Island Health Strategic Initiative Evaluation Project

Contract Number: O57-020-15202

Phase II: Implementation
Prospective Evaluation Report

Submitted by: Dr. Gail Tomblin Murphy

2015-03-10

Amended 2015-04-17

Evaluation Team

Gail Tomblin Murphy (Lead)
Mary Ellen Purkis
Stephen Birch
Adrian MacKenzie
Annette Elliott Rose
Janet Rigby

Acknowledgements

The evaluation team would like to acknowledge the support of Steve Atkinson, Katy Mukai, Jana Archer and the staff of Operations Research and Advanced Analytics throughout this component of the evaluation. Their commitment and active participation have been essential for the completion of the retrospective evaluation activities and for the planning of the prospective evaluation.

The team would also like to thank the Island Health staff members and leaders who participated in the evaluation activities including surveys, focus groups, administrative data collection, and key informant interviews.

The team wishes to acknowledge the initial guidance and leadership of Dr. Lynn Stevenson and Georgina MacDonald, and Grant Hollett, Executive Sponsors of the project and, the leaders at Island Health that are moving this important work forward specifically Dr. Brendan Carr, Joe Murphy and Catherine Mackay.

Contents

Executive Summary

Introduction

In August 2011, Island Health (previously known as the Vancouver Island Health Authority) contracted an external evaluation team led by Drs. Gail Tomblin Murphy, Stephen Birch, and Mary Ellen Purkis to evaluate, in collaboration with Island Health, strategic initiatives being implemented by the organization. The evaluation team was also asked to help Island Health build organizational capacity in evaluation and research. Building on that early collaboration, this Strategic Initiative Evaluation Project (SIEP) began in early 2012. The evaluation includes two components – one 'retrospective' (i.e., looking back) and one 'prospective' (i.e., looking forward). The retrospective evaluation focused on initiatives that had been implemented at different times before 2012; its findings were presented to Island Health's Executive team in April 2013, and a written final report was submitted in July 2013. The prospective evaluation focused on Island Health's model of integrated, community-based service delivery at the Oceanside Health Centre (OHC) and community in Parksville. This report describes the objectives, methods and findings of the prospective component of the SIEP, with the intention of informing Island Health's ongoing operational and strategic planning.

Evaluation Questions & Objectives

The key evaluation questions guiding the SIEP overall (i.e., both the retrospective and prospective components) were:

A: What changes over time in processes and outcomes at the patient, provider, and system levels are associated with Island Health's strategic initiatives, as well as with the system-wide integration of these initiatives?; and

B: What have been the most important drivers and constraints – within and across each of the strategic initiatives – to improving these processes and outcomes?

The specific objective of the prospective component of the SIEP is to determine whether Island Health's Oceanside Health Centre and community services are making a difference to:

1. The health of individuals in the community;
2. Enabling individuals to remain at home;
3. Seamlessness and integration of care planning and service delivery based on patient needs; or
4. Costs.

Methods

All components of the SIEP, including the prospective evaluation, were implemented in collaboration with a working group made up of the external team and Island Health personnel. The prospective evaluation used a mixed-methods before-and-after study design, involving measurement of key outcome indicators before OHC opened in 2013, followed by a repeated measurement in 2014 through surveys and the use of similar questions in the interviews and focus groups to gauge change related to the introduction of OHC. Evaluation indicators were developed and validated with OHC leadership, the

project's Executive sponsors, and the SIEP working group. A suite of instruments was developed to collect information on these indicators from the appropriate source(s). These instruments included:

- A paper survey of residents of the OHC catchment area;
- A web-based survey of Island Health staff and physicians in the OHC catchment area;
- A template for Island Health administrative data pertaining to residents of the OHC catchment area;
- Guides for focus groups with OHC catchment area residents;
- Guides for focus groups with Island Health staff, managers and physicians working at OHC;
- Guides for interviews with physicians working in private practice in the OHC catchment area; and
- Guides for interviews with Island Health executive team members and OHC senior leaders.

All instruments used were approved by the Joint University of Victoria-Island Health Ethics Subcommittee for minimal risk studies. The residents' survey was distributed by Canada Post as unaddressed mail to a random sample of 6,000 households within Local Health Area 69 – OHC's catchment area. The survey was administered at two points in time: summer of 2013, before OHC opened, and then again in the summer of 2014. In 2013 there were 1,471 responses received, and 1,455 in 2014. Of these, 362 respondents completed the survey at both points in time.

The interviews and focus groups, as well as the staff survey, were both administered twice – first in the fall of 2013 and then again in the fall of 2014. Interviews and focus groups with Island Health staff, directors, Executive Directors (EDs), Executive Medical Directors (EMDs) and Executive Team members were conducted in 2013 and 2014 with totals of 57 and 50 participants, respectively. Telephone and in-person interviews were conducted with three physicians with private practices in the Oceanside area in 2013 and five in 2014. The administrative data template was populated by Island Health's Operations Research and Advanced Analytics team in the fall of 2014 with data from the most recent six-month period (January – June 2014) as well as data for comparable periods from each of the preceding three years (2011 through 2013).

The overall focus of the quantitative analyses was to measure any differences in the four dimensions identified above – individuals' health, ability to remain in their homes, seamlessness and integration of care based on patient needs, and costs – between the two study periods. Because Island Health's information systems do not systematically capture the patient-level data required to measure the net costs associated with its various strategic initiatives, economic analyses sought to estimate average costs of particular services provided to the evaluation team by Island Health applied to observed changes in service volumes. Analysis of the qualitative data sought to identify relevant themes arising from a systematic review of the comments of different groups of participants.

