, community care		56.2%	63
Non-government organization		1.8%	2
Academic/Research		5.4%	6
*Other, please specify...		11.6%	13
		Total Responses	112

*The Other category consisted mainly of family practice/physicians.

Respondent Job Title

Response	Chart	Percentage	Count
DHA CEO, VP		8.1%	9
Director		8.1%	9
Manager		12.6%	14
Researcher		0.0%	0
Clinician (diabetes educator, nurse practitioner, physician)		52.3%	58
Faculty member		3.6%	4
*Other, please specify...		15.3%	17
		Total Responses	111

*The Other category consisted mainly of volunteer, family practice nurse, registered nurse, or coordinator titles.

Summary of Demographics

Many participants belonged to a DHA or a care delivery organization. Clinicians as well as some faculty and academic researchers also participated. The fact that many DHA VPs or CEOs and managers provided input is both encouraging and extremely valuable given their decision-maker role with respect to diabetes programming and resource allocation outside DCPNS.

Survey Questions

As seen in the tables below, a colour-coding scheme was used to summarize responses. Green represents positive comments or results; yellow suggests caution with interpretation. Anything that was highly concerning is given a red colour. Anything below 5% response is not coded given the low numbers it would represent.

Strategic Direction #1: Create and share knowledge through collaboration in the development, implementation, and evaluation of comprehensive standards and guidelines for diabetes care, education, and service delivery across the many settings in which care is provided.						
Question: How strongly do you believe that the DCPNS should pursue this strategic direction?						
Not at all	A little	Neutral	Strongly	Very Strongly	Don't Know/ Unsure	Total Responses
0 (0.0%)	1 (0.8%)	2 (1.7%)	33 (28.0%)	82 (69.5%)	0 (0.0%)	118

Key Activities for Strategic Direction #1							
Question: How strongly do you believe that the DCPNS should pursue these areas of interest?							
	Not at all	A little	Neutral	Strongly	Very Strongly	Don't Know/ Unsure	Total Responses
Maintain active surveillance of new advances and best practices in diabetes care, education, and service delivery and facilitate knowledge transfer to key stakeholders.	0 (0.0%)	0 (0.0%)	3 (2.4%)	32 (26.0%)	88 (71.5%)	0 (0.0%)	123
Identify and address priorities for diabetes management, based on new/emerging evidence and care gaps, including guideline/tool development/revision, policy development, etc.	0 (0.0%)	1 (0.8%)	2 (1.6%)	38 (30.9%)	82 (66.7%)	0 (0.0%)	123
Promote accessible, high quality diabetes care for specialty populations, including but not limited to, children/youth and young adults, pregnant women, insulin pump users, and individuals with advanced disease and complex treatment plans.	1 (0.8%)	0 (0.0%)	4 (3.3%)	35 (28.7%)	82 (67.2%)	0 (0.0%)	122

Promote self-management in individuals living with, affected by, or at risk of developing diabetes through targeted interventions aimed at encouraging health care provider engagement in self-management support.	2 (1.6%)	0 (0.0%)	8 (6.6%)	27 (22.1%)	83 (68.0%)	2 (1.6%)	122
Establish new and strengthen existing partnerships in acute, continuing, and community care settings, including collaborative practices, primary care, retail pharmacies, inpatient care, long-term care facilities, etc.	0 (0.0%)	0 (0.0%)	8 (6.6%)	39 (32.2%)	73 (60.3%)	1 (0.8%)	121
Refine the framework and processes (to be manageable and meaningful) for diabetes service review including the reporting of specific indicators and targets.	0 (0.0%)	0 (0.0%)	17 (13.9%)	46 (37.7%)	58 (47.5%)	1 (0.8%)	122
Encourage innovation and adoption of evidence-informed practice and applied research, through the use of quality and safety initiatives.	0 (0.0%)	0 (0.0%)	5 (4.2%)	37 (31.4%)	76 (64.4%)	0 (0.0%)	118

Strategic Direction #2: Assist in the development of an integrated system of diabetes prevention and management aimed at reducing rates of diabetes and delaying the development and/or progression of diabetes complications.						
Question: How strongly do you believe that the DCPNS should pursue this strategic direction?						
Not at all	A little	Neutral	Strongly	Very Strongly	Don't Know/ Unsure	Total Responses
0 (0.0%)	2 (1.8%)	4 (3.6%)	37 (33.3%)	68 (61.3%)	0 (0.0%)	111

Key Activities for Strategic Direction #2							
Question: How strongly do you believe that the DCPNS should pursue these areas of interest?							
	Not at all	A little	Neutral	Strongly	Very Strongly	Don't Know/ Unsure	Total Responses
Develop criteria for diabetes/prediabetes risk stratification, including referral algorithms indicating the most appropriate program and/or provider team.	0 (0.0%)	5 (4.3%)	7 (6.0%)	54 (46.2%)	51 (43.6%)	0 (0.0%)	117

