

# Current State Assessment of the Primary Health Care System in Nova Scotia

The Primary Health Care 2019–20 System Performance  
Report: [Technical Document](#)

Nova Scotia Health | Primary Health Care

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## ACKNOWLEDGEMENTS:

The *Current State Assessment of the Primary Health Care System in Nova Scotia, 2019-20 Update* was completed as a result of data contributions from many Primary Health Care leaders, providers, researchers, and partners.

## RECOMMENDED CITATION:

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## FOR FURTHER INFORMATION:

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### BACKGROUND AND RATIONALE

Primary health care is the foundation of the health system and where the majority of people experience most of their health care during their lives. Nova Scotia Health has been moving forward in a purposeful and planned way toward a broad vision for a strengthened primary health care system. The primary health care system in Nova Scotia has undergone transformational change over the last several years through investments to strengthen collaborative family practice teams and infrastructure for the community-based primary health care system. This has occurred alongside a focus to strengthen the supports available for Nova Scotians to live well and manage their chronic conditions. The COVID-19 pandemic has showed us there is great potential to rapidly innovate and enhance how we do our work virtually.

Together with clinicians, patients, and families, we have continued to explore how we enhance the quality of our programs and services to support a safe, person-centred, quality-oriented primary health care system. Monitoring the performance of the primary health care system through ongoing evaluation, data analytics, and research to support data-driven decision making, effectiveness, and the monitoring of key performance indicators are critical components of ensuring a high quality primary health care system.

To measure the effectiveness of the ongoing system transformation in primary health care, Nova Scotia Health Primary Health Care (PHC) released a report outlining a novel system-level evaluation framework, process for indicator identification and selection, and measurement of 28 priority indicators using readily available data sources at the time of Nova Scotia Health's formation. Published in 2019, the *Current State Assessment of the Primary Health Care System in Nova Scotia* served as a baseline assessment of the primary health care system in Nova Scotia at the time of Nova Scotia Health's formation, as well as a foundation for future measurement.

The current report presents an update of the 28 priority indicators using the most recent available data as of March 31, 2020. Comparisons with previous years are made where data is available.<sup>1</sup> For detailed background on the development of the system-level evaluation framework and process for indicator selection, please see the first release of the Current State Assessment available on the Nova Scotia Health website [here](#).

This series of system performance reports will continue to serve as the foundation for future measurement and evaluation related to the transformation of the NS primary health care system over time. We would like to thank all stakeholders who participated in this work and provided data to support the updated report. It is our commitment to work together with all stakeholders as part of our quality and system performance journey; we must continue to focus on a strong foundation of quality to support sustainable transformation of the primary health care system in Nova Scotia.

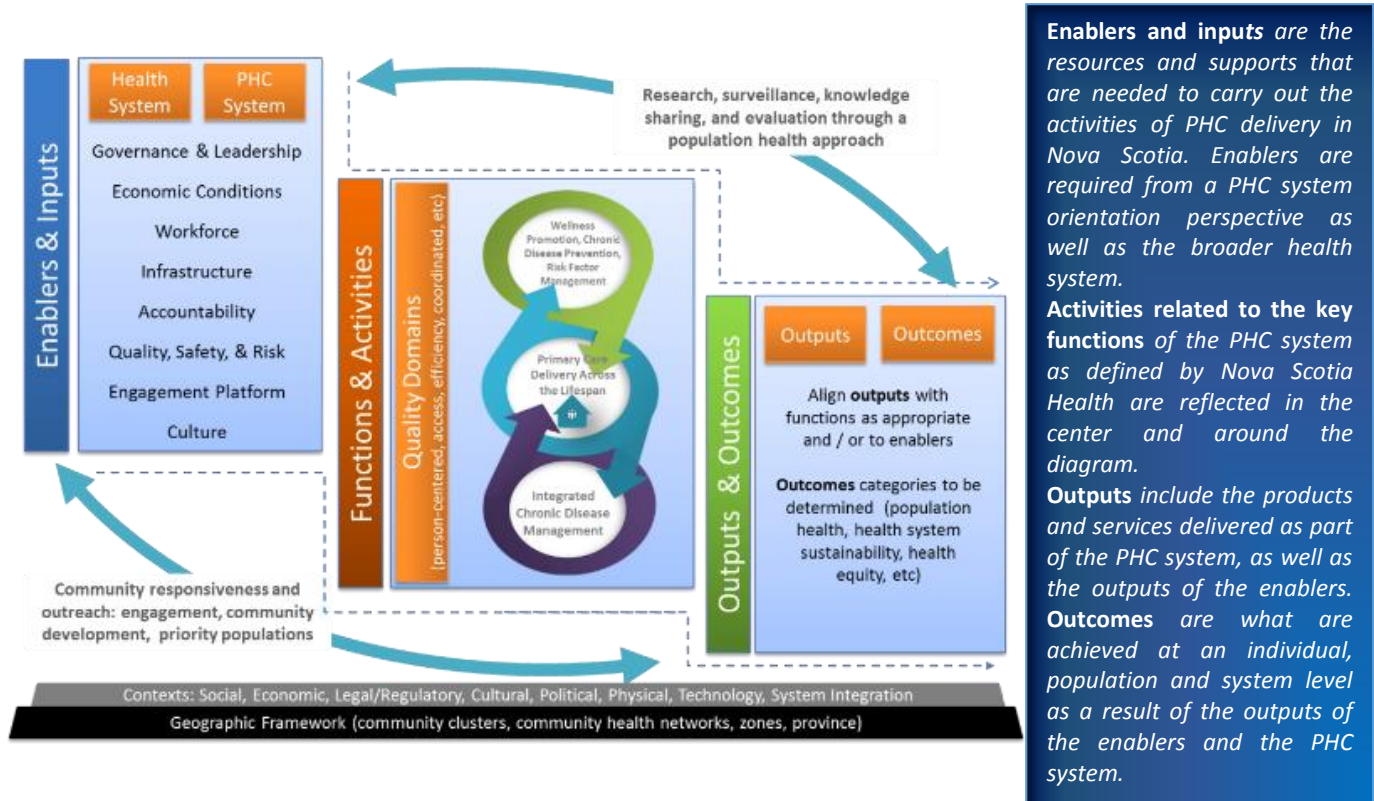
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<sup>1</sup> Depending on data availability, data sources aligned with key indicators between the first report and the data sources used with the present update may vary. Careful consideration should be taken when comparing data across years. For full details on the data sources, please refer to the enclosed Technical Report. Although some changes in data sources may occur, the goal was to maintain the integrity of the intent of the indicator and what it was chosen to measure.

## SYSTEM-LEVEL EVALUATION FRAMEWORK

To guide indicator selection and alignment, a multidimensional evaluation framework was developed that reflects the complex nature of the PHC system, incorporates functions and enablers defined by Nova Scotia Health and considers the broader geographic, economic, and social context in Nova Scotia (Figure 1). The development of the Nova Scotia Health PHC System-level Evaluation Framework was guided and influenced by key documents, guiding frameworks, and stakeholder input.

Figure 1: Nova Scotia Health PHC System-Level Evaluation Framework



The literature identifies the importance of monitoring change over time as it relates to reorienting health systems and strengthening primary health care, as outcomes can take time to emerge (Shi, 2012; Friedburg et al., 2010). Although it has been a relatively short period of time since our first report, there are several changes to note in the selected indicators, particularly those relating to structural measures. Highlights since the first release of the Current State Assessment are identified below.

### HIGHLIGHTS

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- The primary health care system in NS has experienced **substantial growth** over the past five years. For example:
  - ✓ The number of collaborative family practice teams has more than doubled since FY2015-16, increasing by 120% from 39 to 86 teams. [Indicator 3]
  - ✓ In FY2018-19, 28.1% of the population in Nova Scotia was served by a collaborative family practice team. This number is expected to have grown since FY2018-19 given the continued growth in collaborative family practice teams since that time. [Indicator 16]
  - ✓ NS Health Primary Health Care has grown and expanded the workforce of interprofessional team members working collaboratively with family physicians and others, with over 150 clinical staff, including nurse practitioners, family practice nurses, licensed practical nurses, social workers, and dietitians, being hired through the new investment from government since 2017. [Indicator 4]
  - ✓ The number of family physicians working in team-based care has increased by 137% since Nova Scotia Health's formation, with approximately 377 family physicians working in collaborative family practice teams as of March 31, 2020, up from approximately 159 in FY2015-16. [Indicator 22]
  - ✓ NS Health Primary Health Care has instituted more programs and initiatives for populations experiencing vulnerabilities, increasing the number of programs, initiatives, or services available from 17 to 38 (124% increase) since 2017. [Indicator 8]
- **Governance structures** and **payment models** are important enablers for collaborative, team-based care and there have been changes in these enablers reflecting changing models of care delivery:
  - ✓ Since the new investment in collaborative family practice teams, the distribution of governance models for primary care delivery has changed, with co-leadership (64%) now surpassing turn-key (27%) as the primary governance model in Nova Scotia for collaborative family practice teams in FY2019-20. [Indicator 2]
  - ✓ Fee-for-service remains the predominant remuneration method for family physicians in Nova Scotia. However, there has been a 39% growth in the number of family physicians remunerated through alternative payment plans in the last 5 years. [Indicator 1]
- Regarding **access** to primary health care:
  - ✓ The number of Nova Scotians self-reporting they had a regular health care provider was 85.6% in 2019, which is on par with the national rate of 85.5%. This number has dropped by 3.5% from 88.7% in 2015. As of March 31, 2020, there was 5.0% of Nova Scotians who identified that they were seeking a primary care provider by registering on the Need a Family Practice Registry. [Indicator 5]
  - ✓ More Nova Scotians are reporting that they did not have difficulties getting the health care or advice they needed, indicating we are doing better with access, according to our latest

- Patient Experience Survey, which shows 17% fewer Nova Scotians reporting that they had difficulties accessing the care they needed from 2017 to 2019. [Indicator 26]
- ✓ We have observed substantial differences in the number of family physicians accepting new patients in Nova Scotia between 2015 and 2019; however, this indicator should be interpreted *with caution* due to the differences in the data source between the two years' of data. In a 2019 Commonwealth Fund survey, 24.4% of NS family physicians responded that they are accepting new patients, either unconditionally or with exceptions, which represents a 64% decrease from 2015's data obtained through the MAAP-NS research study.
  - ✓ According to the 2019 Commonwealth Survey, the majority of family physicians in Nova Scotia (67%) reported spending 45 hours per week or more in direct patient care and 53.5% reported that they provide appointments after 6pm at least one evening during the week, Monday to Friday. [Indicator 12, 18]
  - ✓ There is a gap in the availability of current, accurate data related to wait times for routine and urgent primary care in Nova Scotia. Previously, we had reported on this indicator using data from the MAAP-NS research study (2015); however, no comparable data source was available to report on this indicator at a systematic level in 2019-20 to gauge Nova Scotian's ability to access routine and urgent primary care. [Indicator 19]
- The primary health care system requires **continued investment** to observe the benefits achieved in other countries with a strong foundation of primary health care (i.e., better population health outcomes, reduced inequities in population health, and lower rates of hospitalization resulting in reduced health care costs).
    - ✓ In 2019-20 the budget for the Primary Health Care program within Nova Scotia Health was \$63.2M, which equates to spending \$68 per person (or \$6.8M per 100,000 people) on primary health care programs and services. This is up from \$36 per person (or \$3.6M per 100,000 people) at the time of Nova Scotia Health's formation. It is important to note that these per capita spending figures *excludes* spending on physician services and MSI billings, which is the predominant source of primary health care expenditures for the population. [Indicator 13]
  - Supporting the population to **live well and and manage their chronic conditions** are core functions of the primary health care system.
    - ✓ The prevalence of individuals with self-reported five or more chronic conditions (asthma, arthritis, high blood pressure, COPD, diabetes, heart disease, cancer, stroke, dementia, mood disorder, and/or anxiety) has decreased by more than half, from 5.3% (FY2013-14) to 2% (FY2017-18). This is based on self-reported data for a sample of the population, so the statistic should be interpreted with that in mind. [Indicator 24]
    - ✓ Since 2017, 29% more patients have reported that they were 'always or sometimes' encouraged to go to a specific group, program or class to help them manage their health concerns as part of our Patient Experience Survey. [Indicator 10]
  - The scope of services provided by primary health care providers is an important part of assessing the **comprehensiveness** attribute of the primary health care system.
    - ✓ The 2019 Commonwealth Fund Survey provided continued indication that primary care providers in Nova Scotia provide a wide variety of services to patients and providers were well-prepared or somewhat prepared to manage care for patients with: chronic conditions (100%), mental illness (96.7%), substance-abuse-related issues (85.9%), palliative care needs (90.8%), and dementia (91.8%).



- ✓ Of note, 35.8% of respondents reported that they were not prepared to offer services to patients requesting medical assistance in dying and 11.8% of respondents reported that they were not prepared to offer services to patients with substance use related issues, indicating areas for further investigation in NS. [Indicator 11]
  - ✓ As part of this same survey, only 10% of providers indicated that they were providing video consultations for patients, which given the COVID-19 pandemic and the rapid introduction of virtual care, makes this an indicator to monitor over time.
- Ensuring that our programs and services remain **patient-centred** and take into account the **diverse backgrounds** of all of the populations we serve is a critical component of the primary health care system.
  - ✓ Primary Health Care reports consistently high results when it comes to staff taking patients' cultural values and those of their family or caregiver into account. 96.4% of patients reported that this was the case in our latest 2019 Patient Experience Survey. [Indicator 9]
  - ✓ Having patients as active partners in their care is an important element of communication and patient-centred care. 95.5% of patients reported that their health care provider/team involved them in making decisions about their care in our latest Patient Experience Survey. [Indicator 27]
  - ✓ In addition to partnering with patients in their care, Primary Health Care has also valued partnering with patients and families at a system-level through the engagement of patient and family advisors in a variety of planning, quality, and safety initiatives. As of 2020, there were at least 40 patient and family advisors involved in PHC initiatives across Nova Scotia. [Indicator 14]
- Influenza has the potential to impact **high-risk groups**, such as seniors, and was selected as a condition to monitor due to the importance of vaccination in primary health care and other community settings, such as pharmacies:
  - ✓ Over the last 5 years, the national rate of influenza immunization in individuals aged 65 and older has increased (to 70.3% FY2019-20 from 64.6% in FY2015-16), while the rate in Nova Scotians in this age group has decreased (to 61.7% FY2019-20 from 68.4% in FY2015-16), indicating an area of improvement for Nova Scotia. [Indicator 21]
- There has been substantial change in the **EMR landscape** in Nova Scotia over the past two years with the sun-setting of some EMR systems and the introduction of new vendors:
  - ✓ In 2017, the predominant EMR in the province was Nightingale on Demand (80% of users) and in 2020, the predominant EMR is Telus' MedAccess (67% of users), followed by QHR's Accuro (31% of users).
  - ✓ EMR use in Nova Scotia remains high, with 83.1% of family physicians and 100% of Nova Scotia health-employed nurse practitioners using an EMR. [Indicator 15]
- Primary Health Care has continued to grow its **research profile**, ensuring PHC researchers are actively involved in leading and partnering on research grants and contributing to the literature through publication.
  - ✓ Over 100 staff and physician leaders from Nova Scotia Health's Primary Health Care Program and Dalhousie University's Department of Family Medicine (DFM) have research profiles, which is up from 60 individuals in 2016-17, representing a 67% increase.
  - ✓ Nova Scotia Health PHC staff, DFM and CoR-PHC are reporting over \$1,000,000 in CIHR funded grants in FY2020-21, and have completed 15 ethic submissions and 25 research publications in the past year. [Indicator 7 & 20]

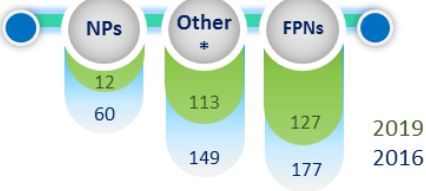
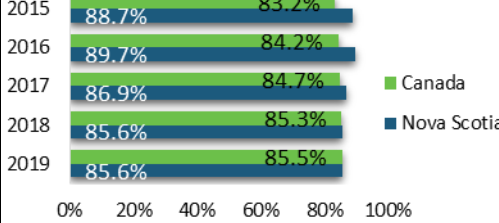


- **Teaching and learning** remains a priority of the primary health care system when it comes to training future health professionals, such as family physicians and nurse practitioners:
  - ✓ 36 family medicine residents (PGY2) completed training in NS family practices in the 2019-20 academic year, which is 5 more residents than 2016-17, indicating increased training capacity for family medicine.
  - ✓ 90 nurse practitioner students completed preceptorships in Primary Health Care in the 2019-20 academic year. [Indicator 6]
  
- Given primary health care is the foundation of the health care system, it is important to monitor select **indicators in other parts of the health care system** to assess the **impact** that the primary health care system may be having in these areas:
  - ✓ We have observed improvements in the rate of hospitalization for ambulatory care sensitive conditions. In FY2018-19 the rate of hospitalization for ambulatory care sensitive conditions in patients younger than age 75 decreased to 341 per 100,000 people, from 355 per 100,000 people. [Indicator 25]
  - ✓ Looking at the percentage of Emergency Department (ED) visits across the province *may* be viewed as a proxy indicator of primary care access since individuals with semi-urgent or non-urgent health concerns may present to the ED when primary care access is delayed or is not conveniently available. It is important to note that many ED visits triaged as CTAS level 4 or 5 may be very appropriate for an ED setting. The number of ED visits in Nova Scotia triaged as CTAS level 4 or 5 decreased slightly to 43.3% in FY2019-20 from 46.9% in FY2016-17. [Indicator 23]
  
- The overall **patient safety culture** within the organization is something that is critical to monitor over time to ensure safe, high-quality care and a just-culture for staff and physicians.
  - ✓ In the latest 2020 Patient Safety Culture survey, Primary Health Care showed improvements in the number of staff responding positively to measures of patient safety culture when compared to the previous survey in 2018. The majority of responses (52%) were considered positive in 2020 (i.e., green flags) and work is ongoing to continue to improve patient safety culture. [Indicator 28]

This executive summary provides a snapshot of the 28 indicators updated as part of the 2019-20 primary health care system current state assessment. Aligning with each component of the system-level evaluation framework (Figure 1), indicators are organized by the following three types: (1) Enablers and Inputs; (2) Functions and Activities; and (3) Outputs and Outcomes. The technical report provides detail related to the background and current context of primary health care in Nova Scotia, as well as information related to the indicator data sources and calculation methodology, along with detailed results.

## Enablers & Inputs


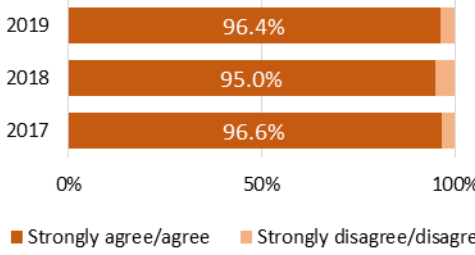
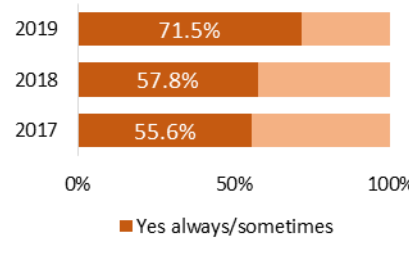
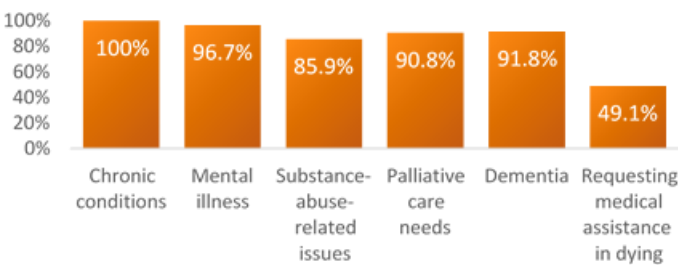
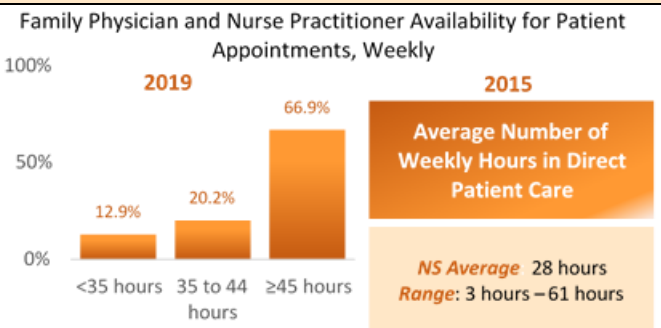
The first seven indicators are classified as enablers and inputs and align with the framework domains: economic conditions, governance and leadership, workforce and research, surveillance, knowledge sharing and evaluation.

<i>Enablers and Inputs: Economic Conditions</i> <b>Indicator 1: Family Physician (FP) Remuneration Method</b>	<i>Enablers and Inputs: Governance and Leadership</i> <b>Indicator 2: Governance Model Distribution of Collaborative Family Practice Teams (CFPTs)</b>	<i>Enablers and Inputs: Workforce</i> <b>Indicator 3: Collaborative Family Practice Teams (CFPT)</b>																																						
<table border="1"> <caption>Indicator 1: Family Physician (FP) Remuneration Method</caption> <thead> <tr> <th>Year</th> <th>Fee-for-service (FFS)</th> <th>Alternative Payment Methods</th> </tr> </thead> <tbody> <tr> <td>2019-20</td> <td>67.8%</td> <td>32.2%</td> </tr> <tr> <td>2015-16</td> <td>76.7%</td> <td>23.2%</td> </tr> </tbody> </table> <p><i>Data Source:</i> FY2015-16 MSI billing data; validated 2017; FY2019-20 Nova Scotia Health and DHW</p>	Year	Fee-for-service (FFS)	Alternative Payment Methods	2019-20	67.8%	32.2%	2015-16	76.7%	23.2%	<table border="1"> <caption>Indicator 2: Governance Model Distribution of Collaborative Family Practice Teams (CFPTs)</caption> <thead> <tr> <th>Year</th> <th>Turn-key</th> <th>Co-leadership</th> <th>Other/Blended</th> <th>Contracted Services</th> </tr> </thead> <tbody> <tr> <td>2019-20</td> <td>51.3%</td> <td>41.0%</td> <td></td> <td></td> </tr> <tr> <td>2015-16</td> <td>51.3%</td> <td>41.0%</td> <td></td> <td></td> </tr> </tbody> </table> <p><i>Data Source:</i> Nova Scotia Health, all years</p>	Year	Turn-key	Co-leadership	Other/Blended	Contracted Services	2019-20	51.3%	41.0%			2015-16	51.3%	41.0%			<table border="1"> <caption>Indicator 3: Collaborative Family Practice Teams (CFPT)</caption> <thead> <tr> <th>Year</th> <th>Number of CFPTs</th> </tr> </thead> <tbody> <tr> <td>2015-16</td> <td>39</td> </tr> <tr> <td>2016-17</td> <td>50</td> </tr> <tr> <td>2017-18</td> <td>57</td> </tr> <tr> <td>2018-19</td> <td>83</td> </tr> <tr> <td>2019-20</td> <td>86</td> </tr> <tr> <td>2020-21</td> <td>++</td> </tr> </tbody> </table> <p><i>Data Source:</i> Nova Scotia Health FY2019-20</p>	Year	Number of CFPTs	2015-16	39	2016-17	50	2017-18	57	2018-19	83	2019-20	86	2020-21	++
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<p>The majority of FPs providing office-based care in NS were remunerated through the fee-for-service method (FY2019-20: 67.8%; FY2015-16: 77%), 32.2% (FY2019-20) were remunerated through alternative payment methods (APP, group APP, AFP, CAPP). The largest change in remuneration method was seen in APP payments, going from 12.8% in FY2015-16 to 26.0% in FY2019-20.</p> <p>Note that this data source was updated for the 2019-20 release based on availability of data.</p>	<p>For the CFPTs that existed at the time of Nova Scotia Health’s formation in FY2015-16, the most predominant governance model was turn-key (51.3%), followed by co-leadership (41.0%). However, as of FY2019-20 the most common governance model was co-leadership (64.0%), followed by turn-key (26.7%).</p>	<p>At the time of Nova Scotia Health’s formation, there were 39 CFPTs in NS, meeting the minimum working definition of having at least 3 health professionals with a minimum of 2 professional disciplines. By the end of FY2019-20, there were 86 CFPTs in NS meeting the above working definition, a growth of 120% over 5 years.</p>																																						

<p><i>Enablers and Inputs: Workforce</i></p> <p><b>Indicator 4: Difference between Available and Required PHC Human Resources</b></p>	<p><i>Enablers and Inputs: Workforce</i></p> <p><b>Indicator 5: Population with a Regular Healthcare Provider</b></p>	<p><i>Enablers and Inputs: Workforce</i></p> <p><b>Indicator 6: Family Medicine and Nurse Practitioner Learners</b></p>
 <p><i>*Community adaptive team members, including social workers, dietitians, occupational therapists, physiotherapists, etc.</i></p> <p>Data Source: Nova Scotia Health, 2016 &amp; 2019</p>	 <p>Data Source: Canadian Community Health Survey, 2015-2019</p>	 <p>Data Source: Dalhousie University, 2016-17 &amp; 2019-20; HSPnet database, 2019-20.</p>
<p>This indicator outlines the additional PHC health human resources required, by professional discipline, to support the population, based on PHC planning parameters. For all three professional discipline categories, the additional resources required has decreased from 2016 to 2019, indicating more professionals were hired during this time period.</p>	<p>In 2015, 88.7% of Nova Scotians who responded to the CCHS indicated that they had a regular health care provider. This was above the national rate of 83.3% Canadians. However, this decreased to 85.6% in 2019, which is approximately equivalent to Canada’s rate of 85.5%.</p>	<p>During the 2016-17 academic year, there were approximately 31 medical residents completing training in Nova Scotia family medicine practices. The number of medical residents completing training in Nova Scotia family medicine practices increased to 36 in the 2019-20 academic year, a difference of 5 PGY2 residents. As well, 90 nurse practitioner students completed preceptorships in PHC in the 2019-20 academic year.</p>
<p><i>Enablers and Inputs: Research, Surveillance, Knowledge Sharing and Evaluation</i></p> <p><b>Indicator 7: Research Capacity (Participation and Partnerships)</b></p>		
 <p>Data Source: CoR-PHC; BRIC-NS; NSHRF; CIHR; NSHARF; FY2016-17 &amp; FY2020-21</p>	<p>Approximately 60 PHC staff and physician leaders from the Nova Scotia Health and Dalhousie Family Medicine (DFM) have research profiles. Other results included 50-100 research activities and 15 research study partnerships, for FY2016-17. Over 100 staff and physician leaders from Nova Scotia Health and DFM have research profiles in FY2020-21, a 67% increase from FY2016-17.</p> <p><b>Note:</b> We are unable to report the number of research activities and research study partnerships for FY2020-21 due to a lack of available data.</p>	



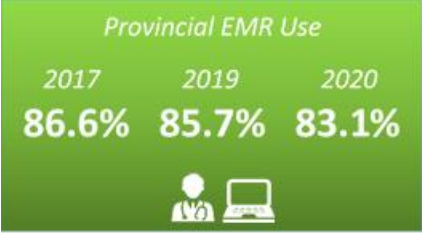
# Functions & Activities


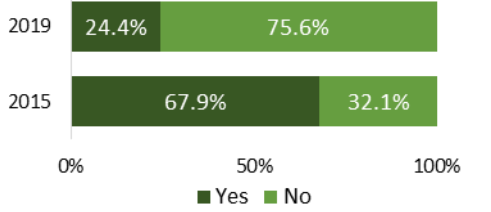
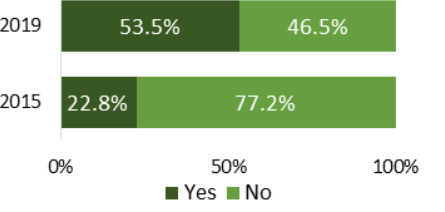
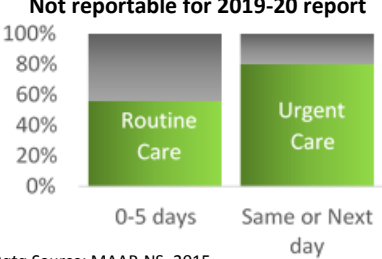
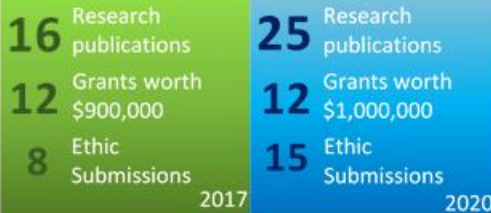
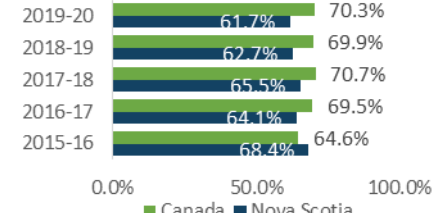
The next five indicators are classified as functions and activities and align with the framework domains: community responsiveness and outreach, integrated chronic disease management (CDM) and PHC delivery.

<p style="text-align: center;"><i>Functions and Activities: Community Responsiveness and Outreach</i> <b>Indicator 8: Programs Dedicated toward Populations Experiencing Vulnerabilities</b></p> <div style="text-align: center;">  <p>Eastern, 13 Central, 9 Western, 9 Northern, 6 Province-wide, 1</p> <p style="color: #e67e22; font-weight: bold; font-size: 1.2em;">38 Programs</p> </div> <p style="font-size: 0.8em; margin-top: 5px;"><i>Data Source: Nova Scotia Health, 2020</i></p>	<p style="text-align: center;"><i>Functions and Activities: Community Responsiveness and Outreach</i> <b>Indicator 9: PHC Providers' Sensitivity to Patients' Cultural Values</b></p> <div style="text-align: center;">  <p>2019 96.4% 2018 95.0% 2017 96.6%</p> <p>0% 50% 100%</p> <p style="font-size: 0.8em;">■ Strongly agree/agree ■ Strongly disagree/disagree</p> </div> <p style="font-size: 0.8em; margin-top: 5px;"><i>Data Source: Nova Scotia Health PHC Patient Experience Survey, 2017-2019</i></p>	<p style="text-align: center;"><i>Functions and Activities: Integrated CDM Delivery</i> <b>Indicator 10: PHC Support for Self-Management of Chronic Conditions</b></p> <div style="text-align: center;">  <p>2019 71.5% 2018 57.8% 2017 55.6%</p> <p>0% 50% 100%</p> <p style="font-size: 0.8em;">■ Yes always/sometimes</p> </div> <p style="font-size: 0.8em; margin-top: 5px;"><i>Data Source: Nova Scotia Health PHC Patient Experience Survey, 2017-2019</i></p>
<p>As of 2020, there were 38 PHC programs and services in Nova Scotia dedicated to populations experiencing vulnerabilities such as the 2SLGBTIQ+ community, students and youth, women, men, newcomers, First Nation communities, and African Nova Scotians. This is a large increase (&gt;120%) from the 17 programs and services reported in 2017.</p>	<p>In 2017, 96.6% of patient respondents to the PHC Patient Experience Survey (PES) administered at locations of PHC teams participating in Accreditation Canada's Primary Care Services Standards agreed or strongly agreed that staff took their cultural values and those of their family or caregiver into account. This remained approximately the same (96.4%) in the 2019 survey.</p>	<p>55.6% of respondents to the 2017 PHC PES reported that yes, they were always or sometimes encouraged to go to a specific group, program or class to help them manage their health concerns. There was an increase of 29%, to 71.5% in the 2019 PHC PES.</p>
<p style="text-align: center;"><i>Functions and Activities: PHC Delivery</i> <b>Indicator 11: Scope of Primary Health Care Services</b></p> <p>Respondents to the Commonwealth Fund Survey who said their practice was well or somewhat prepared to manage care for patients with:</p> <div style="text-align: center;">  <p>100% 96.7% 85.9% 90.8% 91.8% 49.1%</p> <p>Chronic conditions Mental illness Substance-abuse-related issues Palliative care needs Dementia Requesting medical assistance in dying</p> </div> <p style="font-size: 0.8em; margin-top: 5px;"><i>Data Source: Commonwealth Fund: International Health Policy Survey of Primary Care Physicians in 11 Countries, 2019</i></p>	<p style="text-align: center;"><i>Functions and Activities: PHC Delivery</i> <b>Indicator 12: PHC Provider Time in Direct Patient Care</b></p> <p>Family Physician and Nurse Practitioner Availability for Patient Appointments, Weekly</p> <div style="text-align: center;">  <p>2019 2015</p> <p>12.9% 20.2% 66.9%</p> <p>&lt;35 hours 35 to 44 hours ≥45 hours</p> <p style="border: 1px solid #e67e22; padding: 5px; display: inline-block;">Average Number of Weekly Hours in Direct Patient Care</p> <p style="font-size: 0.8em; margin-top: 5px;">NS Average 28 hours Range: 3 hours – 61 hours</p> </div> <p style="font-size: 0.8em; margin-top: 5px;"><i>Data Source: Commonwealth Fund: International Health Policy Survey of Primary Care Physicians in 11 Countries, 2019; MAAP-NS, 2015</i></p>	
<p>The Commonwealth Fund (CWF) surveyed primary care doctors across Canada and 10 other countries in 2019 to assess access to care, patient-centered care, coordination of care and services provided. The survey was broken down by province; the data represents Nova Scotia primary care physicians who responded to the CWF survey.</p> <p>Note that this data source was updated for the 2019-20 release based on availability of data.</p>	<p>In 2015, PHC providers across NS indicated spending an average of 28.3 hours per week in direct patient care. Across individual providers, there was a large range of variability, ranging from 3 hours (minimum) to 61 hours (maximum). 2019 data was captured through the CWF survey, which only includes primary care physicians (no data on NPs) and asked about hours worked per week, without indicating time spent in direct patient care. This indicated the majority of physicians in NS worked over 45 hours per week (66.9%).</p> <p>Note that this data source was updated for the 2019-20 release based on availability of data.</p>	



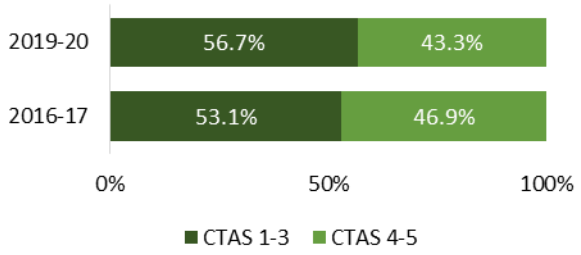
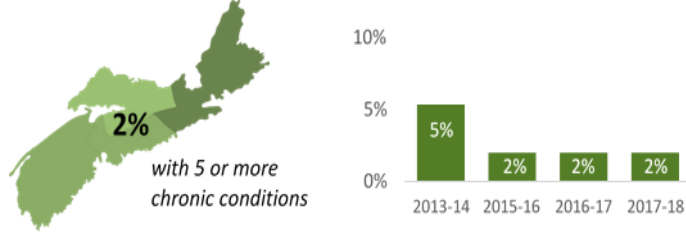

## Outputs & Outcomes

The remaining 16 indicators are classified as outputs and outcomes; 10 are outputs and 6 are outcomes. The 10 output indicators align with the framework domains: economic conditions, engagement platform, infrastructure, workforce, PHC delivery, research, surveillance, knowledge sharing and evaluation, PHC delivery, and wellness, prevention, and risk factor management. Outcome indicators span multiple functions.