Results

Regarding OHC's impacts on various outcomes, the evaluation data indicate that, at this stage:

- OHC has not yet had a quantifiable impact on health at the population level, although there is a mix of qualitative reports of some positive and negative impacts on health at the individual level.
- OHC is now providing a large amount of health care that was previously less accessible – or not accessible at all – to area residents. More specifically, the evaluation data suggest that OHC has contributed to a reduction in Emergency Department use by residents of its catchment area, which has coincided with high volumes of use of its Urgent Care department but little change in the volumes of use of other, pre-existing Island Health services.
- Although there are some reports that the environment is improving, there is still room for improvements in integration and alignment – of both services delivered by Island Health as well as existing community health and social service partners – with patient needs, OHC has contributed to a substantial increase in the costs to Island Health of providing care to the residents of its catchment area.

The analyses also identify several factors that may have contributed, positively or negatively, to these outcomes. These include:

- The dedication of front-line staff;
- A need to continue assessing the health care needs and perspectives of the Oceanside community, particularly high levels of dissatisfaction with existing access to, and processes associated with, primary health care;
- Communication with both Island Health employees and the wider community has been ad hoc; since the evaluation report was completed, additional follow up with the community has taken place and a communications plan developed to improve the communications environment both internally and external. This plan is now being implemented.
- Transparency and effectiveness of stakeholder engagement has been widely criticized as inadequate;
- Efforts to create an improved understanding across Island Health regarding the proposed model of care delivery at OHC is now being implemented;
- The organizational leadership model that had been in place during the implementation of the OHC did not support a robust consultation process and integration of operational priorities and communities programming. The model has now been realigned to better integrate operational, clinical and community programs and strategic priorities; and
- Mixed views on the effectiveness of existing electronic health records. This concern is now being addressed through the IHealth initiative.

Discussion

By investing in an extensive external evaluation of its strategic initiatives and attempting to establish a model of integrated, community-based service delivery at the Oceanside Health Centre (OHC) and community, Island Health showed a commitment to understanding and being accountable for the

processes of change associated with them. By also investing in and enhancing its internal capacity to conduct evaluations and communicate their findings on an ongoing basis, Island Health also demonstrated commitment to incorporating the processes of change and learning into its regular operations and strategic plans. Such commitment is rare among health care organizations. Island Health has indicated its commitment to position the findings of the retrospective and prospective evaluations in ways that will inform future policy developments as they navigate through a complex and rapidly changing health care environment.

The impacts of a major health care delivery change and investment such as OHC will likely take several years to fully materialize. The SIEP findings, therefore, should be used to provide insight into how the development and implementation of OHC have progressed and to identify opportunities for improvement in the future. They do not provide a definitive description of the ultimate effectiveness of OHC but the lessons learned should be helpful to Island Health as it moves forward with its transformational change.

Throughout the SIEP, Island Health has undergone significant changes in addition to those included within the scope of this evaluation. For example, in addition to changing its name, the organization's Board and several members of its Executive team, including but not limited to the Executive sponsors of the SIEP, Island Health's SIEP coordinator, as well as director of OHC itself, have also changed. In addition, Island Health was undertaking strategic initiatives other than those included in the SIEP, such as its IHealth initiative, while this evaluation was taking place. Finally, during the latter stages of the SIEP Island Health was in the process of reorganizing the geographic structure of how its services and programs are organized, planned and delivered. The findings of the SIEP need to be interpreted within this context of broader and quite significant organizational change.

Despite several limitations, this evaluation has produced evidence and lessons that have profound implications for Island Health. The qualitative analysis shows some successes in terms of team-delivered care and increased access for residents of the Oceanside community to more coordinated services. It also illustrates some concerning organizational practices – particularly regarding stakeholder engagement and communication – that may, if not addressed now, undermine innovations and the laudable goals of a more responsive and localized health service delivery system in the future. The quantitative analysis shows little measurable impact of OHC on helping people to remain at home, integrating care around patient needs, or costs at this stage, aside from decreased ED use and high volumes of Urgent Care use.

The data provided by the SIEP participants offer a compelling explanation for the current state of OHC. Simply put, they suggest that both the conceptualization and implementation of OHC were conducted by Island Health without adequate consideration of the needs or perspectives of the Oceanside community

or their care providers, or of whether the service model chosen was adequately aligned with those needs. Given this information, it is perhaps not surprising that challenges have been encountered. The evidence provided through this evaluation will only have value if it is acted upon by Island Health's senior leaders. For instance, sharing the SIEP findings with its participants and Island Health's other key stakeholders now would provide an important opportunity for further strengthening relationships between Island Health and its key stakeholders by being seen to promote a culture of transparency, understanding, and value for evidence-informed decision-making.

Key Messages

I. By investing in the SIEP, Island Health has demonstrated a commitment to fostering a culture of evaluation and ongoing quality improvements within the organization. It is important that Island Health's senior leadership continue to engage its key stakeholders in making direct use of the SIEP findings and lessons learned to inform both its operational and strategic planning on an ongoing basis.

II. There is a need for Island Health senior leadership to continue to discuss and better understand its vision and expectations for integrated care delivery at OHC and to ensure that vision is inclusive of the organization's future interests in advancing integrated care delivery elsewhere in the Health Authority – and then communicate this vision clearly to OHC leaders and staff.