Develop and pilot a disease management system that uses a refined case management approach, including referral to the appropriate care provider, for people with diabetes at high-risk and/or with multiple comorbid conditions.	1 (0.9%)	7 (6.0%)	11 (9.4%)	48 (41.0%)	49 (41.9%)	1 (0.9%)	117
Implement training opportunities for health care providers to acquire and enhance their knowledge and skills around diabetes, including motivational approaches to support chronic disease management.	0 (0.0%)	7 (5.9%)	3 (2.5%)	31 (26.3%)	77 (65.3%)	0 (0.0%)	118
In partnership, identify and help to meet the diabetes needs of vulnerable, at-risk populations.	0 (0.0%)	4 (3.4%)	9 (7.6%)	52 (44.1%)	53 (44.9%)	0 (0.0%)	118
Work with partners to identify the various audiences, the information to be shared, and actions required to reduce rates of diabetes, diabetes complications, and other chronic diseases.	0 (0.0%)	3 (2.6%)	13 (11.2%)	49 (42.2%)	51 (44.0%)	0 (0.0%)	116
Support initiatives/resources focused on mental health issues including diabetes distress, stress, anxiety, and depression.	0 (0.0%)	6 (5.2%)	8 (6.9%)	44 (37.9%)	57 (49.1%)	1 (0.9%)	116

Strategic Direction #3: Use complete, accurate, and accessible local and provincial data, to set targets, make informed decisions, and take action to improve diabetes outcomes in NS.

Question: How strongly do you believe that the DCPNS should pursue this strategic direction?

Not at all	A little	Neutral	Strongly	Very Strongly	Don't Know/ Unsure	Total Responses
2 (1.8%)	1 (0.9%)	8 (7.0%)	45 (39.5%)	58 (50.9%)	0 (0.0%)	114

Key Activities for Strategic Direction #3

Question: How strongly do you believe that the DCPNS should pursue these areas of interest?

	Not at all	A little	Neutral	Strongly	Very Strongly	Don't Know/ Unsure	Total Responses
Enhance the current performance measurement framework (clinical and self-care), including process and outcome indicators for	1 (0.8%)	2 (1.7%)	17 (14.4%)	46 (39.0%)	49 (41.5%)	3 (2.5%)	118

diabetes surveillance, to meet the priorities of health decision makers and providers.							
Facilitate the use of the DCPNS data holdings by policy and decision makers, health system planners, Department of Health & Wellness (including other Provincial Programs), DHAs and the IWK Health Centre, Diabetes Centres, researchers, and others.	1 (0.8%)	2 (1.7%)	19 (16.1%)	43 (36.4%)	52 (44.1%)	1 (0.8%)	118
Enhance the capture of diabetes cases in the DCPNS Registry through collaborative partnerships and linkage with other Health Information Systems, striving to capture basic information on all diabetes cases in the province.	0 (0.0%)	1 (0.8%)	14 (11.9%)	39 (33.1%)	62 (52.5%)	2 (1.7%)	118
Seek funding opportunities to optimize use of the DCPNS diabetes data sources.	1 (0.8%)	6 (5.1%)	28 (23.7%)	40 (33.9%)	40 (33.9%)	3 (2.5%)	118
Improve case detection of diabetes in high-risk, vulnerable populations.	0 (0.0%)	2 (1.7%)	11 (9.5%)	51 (44.0%)	52 (44.8%)	0 (0.0%)	116

Strategic Direction #4: Work collaboratively across Provincial Programs to support chronic disease prevention and management.						
Question: How strongly do you believe that the DCPNS should pursue this strategic direction?						
Not at all	A little	Neutral	Strongly	Very Strongly	Don't Know/ Unsure	Total Responses
0 (0.0%)	2 (1.8%)	6 (5.4%)	35 (31.2%)	69 (61.6%)	0 (0.0%)	112

Key Activities for Strategic Direction #4								
Question: How strongly do you believe that the DCPNS should pursue these areas of interest?								
	Not at all	A little	Neutral	Strongly	Very Strongly	Don't Know/ Unsure	Total Responses	
Develop and implement strategies to address common risk factors.	0 (0.0%)	2 (1.7%)	9 (7.7%)	46 (39.3%)	60 (51.3%)	0 (0.0%)	117	
Participate in joint surveillance initiatives to understand issues of multimorbidity.	0 (0.0%)	0 (0.0%)	3 (2.6%)	16 (13.7%)	38 (32.5%)	59 (50.4%)	1 (0.9%)	117
Explore cross disease initiatives that complement the disease specific approaches of each program.	0 (0.0%)	0 (0.0%)	3 (2.5%)	10 (8.5%)	47 (39.8%)	56 (47.5%)	2 (1.7%)	118
Profile joint work through various communications channels.	0 (0.0%)	0 (0.0%)	5 (4.2%)	18 (15.3%)	46 (39.0%)	49 (41.5%)	0 (0.0%)	118

Summary of Qualitative Comments

Individuals were asked if there was another Key Activity they would like DCPNS to consider that would support a specific Strategic Direction. The number of open-ended responses was extremely low, sometimes in the single digits. Many of the suggested key activities would add value to an operational plan rather than a strategic plan. Therefore, it is not recommended that these comments change the current strategic plan given the low numbers and highly specific nature. The specific comments are included in the list of implementation ideas provided to the Program Manager.

Partners in Implementation

Another question on the survey asked if individuals and organizations would like to work with DCPNS in the implementation of the Strategic Plan and its rollout and what areas would they like to be involved with. Thirty (30) people responded with their names and emails, some with up to five topic areas each.