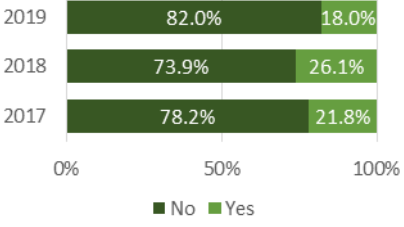

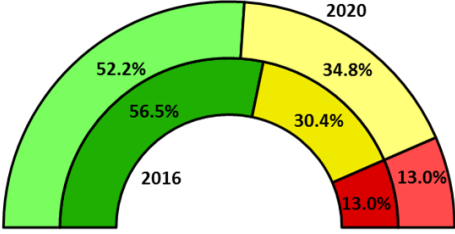
Output: Economic Conditions <b>Indicator 13: Per Capita Primary Health Care Expenditures</b>	Output: Engagement Platform <b>Indicator 14: Patient Participation in Activities</b>	Output: Infrastructure <b>Indicator 15: PHC Physician use of Electronic Medical Record (EMR)</b>
 <p><i>Data Source:</i> Primary Health Care, Nova Scotia Health, 2015-16 &amp; 2019-20</p>	 <p><i>Data Source:</i> Primary Health Care, Nova Scotia Health, 2018-2020</p>	 <p><i>Data Source:</i> Department of Health &amp; Wellness, 2017 &amp; 2020; Commonwealth Fund: International Health Policy Survey of Primary Care Physicians in 11 Countries, 2019; Primary Health Care, Nova Scotia Health 2020,</p>
<p>Primary Health Care’s budget was \$33.3M at the time of Nova Scotia Health’s formation in 2015-16. This equated to Nova Scotia Health spending \$36 per person (or \$3.6M per 100,000 people) on primary health care programs and services (based on a population of 920,383, Census, 2011). In 2019-20 PHC’s budget increased by 90% to \$63.2M, which equates to spending \$68 per person (or \$6.8M per 100,000 people) on primary health care programs and services (based on a population of 923,598, Census, 2016).</p> <p><i>*excludes spending on physician services and MSI billings, which is the predominant source of primary health care expenditures for the population.</i></p>	<p>At the time of the previous report, recruiting patient and family advisors (PFAs) in PHC planning and quality was in its early stages. In the last three years (2018-2020), PFAs have been involved in Quality and Safety committees across all zones, as well as a number of other PHC initiatives. As of 2020, there are 40 PFAs involved in PHC initiatives across Nova Scotia.</p>	<p>In 2017, approximately 86.6% of FPs in the province were on an EMR. Of all physicians using an EMR, 79.9% used Nightingale on Demand. Of the NS primary care physicians who responded to the CWF survey in 2019, 85.7% indicated using an EMR in their practice. In 2020, approximately 83.1% of FPs in the province used an EMR, with 66.9% using Telus’ Med Access and the remainder predominately using QHR’s Accuro (31.1%). In addition, 100% of Nova Scotia Health’s PHC nurse practitioners use an EMR.</p> <p>Note that this data source was updated for the 2019-20 release based on availability of data.</p>

<p><i>Output: Structure</i></p> <p><b>Indicator 16: Percentage of Population Served by a Collaborative Family Practice Team</b></p>	<p><i>Output: PHC Delivery</i></p> <p><b>Indicator 17: Primary Care Providers Accepting New Patients</b></p>	<p><i>Output: PHC Delivery</i></p> <p><b>Indicator 18: Provision of After-Hours Care</b></p>
 <p><i>Population served by CFPT</i> <b>28.1%</b></p> <p><i>Data Source:</i> Sampalli, T., et al. (2019). Preliminary Assessment of Collaborative Care Models in Nova Scotia: Rapid Review. Report prepared for Nova Scotia Department of Health. October 2019.</p>	 <p><i>Data Source:</i> MAAP-NS, 2015; Commonwealth Fund: International Health Policy Survey of Primary Care Physicians in 11 Countries, 2019</p>	 <p><i>Data Source:</i> MAAP-NS, 2015; Commonwealth Fund: International Health Policy Survey of Primary Care Physicians in 11 Countries, 2019</p>
<p>In FY2018-19, 28.1% of the population in Nova Scotia was served by a collaborative family practice team.</p> <p>Note: In the previous report we were unable to report on this indicator.</p>	<p>In 2015, 67.9% of PHC providers indicated they are accepting new patients, either unconditionally or with exceptions (e.g., family members, newborns, etc.). In 2019, 24.4% of NS primary care physicians who responded to the CWF survey indicated they are accepting new patients, either unconditionally or with exceptions. To complement the CWF data, in our local context, in 2019, 133 unique PHC providers accepted patients who were registered as needing a family practice on the Need a Family Practice Registry.</p> <p>Note that this data source was updated for the 2019-20 release based on availability of data.</p>	<p>In 2015, 22.8% of PHC providers indicated that they were providing care after 5 pm at least one evening a week. In 2019, 53.5% of NS primary care physicians who responded to the CWF survey indicated they provide appointments after 6pm at least one evening during the week (Monday to Friday).</p> <p>Note that this data source was updated for the 2019-20 release based on availability of data.</p>
<p><i>Output: PHC Delivery</i></p> <p><b>Indicator 19: Wait Times for Routine and Urgent Primary Care</b></p>	<p><i>Output: Research, Surveillance, Knowledge Sharing and Evaluation</i></p> <p><b>Indicator 20: Research Outputs</b></p>	<p><i>Output: Wellness, Prevention, Risk Factor Management</i></p> <p><b>Indicator 21: Influenza Immunization for Individuals 65 and Over</b></p>
<p><b>Not reportable for 2019-20 report</b></p>  <p><i>Data Source:</i> MAAP-NS, 2015</p>	 <p><i>Data Source:</i> CoR-PHC; BRIC-NS; NSHRF; CIHR; NSHARF; FY2016-17 &amp; FY2020-21</p>	 <p><i>Data Source:</i> Department of Health and Wellness, Nova Scotia; PHAC, Canada.</p>
<p><b>Note:</b> We are unable to report updated data for this indicator in the 2020 version of the report given no suitable replacement data source was identified. As a result, data from the previous report is included again due to the inability to identify a comparable data source.</p> <p>In 2015, over half of PHC providers across the province were able to provide routine care within 5 days (56.4%), while 80.4% were able to see patients same day/next day for urgent care.</p>	<p>In FY2016-17, Nova Scotia Health PHC staff, DFM, and CoR-PHC received 12 grants worth approximately \$900,000, and produced eight ethics submissions and 16 research publications in the past year. Nova Scotia Health PHC staff, DFM and CoR-PHC are reporting over \$1,000,000 in CIHR grants with funding ending in FY2020-21, and have completed 15 ethics submissions and 25 research publications in the past year.</p>	<p>In FY2015-16, 68.4% of Nova Scotians aged 65 and older received an influenza immunization, which surpassed the national rate of 64.6%. However, over the last 5 years, the national rate of influenza immunization in individuals aged 65 and older has increased (70.3% FY2019-20), while the rate in Nova Scotians in this age group has decreased (61.7% FY2019-20).</p> <p>Note that this data source for all years was updated for the 2019-20 release based on availability of data.</p>



<p style="text-align: center;"><i>Output: Workforce</i></p> <p style="text-align: center;"><b>Indicator 22: Family Physicians Working in Collaborative Family Practice Teams</b></p>	<p style="text-align: center;"><i>Outcome: Across Functions</i></p> <p style="text-align: center;"><b>Indicator 23: Use of Emergency Department for Minor Complaints</b></p>
<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid #ccc; border-radius: 15px; padding: 10px; background-color: #e0f2f1;">  <p style="text-align: center;"><b>159</b> Family Physicians Working in <b>39</b> CFPTs  2015-16</p> </div> <div style="border: 1px solid #ccc; border-radius: 15px; padding: 10px; background-color: #e0f2f1;">  <p style="text-align: center;"><b>377</b> Family Physicians Working in <b>86</b> CFPTs  2019-20</p> </div> </div> <p style="font-size: small; margin-top: 5px;"><i>Data Source: Primary Health Care, Nova Scotia Health, FY2015-16 &amp; FY2019-20</i></p>	 <p style="font-size: small; margin-top: 5px;"><i>Data Source: EDIS, Meditech, and STAR data, Nova Scotia Health, FY2016-17 &amp; FY2019-20</i></p>
<p>At the time of Nova Scotia Health’s formation, there were approximately 159 family physicians working in 39 collaborative family practice teams. As of March 31, 2020, there were approximately 377 family physicians working in 86 CFPTs, a 137% increase in family physicians working in team-based care. Note this is an <u>estimated head count</u> of family physicians only and does represent full-time equivalents.</p>	<p>Almost half (46.9%) of all Emergency Department (ED) visits across the province in FY2016-17 were triaged as semi-urgent (CTAS level 4) or non-urgent (CTAS level 5), according to the Canadian Triage and Acuity Scale. The number of ED visits in Nova Scotia triaged as CTAS level 4 or 5 decreased slightly to 43.3% in FY2019-20.</p>
<p style="text-align: center;"><i>Outcome: Across Functions</i></p> <p style="text-align: center;"><b>Indicator 24: Prevalence of Individuals with Self-Reported Five or more Chronic Conditions</b></p>	<p style="text-align: center;"><i>Outcome: Integrated Chronic Disease Management Programs and Services</i></p> <p style="text-align: center;"><b>Indicator 25: Ambulatory Care Sensitive Conditions (ACSC) Hospitalization Rate</b></p>
 <p style="font-size: small; margin-top: 5px;"><i>Data Source: Canadian Community Health Survey, FY2013-14 to FY2017-18</i></p>	 <p style="font-size: small; margin-top: 5px;"><i>Data Source: Canadian Community Health Survey FY2014-15 &amp; FY2018-19</i></p>
<p>The prevalence of individuals with self-reported five or more chronic conditions (asthma, arthritis, high blood pressure, COPD, diabetes, heart disease, cancer, stroke, dementia, mood disorder, and/or anxiety) was 5.3% in Nova Scotia in FY2013-14. Over the years this has decreased by more than half to 2% (FY2017-18).</p>	<p>In FY2014-15, Nova Scotia recorded a hospitalization rate for ambulatory care sensitive conditions of 355 hospitalizations per 100,000 people in patients younger than age 75. In FY2018-19 the rate of hospitalization for ambulatory care sensitive conditions in patients younger than age 75 decreased to 341 per 100,000 people.</p> <p>Note that this data source was updated for the 2020 release based on availability of data.</p>



<p><i>Outcome: Primary Care Delivery Across the Lifespan</i></p> <p><b>Indicator 26:</b> PHC Patient Access to Health Care</p>	<p><i>Outcome: Primary Care Delivery Across the Lifespan</i></p> <p><b>Indicator 27:</b> Patient Involvement in Decisions about their Care and Treatment</p>	<p><i>Outcome: Quality, Safety, and Risk</i></p> <p><b>Indicator 28:</b> Patient Safety Culture</p>
 <p><i>Data Source:</i> Nova Scotia Health PHC Patient Experience Survey, 2017-2019</p>	 <p><i>Data Source:</i> Nova Scotia Health PHC Patient Experience Survey, 2017-2019</p>	 <p><b>Patient Safety Culture Flags</b></p> <p><i>Data Source:</i> Nova Scotia Health Patient Safety Culture Survey, 2016, 2018 &amp; 2020</p>
<p>In 2017, 78.2% of patients at PHC teams participating in Accreditation Canada’s Primary Care Services Standards indicated they did not have difficulties getting the health care or advice they needed. This rate increased to 82.0% in the 2019 PES.</p>	<p>In 2019, 95.5% of patients who were part of PHC teams participating in Accreditation Canada’s Primary Care Services Standards indicated that their health care provider/team involved them in making decisions about their care. The previous report used the QUALICOPC (2013) study as the data source for this indicator.</p> <p>Note that this data source was updated for the 2019-20 release based on availability of data.</p>	<p>Of the total 23 statements related to patient safety culture in Primary Health Care, the responses to statements were rated red, yellow, green, with green being the highest rated and red being the lowest rated. In 2016 (56.5%) and 2020 (52.2%), the majority of responses were green flags; however, in 2018 the majority of responses were yellow flags (47.8%).</p>



# Current State Assessment of the Primary Health Care System in Nova Scotia

*The Primary Health Care 2019-20 System Performance Report: Technical Document*

## INTRODUCTION AND RATIONALE

### THE PRIMARY HEALTH CARE SYSTEM

Primary health care is an approach to health that acknowledges the determinants of health and the importance of healthy individuals and communities. It focuses on factors such as where people live, the state of the environment, education and income levels, genetics, and relationships with friends and family. It also includes the continuum of care from pre-conception to end-of-life care, emphasizing health promotion, disease and injury prevention, health maintenance, and supporting patients and families in being partners in their health journey. With patients and families being core partners on the team, primary health care professionals include family doctors, family practice nurses, nurse practitioners, pharmacists, social workers, dietitians, physiotherapists, behaviourists, psychologists and many others, who all work collaboratively to improve the health and well-being of their patients and clients. Primary health care is the foundation of the health system, where the majority of people experience most of their health care, in the community, and is the ongoing point of contact a person has with the overall health system (adapted from Nova Scotia Health Authority, 2015; Annapolis Valley Health - as cited in Primary Health Care, NSHA, 2017).

Primary Health Care is a multi-dimensional system that has a responsibility to organize care for individuals across the continuum of care and throughout their lifetime as well as to work with our partners to improve the health of our communities. Worldwide, strong primary health care systems have been shown to contribute to overall health system performance and the health of the population (Starfield et al., 2005; Shi, 2012; Freidburg et al., 2010; Kringos et al., 2013; McMurchy, 2009). Monitoring the performance of the primary health care system through ongoing evaluation, data analytics, and research to support data-driven decision making, effectiveness, and the monitoring of key performance indicators are critical components of ensuring a high quality primary health care system.

### NOVA SCOTIA CONTEXT

Upon the formation of the Nova Scotia Health Authority (NSHA), now Nova Scotia Health, in 2015, the provincial government and health authority in Nova Scotia (NS) aimed to strengthen the primary health care system through building on existing and established strategies, models, and innovations while planning for new and essential components of a provincial system and to meet the changing landscape of health care in the province. The primary health care system in NS has undergone transformational change over

the last several years through investments to strengthen collaborative family practice teams and infrastructure for the community-based primary health care system.

Nova Scotia Health has been moving forward in a purposeful and planned way toward a broad vision for a strengthened primary health care system. We have been successful in enhancing collaborative family practice teams across the province, which is demonstrated in this report. Continuing to create more collaborative family practice teams, as well as supporting the ones currently in place, will help us recruit and retain family physicians and other health professionals in our communities, which we know is critical to the future of our health care system. There is important work ahead to continue to support these teams to become health homes, which focus on enhancing team-based care, improving quality, and engaging patients and families in their health and care.

Furthermore, Nova Scotia Health's Primary Health Care team is focused on strengthening the supports available for Nova Scotians to live well and manage their chronic conditions. We will continue the implementation of strategies and programs to support patients in managing their own health by building knowledge, skills, and confidence and continue re-imagining the delivery of wellness programming and chronic disease management services in ways that improve integration with family practice and other parts of the health system. The COVID-19 pandemic has showed us there is great potential to continue to enhance how we do our work virtually and we will continue to explore how we enhance the use of virtual care throughout the primary health care system.

## PURPOSE OF REPORT

In 2016, it was identified by PHC system leaders that a robust **system-level** evaluation plan was required to both measure and monitor the impact of changes in primary health care programming and service delivery, experience of care, and population outcomes. As a result, the *Current State Assessment of the Primary Health Care System in Nova Scotia* report was published in 2019 (Primary Health Care, NSHA, 2019), which outlined the development of a novel system-level evaluation framework for Nova Scotia, a process for indicator identification and selection across framework domains, and measurement of 28 priority indicators using readily available data sources at the time of Nova Scotia Health's formation, where available. The report was considered a 'baseline' assessment of the state of the PHC system and served as the foundation for future measurement and evaluation related to the impact of large-scale primary health care health transformation in NS.

The current report presents an update of the 28 priority indicators using the most recent available data as of March 31, 2020. Comparisons with previous years are made where data is available. The evaluation framework, as well as the indicators and data sources used to assess progress across the framework domains are outlined in the following sections. For detailed background on the development of the system-level evaluation framework and process for indicator selection, please see the first release of the Current State Assessment available on the Nova Scotia Health website [here](#).

This document is a **technical report** and accompanying this technical report is a brief executive summary document of the selected indicators. This technical report will serve as a thorough reference document for the selected indicators and data sources promoting consistency and consensus in the reporting of key measures over time. The report authors and key contributors are identified in Appendix A.

## APPROACH

### SYSTEM EVALUATION FRAMEWORK

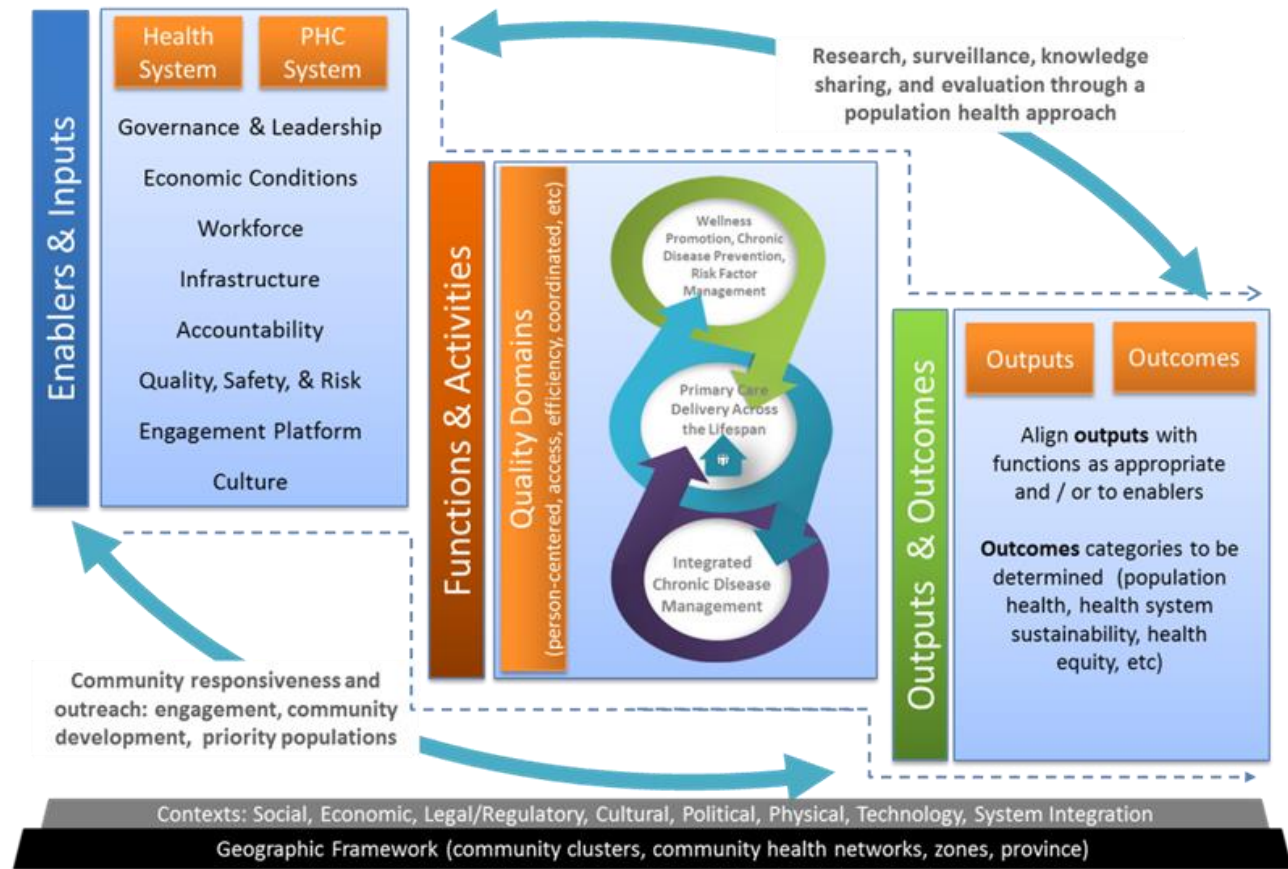
To guide indicator selection and alignment, in 2016-17, the Nova Scotia Health Primary Health Care System Evaluation Framework was developed through a stakeholder engagement and consensus process to reflect the complex nature of the PHC system, incorporate the functions and enablers of a strong primary health care system as defined by Nova Scotia Health, and consider the broader geographic, economic, and social context in NS (Figure 1). The development of this multidimensional framework was guided and influenced by key documents, guiding frameworks, and stakeholder engagement. For a full explanation of the framework and the process for development, please refer to the original [report](#).

The primary health care functions and enablers serve as a foundation for planning and as a conceptual framework for how the primary health care system is viewed, and for the purposes of this report, evaluated in Nova Scotia (Edwards et al., 2017). The functions of the primary health care system include:

- Primary care delivery across the lifespan from birth to end of life care;
- Wellness promotion, chronic disease prevention and risk reduction for individuals, groups and communities;
- Integrated chronic disease management;
- Research, surveillance, knowledge sharing and evaluation through a Population Health approach and in partnership with public health and others; and
- Community responsiveness and outreach: engagement, community development, and priority populations.

The functions are supported by **foundational enablers**, which are required to build and sustain the primary health care system. While the enablers are largely consistent with what is needed across other parts of the health care system, the enablers to support community-based primary health care require a different orientation than in acute care or other parts of the system (Primary Health Care, NSHA, 2017).

**Figure 1: NSHA Primary Health Care System Evaluation Framework**



The visual for the framework uses the domains of a traditional logic model (i.e., inputs, activities, outputs and outcomes) while incorporating the PHC system functions and enablers defined by Nova Scotia Health and highlighting the relationships between quality domains, attributes, outputs, and outcomes of the PHC delivery system. A description of each of the framework elements is outlined in Appendix B.

## INDICATOR ALIGNMENT AND DATA SOURCES

Table 1 presents the 28 final indicators and their mapping in alignment with the elements of the Primary Health Care System Evaluation Framework. The criteria used to select the indicators as part of the multi-stakeholder voting process in 2017 is identified in Appendix C. The names of each indicator are shown alongside the associated function/enabler and categorized by indicator type. Also shown are the data sources used to measure each indicator across report publication years.

While efforts were placed on using the same data sources across publication years, depending on data availability, data sources aligned with key indicators between the first report and the present update can vary. Careful consideration should be taken when comparing data across years for this reason. Although some changes in data sources may occur, the goal was to maintain the integrity of the intent of the indicator and what it was chosen to measure. For full details on the data sources, please refer to the subsequent sections of the Technical Report.

**Table 1: Indicators for State Assessment and Data Sources**

Type	#	Indicator Name	Function/ Enabler	2019 Report Data Source	2021 Report Data Source
<b>Enablers and Inputs</b>	1	Family Physician Remuneration Method	Economic Conditions	MSI Billing Data, 2015-16 validated 2017	Nova Scotia Health and Department of Health and Wellness, 2019-20
	2	Governance Model Distribution of Collaborative Family Practice Teams	Governance and Leadership	Nova Scotia Health, 2015-16	Nova Scotia Health, 2018-19 and 2019-20
	3	Collaborative Family Practice Teams	Workforce	Nova Scotia Health, 2015-16	Nova Scotia Health, 2019-20
	4	Difference between Available and Required PHC Health Human Resources	Workforce	Nova Scotia Health, 2016	Nova Scotia Health, 2019
	5	Population with a Regular Healthcare Provider	Workforce	Canadian Community Health Survey, 2015	Canadian Community Health Survey, 2016-2019
	6	Family Medicine Learners	Workforce	Dalhousie University, 2016-17	Dalhousie University, 2020-21
	7	Research Capacity (Participation, Training, Partnerships)	Research, surveillance, knowledge sharing, and evaluation	CoR-PHC; BRIC-NS; NSHRF; CIHR; NSHARF, 2016-17	CoR-PHC; BRIC-NS; NSHRF; CIHR; NSHARF, 2020-21
<b>Functions and Activities</b>	8	Programs Dedicated Toward Priority Populations	Community Responsiveness & Outreach	Nova Scotia Health, 2017	Nova Scotia Health, 2020
	9	PHC Providers' Sensitivity to Patients' Cultural Values	Community Responsiveness & Outreach	Nova Scotia Health PHC Patient Experience Survey, 2017	Nova Scotia Health PHC Patient Experience Survey, 2018 & 2019
	10	PHC support for self-management of chronic conditions	Integrated CDM Delivery	Nova Scotia Health PHC Patient Experience Survey, 2017	Nova Scotia Health PHC Patient Experience Survey, 2018 & 2019
	11	Scope of PHC services	Primary Care Delivery	Models and Access Atlas of Primary Care-Nova Scotia (MAAP-NS) study, 2015	Commonwealth Fund: International Health Policy Survey of Primary Care Physicians in 11 Countries, 2019
	12	PHC Provider Time in Direct Patient Care	Primary Care Delivery	Models and Access Atlas of Primary Care-Nova Scotia (MAAP-NS) study, 2015	Commonwealth Fund: International Health Policy Survey of Primary Care Physicians in 11 Countries, 2019
<b>Outputs and Outcomes</b>	13	Per Capita PHC Expenditures	Economic Conditions	Primary Health Care, Nova Scotia Health, 2015-16	Primary Health Care, Nova Scotia Health, 2019-20
	14	Patient Participation in Activities	Engagement Platform	Primary Health Care, Nova Scotia Health, 2017	Primary Health Care, Nova Scotia Health, 2018 to 2020

Type	#	Indicator Name	Function/ Enabler	2019 Report Data Source	2021 Report Data Source
	15	PHC use of Electronic Medical Record (EMR)	Infrastructure	Nova Scotia Department of Health and Wellness, 2017	Commonwealth Fund: International Health Policy Survey of Primary Care Physicians in 11 Countries, 2019 Nova Scotia Department of Health and Wellness, 2020
	16	Percentage of Population Served by a Collaborative Family Practice Team	Primary Care Delivery	Indicator not reported	Sampalli, T., et al. (2019). Preliminary Assessment of Collaborative Care Models in Nova Scotia: Rapid Review. Report prepared for Nova Scotia Department of Health. October 2019.
	17	Primary Care Providers Accepting New Patients	Primary Care Delivery	Models and Access Atlas of Primary Care-Nova Scotia (MAAP-NS) study, 2015	Commonwealth Fund: International Health Policy Survey of Primary Care Physicians in 11 Countries, 2019
	18	Provision of After Hours Primary Care	Primary Care Delivery	Models and Access Atlas of Primary Care-Nova Scotia (MAAP-NS) study, 2015	Commonwealth Fund: International Health Policy Survey of Primary Care Physicians in 11 Countries, 2019
	19	Wait Times for Routine and Urgent Primary Care	Primary Care Delivery	Models and Access Atlas of Primary Care-Nova Scotia (MAAP-NS) study, 2015	Indicator not reported
	20	Research Outputs	Research, surveillance, knowledge sharing, and evaluation	CoR-PHC; BRIC-NS; NSHRF; CIHR; NSHARF, 2016-17	CoR-PHC; BRIC-NS; NSHRF; CIHR; NSHARF, 2020-21
	21	Influenza Immunization for Individuals 65 and Older	Wellness, Prevention, Risk Factor Management	CPCSSN, Nova Scotia 2016; CIHI, Canada, 2016	Department of Health and Wellness, Nova Scotia 2015-16 to 2019-20; Public Health Agency of Canada, Canada 2015-16 to 2018-19
	22	Family Physicians Working in Collaborative Family Practice Teams	Workforce	Primary Health Care, Nova Scotia Health, 2015-16	Primary Health Care, Nova Scotia Health, 2019-20
	23	Use of Emergency Department for Minor Complaints	Across Functions	Meditech, and STAR data, Nova Scotia Health, 2016-17	Meditech, and STAR data, Nova Scotia Health, 2019-20

Type	#	Indicator Name	Function/ Enabler	2019 Report Data Source	2021 Report Data Source
	24	Prevalence of Individuals with Self-Reported Five or More Chronic Conditions	Across Functions	Canadian Community Health Survey, 2013-14	Canadian Community Health Survey, 2015-16 to 2017-18
	25	Ambulatory Care Sensitive Conditions (ACSC) Hospitalization Rate	Integrated chronic disease management programs & services	CIHI-DAD, 2014-15	Canadian Community Health Survey, 2018-19
	26	PHC Patient Access to Health Care	Primary Care Delivery	Nova Scotia Health PHC Patient Experience Survey, 2017	Nova Scotia Health PHC Patient Experience Survey, 2018 & 2019
	27	Patient Involvement in Decisions about their Care and Treatment	Primary Care Delivery	QUALICOPC, 2013	Nova Scotia Health PHC Patient Experience Survey, 2017 to 2019
	28	Patient Safety Culture	Quality, Safety and Risk	Nova Scotia Health Patient Safety Culture Survey, 2016	Nova Scotia Health Patient Safety Culture Survey, 2018 & 2020



OVERVIEW

In the following sub-sections, each of the 28 indicators is presented sequentially in detail. Indicators are **categorized by indicator type** and presented with a **description table** and a **results section** for each indicator’s current state upon the formation of Nova Scotia Health using the most recent year of data available up to March 31, **2020**. It is the intent that this report be updated each year and/or as new data becomes available.

The description table presented for each indicator includes the following information where applicable:

- Indicator Description
- Method of Calculation (and associated mathematical terms)
- Years of Data
- Data Sources
- Data Limitations & Considerations
- Level of Reporting
- Comparable Data
- Significance/Rationale

The results section includes both a graph and table, where applicable, to present the data.

TYPE 1: ENABLERS AND INPUTS



The first seven indicators are classified as **enablers and inputs** and align with following functions and enablers: economic conditions, governance and leadership, workforce and research, surveillance, knowledge sharing and evaluation.

These indicators provide examples of core system-level components that support and sustain the work of primary health care:

- Family physician remuneration method
- Family physicians practicing in each governance model
- Collaborative family practice teams
- Difference between available and required collaborative family practice team health human resources
- Population with a regular medical doctor
- Family medicine learners
- Research capacity (participation and partnerships)

## INDICATOR 1: FAMILY PHYSICIAN REMUNERATION METHOD

### DESCRIPTION

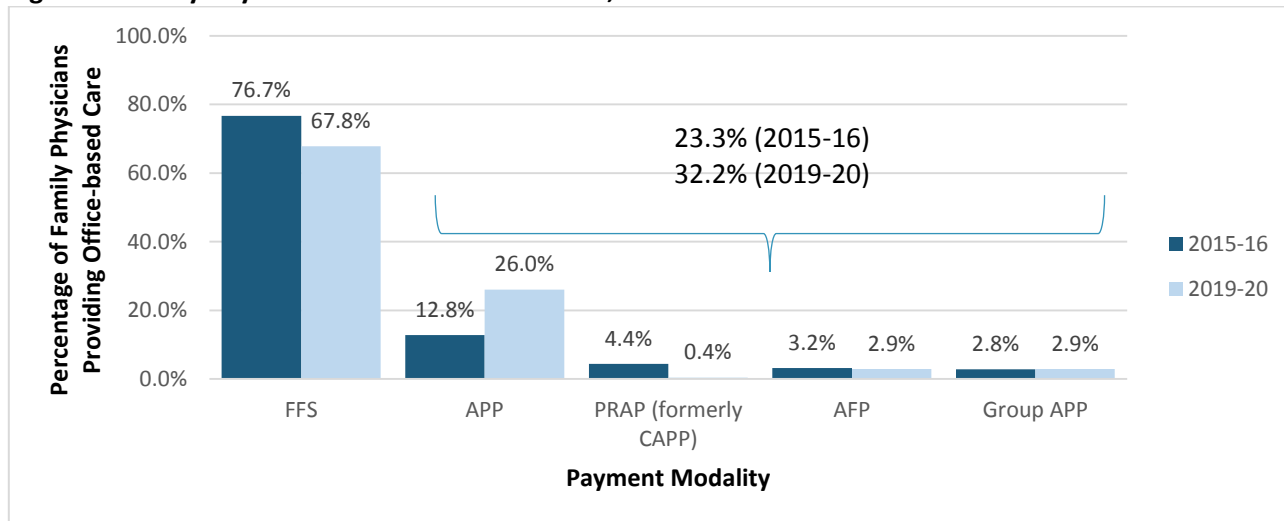
Indicator #1	
Family Physician Remuneration Method	
<b>Type of Indicator</b>	Input
<b>Enabler or Function</b>	Economic conditions
<b>Indicator Description</b>	Percentage of family physicians providing office-based care who were primarily remunerated by type of payment modality (FFS, APP, Group APP, AFP, PRAP (formerly CAPP))
<b>Numerator</b>	<p>Number of family physicians providing office-based care who were primarily remunerated by type of payment modality that is currently available in NS:</p> <ul style="list-style-type: none"> <li>• <b>FFS:</b> Fee-for-service – traditional remuneration method where physicians are self-employed professionals who bill Medical Services Insurance (MSI) for eligible services they provide to patients.</li> <li>• <b>APP:</b> Alternative Payment Plan – alternative payment arrangement to fee-for-service for physicians. These individual physician service contracts recognize and remunerate physicians for their direct clinical services and associated administrative duties.</li> <li>• <b>Group APP:</b> Group Alternative Payment Plan – this is similar to the APP described above but the payment contract includes multiple physicians as a group rather than just one individual physician. The group of physicians is collectively responsible for providing the clinical services and administrative functions outlined. This type of funding arrangement is often used in the Collaborative Emergency Centre (CEC) context to encompass all care provided in the community.</li> <li>• <b>AFP:</b> Academic Funding Plan – used for physicians who teach in NS academic institutions (e.g., Dalhousie University) in addition to clinical practice. These plans recognize and compensate physicians for their direct clinical services in addition to their academic, research, and administrative deliverables. This funding model is currently only available to family physicians working at Dalhousie Family Medicine locations in Halifax.</li> <li>• <b>PRAP:</b> Practice Ready Assessment Program – previously known as Clinician Assessment for Practice Program (CAPP), is an assessment program to ensure that international medical graduates (IMGs) who wish to practice family medicine in Nova Scotia possess appropriate clinical skills and knowledge to provide quality patient care. As of 2015 CAPP was no longer in operation but has been replaced by PRAP, and physicians continue to receive support and supervision from the College while in practice.</li> </ul>
<b>Denominator</b>	Total number of family physicians providing office-based care
<b>Method of Calculation</b>	<p><math>(\text{Numerator}/\text{Denominator}) \times 100</math></p> <p>Nova Scotia Health PHC and Department of Family Practice Leaders reviewed the list of family physicians working in office-based care provided by the Department of Health and Wellness and manually identified the remuneration method for each physician to inform the numerator; the denominator is identified by using information provided by the Department of Health and Wellness regarding the total number of family physicians practicing in office-based care in NS</p>
<b>Year of Data</b>	<p><u>Year of data for the original report release:</u> FY2015-16, validated/updated in 2017</p> <p><u>Year of data for the 2019-20 release:</u> FY2019-20</p>
<b>Data Source</b>	<u>Data source for the original report release:</u>

	MSI Billing Data for family physicians and a list of family physicians on an APP remuneration provided by the Nova Scotia Department of Health and Wellness. <u>Data source for the 2019-20 release:</u> Nova Scotia Health and Department of Health and Wellness
<b>Data Limitations &amp; Considerations</b>	Includes analysis of family physicians working in office-based care; based on best available data and information; estimate based on point-in-time data, as there are frequent changes to practicing physicians (e.g., recruitment, retirements, etc.). Only one payment modality is assigned to each physician based on their primary location of work; it is acknowledged that family physicians may have different payment modalities in different settings (e.g., an FP may be paid by APP for the majority of the work they do during the work, but may also work in a walk-in clinic on weekends where they are paid FFS).
<b>Level of Reporting</b>	Provincial
<b>Comparable Data</b>	See the Canadian Institute for Health Information (CIHI)'s <a href="#">Summary Report, Physicians in Canada, 2019</a> . See the section that starts on page 24, "How much are physicians paid?" for information across Canada and specifically for page 28, Figure 14, showing a national benchmark for Family Medicine. This report is produced annually.
<b>Significance/ Rationale</b>	This measure aids in PHC health workforce planning. Having an understanding of the current remuneration method of physicians also assists in assessing readiness for implementing a collaborative team approach to care delivery in a community cluster (Nova Scotia Health, 2015) and can serve as a benchmark to see how payment models evolve over time to support collaborative, team-based care.