III. It will be important for Island Health to continue to monitor the changes in health delivery at OHC and the impacts on outcomes-of-interest in the future so as to continue to identify means of improving its performance and inform organizational decision-making more broadly. The investments it has made in building organizational capacity for evaluation through the SIEP will contribute positively to this ongoing monitoring.

IV. The quantitative and qualitative analyses from SIEP are both indicative of high levels of unmet need and demand for health care – particularly primary health care – in the Oceanside area prior to the opening of OHC. These analyses also suggest that considerable misalignment between services and need remains (e.g., related to primary health care). This is perhaps most visibly demonstrated in the high volumes of apparently inappropriate use of OHC's urgent care services. It therefore seems important for Island Health to consider investing further in increasing timely access to its Primary Care service at OHC, not only to further address this unmet need, but also to offset some of the burden on Urgent Care. Success in shifting activity from urgent care to primary care will require effective communication with residents to explain the different goals of urgent and primary care.

V. There is a perception among most SIEP participants across Island Health – from the executive table to the provider-patient interface – as well as stakeholders in the Oceanside community, that both the building and service model within it, although well-intentioned, were conceived and implemented without a fulsome understanding of the needs and perspectives of residents, physicians, Island Health personnel, or other stakeholders in the area. This has been identified as an ongoing hindrance to improving health care services in the Oceanside community as it has contributed to considerable dissatisfaction among both residents and care providers, including physicians as well as Island Health

personnel. Future Island Health initiatives would greatly benefit from the development and application of population-level measures of health care needs, as well as comprehensive stakeholder engagement strategies, to inform decisions around service provision.

VI. During the prospective evaluation, Island Health experienced significant personnel change amongst members of its leadership, along with other significant organizational changes. Coincident with these changes has been a marked decrease in the apparent collective level of understanding of, and interest in, OHC among Island Health's leadership, especially in terms of OHC as an exemplar of new ways for providing integrated, community-based care for island residents into the future.

VII. Although some members of Island Health's Executive team report that the information in the retrospective evaluation were used to inform some of the organization's strategic thinking, there was no evidence that its findings and recommendations – particularly as they pertain to organizational transparency, communications, and vision – have been incorporated into Island Health's organizational practice. By using the existing communication expertise within Island Health to disseminate the SIEP findings, the organization can better inform its stakeholders of future work and demonstrate accountability to its key stakeholders.

VIII. This report, together with the other outputs of the SIEP, has provided Island Health with a set of tools and a foundation from which to conduct its own evaluations of its programs and services on an ongoing basis. More broadly, the investment Island Health has made in the SIEP has yielded valuable evidence that forms a strong potential basis for engaging with its various stakeholders, and for being seen by these stakeholders to value and incorporate that evidence into its decision-making. Making use of that potential will contribute directly to the organization's achievement of its mission.

IX. It is clear that Island Health leaders, staff and physicians are highly committed to patients and the Oceanside community and are prepared to make the changes required to improve health, care and programs and services offered through OHC.

Introduction

In August 2011, Island Health (then the Vancouver Island Health Authority) contracted an external evaluation team led by Drs. Gail Tomblin Murphy, Stephen Birch, and Mary Ellen Purkis to develop, in collaboration with Island Health, an integrated outcome evaluation plan for the various strategic initiatives being implemented by the organization. In addition to developing and delivering this framework, the evaluation team was asked to create opportunities to build organizational capacity in evaluation and research.

From September 2011 to January 2012, the evaluation team worked collaboratively with Island Health leadership and program staff to develop an integrated evaluation plan, a capacity building plan, a communications plan and an economic evaluation framework. This work constituted the first of a multi-phase project, and was submitted as a Phase One report in February 2012. The evaluation plan described in that report reflected an interdisciplinary approach to research, evaluation and knowledge sharing, and incorporated principles of operational research, process and outcome evaluation, health economics and health systems research utilizing a mixed methods approach. The overall approach to the project was guided by the principles of outcome mapping (Earl et al., 2001).

Building on that plan, the implementation of the Strategic Initiative Evaluation Project (SIEP) began in early 2012. Consistent with Phase One, the primary objective of the project is to develop and implement an integrated outcome evaluation for strategic initiatives being undertaken by Island Health. Additional objectives include creating opportunities to build organizational capacity in evaluation and research, and developing a framework for economic evaluation.

The evaluation includes two components – one 'retrospective' (i.e., looking back) and one 'prospective' (i.e., looking forward). The retrospective evaluation focused on initiatives that had been implemented at different times before 2012. Each of these initiatives was focused on aspects of care planning and delivery in acute care. The findings of the retrospective evaluation were presented to Island Health's Executive team in April 2013, and a written final report was submitted in July 2013 (Tomblin Murphy et al., 2013). One point of emphasis of that report was the anticipated future focus within Island Health on interdependent acute and community-based care services, and hence the importance of attending to strategic initiatives targeting the latter as well as the former. Island Health's model of integrated, community-based service delivery through its new Oceanside Health Centre (OHC) in Parksville was identified as such a model initiative.