The complete list has been provided to the Program Manager. For the purpose of this report, the implementation ideas were grouped and the following themes identified:

- Data and Evaluation
- Disease Prevention
- Evidence Review
- Dissemination
- Chronic Disease Management
- Population-Focused Initiatives (specific subgroups)
- Education
- EMR
- Mental Health

Survey Evaluation

Finally, participants were asked to evaluate the electronic survey with the following statements and scale.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable	Total Responses
The Emerging Trends/Accomplishments document was helpful to me.	4 (3.7%)	1 (0.9%)	13 (11.9%)	67 (61.5%)	20 (18.3%)	4 (3.7%)	109
The length of time to complete the survey was appropriate.	2 (1.8%)	1 (0.9%)	7 (6.4%)	70 (63.6%)	30 (27.3%)	0 (0.0%)	110
I felt that I had an opportunity to be heard.	3 (2.8%)	1 (0.9%)	12 (11.0%)	69 (63.3%)	24 (22.0%)	0 (0.0%)	109
I have a better understanding of the initiatives that DCPNS will implement in the next five years.	2 (1.8%)	2 (1.8%)	8 (7.3%)	68 (61.8%)	29 (26.4%)	1 (0.9%)	110
I would consider being involved in similar exercises like this into the future.	3 (2.8%)	0 (0.0%)	18 (16.5%)	63 (57.8%)	24 (22.0%)	1 (0.9%)	109
I enjoyed completing the survey.	5 (4.6%)	5 (4.6%)	46 (42.2%)	36 (33.0%)	17 (15.6%)	0 (0.0%)	109

The evaluation results were very positive. While some areas are highlighted in yellow, this is not concerning at all. Surveys are not always seen in a positive light. Given that it was a strategic plan survey, it was very wordy; and there were no incentives to complete it. However, the results were very encouraging. In addition, the fact that there are individuals who want to be involved in similar exercises and who now have a better understanding of DCPNS is a success and should be celebrated.

Summary of Electronic Survey Results

There was strong validation and evidence of support of the strategic directions and key activities. There were no major areas of concern or additions that would alter the direction of the strategic plan. The few negative results or comments could essentially be ignored given the large majority that agreed with everything. 120 participants were engaged and felt heard and would consider participating again in the future which is very positive. These individuals are now also better informed which was one of the purposes of the strategic plan.

Council Session Results

The results shown above were presented to the advisory council on May 2014. The council had an opportunity to hear the responses and comments received in all of methods of engagement. They also had an opportunity to identify anything that surprised them or needed clarification. Comments about strategic direction wording specifically to Strategic Direction 2 & 4 were made. Changes were suggested to the wording around various Key Activities minor changes were made accordingly. Finally, everyone agreed on the final list of the strategic directions and key activities and approved them with knowledge that the Program Manager and others may do minor word changes to Strategic Directions 2 and 4 or formatting but no significant altering would occur.

The 2014-2019 Strategic Directions and supporting Key Activities for DCPNS are:

Strategic Direction #1:

Create and share knowledge through collaboration in the development, implementation, and evaluation of comprehensive standards and guidelines for diabetes care, education, and service delivery across the many settings in which care is provided.

- Maintain active surveillance of new advances and best practices in diabetes care, education, and service delivery and facilitate knowledge transfer to key stakeholders.
- Identify and address priorities for diabetes management, based on new/emerging evidence and care gaps, including guideline/tool development/revision, policy development, etc.
- Promote accessible, high quality diabetes care for specialty populations, including but not limited to, children/youth and young adults, pregnant women, insulin pump users, and individuals with advanced disease and complex treatment plans.
- Promote self-management in individuals living with, affected by, or at risk of developing diabetes through targeted interventions aimed at encouraging health care provider engagement in self-management support.
- Establish new and strengthen existing partnerships in acute, continuing, and community care settings, including collaborative practices, primary care, family practice, retail pharmacies, inpatient care, long-term care facilities, etc.
- Redefine the framework and processes (to be manageable and meaningful) for diabetes service review including the reporting of specific indicators and targets.
- Encourage innovation and adoption of evidence-informed practice and applied research, through the use of quality and safety initiatives.

Strategic Direction #2:

Lead the development of an integrated system of diabetes management aimed at reducing and delaying the development and/or progression of diabetes complications.

- Develop criteria for diabetes/prediabetes/gestational diabetes risk stratification including referral algorithms indicating the most appropriate program and/or provider team.
- Develop and pilot a disease management system that uses a refined case management approach, including referral to the appropriate care provider, for people with diabetes at high-risk and/or with multiple comorbid conditions.
- Implement training opportunities for health care providers to acquire and enhance their knowledge and skills around diabetes, including motivational approaches to support chronic disease management
- In partnership, identify and help to meet the diabetes needs of vulnerable, at-risk populations.
- Work with partners to identify the various audiences, the information to be shared, and actions required to reduce rates of diabetes, diabetes complications and other chronic diseases.
- Support initiatives/resource focused on mental health issues, including diabetes distress, stress, anxiety, and depression.

Strategic Direction #3:

Use complete, accurate, and accessible local and provincial data to set targets, make informed decisions, and take action to improve diabetes outcomes in NS.