## RESULTS

In 2017 and 2019, the majority of family physicians providing office-based care were primarily remunerated through a fee-for-service (FFS) payment modality (2017: 76.7%; 2019: 67.8%). The remainder (2017: 23.3%; 2019: 32.2%) were remunerated through alternative payment mechanisms. In both years, the second most common payment method was alternative payment plan (APP); however, there was a large increase (more than double) in APP remunerated physicians from 2017, 12.8% of family physicians being remunerated through APPs to 2019, where 26.0% were remunerated through an APP. See Figure 2 and Table 2 for more details.

**Figure 2: Family Physician Remuneration Method, 2015-16 and 2019-20**



**Table 2: Family Physician Remuneration Method, 2015-16 and 2019-20**

Remuneration Method	2015-16		2019-20	
	Frequency of Family Physicians	Percentage	Frequency of Family Physicians	Percentage
<b>Fee-for-service (FFS)</b>	<b>574</b>	<b>76.7%</b>	<b>581</b>	<b>67.8%</b>
<b>Alternative Payment Mechanisms</b>	<b>174</b>	<b>23.3%</b>	<b>276</b>	<b>32.2%</b>
<i>Alternative Payment Plan (APP)</i>	96	12.8%	223	26%
<i>Practice Ready Assessment Program (PRAP) [formerly Clinician Assessment for Practice Program (CAPP)]</i>	33	4.4%	3	0.4%
<i>Academic Funding Plan (AFP)</i>	24	3.2%	25	2.9%
<i>Group Alternative Payment Plan (Group APP)</i>	21	2.8%	25	2.9%
<b>Total</b>	<b>748</b>	<b>100%</b>	<b>857</b>	<b>100%</b>

## INDICATOR 2: GOVERNANCE MODEL DISTRIBUTION OF COLLABORATIVE FAMILY PRACTICE TEAMS

### DESCRIPTION

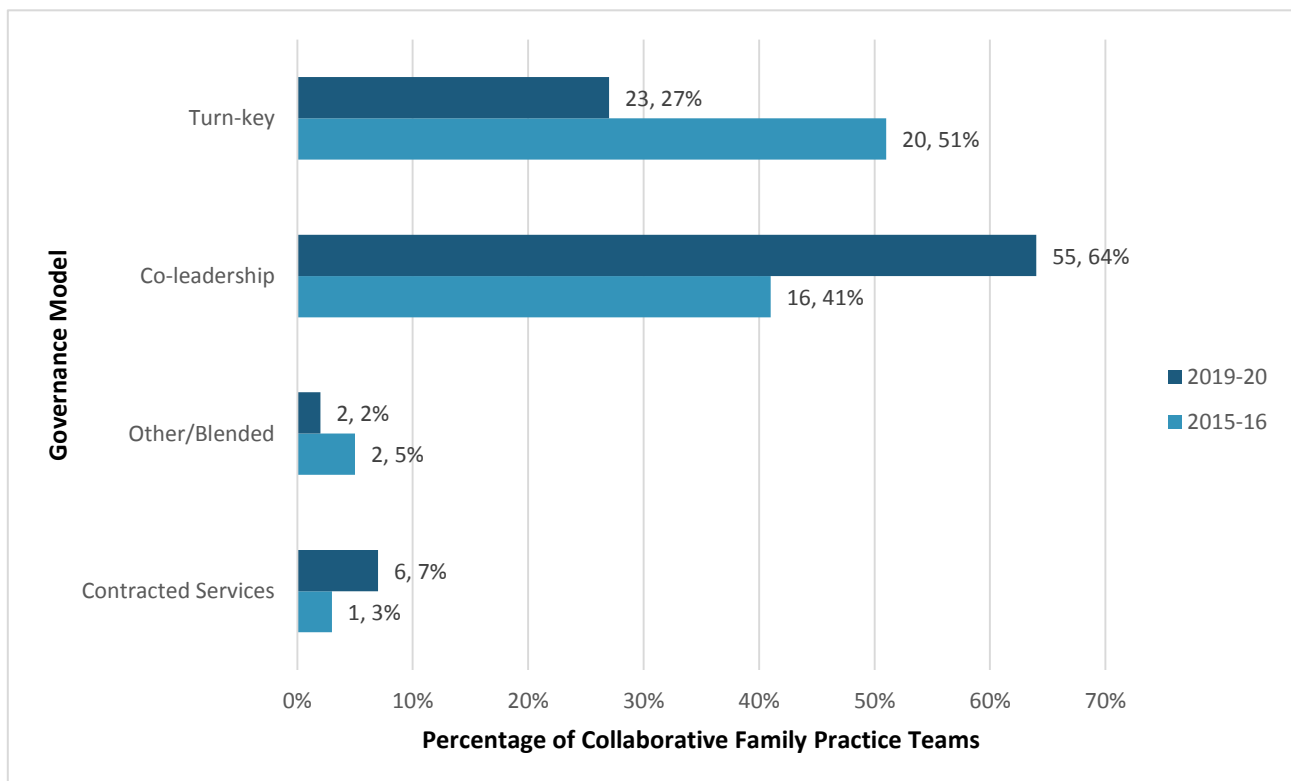
Indicator #2	
Governance Model Distribution of Collaborative Family Practice Teams	
Type of Indicator	Input
Enabler or Function	Governance and Leadership
Indicator Description	Percentage of collaborative family practice teams that existed at the time of this report, aligned with each type of governance model (co-leadership, turn-key, contracted services, other/blended).
Numerator	<p>Collaborative family practice teams associated with each of the following governance models:</p> <ul style="list-style-type: none"> <li> <b>Contracted Services:</b> In a contracted services governance arrangement, Nova Scotia Health provides funds (team member compensation and associated operating costs) to an entity or group who is responsible for the day-to-day operations and management of all activities for the delivery of comprehensive primary care services, including the employment of staff and the delivery of services and monitoring safety and quality of those said services. Nova Scotia Health and the entity work together cooperatively through joint planning and consultation to ensure comprehensive primary care services are provided to the population.         </li> <li> <b>Co-leadership:</b> In a co-leadership governance model, Nova Scotia Health works collaboratively in a co-leadership model with the entity (which may be physicians or other group) to support the collaborative family practice team. Co-leadership means a means a cooperative and collaborative affiliation between Nova Scotia Health and the entity, who work together as equals to oversee the operations of, and share accountability for, the collaborative family practice team.         </li> <li> <b>Turn-key:</b> In a turn-key governance arrangement, Nova Scotia Health is responsible for the managerial and operational oversight of the collaborative family practice team and works collaboratively, with elements of co-leadership, with the family physicians who are part of the team.         </li> <li> <b>Other/blended:</b> Collaborative family practice teams that do not fit directly with one of the three aforementioned governance models due to factors such as involvement of a third party or alternative funding arrangement, etc.         </li> </ul>
Denominator	Total number of collaborative family practice teams ( <i>see Indicator #3 for calculation methodology</i> )
Method of Calculation	<p><math>(\text{Numerator}/\text{Denominator}) \times 100</math></p> <p>Nova Scotia Health PHC Leaders reviewed the list of existing collaborative family practice teams and manually assigned the governance model for each team; the development of collaborative family practice teams is tracked as part of PHC operations.</p>
Year of Data	Data current to March 31, 2020
Data Source	Manual tracking maintained by Primary Health Care, Nova Scotia Health
Data Limitations & Considerations	Reflects the governance model at a high level only, based on the degree of working together with Nova Scotia Health; does not differentiate between the multiple entities and partners in each model. For example, First Nations Health Centres are included in both co-leadership and contracted services categories, based on their model of working together with Nova Scotia Health. Academic family practice models also distributed throughout the categories, as are community health centres, etc.
Level of Reporting	Provincial

Indicator #2	
Comparable Data	Not available
Significance/ Rationale	Through health services planning, Nova Scotia Health PHC has identified a common framework for governance as new collaborative family practice teams are developed. The intent of monitoring this will show how the governance landscape for collaborative family practice teams may or may not change over time. This indicator has resourcing implications for management/leadership structure required to support collaborative family practice teams.

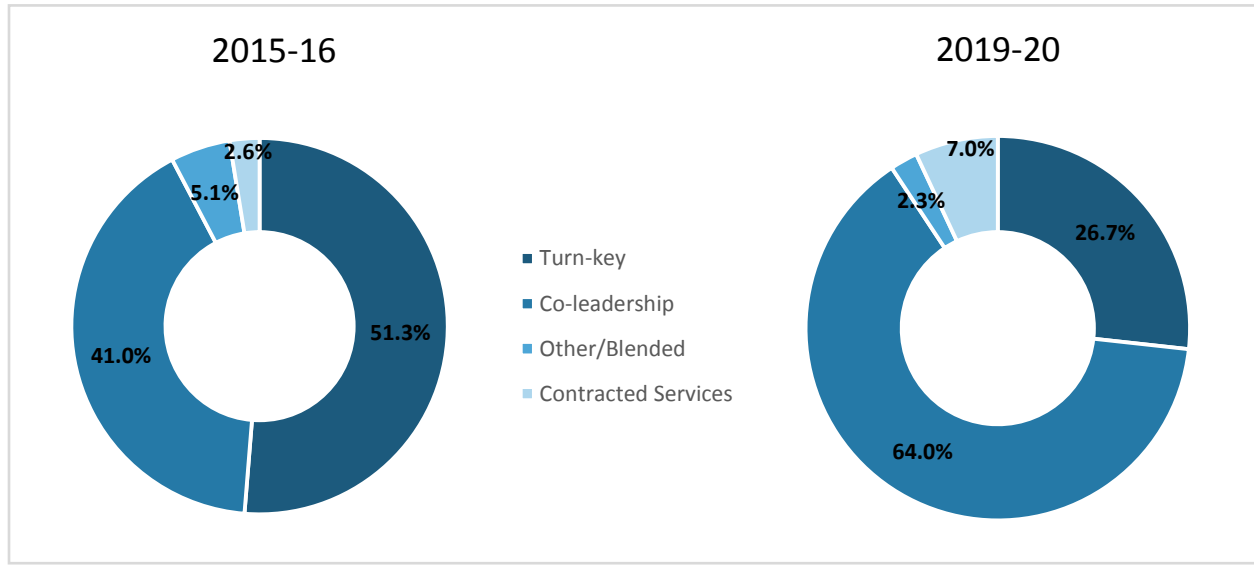
## RESULTS

For the collaborative family practice teams that existed at the time of Nova Scotia Health’s formation in 2015-16, the most predominant governance model was a turn-key arrangement, with 51% of collaborative family practice teams (n=20) being aligned to a turn-key governance model. This was followed by co-leadership, with 41% of collaborative family practice teams (n=16), and small minority working in an ‘other/blended’ arrangement (n=2) or a contracted services arrangement (n=1). Through the investment in PHC and the creation of many more collaborative family practice teams; the number of collaborative family practice teams more than doubled between 2015-16 and 2019-20 going from 39 to 86. This created a shift in the predominant governance model, with 64% of teams in a co-leadership governance arrangement. Figure 3, Figure 4 and Table 3 provide a detailed breakdown of each governance arrangement.

**Figure 3: Collaborative Family Practice Team Governance Model Distribution, by frequency and percentage**



**Figure 4: Collaborative Family Practice Team Governance Model Distribution, by percentage**



**Table 3: Collaborative Family Practice Team Governance Model Distribution**

Governance Model	FY 2015-16		FY 2019-20	
	Number of Collaborative Family Practice Teams	Percentage of Collaborative Family Practice Teams	Number of Collaborative Family Practice Teams	Percentage of Collaborative Family Practice Teams
Turn-key	20	51%	23	27%
Co-leadership	16	41%	55	64%
Other/Blended	2	5%	2	2%
Contracted Services	1	3%	6	7%
<b>Total:</b>	<b>39</b>	<b>100%</b>	<b>86</b>	<b>100%</b>

## INDICATOR 3: COLLABORATIVE FAMILY PRACTICE TEAMS

### DESCRIPTION

Indicator #3	
Collaborative Family Practice Teams	
Type of Indicator	Input
Enabler or Function	Workforce
Indicator Description	<p>Number of collaborative family practice teams</p> <p>For the purposes of identifying current collaborative family practice teams in NS, the following general definition has been adopted:</p> <p><i>Different types of primary health care providers who collaborate and share responsibility for comprehensive and continuous primary health care for a practice population. With patients and families as core partners on the team, the team consists of various combinations of family physicians, nurse practitioners, family practice nurses, and other providers such as dietitians, social workers, occupational therapists, physiotherapists, pharmacists, learners, behaviourists, medical office assistants, and/or community mental health workers, identified based on the needs of the community. Management/leadership support is important to provide strategic and operational support to the team. Clerical/office staff are considered integral members of the team.</i></p> <p>The proposed metric (population to provider ratios) for collaborative family practice teams has been designed to describe the team required to provide accessible, coordinated, continuous, comprehensive, and community oriented primary care to a practice population, working within a health home model. The metric will be applied at the community cluster level as a <b>ratio per 10,000</b> citizens:</p> <ul style="list-style-type: none"> <li>• 4-5 Family physicians**</li> <li>• 1-2 Nurse practitioners</li> <li>• 2-3 Family practice nurses</li> <li>• 1-2 Community adaptive team members (e.g., dietitians, social workers, OT, etc.)</li> <li>• Community pharmacist and other resources aligned to the community cluster</li> <li>• Clerical support</li> <li>• Leadership / management support, including practice support</li> <li>• Linkage with care coordinators, paramedics, other primary and secondary care resources, as appropriate.</li> </ul> <p><i>** Reflective of family physician full-time equivalents providing office based care and home visits only.</i></p> <p>While recognizing that a team size consisting of 4-5 physicians working with nurse practitioners, family practice nurses and other providers serving a population of approximately 10,000 is a preferred future model, Nova Scotia Health is in the first phase of that journey. The current <b>working definition</b> for a collaborative family practice team is a group of <b>at least</b> three health care providers, two of which are different professions, who work together collaboratively. This early definition was created by consensus with Department of Health &amp; Wellness, representatives from the research community, IWK, and Nova Scotia Health. It is envisioned that over time, these smaller teams will join up and work together across a community cluster/network to become a team that meets the preferred size. Going with a minimum definition for measurement was a purposeful decision so that the historically funded small teams would be recognized and to allow Nova Scotia Health to meet physicians where they were in the change journey and provide flexibility for smaller, rural communities.</p>



Indicator #3	
Collaborative Family Practice Teams	
<b>Numerator</b>	n/a – Count only
<b>Denominator</b>	n/a – Count only
<b>Method of Calculation</b>	A count of the groups providing primary care who are working collaboratively that meet the minimum working definition, that is a group of <b>at least</b> three health care providers, two of which are different professions, who work together collaboratively.
<b>Years of Data</b>	2015-16; for collaborative family practice teams existing at the time of Nova Scotia Health's formation; to March 31, 2020
<b>Data Source</b>	Primary Health Care, Nova Scotia Health
<b>Data Limitations &amp; Considerations</b>	Includes those groups that meet the minimum working definition only and are affiliated with Nova Scotia Health (i.e., receive funding from Nova Scotia Health to support the team). There would be groups in NS whereby the family physicians or others directly employ staff (e.g. family practice nurse, LPN) that do not receive funding from Nova Scotia Health that would not be included in this count.
<b>Level of Reporting</b>	Provincial
<b>Comparable Data</b>	Not available using this same working definition; there would be numerous reports from other jurisdictions detailing primary health care models
<b>Significance/ Rationale</b>	Since the formation of the Nova Scotia Health in 2015, through new investments from government, Nova Scotia Health has been working to create more and strengthen existing collaborative family practice teams across the province – a key strategic direction to achieve the health authority's vision of <i>Healthy people, healthy communities – for generations</i> . This indicator is critical to monitor to assess Nova Scotia Health's progress toward strategic goals, advance primary health care as the foundation of the health system, and monitor the impact of as new investments are made by government.

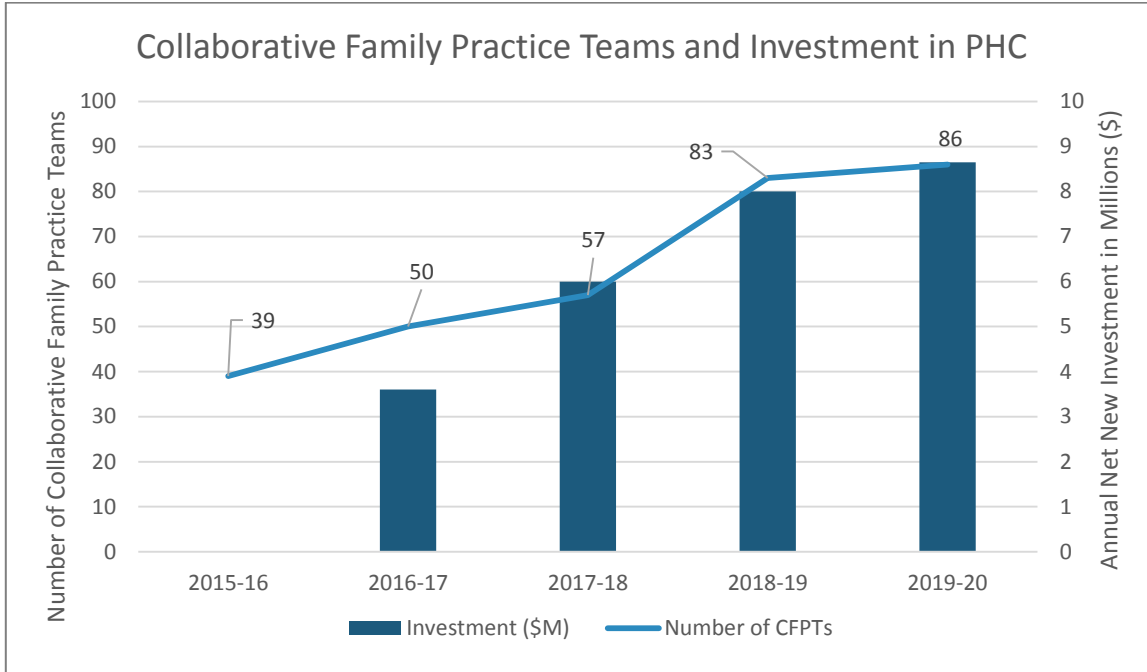
## RESULTS

At the time of Nova Scotia Health's formation, there were 39 collaborative family practice teams in NS meeting the minimum working definition (Table 4 and Figure 5). As of March 31, 2020, there were 86 collaborative family practice teams in NS, signifying a growth of 120% over 5 years (Figure 6).

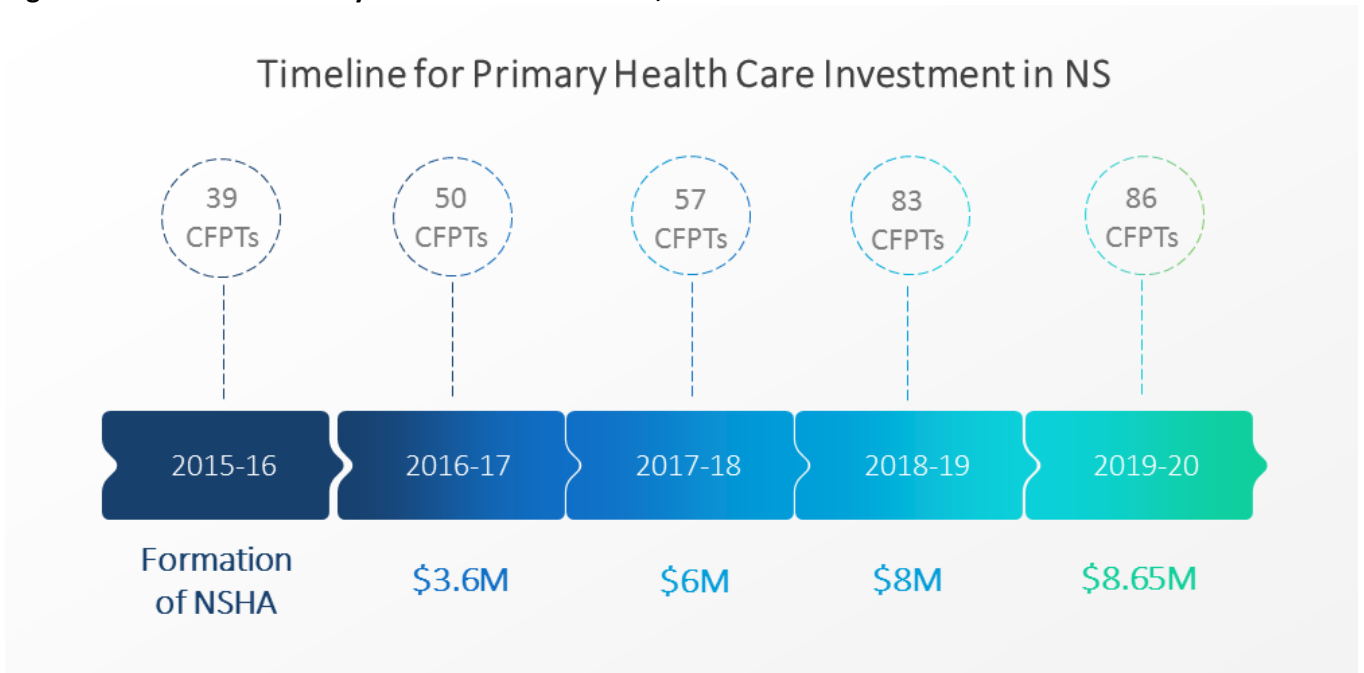
**Table 4: Collaborative Family Practice Teams by Year, 2015-16 to 2019-20**

	2015-16	2016-17	2017-18	2018-19	2019-20
Number of CFPTs	39	50	57	83	86

**Figure 5: Collaborative Family Practice Teams and Investments by Year, 2015-16 to 2019-20**



**Figure 6: Collaborative Family Practice Team Timeline, 2015-16 to 2019-20**



## INDICATOR 4: DIFFERENCE BETWEEN AVAILABLE AND REQUIRED PRIMARY HEALTH CARE HEALTH HUMAN RESOURCES

### DESCRIPTION

Indicator #4	
Difference Between Available and Required PHC Health Human Resources (excluding family physicians)	
<b>Type of Indicator</b>	Input
<b>Enabler or Function</b>	Workforce
<b>Indicator Description</b>	Difference between <u>required</u> PHC provider full time equivalents (FTEs), according to PHC planning metrics developed through health services planning to achieve having the majority of the population with access to a collaborative family practice team and access to wellness programs and services and the <u>current</u> PHC provider FTEs based on population, by cluster. This is for the PHC staff only working in collaborative family practice teams and wellness programs/services and excludes family physicians.
<b>Numerator</b>	Number of active FTE PHC providers by type, by Community Health Network
<b>Denominator</b>	Number of required FTE PHC providers by type, by Community Health Network
<b>Method of Calculation</b>	<p><i>Required primary health care health human resources in each community health network – the current primary health care health human resources in each community health network</i></p> <p>Required PHC health human resources for collaborative family practice teams and wellness programs/services are calculated using PHC planning metrics, as a ratio per 10,000 citizens:</p> <ul style="list-style-type: none"> <li>• 4-5 Family physicians**</li> <li>• 1-2 Nurse practitioners</li> <li>• 2-3 Family practice nurses (includes both RNs and LPNs)</li> <li>• 1-2 Community adaptive team members (CATM) (e.g., dietitians, social workers, OT, etc.)</li> <li>• Community pharmacist and other resources aligned to the community cluster</li> <li>• Clerical support</li> <li>• Leadership / management support, including practice support</li> <li>• Linkage with care coordinators, paramedics, other primary and secondary care resources, as appropriate.</li> </ul> <p><i>** Reflective of family physician full-time equivalents providing office based care and home visits only.</i></p> <p>Calculations for the required providers are based on the population of each network, relative to 2011 Census Population for FY2015-16 and the 2016 Census Population for FY2019-20.</p>
<b>Year of Data</b>	FY2015-16 and FY2019-20
<b>Data Source</b>	Current PHC Health Human Resource Data for NPs, FPNs, and community adaptive team members is from Nova Scotia Health HR Data (SAP); 2011 and 2016 Census population data is from Statistics Canada
<b>Data Limitations &amp; Considerations</b>	Includes clinical resources employed by PHC, Nova Scotia Health only for collaborative family practice teams and wellness programs and services. Excludes current PHC resources dedicated to chronic disease management programs. Not reflective of all of the staffing requirements to operate and sustain a PHC system, including appropriate leadership and management supports, clerical resources, etc. Excludes family physicians. Refer to <a href="#">Nova Scotia Health's website</a> for information on physician recruitment reporting and vacancies.

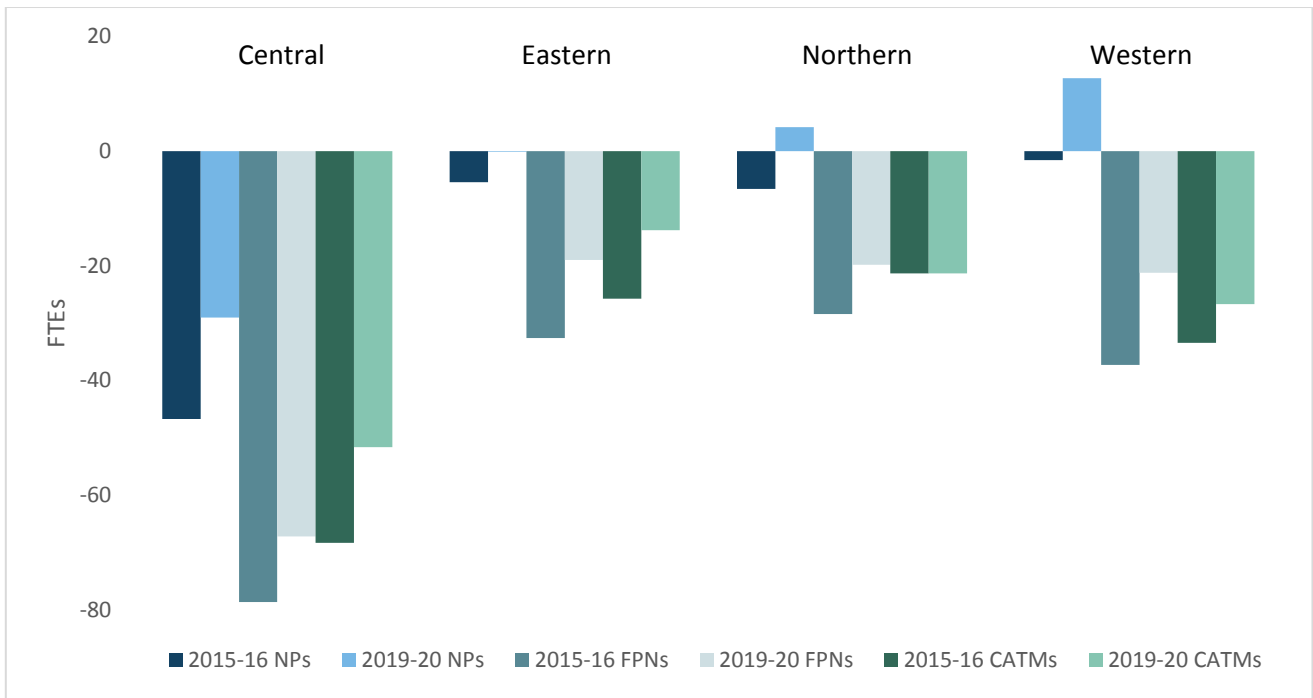
<b>Indicator #4</b>	
	The FY2015-16 metrics are calculated based on the 2011 Census whereas the FY2018-19 metrics are based on the 2016 Census. Some networks may be slightly different due to population changes.
<b>Level of Reporting</b>	Provincial, Zone, Community Health Network
<b>Comparable Data</b>	Not available using this definition and method of calculation
<b>Significance/ Rationale</b>	Since the formation of Nova Scotia Health in 2015, through new investments from government, Nova Scotia Health has been working to create more and strengthen existing collaborative family practice teams across the province. This indicator is critical to monitor to assess Nova Scotia Health’s progress toward strategic goals, advance primary health care as the foundation of the health system, and monitor the impact of as new investments are made by government and as progress is made to expand access to wellness programs and supports across NS.

## RESULTS

Figure 7 and Table 5 to Table 7 depict the difference between the current number of FTE PHC providers in 2015-16 and the required number, based on PHC planning metrics. This is presented by provider type (NPs, FPNs, and community adaptive team members such as dietitians, social workers, or physiotherapists) and geography (zone and community health network). A negative difference signifies an area where the current FTEs are less than the required / planned FTEs, while a positive difference signifies an area where the current supply exceeds the future planned number (note – there may be explainable differences in these areas). The results indicate that gains have been made from 2015-16 to 2019-20 in all provider types; however, there is still not a full complement of PHC providers, relative to the future health services plan.

Primary Health Care has grown and expanded the workforce of interprofessional team members working collaboratively with family physicians and others as we work toward the future planned state population-based health human resource plan. Over 150 clinical staff, including nurse practitioners, family practice nurses, licensed practical nurses, social workers, and dietitians, were hired through the new investment from government since 2017.

**Figure 7: Difference between Current and Planned PHC Health Human Resources by Zone, Network, 2015-16 and 2019-20**



2

<sup>2</sup> NPs - Nurse practitioners; FPNs - Family practice nurses (includes both RNs and LPNs); CATMs - Community adaptive team members (e.g., dietitians, social workers, OT, etc.)

