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3 1 Title: The organization of primary health care services for those with chronic disease across
4 2 Newfoundland and Labrador: a descriptive analysis of publicly funded service provision

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1 ABSTRACT

2 **Background:** Newfoundland and Labrador has a rapidly aging population, poor health behaviours,
3 high rates of chronic disease, and a rural population, presenting a unique challenge to health care
4 delivery. The aim of this study is to describe the availability of publicly funded primary health care
5 programs and services delivered by regional health authorities across the province.

6 **Methods:** A descriptive analysis was performed on a cross-sectional provincial primary health care
7 survey. Survey data included location of site, disease-specific chronic disease prevention programming,
8 types of routine primary care, allied health prevention and promotion, chronic disease prevention and
9 management services, and team-based care. Mode of service delivery was identified for most programs
10 and services.

11 **Results:** Surveys were returned by 153 sites (99.4% response rate). Family physician services were
12 available at 66% (n=145) and nurse practitioner at 51% (n=144) of sites. Generally, many sites offered
13 screening for cervical (59.7%, n=144), colon (41.5%, n=142), and prostate cancers (42.6%, n=141),
14 and various self-management and education services. Allied health services, such as clinical nutritional
15 counselling (46.6%, n=146) and occupational therapy (46.3%, n=147) were frequently available.
16 Available health care services were most often offered by on-site staff members, while few used
17 telehealth. Overall, rural sites offered a greater variety of services, compared to urban.

18 **Interpretation:** There is considerable variability in the range of primary health care services available
19 across Newfoundland and Labrador, with limited delivery of some primary health care programs and
20 services. Future research should examine how availability of programs and services effects health
21 outcomes and costs.

1 INTRODUCTION

2 It is well-established that health systems with a strong primary health care sector achieve better
3 outcomes at lower cost (1). Primary health care is a critical component of quality health care delivery
4 for people with chronic disease (2,3). For Canadians, the most prevalent conditions include diabetes,
5 chronic obstructive pulmonary disease, ischemic heart disease, and cancer (4). It is estimated that
6 approximately 29% of Canadians have at least one chronic disease and 7% have two or more (4).¹
7 Prevalence of chronic disease in Newfoundland and Labrador is higher than the national average; close
8 to one third of the population has one or more chronic diseases and about 9% have two or more (4).
9 This burden on the provincial health care system is further challenged by high health care use and
10 hospitalization rates, and poor retention of primary health care providers, especially in rural and remote
11 communities (5,6).

12 To address the increasing prevalence of and costs associated with chronic diseases, Canada's
13 provinces and territories are reforming primary health care delivery and examining specific attributes
14 of primary health care systems that support or hinder high-quality care (7). The goal of the provincial
15 and territorial health care systems is to ensure patients have access to the care they need, when and
16 where they need it (8,9). National studies have indicated inequities in care between urban and rural
17 areas, with rural regions of the country reporting lower likelihood of accessing health care services,
18 attributed to greater barriers accessing care (e.g., travel times, greater cost) (10,11). As a result,
19 Canadians living in rural areas are more likely to report poorer health outcomes than their urban
20 counterparts. Given that approximately 50% of people in Newfoundland and Labrador reside in a rural
21 community (12), it is important to examine the primary health care attributes for populations living in

¹ One of five major chronic diseases, as identified by Canadian Community Health Survey (CCHS); cancer, diabetes, cardiovascular diseases (heart disease and/or stroke), chronic respiratory diseases (asthma and/or chronic obstructive pulmonary disease) and mood and anxiety disorders.

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3 1 different geographical settings. Therefore, the aim of this study is to describe the availability of primary
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5 2 health care programs and services provided by regional health authorities across Newfoundland and
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7 3 Labrador. Specifically, the objectives of this study are:

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9 4 (1) To describe the availability of primary health care programs and services for chronic diseases
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11 5 provided by regional health authorities across Newfoundland and Labrador, and

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14 6 (2) To examine differences in the nature of programs and services for chronic diseases provided by
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16 7 regional health authorities available in urban and rural regions of Newfoundland and Labrador.

18 8 **METHODS**

20 9 **Design**

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23 10 This study is a descriptive analysis performed on a cross-sectional provincial primary health
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25 11 care survey of publicly funded primary health care sites conducted by the Newfoundland and Labrador
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27 12 Centre for Health Information.

29 13 **Setting**

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32 14 Primary health care sites funded through regional health authorities in Newfoundland and
33
34 15 Labrador (i.e. Eastern Health, Central Health, Western Health, and Labrador-Grenfell Health)
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36 16 identified by the Primary Health Care Review Working Group were surveyed (n=154). A primary
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38 17 health care site was defined as any location that offered primary health care services (e.g. primary care,
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40 18 community support centres, mental health care). This sample represents publicly funded primary health
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42 19 care sites across the province. Privately funded sites, such as fee-for-service practices, are not
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44 20 represented in these data (comprise approximately 65% of physicians in Newfoundland and Labrador)
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46 21 (14).

48 22 **Source of Data**

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51 23 This survey was administered by the Newfoundland and Labrador Centre for Health
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53 24 Information, in partnership with the Department of Health and Community Services, Government of
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3 1 Newfoundland and Labrador. The goal of the survey was to identify primary health care services
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5 2 offered across the province. To develop the questionnaire, a working group was established by the
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7 3 Newfoundland and Labrador Centre for Health Information. This working group was chaired by an
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9 4 employee of the Newfoundland and Labrador Centre for Health Information and consisted of two
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11 5 members from each provincial regional health authority who were employed at the primary health care
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13 6 management-level and an additional representative from the Newfoundland and Labrador Department
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15 7 of Health and Community Services.

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18 8 The survey questionnaire consisted of 21 questions, distributed across 13 pages (Appendix 1).
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21 9 Responses to items on the questionnaire were categorical. For each program or service, respondents
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23 10 could indicate whether it was ‘not delivered’ or offered by ‘on-site personnel’, ‘a visiting health care
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25 11 professional’, or ‘telehealth’. Respondents could choose all delivery modes that applied, although
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27 responses were not mandatory. If a program or service was delivered by any mode, it was coded as
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29 12 “Delivered”. The survey was reviewed in detail by all members of the Primary Health Care Review
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31 13 Working Group for content and clarity and to ensure that the questions would have meaning for
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33 14 respondents within each regional health authority across the province.
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37 16 Data were collected from June 2015 to February 2016. A member of the Primary Health Care
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39 17 Review Working Group identified all primary health care sites in their region, as well as a
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41 18 representative at each site to complete the survey. An email was distributed by the chair to the
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43 19 representative, informing them they had been identified to complete the survey. The survey was
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45 20 voluntary, completed by the employee at their workplace. No incentives were offered. Representatives
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47 21 were sent instructions to complete the survey and a link to the site where the survey was hosted
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49 22 (SurveyMonkey). Each respondent was asked to indicate site name and address, ensuring there was
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51 23 only one response per site. Respondents were free to go back in the questionnaire and change answers
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53 24 as required.
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3 1 The survey collected data on site location, hours of operation, and details about primary health
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5 2 care programs and services delivered at the site (e.g., chronic disease prevention and management,
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7 3 prenatal and early child development, team-based care). Select variables from the survey were
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9 4 requested from the Newfoundland and Labrador Centre for Health Information for use within this
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11 5 study. Location of site was requested to analyze primary health care by rural/urban status. Data were
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14 6 also provided for types of routine primary care services (e.g., family physician, laboratory, and nurse
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16 7 practitioner services), chronic disease prevention and management services (e.g., cancer screening,
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18 8 diabetes education), and types of chronic disease prevention and management programming (e.g.,
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21 9 arthritis, hypertension).

22 23 10 **Statistical Analysis**

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25 11 Descriptive analyses were performed (RB) to determine percentages and frequencies of each
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27 12 response within each question. Sites missing responses for individual questions were removed from
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29 13 analyses of those questions but maintained for analyses where responses were present. This resulted in
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31 14 slightly different sample sizes for each question. Chi-square tests were performed to compare
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33 15 differences in responses between urban and rural sites.
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37 16 Rural/urban status was determined using standard geographical classification codes for the
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39 17 census subdivision in which the site was located. These census subdivision codes were grouped into
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41 18 statistical area classification (SAC), which indicates whether a census subdivision is part of a
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43 19 metropolitan area (CMA), census agglomeration (CA), census metropolitan influenced zone (MIZ), or
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45 20 neither. SAC types are ordered hierarchically, from 1 indicating the census subdivision is within a
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47 21 metropolitan area to 7 indicating a census subdivision outside of census metropolitan area or a census
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49 22 agglomeration area having no metropolitan influence (13). Sites with a SAC code of 1-3 (CMA or CA)
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51 23 were coded as 'urban' while those with a SAC code of four or greater were coded as 'rural' (13). This
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1 definition was developed by Statistics Canada and allows for national comparisons of study results.

2 IBM SPSS Statistics version 24 (IBM Corporation) was used for analysis.

3 **Ethics Approval**

4 This study was approved by the Newfoundland and Labrador Health Research Ethics Board.

5 **RESULTS**

6 The response rate was 99.4% (153/154 questionnaires returned). The completion rate was
7 96.7%; four returned questionnaires were missing responses to the majority of questions and therefore
8 excluded from the analysis. Position titles of respondents were site manager/site lead/director (69.3%,
9 n=106), nurse (17.0%, n=26), facilitator/coordinator (4.6%, n=7), executive (3.3%, n=5),
10 administrative personnel (2.6%, n=4), or other (3.3%, n=5). Most sites were classified as rural (75.2%).