- Enhance the current performance measurement framework (clinical and self-care), including process and outcome indicators for diabetes surveillance, to meet the priorities of health decision makers and providers.
- Facilitate the use of the DCPNS data holdings by policy and decision makers, health system planners, Department of Health (including other provincial programs), DHAs and the IWK Health Centre, Diabetes Centres, researchers and others.
- Enhance the capture of diabetes cases in the DCPNS Registry through collaborative partnerships and linkage with other Health Information Systems, striving to capture basic information on **all** diabetes cases in the province.
- Leverage the DCPNS Registry in support of additional Federal funding to optimize the understanding and use of the DCPNS data sources.
- Improve case detection of diabetes in high-risk, vulnerable populations.

Strategic Direction #4:

Work collaboratively across Provincial Programs and with other departments/agencies/organizations to support the prevention and management of diabetes and other chronic diseases.

- Support the three Provincial Programs' Joint Advisory Council.
- Develop and implement strategies to address common risk factors.
- Partner to increase the reach of wellness/health promotion initiatives, including Thrive.
- Participate in joint surveillance initiatives to understand issues of multimorbidity.
- Explore cross disease initiatives that complement the disease specific approaches of each program.
- Profile joint work through various communications channels.

Recommendations and Next Steps

DCPNS now has a strong sense of where they need to go and this is strongly supported by a variety of people and organizations across Nova Scotia. Suggestions from this consultation process include:

- 1) Disseminate the strategic plan to all of the partners who participated in the process and those outside the health care system.
- 2) Develop an operational plan with identified priorities and indicators of success. This should be done in consultation with staff and partners as appropriate.
- 3) Engage the list of the 30 individuals who gave their names and email IDs as a sounding board or panel on various issues to keep them engaged and involved. These individuals are ready to help implement and should be brought in as appropriate.
- 4) Consult the list of specific implementation ideas when writing the operational plan, recognizing that these are not based on any evidence, are sometimes suggested by only person, and therefore may represent a hidden agenda or personal need/wish.
- 5) Continue to involve individuals and groups using the IAP2 approach to ensure meaningful input. This does not need to be resource-intensive or lengthy, but rather making sure that DCPNS gets the input they need and the individuals providing input feel valued and heard.

Appendix 1 – Emerging Trends

THINKING TO THE FUTURE...

Prevalence Rates

There are currently more than 90,000 individuals living with diagnosed diabetes in Nova Scotia. Ninety-five percent (95%) of these individuals are estimated to have type 2 diabetes and 5 to 10%, type 1. The prevalence of diabetes in Nova Scotia has increased 20% in the past five years.

Incidence Rates

Over 5,000 new cases of diabetes (type 1 and 2) are expected each year in Nova Scotia. It is expected that we will see increasing cases of diabetes in our younger age groups (< age 50) as obesity and inactivity rates continue unabated.

Diabetes in High-Risk Ethno Cultural Groups

Aboriginal, African Nova Scotians, new immigrants, and a number of specific ethno cultural groups (Asian, East Indian, Pakistani, etc.) have increasing rates of diabetes. As Nova Scotia grows and moves to attract more diverse populations, so will grow the needs of these populations.

Diabetes in Pregnancy (changing outcomes)—Preconception Care and Counseling

Obesity, older maternal age, and increasing rates of type 2 diabetes bring increasing numbers of pregnancies complicated by diabetes (both pre-existing and gestational diabetes). Pregnancies complicated by diabetes increase the risks to both the mother and infant.

Frailty and Diabetes

The highest prevalence rates of diabetes are found in our older, often more vulnerable populations. Frailty and cognitive decline pose additional challenges when deciding treatment regimens and care plans.

Prediabetes (blood glucose values known to be above normal, but not yet diagnostic of diabetes)

This classification is a recognized risk category for type 2 diabetes. A greater emphasis on structured lifestyle programming has been shown to prevent development and slow the progression to type 2 diabetes.

Obesity and Physical Inactivity Rates

Growing rates of obesity, coupled with sedentary lifestyles, increases risk of type 2 diabetes in all populations.

Multimorbidity and Multiple Co-morbidities

Increasingly, diabetes presents with and/or progresses to a disease of many comorbid conditions. Diabetes is a multi-system disease, and as a result is extremely complex. As the disease progresses and individuals live longer with the condition, complications emerge, progress, and management becomes more difficult.

Depression and Mental Health Issues—Cause and Effect

Mental health conditions, such as schizophrenia and depression, are associated with high rates of diabetes. Commonly used medications (atypical antipsychotics) increase the risk of metabolic syndrome and dysglycemia. In addition, large numbers of individuals living with diabetes experience varying degrees of depression/anxiety/disease distress. The needs of those with mental health issues are sorely under met.

New Treatment Technologies

An interest in insulin pump therapy has created additional provider and consumer demand for this technology. As more individuals take advantage of this complex technology, the human and fiscal resource demands on diabetes teams will increase.

New Pharmacotherapies

Newer therapies, while expanding access to available drugs that can target specific metabolic abnormalities, pose greater cost to the system and individual and often create more complex treatment regimens. Complex treatment regimens require the expertise of a more specialized team to implement and monitor therapy.

Field of Preventive Immunotherapies

The field of preventative immunotherapies for individuals at risk for or newly diagnosed with type 1 diabetes is an active area of research. If this bears fruit, there is potential for the need to implement new screening and treatment protocols.