**Table 5: Difference between Current and Planned PHC Nurse Practitioners by Zone, Network, 2015-16 and 2019-20**

Zone/Network	Population (2016 Census)	2015-16	2019-20
<b>Central Zone</b>	<b>423,498</b>	<b>-46.7</b>	<b>-29</b>
<i>Dartmouth Southeastern</i>	116,491	-14.0	-6.4
<i>Halifax Peninsula Chebucto</i>	169,768	-21.4	-11.7
<i>Bedford Sackville</i>	99,581	-10.2	-11.9
<i>Eastern Shore Musquodoboit</i>	17,474	0.6	0.7
<i>West Hants</i>	20,184	-1.7	0.4
<b>Eastern Zone</b>	<b>158,936</b>	<b>-5.5</b>	<b>-0.1</b>
<i>Guysborough Antigonish</i>	29,926	-0.6	0.7
<i>Inverness, Victoria, Richmond</i>	32,420	2.4	4
<i>Cape Breton County</i>	99,590	-7.3	-4.7
<b>Northern Zone</b>	<b>147,500</b>	<b>-6.6</b>	<b>4.2</b>
<i>Colchester East Hants</i>	70,658	-8.1	-5.2
<i>Cumberland</i>	33,094	3.5	5.7
<i>Pictou</i>	43,748	-2.0	3.7
<b>Western Zone</b>	<b>193,664</b>	<b>-1.5</b>	<b>12.7</b>
<i>Lunenburg and Queens</i>	57,933	2.3	6.3
<i>Yarmouth, Shelburne, Digby</i>	56,938	1.4	3.6
<i>Annapolis and Kings</i>	78,793	-5.2	2.9
<b>Nova Scotia</b>	<b>923,598</b>	<b>-60.3</b>	<b>-12.1</b>

**Table 6: Difference between Current and Planned PHC Family Practice Nurses by Zone, Network, 2015-16 and 2019-20**

Zone/Network	Population (2016 Census)	2015-16	2019-20
<b>Central Zone</b>	<b>423,498</b>	<b>-78.6</b>	<b>-67.2</b>
<i>Dartmouth Southeastern</i>	116,491	-22.0	-16.3
<i>Halifax Peninsula Chebucto</i>	169,768	-29.8	-22.3
<i>Bedford Sackville</i>	99,581	-18.0	-22.9
<i>Eastern Shore Musquodoboit</i>	17,474	-3.6	-3.6
<i>West Hants</i>	20,184	-5.2	-2
<b>Eastern Zone</b>	<b>158,936</b>	<b>-32.6</b>	<b>-19</b>
<i>Guysborough Antigonish</i>	29,926	-3.9	-5.7
<i>Inverness, Victoria, Richmond</i>	32,420	-4.9	-2.3
<i>Cape Breton County</i>	99,590	-23.8	-11
<b>Northern Zone</b>	<b>147,500</b>	<b>-28.5</b>	<b>-19.8</b>
<i>Colchester East Hants</i>	70,658	-15.5	-11.7
<i>Cumberland</i>	33,094	-4.9	-3.6
<i>Pictou</i>	43,748	-8.1	-4.5
<b>Western Zone</b>	<b>193,664</b>	<b>-37.3</b>	<b>-21.2</b>
<i>Lunenburg and Queens</i>	57,933	-8.9	-6.8
<i>Yarmouth, Shelburne, Digby</i>	56,938	-13.0	-8.7
<i>Annapolis and Kings</i>	78,793	-15.4	-5.7
<b>Nova Scotia</b>	<b>923,598</b>	<b>-177</b>	<b>-127.2</b>

**Table 7: Difference between Current and Planned PHC Community Adaptive Team Members by Zone, Network, 2015-16 and 2019-20**

Zone/Network	Population (2016 Census)	2015-16	2019-20
<b>Central Zone</b>	<b>423,498</b>	<b>-68.3</b>	<b>-51.6</b>
<i>Dartmouth Southeastern</i>	116,491	-18.85	-14.9
<i>Halifax Peninsula Chebucto</i>	169,768	-27.85	-18.7
<i>Bedford Sackville</i>	99,581	-14.93	-13.8
<i>Eastern Shore Musquodoboit</i>	17,474	-3.1	-3
<i>West Hants</i>	20,184	-3.6	-1.2
<b>Eastern Zone</b>	<b>158,936</b>	<b>-25.7</b>	<b>-13.8</b>
<i>Guysborough Antigonish</i>	29,926	-4.64	-4.6
<i>Inverness, Victoria, Richmond</i>	32,420	-4.1	-2.6
<i>Cape Breton County</i>	99,590	-17.01	-6.6
<b>Northern Zone</b>	<b>147,500</b>	<b>-21.3</b>	<b>-21.3</b>
<i>Colchester East Hants</i>	70,658	-10.79	-11.5
<i>Cumberland</i>	33,094	-5.01	-4.7
<i>Pictou</i>	43,748	-5.5	-5
<b>Western Zone</b>	<b>193,664</b>	<b>-33.4</b>	<b>-26.7</b>
<i>Lunenburg and Queens</i>	57,933	-10.12	-8.6
<i>Yarmouth, Shelburne, Digby</i>	56,938	-9.95	-9.5
<i>Annapolis and Kings</i>	78,793	-13.35	-8.6
<b>Nova Scotia</b>	<b>923,598</b>	<b>-149</b>	<b>-113.4</b>



## INDICATOR 5: POPULATION WITH A REGULAR HEALTHCARE PROVIDER

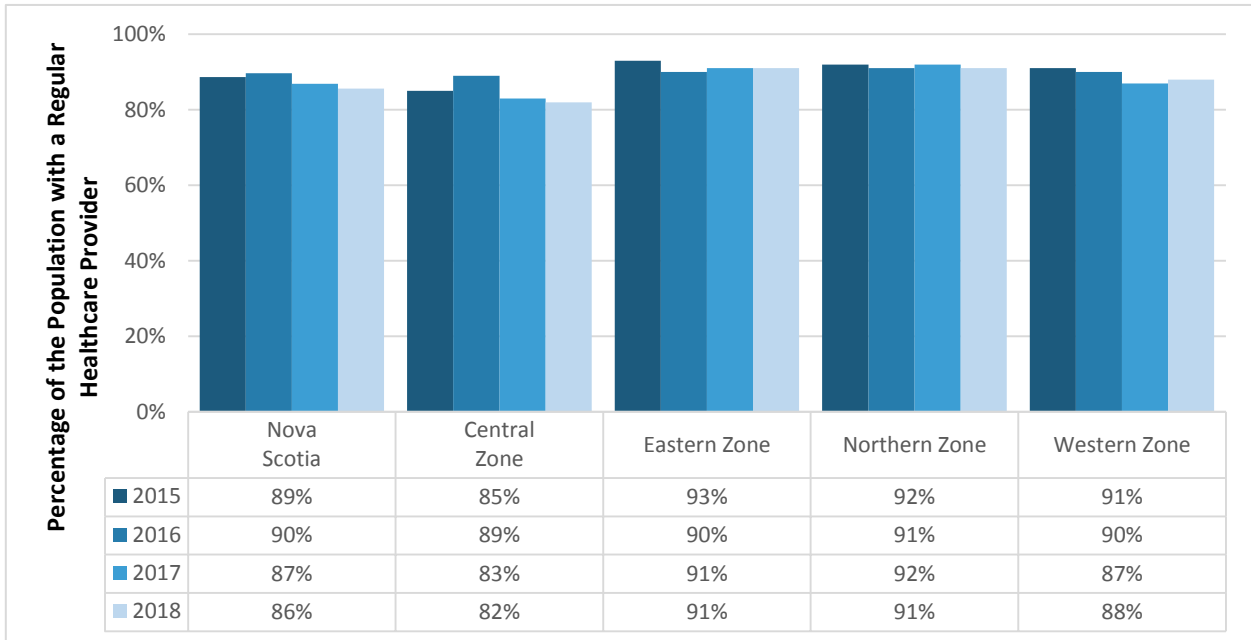
### DESCRIPTION

Indicator #5	
Population with a Regular Healthcare Provider	
<b>Type of Indicator</b>	Input
<b>Enabler or Function</b>	Workforce
<b>Indicator Description</b>	Percentage of population, age 12 and older, who reported having a regular healthcare provider
<b>Numerator</b>	Number of individuals in the denominator who reported having a regular healthcare provider
<b>Denominator</b>	Number of respondents age 12 and older (excludes No Answer, Refused, Don't Know, etc.)
<b>Method of Calculation</b>	$(\text{Numerator}/\text{Denominator}) \times 100$
<b>Year of Data</b>	2015 -2018
<b>Data Source</b>	Canadian Community Health Survey (CCHS), Statistics Canada
<b>Data Limitations &amp; Considerations</b>	CCHS data is based on self-report data.
<b>Level of Reporting</b>	Provincial; Zone
<b>Comparable Data</b>	Comparable national and provincial data through the Canadian Community Health Survey.
<b>Significance/Rationale</b>	Having access (or being attached) to a PHC provider has been associated with better overall health and lower health care utilization. Continuity of care in PHC has been associated with positive health outcomes, including increased rates of preventive care, decreased hospitalization and fewer emergency department visits (CIHI, 2016). Access (and attachment) to a primary care provider is also a top priority of the Nova Scotia Health and government.

### RESULTS

In 2018, 85.6% of Nova Scotians who responded to the Canadian Community Health Survey (CCHS) indicated that they had a regular healthcare provider, which was above the national rate of 84.9%. However, Central Zone had the lowest rate (82%), and was the only zone below the provincial rate (Eastern: 91%; Northern: 91%, Western: 88%). The provincial response to the 2015 CCHS was similar, with 88.7% of Nova Scotians indicating they had a regular healthcare provider, which was also above the national rate of 83.2%. In 2018, there was more variability in rates across Atlantic Provinces (Prince Edward Island – 81.4%; Newfoundland and Labrador – 86.3%; New Brunswick – 90.3%) than compared to the 2015 CCHS (Prince Edward Island – 88.7%; Newfoundland and Labrador – 88.1%; New Brunswick – 90.8%).

**Figure 8: Percentage of the Population with a Regular Healthcare Provider, 2015-2018**



## INDICATOR 6: FAMILY MEDICINE LEARNERS

### DESCRIPTION

Indicator #6	
Family Medicine and Nurse Practitioner Learners	
<b>Type of Indicator</b>	Input
<b>Enabler or Function</b>	Workforce
<b>Indicator Description</b>	Number of Family Medicine learners and Nurse Practitioner (NP) Learners in Nova Scotia practices in the last academic year. Note that NP student placement data was added to the indicator for the 2019-20 release given availability of data.
<b>Numerator</b>	n/a – count only
<b>Denominator</b>	n/a – count only
<b>Method of Calculation</b>	<p><u>Family Medicine Learners:</u> Count of number of residents (Post Graduate Year 2) completing training in Nova Scotia family medicine practices.</p> <p><u>Nurse Practitioner Student Placements:</u> Count of number of discrete nurse practitioner placements (all program years) completed in NS Health practices with nurse practitioner preceptors employed by NS Health; a single student may have more than once discrete placement in an academic year based on progression in their program.</p>
<b>Data Source</b>	<p><u>Family Medicine Learners:</u> Dalhousie University, Department of Family Medicine</p> <p><u>Nurse Practitioner Student Placements:</u> Health Sciences Placement Network (HSPnet) database (HSPnet is the database used by NS Health's Student &amp; Learner Placements Service to secure and track placements for unpaid learner placements other than physician placements) maintained by Interprofessional Practice &amp; Learning, Nova Scotia Health</p>
<b>Year of Data</b>	<p><u>Family Medicine Learners:</u> 2016-17 academic year (July 1, 2016 – June 30, 2017 for residents); 2019-20 academic year (July 1, 2019 – June 30, 2020)</p> <p><u>Nurse Practitioner Student Placements:</u> Nurse practitioner placements: May 1, 2019 – April 30, 2020</p>
<b>Data Limitations &amp; Considerations</b>	The data for this indicator is approximate because there may be residents from outside the province, or some residents that complete training in family medicine at sites in NB or PEI. Overtime, it will be ideal to report on all learners in primary health care, including nurse practitioners and others. For nurse practitioner placements, the data for this indicator is an approximation because some NP learners are in primary care placements outside NS Health (e.g. private physician practices).
<b>Level of Reporting</b>	Provincial
<b>Comparable Data</b>	n/a
<b>Significance/Rationale</b>	With planned investments to increase the number of family medicine seats and training sites and the expansion of nurse Practitioner program seats and the introduction of the Nurse Practitioner Education Incentive, it is important to monitor this indicator over time.

## RESULTS

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In the 2019-20 academic year, approximately 36 medical residents from the Dalhousie University Family Medicine Program in Post Graduate Year 2 (PGY2) did both a core practice experience and a community experience in NS practices, an increase from 31 medical residents in the 2016-17 academic year. As well, 90 nurse practitioner students completed preceptorships in Primary Health Care in the 2019-20 academic year.

## INDICATOR 7: RESEARCH CAPACITY (PARTICIPATION AND PARTNERSHIP)

### DESCRIPTION

Indicator #7	
Research Capacity (Participation and Partnerships)	
<b>Type of Indicator</b>	Input
<b>Enabler or Function</b>	Research, surveillance, knowledge sharing, and evaluation
<b>Indicator Description</b>	Compilation indicator, including: <ul style="list-style-type: none"> <li>• Number of Nova Scotia Health PHC staff (including PHC and Dalhousie Family Medicine) that have a research profile</li> <li>• Number of research activities these staff have participated in (research partnership meetings, engagement, education, presentations)</li> <li>• Number of partnership documents with Nova Scotia Health-PHC Research</li> </ul>
<b>Numerator</b>	n/a
<b>Denominator</b>	n/a
<b>Method of Calculation</b>	Reporting based on manual tracking of activities
<b>Year of Data</b>	2016-17 & 2020-21
<b>Data Source</b>	Collaborative Research in Primary Health Care (CoR-PHC), Building Research for Integrated Primary Healthcare (BRIC-NS), Nova Scotia Health Research Foundation (NSHRF), Canadian Institutes of Health Research (CIHR), Nova Scotia Health Authority Research Fund (NSHARF).
<b>Data Limitations &amp; Considerations</b>	PHC staff are defined as administrators, clinicians, patient advisors, staff, researchers working in PHC services or programs or a collaborator working in a PHC program or service. We are unable to report the number of research activities and research study partnerships for FY2020-21 due to a lack of available data.
<b>Level of Reporting</b>	Provincial
<b>Comparable Data</b>	n/a
<b>Significance/ Rationale</b>	Embedded research, surveillance, knowledge sharing, and evaluation is a core function of the PHC portfolio within Nova Scotia Health. Monitoring, overtime, the level of involvement of staff in research, along with research activity, is critical to monitoring success.

### RESULTS

In 2020-21 over 100 PHC staff and physician leaders from Nova Scotia Health and Dalhousie Family Medicine (DFM) had research profiles, demonstrating growth of 67% since 2016-17, where approximately 60 PHC staff and physician leaders had research profiles. In 2016-17, these staff and physician leaders participated in an estimated 50 to 100 research activities such as research partnership meetings, education and engagement initiatives, and research presentations.

Also, in 2016-17 Nova Scotia Health PHC established four key partnership documents with Collaborative Research in Primary Health Care (CoR-PHC), Building Research for Integrated Primary Healthcare (BRIC-NS), Nova Scotia Health Research Innovation, and the Maritime SPOR (Strategy for Patient Oriented Research) SUPPORT Unit (MSSU) PHC Primary Project. Nova Scotia Health PHC also established approximately 15 research study partnerships in 2016-17. Due to a lack of available data, we are unable to report the number of research activities and research study partnerships for 2020-21.

## TYPE 2: FUNCTIONS AND ACTIVITIES



The following five indicators are classified as **functions and activities** and align with the following functions: community responsiveness and outreach, integrated chronic disease management (CDM) and primary care delivery across the lifespan.

These indicators are largely process-oriented and represent the program/service delivery areas that the primary health care system is responsible to deliver:

- Programs dedicated toward priority populations
- PHC providers' sensitivity toward cultural values
- PHC support for self-management of chronic conditions
- Scope of PHC services
- PHC provider time in direct patient care

### INDICATOR 8: PROGRAMS DEDICATED TOWARD PRIORITY POPULATIONS

#### DESCRIPTION

Indicator #8	
Programs Dedicated toward Populations Experiencing Vulnerabilities	
<b>Type of Indicator</b>	Activity
<b>Enabler or Function</b>	Community responsiveness and outreach: engagement, community development, priority populations
<b>Indicator Description</b>	Number and description of the number of programs for populations experiencing vulnerabilities. In a Public Health context, populations experiencing vulnerabilities “are those populations that are at risk and for whom public health interventions may be reasonably considered to have a substantial impact at the population level” (Public Health Ontario, 2015). In PHC, interventions for populations experiencing vulnerabilities are considered at the individual, community, and population level.
<b>Numerator</b>	n/a – count only
<b>Denominator</b>	n/a – count only
<b>Method of Calculation</b>	Survey - programs were identified by Nova Scotia Health Primary Health Care Directors and Health Services Managers in each zone.
<b>Year of Data</b>	2017-2020
<b>Data Source</b>	Primary Health Care, Nova Scotia Health (manual tracking)
<b>Data Limitations &amp; Considerations</b>	This listing includes only those programs and services delivered by PHC, Nova Scotia Health. It does not include all of the Nova Scotia Health services and initiatives offered to populations experiencing vulnerabilities or the work of the diversity and inclusion committees – this listing would be considered a subset only.
<b>Level of Reporting</b>	Provincial and by Zone
<b>Comparable Data</b>	Not available
<b>Significance/ Rationale</b>	Primary Health Care is an approach to health that acknowledges the determinants of health and is tailored to meet the needs of communities. Focused programs, services, and

partnership work with populations experiencing vulnerabilities is an important part of the work PHC is responsible for, across all functions.
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## RESULTS

In 2020, there were 38 PHC programs and services dedicated to populations experiencing vulnerabilities provided by PHC, Nova Scotia Health, a large increase (>120%) from the 17 PHC programs and services offered in 2017. Targeted populations experiencing vulnerabilities include the 2SLGBTIQ+ community, students and youth, women, men, newcomers, First Nation communities, and African Nova Scotians. Refer to Table 8 for a full listing, by zone.

**Table 8: PHC Programs and Services Dedicated to Populations Experiencing Vulnerabilities by Zone, 2020**

Central Zone
<p>There are nine programs and services in Central Zone:</p> <ul style="list-style-type: none"> <li>• PrideHealth</li> <li>• NS Brotherhood Initiative</li> <li>• Newcomers Health Clinic</li> <li>• Community Health &amp; Wellness Centre serving North Preston, East Preston, Cherry Brook, and Lake Loon</li> <li>• Cobequid Youth Health Centre</li> <li>• Community Health Teams (4 locations in the Halifax Regional Municipality)</li> <li>• North End Community Health Centre</li> <li>• Mobile Outreach Street Health</li> <li>• Primary Care Clinics for unattached patients in the following communities: <ul style="list-style-type: none"> <li>○ Halifax</li> </ul> </li> </ul>
Eastern Zone
<p>There are thirteen programs and services in Eastern Zone:</p> <ul style="list-style-type: none"> <li>• Lindsay's Health Centre for Women</li> <li>• Strait Area Women's Place, Port Hawkesbury</li> <li>• Collaborative family practice team at the Ally Centre</li> <li>• Partnerships with all First Nation Communities in the Zone to establish collaborative family practice teams: <ul style="list-style-type: none"> <li>○ Eskasoni Community Health Centre</li> <li>○ Paqtnkek Health Centre</li> <li>○ Potlotek Medical Centre</li> <li>○ Theresa Cremo Memorial Health Centre</li> <li>○ Wagmatcook Health Centre</li> <li>○ Membertou Wellness Home</li> </ul> </li> <li>• Primary Care Clinics for unattached patients in the following communities: <ul style="list-style-type: none"> <li>○ Glace Bay</li> <li>○ New Waterford</li> <li>○ North Sydney</li> <li>○ Sydney</li> </ul> </li> </ul>
Northern Zone
<p>There are six programs and services in Northern Zone:</p> <ul style="list-style-type: none"> <li>• LGBTQ Safer Space</li> <li>• Sipekne'katik (Indian Brook) PHC collaborative family practice team</li> <li>• Pictou Landing First Nations One Door Chronic Disease Clinic and collaborative family practice team</li> <li>• Primary Care Clinics for unattached patients in the following communities: <ul style="list-style-type: none"> <li>○ Cumberland County</li> <li>○ New Glasgow</li> <li>○ Truro</li> </ul> </li> </ul>

### Western Zone

There are nine programs and services in Western Zone:

- WZ NSH – First Nations Liaison Group
- Liaison for Students with Health Care Needs Partnership
- Group Medical Visits for patients without a primary care provider (Diabetes focus)
- Primary Care Clinics for unattached patients in the following communities:
  - Digby
  - Kentville
  - Lunenburg
  - Middleton
  - Shelburne
  - Yarmouth

### Province-Wide

There is one province-wide program/service:

- Provincial Diversity and Inclusion Committee



## INDICATOR 9: PHC PROVIDERS’ SENSITIVITY TO PATIENTS’ CULTURAL VALUES

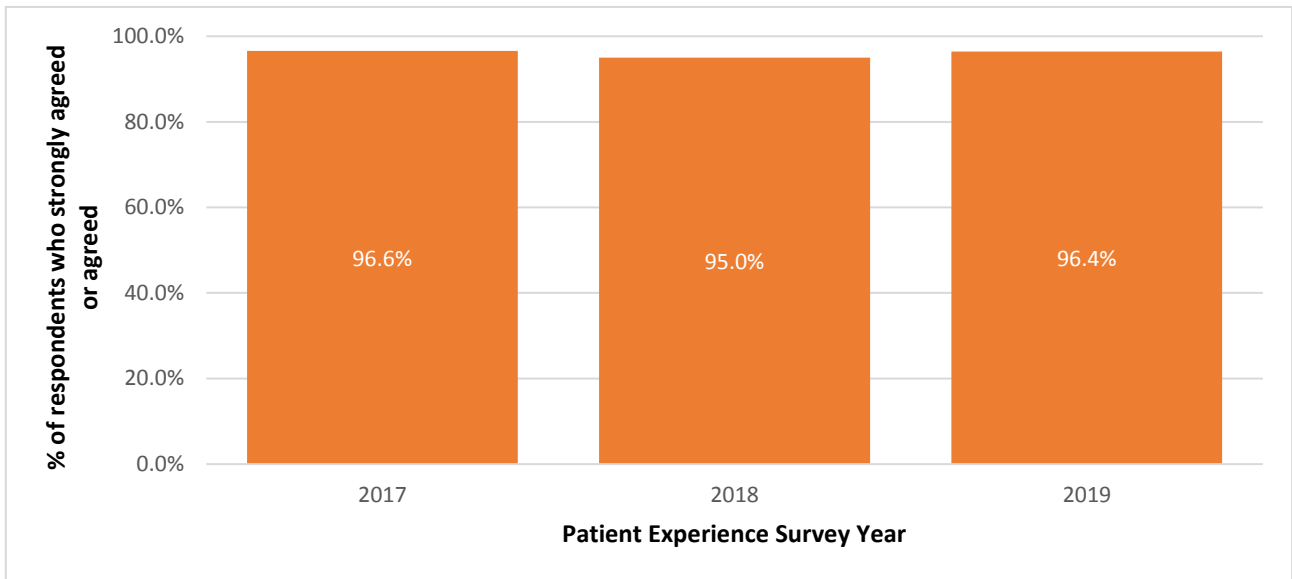
### DESCRIPTION

<b>Indicator #9</b>	
<b>PHC Providers’ Sensitivity to Patients’ Cultural Values</b>	
<b>Type of Indicator</b>	Activity
<b>Enabler or Function</b>	Community responsiveness and outreach: engagement, community development, priority populations
<b>Indicator Description</b>	Percentage of survey respondents to the PHC Patient Experience Survey from all Primary Health Care locations participating in Accreditation for Primary Care Services standards (including collaborative family practice teams, chronic disease management, and wellness teams) who agreed or strongly agreed with the statement “staff took my cultural values and those of my family or caregiver into account”
<b>Numerator</b>	Number of survey respondents to the PHC Patient Experience Survey from all Primary Health Care locations participating in Accreditation for Primary Care Services standards who agreed or strongly agreed with the statement “staff took my cultural values and those of my family or caregiver into account”
<b>Denominator</b>	Number of survey respondents from all Primary Health Care locations participating in Accreditation for Primary Care Services standards who answered this question (blank responses are excluded)
<b>Method of Calculation</b>	$(\text{Numerator}/\text{Denominator}) \times 100$
<b>Year of Data</b>	2017-2019
<b>Data Source</b>	Nova Scotia Health PHC Patient Experience Survey for Accreditation Canada
<b>Data Limitations &amp; Considerations</b>	Certain survey responses were grouped together in the analysis below, including the responses, “Don’t Know”, “Don’t Remember” and “Not Applicable”.
<b>Level of Reporting</b>	Provincial
<b>Comparable Data</b>	N/A
<b>Significance/ Rationale</b>	From <a href="#">Nova Scotia Health’s Diversity and Inclusion Framework</a> , 2017, page 8: “Client and family-centred care is an approach that guides all aspects of planning, delivering and evaluating services. The focus is always on creating and nurturing mutually beneficial partnerships among the organization’s staff and the clients and families they serve. Providing client and family-centred care means working collaboratively with clients and their families to provide care that is respectful, compassionate, culturally safe, and competent, while being responsive to their needs, values, cultural backgrounds and beliefs and preferences. (Accreditation Canada, adapted from the Institute for Patient- and Family-Centered Care (IPFCC) 2008 and Saskatchewan Ministry of Health 2011).”

### RESULTS

96.4% of respondents to the 2019 PHC Patient Experience Survey agreed or strongly agreed that staff at their PHC collaborative family practices and chronic disease management/wellness teams took their cultural values and those of their family or caregiver into account. There has been little change in the three years of surveys (2017: 96.6%; 2018: 95.0%). See Figure 9 and Table 9 for further details.

**Figure 9: PHC Patient Experience Survey: Cultural Values, 2017-2019**



*Strongly Agree or Agree: “Staff took my cultural values and those of my family or caregiver into account”*

**Table 9: PHC Patient Experience Survey: Cultural Values, 2017-2019**

*Strongly Agree or Agree: “Staff took my cultural values and those of my family or caregiver into account”*

Response	2017	2018	2019
Agree + Strongly Agree	96.6%	95.0%	96.4%

## INDICATOR 10: PHC SUPPORT FOR SELF-MANAGEMENT OF CHRONIC CONDITIONS

### DESCRIPTION

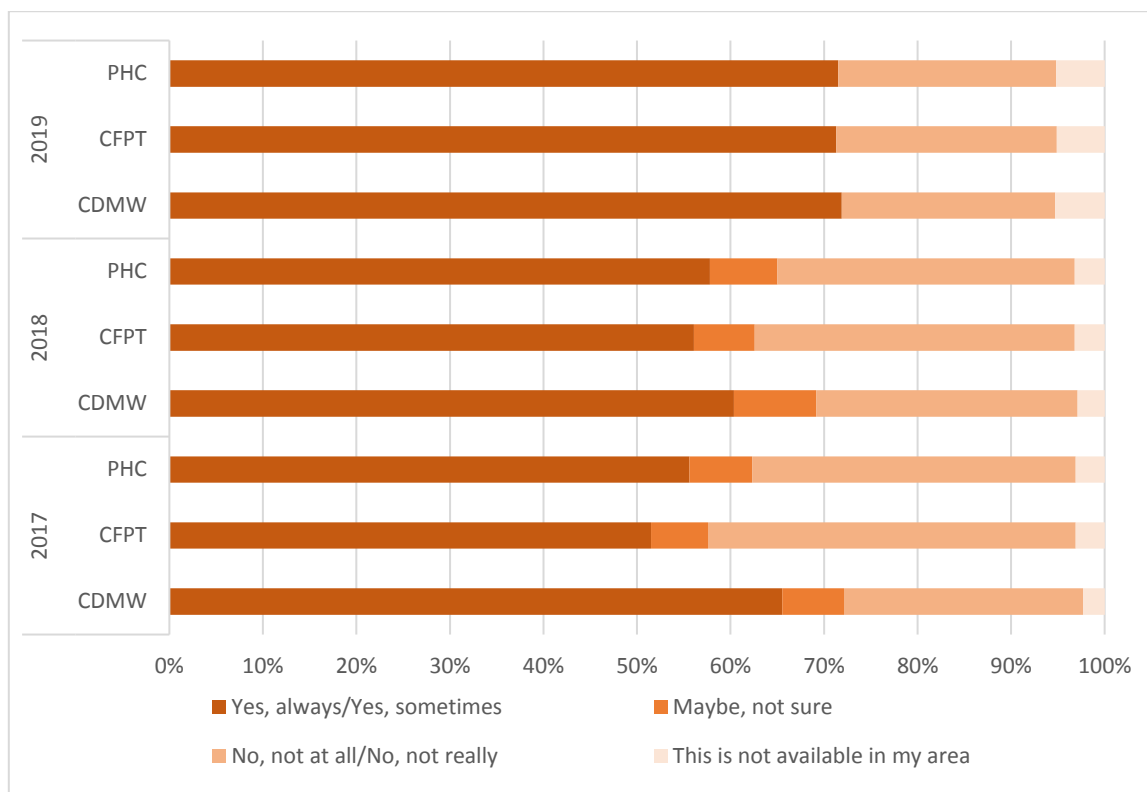
<b>Indicator #10</b>	
<b>PHC Support for Self-Management of Chronic Conditions</b>	
<b>Type of Indicator</b>	Activity
<b>Enabler or Function</b>	Integrated chronic disease management programs and services
<b>Indicator Description</b>	Percentage of survey respondents to the PHC Patient Experience Survey from all Primary Health Care locations participating in Accreditation for Primary Care Services standards (including collaborative family practice teams, chronic disease management, and wellness teams) who responded “yes, sometimes” or “yes, always” to the question, “Were you encouraged to go to a specific group/program or class (such as a self-management class) to help you manage your health concerns”?
<b>Numerator</b>	Number of survey respondents to the PHC Patient Experience Survey from all Primary Health Care locations participating in Accreditation for Primary Care Services standards (including collaborative family practice teams, chronic disease management, and wellness teams) who responded “yes, sometimes” or “yes, always” to the question, “Were you encouraged to go to a specific group/program or class (such as a self-management class) to help you manage your health concerns”?
<b>Denominator</b>	Number of survey respondents from all sites (primary care collaborative family practice teams (CFPT) and chronic disease management/wellness (CDMW) sites) who answered this question (blank responses are excluded)
<b>Method of Calculation</b>	$(\text{Numerator}/\text{Denominator}) \times 100$
<b>Year of Data</b>	2017-2019;
<b>Data Source</b>	Nova Scotia Health Patient Experience Survey for Accreditation Canada
<b>Data Limitations &amp; Considerations</b>	Certain survey responses were grouped together in the analysis below, including the responses, “Don’t Know”, “Don’t Remember” and “Not Applicable”.
<b>Level of Reporting</b>	Provincial
<b>Comparable Data</b>	N/A
<b>Significance/ Rationale</b>	There is strong evidence that to support that chronic disease self-management programs: can improve quality of life, increase healthy behaviors, and improve health outcomes for a variety of chronic conditions. The Health Council of Canada (2012) recommended all health systems across Canada provide self-management supports in a more systematic way.

### RESULTS

Approximately 71.5% of respondents to the 2019 PHC Patient Experience Survey reported that yes, they were always or sometimes encouraged to go to a specific group, program or class to help them manage their health concerns, an increase from 55.6% and 57.8% in 2017 and 2018, respectively. See Figure 10 and Table 10 for results by collaborative family practice teams (CFPT), chronic disease management and wellness programs (CDMW) and for both settings combined (PHC).

**Figure 10: PHC Patient Experience Survey: Self-Management, 2017-2019**

“Were you encouraged to go to a specific group/program or class (such as a self-management class) to help manage your health concerns?” – broken down by team type



**Table 10: PHC Patient Experience Survey: Self-Management, 2017-2019**

“Were you encouraged to go to a specific group/program or class (such as a self-management class) to help manage your health concerns?” – broken down by team type

Response by Team and Year	This is not available in my area	No, not at all/No, not really	Maybe, not sure	Yes, always/Yes, sometimes
<b>PHC</b>				
2017	3.1%	34.6%	6.7%	55.6%
2018	3.2%	31.8%	7.2%	57.8%
2019	5.2%	23.3%		71.5%
<b>CFPT</b>				
2017	3.1%	39.3%	6.1%	51.5%
2018	3.2%	34.2%	6.5%	56.1%
2019	5.1%	23.6%		71.3%
<b>CDMW</b>				
2017	2.3%	25.6%	6.6%	65.6%
2018	2.9%	27.9%	8.8%	60.3%
2019	5.3%	22.8%		71.9%

## INDICATOR 11: SCOPE OF PRIMARY HEALTH CARE SERVICES

### DESCRIPTION

Indicator #11	
Scope of Primary Health Care Services	
<b>Type of Indicator</b>	Activity
<b>Enabler or Function</b>	Primary care delivery across the lifespan
<b>Indicator Description</b>	Percentage of primary health care providers (family physicians, nurse practitioners) that provide a range of primary health care services.
<b>Numerator</b>	<p><u>Numerator for the original report release:</u>            Number of PHC provider respondents to the MAAP-NS fax survey that report offering the following services:</p> <ul style="list-style-type: none"> <li>• Care for an emergent but minor problem</li> <li>• Non-urgent care</li> <li>• Rehabilitation services</li> <li>• Minor office procedures</li> <li>• Pre-natal care</li> <li>• Intrapartum care</li> <li>• Postpartum care</li> <li>• Behaviour change counselling about tobacco use, healthy eating, and/or physical activity</li> <li>• Other health promotion or prevention services</li> <li>• Mental health services</li> <li>• Psychosocial services</li> <li>• Liaison with home care services</li> <li>• Provision of home visits</li> <li>• Outreach services to vulnerable/special populations</li> <li>• Specialized programs</li> <li>• End of life home care</li> <li>• Primary care in long-term care facilities</li> <li>• Community outreach</li> <li>• Emergency Department work</li> <li>• Collaborative Emergency Centres work</li> <li>• In-patient hospital care</li> <li>• Other services</li> </ul> <p><u>Numerator for the 2019-20 release:</u>            Number of PHC physician respondents to the Commonwealth Fund Survey that report offering the following services:</p> <ul style="list-style-type: none"> <li>• Home visits</li> <li>• Video consultations</li> <li>• Coordinate with social services or other community providers</li> </ul> <p>Or reported their preparedness to manage care for patients with:</p> <ul style="list-style-type: none"> <li>• Chronic conditions</li> <li>• Mental illness</li> <li>• Substance-abuse-related issues</li> <li>• Palliative care needs</li> <li>• Dementia</li> <li>• Requesting medical assistance in dying</li> </ul>

<b>Denominator</b>	<u>Denominator for the original report release:</u> Number of PHC provider respondents to the MAAP-NS provider fax survey, 2015 <u>Denominator for the 2019-20 release:</u> Number of PHC physician respondents to the Commonwealth Fund Survey, 2019
<b>Method of Calculation</b>	<i>(Numerator/Denominator) x 100</i>
<b>Year of Data</b>	<u>Year of data for the original report release:</u> 2015 (MAAP-NS) <u>Year of data for the 2019-20 release:</u> 2019 (Commonwealth Fund Survey)
<b>Data Source</b>	<u>Data source for the original release:</u> Models and Access Atlas of Primary Care-Nova Scotia (MAAP-NS) study. The MAAP-NS study addresses knowledge gaps on how primary care practices are structured, what accessibility is like for patients, and the impact on patient care outcomes. <u>Data source for the 2019-20 release:</u> Commonwealth Fund: International Health Policy Survey of Primary Care Physicians in 11 Countries, 2019
<b>Data Limitations &amp; Considerations</b>	<u>Data limitations &amp; considerations for the original report release:</u> This data is based on responses to the faxed provider survey conducted as part of the MAAP-NS study. The response rate for this survey was calculated to be 60% and included both family physicians and NPs for a total response of 433 of 722. No other PHC providers included beyond FPs and NPs who responded to the study. This study was not repeated after the initial work completed in 2015. <u>Data limitations &amp; considerations for the 2019-20 release:</u> The Commonwealth Fund International Health Policy Survey of Primary Care Physicians was administered in 11 countries by telephone, online and mail between January-June 2019, and is a nationally representative random sample of 13,200 primary care physicians. The results were provided for Canada, as well as broken down by province/territory. Please compare the two sources of data with caution, as the surveys did not ask the exact same question, in the exact same way.
<b>Level of Reporting</b>	<u>Level of reporting for the original report release:</u> Provincial and by Zone <u>Level of reporting for the 2019-20 release:</u> Provincial
<b>Comparable Data</b>	At the time of the first report release, MAAP primary care studies were being conducted in four Canadian provinces: BC, NFLD, NS, and PEI and comparison data was available for many items. At the time of the 2019-20 report release, the MAAP-NS study was not repeated after 2015, so an alternative data source was selected. The Commonwealth Fund Survey was administered across 11 countries (Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the UK and the US), providing comparable data for all survey items.
<b>Significance/Rationale</b>	The scope of primary health care services provided by family physicians and nurse practitioners is an important part of assessing the comprehensiveness attribute of PHC.

## RESULTS

Table 11 provides the responses of physicians in Nova Scotia who answered the Commonwealth Fund International Health Policy Survey questions: Do you or any other health care professionals who work with you in your practice provide care in the following ways: home visits, video consultations or coordinate care with social services or other community providers? As of 2019, very few NS physicians or other health care professionals within their practice provided care through video consultations (10.4%); however a large proportion indicated that they or other health care professionals in their practice provide home visits (85.0%) either frequently or occasionally.

**Table 11: Type of Care Offered by PHC Physicians Provincially, 2019**

Type of Care	2019		
	Yes, frequently	Yes, occasionally	Never
Home visits	22.0%	63.0%	15.1%
Video consultations	0.8%	9.6%	89.6%
Coordinate with social services or other community providers	43.0%	49.5%	7.5%

Table 12 provides the responses of physicians in Nova Scotia who answered the Commonwealth Fund International Health Policy Survey questions: How prepared is your practice, with respect to having sufficient skills and experience, to manage care for patients with: chronic conditions, mental illness, substance-abuse-related issues, palliative care needs, dementia, and requesting medical assistance in dying? Based on the table below, most NS physicians and their practices are well or somewhat prepared to manage care for patients with: chronic conditions (100%), mental illness (96.7%), substance-abuse-related issues (85.9%), palliative care needs (90.8%), and dementia (91.8%).

**Table 12: Preparedness to Manage Care by PHC Physicians Provincially, 2019**

How prepared is your practice to manage care for patients with:	2019			
	Well prepared	Somewhat prepared	Not prepared	Do not have these patients
Chronic conditions	89.7%	10.3%	0.0%	
Mental illness	65.5%	31.2%	3.4%	
Substance-abuse-related issues	27.9%	58.0%	11.8%	2.3%
Palliative care needs	53.6%	37.2%	8.1%	1.2%
Dementia	51.9%	39.9%	6.5%	1.7%
Requesting medical assistance in dying	15.0%	34.1%	35.8%	15.2%

Figure 11 shows the five services most commonly offered by primary care providers across NS and in each Zone based on responses to the 2015 MAAP-NS PHC provider fax survey. The most commonly offered services are relatively consistent across Zones.

