

**Demand Forecasting Report
Newfoundland and Labrador Personal Care Homes**

Department of Health and Community Services

December 19, 2019

Disclosure

This report contains forward-looking projections and estimates and as such readers should note that future demand may vary from forecasts.

Note that the accuracy of the Personal Care Homes (PCH) demand projections in this report is dependent on the quality of the data inputs and underlying assumptions supplied by the Department of Health and Community Services, the Department of Finance, and the Regional Health Authorities (RHAs). Consequently, any data discrepancies or changes to the underlying assumptions could result in material deviances from projections.

This report is intended to be a decision support tool and not a comprehensive infrastructure plan.

Data and inputs to this model should be updated on a regular basis.

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1. Introduction

Context and Purpose of Report

In January 2019, Deloitte was engaged by the Department of Health and Community Services (“the Department” or “HCS”) to complete a needs assessment of the demand for Personal Care Home (PCH) services within Newfoundland and Labrador. This assessment includes both current demand and projected future demand in 10, 20, and 30 years, in consideration of geography, demographics, community-specific population needs and availability of other community-based supports. In particular, analysis included the potential current and future impacts of the Home First Initiative as well as the possible expansion of PCH’s scope of services through the introduction of new services such as dementia care.

This report aligns with HCS’ efforts to implement improvements in service delivery within the Long-Term Care and Community Support Services (LTC CSS) system, which includes a focus on quality of care and clinical outcomes. This work also involves the development of a new levels of care framework (still in draft form as of the writing of this report), which will result in more clearly defined care levels. These improvements are part of the goals and priorities outlined in the strategic plan of the Department, including, but not limited to:

- Increased access to community-based home support and care services;
- Increased use of personal care homes for respite and restorative care, including the introduction of adult day programming and other new program areas;
- Improved patient/client satisfaction with community-based services; and,
- Achieving more efficient health care spending through modernizing and streamlining the delivery of services.

A sound forecast for PCH beds is a key enabler for the Department’s goal of matching supply with growing demand for PCH services. With the oldest median age in the country, the complexity of Newfoundland and Labrador’s LTC CSS client population is rising; as such, the quality of care must also increase to meet client’s needs.

Home First

A key consideration within this report is the Home First philosophy and its interaction with the demand for LTC CSS. The Department’s Home First Framework and Policy Guidelines describe Home First as follows: “Home First is a health care management philosophy. It represents a shift from acute and institutional care to the enhancement of home and community based integrated care. Home First is a person-centered, evidence informed initiative to support individuals with complex care needs in their own homes and communities. Home First is not a program; it is an approach focused on removing barriers within regular programming and wrapping supports around people in their homes and communities.”

The guiding principles of Home First are outlined to the right. This needs assessment for PCH aims to incorporate these guiding principles as we consider the current and future demand for services.

Guiding Principles of Home First

- Person and Family-centered
- Collaborative and Integrated
- Accessible, Flexible, and Responsive
- Sustainable
- Accountable
- Evidence Informed
- Shared Responsibility

Overview of Project Objectives and Scope

Deloitte's project approach included developing a quantitative forecasting model informed by the Department's data sources, stakeholder engagement, and a jurisdictional scan of other Canadian provinces.

Project Objectives

1. Develop a regional, 30-year forecast for demand for Personal Care Home services that takes into account geographic, demographic, the full continuum of care, current utilization, and other factors, including existing and planned community support services across Newfoundland and Labrador.
2. Meaningfully engage project stakeholders in the development of projections.
3. Develop a model and final report detailing methodology, results, assumptions and conclusions.

Project Scope

- Analysis of factors affecting demand (demographics, geography, migration, community supports, program outcomes);
- Jurisdictional scan to understand how PCHs are used elsewhere and how dementia care and other programs have impacted PCH demand;
- Stakeholder engagement; and,
- Analysis of current and future state PCH demand.

Scenarios

Three scenarios were built into the model to capture the uncertainty inherent in any projection.

- **Scenario 1:** Constant (High Utilization), assumes that current utilization of PCH is optimal and service levels will remain constant in all forecast periods.
- **Scenario 2:** Regional Average (Medium Utilization), assumes that going forward, the Department's Home First initiative, changes in attitudinal preferences, income levels, and other determinants of demand will have a positive effect on reducing demand and subsequent utilization levels for PCH services.
- **Scenario 3:** Regional Minimum (Low Utilization), assumes that going forward there will be a significant decrease in demand that will result in much lower utilization of PCH services.

Additionally, two sets of projections were developed, as outlined below.

1. The first set of projections outline the projected demand for PCHs based on the **current scope of service offerings**.
2. The second set of projections outline the projected demand for PCHs based on the **new scope of service offerings**, including the addition of residential dementia care services in PCHs.

In addition to this report, a detailed quantitative forecasting model was prepared and provided to the Department under separate cover.

Steering Committee Oversight

Oversight for the project was provided by a Steering Committee consisting of representatives from the Department of Health and Community Services, the Department of Finance, and the Regional Health Authorities (RHAs). The Steering Committee provided guidance, oversight, and feedback. The members of the Steering Committee and their roles are listed below.

Name	Department/RHA	Role
Deena Waddleton	Health and Community Services	Steering Committee Chair & Manager of Community Health Planning, Regional Services
Michael Davis	Health and Community Services	Health Consultant, Regional Services
Beverly Woodward	Labrador-Grenfell Health Authority	Regional Manager for Community Supports, SAP and Rehab Services
Debbie Pelley	Labrador-Grenfell Health Authority	Regional Manager, Client Services, Financial Services Division
Mimie Carroll	Central Health Authority	Regional Director, Long Term Care
Melvin Layden	Eastern Health Authority	Regional Director, Long Term Care
Tracey Bennett	Western Health Authority	Regional Community Support Manager
Tammy Priddle	Western Health Authority	Regional Director, Community Support Services
Neil Morrow	Department of Finance	Economist, Economic and Project Analysis Division
Ken Hicks	Department of Finance	Manager, Modelling & Technical Analysis

2. Approach and Methodology

Overview of Approach and Methodology

The methodology used to guide the work of Deloitte involved six steps which are outlined below and described in detail in the following section of this report. Detailed assumptions and rationale for the scenarios are included in the final section of this report as well as in Appendix B.



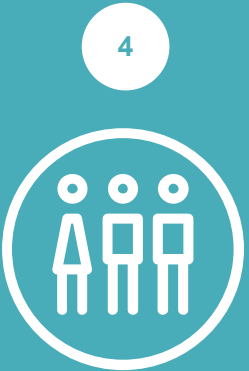
Divided NL into 20 service areas (Economic Zones)



Determined current PCH utilization levels by zone and age group



Grouped EZs into remote, rural, urban categories and developed model assumptions



Applied demographic forecasts by age group through 2048



Identified mitigating factors and quantified impact on three scenarios



Refined assumptions and model through iterative process and developed report

Approach and Methodology (page 1 of 3)

Deloitte's approach to developing the quantitative model, data sources, and research scope and methodology are described in this section. Detailed assumptions and rationale for the scenarios are included in the final section of this report as well as Appendix B.

Approach to Modelling

Steps 1 – 4:

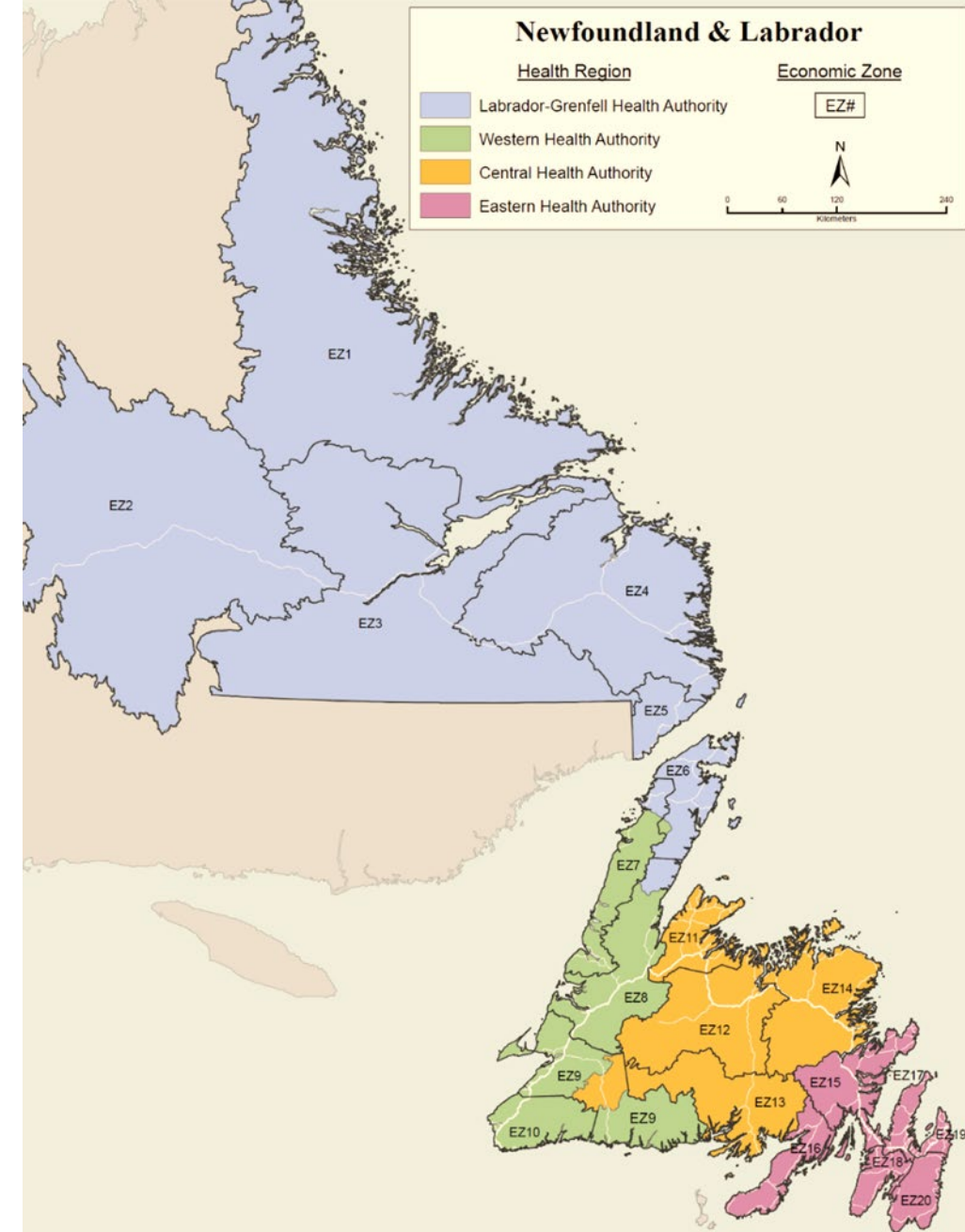
Steps 1 to 4 comprised dividing NL into 20 service areas (Economic Zones), determining actual PCH service levels and utilization levels (by 5-year age groups) for each zone, grouping zones into remote, rural, urban categories, and applying demographic forecasts of the seniors population to determine a base-level forecast.

The two main drivers of the model are the population of seniors and the forecasted utilization of PCH services, or anticipated servicing levels, of that population.

To capture regional differences in both population projections and utilization, our forecast used the pre-existing 20 economic zones which correspond closely to the four Regional Health Authorities (RHAs); Eastern, Central, Western, and Labrador-Grenfell.

The population and utilization figures were further sub-divided into 5-year age groups from 45 years of age to 90+ to better capture the forecasted changes to the demographic make-up of each of the zones and the resulting utilization.

Note that the model assumes there will be no changes to aggregate servicing levels across all LTC CSS clients and, necessarily, any reduction in demand for PCH services will result in an equal and opposite increase in demand for an alternative care option (such as home supports, unpaid family caregivers, LTC facility, etc.).



Approach and Methodology (page 2 of 3)

Step 5:

Three scenarios were built into the model to capture the uncertainty inherent in any projection.

- Scenario 1: Constant (High Utilization), assumes that current utilization of PCH is optimal and service levels will remain constant in all forecast periods.
- Scenario 2: Regional Average (Medium Utilization), assumes that going forward, the Department's Home First initiative, changes in attitudinal preferences and other determinants of demand will have a positive effect on reducing demand and subsequent utilization levels for PCH services.
- Scenario 3: Regional Minimum (Low Utilization), assumes that going forward there will be a significant shift in demand that will result in much lower utilization of PCH services.

Step 6:

Finally, assumptions were refined through an iterative process including stakeholder and RHA engagement. Adjustments were applied to the projected utilization levels to capture the impact of determinants of demand not reflected in the data. These determinants include personal preference and attitudinal preferences, availability of alternate care settings and community supports, and other factors that may have an above-average impact in particular regions. For example, some regions have more informal caregivers due to economic opportunity in the region which is not directly reflected in the data, but would allow clients to stay home longer.

The final step in our approach was to finalize the model and prepare this report.

Approach and Methodology (page 3 of 3)

Described below is the approach, scope, and data captured through our jurisdictional scan process.

Jurisdictional scan

Deloitte's jurisdictional scan gathered insights and information from select Canadian provinces and international* jurisdictions. The purpose of the scan was two-fold:

- 1) Identify and determine the impact of determinants of demand for personal care home services, in particular, PCH alternatives and new program initiatives such as Home First, adult day programs, dementia care, and other new strategic initiatives.
- 2) Identify the inputs, assumptions, and methodology used by jurisdictions that completed similar forecasts and needs assessments.

Jurisdictional Research Methodology

Information was primarily collected through telephone interviews with target jurisdictions. A review of relevant literature was used to supplement jurisdictional findings.

*Scope of international jurisdictions was limited to a literature review of similar forecasting initiatives in the US and UK.

Data and Methods

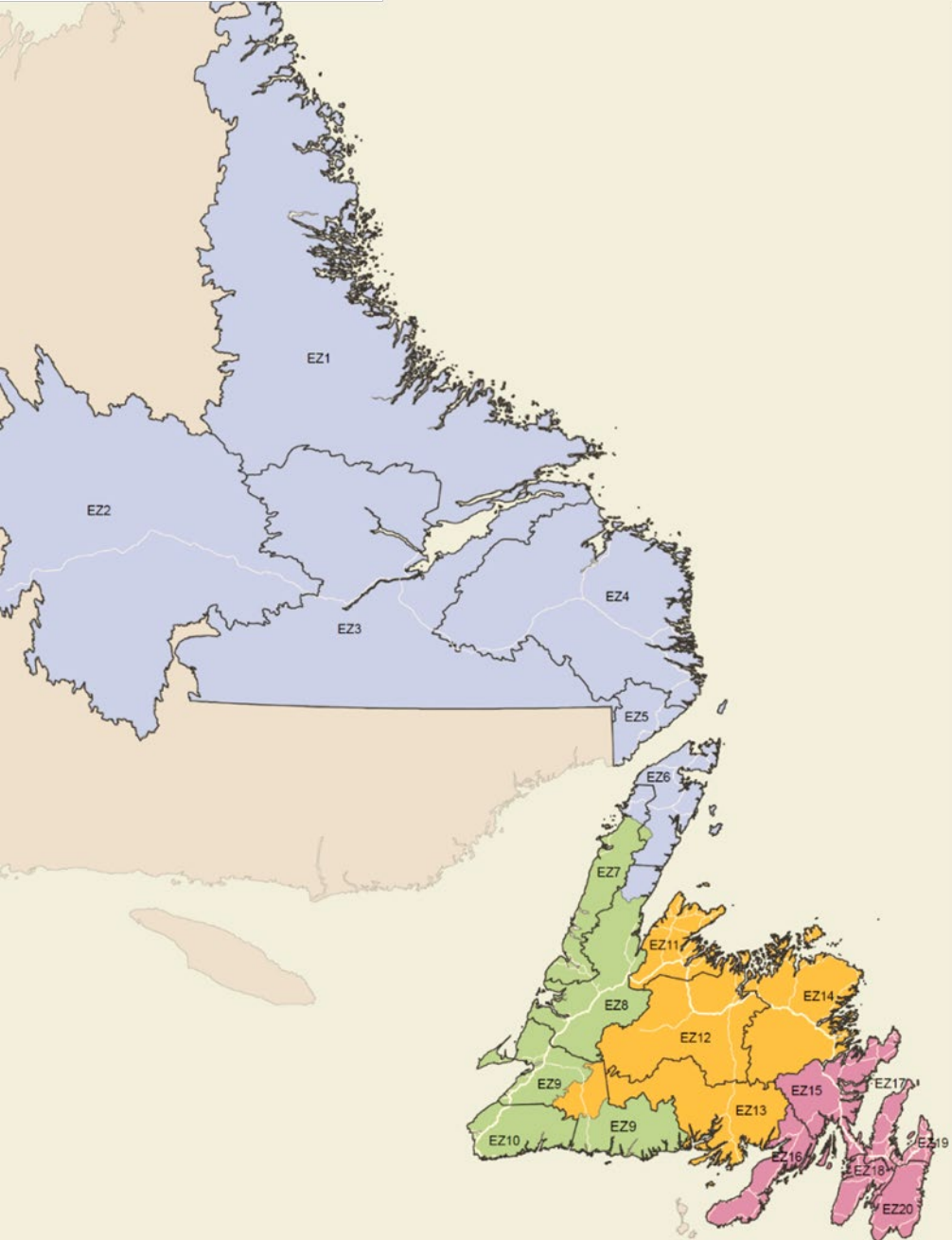
All data used in the model were sourced from HCS, the Department of Finance, and through direct consultations with the RHAs, current and prospective PCH operators in NL, and other jurisdictions. Key data sources for demand forecasting were:

- Department of Finance Population Projections as of January 2019, Medium Scenario for Year 0, 10, 20 and 30 (2018, 2028, 2038, and 2048)
- HCS Quarterly PCH Database
- December 2018 CRMS (Client Record Management Software) data on the number of Personal Care Home residents and Home Support clients
- RHA wait lists
- Consultations with RHAs, prospective PCH applicants, and other jurisdictions.

CRMS data on PCH residents was used to map utilization of services to the respective economic zones and age groups.

Economic Zones in Newfoundland and Labrador

NL is made up of 20 Economic Zones that map to the four (4) Regional Health Authorities (RHAs) which are used as a basis for forecasting. As the report makes various reference to Economic Zones by number, community descriptions are provided below.



Zone	Description of community
EZ1	Rigolet to Nain
EZ2	Labrador West/Churchill Falls
EZ3	Happy Valley/Goose Bay/North West River
EZ4	Mary's Harbour to Cartwright
EZ5	Labrador Straits (L'Anse au Clair to Red Bay)
EZ6	Viking Trail, St. Anthony South West to Plum Point, East to Roddickton/Englee
EZ7	Gros Morne Area, Viking Trail North to and including Plum Point
EZ8	Deer Lake/Humber Area/Corner Brook
EZ9	Stephenville/Port au Port/Burgeo
EZ10	Port aux Basques/Doyles/Rose Blanche
EZ11	Baie Verte/La Scie/Green Bay
EZ12	Grand Falls - Windsor Area
EZ13	Bay D'Espoir Area
EZ14	Gander/Twillingate East to Terra Nova Area
EZ15	Clarenville/Bonavista Peninsula Area
EZ16	Burin Peninsula
EZ17	North West Avalon/Conception Bay North
EZ18	Argentia/Placentia Area
EZ19	North East Avalon/St. John's
EZ20	Southern Shore Area

3. Current state

3.1 Overview of PCH and Community Services

Overview of PCH and Current LTC CSS Programs and Services in NL

Long-term Care and Community Support Services are delivered to seniors, as well as adults and children with disabilities, by the four RHAs and third-party service providers. LTC CSS programs and services are delivered to over 20,000 clients across the province.

Personal Care Homes are a residential care option for seniors and adults requiring assistance with the activities of daily living, per the existing clinical assessment framework, categorized as Level I, II, Enhanced Care or III (awaiting placement in LTC). There are 84 PCHs operating in the province, varying in size from 6 to 100 beds, which provided care to approximately 3,337 clients as of September 2018. This represents approximately 8.5% of all seniors over the age of 75.

Personal Care Homes are privately-operated but may be structured as for-profit, not-for-profit, or board-managed organizations. The majority of PCHs are operated privately as for-profit services. As of December 2018, clients under the age of 65 years old represented 7.7% of PCH residents, and clients over 75 years of age and older represented the majority (78.8%) of PCH residents.

The Provincial Home Support Program (PHSP) provides in-home personal care, homemaking, and respite services to 8,359 seniors and persons living with disabilities (as of 2017/18). For the same period, PHSP clients over 75 years of age totaled 3,267 or approximately 8.2% of all seniors over the age of 75. Eligible services within the PHSP are provided by 33 agency providers or under Self-Managed Care (SMC) arrangements (including paid family caregivers).

The Province also funds a range of supplementary services to clients availing of LTC CSS programs including home therapy support, behavioural aides, foot care, bloodwork, medical transportation, and supplementary income support benefits.

There are 84 PCHs with a total of 4,065 beds in Newfoundland and Labrador serving 3,337 clients, as of September 2018.

Overview of New Strategic Initiatives (page 1 of 2)

The Province has identified several strategic initiatives, including the expansion of PCH services, and the introduction of new community care programs, that are anticipated to impact the future demand for PCH.

Residential Dementia Care Services

In June 2017, the Federal Minister of Health initiated the development of a national dementia strategy. Given that the number of individuals with dementia in Canada is projected to double by 2031, developing a targeted dementia strategy is critical at a national and provincial level. The Department is exploring residential dementia care options for clients with moderate dementia that would enable individuals with low physical care needs to reside in a PCH or dedicated care facility, as opposed to premature placement in a long-term care (LTC) or acute care facility.

Hospice and End-of-Life Care

The Department is also exploring new care options for palliative and end-of-life clients, to implement an integrated palliative approach to support a shared vision across the continuum of care. Leading practices support allowing individuals requiring palliative and end of life care and their families autonomy over choosing the most appropriate care approach, including remaining at home, dying in a PCH, and offering dedicated hospice facilities.

Overview of New Strategic Initiatives (page 2 of 2)

Adult Day Programming

The RHAs currently offer a handful of adult day programs in LTC facilities, but are exploring expanding this type of care to community-based settings (including PCHs). Adult day programs may be offered to residents of PCHs and the community to support individuals with personal care needs, and provide enhanced recreational activity and social interaction for seniors. Depending on the level of complexity of the client, additional nursing functions and personal care supports may be provided. Adult day programs that have been implemented in other jurisdictions have allowed residents to stay in their homes longer and reduced the demand on long-term care and acute care facilities.

Respite support for caregivers

RHAs are also exploring increased respite support for caregivers, providing short term, temporary care provided to caregivers so that they (and their families) can take a break from the daily routine of caregiving.

Residential Rehabilitation

One of the main objectives of the Home First initiative is to provide a client-centered approach to care, including ensuring that services are provided in the correct place to best meet client needs. Some clients require additional time to recover and may require enhanced assistance for a short period of time. As such, the Department is currently exploring expanding and enhancing the provision of reablement services in PCH.