Since the completion of the retrospective evaluation, the evaluation team has continued to collaborate with Island Health to implement the final, prospective component of the evaluation, which focuses on evaluating the model of service delivery at OHC. The facility offers primary care, urgent care, medical day care, environmental health, medical imaging, telehealth, some specialty services, and houses Island

Health's Integrated Primary and Community Care (IPCC) teams. There is also a privately-run laboratory service – Life Labs – on site. The facility first opened to patients on June 24, 2013, when the IPCC teams had moved in and specialty care, environmental health, medical imaging, medical day care, and Life Labs were available. Urgent care opened on September 16th and primary care September 30th, 2013

This report describes the objectives, methods and findings of the prospective component of the SIEP, focusing on OHC. The report is intended to inform Island Health's strategic direction moving forward.

Context

Island Health is one of six health authorities in British Columbia. Through a network of hospitals, clinics, centres, health units, and residential facilities, Island Health provides health care to more than 750,000 people on Vancouver Island, on the islands of the Georgia Strait, and in mainland communities north of Powell River and south of Rivers Inlet. In addition to hospital, community and home care, Island Health provides environmental and public health services, including health education and illness prevention. It is also responsible for establishing regional health care priorities, specifying regional service standards, and monitoring the performance of its service providers in the provision of health care in the Vancouver Island health region.

Island Health is governed by a board of directors appointed by the provincial government. An executive team leads the delivery of health services within the health authority. The organization is publicly funded, and accountable to the provincial government for resources used in delivering health care and services. The Planning & Improvement portfolio, under the direction of the Vice President (VP), is responsible for leading strategic planning for the organization, and is guided by a stated commitment to involving communities in planning to best meet population's health care needs. It is through this portfolio that the activities of SIEP are coordinated.

During the course of the SIEP, Island Health has undergone significant changes in addition to those included as part of this evaluation. Perhaps the most visible of these changes has been the shortening of its name from the Vancouver Island Health Authority (VIHA) to Island Health. In addition, the organization's Board and several members of its Executive team – including but not limited to its Chief Executive Officer, Chief Financial Officer, Chief Medical Officer, and Chief Nursing Officer – have changed. Several of the organization's other senior leaders, including the Executive sponsors of the SIEP as well as director of OHC, have also changed. More recently, Island Health has reorganized the geographic structure of how its services and programs are organized, planned, and delivered.

Throughout these changes, Island Health has aimed to adhere to its current vision statement, "Excellent health and care – for everyone, everywhere, every time" and purpose statement, "To provide superior health care through innovation, teaching and research and a commitment to quality and safety – creating healthier, stronger communities and a better quality of life for those we touch." Island Health is also guided by its values, which are summarized by the acronym "C.A.R.E", representing "Courage – to do the right thing – to change, innovate and grow; Aspire – to the highest degree of quality and safety; Respect – to value each individual and bring trust to every relationship; and Empathy – to give the kind of care we would want for our loved ones."

Evaluation Questions and Objectives

The key evaluation questions guiding the SIEP overall (i.e., both the retrospective and prospective components) are:

A. What changes over time in processes and outcomes at the patient, provider, and system levels are associated with Island Health's strategic initiatives, as well as with the system-wide integration of these initiatives?; and

B. What have been the most important drivers and constraints – within and across each of the strategic initiatives – to improving these processes and outcomes?

The specific objective of the prospective component of the SIEP is to determine whether Island Health's Oceanside Health Centre (OHC) and community services are making a difference to:

1. The health of individuals in the community;
2. Enabling individuals to remain at home;
3. Seamlessness and integration of care planning and service delivery based on patient needs; or
4. Costs.

Methods

The prospective evaluation used a mixed-methods before-and-after study design, involving measurement of key outcome indicators before OHC opened in 2013, followed by a repeated measurement in 2014 through surveys and the use of similar questions in the interviews and focus groups to gauge change related to the introduction of OHC.

Indicators

To guide the prospective evaluation, an extensive initial list of potential outcome indicators for OHC was prepared based on the evaluation objectives. This list was then amended and validated through extensive discussions with OHC leadership, the project's Executive sponsors, and the SIEP working group. The indicators used in the prospective evaluation are listed in Table 1.

Table 1: Prospective Evaluation Indicators

1. Resident[1]-reported physical health
2. Resident-reported mental health
3. Resident-reported overall self-assessed health
4. Resident-perceived adequacy of access to primary health care
5. Resident-perceived comprehensiveness of primary health care
6. Resident-perceived adequacy of access to urgent care
7. Resident-assessed alignment of care with needs, beliefs etc.
8. Resident satisfaction with personal/family involvement in care
9. Resident-assessed adequacy of information provided to access needed services
10. Resident-assessed adequacy of information provided to maintain/promote health
11. Resident-perceived functioning of care providers as a team
12. Challenges for residents in obtaining care
13. New admissions to hospital among residents
14. New alternate level of care (ALC) designations among residents
15. Residents' total hospital lengths of stay
16. Residents' total ALC lengths of stay
17. New admissions to long-term care among residents
18. Median wait time for long-term care admission among residents
19. New admissions to assisted living facilities among residents
20. Median wait time for assisted living placement among residents
21. Number of residents receiving home nursing care
22. Number of home nursing care visits received by residents
23. Number of residents receiving home support
24. Number of home support hours received by residents

[1] Residents of Local Health Area (LHA) 69 – identified by Island Health as the catchment area for OHC