**Figure 11: Five Most Commonly Offered Primary Health Care Services in NS by FPs and NPs, 2015**

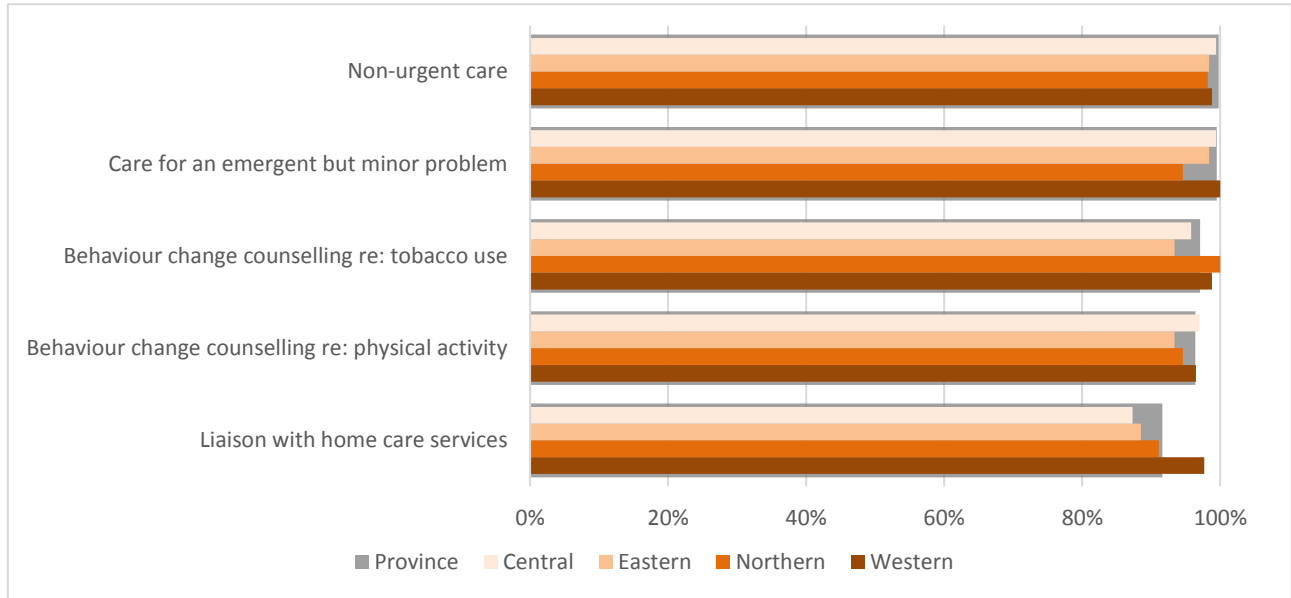


Figure 12 shows the services that are the least commonly offered across NS based on responses to the 2015 MAAP-NS PHC provider fax survey. There is more variability in the proportion of providers offering the service in each Zone for less commonly offered services.

**Figure 12: Five Least Commonly Offered Services in NS by FPs and NPs, 2015**

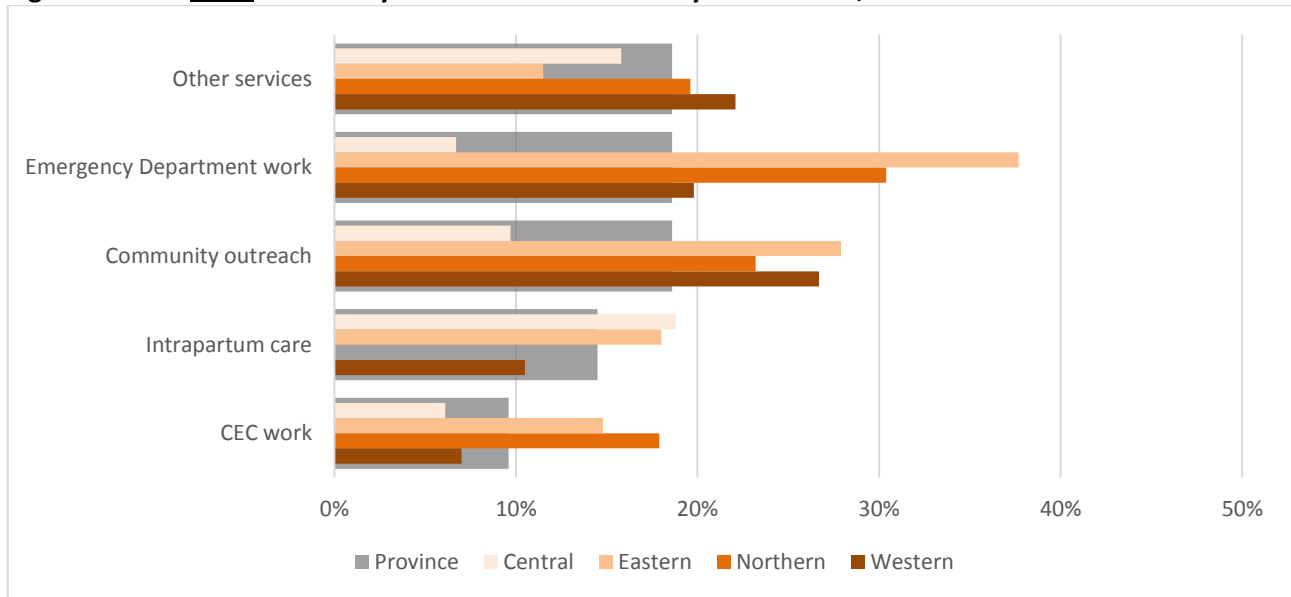




Table 13 provides a detailed list of the types of services offered and the proportion of primary care providers who offer them provincially as well as by zone based on responses to the 2015 MAAP-NS PHC provider fax survey.

**Table 13: Type of Care Offered by PHC Providers (NPs, FPs) Provincially and by Zone, 2015**

Type of Care	Province		Central		Eastern		Northern		Western	
	#	%	#	%	#	%	#	%	#	%
Care for an emergent but minor problem	413	99.5%	164	99.4%	60	98.4%	53	94.6%	86	100.0%
Non-urgent care	414	99.8%	164	99.4%	60	98.4%	55	98.2%	85	98.8%
Behaviour change counselling re: tobacco use	403	97.1%	158	95.8%	57	93.4%	56	100.0%	85	98.8%
Behaviour change counselling re: physical activity	400	96.4%	160	97.0%	57	93.4%	53	94.6%	83	96.5%
Liaison with home care services	380	91.6%	144	87.3%	54	88.5%	51	91.1%	84	97.7%
Other health promotion or prevention services	376	90.6%	150	90.9%	50	82.0%	50	89.3%	79	91.9%
Mental health services	357	86.0%	144	87.3%	51	83.6%	47	83.9%	73	84.9%
Minor office procedures	356	85.8%	135	81.8%	51	83.6%	53	94.6%	75	87.2%
Provision of home visits	353	85.1%	141	85.5%	52	85.2%	43	76.8%	78	90.7%
Behaviour change counselling re: healthy eating	351	84.6%	161	97.6%	56	91.8%	53	94.6%	81	94.2%
Psychosocial services	344	82.9%	139	84.2%	46	75.4%	46	82.1%	72	83.7%
Pre-natal care	307	74.0%	129	78.2%	41	67.2%	46	82.1%	58	67.4%
Postpartum care	302	72.8%	131	79.4%	45	73.8%	49	87.5%	77	89.5%
End of life home care	267	64.3%	98	59.4%	34	55.7%	34	60.7%	72	83.7%
In-patient hospital care	195	47.0%	38	23.0%	52	85.2%	37	66.1%	47	54.7%
Primary care in long-term care facilities	176	42.4%	40	24.2%	41	67.2%	29	51.8%	45	52.3%
Outreach services to vulnerable populations	131	31.6%	37	22.4%	26	42.6%	23	41.1%	30	34.9%
Rehabilitation services	116	28.0%	49	29.7%	20	32.8%	15	26.8%	19	22.1%
Care in long-term care facilities for own patients	110	26.5%	28	17.0%	19	31.1%	27	48.2%	24	27.9%
Specialized programs	107	25.8%	35	21.2%	19	31.1%	17	30.4%	26	30.2%
Community outreach	77	18.6%	16	9.7%	17	27.9%	13	23.2%	23	26.7%
Emergency Department work	77	18.6%	11	6.7%	23	37.7%	17	30.4%	17	19.8%
Other services	77	18.6%	26	15.8%	7	11.5%	11	19.6%	19	22.1%
Intrapartum care	60	14.5%	31	18.8%	11	18.0%	<5	N/A	9	10.5%
CEC work	40	9.6%	10	6.1%	9	14.8%	10	17.9%	6	7.0%
<b>Total Number of Respondents*</b>	<b>415</b>		<b>165</b>		<b>61</b>		<b>56</b>		<b>86</b>	

\* The total number of respondents varied somewhat for each specific type of care provided (i.e., some respondents did not answer yes or no to a specific type of care in the list above). The number of respondents for the question as a whole was therefore used as the denominator for consistency.

## INDICATOR 12: PHC PROVIDER TIME IN DIRECT PATIENT CARE

### DESCRIPTION

Indicator #12	
PHC Provider Time in Direct Patient Care	
<b>Type of Indicator</b>	Activity
<b>Enabler or Function</b>	Primary care delivery across the lifespan
<b>Indicator Description</b>	<p><u>Indicator description for the original report release:</u> Average weekly hours available for appointments, as described by respondents to the practice telephone survey conducted by MAAP-NS, 2015.</p> <p><u>Indicator description for the 2019-20 release:</u> Percentage of primary health care physicians that responded to the Commonwealth Fund Survey question “Thinking about your medical practice, estimate how many hours a week you typically work”, 2019.</p>
<b>Numerator</b>	<p><u>Numerator for the original report release:</u> n/a</p> <p><u>Numerator for the 2019-20 release</u> Number of PHC physician respondents to the Commonwealth Fund Survey who responded “&lt;35 hours”, “35 to 44 hours” or “≥45 hours” to the question: “Thinking about your medical practice, estimate how many hours a week you typically work”, 2019.</p>
<b>Denominator</b>	<p><u>Denominator for the original report release:</u> n/a</p> <p><u>Denominator for the 2019-20 release:</u> Number of PHC physician respondents to the Commonwealth Fund Survey, 2019.</p>
<b>Method of Calculation</b>	<p><u>Method of calculation for the original report release:</u> Collation of data obtained through telephone surveys to calculate the mean, median, and range of weekly hours available for appointments with patients.</p> <p><u>Method of calculation for the 2019-20 release:</u> <math>(\text{Numerator}/\text{Denominator}) \times 100</math></p>
<b>Year of Data</b>	<p><u>Year of data for the original report release:</u> 2015 (MAAP-NS)</p> <p><u>Year of data for the 2019-20 release:</u> 2019 (Commonwealth Fund Survey)</p>
<b>Data Source</b>	<p><u>Data source for the original report release:</u> Models and Access Atlas of Primary Care-Nova Scotia (MAAP-NS) study.</p> <p><u>Data source for the 2019-20 release:</u> Commonwealth Fund: International Health Policy Survey of Primary Care Physicians in 11 Countries, 2019</p>
<b>Data Limitations &amp; Considerations</b>	<p><u>Data limitations &amp; considerations for the original report release:</u> This data is based on responses to the telephone practice survey conducted as part of the MAAP-NS study. The response rate for this survey was calculated to be 85% and included 588 family physician (FPs) and 39 Nurse Practitioners (NPs) for a total response of 627 of 741. The telephone practice survey involved asking the receptionist/office manager about the primary care provider’s information, details regarding access, and organizational model. A total of 598 respondents answered this specific question on hours available for appointments.</p> <p><u>Data limitations &amp; considerations for the 2019-20 release:</u> The Commonwealth Fund International Health Policy Survey of Primary Care Physicians was administered in 11 countries by telephone, online and mail between January-June 2019, and is a nationally representative random sample of 13,200 primary care physicians. The results were provided for Canada, as well as broken down by province/territory.</p>

	Please compare the two sources of data with caution, as the surveys did not ask the exact same question, in the exact same way.
<b>Level of Reporting</b>	<u>Level of reporting for the original report release:</u> Provincial and by Zone <u>Level of reporting for the 2019-20 release:</u> Provincial
<b>Comparable Data</b>	At the time of the first report release, MAAP primary care studies were being conducted in four Canadian provinces: BC, NFLD, NS, and PEI and comparison data was available for many items. At the time of the 2019-20 report release, the MAAP-NS study was not repeated after 2015, so an alternative data source was selected. The Commonwealth Fund Survey was administered across 11 countries (Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the UK and the US), providing comparable data for all survey items.
<b>Significance/ Rationale</b>	This measure provides an indication of accessibility of providers to patients based on the time they spend doing direct clinical care in a primary care practice setting.

## RESULTS

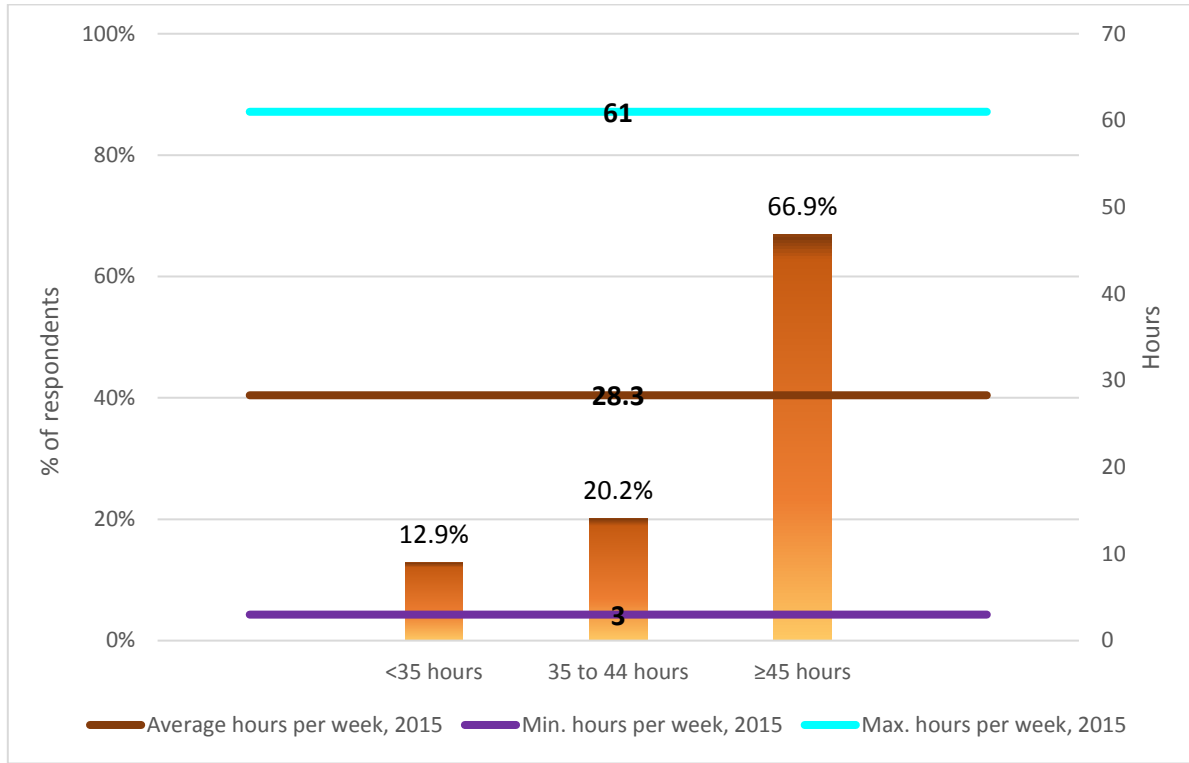
PHC physicians across NS who responded to the Commonwealth Fund Survey in 2019 indicated that the majority work  $\geq 45$  hours per week. This does not indicate the amount of time NS physicians spent in direct patient care, and comparison with the MAAP-NS 2015 survey should be interpreted with caution. See Table 14 for the breakdown of responses.

Figure 13 presents the results of the MAAP-NS 2015 survey and the Commonwealth Fund 2019 survey at the provincial level. The left axis (% of respondents) corresponds to the Commonwealth Fund data (bar graph), while the right axis (hours) corresponds to the MAAP-NS data (line graph).

**Table 14: PHC Physician Hours Worked Per Week, 2019**

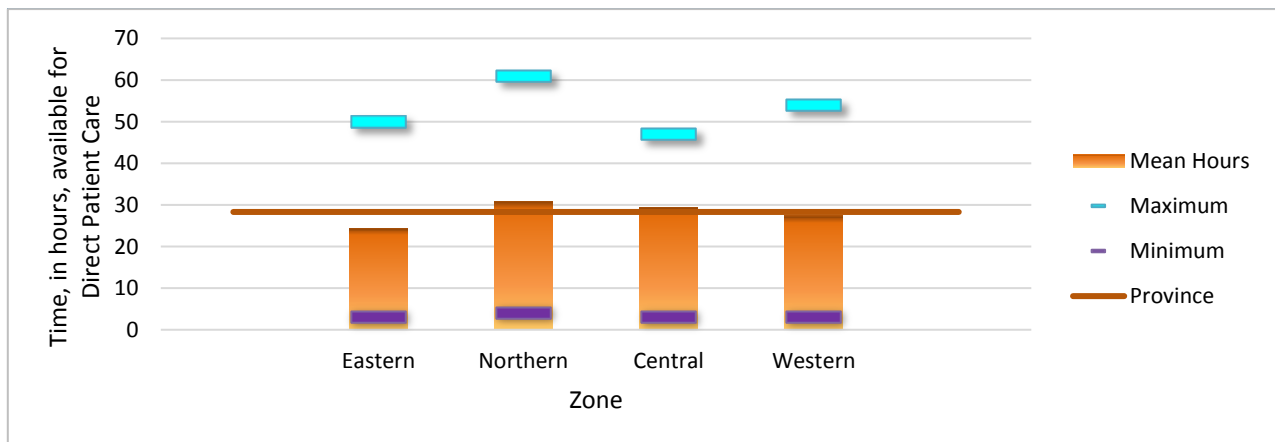
Thinking about your medical practice, estimate how many hours a week you typically work.	2019		
	<35 hours	35 to 44 hours	$\geq 45$ hours
	12.9%	20.2%	66.9%

**Figure 13: PHC Provider Hours Available Weekly for Patient Appointments and Hours Worked Per Week, 2015 & 2019**



PHC providers across NS (FPs, NPs) who responded to the 2015 MAAP-NS survey indicated that, on average, they had 28.3 hours per week available for patient appointments. However, the range of responses was wide, with the minimum being 3 hours and the maximum being 61 hours. See Figure 14 and Table 15 for the breakdown by Zone.

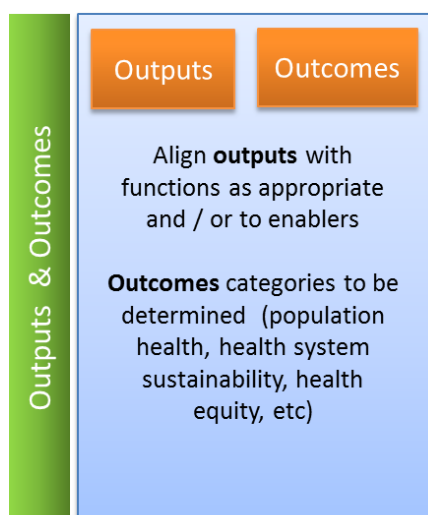
**Figure 14: PHC Provider Hours Available Weekly for Patient Appointments, 2015**



**Table 15: PHC Provider Hours Available Weekly for Patient Appointments, 2015**

<b>Zone</b>	<b>Mean Hours</b>	<b>Median Hours</b>	<b>Range</b>	<b>Number of Respondents</b>
Central	29.4	30	3.0-47.0	282
Eastern	24.4	24	3.0-50.0	102
Northern	30.9	30	4.0-61.0	85
Western	27.4	28	3.0-54.0	129
<b><i>Nova Scotia</i></b>	<b>28.3</b>	<b>28</b>	<b>3.0-61.0</b>	<b>598</b>

## TYPE 3: OUTPUTS AND OUTCOMES



The following sixteen indicators are classified as **outputs and outcomes** and align with the following functions and enablers: economic conditions; engagement platform; quality, safety, and risk; infrastructure; workforce; research, surveillance, knowledge sharing, and evaluation; primary care delivery; integrated CDM delivery; and wellness, prevention, risk factor management. Additionally, there are two ‘cross-cutting’ indicators that are system-level outputs/outcomes and map to multiple functions/enablers.

### INDICATOR 13: PER CAPITA PHC EXPENDITURES

#### DESCRIPTION

Indicator #13	
Per Capita PHC Expenditures	
<b>Type of Indicator</b>	Output – Structure
<b>Enabler or Function</b>	Economic conditions
<b>Indicator Description</b>	Per capita primary health care expenditures by Nova Scotia Health
<b>Numerator</b>	Total Nova Scotia Health PHC Budget
<b>Denominator</b>	Total Nova Scotia population
<b>Method of Calculation</b>	$(\text{Numerator}/\text{Denominator}) \times 100,000$
<b>Year of Data</b>	Fiscal Year 2015-16 & 2019-20
<b>Data Source</b>	Nova Scotia Health for PHC expenditures, based on Primary Health Care’s budget for Primary Health Care identified in SAP. Population data from Statistics Canada, based on the 2011 and 2016 Census data.
<b>Data Limitations &amp; Considerations</b>	This calculation includes only PHC expenditures made by Nova Scotia Health. It does not include expenditures on physician services billed through MSI or other expenses incurred by the Department of Health and Wellness or private organizations.
<b>Level of Reporting</b>	Provincial
<b>Comparable Data</b>	Not available
<b>Significance/ Rationale</b>	Doing things differently by reinvesting resources and change efforts in the primary health care and broader community-based system will not only improve the person-centred health care experience of citizens, but will also contribute to the sustainability of the overall health care system. Prioritizing primary health care and allocating resources to build a strong primary health care system has been shown to “bend the cost curve” over time through a study of 11 European Countries (Kringos et al., 2013). Kringos and colleagues identified that the investment in building strong primary care was associated, with a reduced rate of growth in

	health care spending; lower rates of potentially avoidable hospitalization; better population health outcomes; and lower socioeconomic inequality in self-rated health.
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## RESULTS

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Nova Scotia Health’s total budget for 2019-20 was \$2,200,455,000, a notable increase from the budget (\$1,817,546,047) at the time of Nova Scotia Health’s formation in 2015-16.

In 2019-20 Primary Health Care’s budget was \$63,161,777.16, an increase of 90% from PHC’s 2015-16 budget of \$33,293,521.

Using a total Nova Scotia population of 923,598 (Census, 2016) the 2019-20 PHC budget equates to \$68 per person, or \$6.8M per 100,000 people. The 2015-16 per capita PHC expenditures (using a NS population of 920,383; Census, 2011) equates to \$36 per person or \$3.6M per 100,000 people.

It is important to note that this is Nova Scotia Health’s per capita budget for the Primary Health Care portfolio only. It does not reflect all primary health care system costs, such as physician billings or other physician payment mechanisms, other contributions made to PHC by the Department of Health and Wellness that do not come to Nova Scotia Health, or other private programs/services. Physician expenditures account for a substantial amount of primary health care system expenditures.

## INDICATOR 14: PATIENT PARTICIPATION IN ACTIVITIES

### DESCRIPTION

Indicator #14	
Patient Participation in Activities	
<b>Type of Indicator</b>	Output – Process
<b>Enabler or Function</b>	Engagement platform
<b>Indicator Description</b>	# of Nova Scotia Health Primary Health Care activities (quality, planning) with patient participation/ representation through a patient and family advisor
<b>Numerator</b>	n/a
<b>Denominator</b>	n/a
<b>Method of Calculation</b>	Survey – patient participation in activities was identified by Nova Scotia Health Primary Health Care Directors and Health Services Managers in each zone.
<b>Year of Data</b>	2017-2020
<b>Data Source</b>	Primary Health Care, Nova Scotia Health (manual tracking)
<b>Data Limitations &amp; Considerations</b>	At the time of data collection for this report, there was no established formal tracking of this measure. Results based on best available information available for PHC planning and quality improvement activities. Does not include all patient participants in research studies at this time.
<b>Level of Reporting</b>	Provincial
<b>Comparable Data</b>	n/a
<b>Significance/ Rationale</b>	From Nova Scotia Health’s <i>Involving Patients and Citizens in Decision Making: A Guide to Effective Engagement</i> (2016): “Patient and public engagement (PPE) is a philosophy and methodology that contributes to better, more sustainable, person-focused decisions and outcomes” (pg. 2) and “Engaging people and stakeholders in health and health care is a pathway to shared accountability for health” (pg. 3).

### RESULTS

At the time of the first report (2017), involving patient and family advisors in planning and quality in PHC was in its early stages. All zones were beginning the process to recruit patient and family advisors as part of quality teams and there was a history of patient involvement and engagement in several areas. Due to the lack of formal tracking, information is provided as examples, versus being quantified. As of 2020, there are 40 patient and family advisors (PFA) involved in PHC activities.

Table 16 provides examples of patient engagement activities and PFA involvement in decision making since the first release of this report.



**Table 16: Examples of Patient Engagement / Involvement in Decision Making 2018-2020**

Highlighted Examples up to March 31, 2020 <i>(not a comprehensive inventory)</i>	
<b>Building a culture of quality together with patients and families</b>	Patient representatives on Quality and Safety Committees/Teams in all zones
	Representatives on the provincial PHC Quality and Safety Council and the Safety and Risk Subcommittee
	Patient presenters joined PHC leaders at the Nova Scotia Health Quality Awards, Zone Quality Days, and the International Conference on Patient and Family Centered Care
	Participation at the Provincial PHC Quality Symposium, which included primary health care clinical staff, physicians, leaders, researchers, and policy makers from across the province, along with national and international experts in quality and safety
	Ongoing recruitment of patient and family advisors in all zones, including ongoing recruitment to the Patient and Family Advisor Network in Western Zone, which is a concept being spread to other zones
	Patient and family advisors have become involved in the planning and review of programs and services, such as the inclusion of patient and family advisors in quarterly Diabetes Centre meetings and a focus group on the Need a Family Practice Registry in Eastern Zone
<b>Leading quality improvement together with patients and families</b>	Patients have participated in Quality Initiatives all across the province, for example: <ul style="list-style-type: none"> <li>• Improving front desk reception in Western Zone</li> <li>• Interactive waiting room in Antigonish Diabetes Centre</li> <li>• Welcome poster for the Anita Foley Guysborough Clinic</li> </ul>
	Patient and family representatives participated in various working groups, such as the Opioid Use Disorder Practice Support Program working group, Medication Self-Management working group
	Establishment of the PHC Patient and Family Advisor Exit Interview process, a QI initiative led by a patient advisor and shared broadly within the organization
	Patient advisors reviewed the Your Way to Wellness Volunteer Handbook and participated in the planning for the delivery of the new online virtual program

The level of involvement by patients varied in each initiative, in some cases patients were engaged by *informing* planning and decision making through survey or focus groups; in other cases, patients and families were directly involved in *co-designing* initiatives. A priority of PHC is to increase the number of patient and family advisors participating in quality, planning, and decision making activities, along with completing more public engagement and community conversations.

## INDICATOR 15: PHC PHYSICIAN USE OF ELECTRONIC MEDICAL RECORD (EMR)

### DESCRIPTION

<b>Indicator #15</b>	
<b>Family Physician use of Electronic Medical Record (EMR)</b>	
<b>Type of Indicator</b>	Output
<b>Enabler or Function</b>	Infrastructure
<b>Indicator Description</b>	Percentage of family physicians who use an electronic medical record (EMR)
<b>Numerator</b>	<p><u>Numerator for the original report release:</u> Number of family physicians who currently use an EMR to complete their professional tasks, DHW, 2017.</p> <p><u>Numerator for the 2019-20 release:</u> 1) Number of family physicians who answered “Yes” to “Do you use electronic patient medical records in your practice (no including billing systems?” from the Commonwealth Fund Survey, 2019. 2) Number of family physicians who currently use an EMR, DHW, 2020 3) Number of nurse practitioners who currently use an EMR, PHC, 2020</p>
<b>Denominator</b>	<p><u>Denominator for the original report release:</u> Number of family physicians who are targeted to use an EMR. The target number excludes family physicians that have indicated that they are not interested in EMR, that do not have an office-based practice (e.g., work in hospital only), are retiring, and/or have no address..</p> <p><u>Denominator for the 2019-20 release:</u> 1) Number of PHC physician respondents to the Commonwealth Fund Survey, 2019 2) Number of PHC physicians in Nova Scotia, 2020 3) Number of nurse practitioners in Nova Scotia, 2020</p>
<b>Method of Calculation</b>	$(\text{Numerator}/\text{Denominator}) \times 100$
<b>Year of Data</b>	<p><u>Year of data for the original report release:</u> 2017 (DHW)</p> <p><u>Year of data for the 2019-20 release:</u> 1) 2019 (Commonwealth Fund Survey) 2) 2020 (DHW and PHC)</p>
<b>Data Source</b>	<p><u>Data source for the original report release:</u> Primary Healthcare Information Management (PHIM) Program at the Department of Health and Wellness (DHW), 2017</p> <p><u>Data source for the 2019-20 release:</u> 1) Commonwealth Fund: International Health Policy Survey of Primary Care Physicians in 11 Countries, 2019 2) Department of Health and Wellness (DHW), 2020 3) Nurse Practitioner EMR adoption rate provided by manual tracking maintained by Primary Health Care, Nova Scotia Health</p>
<b>Data Limitations &amp; Considerations</b>	<p><u>Data limitations &amp; considerations for the original report release:</u> See above – the target number excludes family physicians that have indicated that they are not interested in EMR, that do not have an office-based practice (e.g., work in hospital only), are retiring, and/or have no address. Excludes NP data at this time.</p> <p><u>Data limitations &amp; considerations for the 2019-20 release:</u> There were a number of changes to EMR usage since 2017, and therefore changes in the way this indicator was calculated. Nightingale and Practimax were bought by Telus: all users migrated from Nightingale by December 31, 2019 and all users migrated from Practimax by</p>

	<p>December 31, 2020. DHW no longer plays a role in implementation and tracking EMR utilization for all providers and Nova Scotia Health limits tracking activities to only those under their license agreements. DHW also does not receive updated reports from Telus and QHR, so they use a copy of Nova Scotia Health’s report on which providers are actively set up to receive e-results and compare to the number of physicians that CPSNS has posted on their website. Therefore, this is an estimate of the PHC physicians using an EMR and may not be 100% accurate.</p> <p>The Commonwealth Fund International Health Policy Survey of Primary Care Physicians was administered in 11 countries by telephone, online and mail between January-June 2019, and is a nationally representative random sample of 13,200 primary care physicians. The results were provided for Canada, as well as broken down by province/territory.</p> <p>Please compare the sources of data with caution.</p>
<b>Level of Reporting</b>	<p><u>Level of reporting for the original report release:</u> Provincial and by Zone</p> <p><u>Level of reporting for the 2019-20 release:</u> Provincial</p>
<b>Comparable Data</b>	<p>Rates of EMR adoption across Canadian provinces is reported through the National Physician Survey, and The Commonwealth Fund, along with individual province’s EMR support organizations (as published in Change and Gupta, 2015)</p> <p>The Commonwealth Fund Survey was administered across 11 countries (Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the UK and the US), providing comparable data for all survey items.</p>
<b>Significance/ Rationale</b>	<p>The uptake of technology such as EMRs can lead to benefits in patient care and system efficiencies (Canadian Institute for Health Information, 2016) and is recognized as best practice to support informational continuity in primary health care, as well as to support quality improvement and research. EMR use by type of EMR vendor was expected to change substantially after the release of the first report, with the decommissioning of Nightingale in NS.</p>

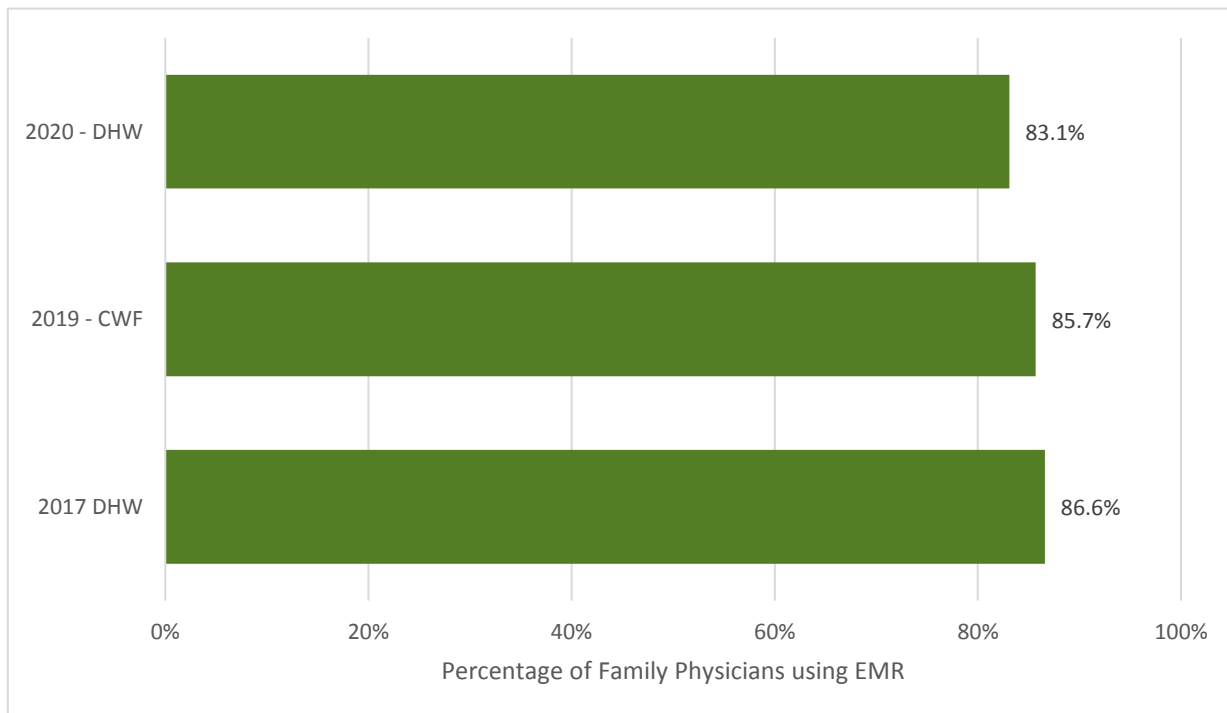
## RESULTS

Of the 1083 family physicians in NS, 83.1% were currently using an EMR in 2020; a slight decrease from the 86.6% using an EMR in 2017, and the 85.7% of NS physicians who responded to the 2019 Commonwealth Fund survey indicating they used an EMR in their practice (See Table 17 and Figure 15). Nova Scotia Health is also able to report that 100% of Primary Health Care nurse practitioners employed by Nova Scotia Health use an EMR.