Key Takeaways from Current State Analysis

Our current state analysis included review of population trends and demographics in NL, current supply of PCH beds, and a detailed review of current demand and utilization of PCH and alternatives. The key takeaways from the current state analysis were:

- **The over 75 seniors population will be the key driver of PCH demand**, as a function of both population growth (over 75 population is projected to grow from 39,802 in 2018 to 89,859 by 2048) and utilization (seniors over 75 are the highest users of PCH services).
- **Younger seniors choosing to increasingly utilize home supports may increase the availability of PCH beds for older seniors**; utilization of home supports is dependent on the supply of home support workers, availability of informal caregivers, and other environmental and economic conditions of the region.
- **Each Economic Zone has its own regional and demographic characteristics** which impact overall utilization levels, including ratio of younger seniors to older seniors, population distribution and informal supports.
- **Current wait lists for PCHs are not caused by a lack of supply**. Given that the number of vacant beds exceed wait lists in almost all economic zones, most residents on the wait lists are based on choices of the individual (such as refusing placement in a particular home or waiting for a private room).
- **Similar private sector services in St. John's is contributing to reduced PCH utilization**. Private sector services in Economic Zone 19 (St. John's) such as assisted living facilities are contributing to reduced the demand for public PCH services and leading to decreased PCH utilization rates for that Zone.
- **The expansion of the scope of PCH services will allow seniors to remain in community-based care settings longer and increase the overall demand for PCHs** from older seniors, including those with moderate dementia, palliative and end-of-life clients, and other clients with complex care needs.
- Following the Province's client-centered approach to ensure appropriate and quality care for all LTC CSS clients, current **PCH residents under 65** (primarily adults with intellectual disabilities) would be **more appropriately placed in the community in smaller residential settings among peers**.

3.2 Population Trends and Demographics

Population Trends and Demographics in NL

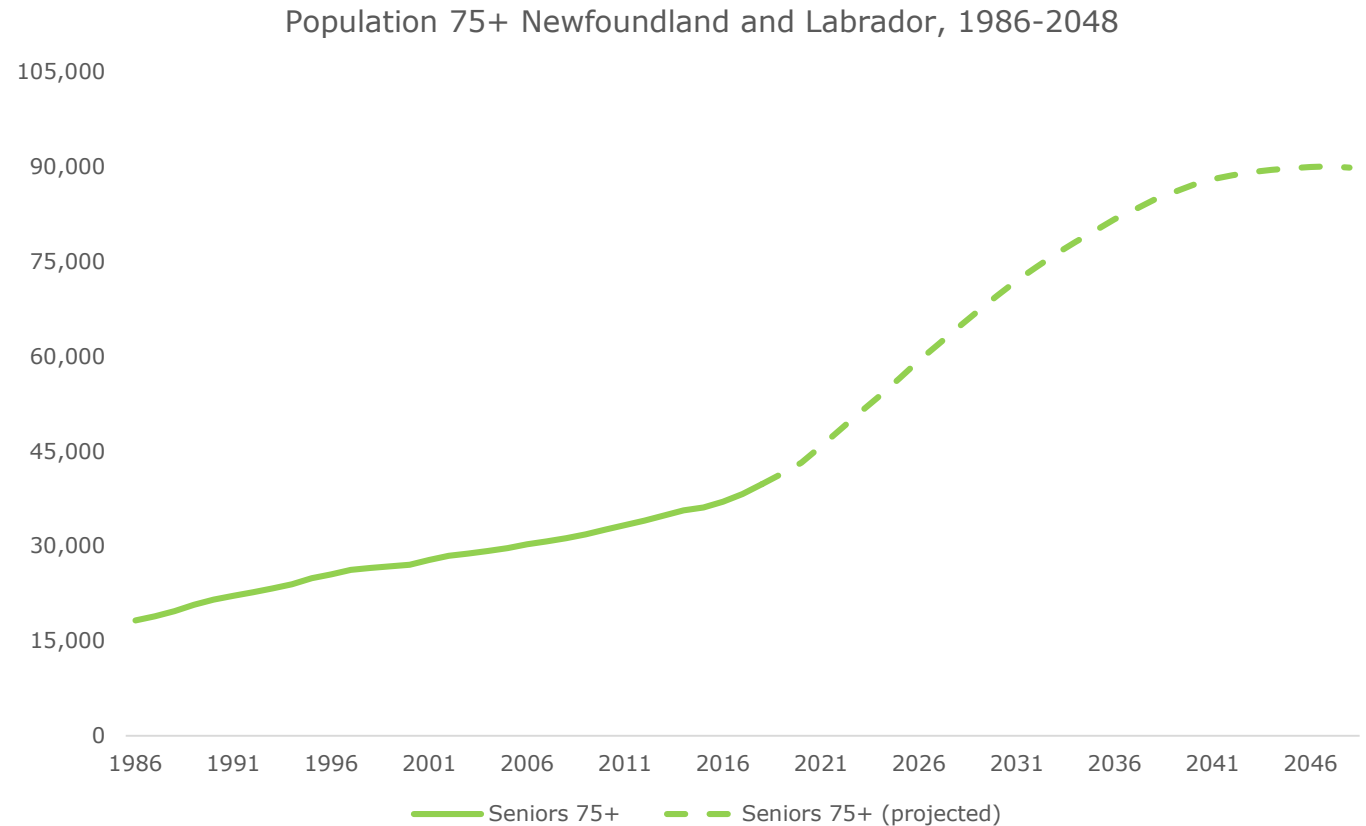
Newfoundland and Labrador has one of the oldest populations in the country, with a median age of 46 years (compared to the Canadian median of 41.2 years). As of 2018, seniors aged 65+ and 75+ represented 20.5% and 7.6% of the population, respectively. As the highest users of health care, rapid growth in the seniors population will significantly increase demand for health and social services.

Overview of seniors population

Given that the vast majority of PCH residents in Newfoundland and Labrador are 75 years of age or older, changes in this age group are expected to be the main driver of the demand for PCH services moving forward.

Between 2018 and 2048, the number of seniors aged 75+ is expected to more than double, from 39,801 to 89,859 seniors (as pictured right).

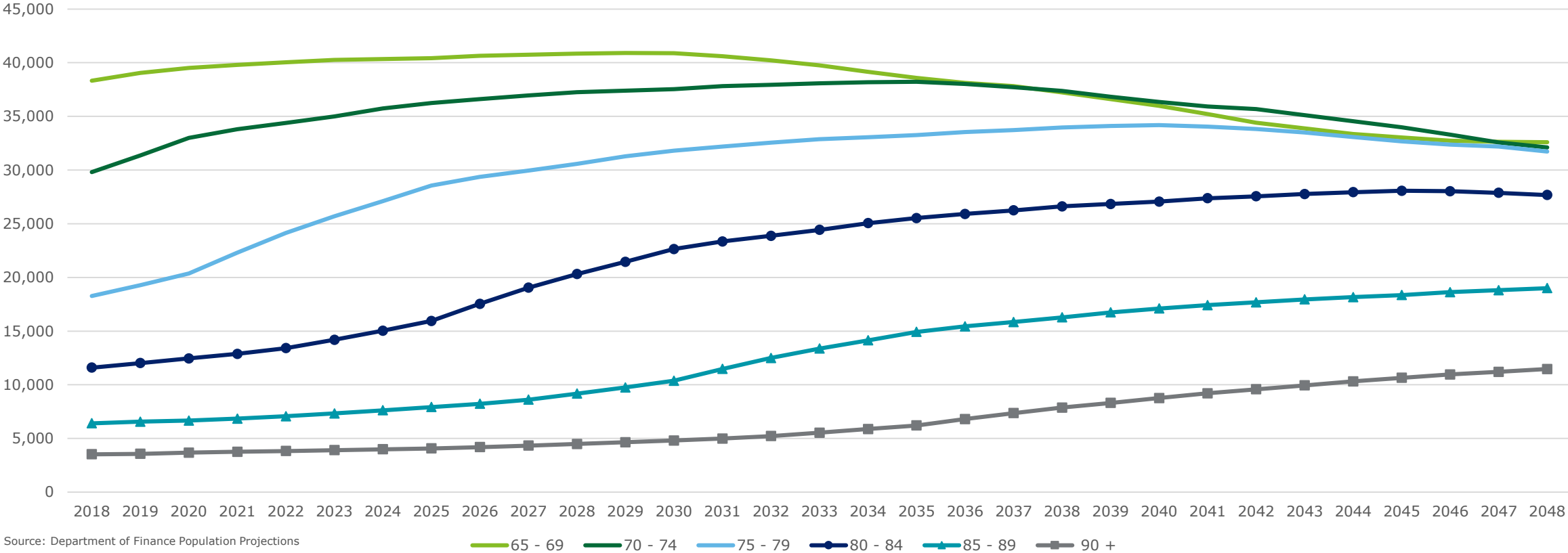
As pictured on the following page, the number of octogenarians and nonagenarians is projected to grow rapidly relative to the younger senior population (an increase of over 50,000 in the next 30 years). The number of seniors aged 65-69 is expected to peak in 2029 and then decline rapidly thereafter. The number of seniors aged 85-89 is projected to rise substantially, reaching 18,997 in 2048 (compared to 6,411 in 2018).



Demographic Profile: Population of seniors 65+ in Newfoundland and Labrador, 2018-2048

Going forward, seniors aged 75+ are projected to be the fastest growing seniors cohort in the province. The number of seniors aged 80+ is projected to increase dramatically by 2048.

Population projections by age group in Newfoundland and Labrador, 2018-2048



Source: Department of Finance Population Projections

65 - 69 70 - 74 75 - 79 80 - 84 85 - 89 90 +

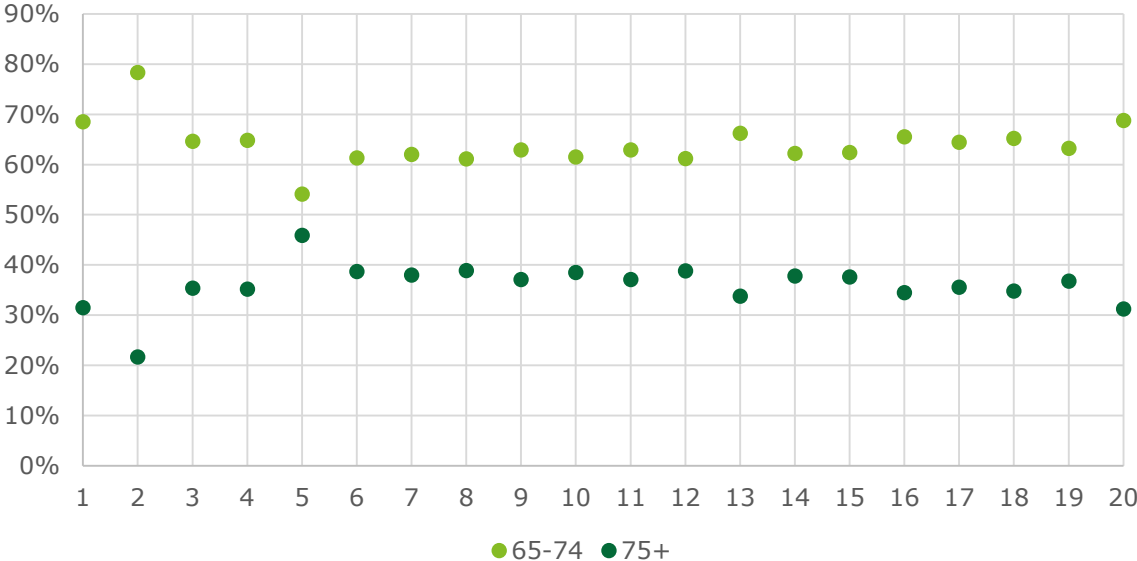
For the next five years, seniors in their 70s are expected to be the fastest growing age group. However, 2023 marks a notable inflection in the projected growth of seniors aged 80-84. This is expected to be followed by projected upticks in the 85-89 and 90+ seniors in 2030 and 2035, respectively. Younger seniors under 75, who often play a critical role as informal caregivers to older seniors, are expected to significantly decline between 2030 and 2048, which will necessitate even higher levels of formal supports, including PCHs and home supports.

Population Trends and Demographics in NL

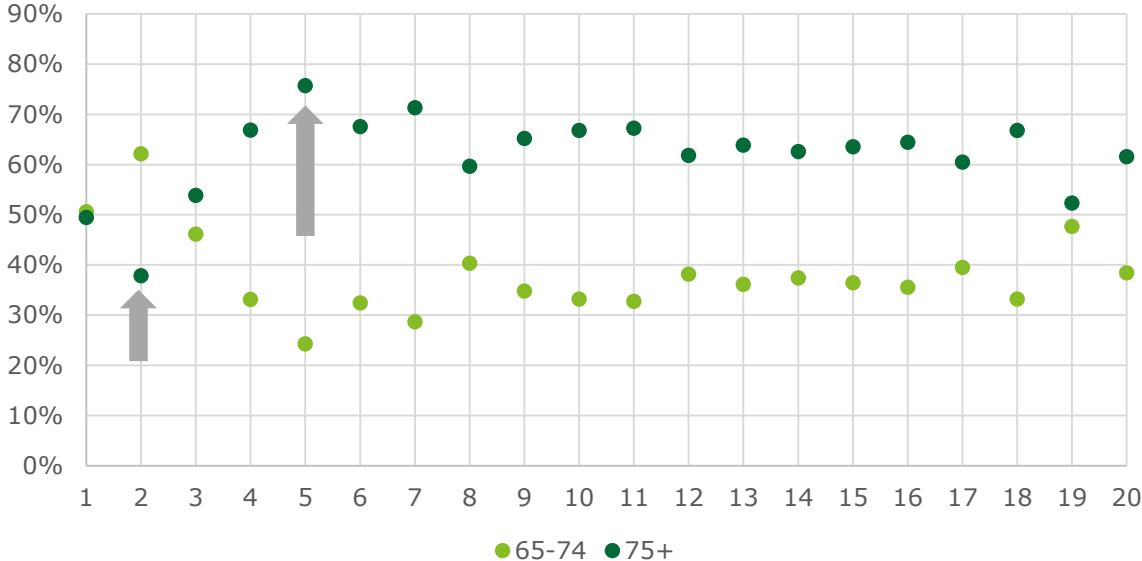
Trends by economic zone

Although all economic regions are expected to see growth in the seniors population over the next 30 years, depending on the demographic makeup of those seniors, the expected demand for PCH and other LTC CSS will vary across regions. In particular, regions with a high percentage of older seniors relative to younger seniors, will experience a greater demand for PCH due to a lack of informal caregivers.

Comparison of younger seniors (65-74) and older seniors (75+) by Economic Zone (2018)



Comparison of younger seniors (65-74) and older seniors (75+) by Economic Zone (2048)



As shown in the graphs above, it is projected that there will be a complete reversal in almost all economic zones between the ratio of younger seniors (aged 65 to 74) and older seniors (over 75) between 2018 and 2048. For example, Zone 5 is projected to grow from having almost an equal ratio of younger to older seniors in 2018 to having a significantly higher percentage of seniors aged 75+ resulting in an increased need for formal support services. Zone 2 represents the opposite end of the spectrum – by 2048 they are projected to have the greatest population of young seniors (65 - 75) and one of the lowest 75+ seniors population. This trend suggests that the need for formal supports will be much lower than in other regions.

3.3. Supply of PCH beds

Current Supply of Personal Care Homes

Given that PCH beds are supplied by private operators, and are not planned or controlled by the Department or the RHAs, this report does not forecast the supply of PCH beds. However, our assessment process did include a review of the number of full-occupancy beds, vacancy rates, and “actively-waiting” wait lists to determine the appropriate Year 0 utilization levels.

For the purposes of this report, supply of PCH beds refers to the number of bed available for occupancy. Licensed bed numbers (that is, the number of beds that PCHs are licensed to operate) were not considered in our analysis or forecasting process, as they do not always represent the actual number of PCH beds occupied or available and may overstate vacancy rates.

Supply and Vacancy Rates

The current supply of full-occupancy beds is 4,065 across the province, as of January 2019. As shown on the following page, the majority of PCH beds are supplied in Economic Zones 8, 14, and, 19. Many regions, including Economic Zones 1, 2, 3, 5, and 13 do not currently supply any PCH beds. In the graph on the following page, the number of vacant beds is compared to the vacancy rates. Overall, ignoring new builds and extensions due to be constructed in 2019 and wait list figures, many regions appear to have a significant excess of beds. As an example, Zones 7 and 16 both have vacancy rates over 35% which significantly exceed the provincial average of 17.9%. By contrast, some regions, such as Zones 4 and 10 both have quite low vacancy rates in PCH.

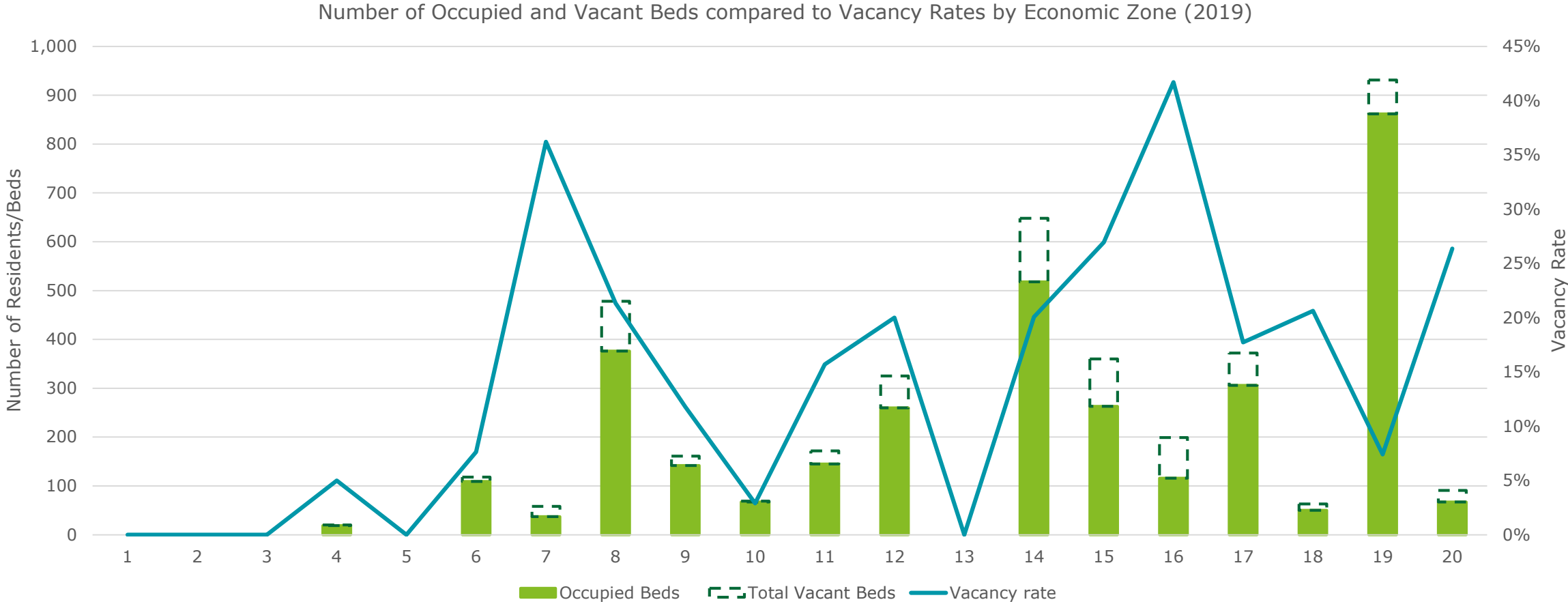
Wait Lists

The number of residents/clients on the “actively-waiting” list amounted to 168 as of January 2019. All wait list figures are reported at a point in time and fluctuate day-to-day as new potential residents are clinically and financially assessed and subsequently placed into a home. Wait list numbers fluctuated significantly month-to-month for 2018. Central Health and Eastern Health wait lists fluctuated the most over the year, with ranges from 60 to 128, and 44 to 84, respectively. This is due, in part, to new beds becoming available.

Despite a significant excess of supply across the province, wait lists for PCHs persist in the Province, even when there are nearby vacancies. Total vacancies significantly exceed the wait list figures in Zones 8, 12, 14, 15, 16 and 17. Overall, net wait list figures (total wait list less vacancies) are very low (or even negative, in many cases) province-wide. Stakeholders report that is partially attributed to residents who refused placements in a particular PCH or are waiting for beds in a preferred location or a particular room type (e.g. waiting for a private room).

Vacancy Rate vs. Total Vacancies

The chart below provides a January 2019 point-in-time total vacancies and vacancy rate in existing PCH facilities by Economic Zone. There is an excess of beds across the province Zone 16, for example, has more than 40% vacancy rate with 80+ excess beds.



Current Supply of Personal Care Homes

Prospective Applicants, Extensions, and New Builds

Our analysis of supply also considered short-term future supply, including a review of applicants for PCH extensions and new builds. RHAs reported that there would be a significant increase in beds over the next 10 years if all new builds and extensions proceed.

Before the end of 2019, an estimated 309 beds are expected to be constructed in Eastern Health. 200 additional beds are expected to be constructed in Western Health. 368 are expected in Central. Combined, an additional 877 beds will be added to a system with significant vacancies throughout the Province. Additional beds are currently being planned or contemplated by private sector developers.

Vacancies are likely to increase in the short term as a result of the new builds, as some PCH residents may apply to move into the newer, more modern facilities. This may impact the viability of smaller, older PCHs.

Determinants of Supply for PCH (and other support services)

Competition for workers, including both skilled and unskilled labour, is one of the key determinants of supply for PCHs and home supports. In many economic zones, there are seniors who would prefer to stay home but do not have the option due to the lack of home support workers. Home support is perceived as a challenging job, especially for unskilled workers who do not have access to formal training to cope; therefore, persistent competition for workers in regions where wages for retail work, seasonal work, and the tourism industry exceeds the wages paid for home/personal support workers limits the supply. Competition for workers has a negative impact on supply for both PCHs and home support workers.

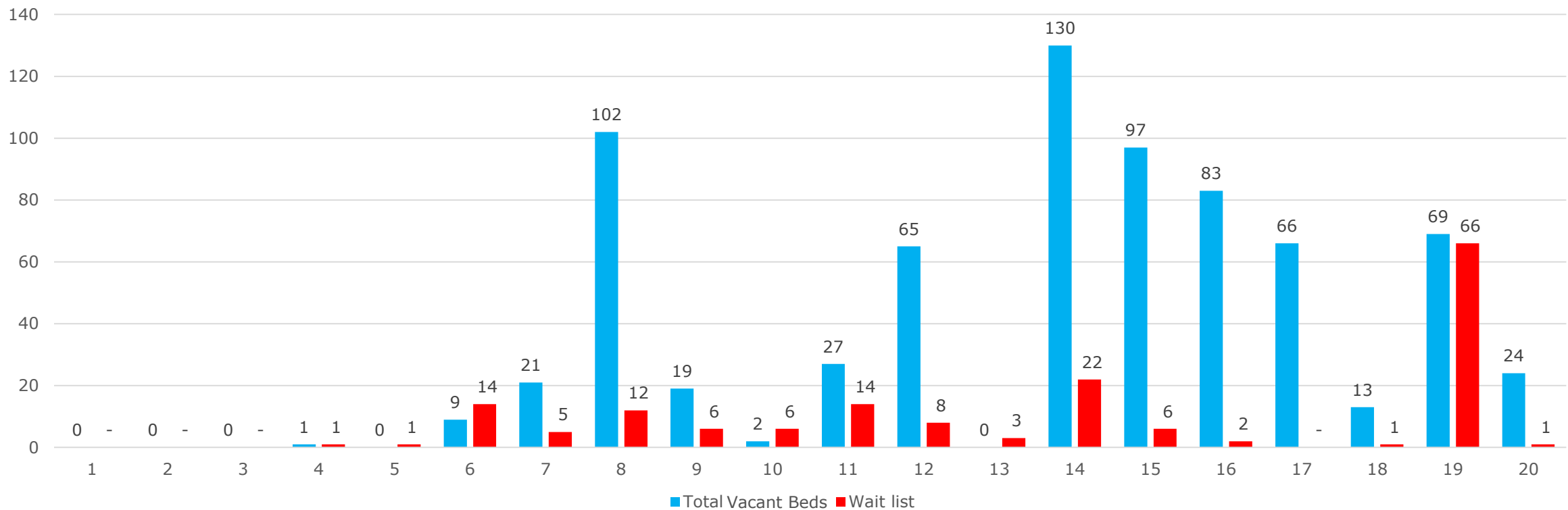
Other key determinants of supply include: current and anticipated future funding rates for subsidized clients, and anticipated future demand for services. These factors are not currently directly captured in the model but may have an impact on historical utilization rates and subsequent future utilization rates.