11 **Description of Primary Health Care Services**

12 Table 1 displays types of routine primary care services delivered at or by primary health care
13 sites. Family physician services were available in 65.5% (n=145) of sites and nurse practitioners at
14 51.4% (n=144). Fewer sites had 24/7 emergency department (32.1%, n=140) or 24/7 primary care
15 services (32.1%, n=137) available. Table 2 shows allied health services available at primary health care
16 sites in Newfoundland and Labrador. Clinical nutritional counselling and education (46.6%, n=146)
17 and occupational therapy (46.3%, n=147) services were most commonly offered by sites; few sites
18 offered respiratory therapy (14.6%, n=144) or audiology (15.9%, n=145) services. Table 3 displays the
19 availability of chronic disease prevention and management services within primary health care sites.
20 Cancer screening services, such as cervical (59.7%, n=144), colon (41.5%, n=142), and prostate
21 (42.6%, n=141), were highly available across sites. Various education and self-management services
22 such as healthy eating (76.8%, n=138), tobacco cessation (74.3%, n=144), diabetes education (52.8%,
23 n=144), and a local self-management program titled “Improving Health My Way” (46.5%, n=142)
24 were offered by sites as well.

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3 1 Data for delivery by an on-site employee are included in Tables 1-3. Table 3 also includes data
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5 2 for visiting health care professional and telehealth delivery. Briefly, most programs and services were
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7 3 delivered by an on-site employee. This was followed by visiting health care professional and telehealth.

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9 4 Focused, team-based care was offered at 40.9% (n=149) of sites. Rural sites were more likely to
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11 5 offer team-based care (45.6% vs. 25.7%), although this difference was not significant. Table 4 shows
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13 6 types of team-based care offered at primary health care sites across Newfoundland and Labrador. For
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15 7 example, team-based care was available for diabetes education (20.8%, n=31), mental health and
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17 8 addictions (13.4%, n=20), and chronic disease prevention and management (12.2%, n=18). Data for
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19 9 targeted, disease-specific chronic disease prevention and management programming are available in
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21 10 Appendix 2.

22 23 24 25 11 **Availability of Services in Urban vs. Rural Sites**

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28 12 When comparing services available between urban and rural sites, generally a greater
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30 13 proportion of rural sites offered various primary health care programs and services than urban sites. A
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32 14 significantly greater percentage of rural sites offered family physician services (76.6% vs 29.4%,
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34 15 $p<0.001$), laboratory (47.7% vs. 27.3%. $p<0.05$), and 24-hour emergency department services (36.4%
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36 16 vs. 18.2%. $p<0.05$) compared to urban sites. A greater percentage of rural sites also reported offering
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38 17 speech and language pathologist services compared to urban sites (33.6% vs. 11.4%, $p<0.05$). No other
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40 18 significant differences regarding allied health services were found between urban and rural sites. In
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42 19 addition, a significantly greater percentage of respondents from primary health care sites in rural
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44 20 settings reported offering screening for prostate (50.0% vs. 18.2%; $p<0.01$), cervical (67.6% vs, 33.3%;
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46 21 $p<.001$), and colon (46.8% vs. 24.2%; $p\leq.05$) cancer, as well as cholesterol (53.7% vs. 30.3%; $p\leq.05$).
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48 22 Diabetes education services were reported to be offered at a greater percentage of rural sites (59.1% vs.
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50 23 32.4%; $p\leq.01$) while physical activity services were more often reported at urban sites (76.5% vs.
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52 24 57.8%; $p\leq.05$).

1 INTERPRETATION

2 The aim of this study was to describe the delivery of primary health care programs and services
3 by regional health authorities across Newfoundland and Labrador, and to examine differences in
4 availability of these programs and services between urban and rural regions of the province. Routine
5 primary health care services, cancer screening, and self-management and education services were
6 offered by the greatest proportion of sites. Findings indicate that regional health authority-funded rural
7 primary health care sites in Newfoundland and Labrador offer a greater variety of services when
8 compared to regional health authority-funded sites in urban areas. Furthermore, results suggest that
9 telehealth is underused for primary health care. Primary health care services, such as self-management
10 and education, and routine primary care services, such as family physician or nurse practitioner
11 services could be made more widely available through telehealth.

12 Although the study results describe the many primary health care services that were delivered in
13 Newfoundland and Labrador, this study does not offer evidence for how this affects the health of
14 people of the province. Typically, the health of people in rural communities, as compared to those in
15 urban communities, is worse (14–16). Furthermore, future studies should link data from this survey
16 with administrative health data sources (e.g., lab, hospitalization, emergency department visits) and
17 other health outcomes data, such as the Canadian Chronic Disease Surveillance System (CCDSS) or
18 Chronic Disease Registry, to determine the efficacy of primary health care services. Furthermore,
19 although the study results describe the types or locations of available services, they do not include rates
20 of access to or awareness of these services. Potential barriers to service access at these sites should also
21 be examined. It is expected that differences in access to primary health care services will be related to
22 differences in chronic disease outcomes. Identifying health system characteristics and other factors
23 associated with disease outcomes would offer direction for future health policy and health care system
24 reform.

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3 1 Of the sites examined in this study, most sites were considered rural (75.2%; n=115). A greater
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5 2 percentage of people living in Newfoundland and Labrador reside in rural communities (~50%),
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7 3 compared to the national average (~17%) (12,17). Newfoundland and Labrador's population is sparse
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9 4 and spread over a large geographic area, creating the need for many primary health care sites servicing
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11 5 small communities. Additionally, these sites may be the only health care site available to those in these
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13 6 communities; therefore, they may act as a "one-stop shop" for health care in these communities. This is
14
15 7 similar to Local Health Hubs proposed for communities in rural Ontario. This model ensures core
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17 8 services are offered by hubs (e.g. mental health and addictions, emergency, primary care) to ensure a
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19 9 comprehensive range of services are available (18). Through the offering of these core services,
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21 10 patients can access the care they need closer to home, thereby removing this barrier to health care and
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23 11 improve health outcomes for rural patients.
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28 12 Findings from this study confirm previous research on use of telehealth in Newfoundland and
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30 13 Labrador. Although telehealth has been available in Newfoundland and Labrador for more than 30
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32 14 years, the province has been slow to implement the delivery of primary health care services through
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34 15 telehealth (19,20). Telehealth services have potential to improve disease self-management and reduce
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36 16 disparities in health service access across rural communities (21,22). Although telehealth is used
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38 17 extensively at many rural sites in the province for specialist chronic disease management services, it
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40 18 appears to be underutilized in primary health care (5). Increased use of technology has the potential to
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42 19 improve access to primary health care services in the province.
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46 20 **Limitations**

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48 21 This study included all regional health authority funded primary health care sites. Services
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50 22 offered by non-regional health authority-funded employees, such as fee-for-service physicians, were
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52 23 not included. Fee-for-service physicians are more likely to work in urban Newfoundland and Labrador
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54 24 and it is very uncommon for these physicians to offer allied health services from their offices. This may
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3 1 account for some of the rural/urban disparity observed. This study addresses a major gap in
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5 2 Newfoundland and Labrador about the availability of primary health care services/programs and sets
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7 3 the foundation for future studies to examine primary care services offered by all primary health care
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9 4 sites, including fee-for-service.

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12 5 The data collection tool used in this study presented some limitations including lack of testing
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14 6 for psychometric properties. Rather, the questionnaire was descriptive in nature and the working group
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16 7 developed each item ensuring that it would be relevant to respondents across all regional health
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18 8 authorities. The questionnaire used in this study asked participants to indicate whether the service was
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20 9 delivered at the site (yes/no) and the mode of delivery. Data do not indicate whether the services are
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22 10 regularly accessed by patients or how health care professionals are offering services to their patients.
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24 11 Future studies should examine whether patients are aware of these services, whether they are accessible
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26 12 and how frequently services are accessed.

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30 13 Strengths of this survey include the high response rate (96.7%), that it includes virtually all
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32 14 regional health authority-funded primary health care sites, as well as the breadth of details captured
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34 15 through the survey. This is the first known provincial survey to capture details regarding primary health
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36 16 care services in the province and provides timely and relevant information to inform current primary
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38 17 health care reform initiatives.

41 18 **Conclusion**

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44 19 The results of this study suggest that there is variability in the availability and nature of primary
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46 20 health care services across the province, with a greater proportion of rural sites offering programs and
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48 21 services compared to urban sites. Considering that half of the people of Newfoundland and Labrador
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50 22 live in rural communities (12,17), it may be that these sites must act as a “one-stop-shop” for health
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52 23 care. This description of primary health care programs and services in Newfoundland and Labrador
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54 24 indicates areas of health care delivery in need of optimization and is an important first step for future
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1 health care policy and reform. Future research is needed to determine which components of primary
2 health care are associated with improvements in chronic disease prevalence and outcomes.

Confidential

FOOTNOTES

Competing interests: None declared.

Contributors: All of the authors were involved in the concept and design of the study. Julia Lukewich acquired the data. Richard Buote performed the data analysis and all authors contributed to data interpretation. Richard Buote drafted the manuscript, which all authors critically revised for intellectual content. All of the authors gave final approval of the version to be published and agreed to be accountable for all aspects of the work.