New Technology

Advancements have been seen in the United Kingdom and many parts of the world around the use of web-based technologies to support and help manage those living with diabetes and other chronic diseases. This technology can complement existing diabetes programs and services, provide easier access to more remote areas, and meet the needs of a growing population where technology is integrated into both work and home environments.

Self-Management within the Context of Chronic Disease Management (CDM)

CDM is a growing and significant movement across Canada and within NS. It has long been recognized in the diabetes world that managing chronic disease is much different than that of acute, episodic care. Chronic disease management requires a daily, long-term commitment and continuous action on behalf of the person living with the disease (self-management). Programming and supports aimed at patient self-management and provider self-management support are our way forward.

Dietary Advances (Functional Foods, Glycemic Index, CHO Counting)

All types of diabetes and prediabetes benefit from nutrition therapy. In individuals with diabetes, treated with non-insulin therapies and/or insulin, individualized plans are required to optimize the treatment plan and reach recommended targets. Individualized plans are essential as building blocks for therapeutic treatment plans.

Available Evidence—Evidence-Informed Decision-Making

Growing availability of local evidence now allows programs to target populations and individuals for specified interventions aimed at improved short and long-term outcomes. This same data can now be used to set provincial targets, engage in partnerships, and measure change over time.

Primary Healthcare and CDM

The growth in collaborative teams, community health centres, and community wellness programs creates opportunity for chronic disease prevention and management efforts aimed at risk factor reduction, early detection/education, and improvement management of non-complicated diabetes/prediabetes cases.

Appendix 2 - Participant Descriptions

Throughout this process, DCPNS aimed to include participants from a variety of roles, backgrounds, decision-making abilities and involvement with diabetes care as possible. The following lists describe the breadth and depth of participant involvement

E-Survey sent to:

- Diabetes Centres (DCs)
- DC Managers
- DCPNS Advisory Council Members and staff
- Provincial Program Managers
- Division of Endocrinology, QEII Health Sciences Centre
- Dr. Zwicker, Endocrinologist, CBDHA
- VPs Medicine
- VPs Clinical/Acute Care
- VPs Community
- Select Pediatricians (12)
- 4 outside the province (PEI, NL, NB and Manitoba)
- Dal CME/academic detailing (7)
- DHW focus group invitees (14)
- Family Practice Nurses (2 individuals with request to circulate to all). This was sent to ~ 40
- Nurse Practitioners (1 individual with request to send to all)
- Acadia University contacts (2)
- Directors Primary Health Care in the DHAs (through PHC at the DHW) to reach collaborative practice teams
- Doctors Nova Scotia (3)
- Primary care physician, GASHA
- Pharmacy Association of Nova Scotia (PANS) with request to send broadly

Focus Groups:

- Telephone Focus Group on the April 22nd: 10 people
- Telephone Focus Group on the April 24th: 11 people
- Provincial Program Manager Focus Group: 3 people
- DHW Focus Group: 8

Total focus groups = 32

Phone Focus Groups:

- Provincial Program Managers (Cardiovascular Health Nova Scotia; Reproductive Care Program of Nova Scotia; Cancer Care Nova Scotia). Nova Scotia Renal Program unable to attend.
- Collaborative Practice representatives
- Diabetes Educators and DC Managers

DHW Focus Group Invitees:

- Primary Care
- Acute and Tertiary Care
- Continuing Care
- BIAP (Business Intelligence Analytics Branch)
- Mental Health and Addictions
- Pharmaceutical Services

Key informant interviewees (13 approached; 12 competed)

- Canadian Diabetes Association (Atlantic Canada Executive Direction): Lisa Matte
- Endocrinologist (Cape Breton): Dr. Deborah Zwicker
- Director Primary Care (CDHA): Dr. Lynn Edwards
- Geriatric/elderly perspective: Dr. Laurie Mallery
- Pediatric perspective: Dr. Andrew Lynk
- Obstetrical perspective: Dr. Jillian Coolen
- DHA Perspective: Tricia Cochrane, VP Community Health and Continuing Care, Annapolis Valley Health
- Head Division of Endocrinology (QEII): Dr. Stephanie Kaiser
- Pharmacy Association (retail pharmacist perspective): Allison Bodnar, Executive Director of PANS
- Dalhousie/Academic Detailing: Dr. Michael Allen
- NS Department of Health and Wellness: Paula English, currently Acting Associate Deputy Minister; Former Chief, Program Standards & Quality, DHW
- NS Department of Health and Wellness: Sandy Christie, Executive Director for Acute & Tertiary Care
- Invited by not able to reach: Dr. Leo Pereira, Internist, GASHA

Appendix 3 – SWOT Results

The following reflects the feedback from the SWOT sessions with DCPNS staff and Advisory Council. The text in **bold** reflects occasions where the feedback was heard multiple times.

Strengths

A clear strength of DCPNS is the knowledge, expertise, and information shared, retained and available within this provincial program, in addition to being a resource for the province, educators and clinicians.

- Timely delivery of guidelines
- Over 20 years of experience
- Diabetes Centres and Educators are our ability to inform, educate and influence practice provincially.
- Data holdings
- Ability to give reports and have Diabetes Centres/ DHAs create their own
- Ability to create guidelines and tools that are not available elsewhere (foot care, LTC, pregnancy)
- Willing and capable to take on new projects
- Provincial Vision
- **Staying current, participating in National Committees**, innovation
- **Clinical Advisors. Credibility and profile**

It is clear that relationships (both internal and external) are the strength of an organization that has been around for 20 years.