**Table 17: EMR Usage Rates across Nova Scotia and by Zone for Family Physicians, 2017**

Zone	Number of Family Physicians Targeted	Total EMR Users	
		Frequency	Percentage
<b>2020</b>			
<i>Nova Scotia</i>	<b>1083</b>	<b>900</b>	<b>83.1%</b>
<b>2019</b>			
<i>Nova Scotia</i>			<b>85.7%</b>
<b>2017</b>			
Central	430	357	83.0%
Eastern	147	132	89.8%
Northern	130	114	87.7%
Western	179	164	91.6%
<i>Nova Scotia</i>	<b>886</b>	<b>767</b>	<b>86.6%</b>

**Figure 15: Family Physician EMR Usage Rates, 2017-2020**



As of the end of 2020, both Nightingale and Practimax were decommissioned and physicians were migrated to new EMR products, Med Access and QHR Accuro. The most commonly used EMR in NS in 2020 was Med Access (66.9%), followed by QHR Accuro (31.1%); however, prior to the migration the most commonly used EMR was Nightingale on Demand (80%) (see Table 18).

**Table 18: Types of EMRs Used by Family Physicians across Nova Scotia and by Zone, 2017 & 2020**

Zone	Total EMR Users	Med Access		Nightingale		Practimax		QHR Accuro		Other EMR	
		#	%	#	%	#	%	#	%	#	%
<b>2020</b>											
<i>Nova Scotia</i>	<b>900</b>	<b>602</b>	<b>66.9%</b>	<b>0</b>	<b>0.0%</b>	<b>18</b>	<b>2.0%</b>	<b>280</b>	<b>31.1%</b>	<b>0</b>	<b>0.0%</b>
<b>2017</b>											
Central	357	0	0.0%	252	70.6%	74	20.7%	29	8.1%	2	0.6%
Eastern	132	0	0.0%	115	87.1%	14	10.6%	3	2.3%	0	0.0%
Northern	114	0	0.0%	103	90.4%	11	9.6%	0	0.0%	0	0.0%
Western	164	0	0.0%	143	87.2%	21	12.8%	0	0.0%	0	0.0%
<i>Nova Scotia</i>	<b>767</b>	<b>0</b>	<b>0.0%</b>	<b>613</b>	<b>79.9%</b>	<b>120</b>	<b>15.6%</b>	<b>32</b>	<b>4.2%</b>	<b>2</b>	<b>0.3%</b>

## INDICATOR 16: PERCENTAGE OF POPULATION SERVED BY A COLLABORATIVE FAMILY PRACTICE TEAM

*Important Methodology Note: Data for this indicator was not available for the first report.*

Following the completion of the stakeholder engagement exercise and in the process of preparation of the first report, it was identified that the data for Indicator #16, percentage of the population served by a collaborative family practice team, was actually not available in order to report on this indicator reliably and accurately at the time of the publishing of the first report.

### DESCRIPTION

Indicator #16	
Percentage of Population Served by a Collaborative Family Practice Team	
<b>Type of Indicator</b>	Output – Structure
<b>Enabler or Function</b>	Primary care delivery across the lifespan
<b>Indicator Description</b>	Percentage of the Nova Scotia population served by a collaborative family practice team
<b>Numerator</b>	Number of population served by a collaborative family practice team (CFPT). This was identified through roster data that came from the Department of Health and Wellness (DHW). Rostering involved creating an initial panel based on three years of fee-for-service billings data by identifying the usual physician providing care to a patient. Invitations to validate the panel were sent to 759 family physicians who had submitted an attestation that they provide comprehensive and continuous primary care to their patients (i.e., not solely walk-ins). This was part of the new incentive package announced in March 2018. Physicians reviewed each entry to indicate whether the patient was theirs or not (no options were prepopulated). If a patient was missing from the list, the physician could make an entry. <b>By June 30, 2019</b> , 627 physicians completed their panel validation. Only roster data for patients attached to physicians working in CFPTs was used in the analysis.
<b>Denominator</b>	Total population of Nova Scotia
<b>Method of Calculation</b>	$(\text{Numerator}/\text{Denominator}) \times 100$
<b>Year of Data</b>	2018-19
<b>Data Source</b>	Sampalli, T., Kephart, G., Martin-Misener, R., Packer, T., Tomblin Murphy, G., Marrie, T., Sim, M., Condran B., et al. (2019). Preliminary Assessment of Collaborative Care Models in Nova Scotia: Rapid Review. Report prepared for Nova Scotia Department of Health. October 2019.
<b>Data Limitations &amp; Considerations</b>	<p><i>Note: Data for this indicator was not available for the first release of this report.</i></p> <p>Only 627 of 759 family physicians completed the panel validation. With the exception of health care number (HCN) checks, no other data quality reviews were completed. The numerator only includes patients who were validated as ‘Yes’ by the physician. Some challenges were faced in the linkage of patients to collaborative family practice teams (CFPT):</p> <ul style="list-style-type: none"> <li>- 10 providers were associated with multiple CFPTs; providers and their rosters were attached to the team in which they primarily worked</li> <li>- Some patients were rostered to more than one physician and team. After linkage, 305,887 patients had 1 provider, 4,932 patients had 2 team providers, and 47 patients had 3 team providers. Patients rostered to more than one team were randomly allocated to one of the teams.</li> </ul> <p>To produce estimates by NS Health management zone, zones were added using a crosswalk file to link forward sortation area (FSA) to zone based on each individual's most recent observation in the dataset.</p>

	Data on CFPTs and physicians in teams is accurate until June 2019.
<b>Level of Reporting</b>	Provincial, by Zone
<b>Comparable Data</b>	Not available
<b>Significance/ Rationale</b>	Since the formation of the Nova Scotia Health in 2015, through new investments from government, collaborative family practice teams over four years, Nova Scotia Health has been working to create more and strengthen existing collaborative family practice teams across the province – a key strategic direction to achieve the health authority’s vision of <i>Healthy people, healthy communities – for generations</i> . This indicator is critical to monitor to assess Nova Scotia Health’s progress toward strategic goals, advance primary health care as the foundation of the health system, and monitor the impact of as new investments are made by government.

## RESULTS

In 2018-19, 21.8% of Nova Scotians were served by a collaborative family practice team (see Table 19).

**Table 19: Percentage of the Population Served by a Collaborative Family Practice Team for Nova Scotia and by Zone, 2018-19<sup>3</sup>**

Zone	% in CFPT	% in Non-CFPT
Central	23.6%	76.4%
Eastern	36.6%	63.4%
Northern	29.3%	70.7%
Western	31.8%	68.2%
<b>Nova Scotia</b>	<b>28.1%</b>	<b>71.9%</b>

<sup>3</sup> The data used in this table were made available by Health Data Nova Scotia of Dalhousie University. Although this health service assessment analysis is based on data obtained from the Nova Scotia Department of Health and Wellness, the observations and opinions expressed are those of the authors and do not represent those of either Health Data Nova Scotia or the Department of Health and Wellness.

## INDICATOR 17: PRIMARY CARE PROVIDERS ACCEPTING NEW PATIENTS

### DESCRIPTION

Indicator #17	
Primary Care Providers Accepting New Patients	
<b>Type of Indicator</b>	Output – Process
<b>Enabler or Function</b>	Primary care delivery across the lifespan
<b>Indicator Description</b>	<p><u>Indicator description for the original report release:</u> Percentage of PHC providers accepting new patients (unconditionally or with exceptions) as reported through the MAAP-NS study, 2015.</p> <p><u>Indicator description for the 2019-20 release:</u> 1) Percentage of PHC physicians accepting new patients (unconditionally or with exceptions) reported through CWF survey, 2019. 2) Number of unique providers accepting new patients, 2016-2020.</p>
<b>Numerator</b>	<p><u>Numerator for the original report release:</u> Number of PHC providers who responded to the MAAP-NS study that they were accepting new patients (unconditionally or with exceptions)</p> <p><u>Numerator for the 2019-20 release:</u> Number of PHC providers who responded to the CWF survey that they were accepting new patients (unconditionally or with exceptions)</p>
<b>Denominator</b>	<p><u>Denominator for the original report release:</u> Total Number of PHC provider respondents to the telephone and fax surveys through the MAAP-NS study, 2015.</p> <p><u>Denominator for the 2019-20 release:</u> Total Number of NS PHC physicians who responded to the CWF survey, 2019.</p>
<b>Method of Calculation</b>	$(\text{Numerator}/\text{Denominator}) \times 100$
<b>Year of Data</b>	<p><u>Year of data for the original report release:</u> 2015 (MAAP-NS)</p> <p><u>Year of data for the 2019-20 report release:</u> 1) 2019 (Commonwealth Fund Survey) 2) 2016-2020 (Need a Family Practice Registry)</p>
<b>Data Source</b>	<p><u>Data source for the original report release:</u> Models and Access Atlas of Primary Care-Nova Scotia (MAAP-NS) study.</p> <p><u>Data source for the 2019-20 release:</u> 1) Commonwealth Fund: International Health Policy Survey of Primary Care Physicians in 11 Countries, 2019 2) Need a Family Practice Registry, Nova Scotia Health, Primary Health Care</p>
<b>Data Limitations &amp; Considerations</b>	<p><u>Data limitations &amp; considerations for the original report release:</u> This data is based on responses to the both the telephone practice survey and the fax provider survey conducted as part of the MAAP-NS study.</p> <p><u>Data limitations &amp; considerations for the 2019-20 release:</u> The Commonwealth Fund International Health Policy Survey of Primary Care Physicians was administered in 11 countries by telephone, online and mail between January-June 2019, and is a nationally representative random sample of 13,200 primary care physicians. The results were provided for Canada, as well as broken down by province/territory. Please compare the two sources of data with caution, as the surveys did not ask the exact same question, in the exact same way.</p>
<b>Level of Reporting</b>	<p><u>Level of reporting for the original report release:</u> Provincial and by Zone</p>

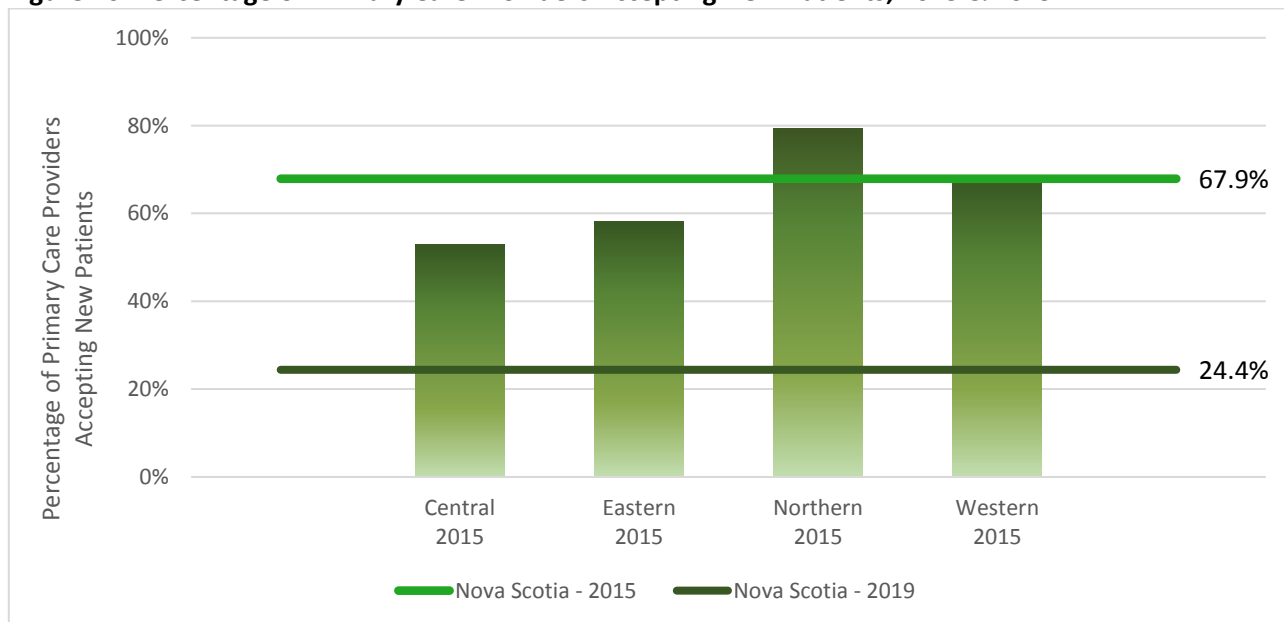


	<u>Level of reporting for the 2019-20 release:</u> Provincial
<b>Comparable Data</b>	The MAAP primary care studies were being conducted in four Canadian provinces: BC, Nfld, NS, and PEI. Comparison Data will be available for many items. At the time of the 2019-20 report, the MAAP-NS study was not repeated after 2015, so an alternative data source was selected. The Commonwealth Fund Survey was administered across 11 countries (Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the UK and the US), providing comparable data for all survey items.
<b>Significance/ Rationale</b>	Having access (or being attached) to a PHC provider has been associated with better overall health and lower health care utilization. Continuity of care in PHC has been associated with positive health outcomes, including increased rates of preventive care, decreased hospitalization and fewer emergency department visits (Canadian Institute for Health Information, 2016). Access (and attachment) to a primary care provider is also a top priority of the Nova Scotia Health and government.

## RESULTS

As illustrated in Figure 16 and Table 20, 24.4% of primary care physicians in NS who responded to the Commonwealth Fund Survey indicated they are accepting new patients, either unconditionally or with exceptions. This is a marked (64%) decrease from the 2015 MAAP-NS survey where 67.9% of primary care providers in NS indicated they are accepting new patients (unconditionally or with exceptions).

**Figure 16: Percentage of Primary Care Providers Accepting New Patients, 2015 & 2019**



**Table 20: Primary Care Providers Accepting New Patients, 2015 & 2019**

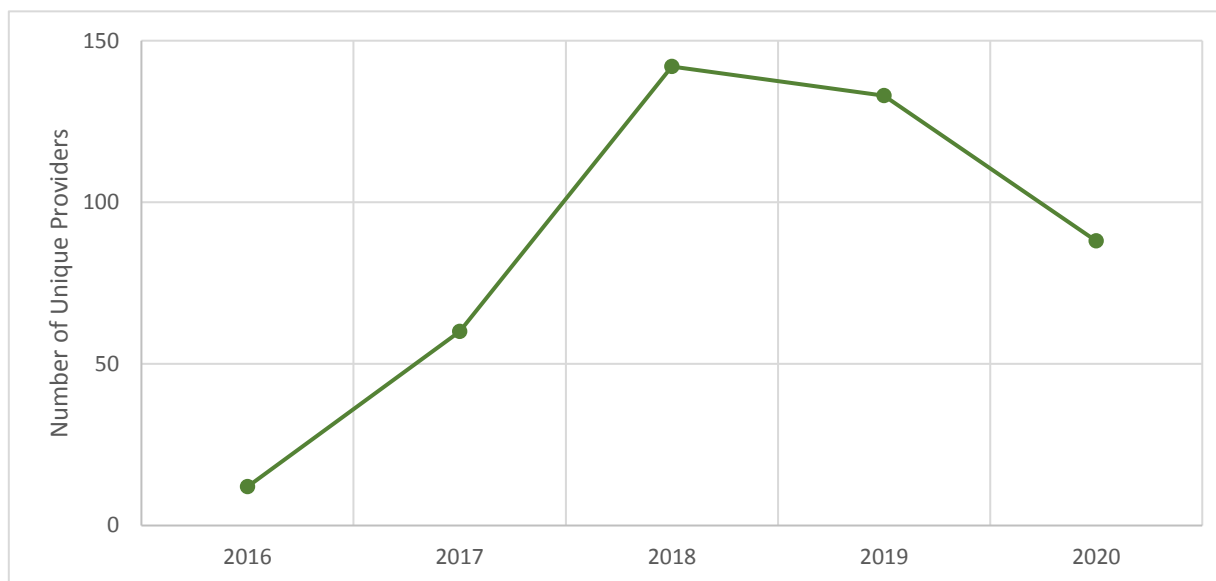
Zone	Number of Primary Care Provider Respondents	Respondents that are Accepting New Patients	
		Frequency	Percentage
<b>2019</b>			
<i>Nova Scotia</i>			<b>24.4%</b>
<i>Canada</i>			<b>38.6%</b>
<b>2015</b>			
Central	289	153	52.9%
Eastern	110	64	58.2%
Northern	92	73	79.3%
Western	135	92	68.1%
<b><i>Nova Scotia</i></b>	<b>626</b>	<b>425</b>	<b>67.9%</b>

In 2018, 142 NS providers accepted new patients, the highest number recorded in the last 5 years, followed closely by 133 providers in 2019 (See Table 21 and Figure 17).

**Table 21: Number of Unique Providers Accepting New Patients, Nova Scotia, 2016-2020**

	2016	2017	2018	2019	2020
<b><i>Number of Unique Providers</i></b>	<b>12</b>	<b>60</b>	<b>142</b>	<b>133</b>	<b>88</b>

**Figure 17: Number of Unique Providers Accepting New Patients, Nova Scotia, 2016-2020**



## INDICATOR 18: PROVISION OF AFTER HOURS PRIMARY CARE

### DESCRIPTION

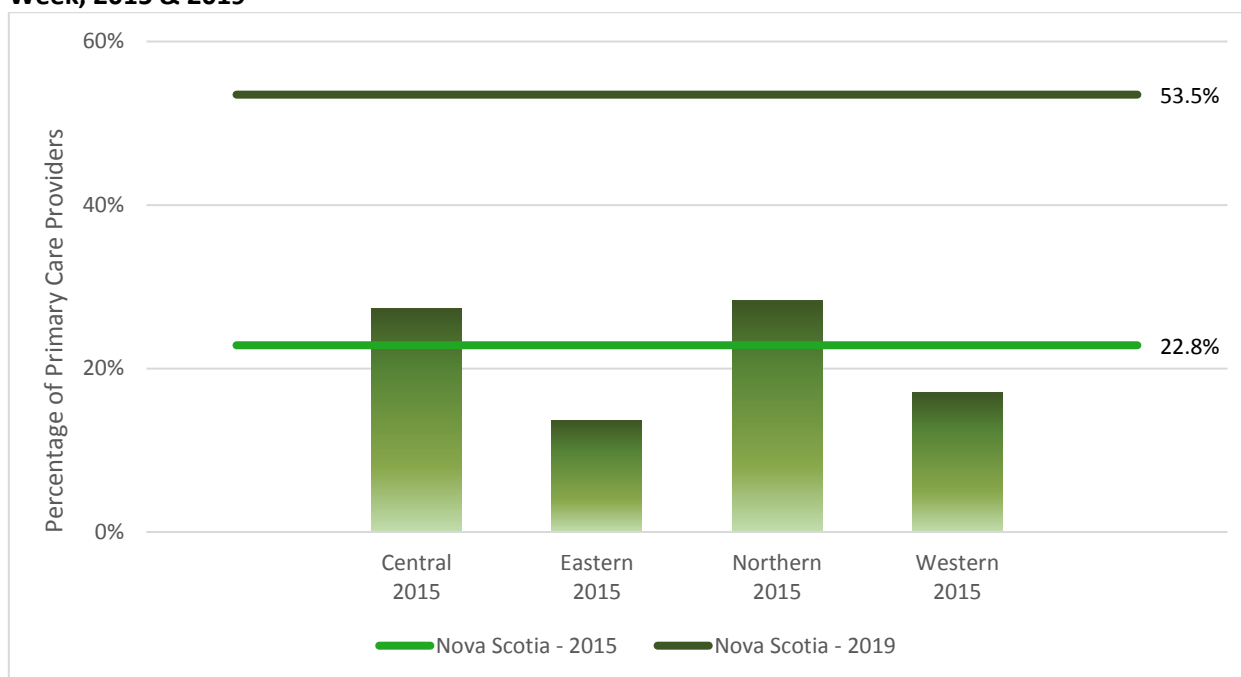
Indicator #18	
Provision of After Hours Primary Care	
<b>Type of Indicator</b>	Output – Process
<b>Enabler or Function</b>	Primary care delivery across the lifespan
<b>Indicator Description</b>	<p><u>Indicator description for the original report release:</u> Percentage of primary care providers who provide care at least one evening (after 5:00 PM) a week, MAAP-NS study 2015.</p> <p><u>Indicator description for the 2019-20 release:</u> Number of NS PHC physicians who indicated they offer patient appointments after 6pm 1 day per week, 2 or 3 days per week, 4 or more days per week or never, CWF 2019.</p>
<b>Numerator</b>	<p><u>Numerator for the original report release:</u> Number of primary care providers who provide care at least one evening (after 5:00 PM) a week, MAAP-NS 2015.</p> <p><u>Numerator for the 2019-20 release:</u> Number of NS PHC physicians who indicated they offer patient appointments after 6pm 1 day per week, 2 or 3 days per week, 4 or more days per week or never.</p>
<b>Denominator</b>	<p><u>Denominator for the original report release:</u> Total number of primary care provider respondents to the telephone practice survey through the MAAP-NS study, 2015.</p> <p><u>Denominator for the 2019-20 release:</u> Total Number of NS PHC physicians who responded to the CWF survey, 2019.</p>
<b>Method of Calculation</b>	$(\text{Numerator}/\text{Denominator}) \times 100$
<b>Year of Data</b>	<p><u>Year of data for the original report release:</u> 2015 (MAAP-NS)</p> <p><u>Year of data for the 2019-20 release:</u> 2019 (Commonwealth Fund Survey)</p>
<b>Data Source</b>	<p><u>Data source for the original report release:</u> Models and Access Atlas of Primary Care-Nova Scotia (MAAP-NS) study.</p> <p><u>Data source for the 2019-20 release:</u> Commonwealth Fund: International Health Policy Survey of Primary Care Physicians in 11 Countries, 2019.</p>
<b>Data Limitations &amp; Considerations</b>	<p><u>Data limitations &amp; considerations for the original report release:</u> This data is based on responses to the telephone practice survey conducted as part of the MAAP-NS study. The response rate for this survey was calculated to be 85% and included 588 family physicians (FPs) and 39 Nurse Practitioners (NPs) for a total response of 627 of 741. The telephone practice survey involved asking the receptionist/office manager about the primary care provider's information, details regarding access, and organizational model.</p> <p><u>Data limitations &amp; considerations for the 2019-20 release:</u> The Commonwealth Fund International Health Policy Survey of Primary Care Physicians was administered in 11 countries by telephone, online and mail between January-June 2019, and is a nationally representative random sample of 13,200 primary care physicians. The results were provided for Canada, as well as broken down by province/territory. Please compare the two sources of data with caution, as the surveys did not ask the exact same question, in the exact same way.</p>
<b>Level of Reporting</b>	<p><u>Level of reporting for the original report release:</u> Provincial and by Zone</p>

	<u>Level of reporting for the 2019-20 release:</u> Provincial
<b>Comparable Data</b>	At the time of this report, MAAP primary care studies were being conducted in four Canadian provinces: BC, Nfld, NS, and PEI. Comparison Data will be available for many items. At the time of the 2019-20 report, the MAAP-NS study was not repeated after 2015, so an alternative data source was selected. The Commonwealth Fund Survey was administered across 11 countries (Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the UK and the US), providing comparable data for all survey items.
<b>Significance/ Rationale</b>	The provision of afterhours care is an important component for ensuring accessibility in primary health care. Enhanced access is associated with reduced wait times, improved coordination, improved referrals, less duplication of services, reduced mortality, and reduced self-referred emergency department visits (McMurphy, 2009; Shi, 2012; Cowling et al., 2013). There is also evidence that access to primary care can lead to improvements in other inter-related attributes, such as continuity and comprehensiveness and access is linked to improvements in health equity for priority population groups in multiple reviews (Shi, 2012; Kringos et al, 2010; Starfield et al., 2005).

## RESULTS

As seen in Figure 18 and Table 22 below, in 2019, 53.5% of family physicians who responded to the CWF survey indicated they provide care after 6:00 PM at least one evening per week. This is further broken down in Table 23 by how many evenings a week they offer care. Comparatively, in the 2015 MAAP-NS survey, 22.8% of primary care providers indicated that they provide care after 5:00 PM at least one evening a week. In 2015, the rates varied by zone, from 13.6% to 28.3%.

**Figure 18: Percentage of Primary Care Providers that Provide Care after 5:00 PM at Least One Evening a Week, 2015 & 2019**



**Table 22: Primary Care Providers that Provide Care after 5:00 PM or 6:00 PM at Least One Evening a Week, 2015 & 2019**

Zone	Number of Primary Care Provider Respondents	Respondents that Provide Care after 5:00 PM	
		Frequency	Percentage
<b>2019</b>			
<i>Nova Scotia</i>			<b>53.5%</b>
<b>2015</b>			
Central	289	79	27.3%
Eastern	110	15	13.6%
Northern	92	26	28.3%
Western	135	23	17.0%
<i>Nova Scotia</i>	<b>626</b>	<b>143</b>	<b>22.8%</b>

**Table 23: Primary Care Physicians' Responses to the Commonwealth Fund Survey, 2019**

	1 day per week	2 or 3 days per week	4 or more days per week	Never
<i>How often does your practice offer appointments after 6pm during the week?</i>	<b>29.8%</b>	<b>9.6%</b>	<b>14.1%</b>	<b>46.5%</b>

## INDICATOR 19: WAIT TIMES FOR ROUTINE AND URGENT PRIMARY CARE

*Important Methodology Note: Data for this indicator was not available for the release of the 2019-20 report.*

The MAAP-NS study was not repeated and we were unable to identify a suitable data source replacement.

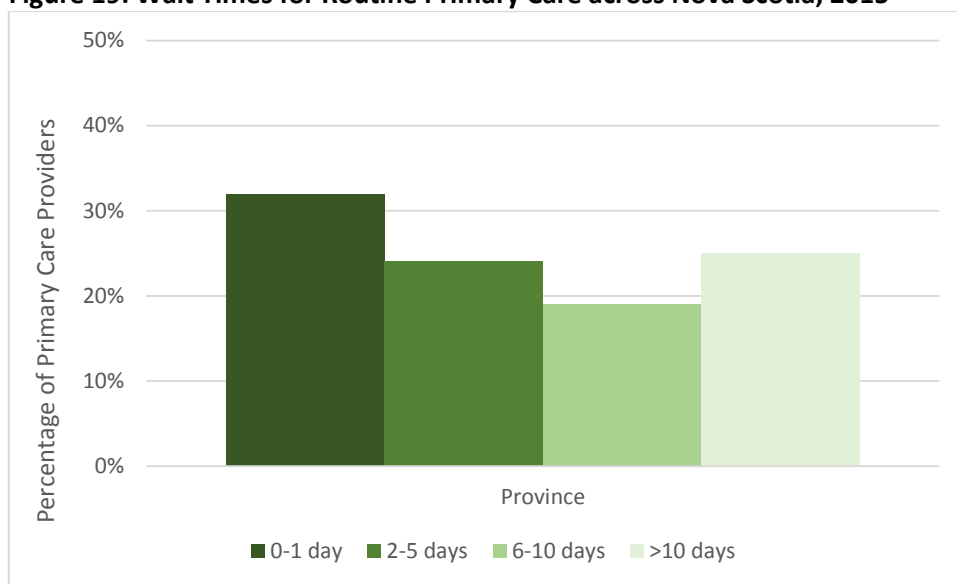
### DESCRIPTION

Indicator #19	
Wait Times for Routine and Urgent Primary Care	
<b>Type of Indicator</b>	Output – Process
<b>Enabler or Function</b>	Primary care delivery across the lifespan
<b>Indicator Description</b>	Percentage of primary care providers who report seeing patients for <u>routine</u> care with the following waits: 0-1 day, 2-5 days, 6-10 days, >10 days; and Percentage of primary care providers who report seeing patients for <u>urgent</u> care with the following waits: Same day, next day, 2-5 days, >5days
<b>Numerator</b>	Number of primary care providers who report seeing patients for routine care with the following waits: 0-1 day, 2-5 days, 6-10 days, >10 days; and Number of primary care providers who report seeing patients for urgent care with the following waits: Same day, next day, 2-5 days, >5days
<b>Denominator</b>	Total number of primary care provider respondents to the telephone practice survey through the MAAP-NS study
<b>Method of Calculation</b>	$(\text{Numerator}/\text{Denominator}) \times 100$
<b>Year of Data</b>	2015 <i>We were unable to report updated data for this indicator in the 2019-20 release due to lack of a comparable indicator data source.</i>
<b>Data Source</b>	Models and Access Atlas of Primary Care-Nova Scotia (MAAP-NS) study.
<b>Data Limitations &amp; Considerations</b>	This data is based on responses to the telephone practice survey conducted as part of the MAAP-NS study. The response rate for this survey was calculated to be 85% and included 588 family physicians (FPs) and 39 Nurse Practitioners (NPs) for a total response of 627 of 741. The telephone practice survey involved asking the receptionist/office manager about the primary care provider's information, details regarding access, and organizational model.
<b>Level of Reporting</b>	Provincial and by Zone
<b>Comparable Data</b>	At the time of this report, MAAP primary care studies were being conducted in four Canadian provinces: BC, NFDL, NS, and PEI. Comparison Data will be available for many items. At the time of this report, the MAAP-NS study was not repeated after 2015.
<b>Significance/ Rationale</b>	Enhanced access to primary health care is associated with reduced wait times, improved coordination, improved referrals, less duplication of services, reduced mortality, and reduced self-referred emergency department visits (McMurphy, 2009; Shi, 2012; Cowling et al., 2013). There is also evidence that access to primary care can lead to improvements in other inter-related attributes, such as continuity and comprehensiveness and access is linked to improvements in health equity for priority population groups in multiple reviews (Shi, 2012; Kringos et al, 2010; Starfield et al., 2005).

## RESULTS

Over half (56%) of primary care providers in NS who responded to the 2015 MAAP-NS survey indicated they are able to provide patients requiring routine care with an appointment within 5 days. See Figure 19 and Table 24 for more information.

**Figure 19: Wait Times for Routine Primary Care across Nova Scotia, 2015**

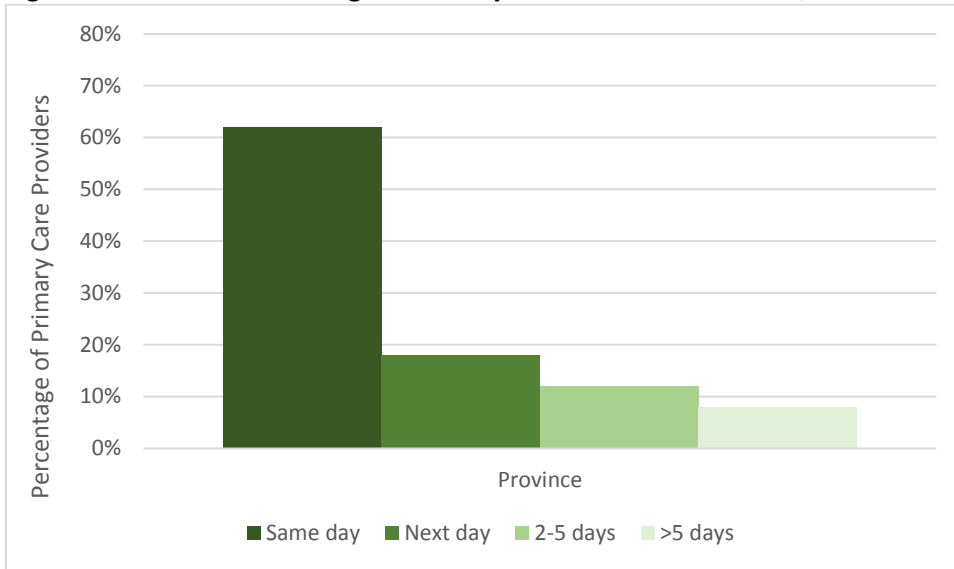


**Table 24: Wait Times for Routine Primary Care across Nova Scotia, 2015**

Wait Time	Province	
	#	%
0-1 day	171	32%
2-5 days	126	24%
6-10 days	98	19%
>10 days	132	25%
<b>Total</b>	<b>527</b>	<b>100%</b>

The majority of NS primary care provider respondents (80%) indicated they are able to see patients the same or next day for urgent care. See Figure 20 and Table 25.

**Figure 20: Wait Times for Urgent Primary Care across Nova Scotia, 2015**



**Table 25: Wait Times for Urgent Primary Care across Nova Scotia, 2015**

Wait Time	Province	
	#	%
Same day	311	62%
Next day	92	18%
2-5 days	60	12%
>5 days	38	8%
<b>Total</b>	<b>501</b>	<b>100%</b>

For wait time breakdowns by Health Management Zone please see the first of the Current State assessment available on the Nova Scotia Health website [here](#).



## INDICATOR 20: RESEARCH OUTPUTS

### DESCRIPTION

Indicator #20	
Research Outputs	
<b>Type of Indicator</b>	Output – Structure
<b>Enabler or Function</b>	Research, surveillance, knowledge sharing, and evaluation
<b>Indicator Description</b>	Number of grants, research publications and ethics submissions in the past year from Nova Scotia Health PHC staff, Dalhousie Family Medicine (DFM), and Collaborative Research in Primary Health Care (CoR-PHC)
<b>Method of Calculation</b>	N/A
<b>Year of Data</b>	2017 & 2020
<b>Data Source</b>	CoR-PHC, Building Research for Integrated Primary Healthcare (BRIC-NS), Nova Scotia Health Research Foundation (NSHRF), Canadian Institutes of Health Research (CIHR), Nova Scotia Health Authority Research Fund (NSHARF).
<b>Data Limitations &amp; Considerations</b>	PHC staff are defined as administrators, clinicians, patient advisors, staff, researchers working in PHC services or programs or a collaborator working in a PHC program or service
<b>Level of Reporting</b>	Provincial
<b>Comparable Data</b>	N/A
<b>Significance/ Rationale</b>	Embedded research, surveillance, knowledge sharing, and evaluation is a core function of the Primary Health Care portfolio within Nova Scotia Health. Monitoring, overtime, the level of involvement of staff in research, along with research activity, is critical to monitoring success.

### RESULTS

Nova Scotia Health PHC staff, DFM and CoR-PHC reported over \$1,000,000 in CIHR grants with funding ending in FY2020-21 and have completed 15 ethics submission and over 25 research publications in 2020. Comparatively, in 2017 Nova Scotia Health PHC staff, Dalhousie Family Medicine, and CoR-PHC received 12 grants worth approximately \$900,000, and produced 8 ethics submissions and 16 research publications.