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ABSTRACT

Background: Newfoundland and Labrador has a rapidly aging population, poor health behaviours, high rates of chronic disease, and a rural population, presenting a unique challenge to health care

delivery. The aim of this study is to describe the availability of publicly funded primary health care programs and services delivered by regional health authorities across Newfoundland and Labrador the province.

Methods: A descriptive analysis was performed on a cross-sectional provincial primary health care survey. Survey data included location of site, disease-specific chronic disease prevention programming, types of routine primary care, allied health prevention and promotion, chronic disease prevention and management services, and team-based care. Mode of service delivery was identified for most programs and services.

Results: Surveys were returned by 153 sites (99.4% response rate). Family physician services were available at 66% (n=145) and nurse practitioner at 51% (n=144) of sites. Generally, many sites offered screening for cervical (59.7%, n=144), colon (41.5%, n=142), and prostate cancers (42.6%, n=141), and various self-management and education services. Allied health services, such as clinical nutritional counselling (46.6%, n=146) and occupational therapy (46.3%, n=147) were frequently available.

Available health care services were most often offered by on-site staff members, while few used telehealth. Overall, rural sites offered a greater variety of services, as compared to urban sites.

Interpretation: There is considerable variability in the range of primary health care services available across Newfoundland and Labrador, with limited delivery of some primary health care programs and services. Future research should examine how availability of these programs and services effects health outcomes and costs, in Newfoundland and Labrador.

INTRODUCTION

It is well-established that health systems with a strong primary health care sector achieve better outcomes at lower cost (1). Primary health care is a critical component of quality health care delivery for people with chronic disease (2,3). For Canadians, the most prevalent conditions include diabetes, chronic obstructive pulmonary disease, COPD, ischemic heart disease, and cancer (4). Further, it is estimated that approximately 29% of Canadians have at least one chronic disease and 7% have two or more (4).¹ Prevalence of chronic disease in Newfoundland and Labrador is higher than the national average; close to one third of the population has one or more chronic diseases and about 9% have two or more (4). This burden on the provincial health care system is further challenged by high health care use and hospitalization rates, and poor retention of primary health care providers, especially in rural and remote communities (5,6).

To address the increasing prevalence of and costs associated with chronic diseases, Canada's provinces and territories are reforming primary health care delivery and examining specific attributes of primary health care systems that support or hinder high-quality care (7). The goal of the provincial and territorial health care systems is to ensure patients have access to the care they need; when and where they need it (8,9). National studies have indicated inequities in care between urban and rural areas, with rural regions of the country reporting lower likelihood of accessing health care services, attributed to greater barriers accessing care (e.g., travel times, greater cost) (10,11). As a result, Canadians living in rural areas are more likely to report poorer health outcomes than their urban counterparts. Given that approximately 50% of people in Newfoundland and Labrador reside in a rural

¹ One of five major chronic diseases, as identified by Canadian Community Health Survey (CCHS); cancer, diabetes, cardiovascular diseases (heart disease and/or stroke), chronic respiratory diseases (asthma and/or chronic obstructive pulmonary disease) and mood and anxiety disorders.

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3 1 community (12), it is important to examine the primary health care attributes for populations living in
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5 2 different geographical settings. ~~Although one study conducted in Western Newfoundland has indicated~~
6
7 3 ~~difficulties with individuals accessing primary health care services (18), to this point no study has~~
8
9 4 ~~established the availability and nature of primary health care services across the province as a whole.~~

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12 5 Therefore, the aim of this study is to describe the availability of primary health care programs and
13
14 6 services provided by regional health authorities across Newfoundland and Labrador. Specifically, the
15
16 7 objectives of this study are:

17
18 8 (1) To describe the availability of primary health care programs and services for chronic diseases
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20
21 9 provided by regional health authorities across Newfoundland and Labrador, and

22
23 10 (2) To examine differences in the nature of programs and services for chronic diseases provided by
24
25 11 regional health authorities available in urban and rural regions of Newfoundland and Labrador.

26 12 **METHODS**

27 13 **Design**

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29
30 14 This study is a descriptive analysis performed on a cross-sectional provincial primary health
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32
33 15 care survey of publicly funded primary health care sites conducted by the Newfoundland and Labrador
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35 16 Centre for Health Information. ~~This study was approved by the Newfoundland and Labrador Health~~
36
37 17 ~~Research Ethics Board.~~

38 18 **Setting**

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41 19 Primary health care sites funded through regional health authorities in Newfoundland and
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43
44 20 Labrador (i.e. Eastern Health, Central Health, Western Health, and Labrador-Grenfell Health)
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46
47 21 identified by the Primary Health Care Review Working Group were surveyed (n=154). A primary
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49
50 22 health care site was defined as any location that offered primary health care services (e.g. primary care,
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53 23 community support centres, mental health care). ~~Although~~ This sample represents all publicly funded
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55 24 primary health care sites across the province. ~~any~~ Privately funded sites, such as fee-for-service

1 ~~practices, are not represented in these data (comprise . For example, A~~ approximately 65% of
2 ~~physicians in Newfoundland and Labrador) are privately funded~~ paid from a fee-for-service model and
3 ~~practice in private offices and therefore are not included in these data~~ (14).

4 **Source of Data**

5 This survey was administered by the Newfoundland and Labrador Centre for Health
6 Information, ~~in partnership with the Department of Health and Community Services, Government of~~ of
7 ~~Newfoundland and Labrador. The goal of the survey was to with the goal of~~ identifying primary health
8 care services offered across the province. To develop the questionnaire, a working group was
9 established by the Newfoundland and Labrador Centre for Health Information. This working group was
10 chaired by an employee of the Newfoundland and Labrador Centre for Health Information and
11 consisted of two members from each provincial regional health authority who were employed at the
12 primary health care management-level and an additional representative from the Newfoundland and
13 Labrador Department of Health and Community Services.

14 The survey questionnaire consisted of 21 questions, distributed across 13 pages (Appendix 1).
15 Responses to items on the questionnaire were categorical. For each program or service, respondents
16 could indicate whether it was ‘not delivered’ or offered by ‘on-site personnel’, ‘a visiting health care
17 professional’, or ‘telehealth’. Respondents could choose all delivery modes that applied, although
18 responses were not mandatory. If a program or service was delivered by any mode, it was coded as
19 “Delivered”. The survey was reviewed in detail by all members of the Primary Health Care Review
20 Working Group for content and clarity and to ensure that the questions would have meaning for
21 respondents within each regional health authority across the province.

22 Data were collected from June 2015 to February 2016. ~~In an effort to sample the entire~~
23 ~~population, A~~ A member of the Primary Health Care Review Working Group identified all primary
24 health care sites in their region, as well as a representative at each site to complete the survey. An email

1 was distributed by the chair to the representative, informing them they had been identified to complete
2 the survey. The survey was voluntary, completed by the employee at their workplace. No incentives
3 were offered. Representatives were sent instructions to complete the survey and a link to the site where
4 the survey was hosted (SurveyMonkey). Each respondent was asked to indicate site name and address,
5 ensuring there was only one response per site. Respondents were free to go back in the questionnaire
6 and change answers as required.

7 The survey collected data on site location, hours of operation, and details about primary health
8 care programs and services delivered at the site (e.g., chronic disease prevention and management,
9 prenatal and early child development, team-based care). Select variables from the survey were
10 requested from the Newfoundland and Labrador Centre for Health Information for use within this
11 study. Location of site was requested to analyze primary health care by rural/urban status. Data were
12 also provided for types of routine primary care services (e.g., family physician, laboratory, and nurse
13 practitioner services), chronic disease prevention and management services (e.g., cancer screening,
14 diabetes education), and types of chronic disease prevention and management programming (e.g.,
15 arthritis, hypertension).

16 **Statistical Analysis**

17 Descriptive analyses were performed (RB) to determine percentages and frequencies of each
18 response within each question. Sites missing responses for individual questions were removed from
19 analyses of those questions but maintained for analyses where responses were present. This resulted in
20 slightly different sample sizes for each question. Chi-square tests were performed to compare
21 differences in responses between urban and rural sites.

22 Rural/urban status was determined using standard geographical classification codes for the
23 census subdivision in which the site was located. These census subdivision codes were grouped into
24 statistical area classification (SAC), which indicates whether a census subdivision is part of a

1 metropolitan area (CMA), census agglomeration (CA), census metropolitan influenced zone (MIZ), or
2 neither. SAC types are ordered hierarchically, from 1 indicating the census subdivision is within a
3 metropolitan area to 7 indicating a census subdivision outside of census metropolitan area or a census
4 agglomeration area having no metropolitan influence (13). Sites with a SAC code of 1-3 (CMA or CA)
5 were coded as 'urban' while those with a SAC code of four or greater were coded as 'rural' (13). This
6 definition was developed by Statistics Canada and allows for national comparisons of study results.

7 IBM SPSS Statistics version 24 (IBM Corporation) was used for analysis.

8 **Ethics Approval**

9 This study was approved by the Newfoundland and Labrador Health Research Ethics Board.

10 **RESULTS**

11 The response rate was 99.4% (n=153/-out of 154 questionnaires returned); however, fThe
12 completion rate was 96.7%; four returned questionnaires were missing responses to the majority of
13 questions and therefore excluded from the analysis. incomplete not completed to the final page
14 (i.e., completion rate 149/153, 96.7% answer to one or more questions missing; 96.7% complete,
15 n=149). Position titles of respondents were site manager/site lead/director (69.3%, n=106), nurse
16 (17.0%, n=26), facilitator/coordinator (4.6%, n=7), executive (3.3%, n=5), administrative personnel
17 (2.6%, n=4), or other (3.3%, n=5). Most sites were classified as rural (75.2%).