- **DCPNS staff, tight-knit and hard working with expertise**
- Standardization and relationships with Diabetes Centres
- Partnerships with other Provincial Programs
- **Academic partnerships; i.e., Dal (specific researchers) and DAL CME/ Academic Detailing, Acadia**
- **PHAC relationship**
- Promoting collaborative work
- Work with other provinces—PE and NB (Insulin Dose Adjustment Policy formal agreements); NL re: LTC and other initiatives.
- DCPNS grants—foster collaboration, innovation, and relationships
- DEANS, Drug Evaluation Unit

Along with being a resource and building relationships over 20 years, DCPNS has created an additional strength of reputation.

- Stakeholders see us as a source of information (not public)
- Revered outside of the province, country
- Solid foundation of good work- stay true to initial vision
- Trust built with partners, DHAs, DCs, Provincial Programs, DHW

Weaknesses

One identified weakness is the decreasing ability of DCPNS to drive its own agenda within the agendas of other (larger) organizations and the impact that has on the program.

- **Lack of control of our destiny**
- **Susceptible to outside influence (other priorities become our priorities- NSIPP, Targets)**
- Lack of power/ mandate “the stick”, more support needed from DHW to “force” implementation of provincial standards (forms GL, etc) (but leads to increased profile within DHW who funds us)
- **One piece of the puzzle**-not sure where we fit within the broader DHW vision
- Changing priorities in primary health and lack of influence over them
- **At Mercy of others- partners**
- 5 year time frame- not as nimble-cannot react to changes in broader society
- Take on work to compensate for lack of resources in other programs (i.e., PIA work) (e.g., CCDSS project funds, and form development for NSIPP)
- Institutional knowledge within the broader organization

While closely connected to the ability to drive one’s program and priorities, the “perception” DCPNS has with other organizations could be mentioned as separate weakness.

- **Lack profile within larger organizations/departments, i.e., DHW, DHAs, Chronic Disease Prevention and Management, Primary Care**
- Perceived as part of larger DHW- less connected with the front-line
- Poor local profile

It should come as no surprise that a lack of resources was identified as a weakness within a Provincial Program. There was also mention of the fact that recognition of collaborations, accomplishments of the program was a weakness, and the feeling that diabetes prevention is too big for one primary program.

Lack of resources to address unplanned or last minute priorities

Policy makers of Provincial Programs don't seem to remember the uniqueness of the DCPNS Registry's data sources (actual clinical visits to local centres throughout the province), the proprietary silos of each primary physician's EHR and that the province's administrative records don't give the data required for creating guidelines and tools.

Threats

If the inability to drive their own agenda was identified as a weakness, not knowing their place in the larger organization due to restructuring and re-aligning of priorities and responsibilities is seen as a threat.

- **Chronic disease and prevention mandate is now primary care**
- Gov’t restructuring threatens the Provincial Programs
- **Key personnel changes at DHW loses corporate memory**
- Uncoordinated restructuring of diabetes care in the DHAs threatens diabetes expertise
- Issues with MOU with host institution (s)
- Staff succession planning / risk management of DCPNS

Information Management and technological threats to the celebrated reliability of DCPNS to provide accurate and relevant data to providers, stakeholders and partners were also articulated.

- DHW lack of vision and support for provincial databases and the expansion/support of these to answer necessary questions.
- Overlapping data collection with DCPNS registry and Nightingale, EMR (double entry for some)
- Regular IT maintenance resources (hardware software, planning interoperability) controlled by outside sources
- Legacy systems hinder uptake of new information systems
- Time that this takes has led to lack of support and functionality to the database users – this is a threat if they become frustrated and do not maintain the data
- No availability to the DHAs to massage their own data as aggregate one I see as threat for the future data quality and completeness
- Long reports might become weaknesses

Opportunities

Within a SWOT analysis, opportunities are often identified within or because of the weaknesses and threats, and this exercise was no exception. Restructuring and re-aligning opportunities were identified:

- **One EHR for the Province**
- 1 DHA, 4 Zones; 1 Gov't Body
- Primary Care CDM
- DHW Target setting

As several IT/IM weaknesses were identified, so were several opportunities:

- Technology (pt/provider)- new trend – Apps
- New DCPNS Registry (centralized; opportunity for interface with other systems)
- Design IT with interoperability in mind
- Clarifying relationship with PHIM as opportunity for getting possible complete diabetes picture in NS.
- Building data cubes (e.g., in Cognos) available for DHAs. Opportunity to free existing resources and build strong collaboration.

Likewise, several opportunities to tap into resources to support the program were also identified to balance the “lack of resources” previously mentioned:

- Untapped resources (community peer-peer)
- **Across disease guideline development**
- **Interprovincial collaboration; e.g. guidelines (DMF)**
- Grant opportunities
- Strengthen MA role across the province

This group also specifically identified several relationships they would like to strengthen that would both improve how DCPNS works, but also the reputation it holds within the province.