## INDICATOR 21: INFLUENZA IMMUNIZATION FOR INDIVIDUALS 65 AND OLDER

### DESCRIPTION

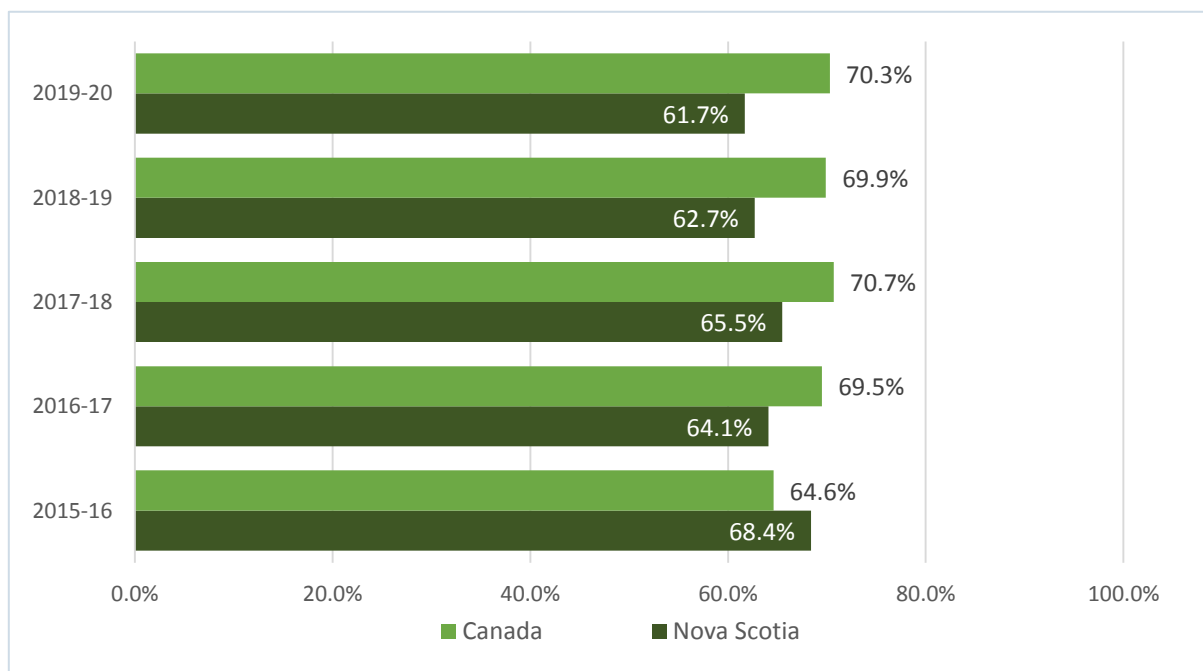
Indicator #21	
Influenza Immunization for Individuals 65 and Older	
<b>Type of Indicator</b>	Output – Process
<b>Enabler or Function</b>	Wellness promotion, chronic disease prevention, risk factor management
<b>Indicator Description</b>	Percentage of patient population, age 65 and older, who received an influenza immunization
<b>Numerator</b>	<p><u>Numerator for the original report release:</u> Number of individuals aged 65 and older, in the denominator population who received an influenza immunization within the past 12 months by their primary care provider, CPCSSN-MaRNetFP, 2016.</p> <p><u>Numerator for the 2019-20 release:</u> Number of individuals aged 65 and older who received an influenza immunization during the influenza season (October-March), DHW 2015-2019.</p>
<b>Denominator</b>	<p><u>Denominator for the original report release:</u> Number of primary care patients who have had an encounter visit in the past 24 months, and were age 65 and older at the time data collection. The denominator was calculated based on the definition of an “active patient” within CPCSSN-MaRNetFP, which requires an encounter visit in the past 24 months. The two year contact group is perceived to most accurately reflect the providers’ active patient roster, CPCSSN-MaRNetFP, 2016.</p> <p><u>Denominator for the 2019-20 release:</u> Number of individuals aged 65 and older identified as eligible to receive the influenza vaccination, DHW 2015-2019.</p>
<b>Method of Calculation</b>	$(\text{Numerator}/\text{Denominator}) \times 100$
<b>Year of Data</b>	<p><u>Year of data for the original report release:</u> 2016 (CPCSSN-MaRNetFP)</p> <p><u>Year of data for the 2019-20 release:</u> 2015-2019 (Department of Health and Wellness)</p>
<b>Data Source</b>	<p><u>Data source for the original report release:</u> Canadian Primary Care Sentinel Surveillance Network (CPCSSN) – Maritime Family Practice Research Network (49%), 2016.</p> <p><u>Data source for the 2019-20 release:</u> Department of Health and Wellness, Annual Influenza Immunization Report (2015-16 to 2019-20)</p> <p>Data sources: Provincial MSI physician-billing (individuals who received immunization by physicians), MSI Pharmacare database (individuals who received immunization by pharmacists), Panorama database (individuals who received immunization by public health), DHW data collection tools used by local public health services (immunization data from clinics, long term care, acute care and other community agencies), Statistics Canada.</p> <p>Canadian data: Public Health Agency of Canada annual Vaccine Uptake in Canadian Adults report.</p>
<b>Data Limitations &amp; Considerations</b>	<p><u>Data limitations &amp; considerations for the original report release:</u> This indicator reflects data from a sample of Nova Scotia primary care practices. CPCSSN data for Nova Scotia includes information from 80 sentinel providers approximately 125,000 patients (as of November 2016). Individual primary care practices for documenting pharmacy administered vaccination may vary. This adds a degree of uncertainty to the reliability of the numerator.</p>

	<u>Data limitations &amp; considerations for the 2019-20 release:</u> Use caution when comparing DHW to CPCSSN-MarNetFP data.
<b>Level of Reporting</b>	Provincial
<b>Comparable Data</b>	National data is available for this indicator through other CPCSSN nodes and other nationally reported mechanisms. National data is available for this indicator through the Public Health Agency of Canada – Vaccine uptake in Canadian adults annual reports: <a href="https://www.canada.ca/en/public-health/services/publications/healthy-living/2018-2019-influenza-flu-vaccine-coverage-survey-results.html">https://www.canada.ca/en/public-health/services/publications/healthy-living/2018-2019-influenza-flu-vaccine-coverage-survey-results.html</a>
<b>Significance/Rationale</b>	Influenza has the potential to cause significant morbidity and mortality among high-risk groups, such as seniors. The National Advisory Committee on Immunization recommends that at least 80% of eligible Canadian seniors receive the annual influenza vaccine (Canadian Institute for Health Information, 2016).

## RESULTS

As shown in Figure 21 below, in the 2019-20 influenza season, 61.7% of Nova Scotians aged 65 and older received an influenza immunization. The national rate of influenza immunization in those aged 65 and older was higher than the NS rate for all years except the 2015-16 influenza season.

**Figure 21: Percentage of individuals aged 65 and older who received an influenza immunization, NS and Canada, 2015-2019**



At the time of the first release of this report (2017), data from the 2016 Canadian Primary Care Sentinel Surveillance Network (CPCSSN) – Maritime Family Practice Research Network (MaRNet-FP) was used to report the percentage of Nova Scotians aged 65 years and older who received an influenza immunization. 49% of primary care patients at Nova Scotia practices participating in CPCSSN –MaRNet-FP, who had an encounter visit in the 24 months prior to reporting, and were age 65 and older at the time of data collection, received an influenza immunization in the twelve months prior to data collection. Nationally, the influenza vaccination rate among those over 65 years old was 64% in 2013-14 (Canadian Institute for Health Information, 2016). It is likely that CPCSSN – MarNet-FP does not fully represent the Nova Scotia

population being immunized as it did not take into account those immunized outside of primary care practices, i.e. by pharmacists, public health professionals, long-term care, etc.

## INDICATOR 22: FAMILY PHYSICIANS WORKING IN COLLABORATIVE FAMILY PRACTICE TEAMS

### DESCRIPTION

Indicator #22	
Family Physicians Working in Collaborative Family Practice Teams	
<b>Type of Indicator</b>	Output – Structure
<b>Enabler or Function</b>	Workforce
<b>Indicator Description</b>	Number of family physicians who work collaborative with other health professionals providing office-based care as part of a collaborative family practice team that meets the minimum working definition (see Indicator #3 for calculation methodology)
<b>Numerator</b>	n/a
<b>Denominator</b>	n/a
<b>Method of Calculation</b>	Count of the number of family physicians who work collaborative with other health professionals providing office-based care as part of a collaborative family practice team, less duplicates (to account for physicians working in multiple teams). Head count only; FTE not available.
<b>Year of Data</b>	2015-16; for collaborative family practice teams existing at the time of Nova Scotia Health's formation until March 31, 2020 for FY19-20
<b>Data Source</b>	Primary Health Care, Nova Scotia Health (manual tracking)
<b>Data Limitations &amp; Considerations</b>	Based on best available data and information; estimate based on point-in-time data as there are frequent changes to practicing physicians (e.g., recruitment, retirements, etc.). Data is based on the teams that existed in 2015-16, relative to the current physician complement for each team in 2019. Estimate only.
<b>Level of Reporting</b>	Provincial
<b>Comparable Data</b>	Not available
<b>Significance/ Rationale</b>	Since the formation of Nova Scotia Health in 2015, through new investments from government, Nova Scotia Health has been working to create more and strengthen existing collaborative family practice teams across the province – a key strategic direction to achieve the health authority's vision of <i>Healthy people, healthy communities – for generations</i> . This indicator is critical to monitor to assess Nova Scotia Health's progress toward strategic goals, advance primary health care as the foundation of the health system, and monitor the impact of as new investments are made by government.

### RESULTS

In the collaborative family practice teams that existed at the time of Nova Scotia Health's formation (n = 39), there were approximately 159 family physicians working as part of the 39 collaborative family practice teams. As of 2019-20 the number of collaborative family practice teams has increased to 86, with approximately 377 family physicians working in these teams, resulting in a 137% increase. Note this is an estimated head count of family physicians only; this does not represent full-time equivalents.

## INDICATOR 23: USE OF EMERGENCY DEPARTMENT FOR MINOR COMPLAINTS

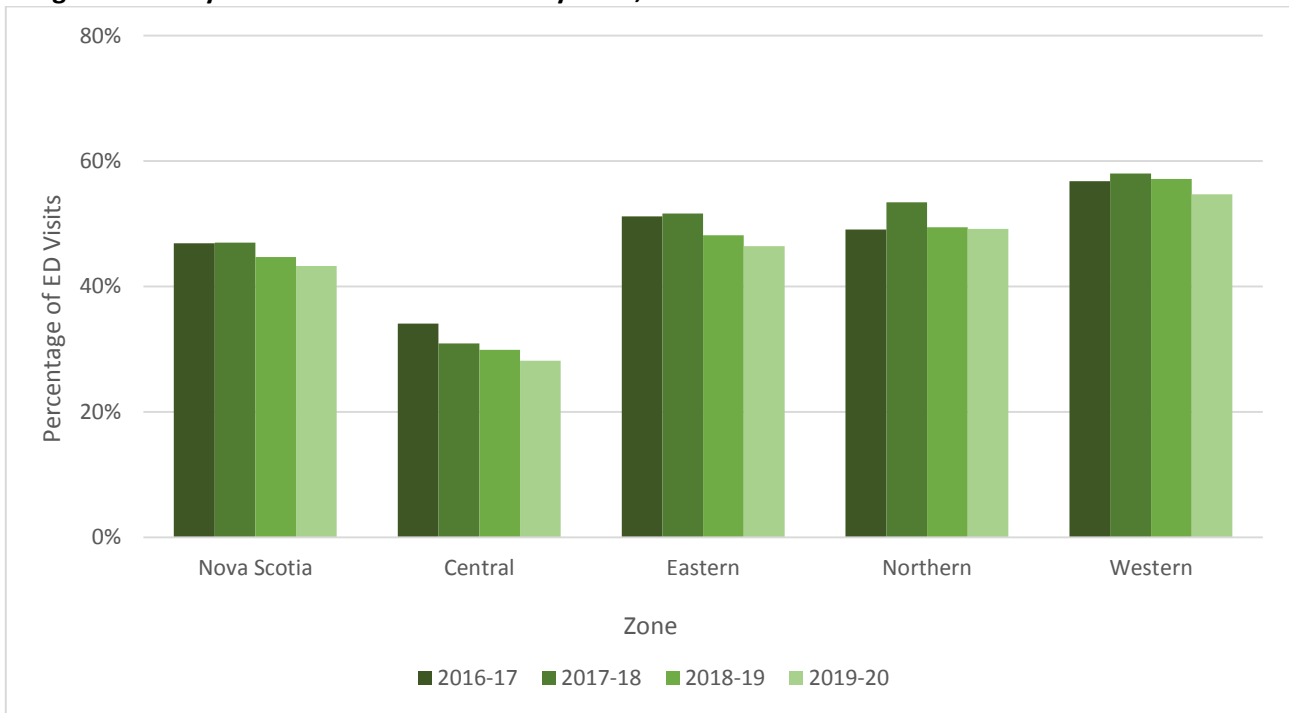
### DESCRIPTION

Indicator #23	
Use of Emergency Department for Minor Complaints	
<b>Type of Indicator</b>	Outcome – Efficiency of Care
<b>Enabler or Function</b>	Across functions
<b>Indicator Description</b>	Percentage of emergency department visits that are a level 4 (semi-urgent) or 5 (non-urgent) based on the Canadian Triage and Acuity Scale (CTAS)
<b>Numerator</b>	Number of emergency department visits that are a level 4 (semi-urgent) or 5 (non-urgent) on the CTAS
<b>Denominator</b>	Total triaged emergency department visits in NS (patients with unknown triage scores are excluded)
<b>Method of Calculation</b>	$(\text{Numerator}/\text{Denominator}) \times 100$
<b>Year of Data</b>	2016-2019
<b>Data Source</b>	Emergency department information system (EDIS), Meditech, and STAR Nova Scotia Health supplemental technical document (2015)
<b>Data Limitations &amp; Considerations</b>	It should be acknowledged that CTAS 4 and CTAS 5 visits may be <i>appropriate</i> emergency department encounters in many circumstances. Emergency Department visits at the IWK Health Centre are excluded from this data.
<b>Level of Reporting</b>	Provincial and by Zone
<b>Comparable Data</b>	Some jurisdictional data available across Canada by facility type
<b>Significance/ Rationale</b>	Patients seen in the emergency department (ED) with triage level four (semi-urgent) and five (non-urgent) conditions maybe individuals who could be seen in a primary care setting with the available resources and supports. This indicator is often viewed as a proxy indicator of primary care access since individuals with semi-urgent or non-urgent health concerns may present to the ED when primary care access is delayed or is not conveniently available.

### RESULTS

As seen in Figure 22 and Table 26, less than half (43.3%) of all Emergency Department (ED) visits across the province in 2019-20 were triaged as semi-urgent (CTAS level 4) or non-urgent (CTAS level 5), compared to 46.9% in 2016-17. The 2019-20 rate of CTAS 4 and 5 visits in Central Zone (28.2%) was lower than the other three Zones (54.7% in Western, 46.4% in Eastern and 49.2% in Northern), and was consistent across all years. The lower rates in Central Zone are likely due to the presence of the province’s largest tertiary care facility.

**Figure 22: Percentage of ED Visits that were Level 4 (semi-urgent) or 5 (non-urgent) on the Canadian Triage and Acuity Scale for Nova Scotia and by Zone, 2016-17 to 2019-20**



**Table 26: ED Visits that were Level 4 (semi-urgent) or 5 (non-urgent) on the Canadian Triage and Acuity Scale for Nova Scotia and by Zone, 2016-17 to 2019-20**

Zone	2016-17	2017-18	2018-19	2019-20
Central	34.1%	30.9%	29.9%	28.2%
Eastern	51.2%	51.7%	48.2%	46.4%
Northern	49.1%	53.5%	49.5%	49.2%
Western	56.8%	58.1%	57.2%	54.7%
<b>Nova Scotia</b>	<b>46.9%</b>	<b>47.0%</b>	<b>44.7%</b>	<b>43.3%</b>

## INDICATOR 24: PREVALENCE OF INDIVIDUALS WITH SELF-REPORTED FIVE OR MORE CHRONIC CONDITIONS

### DESCRIPTION

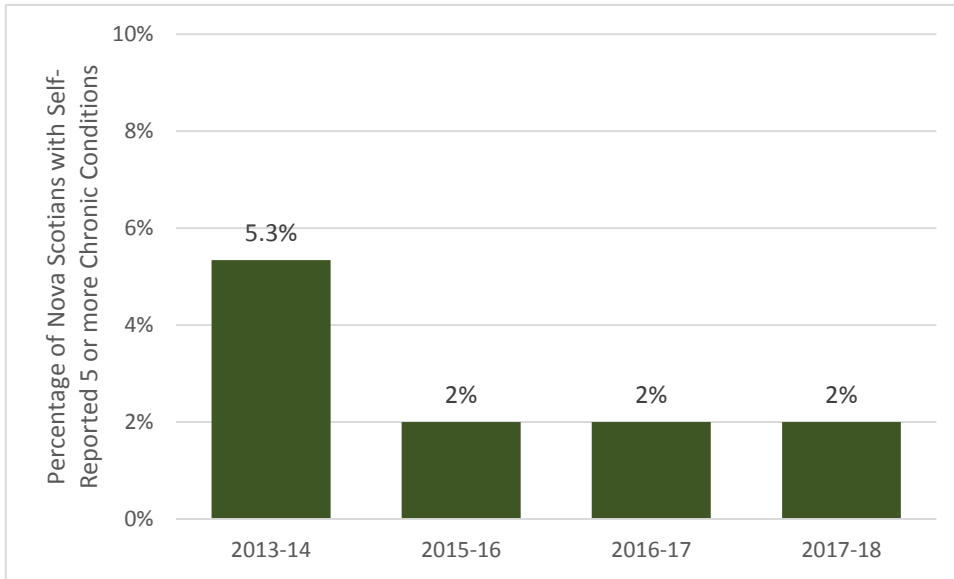
Indicator #24	
Prevalence of Individuals with Self-Reported Five or more Chronic Conditions	
<b>Type of Indicator</b>	Outcome – Quality of Care
<b>Enabler or Function</b>	Across functions
<b>Indicator Description</b>	Prevalence of individuals with self-reported five or more chronic conditions from the following possibilities: Asthma, Arthritis, High Blood Pressure, COPD, Diabetes, Heart Disease, Cancer, Stroke, Dementia, Mood Disorder, or Anxiety
<b>Numerator</b>	Number of individuals with self-reported five or more chronic conditions (all 'No Answer', 'Refused', and 'Don't Know' responses removed from denominators)
<b>Denominator</b>	Total survey respondents
<b>Method of Calculation</b>	$(\text{Numerator}/\text{Denominator}) \times 100$
<b>Year of Data</b>	2013-14 to 2017-18
<b>Data Source</b>	Canadian Community Health Survey (CCHS)
<b>Data Limitations &amp; Considerations</b>	Due to small sample sizes of the CCHS, several years of data are pooled together to increase sample size and reduce the variance in the data, and thereby improve the accuracy of the data. Therefore, instead of a single year of data being compared to previous years for any given health authority (thereby providing a temporal trend), we see the prevalence of a health condition over a four-year time period.
<b>Level of Reporting</b>	Provincial
<b>Comparable Data</b>	National data available through CCHS to compare across provinces and with national rates
<b>Significance/Rationale</b>	Nova Scotia has high rates of chronic disease, and also scores low on many of the social determinants of health, compounding an already poor provincial health profile, and highlighting the need for effective chronic disease management and primary prevention efforts. Evidence supports the assertion that high rates of chronic disease, coupled with poor chronic disease management, can lead to negative health outcomes and high health care costs.

### RESULTS

The prevalence of individuals with self-reported five or more chronic conditions (asthma, arthritis, high blood pressure, COPD, diabetes, heart disease, cancer, stroke, dementia, mood disorder, and/or anxiety) was 5.3% in NS in 2013-14. NS has the second highest prevalence compared to the other Atlantic Provinces, and was also higher than the national average. The prevalence of individuals with self-reported five or more chronic conditions decreased to 2% in NS in 2015-16 to 2017-18 (Figure 23).



**Figure 23: Nova Scotians with Self-Reported 5 or More Chronic Conditions, 2013-14 to 2017-18**



## INDICATOR 25: AMBULATORY CARE SENSITIVE CONDITIONS (ACSC) HOSPITALIZATION RATE

### DESCRIPTION

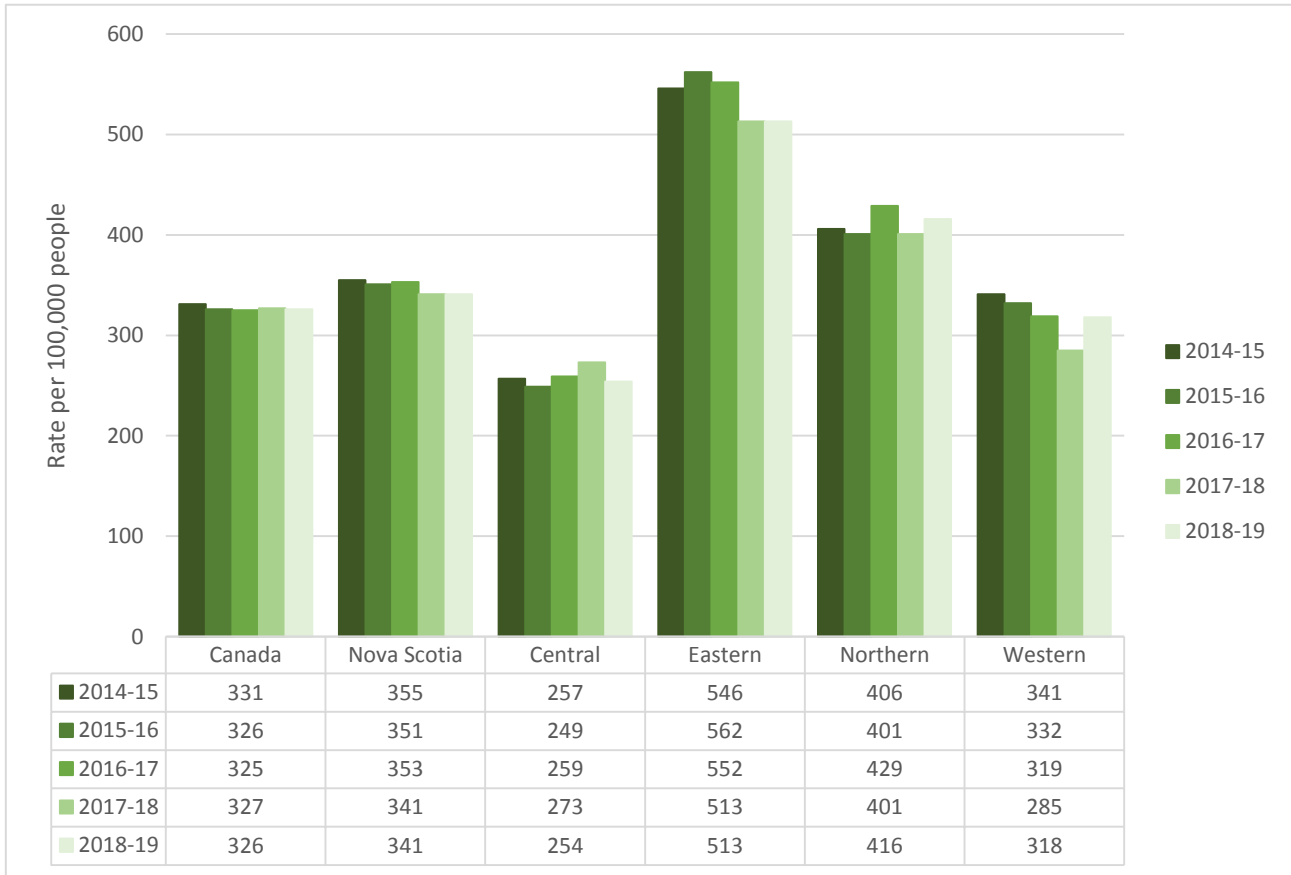
Indicator #25	
Ambulatory Care Sensitive Conditions (ACSC) Hospitalization Rate	
<b>Type of Indicator</b>	Outcome – Quality of Care
<b>Enabler or Function</b>	Integrated chronic disease management programs and services
<b>Indicator Description</b>	Age-standardized acute care hospitalization rate for conditions where appropriate ambulatory care may prevent or reduce the need for admission to hospital, per 100,000 population
<b>Numerator</b>	Total number of acute care hospitalizations for ambulatory care sensitive conditions (grand mal status and other epileptic convulsions, chronic obstructive pulmonary disease, asthma, diabetes, heart failure and pulmonary edema, hypertension, and angina) in patients younger than age 75
<b>Denominator</b>	Mid-year population age 75 and younger, divided by 100,000 (age adjusted)
<b>Method of Calculation</b>	<i>Numerator/Denominator</i>
<b>Year of Data</b>	<u>Year of data for the original report release:</u> 2014-15 (DAD, CIHI) <u>Year of data for the 2019-20 report release:</u> 2015-16 to 2018-19 (CCHS)
<b>Data Source</b>	<u>Data source for the original report release:</u> Discharge Abstract Database (Canadian Institute for Health Information), 2014-15. <u>Data source for the 2019-20 release:</u> Canadian Community Health Survey (CCHS), 2015-16 to 2018-19.
<b>Data Limitations &amp; Considerations</b>	Data is retrospective and so will not reflect any recent changes to process/policy etc.
<b>Level of Reporting</b>	Provincial and by Zone
<b>Comparable Data</b>	National data is available through CIHI
<b>Significance/ Rationale</b>	Nova Scotians have high rates of chronic disease. This indicator helps in understanding how patients with chronic diseases access health services in Nova Scotia. Ambulatory Care Sensitive Conditions (ACSC) are chronic medical conditions that when treated effectively in community settings, should not, in most cases, lead to a hospital stay. Managing chronic diseases effectively in the community can improve patient outcomes while using fewer hospital in-patient services.

### RESULTS

In 2018-19, NS recorded a hospitalization rate of 341 hospitalizations per 100,000 people for ambulatory care sensitive conditions (grand mal status and other epileptic convulsions, chronic obstructive pulmonary disease, asthma, diabetes, heart failure and pulmonary edema, hypertension, and angina) in patients younger than age 75. This was above the national rate of 326 hospitalizations per 100,000 people, and above the Central Zone rate of 254 hospitalizations per 100,000 people. The highest rate across the province was in Eastern Zone at 513 hospitalizations per 100,000.

Since 2014-15, Nova Scotia has consistently reported hospitalization rates for ambulatory care sensitive conditions above the national rate, as well as above the Central Zone rate. In addition, Eastern Zone has continued to have the highest rate in the province. See Figure 24 for further details.

**Figure 24: Ambulatory Care Sensitive Conditions Hospitalization Rate per 100,000 people in Canada, NS and by Zone, 2014-15 to 2018-19**



## INDICATOR 26: PHC PATIENT ACCESS TO HEALTH CARE

### DESCRIPTION

Indicator #26	
PHC Patient Access to Health Care	
<b>Type of Indicator</b>	Outcome – Quality of Care
<b>Enabler or Function</b>	Primary care delivery across the lifespan
<b>Indicator Description</b>	Percentage of survey respondents to the PHC Patient Experience Survey from all Primary Health Care locations participating in Accreditation for Primary Care Services standards (including collaborative family practice teams, chronic disease management, and wellness teams) who responded “yes, once” or “yes, several times” to the question, “were there times when you had difficulty getting the health care or advice you needed?”
<b>Numerator</b>	Number of survey respondents to the PHC Patient Experience Survey from all Primary Health Care locations participating in Accreditation for Primary Care Services standards (including collaborative family practice teams, chronic disease management, and wellness teams) who responded “yes, once” or “yes, several times” to question, “were there time when you had difficulty getting the health care or advice you needed?”
<b>Denominator</b>	Number of survey respondents from all Primary Health Care locations participating in Accreditation for Primary Care Services standards (including collaborative family practice teams, chronic disease management, and wellness teams) who answered this question (blank responses are excluded)
<b>Method of Calculation</b>	$(\text{Numerator}/\text{Denominator}) \times 100$
<b>Year of Data</b>	2017-2019
<b>Data Source</b>	Nova Scotia Health Patient Experience Survey for Accreditation Canada
<b>Data Limitations &amp; Considerations</b>	Certain survey responses were grouped together in the analysis below, including the responses, “Don’t Know”, “Don’t Remember” and “Not Applicable”.
<b>Level of Reporting</b>	Provincial
<b>Comparable Data</b>	N/A
<b>Significance/ Rationale</b>	Delays in providing requested primary health care services can adversely affect clinical outcomes, patient and staff satisfaction and cost. Patients unable to be seen in a timely manner risk seeing health concerns worsen without being investigated, or having to seek care elsewhere (EDs, walk-in clinics, etc.). Continuity of care, one of the key benefits of attachment to a primary care provider, can suffer as a consequence.

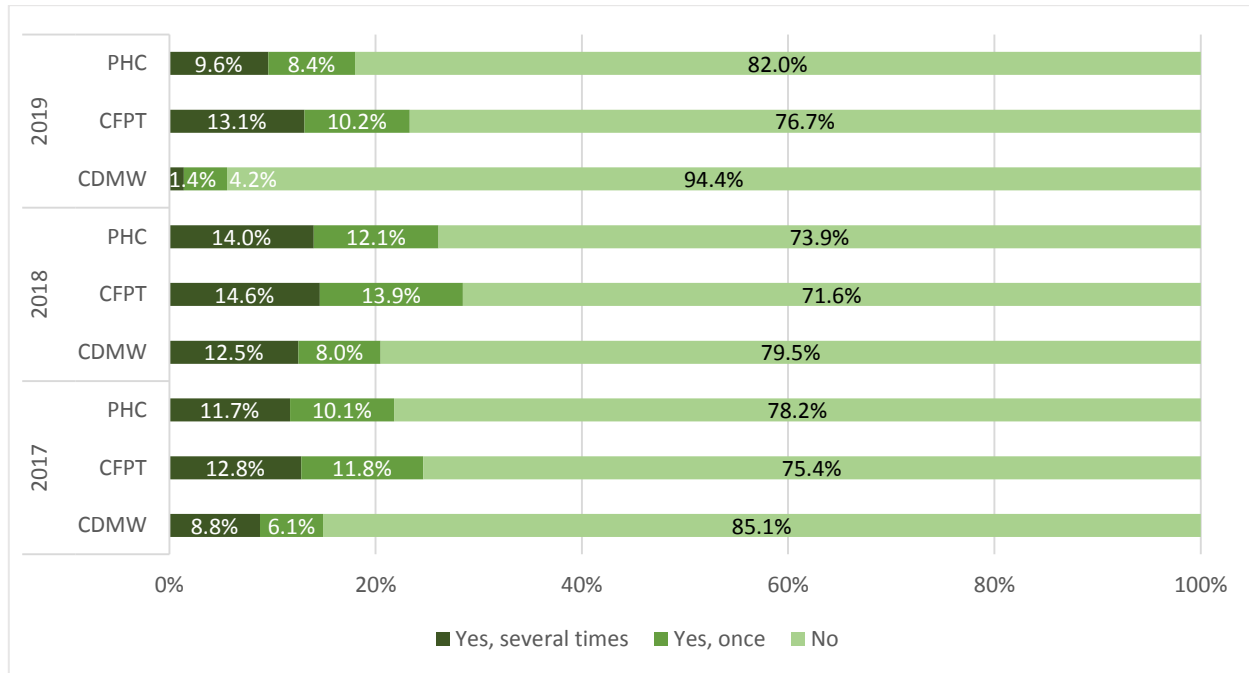
### RESULTS

In 2019, 82.0% of respondents to the PHC Patient Experience Survey of all Primary Health Care locations participating in Accreditation for Primary Care Services standards indicated that they did not have difficulty getting the health care or advice they needed. 13.1% of respondents for CFPTs had difficulty several times getting the health care or advice they needed and only 1.4% of respondents from chronic disease management and wellness (CDMW) sites reported having difficulty several times getting the health care or advice they needed. Compared to previous years, overall more respondents indicated that they did not have difficulty getting the health care or advice they needed (2019: 82.0%; 2018: 73.9%; 2017: 78.2%). The number of respondents for CFPTs who had difficulty several times remained similar (2019: 13.1%; 2018: 14.6%; 2017: 12.8%); however, there was a large decrease for respondents from CDMW sites who reported having

difficulty getting the health care or advice they needed several times (2019: 1.4%; 2018: 12.5%; 2017: 8.8%). See Figure 25 and Table 27 for further details.