18 **Description of Primary Health Care Services**

19 Table 1 displays types of routine primary care services delivered at or by primary health care
20 sites. Family physician services were available in 65.5% (n=145) of sites and nurse practitioners at
21 51.4% (n=144). Fewer sites had 24/7 emergency department (32.1%, n=140) or 24/7 primary care
22 services (32.1%, n=137) available. Table 2 shows allied health services available at primary health care
23 sites in Newfoundland and Labrador. Clinical nutritional counselling and education (46.6%, n=146)
24 and occupational therapy (46.3%, n=147) services were most commonly offered by sites; few sites

1
2
3 1 offered respiratory therapy (14.6%, n=144) or audiology (15.9%, n=145) services. Table 3 displays the
4
5 2 availability of chronic disease prevention and management services within primary health care sites.
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7 3 Cancer screening services, such as cervical (59.7%, n=144), colon (41.5%, n=142), and prostate
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9 4 (42.6%, n=141), were highly available across sites. Various education and self-management services
10
11 5 such as healthy eating (76.8%, n=138), tobacco cessation (74.3%, n=144), diabetes education (52.8%,
12
13 n=144), and a local self-management program titled “Improving Health My Way” (46.5%, n=142)
14
15 6 were offered by sites as well.
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17 7

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19 8 Data for delivery by an on-site employee are included in Tables 1-3. Table 3 also includes data
20
21 9 for visiting health care professional and telehealth delivery. Briefly, most programs and services were
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23 10 delivered by an on-site employee. This was followed by visiting health care professional and telehealth.
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26 11 Focused, team-based care was offered at 40.9% (n=149) of sites. Rural sites were more likely to
27
28 12 offer team-based care (45.6% vs. 25.7%), although this difference was not significant. Table 4 shows
29
30 13 types of team-based care offered at primary health care sites across Newfoundland and Labrador. For
31
32 14 example, team-based care was available for diabetes education (20.8%, n=31), mental health and
33
34 15 addictions (13.4%, n=20), and chronic disease prevention and management (12.2%, n=18). Data for
35
36 16 targeted, disease-specific chronic disease prevention and management programming are available in
37
38 17 Appendix 2.
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41 18 **Availability of Services in Urban vs. Rural Sites**

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44 19 When comparing services available between urban and rural sites, generally a greater
45
46 20 proportion of rural sites offered various primary health care programs and services than urban sites. A
47
48 21 significantly greater percentage of rural sites offered family physician services (76.6% vs 29.4%,
49
50 22 $p<0.001$), laboratory (47.7% vs. 27.3%. $p<0.05$), and 24-hour emergency department services (36.4%
51
52 vs. 18.2%. $p<0.05$) compared to urban sites. A greater percentage of rural sites also reported offering
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54 23 speech and language pathologist services compared to urban sites (33.6% vs. 11.4%, $p<0.05$). No other
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3 1 significant differences regarding allied health services were found between urban and rural sites. In
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5 2 addition, a significantly greater percentage of respondents from primary health care sites in rural
6
7 3 settings reported offering screening for prostate (50.0% vs. 18.2%; $p < 0.01$), cervical (67.6% vs, 33.3%;
8
9 4 $p < .001$), and colon (46.8% vs. 24.2%; $p \leq .05$) cancer, as well as cholesterol (53.7% vs. 30.3%; $p \leq .05$).
10
11
12 5 Diabetes education services were reported to be offered at a greater percentage of rural sites (59.1% vs.
13
14 6 32.4%; $p \leq .01$) while physical activity services were more often reported at urban sites (76.5% vs.
15
16 7 57.8%; $p \leq .05$).

18 8 **INTERPRETATION**

20
21 9 The aim of this study was to describe the delivery of primary health care programs and services
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23 10 by regional health authorities across Newfoundland and Labrador, and to examine differences in
24
25 11 availability of these programs and services between urban and rural regions of the province. Routine
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27
28 12 primary health care services, cancer screening, and self-management and education services were
29
30 13 offered by the greatest proportion of sites. Findings indicate that regional health authority-funded rural
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32 14 primary health care sites in Newfoundland and Labrador offer a greater variety of services when
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34
35 15 compared to regional health authority-funded sites in urban areas. Furthermore, results suggest that
36
37 16 telehealth is underused for primary health care. Primary health care services, such as self-management
38
39 17 and education, and routine primary care services, such as family physician or nurse practitioner
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41
42 18 services could be made more widely available through telehealth.

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44 19 Although the study results describe the many primary health care services that were delivered in
45
46 20 Newfoundland and Labrador, this study does not offer evidence for how this affects the health of
47
48 21 people of the province. Typically, the health of people in rural communities, as compared to those in
49
50
51 22 urban communities, is worse (14–16). Furthermore, future studies should link data from this survey
52
53 23 with administrative health data sources (e.g., lab, hospitalization, emergency department visits) and
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55 24 other health outcomes data, such as the Canadian Chronic Disease Surveillance System (CCDSS) or

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3 1 Chronic Disease Registry, to determine the efficacy of primary health care services. Furthermore,
4
5 2 although the study results describe the types or locations of available services, they do not include rates
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7 3 of access to or awareness of these services. Potential barriers to service access at these sites should also
8
9 4 be examined. It is expected that differences in access to primary health care services will be related to
10
11 5 differences in chronic disease outcomes. Identifying health system characteristics and other factors
12
13 6 associated with disease outcomes would offer direction for future health policy and health care system
14
15 7 reform.

18 8 Of the sites examined in this study, most sites were considered rural (75.2%; n=115). A greater
19
20 9 percentage of people living in Newfoundland and Labrador reside in rural communities (~50%),
21
22 10 compared to the national average (~17%) (12,17). Newfoundland and Labrador's population is sparse
23
24 11 and spread over a large geographic area, creating the need for many primary health care sites servicing
25
26 12 small communities. Additionally, these sites may be the only health care site available to those in these
27
28 13 communities; therefore, they may act as a "one-stop shop" for health care in these communities. This is
29
30 14 similar to Local Health Hubs proposed for communities in rural Ontario. This model ensures core
31
32 15 services are offered by hubs (e.g. mental health and addictions, emergency, primary care) to ensure a
33
34 16 comprehensive range of services are available (18). Through the offering of these core services,
35
36 17 patients can access the care they need closer to home, thereby removing this barrier to health care and
37
38 18 improve health outcomes for rural patients.

43
44 19 Findings from this study confirm previous research on use of telehealth in Newfoundland and
45
46 20 Labrador. Although telehealth has been available in Newfoundland and Labrador for more than 30
47
48 21 years, the province has been slow to implement the delivery of primary health care services through
49
50 22 telehealth (19,20). Telehealth services have potential to improve disease self-management and reduce
51
52 23 disparities in health service access across rural communities (21,22). Although telehealth is used
53
54 24 extensively at many rural sites in the province for specialist chronic disease management services, it
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1
2
3 1 appears to be underutilized in primary health care (5). Increased use of technology has the potential to
4
5 2 improve access to primary health care services in the province.

6 7 3 **Limitations**

8
9 4 This study included all regional health authority funded primary health care sites. Services
10
11 5 offered by non-regional health authority-funded employees, such as fee-for-service physicians, were
12
13 6 not included. Fee-for-service physicians are more likely to work in urban Newfoundland and Labrador
14
15 7 and it is very uncommon for these physicians to offer allied health services from their offices. This may
16
17 8 account for some of the rural/urban disparity observed. This study addresses a major gap in
18
19 9 Newfoundland and Labrador about the availability of primary health care services/programs and sets
20
21 10 the foundation for future studies to examine primary care services offered by all primary health care
22
23 11 sites, including fee-for-service.

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28 12 The data collection survey tool used in this study presented some limitations including lack of
29
30 13 testing for psychometric properties. First, the tool was not validated. This may have contributed to the
31
32 14 amount of missing data and varying sample sizes. Second, the tool was not tested for psychometric
33
34 15 properties. Instead, rather, the questionnaire survey was descriptive in nature and the working group
35
36 16 developed each item ensuring that it would be relevant to respondents across all regional health
37
38 17 authorities. questions were developed by the working group, ensuring questions would be meaningful
39
40 18 for employees in their regions. Finally, the questionnaire used in this study asked participants to
41
42 19 indicate whether the service was delivered at the site (yes/no) and the mode of delivery. Data do not
43
44 20 indicate whether the services are regularly accessed by patients or how health care professionals are
45
46 21 offering services to their patients. Future studies should examine whether patients are aware of these
47
48 22 services, whether they are accessible and how frequently services are accessed.

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52
53 23 Strengths of this survey include the high response rate (96.7%), that it includes virtually all
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55 24 regional health authority-funded primary health care sites, as well as the breadth of details captured

1
2
3 1 through the survey. This is the first known provincial survey to capture details regarding primary health
4
5 2 care services in the province and provides timely and relevant information to inform current primary
6
7 3 health care reform initiatives.

9 4 **Conclusion**

11
12 5 The results of this study suggest that there is variability in the availability and nature of primary
13
14 6 health care services across the province, with a greater proportion of rural sites offering programs and
15
16 7 services compared to urban sites. Considering that half of the people of Newfoundland and Labrador
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18 8 live in rural communities (12,17), it may be that these sites must act as a “one-stop-shop” for health
19
20
21 9 care. This description of primary health care programs and services in Newfoundland and Labrador
22
23 10 indicates areas of health care delivery in need of optimization and is an important first step for future
24
25
26 11 health care policy and reform. Future research is needed to determine which components of primary
27
28 12 health care are associated with improvements in chronic disease prevalence and outcomes.