- Joint Advisory Group/ DCPNS Positioning
- **Promote DCPNS / Raise Profile**
- Relationship with Adult Endocrine Divisions of , QEII
- Linkage to vulnerable populations First Nations, African Nova Scotians
- Improve collaboration with Family MDs & Pharmacy
- Improve functionality for end users of database (DC's using own data) without having to request queries from DCPNS
- moving into inpatient diabetes

Because the government has moved chronic disease and prevention mandate from acute to primary care, can we somehow encourage government to do further "meta" restructuring so that chronic disease and prevention mandate is not forced into one or the other box but reflects a patient's movement back and forth between primary and acute care according to the individual's status during the disease's **progression?**

Appendix 4 – Focus Group Data

Data and Information Management

Support

- Support for software/hardware in Diabetes Centres
- Embrace technology to network, to teach, and improve data collection and transfer”
- Need new computers, we get kicked off/ frozen software so lose what we enter, so at least we can get on the Canadian Diabetes Association website
- Pump software downloads on computer, sometimes is not possible
- Stats program helps out at Year End hard to do with clinical stuff.

Implementation

- Provide stats at local level so we can make decision to target our patients.
- Data collection is so hard to do at clinical setting, so DCPNS takes care of that for us.
- Excellent systems of data collection at the province and provider level
- Use same local data for quality assurance and improvement decision.
- Have huge amounts of info avail, but not sure where/how the info is used by government to steer directions or make decisions, could work to see if it happens.
- All Provincial Programs are in the same boat to understand how program data can be used, interpreted and shared.

Reporting

- DCPNS Registry, Clearinghouse of data allows us to compare and contrast clinical indicators
- DCPNS is the place to go for clinical data- other diseases don't have a go-to place
- Great fit using local data within the communities, Diabetes Education Centres and passing along it along to local physicians.
- Maybe some confusion around what is in the database and how it can be used, and where the data sits and goes in reports.
- Data collection and dissemination is important

Changes to consider

- Remove duplication by linking and sharing
- Technology- need to capture cases and case info but not sure need a registry for each disease is needed, maybe on super registry. Not sure more \$ and time on own silo if it can be integrated.
- DHW recognize the fact that DCPNS has received national/ international recognition for their data source- a super registry is years away.
- May need to step back from specific data and focus on quality

Leadership, Collaboration and Advocacy

Leadership

- For tackling complex issues like obesity and high risk factors like chronic diseases
- National recognition that we have “DCPNS”, so that makes us a lucky province.” The Thrive strategy has huge potential and a great impact
- [Known for] Leadership-are the go to program for answers because they stay up on top of treatments and patient needs.
- Leads other Provincial Programs in dealing with co-morbidities
- Highly respected across Canada for their work
- People read DCPNS newsletter which makes us all look like a leader in diabetes
- DCPNS has always kept up with the times and new treatments DCPNS have always been cutting edge

Collaboration

- DCPNS is taking the lead and doing consultations like this focus group for their Strategic Planning. Always seek education and documentation advice
- Work with others like CVH and long term care. DCPNS reaches beyond educator and it opens doors for us
- May not do less, but do more coordinating
- DCPNS is well known for its effective partnerships

Advocacy

- Protect needs of diabetes clients within chronic disease environment. Make sure persons with diabetes d/n get lost in Chronic disease programs or delivery models- need special attention
- Focus on Diabetes
- Advocacy- pump policy and program
- Stay strong, do not get lost in the Chronic Disease, do not let diabetes type 1 be the only thing treated at the Diabetes Centers
- Speak on behalf of the patients at the larger level, when we can't
- Is our voice at a higher level because we are on the ground?

Diabetes Management and Education

Provincial Conference

- The Provincial conference is important on so many levels
- The Education Workshops (5x)
- Instead of 1 big conference have several throughout the province so can avoid the travel restrictions
- Online communication or learning and phone meetings

- Networking opportunities for educators across the province – does not have to be the 2 day workshop which I know is expensive, even an evening event or breakfast event would be great that was less about presentations and more about sharing and talking to fellow educators

Standardized Resources and Reference Material

- DCPNS has done a great job in creating material for the public and care providers that match and give the same message- other programs admire that
- Reference Material and binders (pregnancy, child) guidelines, helps us be consistent
- Standards help manage clinic, practice guidelines provide good tools
- Nice to have standardized forms
- Evidence based policy
- Insulin adjustment, gestational guidelines they give us
- High level access to the latest material on diabetes management
- Development of policies, especially Insulin-Dose Adjustment (4x).
- Provision of Hard Copies, can be used in any area of the clinic
- Delivery of modules and guidelines
- Their work has given all areas of NS equal access to quality education area
- Standardized Programming
- Understand technology changes and use them well

Educator and Care Provider Support

- DCPNS work with educators to ensure all clients get the same level of care regardless of where they live
- Teaches us about best practices, guidelines so we can provide care.
- They keep us up to date on the latest treatments because clinical stuff keeps us so busy we need to know someone is working on the big picture.
- Implement standards not just set them
- Support for us in all aspects
- Supports staff across the province by allowing us to work tog.
- Guidelines and manuals for us to us
- Optimizes care by provider education opportunities b/c its standardized
- Develop tools for patient education and supply staff to train care providers
- Are other providers as knowledgeable about diabetes as Diabetes Educators are?
- Can everyone has same training, knowledge and can give pt standard care (3x)

Leadership, Collaboration and Advocacy

- All the Provincial Programs are trying to reach Primary Health Care providers because currently there is no system to reach Primary Health Care folks and deliver standardize work and messages
- Advocacy for those with diabetes and work to improve access to specialized care (funding)
- Continue to highlight the importance of specialized diabetes care for diabetes

- Be involved in family practice nursing and Doctors' clinics to ensure treatments are standardized. Family practice staff need to complete the same forms, follow same guidelines- DCPNS can do this.
- Keep working with chronic disease team.
- DCPNS is recognized for getting evidence into practice- think they will be working with different settings and will finally get through to primary health care.