**Figure 25: PHC Patient Experience Survey: Patient Access, 2017-2019**

*“Were there times when you had difficulty getting the health care or advice you needed?”*



**Table 27: PHC Patient Experience Survey: Patient Access, 2017-2019**

*“Were there times when you had difficulty getting the health care or advice you needed?”*

Response	2017			2018			2019		
	PHC	CDMW	CFPT	PHC	CDMW	CFPT	PHC	CDMW	CFPT
Yes, once	10.1%	6.1%	11.8%	12.1%	8.0%	13.9%	8.4%	4.2%	10.2%
Yes, several times	11.7%	8.8%	12.8%	14.0%	12.5%	14.6%	9.6%	1.4%	13.1%
No	78.2%	85.1%	75.4%	73.9%	79.5%	71.6%	82.0%	94.4%	76.7%

## INDICATOR 27: PATIENT INVOLVEMENT IN DECISIONS ABOUT THEIR CARE AND TREATMENT

### DESCRIPTION

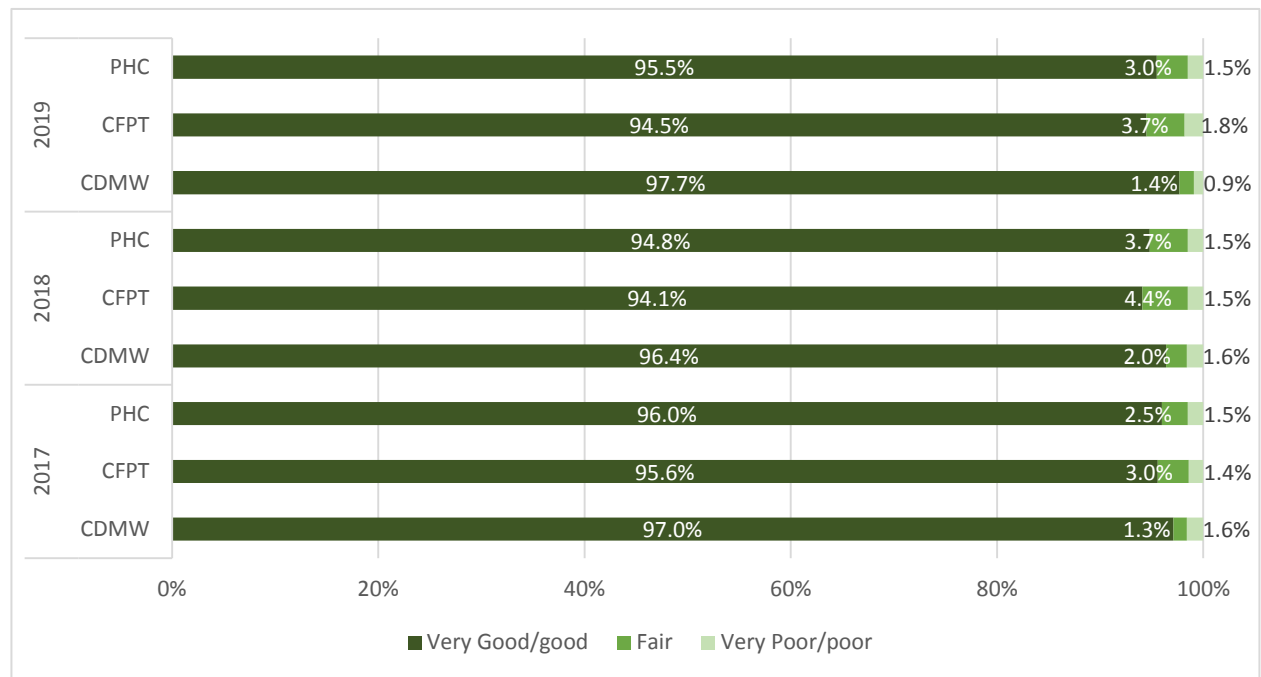
Indicator #27	
Patient Involvement in Decisions about their Care and Treatment	
<b>Type of Indicator</b>	Outcome – Quality of Care
<b>Enabler or Function</b>	Primary care delivery across the lifespan
<b>Indicator Description</b>	<p><u>Indicator description for the original report release:</u> Percentage of NS patients that completed a Patient Experience Survey (PES) as part of the QUALICOPC study who replied positively to the question "the doctor involved me in making decisions about treatment and/or health related goals at today's visit", 2013.</p> <p><u>Indicator description for the 2019-20 release:</u> Percentage of survey respondents to the PHC Patient Experience Survey from all Primary Health Care locations participating in Accreditation for Primary Care Services standards (including collaborative family practice teams, chronic disease management, and wellness teams) who responded "very good" or "good" to the question, "How would you rate the health care provider/team at involving you in decisions about your care?", 2017-2019.</p>
<b>Numerator</b>	<p><u>Numerator for the original report release:</u> Number of NS patients that completed a PES as part of the QUALICOPC study who replied positively to the question "the doctor involved me in making decisions about treatment and/or health related goals at today's visit", 2013.</p> <p><u>Numerator for the 2019-20 release:</u> Number of survey respondents to the PHC Patient Experience Survey from all Primary Health Care locations participating in Accreditation for Primary Care Services standards (including collaborative family practice teams, chronic disease management, and wellness teams) who responded "very good" or "good" to question, , "How would you rate the health care provider/team at involving you in decisions about your care?", 2017-2019.</p>
<b>Denominator</b>	<p><u>Denominator for the original report release</u> Number of NS patients that completed a PES as part of the QUALICOPC study, 2013.</p> <p><u>Denominator for the 2019-20 release:</u> Number of survey respondents from all Primary Health Care locations participating in Accreditation for Primary Care Services standards (including collaborative family practice teams, chronic disease management, and wellness teams) who answered this question (blank responses are excluded).</p>
<b>Method of Calculation</b>	$(\text{Numerator}/\text{Denominator}) \times 100$
<b>Year of Data</b>	<p><u>Year of data for the original report release:</u> 2013 (QUALICOPC)</p> <p><u>Year of data for the 2019-20 report release:</u> 2017-2019 (PHC PES)</p>
<b>Data Source</b>	<p><u>Data source for the original report release:</u> QUALICOPC began as a research program funded by the European Union (EU), including 31 countries. Canada decided to participate in this study as well, and all 10 provinces collaborated for this purpose. The research included recruiting physicians to participate in the study, and then distributing patient experience surveys (PES) to consecutive consenting patients visiting the participating physicians. The patient experience survey measured four dimensions of primary care including Continuity and Coordination, Communication and Patient-Centredness, Patient Activation and Access. Provinces began their recruitment in 2013 with the majority of data collection occurring over the summer. Some provinces continued collecting surveys from practices until the winter of 2014 to achieve their target number of participating practices.</p>

Indicator #27	
Patient Involvement in Decisions about their Care and Treatment	
	<p>Across Canada, a total of 8,332 patients of 810 primary care physicians in 785 practices participated in the QUALICOPC study. Of these, 7,172 patients of 807 primary care physicians completed the PES, reporting on their experience with primary care. Canadian Foundation for Healthcare Improvement (2014). <i>QUALICOPC (Quality and Costs of Primary Care) Canada — A focus on the aspects of primary care most highly rated by current patients of primary care practices</i>. Available <a href="#">online</a>. Data for NS for this question is on page 20. Nova Scotia Health Patient Experience Survey for Accreditation Canada</p> <p><u>Data source for the 2019-20 release:</u> Nova Scotia Health PHC Patient Experience Survey for Accreditation Canada</p>
<b>Data Limitations &amp; Considerations</b>	<p><u>Data limitations &amp; considerations for the original report release:</u> This indicator reflects data from a selected sample of NS PHC practices. 59 physicians from NS participated in QUALICOPC and 544 patients completed the PES. There is also data for a similar indicator from the TRANSFORMATION research study, but each question has slightly different wording.</p> <p><u>Data limitations &amp; considerations for the 2019-20 release:</u> Certain survey responses were grouped together in the analysis below, including the responses, “Don’t Know”, “Don’t Remember” and “Not Applicable”.</p>
<b>Level of Reporting</b>	<p><u>Level of reporting for the original report release:</u> Provincial – selected sample as described.</p> <p><u>Level of reporting for the 2019-20 release:</u> Provincial, collaborative family practice teams, and chronic disease management and wellness teams</p>
<b>Comparable Data</b>	<p>Across Canada, 96% of patients that completed a Patient Experience Survey (PES) as part of the QUALICOPC study indicated that their doctor involved them in making decisions about treatment and/or health related goals at their visit. At the time of the 2019-20 report release, the QUALICOPC study was not repeated.</p>
<b>Significance/ Rationale</b>	<p>This indicator reflects an important element of communication and patient-centred care. 76% of Canadian patients in the QUALICOPC study ranked this aspect of primary care as “very important”, giving it the 6<sup>th</sup> highest ranking in a list of 56 aspects of primary care.</p>

## RESULTS

The majority of NS Patients that completed the PHC Patient Experience Survey in 2017-2019 rated the health care provider/team as ‘Very Good’ or ‘Good’ at involving them in decisions about their care (2019: 95.5%; 2018: 94.8%; 2017: 96.0%) See Figure 26 and Table 28 below for more details. At the time of the release of the first report, data from the 2013 Patient Experience Survey portion of the QUALICOPC study was used. Of NS patients that completed the 2013 Patient Experience Survey as part of the QUALICOPC study, 96% indicated that their doctor involved them in making decisions about treatment and/or health related goals at their visit, indicating stability in the indicator over time

**Figure 26: PHC Patient Experience Survey: Patient Involvement in Care, 2017-2019**



**Table 28: PHC Patient Experience Survey: Patient Involvement in Care, 2017-2019**

Response	2017			2018			2019		
	PHC	CDMW	CFPT	PHC	CDMW	CFPT	PHC	CDMW	CFPT
Very Good/Good	96.0%	97.0%	95.6%	94.8%	96.4%	94.1%	95.5%	97.7%	94.5%
Fair	2.5%	1.3%	3.0%	3.7%	2.0%	4.4%	3.0%	1.4%	3.7%
Very Poor/Poor	1.5%	1.6%	1.4%	1.5%	1.6%	1.5%	1.5%	0.9%	1.8%



## INDICATOR 28: PATIENT SAFETY CULTURE

### DESCRIPTION

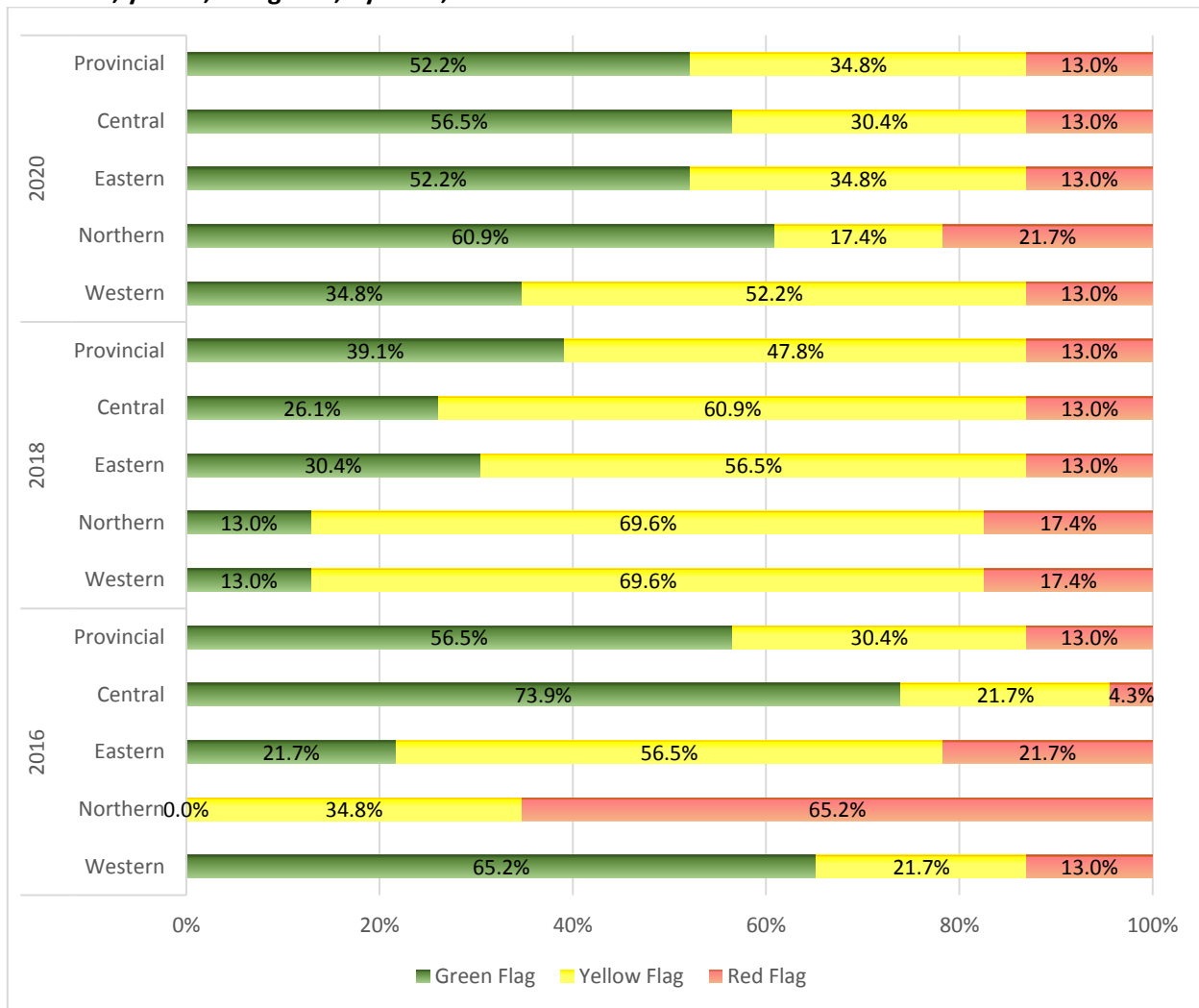
Indicator #28	
Patient Safety Culture	
<b>Type of Indicator</b>	Outcome – Quality of Care
<b>Enabler or Function</b>	Quality, safety and risk
<b>Indicator Description</b>	Percentage of total flags received by PHC through the Patient Safety Culture (PSC) survey that were red, yellow, and green. Green flags represent the best performance and red flags represent the worst performance. See ‘Method of Calculation’ for an explanation of a flag and description of how flags are determined.
<b>Numerator</b>	Number of flags received by PHC through the PSC survey that were red, yellow, or green
<b>Denominator</b>	Total number of possible flags (i.e., the 23 statements)
<b>Method of Calculation</b>	<p>This data is drawn from the results of the PSC survey Nova Scotia Health completed through Accreditation Canada in May 2016. The survey included 23 statements related to patient safety. For the first 21 statements, respondents were asked to indicate their agreement with each statement using the scale strongly disagree, disagree, neutral, agree, strongly agree (respondents could also indicate not applicable). For the other two statements, respondents were asked to give their unit and their organization an overall grade on patient safety using the scale A-excellent, B-very good, C-acceptable, D-Poor, and F-failing.</p> <p>Each statement is then assigned a ‘flag’ that is coloured either red, yellow or green. The colour of the flag for each statement is calculated by summing the percentage of respondents that selected each of the top two positive answers. This could be either strongly agree + agree or strongly disagree + disagree depending on how the statement is framed (e.g., the statement “Patient safety decisions are made at the proper level by the most qualified people” would be strongly agree + agree; the statement “My co-workers will lose respect for me if they know I’ve made a serious error” would be strongly disagree + disagree), or A-excellent + B-very good for the two statements on the overall grade for patient safety.</p> <p>The flags are then defined as follows:</p> <ul style="list-style-type: none"> <li>• Green flag: the sum of the two positive columns <math>\geq 75\%</math></li> <li>• Yellow flag: the sum of the two positive columns <math>&gt;50\%</math> and <math>&lt;75\%</math></li> <li>• Red flag: the sum of the two positive columns <math>\leq 50\%</math></li> </ul> <p>The percentage for the indicator is then calculated by:  <math>(\text{Numerator}/\text{Denominator}) \times 100</math></p>
<b>Year of Data</b>	2016, 2018, 2020
<b>Data Source</b>	Nova Scotia Health PSC survey completed through Accreditation Canada
<b>Data Limitations &amp; Considerations</b>	The total sample completing the PSC survey is 269 responses across the province in PHC. This survey was open to all staff, regardless if they had a direct role in patient care. If there were fewer than 5 responses for any site, these sites were not reported.
<b>Level of Reporting</b>	Data is reported at the Zone and provincial level. Data was collected at multiple sites within each Zone and is also available at the site level.
<b>Comparable Data</b>	Not available
<b>Significance/ Rationale</b>	This survey was conducted to gather information about staff and physician perceptions and opinions on patient safety. Overall, the number and balance of red, yellow and green flags provides an indication of patient safety and the overall patient safety culture within the organization. Statements with red flags across the province highlight areas where additional

<b>Indicator #28</b>	
<b>Patient Safety Culture</b>	
	support is needed. An action plan to respond to the red flag areas identified in the PSC survey was developed.

## RESULTS

In 2020, of the total 23 statements related to patient safety culture in Primary Health Care, the majority were green flags (52.2%), 34.8% were yellow flags, and 13.0% were rated as a red flag. This is consistent with the 2016 Patient Safety Culture survey, where green flags were also the majority (56.5%), however, yellow flags (47.8%) were the majority in 2018 (Figure 27 and Table 29).

**Figure 27: Percentage of total flags received by PHC through the Patient Safety Culture (PSC) survey that were red, yellow, and green, by Zone, 2016-2020**



**Table 29: Percentage of total flags received by PHC through the Patient Safety Culture (PSC) survey that were red, yellow, and green, by Zone, 2016-2020**

Year	Flag Colour	Provincial		Central		Eastern		Northern		Western	
		#	%	#	%	#	%	#	%	#	%
2020	Green	12	52.2%	13	56.5%	12	52.2%	14	60.9%	8	34.8%
	Yellow	8	34.8%	7	30.4%	8	34.8%	4	17.4%	12	52.2%
	Red	3	13.0%	3	13.0%	3	13.0%	5	21.7%	3	13.0%
	<b>Total</b>	<b>23</b>	<b>100%</b>	<b>23</b>	<b>100%</b>	<b>23</b>	<b>100%</b>	<b>23</b>	<b>100%</b>	<b>23</b>	<b>100%</b>
2018	Green	9	39.1%	6	26.1%	7	30.4%	3	13.0%	3	13.0%
	Yellow	11	47.8%	14	60.9%	13	56.5%	16	69.6%	16	69.6%
	Red	3	13.0%	3	13.0%	3	13.0%	4	17.4%	4	17.4%
	<b>Total</b>	<b>23</b>	<b>100%</b>	<b>23</b>	<b>100%</b>	<b>23</b>	<b>100%</b>	<b>23</b>	<b>100%</b>	<b>23</b>	<b>100%</b>
2016	Green	13	56.5%	17	74.3%	5	21.7%	0	0.0%	15	65.2%
	Yellow	7	30.4%	5	21.7%	13	56.5%	8	34.8%	5	21.7%
	Red	3	13.0%	1	4.3%	5	21.7%	15	65.2%	3	13.0%
	<b>Total</b>	<b>23</b>	<b>100%</b>	<b>23</b>	<b>100%</b>	<b>23</b>	<b>100%</b>	<b>23</b>	<b>100%</b>	<b>23</b>	<b>100%</b>

## CONCLUSION

The *2019-20 update of the Current State Assessment of the Primary Health Care System in Nova Scotia* provides a comprehensive system-level review of the performance of the NS primary health care system as of March 31, 2020. Overall, the primary health care system in NS has experienced tremendous growth over the past five years. The following paragraphs outline examples of this growth, as well as considerations and future directions of this performance monitoring work.

Regarding collaborative family practice teams, the number of collaborative family practice teams has more than doubled over the past 5 years, growing from 39 to 86 meeting the minimum definition.<sup>4</sup> This represents a 120 percent increase. In FY2018-19, 28.1% of the population in Nova Scotia was served by a collaborative family practice team. This number is expected to have grown since FY18/19 given the continued growth in collaborative family practice teams since that time. Since the new investment in collaborative family practice teams, the distribution of governance models for primary care delivery in Nova Scotia has changed. At the time of Nova Scotia Health's formation in 2015-16 the majority of collaborative family practice teams were operated by Nova Scotia Health (n=20, 51%) as part of a turn-key governance arrangement. As of 19/20, the majority of collaborative family practice teams are now operated in a co-leadership governance arrangement (n=55, 64%), whereby Nova Scotia Health works collaboratively in a co-leadership model with the entity (which may be physicians or other group) to support the collaborative family practice team. The current distribution of governance models identifies that approximately two-thirds of teams operate in a co-leadership arrangement (64%), one quarter of teams in a turn-key model (27%), and the remainder in a contracted services (7%) or other/blended arrangement (<3%).

NS Health Primary Health Care has also grown and expanded the workforce of interprofessional team members working collaboratively with family physicians and others as we work toward the future planned state population-based health human resource plan. Over 150 clinical staff, including nurse practitioners, family practice nurses, licensed practical nurses, social workers, and dietitians, were hired through the new investment from the provincial government since 2017. The number of family physicians working in team-based care has increased by 137 percent since Nova Scotia Health's formation, with approximately 377 family physicians working in collaborative family practice teams as of March 31, 2020, up from approximately 159 in FY15/16. Note this is an estimated head count of family physicians only and does not represent full-time equivalents. The predominant payment model for family physicians in Nova Scotia remains fee-for-service; however, we have seen growth in the number of family physicians who are remunerated through an alternate payment plan in the last 5 years, increasing by 39%. NS Health Primary Health Care has also instituted more programs and initiatives for populations experiencing vulnerabilities. The number of programs, initiatives, or services for populations experiencing vulnerabilities has increased from 17 to 38, representing a 124 percent increase, since 2017.

In terms of access to primary health care, the number of Nova Scotians self-reporting they had a regular health care provider was 85.6% in 2019, which is on par with the national rate of 85.5%. This number has dropped by 3.5% from 88.7% in 2015. As of March 31, 2020, there was 5.0% of Nova Scotians who identified that they were seeking a primary care provider by registering on the Need a Family Practice Registry. More Nova Scotians are reporting that they did not have difficulties getting the health care or advice they needed, indicating we are doing better with access, according to our latest Patient Experience

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<sup>4</sup> having at least 3 health professionals with a minimum of 2 professional disciplines working collaboratively

Survey, which shows 17% fewer Nova Scotians reporting that they had difficulties accessing the care they needed from 2017 to 2019. We have observed substantial differences in the number of family physicians accepting new patients in Nova Scotia between 2015 and 2019; however, this indicator should be interpreted with caution due to the differences in the data source between the two years' of data. In a 2019 Commonwealth Fund survey, 24.4% of NS family physicians responded that they are accepting new patients, either unconditionally or with exceptions, which represents a 64% decrease from 2015's data obtained through the MAAP-NS research study. According to the Commonwealth Survey (2019) the majority of family physicians in Nova Scotia (67%) reported spending 45 hours per week or more in direct patient care and 53.5% reported that they provide appointments after 6pm at least one evening during the week, Monday to Friday. There is a gap in the availability of current, accurate data related to wait times for routine and urgent primary care in Nova Scotia. Previously, we had reported on this indicator using data from the MAAP-NS research study (2015); however, no comparable data source was available to report on this indicator at a *systematic* level in 2019-20 to gauge Nova Scotian's ability to access routine and urgent primary care.

The primary health care system requires continued investment to observe the benefits achieved in other countries with a strong foundation of primary health care (i.e., better population health outcomes, reduced inequities in population health, and lower rates of hospitalization resulting in reduced health care costs). In 2019-20 the budget for the Primary Health Care program within Nova Scotia Health was \$63.2M, which equates to spending \$68 per person (or \$6.8M per 100,000 people) on primary health care programs and services. This is up from \$36 per person (or \$3.6M per 100,000 people) at the time of Nova Scotia Health's formation. It is important to note that these per capita spending figures excludes spending on physician services and MSI billings, which is the predominant source of primary health care expenditures for the population.

The prevalence of individuals with self-reported five or more chronic conditions (asthma, arthritis, high blood pressure, COPD, diabetes, heart disease, cancer, stroke, dementia, mood disorder, and/or anxiety) has decreased by more than half, from 5.3% (FY13-14) to 2% (FY2017-18). This is based on self-reported data for a sample of the population, so the statistic should be interpreted with that in mind. A priority for Primary Health Care is to ensure that Nova Scotians have access to the supports they need to stay well and manage their chronic condition(s). Since 2017, 29% more patients have reported that they were 'always or sometimes' encouraged to go to a specific group, program or class to help them manage their health concerns as part of our Patient Experience Survey.

The scope of services provided by primary health care providers is an important part of assessing the comprehensiveness attribute of the primary health care system. The Commonwealth Fund Survey (2019) provided continued indication that primary care providers in Nova Scotia continue to provide a wide variety of services to patients and were well-prepared or somewhat prepared to manage care for patients with: chronic conditions (100%), mental illness (96.7%), substance-abuse-related issues (85.9%), palliative care needs (90.8%), and dementia (91.8%). Of note, 35.8% of respondents reported that they were not prepared to offer services to patients requesting medical assistance in dying and 11.8% of respondents reported that they were not prepared to offer services to patients with substance use related issues, indicating areas for further investigation in NS. As part of this same survey, only 10% of providers indicated that they were providing video consultations for patients, which given the COVID-19 pandemic and the rapid introduction of virtual care, makes this an indicator to monitor over time.

Over the last 5 years, the national rate of influenza immunization in individuals aged 65 and older has increased (to 70.3% FY2019-20 from 64.6% in FY2015-16), while the rate in Nova Scotians in this age group has decreased (to 61.7% FY2019-20 from 68.4% in FY2015-16), indicating an area of improvement for Nova Scotia.

Ensuring that our programs and services remain patient-centred and take into account the diverse backgrounds of all of the populations we serve is a critical component of the primary health care system. Primary Health Care reports consistently high results when it comes to staff taking patients' cultural values and those of their family or caregiver into account. 96.4% of patients reported that this was the case in our latest 2019 Patient Experience Survey. Having patients as active partners in their care is an important element of communication and patient-centred care. 95.5% of patients reported that their health care provider/team involved them in making decisions about their care in our latest Patient Experience Survey. In addition to partnering with patients in their care, Primary Health Care has also valued partnering with patients and families at a system-level through the engagement of patient and family advisors in a variety of planning, quality, and safety initiatives. As of 2020, there were at least 40 patient and family advisors involved in PHC initiatives across Nova Scotia.

There has been substantial change in the EMR landscape in Nova Scotia over the past two years with the sun-setting of some EMR systems and the introduction of new vendors. In 2017, the predominant EMR in the province was Nightingale on Demand (80% of users) and in 2020, the predominant EMR is Telus' MedAccess (67% of users), followed by QHR's Accuro (31% of users). EMR use in Nova Scotia remains high, with 83.1% of family physicians and 100% of Nova Scotia health-employed nurse practitioners using an EMR.

Primary Health Care has continued to grow its research profile, ensuring PHC researchers are actively involved in leading and partnering on research grants and contributing to the literature through publication. Over 100 staff and physician leaders from Nova Scotia Health's Primary Health Care Program and Dalhousie University's Department of Family Medicine (DFM) have research profiles, which is up from 60 individuals in 2016-17, representing a 67% increase. Nova Scotia Health PHC staff, DFM and CoR-PHC are reporting over \$1,000,000 in CIHR funded grants in FY2020-21, and have completed 15 ethic submissions and 25 research publications in the past year. Teaching and learning remains a priority of the primary health care system when it comes to training future health professionals, such as family physicians and nurse practitioners. 36 family medicine residents (PGY2) completed training in NS family practices in the 2019-20 academic year, which is 5 more residents than 2016-17, indicating increased training capacity for family medicine. As well, 90 nurse practitioner students completed preceptorships in Primary Health Care in the 2019-20 academic year.

Given primary health care is the foundation of the health care system, it is important to monitor select indicators in other parts of the health care system to assess the impact that the primary health care system may be having in these areas. We have observed improvements in the rate of hospitalization for ambulatory care sensitive conditions. In FY2018-19 the rate of hospitalization for ambulatory care sensitive conditions in patients younger than age 75 decreased to 341 per 100,000 people, from 355 per 100,000 people. This indicator helps in understanding how patients with chronic diseases access health services in Nova Scotia. Ambulatory Care Sensitive Conditions (ACSC) are chronic medical conditions that when treated effectively in community settings, should not, in most cases, lead to a hospital stay. Looking at the percentage of Emergency Department (ED) visits across the province *may* be viewed as a proxy indicator of primary care access since individuals with semi-urgent or non-urgent health concerns may present to the

ED when primary care access is delayed or is not conveniently available. It is important to note that many ED visits triaged as CTAS level 4 or 5 may be very appropriate for an ED setting. The number of ED visits in Nova Scotia triaged as CTAS level 4 or 5 decreased slightly to 43.3% in FY2019-20 from 46.9% in FY2016-17.

The overall patient safety culture within the organization is something that is critical to monitor over time to ensure safe, high-quality care and a just-culture for staff and physicians. In the latest 2020 Patient Safety Culture survey, Primary Health Care showed improvements in the number of staff responding positively to measures of patient safety culture when compared to the previous survey in 2018. The majority of responses (52%) were considered positive in 2020 (i.e., green flags) and work is ongoing to continue to improve patient safety culture.

While this series of system performance reports is critical in the evaluation of the PHC system in NS, the information presented should be interpreted with the following considerations. The PHC System Evaluation Framework and the associated indicators presented are intended to reflect a *system-level view* of the PHC system in NS and progress toward these indicators since the previous report. There is continued work to identify a core set of indicators to assess performance of PHC at various levels, including the program and practice level. It is also important to note that indicators in this report are aligned with currently available data sources, some of which have changed since the original report. While there is ongoing work to identify a complete set of ideal indicators as well as develop data collection tools and resources to gather data, careful consideration should be taken when comparing data across years for indicators with different data sources between the first and present reports. Although some changes in data sources occurred due to issues with data availability, the goal was to maintain the integrity of the intent of the indicator and what it was chosen to measure.

This series of system performance reports will continue to serve as the foundation for future measurement and evaluation related to the transformation of the NS primary health care system over time. Continuing efforts will be placed on identifying a complete list of ideal, future-oriented indicators that are not constrained by readily available data sources only. This will require further work to identify and/or develop accompanying data collection tools, resources, and evaluation infrastructure, as well as ongoing collaborative efforts to systematically access critical information sources, such as electronic medical record (EMR) data.

We would like to thank all stakeholders who participated in this work and provided data to support the development of this report. The *2019-20 update of the Current State Assessment of the Primary Health Care System in Nova Scotia* was completed as a result of data contributions from many Primary Health Care leaders, providers, researchers, and partners. It is our commitment to work together with all stakeholders as part of our quality and system performance journey; we must continue to focus on a strong foundation of quality to support sustainable transformation of the primary health care system in Nova Scotia.

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# APPENDICES

## APPENDIX A: KEY CONTRIBUTORS AND REPORT AUTHORS

Report authors include:

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The report authors would also like to acknowledge the contributions of the original stakeholders from the first report who provided valuable contributions in the design of the system performance

framework, indicator selection, and data for the original release that is brought forward in the 2019-20 release for comparative purposes. For a full list of stakeholders who participated in the foundational work, please see page 76 of the first release of the Current State Assessment available on the Nova Scotia Health website [here](#).

## APPENDIX B: EVALUATION FRAMEWORK ELEMENTS

Framework Element(s)	Description
<p><b>Enablers &amp; Inputs</b></p>	<p>The box on the far left of the framework captures the <b>enablers and inputs</b> to PHC delivery, i.e., the resources and supports that are needed to carry out the activities of PHC delivery in NS. The enablers may also be reflected in the outputs and outcomes box. The enablers are reflective of what is required from a PHC system orientation perspective, as well as the broader health system lens.</p>
<p><b>Functions and Activities</b></p>	<p>The middle box of the framework reflects the <b>activities related to the program and service delivery functions</b> of the PHC system as defined by the NSHA. The three functions within the box are presented as overlapping and with interconnected arrows to show that they are not discrete, but are interconnected both conceptually and practically from a care delivery perspective.</p> <p>The other two functions are shown with arrows outside of the boxes because they cut across all elements of the framework and reflect “how” we do our work, with a focus on research, surveillance, and knowledge sharing with a community responsiveness lens. The eight quality domains identified by Accreditation Canada (See Appendix B: <i>Guiding Documents and Framework</i> for a list of the Accreditation Canada Quality Domains) are also captured in this middle box as they most closely relate to how programs/services are delivered, and indicators that address these domains may include input, activity, output or outcome indicators.</p>
<p><b>Outputs and Outcomes</b></p>	<p>The final box reflects the <b>outputs and outcomes</b> of the PHC system. The <b>outputs</b> include the products and services delivered as part of the PHC system, as well as the outputs of the enablers. The <b>outcomes</b> reflect what is achieved at an individual, population, and system level as a result of the outputs of the enablers. The outputs reflect either the structural elements (governance, economic conditions, workforce) or the processes of care within the system (access, continuity of care, coordination of care, comprehensiveness of care) (Kringos et al., 2010). The outcomes address quality of care, efficiency of care, and/or equity in health (Kringos et al., 2010).</p>
<p><b>Geographic Framework for Planning and Context</b></p>	<p>Underneath the three main boxes, the <b>geographic framework for planning</b> is outlined as a critical consideration, along with elements related to the broader <b>context</b> in NS (e.g., provincial economic conditions, social and cultural factors, etc.), as these elements contribute to the inputs of the system and have an impact on the outputs and outcomes. The geographic framework and elements of the NS context are further described in Appendix B: <i>Guiding Documents and Framework</i>. While indicators that assess this broader context are not included in the Baseline Report, they are taken into consideration through the community responsiveness function in the PHC system.</p>

### INDICATOR SELECTION CRITERIA

1. Important and Actionable: Indicators should:
  - a. Be relevant for Nova Scotia;
  - b. Be relevant to policy, planning and/or system management needs for the Primary Health Care system;
  - c. Reflect issues of provincial importance;
  - d. Be useful and applicable to the people that will be using the indicators; and
  - e. Be useful for PHC system performance improvement (i.e., indicator data is useful to support decision-making and can be acted on to improve the PHC system).
  
2. Feasible
  - a. Baseline data for the indicator should be readily available or obtainable within the timeline required.
  - b. The value of the data for an indicator (including ongoing data collection and monitoring) should be greater than the burden (cost, personnel, etc.) of data collection.
  - c. Data should be available with appropriate frequency.
  
3. Credible:
  - a. Indicators should be both valid (accurately reflect the dimension of PHC system performance it is supposed to assess) and reliable (produce consistent results).
  - b. Indicators that are collected for sub-groups of the population should have sufficient coverage to ensure against misleading results (e.g., potential bias with a small population).
  - c. There should be a good evidence base to support the indicator or the indicator should be innovative and make a clear contribution to expanding/informing the evidence base.
  
4. Comparable:
  - a. Indicators should be comparable across people (e.g., sub-populations) and places (e.g., national, provincial, zone, or community level).
  - b. Indicators that reflect a small sample of the population or only part of the geographical area of the province should only be used if no other data source is available.
  - c. Indicator data should be comparable over time.
  - d. Where possible and appropriate, indicators that are comparable nationally and/or internationally should be selected.
  
5. Understandable:
  - a. Indicators should be understandable to a range of audiences.
  - b. Indicators should be straightforward to interpret, avoiding ambiguity about whether the performance being monitored has improved or deteriorated.

### DESCRIPTION OF THE MULTI-VOTING STAKEHOLDER PROCESS

A multi-voting process was used to narrow down the list of indicators to be included in this report from 95 to less than 30. This took place at a meeting of key stakeholders on Jan. 31, 2017. The process was as follows:

- The group used a “dotmocracy” process to conduct the voting, with those participating remotely submitting their votes via a poll on Lync or by typing in their choices if a poll was not feasible due to the number of options.
- Indicators were categorized by indicator type (input, activity, output, outcome), by function or enabler (i.e., the five functions and eight enablers represented in the Functions and Enablers of PHC document), and by Accreditation Canada domain (Accessibility, Appropriateness, Client-centred Services, Continuity, Efficiency, Population Focus, Safety, Worklife).
- The voting followed the structure of the PHC indicator framework, moving from inputs, to activities, to outputs, to outcomes.
- The **first round of voting** involved voting on any sub-groups with five or more indicators (e.g., input indicators for workforce, output indicators for accountability, etc.). Sub-groups with fewer than 5 indicators were not included in the first round of voting, only in the second round.
- There were six indicators that reflect the NSHA Key Performance Indicators (KPIs) that PHC is required to report on, so these indicators were not voted on and moved forward automatically.
- For the voting process, if selecting between 5 or fewer indicators, each person got 1 vote; if 6-10 indicators, 2 votes each; if 10-15 indicators, 3 votes each.
- The groups included in the first round of voting were:
  - Inputs: sub-groups reviewed and voted on in round 1:
    - Economic Conditions (6 indicators)
    - Quality, Safety and Risk (5 indicators)
    - Workforce (8 indicators)
  - Activities: included all 8 indicators in this group
  - Outputs: sub-groups reviewed and voted on in round 1:
    - Accountability (6 indicators)
    - Quality, Safety and Risk (5 indicators)
    - PHC delivery (13 indicators)
  - Outcomes: sub-groups reviewed and voted on in round 1:
    - PHC delivery (7 indicators)
    - Across functions (6 indicators)
- Round 1 voting on the specific sub-groups reduced the list from 95 to 61 indicators.
- The **second round of voting** brought all the indicators together for each type of indicator, i.e., all inputs, all outputs, all outcomes (all activity indicators were already voted on in the first round).
  - Indicators for inputs were reduced from 17 to 5 indicators.
  - Indicators for activities remained at 5 indicators (this group was not voted on again).
  - Indicators for outputs were reduced from 29 to 10 indicators.
  - Indicators for outcomes were reduced from 10 to 6 indicators.
- As part of this round of voting, the group also looked at the balance of indicators across domains (i.e., the functions and enablers) and in some cases decided to add indicators back in that had been removed during the voting process to ensure coverage of certain domains.
- The group also combined some indicators and suggested changes to the wording and categorization of some indicators.