FOOTNOTES

Competing interests: None declared.

Contributors: All of the authors were involved in the concept and design of the study. Julia Lukewich acquired the data. Richard Buote performed the data analysis and all authors contributed to data interpretation. Richard Buote drafted the manuscript, which all authors critically revised for intellectual content. All of the authors gave final approval of the version to be published and agreed to be accountable for all aspects of the work.

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Table 1. Types of routine primary care services delivered at or by PHC site by urban/rural status, n (%).¹

	Nurse Practitioner Services n=144	Family Physician Services n=145	X-Ray Services n=141	Laboratory Services n=142	24/7 Emergency Department Services n=140	24/7 Primary Care Services n=137
Delivered	74 (51.4)	95 (65.5)***	42 (29.8)	61 (43.0)*	45 (32.1)*	44 (32.1)
Urban	14 (40.0)	10 (29.4)	6 (18.8)	9 (27.3)	6 (18.2)	7 (21.2)
Rural	60 (55.0)	85 (76.6)	36 (33.0)	52 (47.7)	39 (36.4)	37 (35.6)
On-site delivery ²	59 (79.7)	63 (66.3)	41 (97.6)	55 (90.2)	44 (97.8)	43 (97.7)
Urban	13 (92.9)	6 (60.0)	6 (100.0)	8 (88.8)	6 (100.0)	7 (100.0)
Rural	46 (76.7)	57 (67.1)	35 (97.2)	47 (90.4)	38 (84.4)	36 (97.3)

* p ≤ .05

*** p < 0.001

Confidential

¹ Sample sizes differ between tables due to differing response rates of each question.² Data shown for delivery by an on-site employee. If not delivered by on-site employee, service was delivered by visiting health care professional or telehealth.

Table 2. Types of Allied Health Prevention and Promotion Services delivered at or by PHC site by urban/rural status, n (%).

	Audiology n=145	Occupational Therapy n=147	Injury Prev. & Education n=141	Clin. nutritional counselling/ Education n=146	Physiotherapy n=147	Recreation Therapy n=144	Respiratory Therapy n=144	Speech Lang. Path n=145
Delivered	23 (15.9)	68 (46.3)	56 (39.7)	68 (46.6)	45 (30.6)	23 (16.0)	21 (14.6)	41 (28.3)*
Urban	4 (11.8)	15 (42.9)	14 (41.2)	17 (48.6)	11 (31.4)	8 (22.2)	5 (14.7)	4 (11.4)
Rural	19 (17.1)	53 (47.3)	42 (39.3)	51 (45.9)	34 (30.4)	15 (13.9)	16 (14.5)	37 (33.6)
On-site delivery	10 (43.5)*	31 (45.6)***	33 (58.9)	41 (60.3)	25 (55.6)*	19 (82.6)	12 (57.1)	16 (39.0)**
Urban	4 (100.0)	13 (86.7)	11 (78.6)	12 (70.6)	9 (81.8)	7 (87.5)	4 (80.0)	4 (100.0)
Rural	6 (31.6)	18 (34.0)	22 (52.4)	29 (56.9)	16 (47.1)	12 (80.0)	8 (50.0)	12 (32.4)

* p ≤ .05
 ** p < 0.01
 *** p < 0.001

Confidential

Table 3. Types of chronic disease prevention and management services delivered at or by PHC site by urban/rural status, n (%)

	Blood Pressure n=143	Breast Screening n=142	Cervical Screening n=144	Colon Screening n=142	Prostate Screening n=141	Cholesterol Screening n=141	Improving Health My Way n=142	Self- management n=141
Delivered	96 (67.1)	66 (46.5)	86 (59.7)***	59 (41.5)*	60 (42.6)**	68 (48.2)*	66 (46.5)	52 (36.9)
Urban	20 (58.8)	11 (33.3)	11 (33.3)	8 (24.2)	6 (18.2)	10 (30.3)	12 (36.4)	12 (34.3)
Rural	76 (69.7)	55 (50.5)	75 (67.6)	51 (46.8)	54 (50.0)	58 (53.7)	54 (49.5)	40 (37.7)
On-site delivery	83 (86.5)	56 (84.8)	71 (82.6)	55 (93.2)	50 (83.3)	56 (82.4)	37 (56.1)	37 (71.2)
Urban	17 (85.0)	10 (90.9)	10 (90.9)	8 (100.0)	6 (100.0)	8 (80.0)	7 (58.3)	9 (75.0)
Rural	66 (86.8)	46 (83.6)	61 (81.3)	47 (92.2)	44 (81.5)	48 (82.8)	30 (55.6)	28 (70.0)
Telehealth	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.5)	2 (3.0)	2 (3.8)
Urban	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Rural	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.7)	2 (3.7)	2 (5.0)

	Diabetes Education n=144	Foot Assessment n=138	Healthy Eating n=138	Heart Failure n=139	Injury Prevention n=142	Obesity Mgmt. n=138	Physical Activity n=143	Tobacco Cessation n=144
Delivered	76 (52.8)**	78 (56.5)	106 (76.8)	33 (23.7)	70 (49.3)	35 (25.4)	89 (62.2)*	107 (74.3)
Urban	11 (32.4)	14 (42.4)	25 (75.8)	7 (21.2)	17 (51.5)	6 (18.2)	26 (76.5)	28 (82.4)
Rural	65 (59.1)	64 (61.0)	81 (77.1)	26 (24.5)	53 (48.6)	29 (27.6)	63 (57.8)	79 (71.8)
On-site delivery	61 (80.3)	66 (84.6)	85 (80.2)	20 (60.6)	56 (80.0)	25 (71.4)	74 (83.1)	90 (84.1)
Urban	9 (81.8)	12 (85.7)	22 (88.0)	5 (71.4)	15 (88.2)	5 (83.3)	24 (92.3)	24 (85.7)
Rural	52 (80.0)	54 (84.4)	63 (77.8)	15 (57.7)	41 (77.4)	20 (69.0)	50 (79.4)	66 (83.5)
Telehealth	8 (10.5)	0 (0.0)	2 (1.9)	2 (6.1)	0 (0.0)	1 (2.9)	0 (0.0)	1 (0.9)
Urban	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Rural	8 (12.3)	0 (0.0)	2 (2.5)	2 (7.7)	0 (0.0)	1 (3.4)	0 (0.0)	1 (1.3)

* p ≤ .05

** p < 0.01

*** p < 0.001

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Table 4. Types of focused, team-based care delivered at PHC site, n (%)

Type of team-based care (n = 149)	
Diabetes Care & Education	31 (20.8)
Mental Health and Addictions	20 (13.4)
Chronic Disease Prevention & Management	18 (12.2)
Childhood Development, Intellectual and Physical Disabilities	14 (9.4)
Primary Health Care	11 (7.4)
Cancer Care & Screening	9 (6.0)
Rehabilitative Care	7 (4.7)
Acute/Emergency Care	6 (4.0)
Home and Community Care	6 (4.0)
Long Term Care Services/Placements	6 (4.0)
Respiratory Chronic Disease Management	6 (4.0)
Allied Health Care	5 (3.4)
Community Support	5 (3.4)
Palliative Care	5 (3.4)
Public Health	5 (3.4)
Autism Care	3 (2.0)
Individual Support Services Program	3 (2.0)
Refugee Health	3 (2.0)
Sexual Health	3 (2.0)
Social Services	3 (2.0)
Community Advisory Committee	2 (1.3)
Community Care	2 (1.3)
Discharge Planning	2 (1.3)
Dressing Clinic	2 (1.3)
FASD Care	2 (1.3)
Orthopedic Clinic	2 (1.3)
Other ^a	7 (4.7)

^aHematology, inpatient care team, interim care, medical day care, mentoring students, occupational health, preadmission clinic

Survey Information

This survey is designed to gather information on the delivery of primary health care services across the province of Newfoundland and Labrador. We are interested in the number of primary health care sites operating across the province, the services delivered by those sites, and how and by whom services are delivered. We are also interested in the ways in which RHA primary health care providers collaborate with each other and with other non-RHA primary health care providers.

For the purposes of this survey, primary health care can be defined as the day-to-day services and supports needed to protect, maintain or restore our health. For most people, it is both their first point of contact with the health care system and the health services they use most often. Primary health care can include interactions with providers such as community volunteers, counsellors, health educators, family doctors, occupational therapists, pharmacists, registered nurses, social workers, and others. It includes services that promote health and wellness, prevent illness, treat health issues or injuries, and diagnose and manage chronic health conditions. While primary health care may take place at health care facilities such as health centres or hospitals, primary health care is *not the specialized medical services* received in a health care facility like a hospital or a cancer clinic.

In this survey, a "primary health care site" is defined as a physical location (such as a community office, health centre or hospital) where primary care or primary health care services are offered by RHA staff. These services may be delivered by telehealth, on-site staff, or visiting staff. This definition of a primary health care site excludes stand-alone long-term care facilities.

This survey has been developed by the Newfoundland and Labrador Centre for Health Information in collaboration with the Department of Health and Community Services and the Primary Health Care Review Working Group. The results of this survey will be used in a larger report on the organization of primary health care services in Newfoundland and Labrador. If you have any questions while you are completing this survey, or if you require any technical assistance, please contact:

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or

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Confidential

Respondent Information

This section is designed to gather information about your position title and responsibilities.