25. Number of Emergency Department (ED) visits by residents, by Canadian Triage Assessment Scale (CTAS) score
26. Provider-perceived alignment of care planning and delivery with client needs
27. Provider-perceived comprehensiveness of health records
28. Provider-perceived accessibility of health records
29. Provider-perceived team climate
30. Provider-perceived clarity/ambiguity of roles
31. Provider-perceived adequacy of learning and practice supports
32. Provider-perceived effectiveness of care-related communication
33. Provider-perceived physician engagement
34. Provider-assessed adequacy of OHC physical space
35. Provider-assessed efficiency of processes to move patients between sectors
36. Provider-perceived use of evidence/best practices
37. Provider-assessed adequacy of mechanisms for sharing concerns re: care
38. Effectiveness of organizational communication
39. Factors affecting seamlessness/integration of care planning & delivery
40. Provider satisfaction with care
41. Provider-assessed adequacy of supports to provide safe care
42. Provider job satisfaction
43. Number and type of human resources employed to provide care in Qualicum
44. Costs to Island Health for staffing LHA 69
45. Perceived sustainability of OHC & community services model

Instruments

A suite of instruments was developed to collect information on these indicators from the appropriate source(s). These instruments included:

- A paper survey of residents of the OHC catchment area (identified by Island Health as Local Health Area 69);
- A web-based survey of Island Health staff and physicians in the OHC catchment area;
- A template for Island Health administrative data pertaining to residents of the OHC catchment area;
- Guides for focus groups with OHC catchment area residents;
- Guides for focus groups with Island Health staff, managers and physicians working at OHC;
- Guides for interviews with physicians working in private practice in the OHC catchment area; and
- Guides for interviews with Island Health executive team members and OHC senior leaders.

All instruments used were approved by the Joint University of Victoria-Island Health Ethics Subcommittee for minimal risk studies. A table showing which instruments were used to gather data on each indicator is provided as Appendix A. Copies of these instruments are provided as Appendix B.

Data Collection

Although the British Columbia Ministry of Health holds data on provincial residents that would have allowed for a more targeted sampling strategy, provincial legislation prohibits the use of that data for contacting residents for research purposes. Island Health's own data is subject to the same restrictions. Municipal tax roll data was not available in a timely way in a format that would allow for systematic sampling of residents. These preferable methods for sampling the LHA 69 population not being feasible, the residents' survey was distributed by Canada Post as unaddressed mail to a random sample of 6,000 households within LHA 69. The survey was administered at two points in time: summer of 2013, before OHC opened; and then again in the summer of 2014. In 2013 there were 1,471 responses received, and 1,455 in 2014, for response rates of 25 per cent and 24 per cent, respectively. Of these, 362 completed the survey at both points in time.

The interviews and focus groups, as well as the staff survey, were both administered twice – first in the fall of 2013 and then again in the fall of 2014. Members of staff were invited to complete the online survey through an email invitation sent at both points in time. In 2013, because OHC had not yet opened, the invitation was distributed from the office of the SIEP Executive sponsor to the managers of the programs whose staff would be moving into OHC, who were then to distribute the invitation to their staff. No follow-up reminding staff of the opportunity to complete the survey was distributed. Only six responses to the staff survey were received in 2013, for a response rate of less than one per cent. In 2014, the invitation was emailed from the OHC site director to the 332 staff and physicians at OHC (as opposed to all Island Health personnel in LHA 69), and a follow-up email reminding them of the opportunity to complete the survey was distributed one week later. The number of responses in 2014 was 49, for a response rate of 15 per cent. A series of focus groups, in which a total of 27 OHC staff participated in 2013 and 12 in 2014, were conducted. Invitations to participate in staff focus groups were also distributed via email. Reminder posters were also created for both the online survey and the focus groups for posting at staff work locations.

Interviews and focus groups were also organized with Island Health directors, EDs, EMDs and Executive Team members in 2013 and 2014, in which totals of 30 and 38 people participated, respectively. These were arranged through the office of the SIEP Executive sponsor.

Telephone interviews were conducted with three physicians in private practices in the Oceanside area in 2013, and five in 2014. These were coordinated through the Oceanside Division of Family Practice.

The numbers of participants in the prospective evaluation are summarized in Table 2.

Table 2: Prospective Evaluation Participants

Participant Type & Mechanism	**2013**	**2014**
Residents – survey	1,471	1,455

Participant Type & Mechanism	2013	2014
Resident – focus group	50	11
Front-line staff & physicians – survey	6	49
Front-line staff & physicians – focus group	27	12
Private practice physicians – interviews	3	5
Directors – interviews	6	20
EDs/EMDs/Executive Team members – interviews	24	18

The administrative data template was refined based on repeated consultations with Island Health's Operations Research and Advanced Analytics (ORAA) team regarding data availability and limitations. The ORAA team populated the template in the fall of 2014 with data from the most recent six-month period (January – June 2014) as well as data for comparable periods from each of the preceding three years (2011 – 2013).

Quantitative Analysis

The overall focus of the quantitative analyses was to measure any differences in the four dimensions identified above – individuals' health, ability to remain in their homes, seamlessness and integration of care based on patient needs, and costs – between the two study periods. Temporal differences in quantitative data from the residents' survey were tested for statistical significance with *t*-tests or regression models, depending on the nature of the variable. Because of the low response rate in 2013, no temporal differences could be estimated for measures from the staff survey.