PCH Vacancies vs. Wait list

The chart below provides a comparison of PCH vacancies and wait lists by Economic Zone. Across the province, total vacancies (in blue) generally outweigh wait lists for personal care homes (in red). Total vacancies significantly exceed the wait list figures in Zones 8, 12, 14, 15, 16 and 17. Stakeholders reported that a large proportion of individuals currently on the wait list were waiting for a preferred home and/or were not ready to be admitted to a home. Given the high vacancy rate as well as stakeholder reports, an assumption was made that the size of the wait list at this junction does not reflect actual demand for PCH services. This should be revisited on a periodic basis.

Note: Wait lists are only maintained in Economic Zones that have PCHs.

Total PCH Vacancies vs. PCH Wait list by Economic Zone



3.4. Demand for PCH beds

Current Demand for PCH

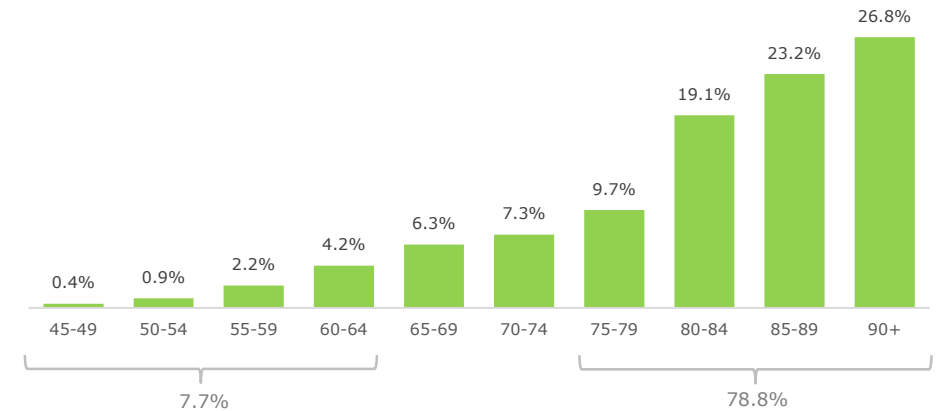
Our analysis of demand for PCH services was focused on the current resident population and the utilization of PCH services and alternatives to set a base-level for forecasting purposes. For the purposes of this analysis and the forecasting model, all current residents are assumed to represent “true demand” and are assumed to have freedom of choice over placement options (where available). Although publically-subsidized clients represent the majority (82.6%) of residents, private pay clients may also choose to live in a PCH if they do not meet either the clinical or financial eligibility criteria to receive government subsidy.

As identified in the Stakeholder Engagement Section of this report, the key determinants of demand for PCH services include: personal and attitudinal preferences, availability and quality of alternatives (including home supports and informal caregivers), availability and quality of PCH, and income and financial eligibility of the client.

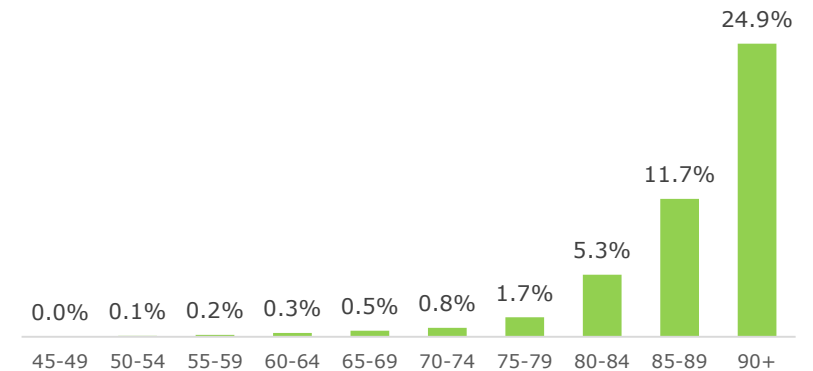
As at September 2018, there were 3,337 Newfoundlanders and Labradorians residing in personal care homes, 2,758 of which are government subsidized clients. An analysis of PCH residents by age group revealed that the primary users of PCH services are seniors over 75 years old. As of December 2018, seniors over 75 represent 78.8% of PCH residents (as shown in the top right chart). Only 7.7% of PCH residents are under the age of 65 – younger residents are typically adults with disabilities who would be more-appropriately placed in an alternate community-based care setting with a peer-group.

Utilization rates for PCH services (measured as number of residents over population) was highest for residents 90 or older. As shown in the graph to the bottom right, 24.9% of seniors in the 90+ age group, and 11.7% of seniors in the 85-89 age group, currently reside in a PCH.

Age group as share of all PCH residents
(CRMS Data, Dec 2018)



Provincial PCH utilization by age group
(CRMS Data, Dec 2018)



Source: Deloitte Analysis, CRMS Data, December 2018

3.5. Utilization of PCH and Home Supports

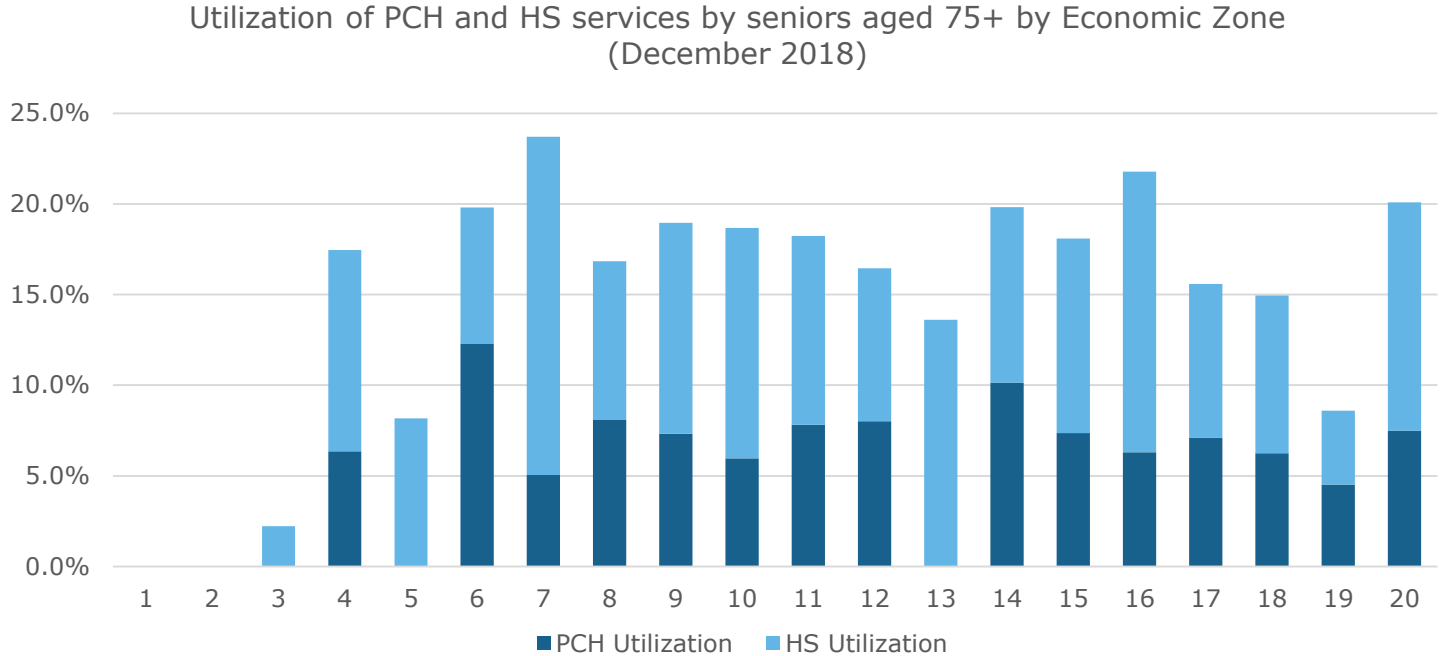
Current utilization of home supports as an alternative to PCH (2018)

A comparative analysis of PCH utilization relative to home supports was used to assess the impact of programs like Home First and to set a baseline for modelling purposes. As shown in the graph to the right, uptake of home supports by seniors aged 75+ across the regions is already quite high, especially in Economic Zones 5, 7, and 13, where the utilization and/or availability of PCH services is lower or nonexistent.

Utilization levels vary across zones. Stakeholders reported a variety of possible reasons for the variances, including demographic and socio-economic factors as well as the qualitative characteristics of each economic zone.

In the Stakeholder Engagement section of this report we share insights from each of the four RHAs on the unique context of each economic zone.

Utilization of home support appears to be higher in regions with lower PCH utilization or a lack of PCH beds (most notably in Economic Zones 5, 7, and 13). Overall, some regions have higher total utilization of services (measured as PCH utilization plus home support utilization), due in part to factors such as lack of informal supports and availability/proximity of resources and infrastructure.



Source: Deloitte Analysis. Data: CRMS Client Data, December 2018

Current Utilization of PCH and HS Services

Utilization of both HS and PCH in Zone 19 (the St. John's Metro Area) stands out. The region has the lowest PCH utilization rate and overall utilization rate for HS and PCH services of all the regions and appears to have a number of unique factors that result in these lower rates. Firstly, it appears that the economies of scale that come with a larger population base make it feasible for private operators to offer more services in the St. John's area compared to other parts of the province. As a result, the demand for HS and PCH type services are partially being met through private services such as private pay home care, independent/assisted living, extensive seniors housing, etc. In addition government funds the operation of Community Care Homes in the St. John's Metro Area that currently houses 150 residents. In most areas of the province outside the St. John's Metro Area, these types of private sector services do not exist. Thus, all the service needs fall on government funded HC and PCH. Secondly, seniors in the St. John's area are more likely to have informal caregivers and easier access to services (i.e. hospitals, stores, social areas, etc.) than seniors in other parts of the province, which results in the seniors in St. John's being able to live independently later in life than their counterparts in rural or remote regions. Thirdly, Zone 19 is one of the wealthiest Economic Zones in the province. According to the 2016 Census, average household was \$102,635 in the St. John's Census Metropolitan Area in 2015 compared to a provincial average of \$87,392. As a result, more seniors in the St. John's area may be better able to afford the private services discussed above.

Interestingly, Zone 7, which has a similar level of PCH utilization to St. John's, has the highest level of home support utilization rates in the Province. That zone has the highest level of home support utilization by seniors older than 90 at 45% compared to the provincial average of 19.4% for that cohort. Consultations with RHAs also revealed that most HS clients in zone 7 are self-managed.

Zone 6 also presents as an interesting outlier as well; PCHs in this region have the highest utilization out of all the economic zones. Consultations with the RHAs revealed that the forces driving this high utilization appear to be two-fold: firstly, the PCH in this region is perceived to be well operated and is attractive to potential residents, and secondly, the availability of home support workers is limited due to competition for labour.

Analysis also compared the utilization of PCH and HS by age groups. Detailed supporting analysis and graphics are included in Appendix B. Overall, seniors aged 80+ are the highest users of both PCH and HS. However, when comparing utilization by 5 year age groups, a larger portion of seniors under 90 access HS than PCH. However, a greater percentage of seniors 90+ live in a PCH.

It was reported that in some regions home support services may allow individuals to stay in their homes longer. This statement appears to be somewhat supported by the data across different age groups; that is, regions with exceptionally high PCH or HS utilization for a particular age group, usually have extremely low utilization of the opposite. Zone 6's utilization by seniors aged 90+ is the most striking example of this (as demonstrated by a PCH utilization of 48.5% compared to 12% HS utilization.) Conversely, Zone 13 has 0% PCH utilization by seniors aged 90+ and 42% utilization of HS for the same age group. The table to the right shows a comparison of PCH and HS utilization by age group at a provincial level.

Provincial Utilization of PCH and HS by Age Group (December 2018)

Age Group	PCH Average	HS Average
65-69	0.5%	1.3%
70-74	0.8%	2.1%
75-79	1.8%	4.0%
80-84	5.5%	8.3%
85-89	12.0%	13.8%
90+	25.2%	19.4%

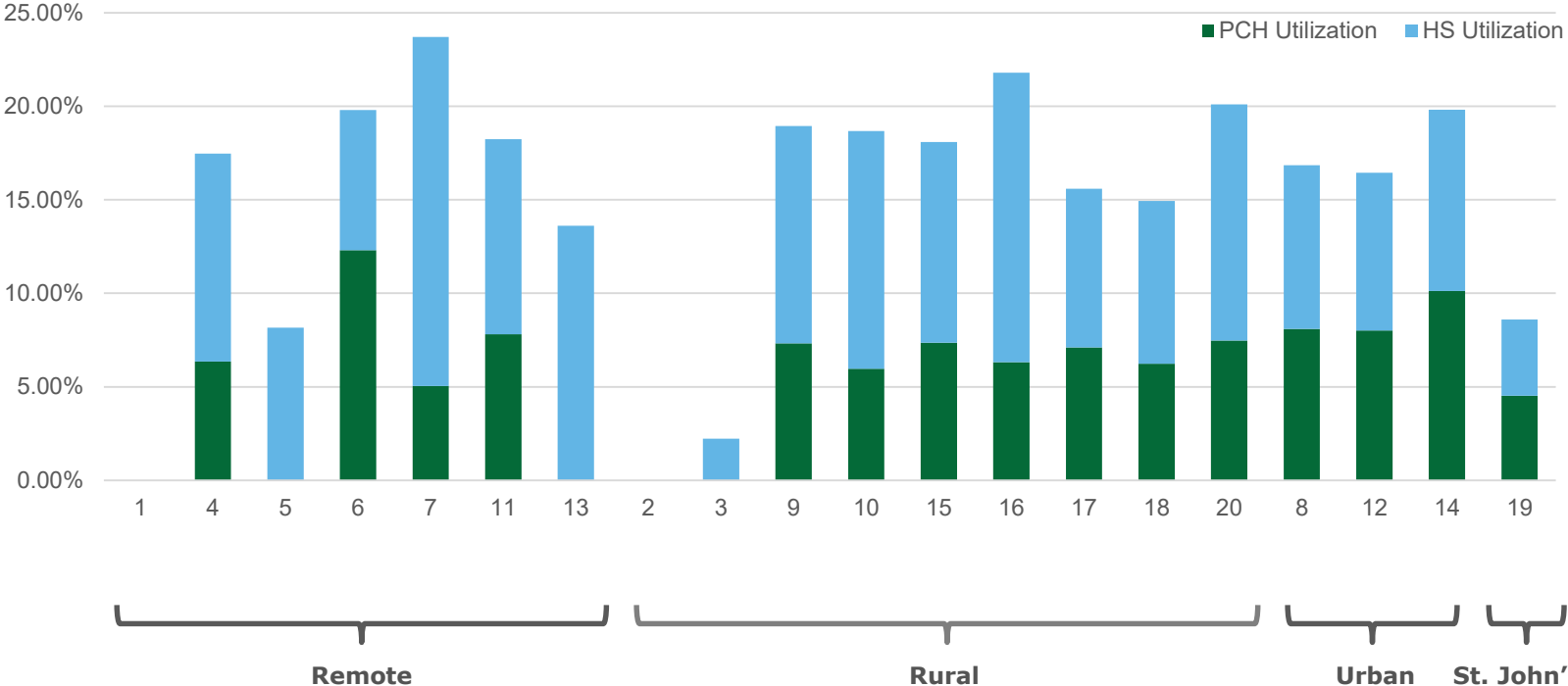
Source: Deloitte Analysis. Data: CRMS Client Data, December 2018; HCS Department of Finance Population Data

Current utilization of PCH and HS sorted by community population size, 2018

On average, utilization of PCH services is highest in urban (excluding St. John’s) and rural areas. Remote Economic Zones with only small communities (excluding regions with no PCH beds) have lower average utilization than rural and urban regions. On average, home supports are most highly utilized in remote regions through the self-managed care option.

Zones 2 and 3, although geographically large, have a concentrated population in more regional centers (Labrador City and Happy Valley-Goose Bay) and are classified as rural rather than remote. Despite Zone 20’s smaller population, given its close proximity to St. John’s it has been classified as Rural rather than Remote.

Data on Zones 1, 2, and 3 may not be fully reflected as some services are not provided the RHA, and instead are funded through other streams. Stakeholders reported that the Nunatsiavut Government funds certain services for these areas.



	PCH Utilization	HS Utilization
Remote Average	4.50%	9.92%
Rural Average	5.31%	9.17%
Urban Average	8.74%	8.96%
St. John's Average	4.52%	4.08%

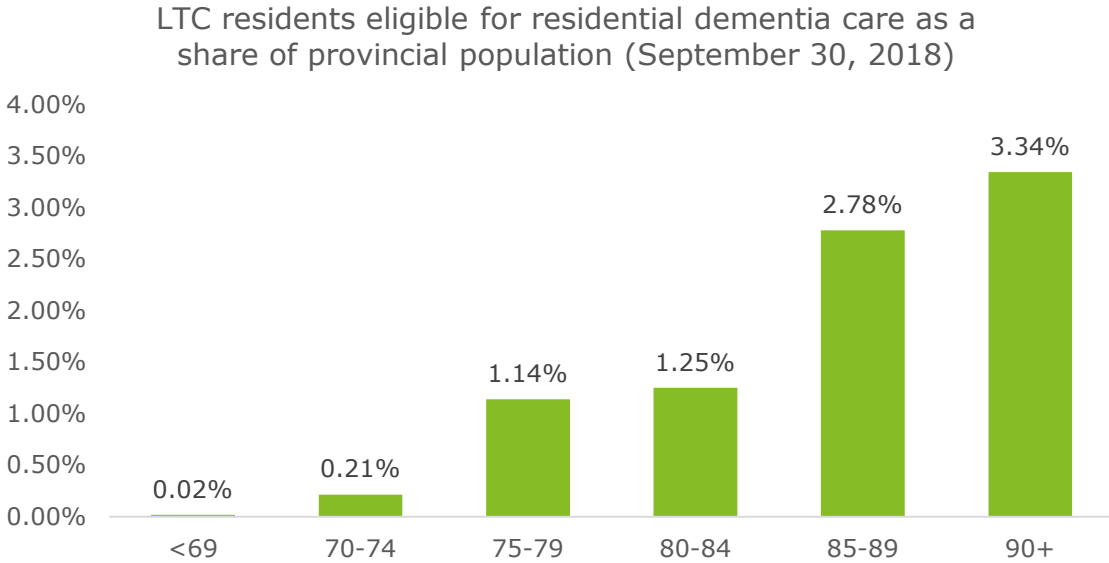
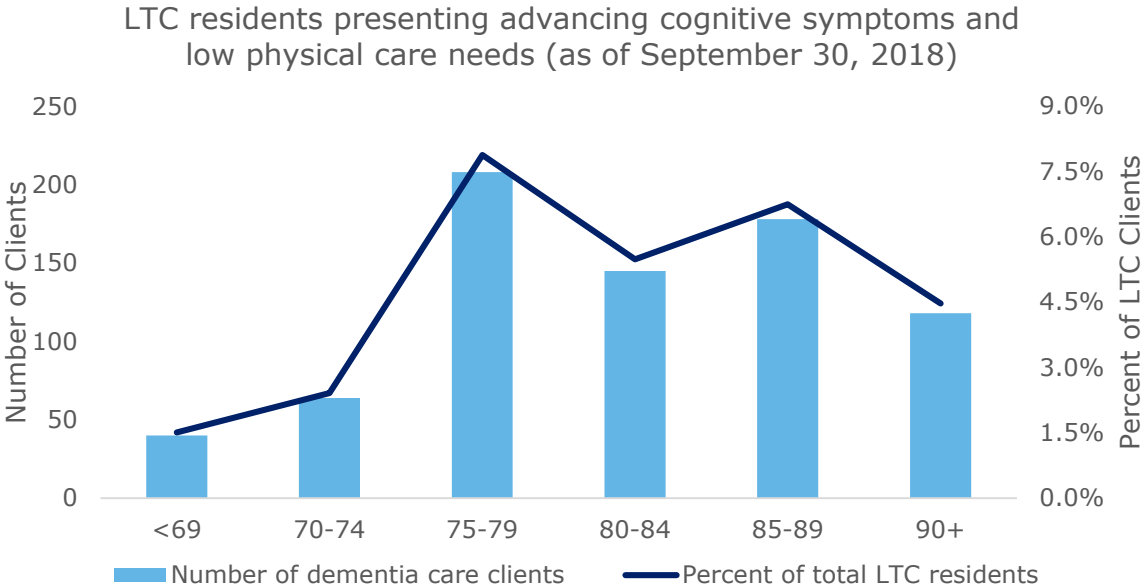
Excluding regions with no utilization

	PCH Utilization	HS Utilization
Remote Average	6.30%	11.58%
Rural Average	6.83%	10.32%
Urban Average	8.74%	8.96%
St. John's Average	4.52%	4.08%

Projected Utilization for Residential Dementia Care

An analysis was completed by HCS to estimate the potential number of current LTC residents who may be appropriate for PCH given the availability of enhanced support for dementia care. Some clients with dementia may be prematurely placed in LTC due to symptoms of dementia; however do not require 24 hour nursing care. Clients identified as potential candidates presented the following conditions: advancing cognitive symptoms of dementia, and low physical care needs (i.e. ambulatory clients).

The figures presented in the graph below (left) were used to calculate the number of dementia care residents by age group on a provincial basis.



Source(s): HCS Analysis; September 30, 2018 CIHI Canadian Institute for Health Information RAI-MDS 2.0 Database

Clients aged 75+ represent the highest share of LTC residents that present the combination of symptoms that would make them eligible for residential dementia care. Clients aged 85+ would be the highest users by age group.

4. Stakeholder Engagement

Stakeholder Engagement Approach

Our stakeholder consultations included engagement of staff directly involved in continuing care in each of the RHAs, as well as three PCH owners, a consultant to the industry, and an association executive.

The objectives of the engagement were to more fully understand the current and future direction of care in the community and home, including:

- The current state of PCHs in the province’s different geographical regions.
- Developments that may influence demand for PCH beds: e.g. adult day programs, respite care, re-enablement and memory care.
- Each region’s particular challenges or advantages in program delivery that may affect PCH demand and availability.

Detailed stakeholder engagement notes can be found in Appendix C.