1. What is your position title? (e.g. Site Coordinator)

2. What are the primary responsibilities of your position? (check any that apply)

- Oversight of all site operations
- Oversight of some site operations
- Oversight of some regional operations/programs
- Oversight of some on-site primary health care providers
- Oversight of all on-site primary health care providers
- Oversight of some regional primary health care providers
- Clinical duties

Other (please specify)

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Site Information

This section is designed to gather specific information about your primary health care site, including the location and hours of operation of your site as well as the communities serviced by your site.

3. Please indicate the name and location of the site that you are reporting on.

Site name:

Site address:

Site city/town:

4. Which of the following best describes your primary health care site:

- The site I am reporting on offers only primary health care.
- The site I am reporting on offers primary health care services and some medical specialist services (e.g. visiting physician specialists).
- The site I am reporting on offers primary health care services, medical specialist services, and tertiary-level care.

5. Please enter your site hours (Emergency and non-Emergency) for each day of a typical week (e.g. 9:00am to 4:00pm). If different services at your site operate during different hours, please indicate hours for each service and separate your entries with a semi-colon (e.g. "diabetes education, 9:00am-12:00pm; outpatient clinics, 9:00am-8:00pm; all other services, 9:00am-4:30pm"). You will have been provided with a reference list of primary health care services to complete this survey. If you have not been provided with a reference list of services, please contact janelle.hippe@nlchi.nl.ca or melody.sorenson@nlchi.nl.ca to obtain one.

Note that if a service at your site is only provided through Emergency (for example, if a nurse practitioner is working at your site, but works only in Emergency), then for the purposes of this survey, that service is considered an Emergency service.

Monday (non-Emergency hours):

Monday (Emergency hours):

Tuesday (non-Emergency hours):

Tuesday (Emergency hours):

Wednesday (non-Emergency hours):

Wednesday (Emergency hours):

Thursday (non-Emergency hours):

Thursday (Emergency hours):

Friday (non-Emergency hours):

Friday (Emergency hours):

Saturday (non-Emergency hours):

Saturday (Emergency hours):

Sunday (non-Emergency hours):

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6. Please indicate the Regional Health Authority responsible for your site.

- Eastern Regional Health Authority
- Central Regional Health Authority
- Western Regional HealthyAuthority
- Labrador-Grenfell Regional Health Authority

Confidential

Eastern Health Region Community List

Please check all of the communities serviced by your site.

- All communities in the Eastern Regional Health Authority
- All communities in the Province
- Admiral's Beach
- Admiral's Cove
- Aquaforte
- Arnold's Cove
- Arnold's Cove Station
- Avondale
- Baine Harbour
- Bareneed
- Bauline
- Bay Bulls
- Bay de Verde
- Bay L'Argent
- Bay Roberts
- Beau Bois
- Bell Island
- Bellevue
- Bellevue Beach
- Big Barachois
- Birchy Cove
- Biscay Bay
- Bishop's Cove
- Black River
- Blaketown
- Bloomfield
- Boat Harbour

- 1 Branch
- 2
- 3 Brigus
- 4
- 5 Brigus Junction
- 6
- 7 Brigus South
- 8
- 9 Bristol's Hope
- 10
- 11 Broad Cove
- 12
- 13 Brooklyn
- 14
- 15 Brookside
- 16
- 17 Brownsdale
- 18
- 19 Bryant's Cove
- 20
- 21 Bunyan's Cove
- 22
- 23 Burgoynes Cove
- 24
- 25 Burin
- 26
- 27 Burin Bay Arm
- 28
- 29 Burnt Point
- 30
- 31 Butler Cove
- 32
- 33 Calvert
- 34
- 35 Canning's Cove
- 36
- 37 Cape Broyle
- 38
- 39 Caplin Cove/Low Point
- 40
- 41 Caplin/Southport
- 42
- 43 Carbonear
- 44
- 45 Catalina
- 46
- 47 Cavendish
- 48
- 49 Champney's West
- 50
- 51 Chance Cove
- 52
- 53 Chapel Arm
- 54
- 55 Chapel Cove
- 56
- 57 Charleston
- 58
- 59 Charlottetown
- 60
- 61 Clarenville

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- Clarke's Beach
- Clifton
- Colley's Point South
- Colinet
- Colliers
- Come By Chance
- Conception Bay South
- Conception Harbour
- Creston
- Creston North
- Cupids
- Cuslett
- Daniel's Cove
- Deer Park/Vineland Road
- Dildo
- Dunfield
- Duntara
- Elliston
- English Harbour East
- English Harbour, Trinity Bay
- Epworth Great Salmonier
- Fairhaven
- Fermeuse
- Ferryland
- Flatrock
- Forest Field-New Bridge
- Fox Cove Mortier
- Fox Harbour
- Frenchman's Cove
- Freshwater, Conception Bay
- Freshwater, Placentia Bay

- 1 Garden Cove
- 2
- 3 Garnish
- 4
- 5 Gaskiers/Point La Haye
- 6
- 7 George's Brook
- 8
- 9 Gin Cove
- 10
- 11 Goobies
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- 13 Gooseberry Cove
- 14
- 15 Grand Bank
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- 17 Grand Beach
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- 19 Grand le Pierre
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- 21 Grates Cove
- 22
- 23 Green's Harbour
- 24
- 25 Gull Island
- 26
- 27 Hant's Harbour
- 28
- 29 Harbour Grace
- 30
- 31 Harbour Main/Chapel's Cove/Lakeview
- 32
- 33 Harbour Mille/Little Harbour East
- 34
- 35 Harcourt-Munroe-Waterville
- 36
- 37 Harricott
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- 39 Heart's Content
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- 41 Heart's Delight/Islington
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- 43 Heart's Desire
- 44
- 45 Hibbs Cove
- 46
- 47 Hickman's Harbour
- 48
- 49 Hillview/Adeytown/Hatchet Cove/St. Jones/Deep Bight/Queen's Cove
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- 51 Hodderville
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- 53 Hodge's Cove
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- 55 Holyrood
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- 57 Hopeall
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- 59 Jean de Baie
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- 61 Jersey-side

- 1 Job's Cove
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- 3 Keels
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- 5 King's Cove
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- 7 Kingston
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- 9 Knight's Cove
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- 11 L'Anse au Loup
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- 13 La Manche
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- 15 Lamaline
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- 17 Lawn
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- 19 Lead Cove
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- 21 Lethbridge
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- 23 Lewin's Cove
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- 25 Little Bay East
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- 27 Little Bay, Placentia Bay
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- 29 Little Catalina
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- 31 Little Harbour, Placentia Bay
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- 33 Little Heart's Ease
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- 35 Little St. Lawrence
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- 37 Logy Bay/Middle Cove/Outer Cove
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- 39 Long Beach
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- 41 Long Harbour/Mount Arlington Heights
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- 43 Lord's Cove
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- 45 Lower Amherst Cove
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- 47 Lower Island Cove
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- 49 Lower Lance Cove/Britannia
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- 51 Makinsons
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- 53 Main Point/Davidsville
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- 55 Mall Bay
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- 57 Markland
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- 59 Marystown
- 60 Melrose

- 1 Middle Amherst Cove
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- 3 Milton
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- 5 Mobile
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- 7 Monkstown
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- 9 Morley's Siding
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- 11 Mount Carmel/Mitchell's Brook/St. Catherine's
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- 13 Mount Pearl
- 14
- 15 Muddy Brook
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- 17 Musgravetown
- 18
- 19 New Bonaventure
- 20
- 21 New Chelsea
- 22
- 23 New Harbour
- 24
- 25 New Melbourne
- 26
- 27 New Perlican
- 28
- 29 Newman's Cove
- 30
- 31 Norman's Cove/Long Cove
- 32
- 33 North Harbour, Placentia Bay
- 34
- 35 North Harbour, St. Mary's Bay
- 36
- 37 North River
- 38
- 39 North West Brook/Ivany's Cove
- 40
- 41 Northern Bay
- 42
- 43 O'Donnell's
- 44
- 45 Ochre Pit Cove
- 46
- 47 Old Bonaventure
- 48
- 49 Old Perlican
- 50
- 51 Old Shop
- 52
- 53 Open Hall/Red Cliffe
- 54
- 55 Paradise
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- 57 Parkers Cove
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- 59 Patrick's Cove-Angel's Cove
- 60
- 61 Perry's Cove

- 1 Petite Forte
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- 3 Petty Harbour/Maddox Cove
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- 5 Placentia
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- 7 Plate Cove East
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- 9 Plate Cove West
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- 11 Point au Gaul
- 12 Point Lance
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- 14 Point May
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- 16 Point Verde
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- 18 Port au Bras
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- 20 Port Blandford
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- 22 Port de Grave
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- 24 Port Kirwan
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- 26 Port Rexton
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- 28 Port Union
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- 30 Portland-Jamestown-Winterbrook
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- 32 Portugal Cove South
- 33 Portugal Cove/St. Phillips
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- 35 Pouch Cove
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- 37 Princeton
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- 39 Random Island
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- 41 Red Harbour
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- 43 Red Head Cove
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- 45 Renews/Cappahayden
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- 47 Riverhead
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- 49 Roache's Line
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- 51 Rock Harbour
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- 53 Rushoon
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- 55 Salmon Cove
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- 57 Shearstown
- 58 Ship Harbour, Placentia Bay
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- Shoe Cove
- Sibley's Cove
- Small Point/Adam's Cove/Blackhead/Broad Cove
- South Dildo
- South River
- Southeast Bight
- Southern Bay
- Southern Harbour
- Spaniard's Bay
- Spanish Room
- Spillars Cove
- Spread Eagle
- St. Bernard's/Jacques Fontaine
- St. Bride's
- St. John's
- St. Joseph's
- St. Lawrence
- St. Mary's
- St. Michael's
- St. Shott's
- St. Vincents/St. Stephen's/Peter's River
- Stock Cove
- Summerville
- Sunnyside
- Sweet Bay
- Swift Current
- Taylor's Bay
- Terrenceville
- The Dock
- Thorburn Lake
- Thornlea

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- Tickle Cove
- Torbay
- Tors Cove/Burnt Cove/Bauline South
- Trepassey
- Trinity Bay North
- Trinity East
- Trinity, Trinity Bay
- Trouty
- Turk's Cove
- Upper Amherst Cove
- Upper Island Cove
- Victoria
- Wabana
- Western Bay
- Whitbourne
- Whiteway
- Winterland
- Winterton
- Witless Bay
- Witless Bay Line
- Woody Island

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Site Services

This section is designed to gather information about the primary health care services provided at your site, as well as information about how those services are provided.