Estimating Costs

The economic component of the SIEP was designed to apply principles of economic analysis to current integration and implementation of initiatives and services within Island Health with a view toward helping the organization identify efficient uses for its resources. In Phase One of the SIEP, a generic framework for evaluation was developed and validated by Island Health's Executive team to help guide the organization in identifying the key questions to be answered pertaining to the strategic initiatives. In Phase Two, the evaluation team worked with Island Health to determine specific evaluation questions for the SIEP based on organizational priorities. As part of this process, a workshop on economic evaluation was facilitated with Island Health stakeholders in order to further enhance their understanding of the economic evaluation. Based on these meetings, three priority areas with corresponding guiding questions were identified that might be informed by the evaluation:

- **Planning***:* What are the net additional resource requirements of new services or programs (new investment required)?
- **Evaluation***:* What is the average rate of return on the new investment?
- **Decision-Making***:* How does this compare with other ways of investing these additional resources?

The retrospective evaluation report noted, however, that Island Health's information systems do not systematically capture the patient-level data required to measure the net costs associated with its various strategic initiatives. For this reason, the economic analyses in the retrospective component of the SIEP focused on the second of the above questions.

Unless and until this limitation is removed, addressing any of these priority questions will remain extremely difficult for Island Health. In addition, estimating the value of Island Health's investment in OHC at this stage is premature as the benefits will likely take several years to become apparent. As such, the economic analyses in the prospective evaluation focus on estimating changes in the costs associated with changes in service volumes following the opening of OHC. These analyses are based on estimated average costs of particular services provided to the evaluation team by Island Health applied to observed changes in service volumes.

Qualitative Analysis

Qualitative data were coded using NVivo 10 software. The analysis[2] of these data was conducted in four phases:

1. In the first phase, an open coding approach was used and the recorded interviews were reviewed and, through inductive processes, analytic categories (codes) were extracted from each interview. A coding framework was created to organize these data with additional codes added as required in order to draw out themes that participants noted as relevant to particular phases of program implementation, incidents, or types of behaviour.
2. In the second phase, focused coding using comparison groups were selected based on their relevance to further refine the development of emerging categories. This began with the analytic categories from each organizational group (e.g., care delivery personnel, managers, senior leaders etc.). Guided by the data, additional comparison groups were selected based upon sub-categories of the organizational groups. Examples included people with different health or social care needs, people with different access to services, providers within OHC and those practicing in the community. These comparison groups were considered in relation to each other – through a process of constant comparison (Glaser, 1965) – to determine similarities and differences across areas and teams. This analytic process was inclusive, generating as many categories of similarity and difference as possible. Throughout the constant comparative process, memos related to the categories informed the conceptualization of themes in phase 3.
3. Having developed a broad and inclusive set of analytic categories, in phase three, a first-level compilation (e.g., analytic induction) of those categories was developed. This resulted in an understanding and identification of relevant themes across categories and participant groups

[2] The description of the qualitative analytic framework draws substantially on the work of Pope, Ziebland & Mays (2000).

(Charmaz, 2003). Two theoretical descriptions regarding the strategic initiatives were developed from this level of analysis. The first focused on the story and the meaning of the pre-implementation and post-implementation experiences, the second on the components of those experiences that were most relevant to highlight both the challenges and the enablers to support change. These were informed by the multiple realities and experiences of different participants (Charmaz, 2006; Mills, Bonner & Francis, 2008).

4. Specific recommendations have been developed in phase four and these have been integrated with findings from the quantitative analysis with the intention that, together, these recommendations could be considered for inclusion by those planning wider implementation of the strategic initiatives in Island Health into the future.

Results

The findings that emerged from the analyses described above are presented in this section in direct relation to the evaluation objectives.

OHC and the Health of Individuals in the Community

The residents' survey used the SF-12® version 2 (Ware et al., 1996; 2000) health survey questions to assess the mental and physical well-being of respondents. No differences were detected in either the mental or physical component summary scales from the SF-12® between the two applications of the survey or between respondents who had received care at OHC and those who had not. Given the short period of time that OHC had been open, this lack of measurable change at this stage is not surprising. Any impacts of OHC on the health of individuals in its surrounding community will likely only be detectable over the longer term.

There were concerns expressed in both staff and resident focus groups that some high-needs clients are encountering a range of barriers to accessing services at OHC. This problem was attributed to several factors, including:

- The location of the facility away from the town centre in an area lacking in sidewalks, transit service and parking;
    - As one resident reported, "[OHC] is out of reach for many senior residents which in the case of Qualicum is the majority of the population, who are no longer able to drive. Public transit in the area is abysmal and taxi rides to x-ray and/or walk in clinic are now more costly because of the distance involved and using public transit to the white elephant now in many cases is a day trip."
- A perceived lack of clarity and consistency regarding procedures and eligibility requirements for services (e.g., who is admitted to the primary care program);
- The limited capacity of OHC in terms of staffing (impacting, for example, the number of people eligible to join the primary care practice) and operating hours, which has led to repeated unscheduled closures of Urgent Care;
    - One resident commented, for example, that the "Urgent care is closed randomly due to lack of doctors."
- The physical appearance of the Centre, particularly as it may be experienced by Aboriginal people (no cultural artifacts in evidence) and people with mental health issues (very public waiting areas), but also in terms of a lack of amenities for people waiting for Urgent Care (although vending machines have been added);
- Perceived insensitivity, ineffective communication, and even reported rudeness by some staff members.
    - As one resident commented, "Staff at the Oceanside Urgent Care center require sensitivity training, or at least a course in manners. I have needed to visit this centre 4

> times in the past 6 months. I make alternate arrangements whenever necessary due to the abrupt manner in which I have been [treated]."