RHA interview participants

Eastern	Michelle White	Regional Manager, PCH Program
	Carole Byrne	Regional Manager Community Support Programs
	Loretta Cornick	Regional Manager Community Placement Services
Central	Irene Pack	Regional Manager, Community Supports (Personal Care Home Lead)
	Stephanie White	Regional Manager, Community Supports (Community Residential Services Lead)
	Florence Sentner	Regional Manager, Community Supports (Home Support Services and Home First Lead)
	Stephanie MacLean	PCH Coordinator
Labrador - Grenfell	Beverly Woodward	Regional Manager
	Tiffany McLean	Placement Services
	Tanya Gibbons	Community Health – Home & Community Care
Western	Bruce Loder	Acute Care Social Worker
	Gloria Rouzes	Manager, Assessment and Placement
	Janet House	Community Health Nurse

Insights from Stakeholder Consultations – RHAs

Based on our discussions with RHA staff, we identified the following key environmental and social drivers that affect the demand for PCH beds:

Home First and Home Support services

- Home First philosophies and better extension of care into people's homes are enabling people to remain at home longer and, thus, the average age of PCH residents is increasing. We anticipate that PCH operators will want to shift their services in response, with Enhanced Care, dementia care, and other supports for clients with increasingly complex needs. The drive to keep people in their homes longer also applies to those whose home is a PCH. How these services are funded will help shape which services are provided.
- We heard from RHA staff that the perceived quality of the environment, and of the care provided by a given PCH, has a strong influence on demand for PCH beds.

Environmental and social impacts

- For the frail elderly across the province, and particularly in northern Newfoundland and in Labrador, coping with winter and other seasonal home maintenance is a challenge. We heard that inability to clear snow and the difficulties inherent in cold and snowy conditions can be a decisive factor in choosing to move to a PCH. Individuals living alone can become isolated in winter.
- All RHAs said they observed difficulty in finding support workers, particularly in rural areas, if there are attractive employment alternatives. PCHs have the effect of concentrating the need for support workers in one place, and generally operate in communities with a more-concentrated working-age population, which helps reduce some staffing constraints.
- We heard that outmigration has another impact on PCH demand: family members who live away were reported to be encouraging their parent(s) to move to a PCH rather than staying home, even if an assessment indicates they could stay at home with the right supports. This pressure increases during the summer and during holidays; times when family members are visiting.
- We heard many comments about the shortage of home care workers and the difficulty in keeping them, both for agencies providing home support services and for individuals or families who choose the self-managed care option.
- Social isolation can have an affect on heath. This can be partly due to the absence of family, a loss of friends and a loss of mobility, or a combination of such factors.

Wait lists and vacancy levels

- Wait lists were described to us as being poor indicators of how well demand is being met by supply. For example, wait lists do not mean there is no place available for an individual. In fact, in a number of cases there are wait lists and vacancies at the same time, due in part by individuals choosing not to take up a place that is vacant. For clients willing to accept a place in a home that is not in their community, and to accept a semi-private room, placement can happen very quickly. However, a number of individuals continue to choose to stay at home until a placement at a preferred room or PCH becomes available.

Insights from Stakeholder Consultations – Current and Prospective PCH Operators

We held interviews with a new entrant to the PCH operator industry, a prospective new entrant and a long-term owner/operator with homes in urban and rural areas.

What we heard from industry

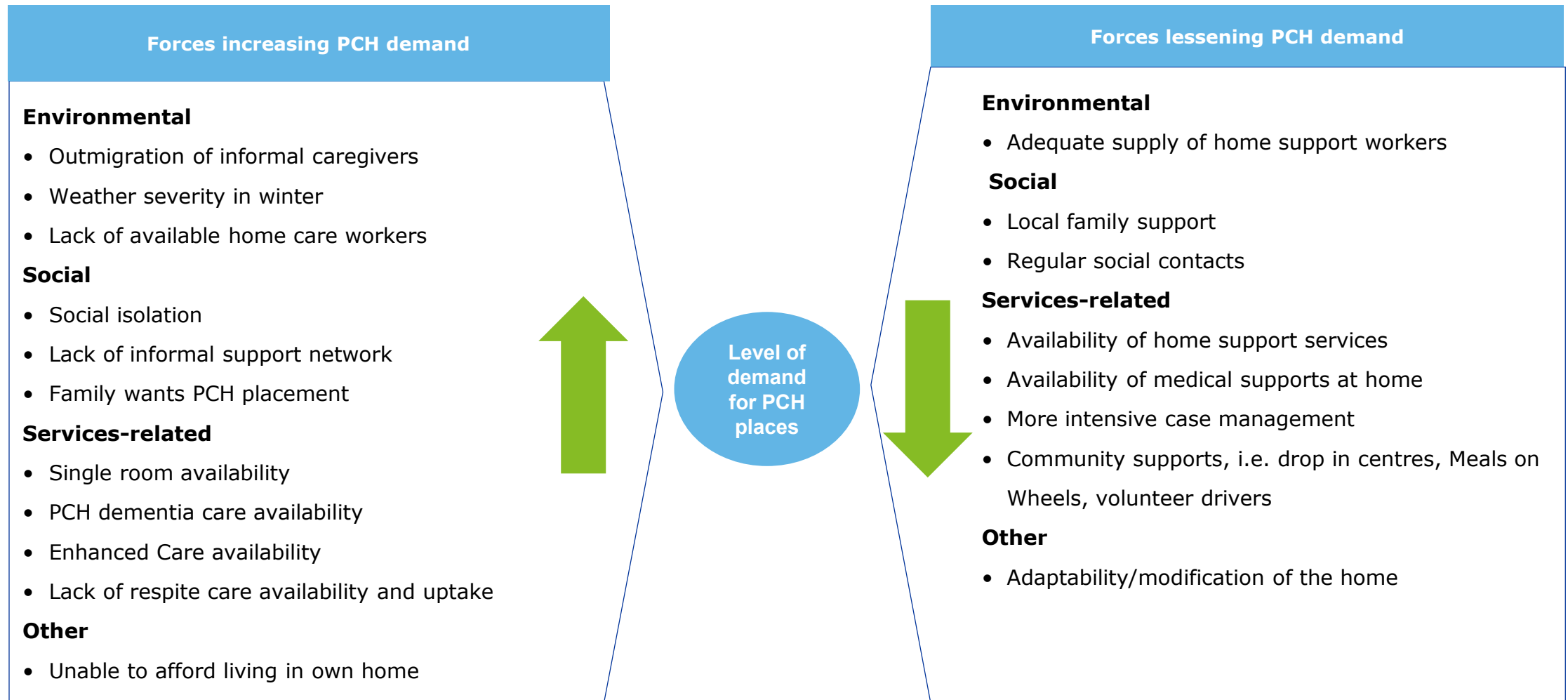
- Current and prospective owner/operators see opportunities to provide a continuum of services, including respite care dementia care, day programs, independent living apartments and palliative care. How services are subsidized will strongly influence which services are offered by each provider.
- While large operators focus on higher-volume PCHs in larger population centres, we heard that in smaller communities there is a role for smaller homes that enable people to stay at home longer. These comments from industry were corroborated by anecdotes from RHAs, who told us that smaller homes (defined as those with fewer than 30 beds) can play an important role in serving rural areas.
- Larger companies with the ability to attract investors and to create larger, attractive PCHs in which to live are dominating new builds in larger towns.
- We heard from several current and prospective operators, that they believe Zone 19 (St. John's and North Eastern Avalon) needs more supply. At present, they believe there is strong demand for private rooms in high quality, newly constructed personal care homes, which they believe competes with the choice to stay at home. We heard from several sources that there is often a significant stigma attached to moving into older, more outdated facilities that more closely resemble long-term care or institutional facilities, which may be keeping seniors in their home longer. The amenities of several proposed "campus style" facilities, such as coffee shops, pools, bowling alleys, and other features are considered significant selling features of the homes.

More access to data, more flexibility

- Current and prospective operators reported that access to better data about the demographics, income and needs of residents in target communities, would enable them to better validate demand. This would reduce risk and therefore the cost of capital for investors.
- Some current operators feel that the 100 bed single-facility limit is too restrictive. They believe that licensing to invest in new "wings" of existing buildings would allow them to offer additional capacity very cost effectively, as new wings in an existing facility would allow them to take advantage of infrastructural systems (i.e., HVAC, water, electrical, etc.).
- Some current operators believe that operating policies and funding should be more supportive of smaller-scale PCHs to ensure that demand for services in smaller communities is met. They believe that smaller capacity operators in small communities help people maintain their quality of life and reduce the dependency on home support services in rural areas.

Forces affecting PCH demand

RHA representatives described the forces that are acting on the choice of placement today and tomorrow. On the left are the major forces contributing toward PCH placement; while those on right contribute to enabling more individuals to live in their homes longer. These forces differ by individual circumstances and by geography, however, we heard from everyone that rural communities tend to have greater environmental and social drivers towards seeking earlier PCH placement.



Impact of geography on the drivers of PCH demand

Economic Zones have different conditions that affect the attractiveness of a move to a personal care home. The below right table shows the population of the largest community in each Economic Zone. Consultations revealed that demand for PCH services is often dependent on PCHs being located in a centralized, economic hub that has a critical mass to support PCH workers, access to services, and nearby family.

Key points

- For the purpose of informing our forecasting, we identified the population size of the largest communities in each Economic Zone.
- We designated Economic Zones as relatively Remote, Rural or Urban, based on the population in the largest community, and on RHA staff descriptions of what affects PCH demand in their respective economic zones. Note that Urban does not imply the entire economic zone is urban, but that the zone has one or more significant sized urban centres that act as population and services hubs.
- The environmental barriers to staying in one's own home are greater in more rural areas. PCH need should be higher on a per capita basis in such regions.

Zone type	Largest Community	Total Pop.	Typical features	Environmental Factors
Remote	Pop < 3,000	38,347	<ul style="list-style-type: none"> • Smaller towns • Long distances to larger towns 	<ul style="list-style-type: none"> • Environment and social challenges, such as outmigration, higher chances of social isolation; however, social bonds can be strong • Difficult to find and retain home support workers • Long travel distances between clients for home support • Few or no PCHs as of 2018 • Likely less attractive for new PCH investment
Rural	3,000 < Pop < 12,000	140,565	<ul style="list-style-type: none"> • May have regional centre; e.g. Zone 2, Labrador City 	<ul style="list-style-type: none"> • Higher populations mean more sources of support workers • Difficult to hire and retain home support workers • Long travel distances for home support workers in rural areas • Regional hubs often have PCHs • Some PCH investment may take place, likely in regional centres
Urban	Pop > 10,000	110,216	<ul style="list-style-type: none"> • Larger regional centres and urban areas 	<ul style="list-style-type: none"> • Larger towns and cities, still may have a large rural area • Towns are regional hubs with potential for PCH growth • Easier to recruit home care workers in towns and cities • More likely to have family nearby • Migration to hub towns is reported by RHAs in several of these Economic Zones
St. John's	Pop. > 100,000	228,182	<ul style="list-style-type: none"> • Capital city, most services 	<ul style="list-style-type: none"> • St. John's is unique in its population density and size as its treated separately • Likely most attractive for new PCH investors • Most likely to have family nearby

	Zone	Pop.	Pop. Largest Comm.	RHA
Remote	1	3,680	1,125	LGH
	4	1,765	427	LGH
	5	1,455	558	LGH
	6	6,497	2,258	LGH
	7	6,993	947	WH
	11	11,721	2,971	CH
	13	6,236	1,634	CH
Rural	2	9,525	7,220	LGH
	3	10,814	8,109	LGH
	9	18,757	6,623	WH
	10	7,326	4,067	WH
	15	24,652	6,291	EH
	16	17,232	5,316	EH
	17	39,004	6,012	EH
	18	5,072	3,496	EH
Urban	20	8,183	1,619	EH
	8	41,799	19,806	WH
	12	25,134	14,171	CH
St. John's	14	43,283	11,688	CH
	19	228,182	108,860	EH

Snapshot of utilization of PCH and Home Support in Labrador-Grenfell Health

Below we provide a summary of the key RHA observations and show the utilization and largest community for the zones covered by the RHA. The Labrador-Grenfell RHA (LGH) provides services to highly rural regions of the province. We note that Zone 6 has the highest PCH utilization in the province.

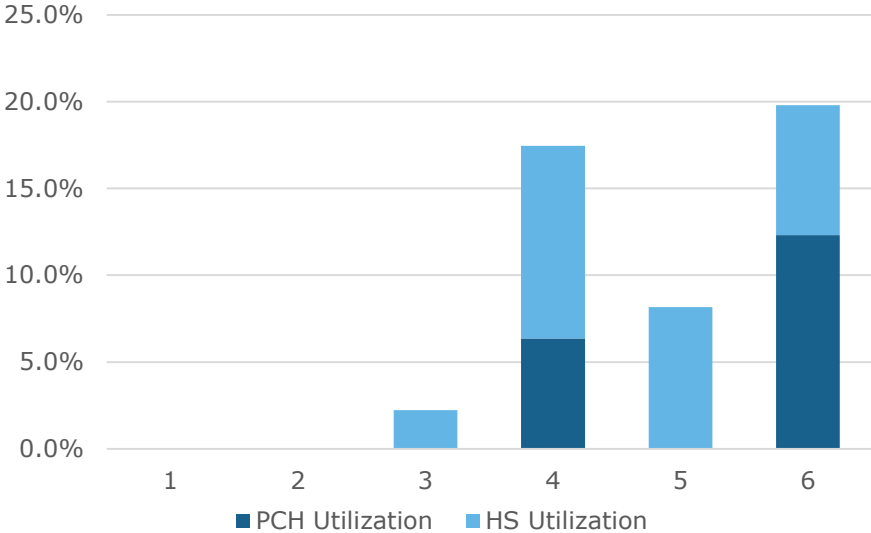
- In some zones in LGH there are no PCH facilities. Clients needing support may be provided services by the Nunatsiavut Government.
- There are four PCHs in LGH: St. Anthony; Flowers Cove; Roddickton; Mary’s Harbour
- Staff reported that the region was well served, with wait lists being described as “manageable”. At the time of the interview in mid-March 2019, stakeholders reported there was a wait list in three of the four PCHs.
- LGH as a whole has lower population density, severe weather, and is significantly impacted by out-migration of the working-age population, with the exception of Labrador City and Happy Valley-Goose Bay, areas which experience in-migration of working age people.
- Zone 6 has the highest PCH utilization rate in the province. There are three PCHs in the zone. St. Anthony is a services and health care hub for the zone.

Population of Largest Community by Zone (2028)

Zone	Largest Community	Pop. Of Largest Comm.	Type
1	Nain	1,125	Remote
2	Labrador City	7,220	Rural
3	Happy Valley-Goose Bay	8,109	Rural
4	Cartwright, Labrador	427	Remote
5	L'Anse au Loup	558	Remote
6	St. Anthony	2,258	Remote

Source: Deloitte Analysis; GNL Department of Finance

Utilization of PCH and HS services by seniors aged 75+ (December 2018)



Source: Deloitte Analysis. Data: CRMS Client Data, December 2018

Zone	Insights from RHA Consultations
1	Support services in this region are provided by the Nunatsiavut government and funded federally; there is not any unmet demand for PCH in this zone.
2	Population in this region is primarily families that retire out of the community; there is limited demand for PCH in this zone.
3	No PCH, home supports are meeting demand.
4	Many residents move away for residential care in Zones 5 and 6; expansion of PCH services may reduce this number, however it may have a corresponding increase in PCH demand.
6	RHAs reported a shortage of informal support and agency-provided home supports; RHAs also reported that the PCH in this region is particularly well-managed.

Snapshot of utilization of PCH and Home Support in Western Health

Below we provide a summary of the key RHA observations and show the utilization and largest community for the zones covered by the RHA. Most notable is the high utilization of home supports in Zone 7 at nearly 19% of seniors aged 75+.

- For Western region as a whole, supply exceeds demand.
- Zone 7, Gros Morne and the Viking Trail North, has a home support utilization of nearly 19% for those aged 75+.
- Staff indicated they are processing fewer PCH applications than previously.
- From acute care, people are being supported to return home who would have gone to LTC.
- Perception of PCH quality has a big impact on demand.
- Corner Brook (Zone 8) does not have a PCH licensed to provide Enhanced Care – a gap in services.

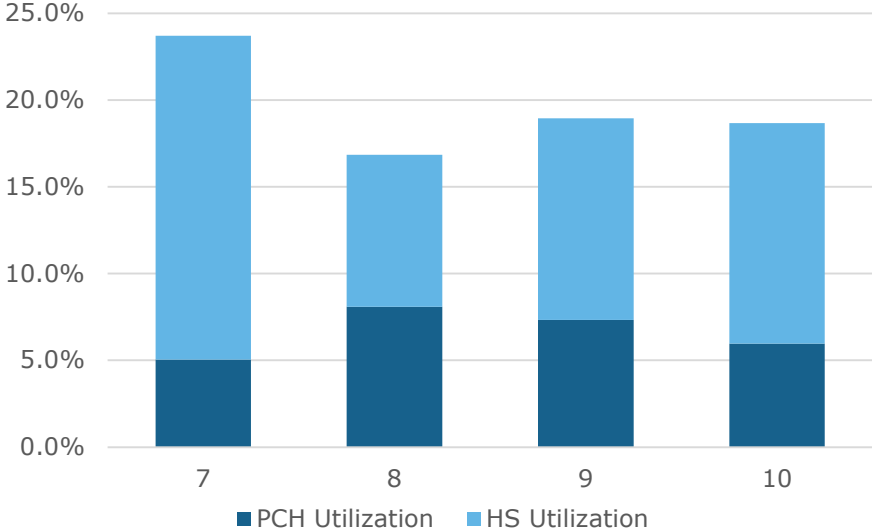
Zone	Insights from RHA Consultations
7	Adequate supply of PCH places within easy reach of most communities; 40 PCH residents; almost 100% of HS clients are self-managed.
8	Lots of PCH capacity in Corner Brook; enhanced and respite care provided outside Corner Brook, but not in the city.
9	Relatively rural; good availability of PCH places.
10	Port-aux-Basques has a PCH, however, the rest of the zone does not have ready access to PCH services; support needs are met by home support services.

Population of Largest Community by Zone (2028)

Zone	Largest Community	Pop. Of Largest Comm.	Type
7	Rocky Harbour	947	Remote
8	Corner Brook	19,806	Urban
9	Stephenville	6,623	Rural
10	Channel-Port aux Basques	4,067	Rural

Source: Deloitte Analysis; GNL Department of Finance

Utilization of PCH and HS services by seniors aged 75+ (December 2018)



Source: Deloitte Analysis. Data: CRMS Client Data, December 2018

Snapshot of utilization of PCH and Home Support in Central Health

Central region stands out as having an economic zone (EZ 13) without any PCH beds that appears to be fully served by HS services. Only 72 residents aged 75+ are receiving supports in Zone 13. Based on the utilization rates of both PCH and HS, the other economic zones in Central appear to be well-served.

- Overall adequate supply of PCHs in Central Health, however, some areas are not served at all (Zone 13). This area has a high utilization of home support services at nearly 14% of seniors aged 75+.
- RHA representatives report that people are choosing to move to a PCH later in life than previously.
- RHAs commented that people are moving to the Eastport Peninsula and to Grand Falls to retire (in Zones 14 and 12, respectively).
- It is difficult to find home care workers. Unless the availability of home support workers increases, this may increase demand for PCH services.
- Central regional health authority commented that they actively encourage the Home First initiative and have helped support clients who wished to stay in their homes longer. This is supported by strong HS utilization rates across the RHA.

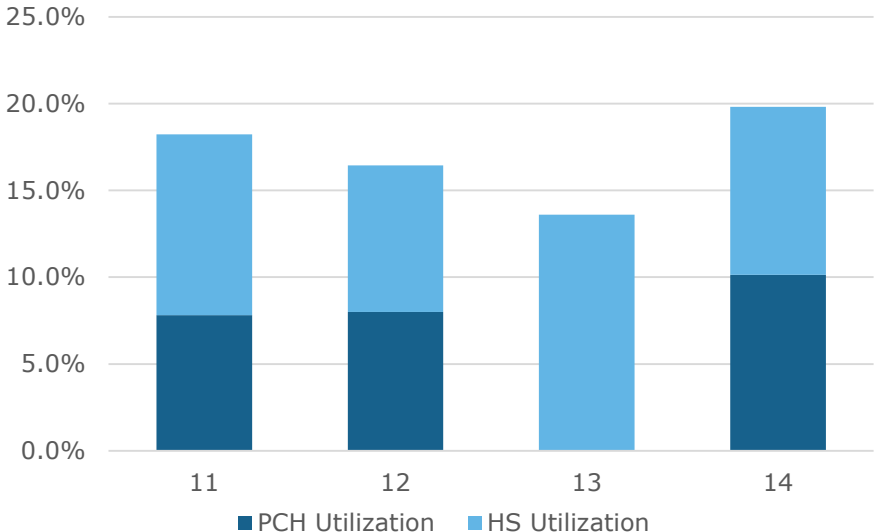
Zone	Insights from RHA Consultations
11	Relatively rural; good availability of PCH places; served by home support services.
12	Relatively rural; good availability of PCH places; served by home support services.
13	No PCH in zone; 72 clients 75+ with supports. Not perceived to be an attractive market for PCH entry, so support is 100% home care. Some clients move to Grand Falls to retire.
14	Fast growing senior population; a retirement destination; well served with PCH capacity.

Population of Largest Community by Zone (2028)

Zone	Largest Community	Pop. Of Largest Comm.	Type
11	Springdale	2,971	Remote
12	Grand Falls-Windsor	14,171	Urban
13	Harbour Breton	1,634	Remote
14	Gander	11,688	Urban

Source: Deloitte Analysis; GNL Department of Finance

Utilization of PCH and HS services by seniors aged 75+ (December 2018)



Source: Deloitte Analysis. Data: CRMS Client Data, December 2018

Snapshot of utilization of PCH and Home Support in Eastern Health

Below we provide a summary of the key Eastern Health observations and show the utilization and largest community for the zones covered by the RHA. Zone 19, which includes St. John's, is unique in its low utilization rates for both home supports and PCH places. PCH industry participants stated that in Eastern region there is unmet demand for single rooms, while vacancies persist in double rooms.

- Wait list is persistent, but places are continually available. For those waiting for a preferred home and/or for a private room, the wait can be considerable.
- An 877-bed increase to supply is anticipated from planned expansions and construction across Eastern Health in 2019.
- PCH utilization rates very similar in all zones except in North East Avalon/St. John's zone.
- Relatively high utilization rates of home supports in Zones 16 and 20, while PCH utilization is similar to other zones in the RHA; may indicate conditions favour home support adoption, but not necessarily at the expense of PCH demand.
- RHA expressed confidence that overall PCH demand could be met for the next 15 years.

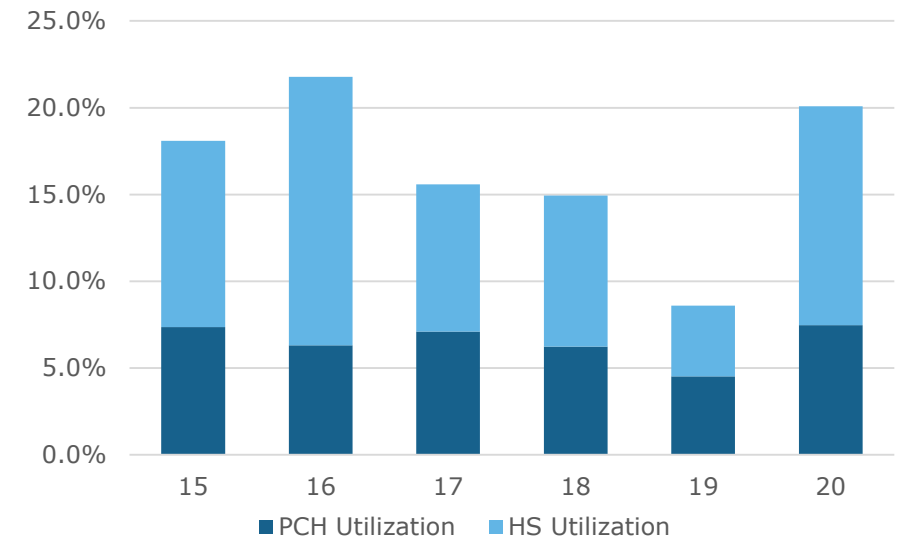
Zone	Insights from RHA Consultations
15	New capacity coming in 2019.
16	There are good community-based supports on the Burin Peninsula.
17	New capacity is available. Good support for seniors.
18	Home supports are considered effective and well-utilized. No reported issues with PCH capacity.
19	Low utilization levels were a surprise; however, availability and accessibility of resources and support services are higher; there is not unmet demand.
20	No issues with PCH capacity.