7. What types of Routine Primary Care Services are provided at or by your site and how are they delivered?

	service not delivered	service delivered by telehealth	service delivered by visiting health care provider(s)	service delivered by on-site staff
Nurse practitioner services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family physician services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
X-ray services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24/7 Emergency Department services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24/7 Emergency on-call primary care services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify type of service delivery - telehealth, visiting staff, or on-site staff)

8. What types of Mental Health and Addictions Services are provided at or by your site and how are they delivered?

	service not delivered	service delivered by telehealth	service delivered by visiting health care provider(s)	service delivered by on-site staff
Addictions counseling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assertive Community Treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Behavioral management services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Case management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Crisis response (daytime)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Crisis response (after hours)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Early psychosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FASD screening and/or services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mental health counseling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mental health promotion/prevention and education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychology services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Youth outreach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify type of service delivery - telehealth, visiting staff, or on-site staff)

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9. What types of Prenatal and Early Child Development Services are delivered/ supported at or by your site and how are they delivered/supported?

	service not delivered	service delivered by telehealth	service delivered by visiting health care provider(s)	service delivered by on-site staff
Autism services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Breastfeeding support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Child development screening and intervention	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Childbirth education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Health services to Family Resource Centres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Healthy Beginnings/ well baby clinics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Health services to Healthy Baby Clubs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parenting clinics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preschool health checks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Health services to daycare centres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
School health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Women's health clinics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify type of service delivery - telehealth, visiting staff, or on-site staff)

10. What types of Allied Health Prevention and Promotion Services are delivered at or by your site and how are they delivered?

	service not delivered	service delivered by telehealth	service delivered by visiting health care provider(s)	service delivered by on-site staff
Audiology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Occupational therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Injury prevention and education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clinical nutritional counseling and/or education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physiotherapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Respiratory therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speech language pathology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify type of service delivery - telehealth, visiting staff, or on-site staff)

11. What types of Healthy Aging Services are delivered at or by your site and how are they delivered?

	service not delivered	service delivered by telehealth	service delivered by visiting health care provider(s)	service delivered by on-site staff
Dementia care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fall prevention education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Healthy aging education and promotion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Home care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Home support services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meals on Wheels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Palliative care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Respite care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify type of service delivery - telehealth, visiting staff, or on-site staff)

12. What types of Communicable Disease Prevention and Control Services are delivered at or by your site and how are they delivered?

	service not delivered	service delivered by telehealth	service delivered by visiting health care provider(s)	service delivered by on-site staff
Immunization clinics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sexual and reproductive health clinics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sexual and reproductive health education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
STBBI (Sexually Transmitted and Blood-Born Infections) follow-up and contact tracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Communicable Diseases (other) follow-up and contact tracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TB testing and screening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify type of service delivery - telehealth, visiting staff, or on-site staff)

13. What types of Chronic Disease Prevention and Management Services are delivered at or by your site and how are they delivered?

	service not delivered	service delivered by telehealth	service delivered by visiting health care provider(s)	service delivered by on-site staff
Blood pressure screening and education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cancer screening services - Breast cancer screening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cancer screening services - Cervical screening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cancer screening services - Colon cancer screening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cancer screening services - Prostate cancer screening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cholesterol screening and education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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	service not delivered	service delivered by telehealth	service delivered by visiting health care provider(s)	service delivered by on-site staff
Chronic disease self-management - Improving Health My Way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chronic disease self-management - General (i.e. practitioners trained in self-management approach)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes education, including insulin education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Foot assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Healthy eating promotion and education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heart failure services/ supports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Injury prevention and promotion and education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Obesity management clinics/ services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical activity promotion and education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tobacco cessation promotion and education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify type of service delivery - telehealth, visiting staff, or on-site staff)				

Site Services

14. What types of targeted, disease-specific chronic disease prevention and management programming does your site offer?

	no programming	unsure if programming is offered	programming delivered by visiting health care provider(s)	programming delivered by on-site staff
Arthritis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Asthma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Autism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cancer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cardiac Rehab	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cardiovascular Disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Crohn's/ Colitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chronic Pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Congestive Heart Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COPD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cystic Fibrosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Developmental Delay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eating Disorders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Epilepsy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hemophilia or Bleeding Disorders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HIV	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypertension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kidney Disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pulmonary Rehab	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stroke	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify programming and area and how programming is delivered - i.e. by visiting health care providers or on-site health care providers)

[Empty text box for other programming details]

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Team-Based Care

This section is designed to capture information on the types of clinical team-based care offered at your site.

15. Does your site offer formalized, multidisciplinary, collaborative team-based care in any area(s) (e.g. diabetes teams, cancer care teams, etc.)?

Yes

No

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Primary Health Care Teams

This page is designed to gather additional information on the formalized, multidisciplinary, collaborative primary health care teams operating at your site. In the spaces provided below, for each team, please indicate the team focus, the number and types of on-site RHA providers on the team, the number and types of off-site RHA providers on the team, and the number and types of non-RHA providers on the team.

15a.

Team Focus:

RHA providers ON-SITE
(numbers and formal position titles):

RHA providers OFF-SITE
(including those accessed through telehealth; numbers and formal position titles):

Non-RHA providers
(numbers, formal position titles, and organization/ organizational affiliation)

15b.

Team Focus:

RHA providers ON-SITE
(numbers and formal position titles):

RHA providers OFF-SITE
(including those accessed through telehealth; numbers and formal position titles):

Non-RHA providers
(numbers, formal position titles, and organization/ organizational affiliation)

15c.

Team Focus:

RHA providers ON-SITE
(numbers and formal
position titles):

RHA providers OFF-SITE
(including those accessed
through telehealth;
numbers and formal
position titles):

Non-RHA providers
(numbers, formal position
titles, and organization/
organizational affiliation)

15d.

Team Focus:

RHA providers ON-SITE
(numbers and formal
position titles):

RHA providers OFF-SITE
(including those accessed
through telehealth;
numbers and formal
position titles):

Non-RHA providers
(numbers, formal position
titles, and organization/
organizational affiliation)

15e.

Team Focus:

RHA providers ON-SITE
(numbers and formal
position titles):

RHA providers OFF-SITE
(including those accessed
through telehealth;
numbers and formal
position titles):

Non-RHA providers
(numbers, formal position
titles, and organization/
organizational affiliation)

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Enter information for additional teams?

- Yes
- No

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Additional Teams

15f.

Team Focus:

RHA providers ON-SITE
(numbers and formal
position titles):

RHA providers OFF-SITE
(including those accessed
through telehealth;
numbers and formal
position titles):

Non-RHA providers
(numbers, formal position
titles, and organization/
organizational affiliation)

15g.

Team Focus:

RHA providers ON-SITE
(numbers and formal
position titles):

RHA providers OFF-SITE
(including those accessed
through telehealth;
numbers and formal
position titles):

Non-RHA providers
(numbers, formal position
titles, and organization/
organizational affiliation)

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15h.

Team Focus:

RHA providers ON-SITE
(numbers and formal
position titles):

RHA providers OFF-SITE
(including those accessed
through telehealth;
numbers and formal
position titles):

Non-RHA providers
(numbers, formal position
titles, and organization/
organizational affiliation)

15i.

Team Focus:

RHA providers ON-SITE
(numbers and formal
position titles):

RHA providers OFF-SITE
(including those accessed
through telehealth;
numbers and formal
position titles):

Non-RHA providers
(numbers, formal position
titles, and organization/
organizational affiliation)

15j.

Team Focus:

RHA providers ON-SITE
(numbers and formal
position titles):

RHA providers OFF-SITE
(including those accessed
through telehealth;
numbers and formal
position titles):

Non-RHA providers
(numbers, formal position
titles, and organization/
organizational affiliation)

15k.

Team Focus:

RHA providers ON-SITE
(numbers and formal
position titles):

RHA providers OFF-SITE
(including those accessed
through telehealth;
numbers and formal
position titles):

Non-RHA providers
(numbers, formal position
titles, and organization/
organizational affiliation)

15l.