That said, some clinicians reported that the way in which services are provided at OHC may be helping to better understand the current health status and health care needs of individuals in the community. As one noted, "An unintended consequence is that when you actually wrap services around the client, a lot more need emerges." Members of OHC staff indicated that the facility is providing care to some 'high-needs' clients who would not likely be able to access such care otherwise. Residents participating in focus groups expressed concerns, however, that 'high-needs' people still experience barriers to accessing care at OHC, while community agencies continue to seek out effective partnerships with OHC personnel in order to provide a more effective, supportive "safety net" to vulnerable residents in the Oceanside geographical area.

OHC and Helping Individuals to Remain in Their Homes

There has not yet been any measurable impact of OHC on inpatient hospital use by residents of LHA 69. Hospital admissions per 100 population were three per cent lower in the first six months of 2014[3] than in the first six months of 2013 – just before OHC opened – but nearly identical (less than one per cent higher) than in the first six months of 2012. They spent four per cent more days as inpatients in 2014 than they did in 2013 but four per cent fewer days than in 2012. More of those hospital days were spent under an Alternate Level of Care (ALC) designation in 2014 (13 per cent) than in 2013 (10 per cent) but fewer than in 2012 (20 per cent). The proportion of those hospital days attributed to ambulatory care-sensitive conditions has remained steady at about three per cent over the past three years. The number of residents living in long-term care and assisted living facilities has remained relatively stable since OHC opened. Neither the numbers of home support nor home nursing care clients, nor the volumes of such services they receive, can be reliably compared before and after OHC opened because of inconsistencies in how these data have been captured over time by Island Health information systems.

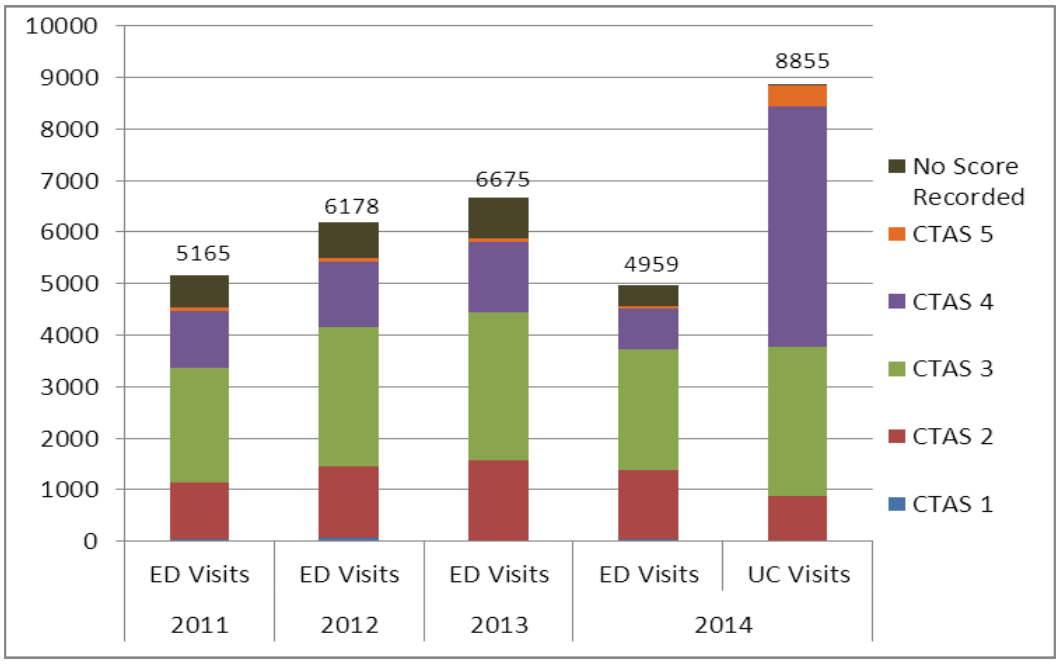
The number of visits to hospital Emergency Departments (EDs) by LHA 69 residents has decreased substantially since the opening of OHC (Figure 1). Between January and June 2014 (the most recent six-month period for which a full set of administrative data were available for analysis within the timelines of the SIEP), LHA 69 residents had 25 per cent fewer ED visits overall than during the same six-month period the year before OHC opened (January – June 2013). As part of that overall decrease, there were 39 per cent fewer ED visits scored CTAS level 5[4] (non-urgent), 42 per cent fewer for CTAS 4 (semi-

[3] Unless otherwise specified, all measures of health care utilization described here refer to use by LHA 69 residents during the six-month period of January to June of the year in question.
[4] The meanings of CTAS levels cited here are drawn from those established by the Canadian Association of Emergency Physicians. See http://caep.ca/resources/ctas/implementation-guidelines.

urgent), 18 per cent fewer for CTAS 3 (urgent), 14 per cent fewer for CTAS 2 (emergency), 48 per cent more for CTAS 1 (requiring resuscitation), and 50 per cent fewer with no CTAS score attached.

In 2013, in contrast, the number of ED visits by LHA 69 residents was eight per cent higher than in 2012, which in turn was 20 per cent higher than in 2011.