Population of Largest Community by Zone (2028)

Zone	Largest Community	Pop. Of Largest Comm.	Type
15	Clareville	6,291	Rural
16	Marystown	5,316	Rural
17	Bay Roberts	6,012	Rural
18	Placentia	3,496	Rural
19	St. John's	108,860	St. John's
20	Witless Bay	1,619	Rural

Source: Deloitte Analysis; GNL Department of Finance

Utilization of PCH and HS services by seniors aged 75+ (December 2018)



Source: Deloitte Analysis. Data: CRMS Client Data, December 2018

5. Jurisdictional Scan

Jurisdictional Scan – Introduction

To learn from other provinces' experience with forecasting PCH (or equivalent) services, and in consultation with the Steering Committee, Deloitte consulted with four Canadian jurisdictions.

Approach

- Using contacts from Steering Committee members and Deloitte, we reached out to representatives that were known to have responsibility for Personal Care Homes or to comparable facilities/models of care in four provinces. Our objective was to learn about:
 - Initiatives undertaken that have affected demand for PCHs
 - Measurement of outcomes of PCH and home care
 - Impacts on demand observed from new initiatives and programs
 - How the licenses for PCHs are controlled and implications of such controls
 - Any demand forecasting activities for PCH that were undertaken

Provinces consulted:

- Saskatchewan
- New Brunswick
- Prince Edward Island
- Nova Scotia

A note on terminology

- HCS defines Personal Care Homes to be privately owned and operated facilities that provide care and accommodations to seniors and other adults who require assistance with activities of daily living and instrumental activities of daily living and support clients requiring Level I, Level II, and Enhanced Care. Care in these homes is provided by a generally unskilled labour force with monitoring and licensing completed by the Regional Health Authorities.
- The provinces we consulted have different terms for personal care homes; for each province we indicate their equivalent name.

Jurisdictional Scan – Key insights

For the purposes of supporting development of a forecast, we found that other jurisdictions contacted have not forecasted the demand for PCH equivalent facilities.

What we learned...

- Note that below we will use the term PCH to refer to care homes in all jurisdictions, despite as noted above, other jurisdictions use different terminology to refer to the same type of home.
- Of the four jurisdictions we reviewed, only New Brunswick limits the number of licenses. The province has done so since the late 1990s. Licenses are granted for new facilities or expansion, based on demonstrated need in a given region or town.
- There have been no recent efforts to forecast demand in our target jurisdictions. Manitoba were found to have conducted a forecast in 2007, and we reviewed their approach as an input to our decision-making about how best to forecast the NL demand.
- There are similar initiatives in place and contemplated to help people stay at home longer as they age, although they are described differently and the strategies being executed are not identical in their programming. (See the individual jurisdiction descriptions on the pages that follow).
- There is a high level of confidence that effective home supports, coupled with the evident desire of people to remain at home, will lessen demand for PCH places, although no one could quantify the impact.
- Additional services in PCHs are contemplated, including dementia care, respite care and Enhanced Care. New Brunswick's approach stood out for us. This involves developing a memory care capability in standalone homes and as wings in existing PCH buildings, with specific designs, layouts and equipment. All jurisdictions are developing plans to respond to the increased frailty and cognitive symptoms of dementia.
- No jurisdiction expressed any concerns about lack of availability of PCH beds generally.
- Demand for PCHs in each jurisdiction is shaped by local forces. Interviewees noted that planning or forecasting demand for PCH beds based on a province-wide average would be unwise as it does not capture regional differences.
- In conclusion, the jurisdictional scan did not provide any insights about how to forecast, or any guidance to help quantify the impacts of home support services, or new PCH services on demand for places. It did, however, make clear that all provinces we spoke to are, broadly speaking, following similar strategies to enable people to choose to stay in their existing homes.

Jurisdictional Findings – New Brunswick

Since 1998 NB has restricted licenses for operators to build Special Care Homes (PCH equivalents). The province is currently undertaking consultations related to the development of a dementia strategy, an initiative under the NB aging strategy which was published in 2017.

Background

- NB’s “Special Care Homes” are equivalent to the PCH in NL.
- NB’s model for seniors involves four levels of care (see following page).
- NB has 6,700 special care home places, 5,700 were “filled” at the time of the interview.
- NB published *An Aging Strategy for NB*, in March 2017. See: <https://www2.gnb.ca/content/dam/gnb/Departments/sd-ds/pdf/Seniors/AnAgingStrategyForNB.pdf>

Licensing

- NB has had a “moratorium” in place on the construction of new Special Care Homes since the late 1990s.
- Exceptions are granted in regions where the vacancy rate falls below 20%.
- “We manage competition”.

Forecasting

- No forecasting to date, of PCH places, but monitor pressure on capacity.
- There are major regional differences: for example, Moncton has a “culture of placement”, while Saint John has a culture of keeping people at home.

Other

- Biggest issue in Special Care Homes is medication mismanagement.
- Undertaking a demographic study related to memory care (not specific to special care homes).
- It costs \$700 per month more to house an eligible person at home than in special care home.

Initiatives affecting PCHs

- Additional memory care homes and memory care wings in existing homes will help keep people out of nursing homes and provide an environment designed to better support behaviours associated with dementia and Alzheimer's-related conditions.
- Province is developing a dementia strategy; consultations began related to this initiative on March 29, 2019. See: https://www2.gnb.ca/content/gnb/en/news/news_release.2019.03.0192.html

Measurement

- The percentage of people being provided support at home at Level 1 & 2 was falling until 2015/16 but is now going back up. (See table at right.)
- This results from better home supports and publicizing that it is possible.

Year	HS Utilization
1998	57%
2016	34%
2019	38%

Care options in New Brunswick

NB has four levels of care in an institutional setting. The province has controlled the licensing of Special Care homes.

The below extract is from the NB government document *Admission criteria: All levels of care*

Criteria	Special Care Home	Generalist	Memory Care	Nursing Home
Level of care	<ul style="list-style-type: none"> Level 2 	<ul style="list-style-type: none"> General Level 3 (3G) 	<ul style="list-style-type: none"> Level 3B 	<ul style="list-style-type: none"> Level 3A or 4
Age	<ul style="list-style-type: none"> 19+ 	<ul style="list-style-type: none"> 19+ 	<ul style="list-style-type: none"> 65+ 	<ul style="list-style-type: none"> 65+
Supervision	<ul style="list-style-type: none"> Access to supervision 	<ul style="list-style-type: none"> Requires 24-hour supervision 	<ul style="list-style-type: none"> Requires 24-hour supervision 	<ul style="list-style-type: none"> Requires 24-hour supervision
Staff Ratio (Daytime)	<ul style="list-style-type: none"> 1 staff per 6 residents 	<ul style="list-style-type: none"> 1 staff for every 3 residents 	<ul style="list-style-type: none"> 1 staff for every 3 residents 	<ul style="list-style-type: none"> 3.1 hrs nursing care/ resident / day
Medical status	<ul style="list-style-type: none"> Medically stable No diagnostic criteria required 	<ul style="list-style-type: none"> Medically stable No diagnostic criteria required physically frail; Doesn't display maladaptive behaviors associated with dementia that put themselves / others at risk 	<ul style="list-style-type: none"> Medically stable Display maladaptive behaviors associated with a moderate to severe dementia that put themselves or others at risk 	<ul style="list-style-type: none"> Medical stable Complex medical care; requires continuous on-site nursing assessment

Jurisdictional Findings – Saskatchewan

Saskatchewan has seen a drop in the number of Personal Care Homes, but a significant increase in beds as the average home size is increasing.

Home support services are an integral part of Saskatchewan’s plans and are expected to decrease demand for PCHs generally, although no data have been collected to support this assertion.

Background

- Saskatchewan has 4,474 beds currently in 249 PCHs.
- Have seen growth in beds, while the number of PCHs has dropped.
- The number of larger homes (21 beds and over) has increased.

Licensing

- No restrictions on licenses.
- Visits to inspect are every two to three months.
- Use an inspection tool.

Forecasting

- No forecasting of PCH places has been done.

Other

- Mentioned anecdotal evidence from “former health regions” that there is difficulty in recruiting in some areas of the province.
- Staffing requirements are not prescribed precisely by the province; based on regular inspections and determination of whether residents are receiving the appropriate level of care.
- Department has an assessment tool to be used by caregivers.

Initiatives affecting PCHs

- Home First Quick Response
 - Aimed at enhancing responses to crises and intensive short term medical needs
 - Early discharge from acute care to community
 - Avoids unnecessary admissions to emergency departments
 - Takes a multi-disciplinary approach
- Senior’s House Calls
 - Multidisciplinary effort to bring medical care to seniors at home
- Connected Care: A Saskatchewan Health Authority strategy to “coordinate seamless, accessible and connected care for patients..” (See: <https://www.saskatchewanhealthregion.ca/about/our-plan>)
- Individualized funding options for home care
- Expanded palliative care

Measurement

- Not measuring outcomes

Jurisdictional Findings – Prince Edward Island

Background

- PEI's "Community Care Facilities" (CCF) are equivalent to the PCH in NL.
- PEI has 1,250 personal care home places in 37 homes.
- Recently awarded a license for 100 new bed expansion to existing facilities.

Licensing

- Government of PEI licenses and inspects Community Care Facilities.

Forecasting

- Does not forecast.
- Does not track wait list.

Other

- Nicer facilities tend to have a wait list.
- Younger people with mental health problems have few places to go in PEI.
- The Province is currently looking at new assessment tools for seniors' overall health and for mental health.

Initiatives affecting PCHs

- PEI's home care program is expected to reduce demand for CCFs
- Programs mentioned that are likely to impact CCF demand:
 - Adult day programs
 - Palliative care
 - Visits by Occupational Therapists to reduce the likelihood of falls (this program has a significant wait list, we were told.)
 - Medication management

Measurement

- No observations shared about about measurement.

Literature Review – Two Approaches to Demand Forecasting

In addition to our interviews with jurisdictional contacts, the scan included a limited literature review of similar demand forecasting reports in other regions. From those reports, Deloitte identified two predominant forecasting methodologies: forecasting based on optimal service/utilization levels for a particular population group; and forecasting based on resident profiles and population health characteristics. The table below provides a description of each approach and their respective benefits and limitations.

Approach	Description	Benefits	Limitations
Optimal service levels/utilization levels	Demand is determined according to a optimal service or utilization of the in-scope service offering. Calculated using a target utilization rate and population forecasts.	<ul style="list-style-type: none"> Conceptually simple to understand and apply Easy access to data Assumes constant utilization rate useful when fluctuations are small 	<ul style="list-style-type: none"> Where utilization is based on historical data, estimates may be constrained by current supply (not representative of true demand). Net waitlist figures can be used in regions with PCHs as a proxy for unmet demand Not responsive to changes in population health characteristics, other types of supports, or other determinants of demand Ignores trend effects
Resident profile	Looks at population health characteristics, demographics, and socio-economic status to assess the future need for services. A “resident profile” is created to map to population and demographic forecasts.	<ul style="list-style-type: none"> Needs-driven approach Is responsive to changes in population health characteristics Incorporates specific factors of individual resident Separates demand from supply 	<ul style="list-style-type: none"> Reliant on accurate and comprehensive data Time-fixed assumptions may not represent future demographic conditions Increased number of assumptions may lead to a false sense of precision

For the purpose of this report, Deloitte, along with the Department, elected to proceed with the optimal service level approach based on the availability and accuracy of data sources. The resident approach was determined to not be appropriate for the purposes of this project given the lack of a comprehensive data source which would include detailed client demographic, socio-economic, and health data. Data exists but at the time of writing, could not be separated out for PCH residents.

6. Demand Projections

Summary of Model Projections

The following pages present two sets of projection results for our three scenarios:

- Scenario 1: Constant (High Utilization), assumes that current utilization of PCH is optimal and service-levels will remain constant in all forecast periods.
- Scenario 2: Regional Average (Medium Utilization) assumes that going forward, the Home First initiative and other determinants of demand will have a positive effect on reducing demand and therefore utilization levels for PCH services.
- Scenario 3: Regional Minimum (Low Utilization) assumes that going forward there will be a significant shift in demand that will result in even lower utilization of PCH services.

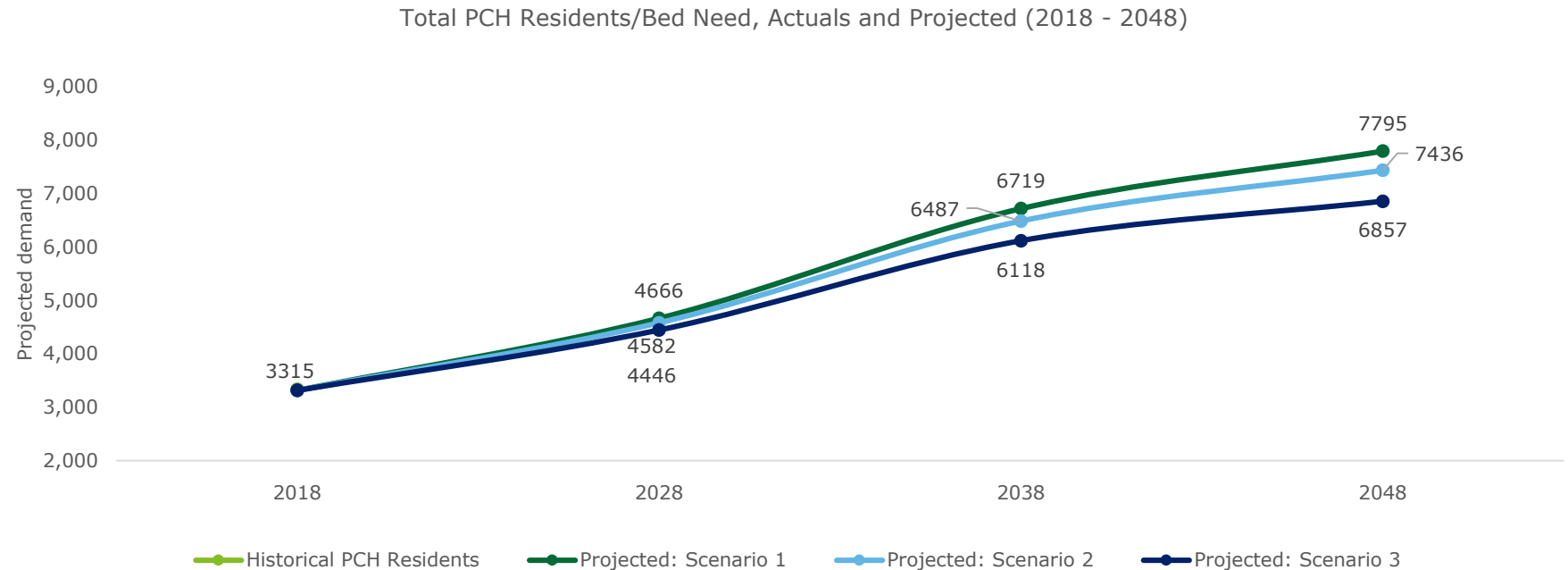
All three scenarios forecast a growing demand for PCH beds as the population ages.

The first set of projections, shown here, outline the projected demand for PCHs based on the **current scope of service offerings.**

Scenario 1 (High utilization) projects demand for PCH beds to grow to 4,666 in 2028, 6,719 in 2038, and 7,795 in 2048.

According to the medium utilization scenario (Scenario 2), demand for PCH beds is projected to grow to 4,582 in 2028, 6,487 in 2038, and 7,436 in 2048.

The low utilization scenario (Scenario 3) projects demand for PCH beds to grow to 4,446 in 2028, 6,118 in 2038, and 6,857 in 2048.



The following page presents detailed forecast results for each Economic Zone.

Projections based on Current Service Offerings by Economic Zone and Scenario

Economic Zone	Area Description	Current Supply (Jan 2019)	Scenario 1 - Constant (High Utilization)				Scenario 2 - Regional Average (Medium Utilization)				Scenario 3 - Regional Minimum (Low Utilization)			
			2018	2028	2038	2048	2018	2028	2038	2048	2018	2028	2038	2048
1	Rigolet to Nain	-	8	14	23	33	8	14	23	33	8	13	21	30
2	Labrador West/Churchill Falls	-	16	23	30	29	16	23	30	29	16	22	27	25
3	Happy Valley/Goose Bay/North West River	-	33	48	75	107	33	48	75	107	33	45	66	89
4	Mary's Harbour to Cartwright	20	14	23	33	43	14	23	32	41	14	22	30	38
5	Labrador Straits (L'Anse au Clair to Red Bay)	-	20	32	41	49	20	32	40	47	20	31	38	44
6	Viking Trail, St. Anthony South West to Plum Point, East to Roddickton/Englee	118	93	126	167	179	93	123	161	172	93	118	153	162
7	Gros Morne Area, Viking Trail North to and including Plum Point	58	69	111	168	199	69	111	167	197	69	111	166	196
8	Deer Lake/Humber Area/Corner Brook	478	362	474	668	770	362	470	659	759	362	450	612	690
9	Stephenville/Port au Port/ Burgeo	161	138	192	273	312	138	191	270	305	138	189	264	294
10	Port aux Basques/Doyles/Rose Blanche	69	62	84	114	123	62	84	113	120	62	83	110	116
11	Baie Verte/La Scie/Green Bay	172	118	172	253	285	118	171	251	282	118	171	250	280
12	Grand Falls - Windsor Area	325	204	285	409	478	204	285	408	477	204	278	390	442
13	Bay D'Espoir Area	-	56	83	122	139	56	83	122	139	56	80	115	130
14	Gander/Twillingate East to Terra Nova Area	648	518	743	1,059	1,170	518	696	925	952	518	656	817	777
15	Clarenville/Bonavista Peninsula Area	360	228	319	448	483	228	308	420	442	228	295	383	387
16	Burin Peninsula	199	146	211	308	322	146	204	288	295	146	195	261	258
17	North West Avalon	372	292	429	628	697	292	422	610	671	292	400	546	569
18	Argentia/Placentia Area	63	50	65	91	89	50	64	88	86	50	61	78	72
19	North East Avalon/St. John's	931	828	1,143	1,663	2,120	828	1,143	1,663	2,120	828	1,143	1,663	2,120
20	Southern Shore Area	91	60	89	146	168	60	87	142	162	60	83	128	138
Total	Demand before Adjustment Factors	4,065	3,315	4,666	6,719	7,795	3,315	4,582	6,487	7,436	3,315	4,446	6,118	6,857

According to **Scenario 1**, there is a need for an additional 601 beds by 2028, 2,654 beds by 2038, and 3,730 beds by 2048, based on the current supply of 4,065 beds.

According to **Scenario 2**, there is a need for an additional 517 beds by 2028, 2,422 beds by 2038, and 3,371 beds by 2048, based on the current supply of 4,065 beds.

According to **Scenario 3**, there is a need for an additional 381 beds by 2028; 2,053 beds by 2038, and 2,792 beds by 2048, based on the current supply of 4,065 beds.

Summary of Model Projections (including proposed dementia care offerings)

The second set of projections, shown below, outline the projected demand for PCHs, including the impact of the proposed expansion of PCHs to include dementia care services. A summary of those results are presented below and the supporting rationale, assumptions, and detailed analysis are included in the following section and Appendix B of this report.

Projections based on New Service Offerings

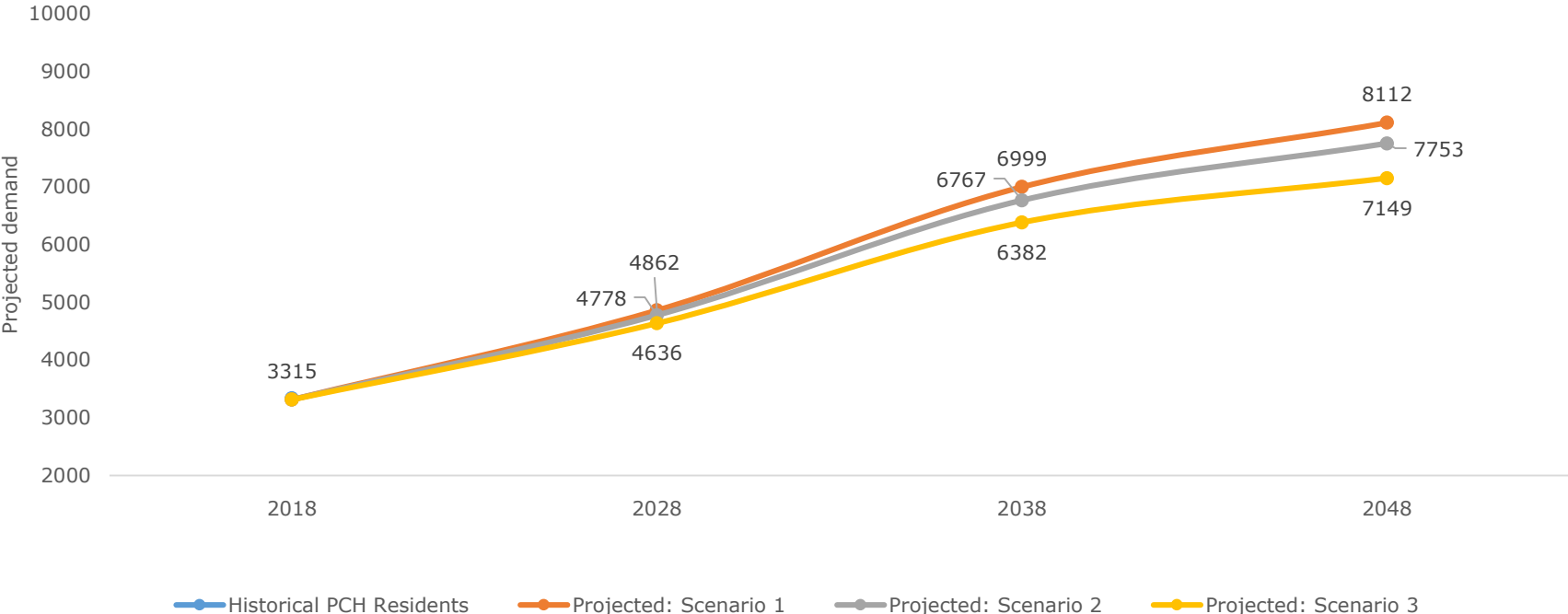
Including the demand for dementia care services, the constant utilization scenario (Scenario 1) projects demand for PCH beds to grow to 4,862 in 2028, 6,999 in 2038, and 8,112 in 2048.

In the medium utilization scenario (Scenario 2), demand for PCH beds is projected to grow to 4,778 in 2028, 6,767 in 2038, and 7,753 in 2048.

The low utilization scenario (Scenario 3) projects demand for PCH beds to grow to 4,636 in 2028, 6,382 in 2038, and 7,149 in 2048.