Team Focus:

RHA providers ON-SITE
(numbers and formal
position titles):

RHA providers OFF-SITE
(including those accessed
through telehealth;
numbers and formal
position titles):

Non-RHA providers
(numbers, formal position
titles, and organization/
organizational affiliation)

15m.

Team Focus:

RHA providers ON-SITE
(numbers and formal
position titles):

RHA providers OFF-SITE
(including those accessed
through telehealth;
numbers and formal
position titles):

Non-RHA providers
(numbers, formal position
titles, and organization/
organizational affiliation)

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15n.

Team Focus:

RHA providers ON-SITE
(numbers and formal
position titles):

RHA providers OFF-SITE
(including those accessed
through telehealth;
numbers and formal
position titles):

Non-RHA providers
(numbers, formal position
titles, and organization/
organizational affiliation)

15o.

Team Focus:

RHA providers ON-SITE
(numbers and formal
position titles):

RHA providers OFF-SITE
(including those accessed
through telehealth;
numbers and formal
position titles):

Non-RHA providers
(numbers, formal position
titles, and organization/
organizational affiliation)

Collaboration in Patient Care

This next series of questions is designed to gather information on types of collaboration that occur at your primary health care site.

16. Does your site provide space to non-RHA service providers to deliver primary health care services?
(This question does not include services offered through telehealth.)

- Yes
- No

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Collaboration in Patient Care

This page is designed to gather additional information on the non-RHA providers providing primary care and/or primary health care services at your site. The question below is not intended to capture information on specialists, except for psychiatrists.

16a. Please indicate the number and types of non-RHA service providers who provide primary health care at your site, the type of service provided, and the method of service provision.

	Type of service provider	Number of Service providers	Method of service provision	RHA provides support staff?
1.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
5.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
6.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
7.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
8.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
9.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
10.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
11.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
12.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
13.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
14.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
15.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Others (please specify numbers, methods of service provision, and whether or not RHA provides support staff). Please separate entries, if necessary, with a semi-colon.

Collaboration in Patient Care

This section is designed to capture information on the degree and types of collaboration that take place at your site among RHA primary health care providers at your site, between RHA primary health care providers at your site and RHA primary health care providers at other sites, and between RHA primary health care providers at your site and non-RHA primary health care providers.

17. To what degree do primary health care providers at your site typically consult and/or collaborate in patient care with the following types of primary health care providers:

	Never	Sometimes	Frequently	Don't Know
Other RHA providers at your site	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Providers within your RHA at other sites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Providers from other RHAs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non-RHA providers at your site	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non-RHA providers at other sites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. To what degree do RHA primary health care providers at your site use the following methods to communicate/collaborate/consult about patient care with other RHA primary health care providers on-site?

	Never	Sometimes	Frequently	Don't Know
Telephone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Face to face meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
EHR	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hard copy/ paper documentation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

1 19. To what degree do RHA primary health care providers at your site use the following methods to
 2 communicate/collaborate/consult about patient care with other RHA primary health care providers located
 3 off-site (including primary health care providers from other RHAs)?
 4

	Never	Sometimes	Frequently	Don't Know
5				
6				
7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8				
9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14				
15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16				

17
 18 20. To what degree do RHA primary health care providers at your site use the following methods to
 19 communicate/collaborate/consult about patient care with non-RHA primary health care providers?
 20

	Never	Sometimes	Frequently	Don't Know
21				
22				
23	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24				
25	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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27	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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29	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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31	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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RHA/non-RHA Collaboration

21. The two types of RHA/ non-RHA collaboration this survey has included questions about are: a) instances where non-RHA primary health care providers deliver services in RHA facilities (Question 16); and b) instances where RHA primary health care providers consult/collaborate/communicate with non-RHA providers in patient care (Questions 17 and 20).

Are there other ways that RHA providers collaborate with non-RHA providers that we have not included questions about in this survey? If so, please briefly describe. Responses to this question will be used to assist the development of focus group questions designed to learn more about RHA/ non-RHA collaboration in primary health care.

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Thank You

Thank you for taking the time to gather information for and complete this survey.

Do you have any additional comments to add regarding the organization and delivery of primary health care services at your site?

Please enter your name, phone number, and email address, so that we may contact you for clarification of answers, if necessary.

Name:

Phone number:

Email:

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Appendix 2. Types of targeted, disease-specific chronic disease prevention and management programming delivered at PHC site by urban/rural status, n (%).

	Arthritis n=139	Asthma n=139	Autism n=138	Cancer n=137	Cardiac Rehab n=138	CVD n=139	Crohn's/ Colitis n=136	Chronic Pain n=139
Delivered	20 (14.4)	23 (16.5)	37 (26.8)	31 (22.6)	24 (17.4)	30 (21.6)	19 (14.0)	26 (18.7)
Urban	5 (15.2)	8 (24.2)	6 (18.2)	8 (25.0)	5 (15.6)	8 (24.2)	6 (18.8)	8 (24.2)
Rural	15 (14.2)	15 (14.2)	31 (29.5)	23 (21.9)	19 (17.9)	22 (20.8)	13 (12.5)	18 (17.0)
Delivered by visiting HCP	4 (20.0)	5 (21.7)	16 (43.2)	7 (22.6)	3 (12.5)	5 (16.7)	3 (15.8)	5 (19.2)
Urban	0 (0.0)	1 (12.5)	2 (33.3)	1 (12.5)	0 (0.0)	0 (0.0)	0 (0.0)	1 (12.5)
Rural	4 (26.7)	4 (26.7)	14 (45.2)	6 (26.1)	3 (15.8)	5 (22.7)	3 (23.1)	4 (22.2)
On-site delivery	17 (85.0)	19 (82.6)	24 (64.9)	27 (87.1)	22 (91.7)	26 (86.7)	16 (84.2)	22 (84.6)
Urban	5 (100.0)	7 (87.5)	5 (83.3)	7 (87.5)	5 (100.0)	8 (100.0)	6 (100.0)	7 (87.5)
Rural	12 (80.0)	12 (80.0)	19 (61.3)	20 (87.0)	17 (89.5)	18 (81.8)	10 (76.9)	15 (83.3)
Unsure	4 (2.9)	3 (2.2)	5 (3.6)	2 (1.5)	5 (3.6)	3 (2.2)	3 (2.2)	2 (1.4)
	Congestive Heart Failure n=139	COPD n=139	Cystic Fibrosis n=136	Dev. Delay n=134	Diabetes n=138	Eating Disorders n=136	Epilepsy n=137	Bleeding Disorders n=137
Delivered	31 (22.3)	33 (23.7)	12 (8.8)	29 (21.6)	63 (45.7)	27 (19.9)	17 (12.4)	14 (10.2)
Urban	7 (21.9)	7 (21.9)	5 (15.6)	5 (16.1)	13 (40.6)	6 (19.4)	5 (15.6)	3 (9.4)
Rural	24 (22.4)	26 (24.3)	7 (6.7)	24 (23.3)	50 (47.2)	21 (20.0)	12 (11.4)	11 (10.5)
Delivered by visiting HCP	7 (22.6)	7 (21.2)	2 (16.7)	12 (41.4)	18 (28.6)	4 (14.8)	4 (23.5)	6 (42.9)
Urban	0 (0.0)	0 (0.0)	0 (0.0)	1 (20.0)	4 (30.8)	0 (0.0)	1 (20.0)	1 (33.3)
Rural	7 (29.2)	7 (26.9)	2 (28.6)	11 (45.8)	14 (28.0)	4 (19.0)	3 (25.0)	5 (45.5)
On-site delivery	26 (83.9)	27 (81.8)	10 (83.3)	18 (62.1)	53 (84.1)	23 (85.2)	14 (82.3)	8 (57.1)
Urban	7 (100.0)	7 (100.0)	5 (100.0)	4 (80.0)	9 (69.2)	6 (100.0)	4 (80.0)	2 (66.7)
Rural	19 (79.2)	20 (76.9)	5 (71.4)	14 (58.3)	44 (88.0)	17 (81.0)	10 (83.3)	6 (54.5)
Unsure	1 (0.7)	1 (0.7)	4 (2.9)	6 (4.5)	2 (1.4)	3 (2.2)	4 (2.9)	5 (3.6)
	HIV n=137	Hypertension n=136	Kidney Disease n=136	Pulmonary Rehab n=137	Stroke n=137			
Delivered	21 (15.3)	34 (25.0)	26 (19.1)	15 (10.9)	24 (17.5)			
Urban	8 (25.0)	8 (25.8)	6 (18.8)	6 (18.8)	7 (21.9)			
Rural	13 (12.4)	26 (24.8)	20 (19.2)	9 (8.6)	17 (16.2)			
Delivered by visiting HCP	7 (33.3)	8 (23.5)	10 (38.5)	4 (26.7)	3 (12.5)			
Urban	2 (25.0)	2 (25.0)	1 (16.7)	1 (16.7)	0 (0.0)			
Rural	5 (38.5)	6 (23.1)	9 (45.0)	3 (33.3)	3 (17.6)			
On-site delivery	16 (76.2)	28 (82.4)	19 (73.1)	13 (86.7)	22 (91.7)			
Urban	6 (75.0)	6 (75.0)	5 (83.3)	5 (83.3)	7 (100.0)			
Rural	10 (76.9)	22 (84.6)	14 (70.0)	8 (88.9)	15 (88.2)			
Unsure	5 (3.6)	2 (1.5)	2 (1.5)	3 (2.2)	2 (1.5)			

* p ≤ .05