Appendix 5 - Key Informant Interview Data

Collaboration

- They involve a lot of people across the province.
- Very collaborative and able to bring together many different points of view.
- We could do a lot more to work together.
- Continue to work with other Provincial Programs.
- They collaborate very well with a core group of people but could look at other organizations and resources beyond the health care system.
- We have an epidemic on our hands and we need to rally the troops (speaking to broader health system).
- Rest of the time the patients rely on community assets (once out of DEC/MD office).

Leadership

- They take leadership to roll out new program and guidelines and keep patients and providers informed. They do a great job at this.
- DCPNS is critical to us and the work we do.
- Everything they do is excellent and they should be proud of what they do. We are really supportive of their work and we share it with other organizations across Canada.
- Peggy is an exceptional leader and highly organized and thoughtful.
- They are phenomenal and are so wonderful to work with.

Integration

- Help the communication among the other Provincial Programs to be stronger.
- A standalone entity is good but good to merge with other groups as well.
- Diabetes pathway is becoming part of the chronic disease pathway. Scared that they will be consumed up in cardiovascular health but it is part of it.
- DCPNS may not exist in 5 years because we will have a chronic disease program hub. It will not be disease based but a whole person perspective.
- Will have to work more with chronic diseases, as more patients will have co-morbidities, though diabetes is the reason they come to the DECs, but the educators will treat all the diseases.
- Multi-stakeholder disease state that needs a team of practitioners.
- More integrated with other Provincial Programs and the system.

Primary Health Care

- Need to work more closely with Primary Health Care to determine which patients come to DECs and which go to PHC providers.
- Strengthen the relationship with primary health care.
- DCPNS will have a broader audience with more of a focus on PHC.
- Having the physician as the gatekeeper is expensive and not preventing diseases.

Education

- They provide great training to health care providers.
- The workshops, awards, and training are excellent.
- Provide educational events for physicians and pharmacists and diabetes educators which are good.
- Including the need to support consistent high quality education.
- Perhaps the most important is the knowledge transfer to care providers.
- Do more education but not necessarily in Halifax. Maybe use webcasts.
- Keep promoting and providing education and support to patients and providers.

Standards

- DCPNS sets the standards of care and creates the high quality programming that we have.
- The promoted new guidelines and treatment ideas and I really like how they tell us what is important and figure out ways to inform the province and implement those suggestions locally.
- They figure out what we can do in NS and what will help with our patients and provide our best care possible about those new changes.
- They do well at setting standards and being forward thinking and implementing best practice across the province.

Enforcement

- They work towards standardizing care but don't close the loop. The DHA's are left to finish it through.
- There is no way to really enforce a standard or policy. The clinics seem autonomous and there is no enforcement.
- DCPNS is setting the standards and make recommendations but services are provided by DHAs and care is determined by DHAs.
- There is not DCPNS involvement in Diabetes Centres, but yet they want them to implement standards. They need to lobby to be in there more.

Evidence-Based

- DCPNS is a base of knowledge for all the places where diabetes care happens. They ensure consistency and raise and keep expectations high.
- Everything they do is evidence based and is credible, particularly for health care providers.
- They interpret the data but also hold us accountable, by asking why the data is like it is.
- They use that evidence to inform practitioners to get the best care for patients. We have a high level of respect and dependence on them to provide that expertise.
- The new guidelines regarding the screening and diagnosis of diabetes; DCPNS has taken the suggestions by the Canadian Diabetes group and put it into a NS perspective.

Sub-Populations

- Could bring expert and local nurses together for youth with diabetes and their families.
- Not involved enough with aboriginal communities. A big population in NS and Cape Breton. First nation communities are interested.
- Doctors and nurse educators need more direction on how to treat elderly and persons with diabetes.
- On top of the evidence and guidelines that allow us to act on new treatment for youth and geriatric care.
- Often wonder about First Nations screening for young kids and guidance for that population.
- We know the incidence is rising in gestational diabetes and will need to work closely with DCPNS.

Data

- DCPNS should look into the patient information system and how they can connect to Nightingale info system. Can they be put together so we can report all patients not just DCPNS ones.
- Share data with primary health care.
- Data capture is unique and important to organizations like ours.
- Instead of extrapolating from national sources, they give us local data.
- The DCPNS Registry hasn't reached its full potential yet.
- More linking data with other Provincial Programs, not analyze in a silo.
- Contribute to a CDM database.

Governance Structure

- Role they do around standard setting will be negotiated between the new government and DHA.
- DHAs will be gone so may be easier to roll out things and have great access and influence the DECs and educators.
- Infrastructure changes will give the Provincial Programs an exciting new reality and the work DCPNS does will compliment this structure.
- Might have to look at the role of programs in a new DHA model. What role or function should they play to define the system design?