The following page presents detailed forecast results for each economic zone.

Total PCH Residents/Bed Need, including dementia care services (2008 - 2048)



Projections based on New Service Offerings by Economic Zone and Scenario

Economic Zone	Area Description	Current Supply (Jan 2019)	Scenario 1 - Constant (High Utilization)				Scenario 2 - Regional Average (Medium Utilization)				Scenario 3 - Regional Minimum (Low Utilization)			
			2018	2028	2038	2048	2018	2028	2038	2048	2018	2028	2038	2048
1	Rigolet to Nain	- 8	8	15	24	34	8	15	24	34	8	14	22	31
2	Labrador West/Churchill Falls	- 16	16	24	31	30	16	24	31	30	16	23	28	26
3	Happy Valley/Goose Bay/North West River	- 33	33	50	78	111	33	50	78	112	33	47	69	93
4	Mary's Harbour to Cartwright	20	14	24	34	45	14	24	33	43	14	23	31	40
5	Labrador Straits (L'Anse au Clair to Red Bay)	- 20	20	33	43	51	20	33	42	49	20	32	40	46
6	Viking Trail, St. Anthony South West to Plum Point, East to Roddickton/Englee	118	93	131	174	186	93	128	168	179	93	123	160	169
7	Gros Morne Area, Viking Trail North to and including Plum Point	58	69	116	175	207	69	116	174	205	69	116	173	204
8	Deer Lake/Humber Area/Corner Brook	478	362	494	696	801	362	490	687	791	362	469	638	719
9	Stephenville/Port au Port/ Burgeo	161	138	200	284	325	138	199	282	318	138	197	275	307
10	Port aux Basques/Doyles/Rose Blanche	69	62	88	119	128	62	88	118	125	62	87	115	121
11	Baie Verte/La Scie/Green Bay	172	118	179	264	297	118	178	262	294	118	178	261	292
12	Grand Falls - Windsor Area	325	204	297	426	497	204	297	426	497	204	290	407	461
13	Bay D'Espoir Area	- 56	56	86	127	145	56	87	127	145	56	83	120	136
14	Gander/Twillingate East to Terra Nova Area	648	518	774	1,103	1,218	518	726	965	993	518	684	852	810
15	Clarenville/Bonavista Peninsula Area	360	228	332	467	503	228	321	438	461	228	308	400	403
16	Burin Peninsula	199	146	220	321	335	146	213	300	308	146	203	272	269
17	North West Avalon	372	292	447	654	725	292	440	636	700	292	417	570	593
18	Argentia/Placentia Area	63	50	68	95	93	50	67	92	90	50	64	81	75
19	North East Avalon/St. John's	931	828	1,191	1,732	2,206	828	1,192	1,735	2,210	828	1,192	1,735	2,210
20	Southern Shore Area	91	60	93	152	175	60	91	148	169	60	87	134	144
Total	Demand before Adjustment Factors	4,065	3,315	4,862	6,999	8,112	3,315	4,778	6,767	7,753	3,315	4,636	6,382	7,149

According to **Scenario 1**, including dementia care services, there is a need for an additional 797 beds by 2028, 2,934 beds by 2038, and 4,047 beds by 2048, based on the current supply of beds.

According to **Scenario 2**, including dementia care services, there is a need for an additional 713 beds by 2028, 2,702 beds by 2038, and 3,689 beds by 2048, based on the current supply of beds.

According to **Scenario 3**, including dementia care services, there is a need for an additional 571 beds by 2028, 2,317 beds by 2038, and 3,084 beds by 2048, based on the current supply of beds.

Assumptions - General

The following section documents the assumptions and supporting rationale for the decisions built into the quantitative model:

General Assumptions:

All scenarios are built on the medium population forecasts provided by the Department of Finance. The model is neutral on the current and future supply of beds, as supply is determined by private sector and not in-scope for this report. Demand is forecasted at the Economic Zone level by age group (5 year age bands). Baseline PCH resident count is sourced from December 2018 CRMS data. Demand is forecasted in 10-year increments (Year 0, Year 10, Year 20, and Year 30).

Demand-related Assumptions:

Individuals who require PCH services in the future are assumed to have the same age distribution as current PCH residents. The model assumes 100% of current residents represent legitimate need (as determined by clinical eligibility). Regional average utilization for remote, rural, and urban areas by age group was used as a substitute for lack of data or in regions without PCH in Year 0. The classification used to categorize regions as remote, rural, or urban is detailed on page 41.

Wait List Assumptions:

Only net positive wait list figures (measured as wait list less vacant beds) are deemed to represent true excess demand for PCHs. No acceptable wait list time has been built into the model (all net positive wait list figures represent immediate need). Point-in-time wait list figures by Economic Zone are deemed to be representative of typical wait list.

Dementia Care Assumptions:

Analysis was completed by the Department of Finance to determine the number of clients who currently reside in a LTC facility that present symptoms that would make them candidates for residential dementia care services in a dedicated facility or within a PCH. Clients identified as potential candidates presented the following conditions: advancing cognitive symptoms of dementia, and low physical care needs (i.e. ambulatory clients).

The figures provided by the Department (presented on page 35) were used to calculate the number of dementia care residents by age group on a provincial basis. Residents were allocated across the Economic Zones based on the current and forecasted distribution of PCH clients across those regions. All regions are forecasted to fully-realize dementia care utilization by Year 10.

Assumptions - Scenarios

As described previously, PCH needs were assessed according to three different scenarios (constant (high) utilization, medium utilization, and low utilization) to present the potential impacts of factors both external and internal to the LTC CSS system, such as: impact of the Home First initiative, changes in attitudinal/personal preferences, technological improvements, and the overall impact of new PCH alternatives and policy objectives.

The initial proposed approach to modelling the mitigating factors included engaging the RHAs and other jurisdictions through consultations to quantify the impact of each of mitigating factors (i.e., Home First, reablement services, personal preferences and attitudinal changes, technological improvements, etc.). However, during the initial consultations it was determined that there was limited data to defensibly quantify the impacts. A conservative approach of adjusting the current utilization by Economic Zone towards the regional average for remote, rural, and identifying Economic Zones to use as proxies for the “future state” of personal care home utilization was used to collectively quantify all mitigating factors.

The assumptions and rationale for each of the scenarios are presented below.

All Scenarios:

- Year 0 Utilization is based on actual utilization for 2018 with regional average utilization (by age group) used as a substitute for lack of data or in regions without PCH/residents.
- Regional averages were calculated by age group as total PCH residents over total population (for 5-year age groups 45+), excluding regions which do not currently have any PCH residents.

Scenario 1: Constant (High Utilization)

- Year 0 Utilization by age group will prevail across all forecast years (Year 10, 20, and 30).

Scenario 2: Regional Average (Medium Utilization)

- Projected utilization for each EZ is calculated as the average utilization based on the regional classification as Remote, Rural, or Urban (according to designations outlined on page 41) for each age group. If the EZ's current utilization is *already* lower than the regional average, the current utilization rate is preserved across all forecast years

Scenario 3: Regional Minimum (Low Utilization)

- Projected utilization is calculated as the utilization rate of a selected “proxy” EZ which represents the lowest aggregate utilization of PCH services for each regional group by age group. If the EZ's current utilization is the regional proxy or is lower, the current utilization rate is preserved across all forecast years.

Note: For scenarios 2 and 3, the projected decrease in utilization rates are phased in gradually as follows: 3.33% annually over 30 years.

7. Conclusion

Final Remarks

While there is currently an excess of supply of PCH beds in Newfoundland and Labrador, this is expected to change significantly over the coming years. Demand for PCH services is projected to increase across all economic zones and in all scenarios.

An additional 517 beds will be required provincially by Year 10 (assuming a vacancy rate of 0), according to the medium scenario of the current service offerings forecast (based on the current supply of 4,065 PCH beds in 2018). The demand for services in each economic zone should also be considered by the Province, prospective operators, and investors when considering whether to increase capacity in a particular region. The introduction of dementia care services in PCHs is also expected to have a significant impact across the province, potentially increasing demand by as much as 713 beds by Year 10 of the forecast; however, realization of this increase is dependent on policy decisions by the Department, the successful pilot of this program extension, and subsequent funding decisions by the Province. If dementia care-oriented PCHs are introduced, revisions should be made to the Department's LTC demand projections which could expect a corresponding decrease in demand.

At the time of this report's writing, the Department is in the process of reviewing the funding rates paid to third-party service providers for subsidized residents. Any changes to subsidized funding rates for PCH services could have a material impact on the future supply and subsequent utilization of PCH services across the Province. Future changes to the Levels of Care framework for LTC CSS clients may also impact the clinical eligibility of clients for subsidized PCH services, this too could have material impacts on the future demand for PCH services. At the time of this reports writing, there was no data available to support this analysis.

Further, although not directly measured in these projections, the impact of introducing adult day programs in PCHs, hospice and residential end-of-life services, rehabilitation services, community care homes, and other new policy initiatives should be considered on a go-forward basis when analyzing demand for PCH services and should be included in the forecasting model as soon as sufficient data becomes available.

Overall, this report provided a series of forward-looking projections and estimates and as such readers should note that future demand may vary from forecasts. The accuracy of the PCH demand projections is dependent on the quality of the data inputs and underlying assumptions supplied by the Department of Health and Community Services. Consequently, any data discrepancies or changes to the underlying assumptions could result in material deviances from projections.

Finally, data, inputs and underlying assumptions to this model should be updated over time to reflect new trends in PCH and Home Supports as well as progress from the Province's Home First strategy.



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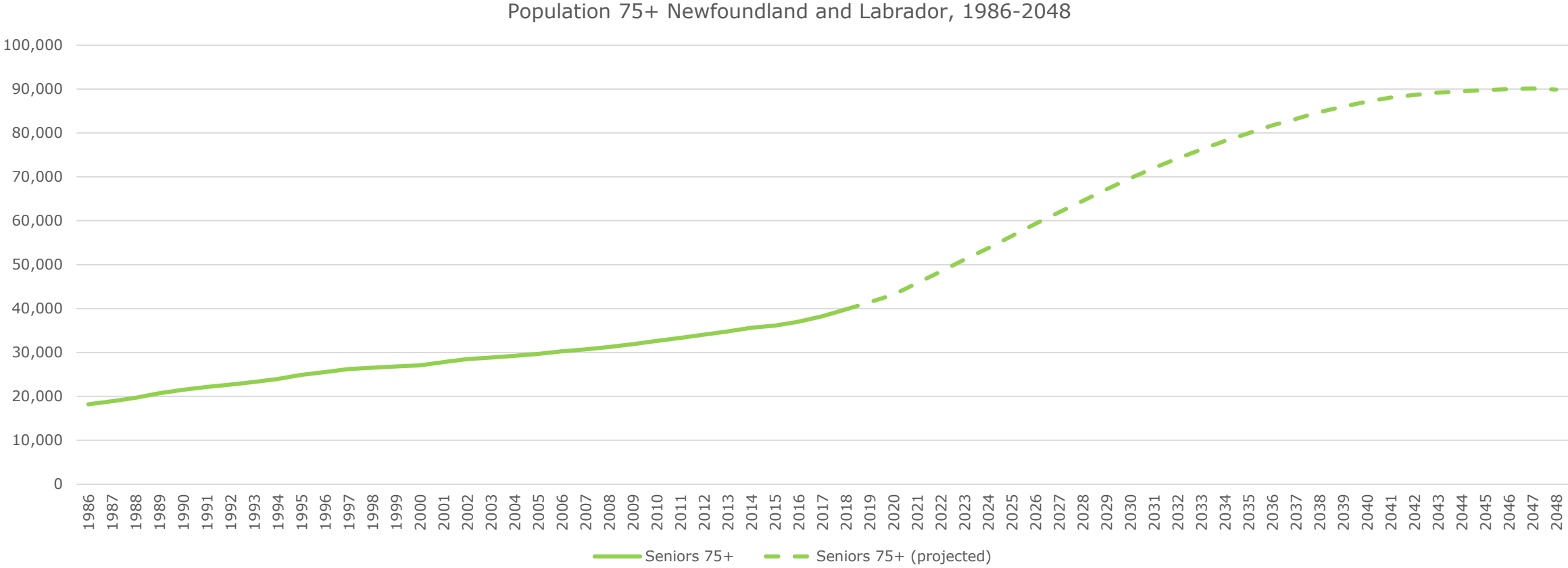
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Appendix

Appendix A: Demographic Profile by Economic Zone (2018-2048)

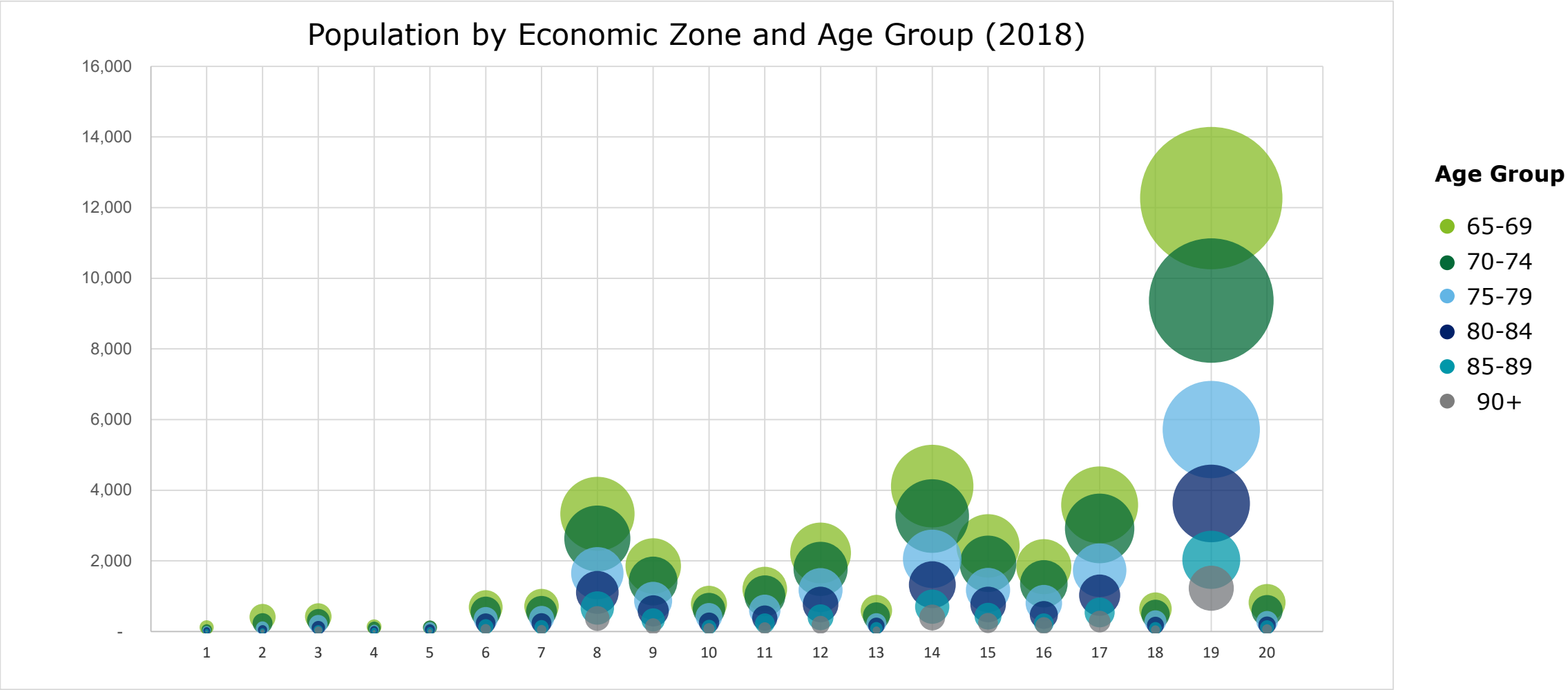
Population of seniors 75+ in Newfoundland and Labrador, 1986-2048

Given that the vast majority of PCH residents in Newfoundland and Labrador are 75 years of age or older, changes in this age group are expected to be the main driver of the demand for PCH services moving forward. Between 2018 and 2048, the number of seniors aged 75+ is expected to more than double, from 39,801 to 89,859 seniors.



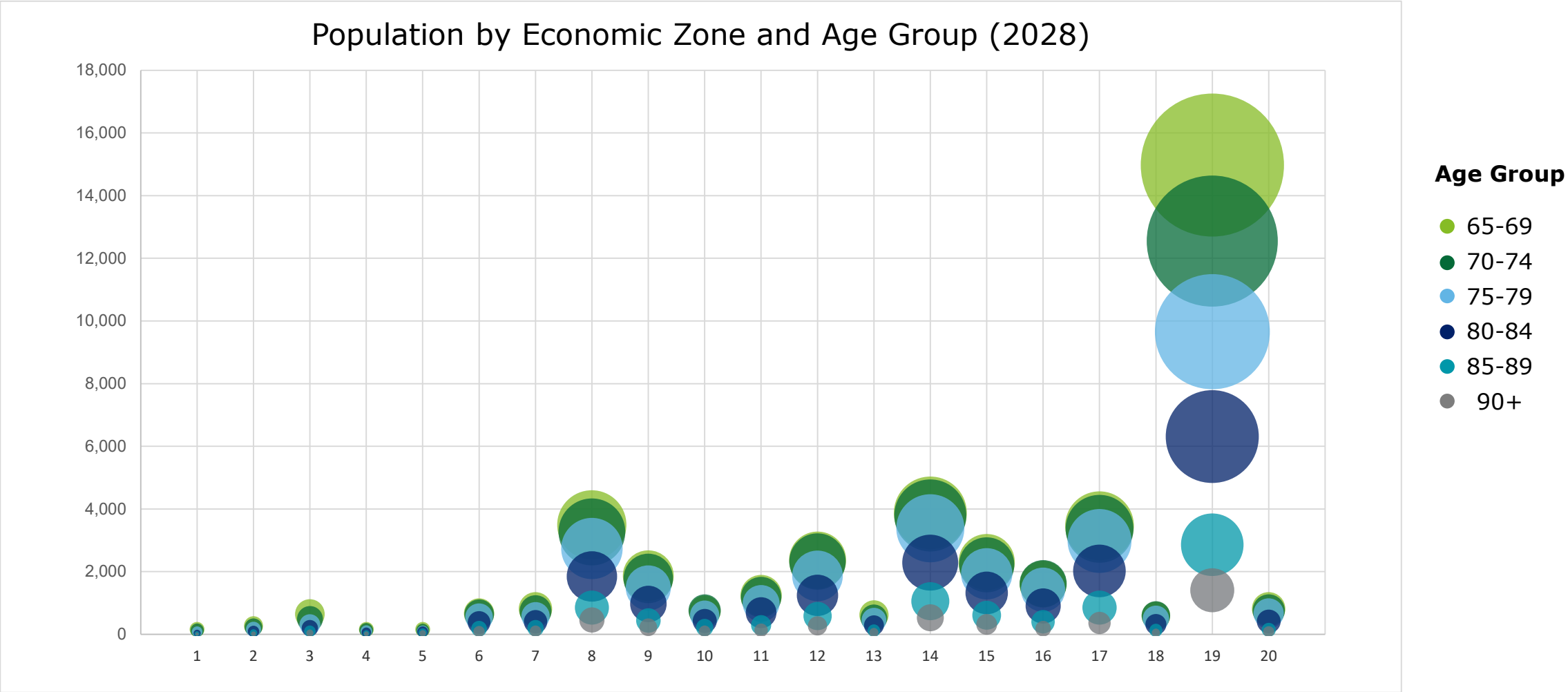
Demographic Profile: Population of seniors 65+ by Economic Zones and Age Group (2018)

The chart provides a breakdown of seniors 65+ by age group across all the Economic Zones in 2018



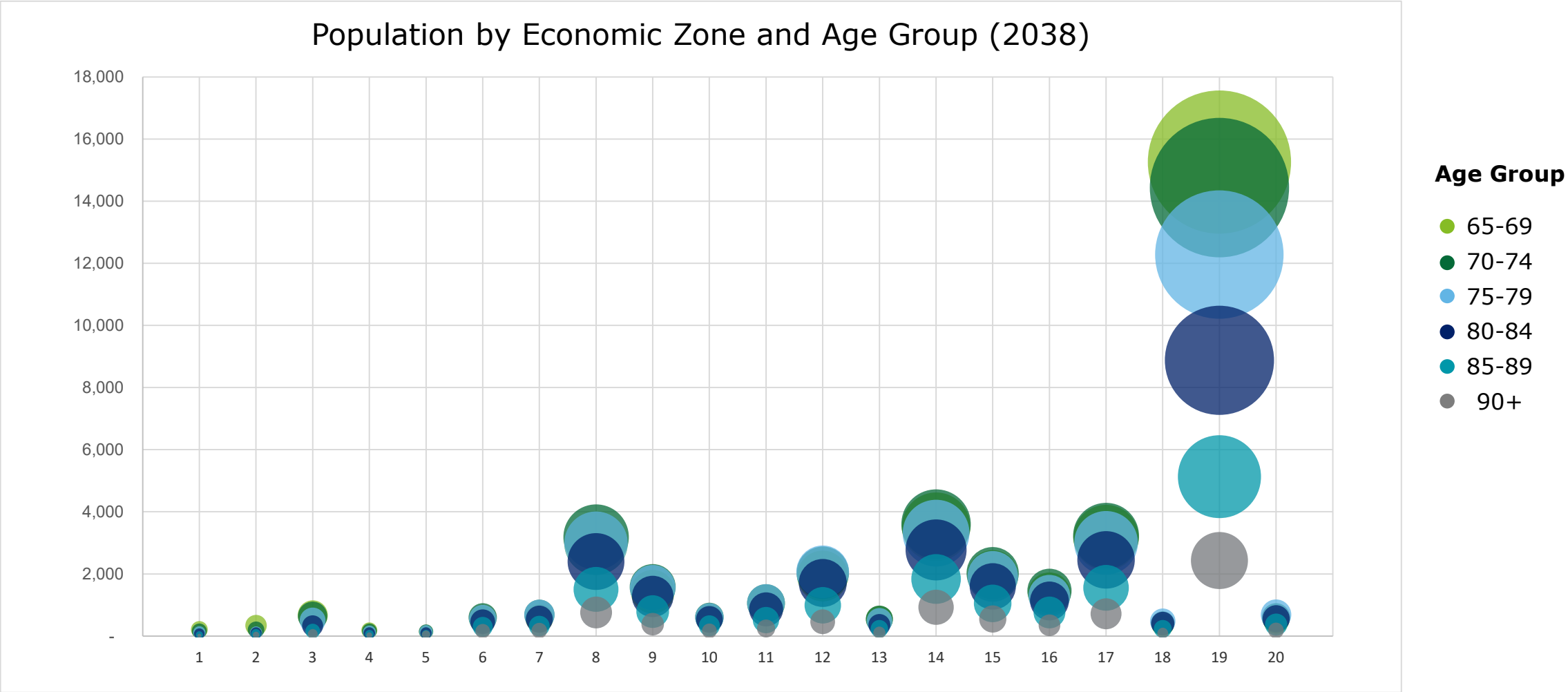
Demographic Profile: Population of seniors 65+ by Economic Zones and Age Group (2028)

The chart provides a breakdown of 2028 forecasted seniors 65+ by age group across all the Economic Zones



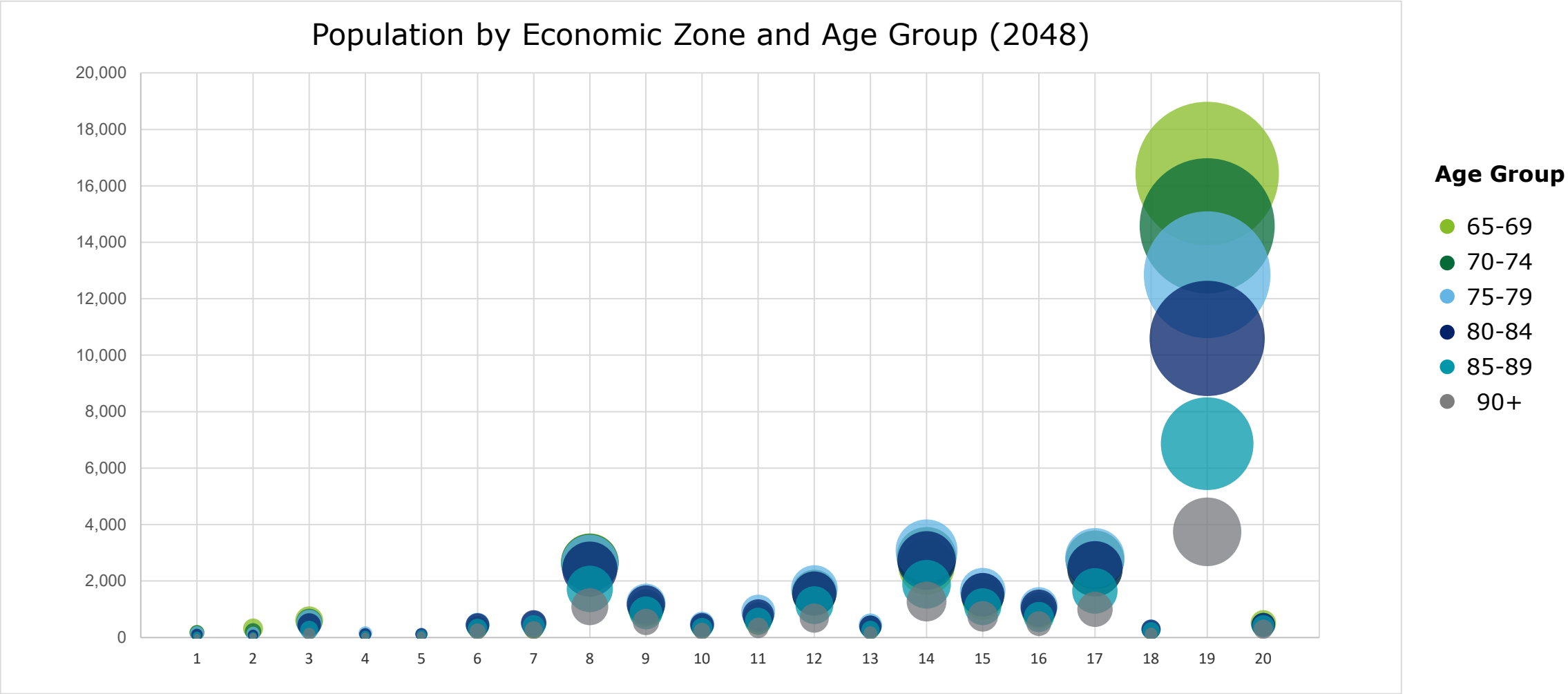
Demographic Profile: Population of seniors 65+ by Economic Zones and Age Group (2038)

The chart provides a breakdown of 2038 forecasted seniors 65+ by age group across all the Economic Zones



Demographic Profile: Population of seniors 65+ by Economic Zones and Age Group (2048)

The chart provides a breakdown of 2048 forecasted seniors 65+ by age group across all the Economic Zones



Appendix B: Current State Analysis

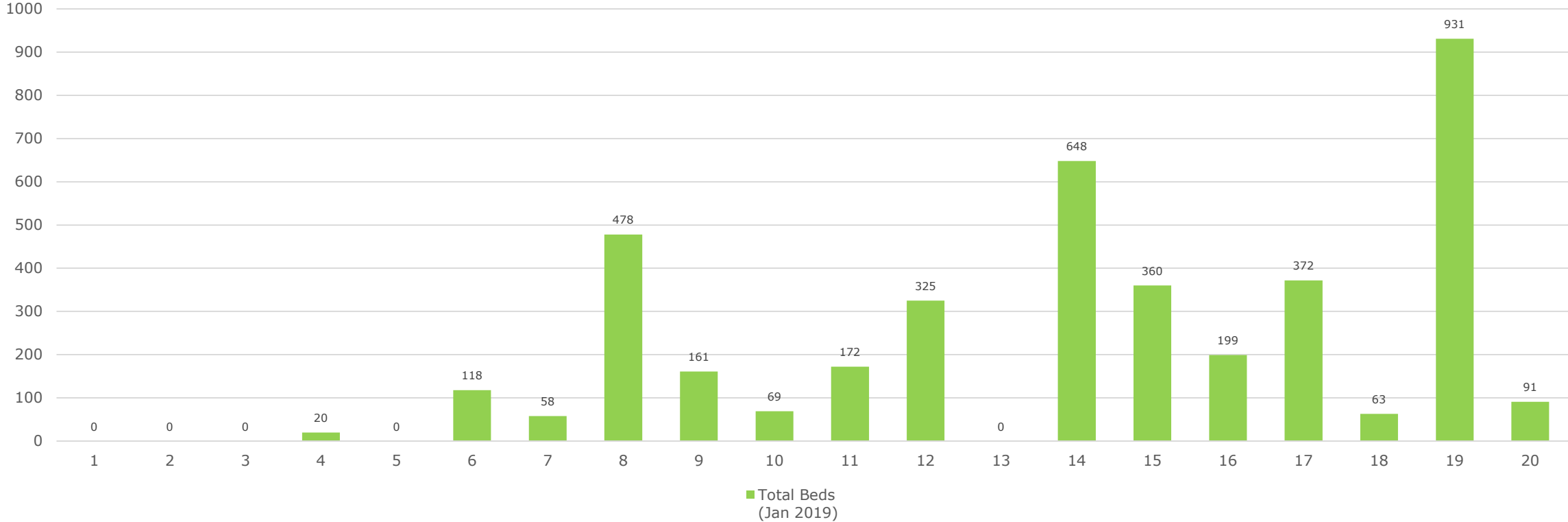
Current supply of PCH Beds in Newfoundland and Labrador

The chart provides a breakdown of beds provided in existing PCH facilities by Economic Zone.

Highlights:

- The majority of the PCH beds supplied in NL are in Zone 8, 14 and 19.
- No PCH bed supplied in Zone 1, 2, 3, 5 and 13.

PCH beds by Economic Zone (as of January 2019)



Summary of Current PCH Residents

The table provides a breakdown of residents' age across health regions in January 2019.

Highlights:

- 8 per cent of existing residents in PCH are under the age of 65.

Current Residents					
Age Range	Eastern Health	Central Health	Western Health	Labrador-Grenfell Health	% of Total
Under 65	131	54	65	13	8.0%
65-69	121	47	36	< 10	6.4%
70-74	133	59	35	< 10	7.1%
75-79	197	114	48	18	11.3%
80-84	308	193	117	28	19.4%
85-89	358	249	142	28	23.3%
90-94	274	182	108	21	17.6%
95-99	105	43	48	< 10	6.0%
Over 100	21	< 10	< 10	< 10	~1.0%

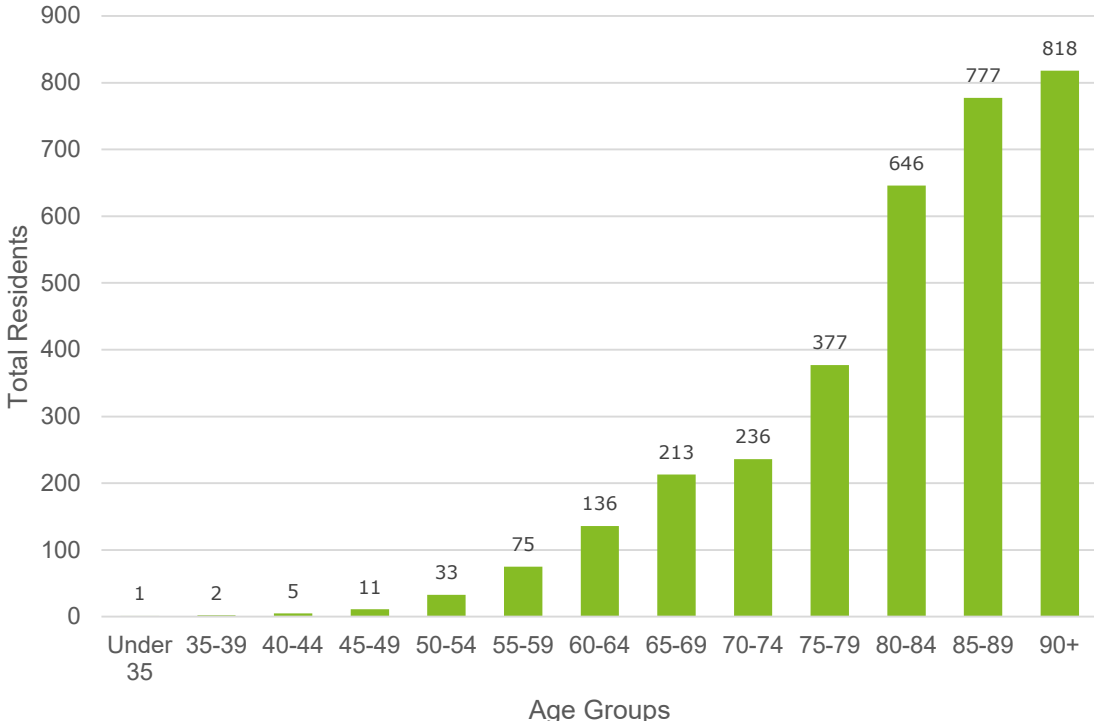
PCH Residents and PCH utilization rates by age group (2019)

The charts show the total number of PCH residents as well as PCH utilization rates by age group.

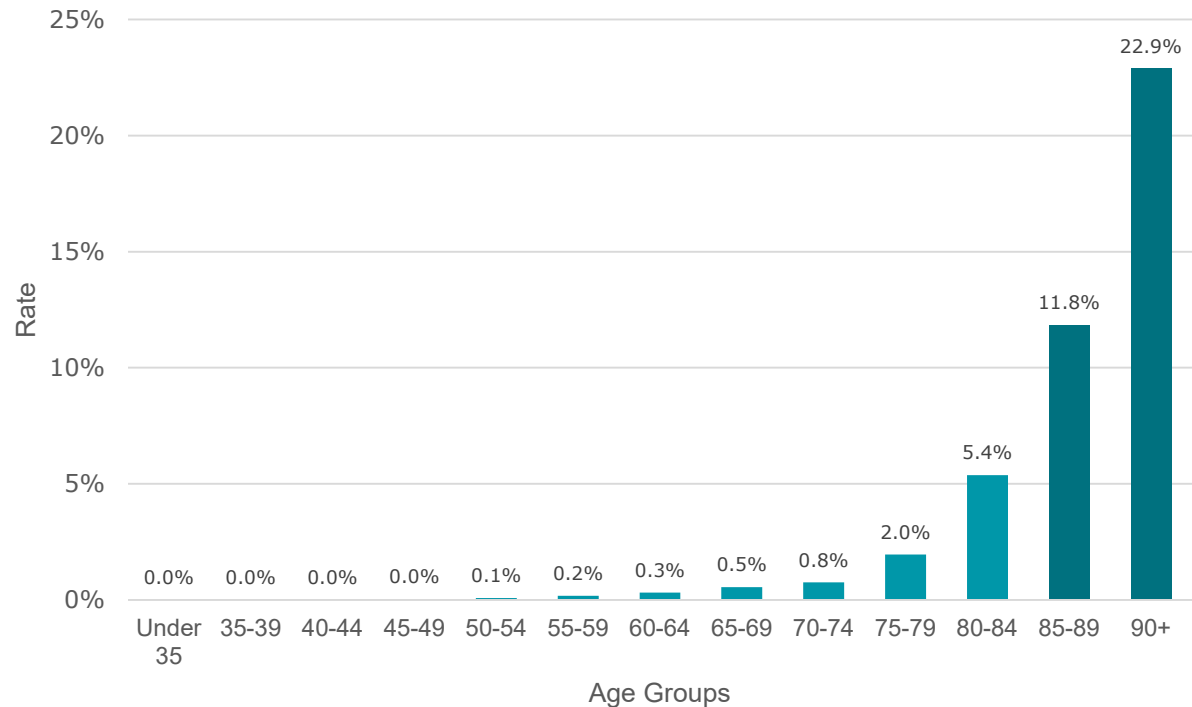
Highlights:

- 11.8% of the population in the 85-89 age group currently reside in PCHs
- More than 20% of the population in the 90+ age group currently reside in the PCHs

PCH Residents by age group



PCH Utilization Rates by age group



Source: Deloitte Analysis. Data: HCS resident counts

Source: Deloitte Analysis. Data: GNL Population Projections (2019) & HCS resident counts

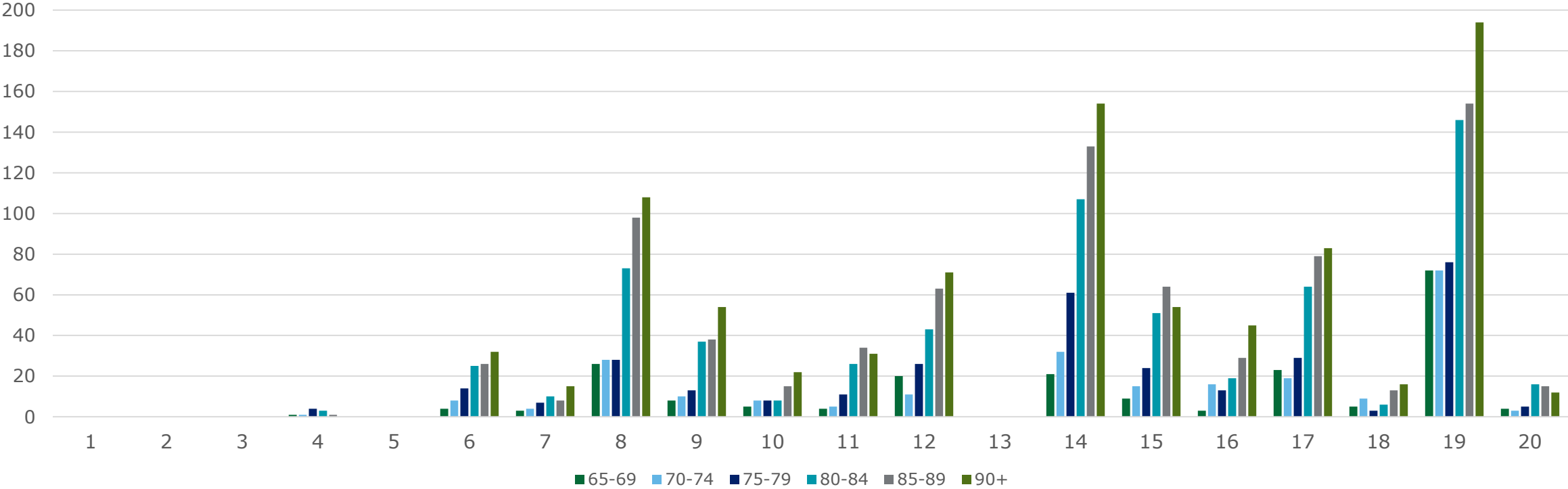
PCH Residents by Economic Zones and Age Group

The chart provides a breakdown of PCH residents by age group across all the Economic Zones

Highlights:

- Age groups are not distributed equally across all economic zones; therefore, forecasting based on provincial averages may skew the resulting estimates

PCH Residents by Age Group and Economic Zone (2018)



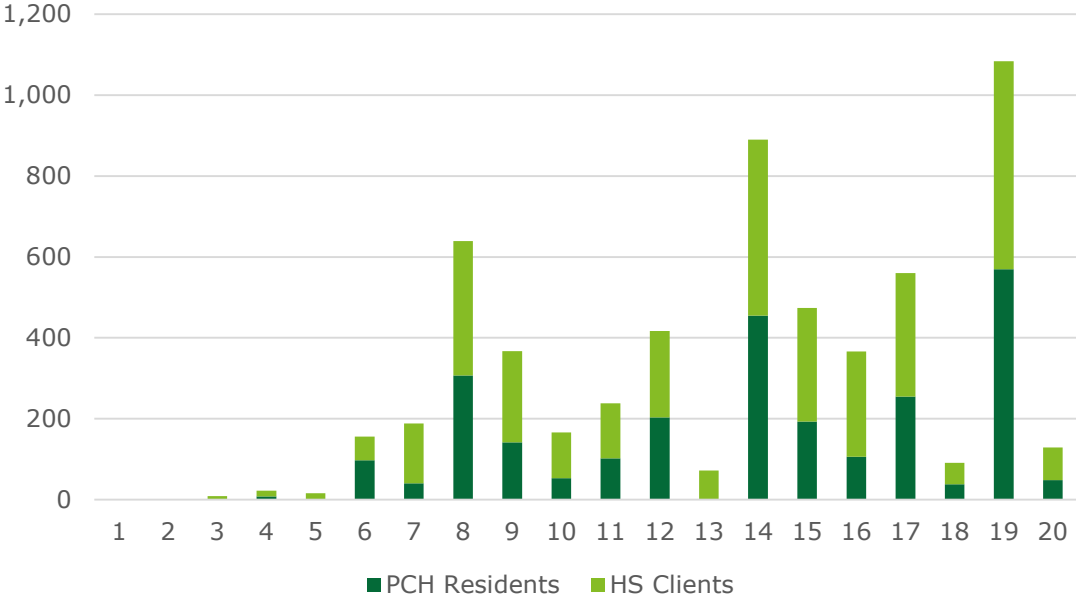
Current utilization of home supports and PCH, 2018

The charts provides a comparison of client volume and utilization for PCH vs Home Support by Economic Zone.

Highlights:

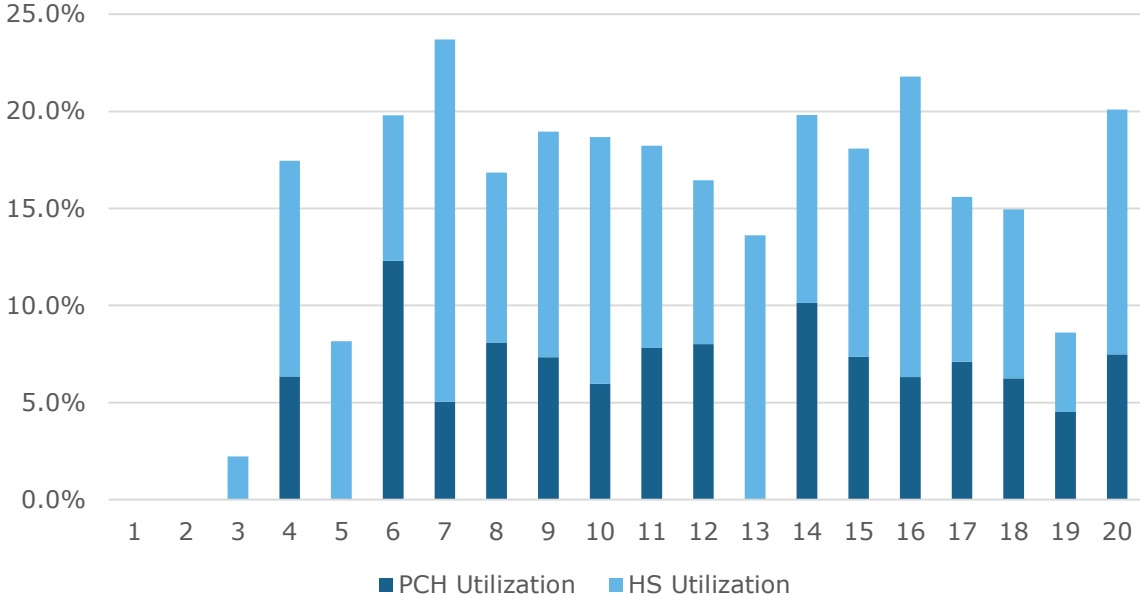
- Utilization of home support is generally higher in regions with lower PCH utilization or a lack of PCH beds (most notably in economic zones 5, 7, 13)
- Neither home supports nor PCH services are utilized in economic zones 1 and 2

Number of PCH Residents and HS Clients aged 75+ by Economic Zone (December 2018)



Source: Deloitte Analysis. Data: CRMS Client Data, December 2018

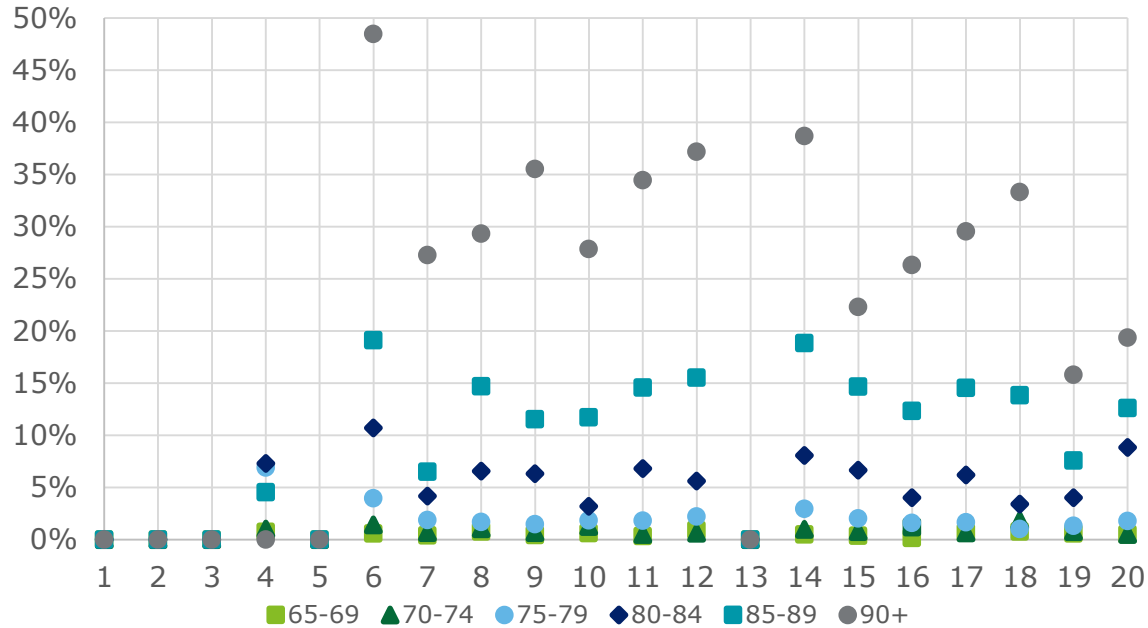
Utilization of PCH and HS services by seniors aged 75+ by Economic Zone (December 2018)



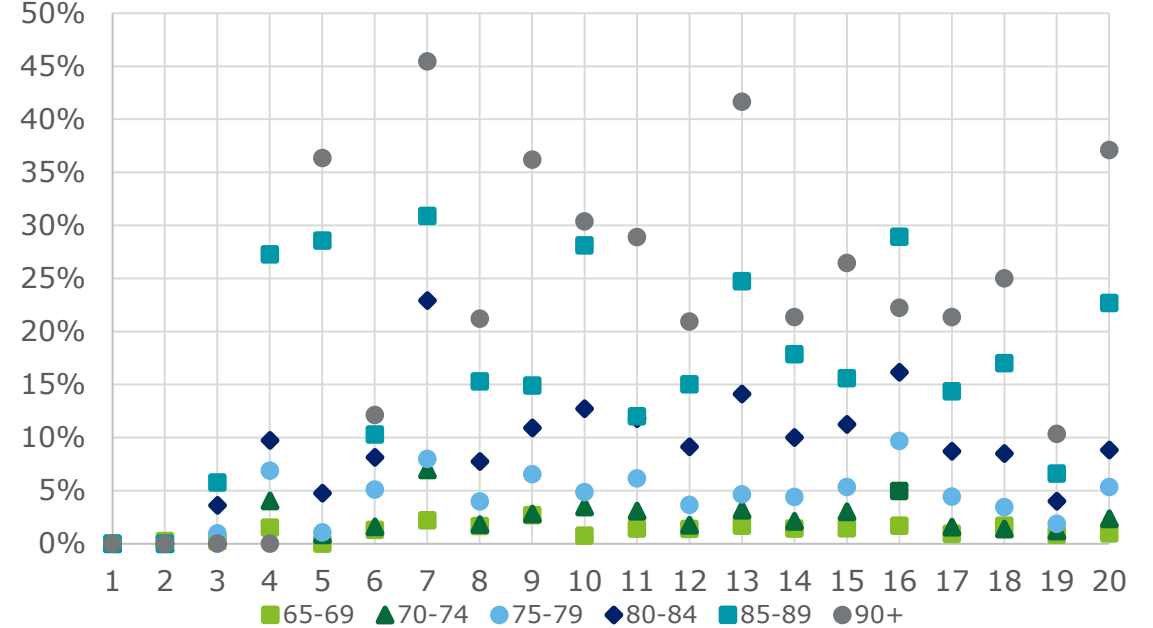
PCH and HS utilization rates currently vary by Economic Zone due in part by geographic factors

The chart provides a breakdown of utilization of PCH by age group across all the Economic Zones

PCH Utilization by Economic Zone and Age Group (2018)



Home Support Utilization by Economic Zone and Age Group (2018)



Age Group	PCH Average	HS Average
65-69	0.5%	1.3%
70-74	0.8%	2.1%
75-79	1.8%	4.0%
80-84	5.5%	8.3%
85-89	12.0%	13.8%
90+	25.2%	19.4%

Highlights:

- Overall, clients aged 80+ are persistently the highest users of both PCH and HS across all zones
- The possibility that HS may be an alternative for PCHs in some cases appears to be supported by the data across different age groups (regions with exceptionally high PCH or HS utilization have extremely low utilization of the opposite). Zone 6 utilization by those aged 90+ is the most striking example of this trend.

Source: Deloitte Analysis. Data: CRMS Client Data, December 2018; HCS Department of Finance Population Data

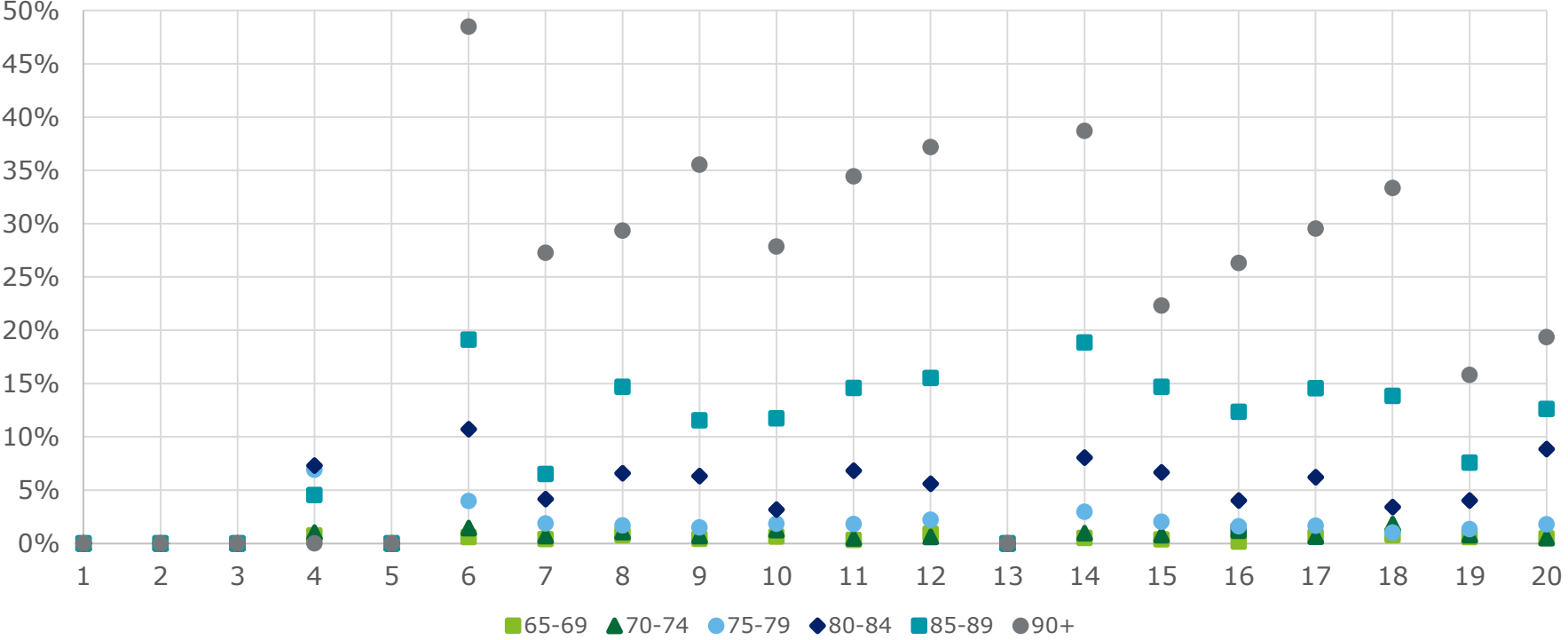
PCH utilization rates by Economic Zone

The chart provides a breakdown of utilization of PCH by age group across all the Economic Zones

Highlights:

- Utilization varies by age group across the economic zones

PCH Utilization by Economic Zone and Age Group (2018)



Age Group	Provincial Average
45-49	0.0%
50-54	0.1%
55-59	0.2%
60-64	0.3%
65-69	0.5%
70-74	0.8%
75-79	1.8%
80-84	5.5%
85-89	12.0%
90+	25.2%

Source: Deloitte Analysis. Data: CRMS Client Data, December 2018; HCS Department of Finance Population Data

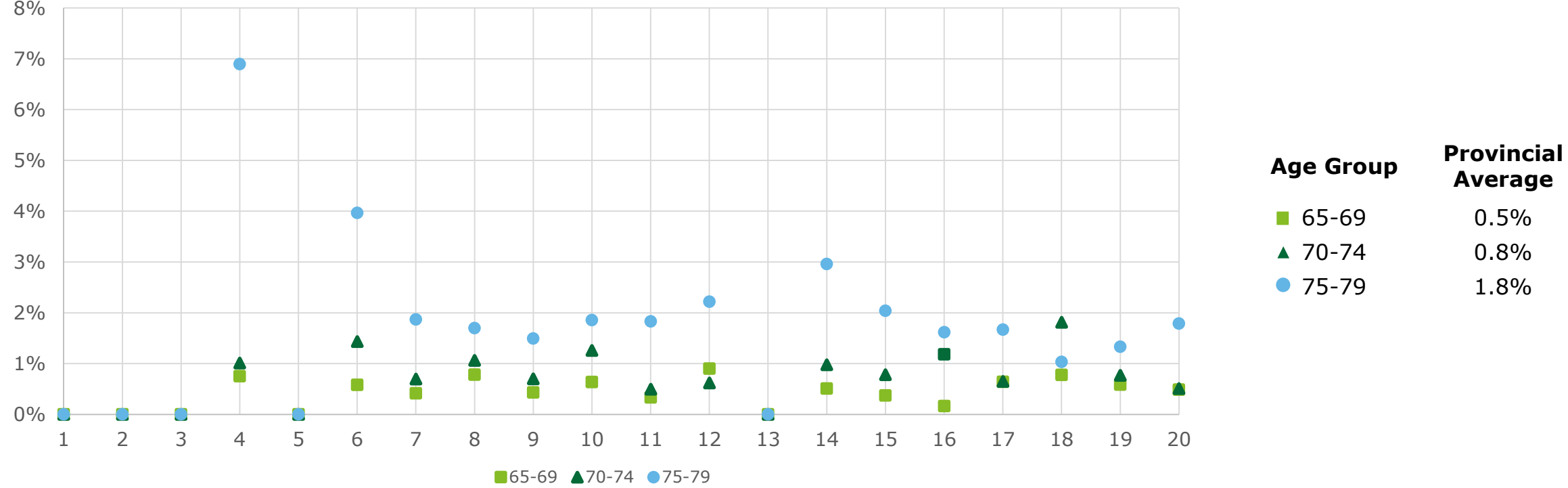
PCH utilization rates currently vary by Economic Zone due in part by geographic factors

The chart provides a breakdown of utilization of PCH by age group across all the Economic Zones for young seniors (65-79 years old)

Highlights:

- Utilization varies by age group across the economic zones

PCH Utilization by Economic Zone and Age Group (2018)



Source: Deloitte Analysis. Data: CRMS Client Data, December 2018; HCS Department of Finance Population Data

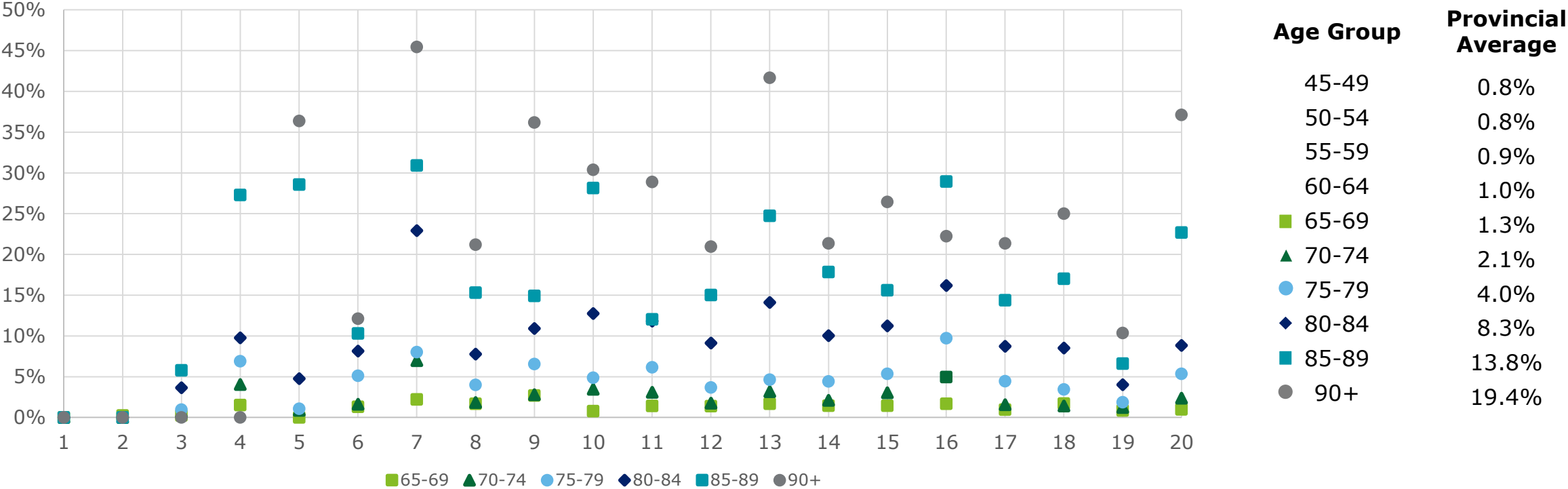
HS utilization rates currently vary by Economic Zone due in part by geographic factors

The chart provides a breakdown of utilization of HS by age group across all the Economic Zones

Highlights:

- Utilization varies by age group across the economic zones

Home Support Utilization by Economic Zone and Age Group (2018)



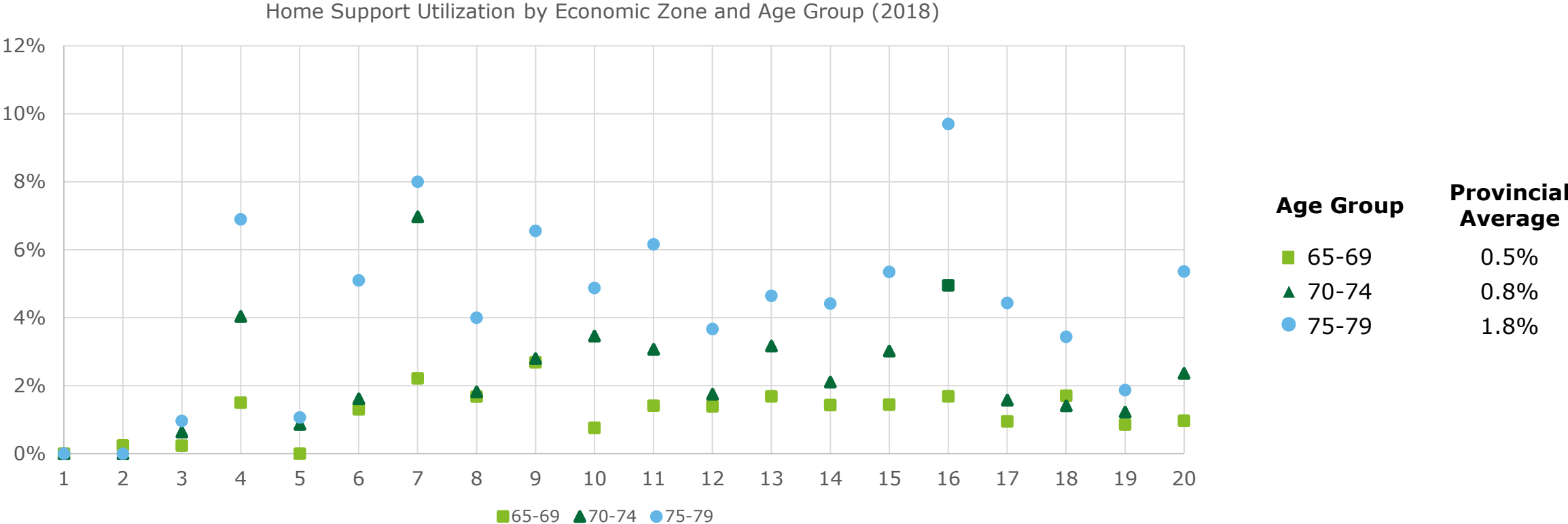
Source: Deloitte Analysis. Data: CRMS Client Data, December 2018; HCS Department of Finance Population Data

HS utilization rates currently vary by Economic Zone due in part by geographic factors

The chart provides a breakdown of utilization of HS by age group across all the Economic Zones for young seniors (65-79 years old)

Highlights:

- Utilization varies by age group across the economic zones



Source: Deloitte Analysis. Data: CRMS Client Data, December 2018; HCS Department of Finance Population Data

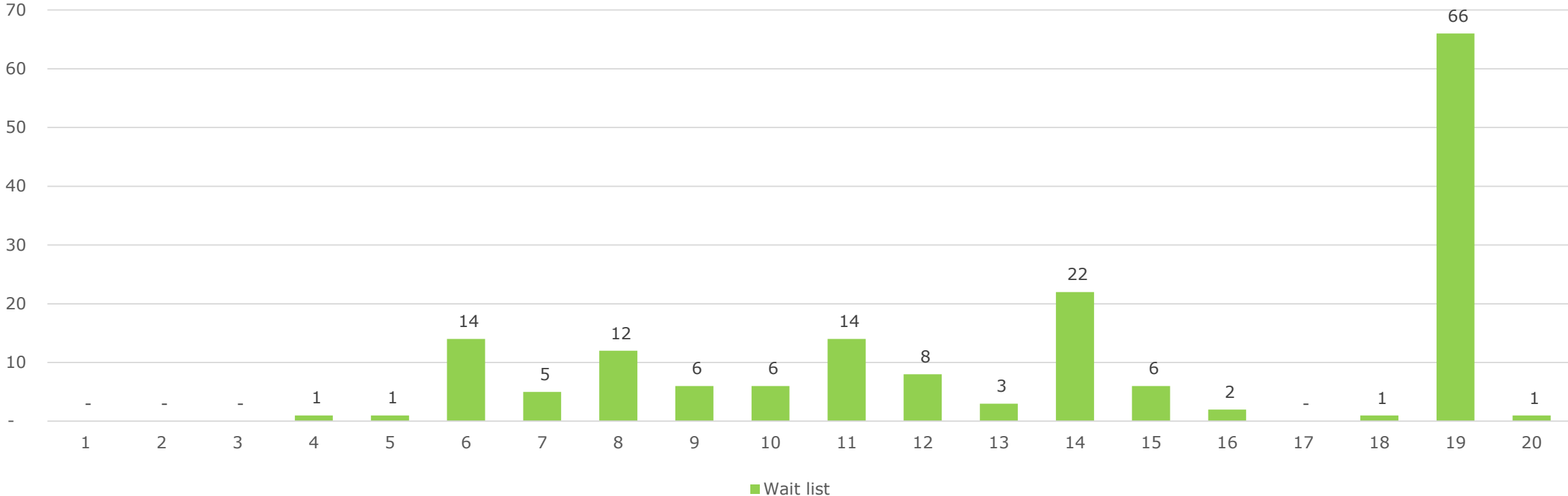
PCH Wait List

The chart provides the total number PCH wait list by Economic Zone.

Highlights:

- Despite a significant amount of excess supply, there continues to be a wait list for PCHs in the Province
- For example, 66 clients are on the wait list in Zone 19.

PCH Wait list (February 2019)



Appendix C: Stakeholder Consultation Notes

Eastern Regional Health Authority

Detailed Stakeholder Consultation Notes

Key points

- Overall in EH supply is believed to meet demand for next 15 years.
- St. John's is believed to be at capacity, but pressure being relieved by new supply
 - 100 new bed facility just opened in CBS
 - Applications for 700 new beds mentioned
 - Increase in PCH placement believed to be driven by social isolation
- Requests peak in summer and winter when family is home.
- Educating family and clients about home supports could assist in allowing people to stay in their homes longer
- Wait list is not indicative of lack of a place; reports that some people put their name in speculatively, possibly to please family, and then occasionally refuse a placement when it is offered.

Current factors that today tend to increase demand

- Social isolation
- Diversion from acute care to PCHs
- Smaller communities harder to deliver home support services
- Increases to cost of living
- Home maintenance costs
- Elderly clients with unsteady gait and disrupted sleep run the risk of falling at night
- Requirement of 24-hour care which cannot be met by home supports

Factors that will keep people at home longer

- Physio OT, supports, Nurse practitioner, if available
- Day care
- Respite
- Educate family about home support services
- Greater community involvement: meals on wheels, volunteer transportation
- Addressing social isolation through other means

Central Regional Health Authority

Detailed Stakeholder Consultation Notes

Key points

- Overall adequate supply in Central,
- Some areas are not served at all: Zone 13
- 7 PCHs in the RHA, soon to be 9
 - 100 beds in Gander; 72 beds in Lewisporte
- Recent new growth in Grand Falls
- Definitely see entry to PCH later in life now
- People want to stay home longer today
- People move to Grand Falls, Eastport Peninsula to retire
- Can be difficult to find home support workers
- Zone 13 – no PCH, and people want to stay in their communities,
- Zones 11, 12, 14 well supplied with PCH capacity that is attractive
- Population in PCHs in Central tend to be:
 - Older, no kids, no family, people who have difficulty maintaining a placement elsewhere

Current factors that today tend to increase demand

- ER initiatives to keep people out of emergency filters down to increased demand for LTC and PCH
- Cluster of PCHs in Glovertown and Gambo
- Proximity to doctors offices, hospitals;
- Generational shift in preference for home
- “Home services is growing by leaps and bounds”
- Homes are getting better at providing attractive services – selling better
- Financial pressures on the elderly

Factors that will keep people at home longer

- Informal supports
- Family support for concept of staying at home
- Adequate supply of home support workers
- Need professional staff and home care workers to support the growing numbers to keep in their homes

Western Regional Health Authority

Detailed Stakeholder Consultation Notes

Key points

- For the region as a whole, supply exceeds demand
- Processing fewer PCH applications than previously
- From acute care, people are being sent home who would have gone to LTC – this is having an impact
- Perception of PCH quality on the part of prospective residents has a big impact on demand
- Enhanced Care and dementia care is offered but only in some homes
- Corner Brook (Zone 8) has no PCH with Enhanced Care

Current factors that today tend to increase demand

- Pressure from family
- Financial capacity to fund staying at home
- Some PCHs in Western have tended to specialize:
 - Clients with mental health issues

Factors that will keep people at home longer

- Medical supports increasingly available at home
- More intensive case management
- Community supports
- Nurse practitioners to visit homes
- People tend to want to stay local

Labrador-Grenfell Regional Health Authority

Detailed Stakeholder Consultation Notes

Key points

- In a number of Zones in LGH, there are no PCH facilities.
- 4 PCHs: St. Anthony; Flowers Cove; Roddickton; Mary's Harbour
- Staff felt that region was pretty well served, with wait lists being described as "manageable". At the time of the interview in mid-March, we heard there was a wait list in three of the four PCHs.
- LGH has a lower population density, more severe weather and feels the effects of out-migration, with the exception of Labrador City-Goose Bay, area which experiences in-migration of working age people.

Current factors that today tend to increase demand

- Challenging to find workers for home support. Competition for labour in local business, sometimes seasonal
- Geography
- Weather is an obstacle to people staying in their home as they age:
 - Snow clearing.
- PCHs are seen as one way to address social isolation
- Families have moved away
- Family desire to reduce risks of living alone when family is away

Factors that will keep people at home longer

- Quality of PCH experience
- PCHs only in certain communities and people don't want to move

Appendix D: Jurisdiction Scan Question Set

Jurisdictional Scan – Question set

The questions below were used as the basis for our inquiry into the activities of the selected provinces. In only one case (Saskatchewan) did not receive a written response to the questions we sent in advance to our contact(s). Note that we contacted only government officials and did not approach any health authorities for their insights.

Overall questions

1. What initiatives you have undertaken, or have planned, that would reduce or increase the demand for PCH-like places in your jurisdiction, and
2. How you have measured, or forecasted the actual impacts or projected impacts?

I. General

1. What is the total supply of Personal Care Home spaces or beds in your Province?
2. For *existing* home care and community care programs, do you measure the results for these programs? If so, can you describe what indicators you measure and what results you are seeing that would affect PCH demand?
3. Has the impact been uniform across the Province or are there regional disparities? Please explain.
4. What future services are you *planning* aimed at allowing seniors to stay in their homes longer? Does your plan for such services include estimates of benefits such as reduced demand for places in PCH-like facilities? If so, we would like to understand how you estimated these benefits.
5. Does your Province control licenses for building new personal care homes? Do you believe restricting licenses for building homes has led to any issues for the supply of Personal Care Homes?
6. What three jurisdictions do you consider to be doing the best job of creating the most successful personal care home and community care programming?

II. Demand Forecasting

1. In the last 5 years, did you complete a forecast of demand for PCHs in your jurisdiction?
2. If you **did** do a forecast:
 - What existing community-based programs or services did you include, or make assumptions about, in your forecast?
 - Please share what assumptions you made.
 - How did you include the impacts of new technologies?