Figure 1: Total Emergency Department and Urgent Care Visits by LHA 69 Residents by CTAS Score

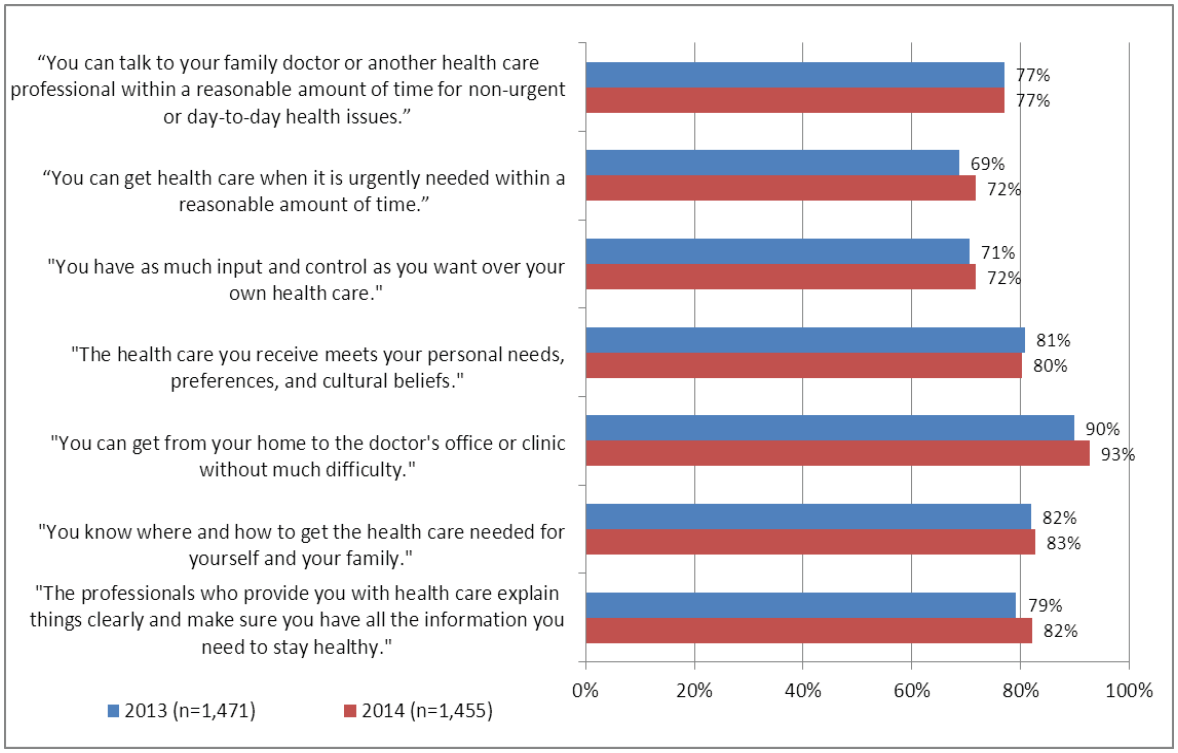


The majority (at least 60 per cent) of ED visits by LHA 69 residents at each of these points in time were for issues rated at least CTAS level 3 (i.e., urgent). In the three years before OHC opened, about 21 per cent of ED visits by LHA 69 residents were for problems rated CTAS level 4 (used for issues such as headaches, chronic back pain, or minor trauma) or 5 (used for issues such as sprains and sore throats); in 2014 this dropped to 17 per cent. Thus since OHC opened, LHA 69 residents have made fewer visits to EDs, and fewer of those visits have been for less urgent problems that could be addressed in a primary care setting. Such a reduction in ED use by Oceanside residents was a key intended outcome of OHC.

There were 8,855 visits to OHC's Urgent Care department between January and June of 2014. Of these, less than one per cent were for issues rated with CTAS level 1 (used for the most severe problems, such as cardiac arrest), 10 per cent for level 2 (used for problems such as severe trauma or severe anaphylaxis), 33 per cent for level 3, the majority (53 per cent) for level 4, and five per cent for level 5. So although the desired reduction in ED use by Oceanside residents has been achieved – both in terms of absolute volumes and inappropriate visits – this seems to have been replaced by high volumes of Urgent Care, most of which could apparently be dealt with in a primary care setting.

The residents' survey asked whether they agreed with each of a series of statements about health care in their community, and looked at how those responses differed before and after OHC opened. Figure 2 shows the proportion of respondents who agreed with each statement in 2013 and 2014.

Figure 2: Proportion of LHA 69 Residents Agreeing with Statements about Health Care Accessibility



The responses to the residents' survey in 2013 – before OHC opened – suggest residents had mostly positive perceptions of the accessibility of health care in their community. There is still room for improvement, particularly in the perceived accessibility of primary and urgent care. The survey data showed no significant differences in any of these measures between 2013 and 2014 – despite high volumes of cases seen in the Urgent Care clinic (the majority of which were for non-urgent matters). There was a mix of positive and negative anecdotal reports regarding residents' perceptions of OHC. For example, one respondent reported that they could get care when urgently needed, "…now that our urgent care facility is available"; another commented, "So grateful to have a 'one-stop shop' of OHC". At the other end of the spectrum, one resident reported that, "OHC mental health care is abysmal… walk-in services for the same are dysfunctional." Another commented that, "Through experience, my husband and I have learned there is no point in wasting time by going to the OHC… either no help is available, the wait is forever, or the expertise/equipment simply is not available."

To more closely examine the impact of OHC on these measures, changes in them between the two points in time were compared between people who had received care at OHC and those who had not. However, it may be that people who went there for care were more likely to be dissatisfied with their

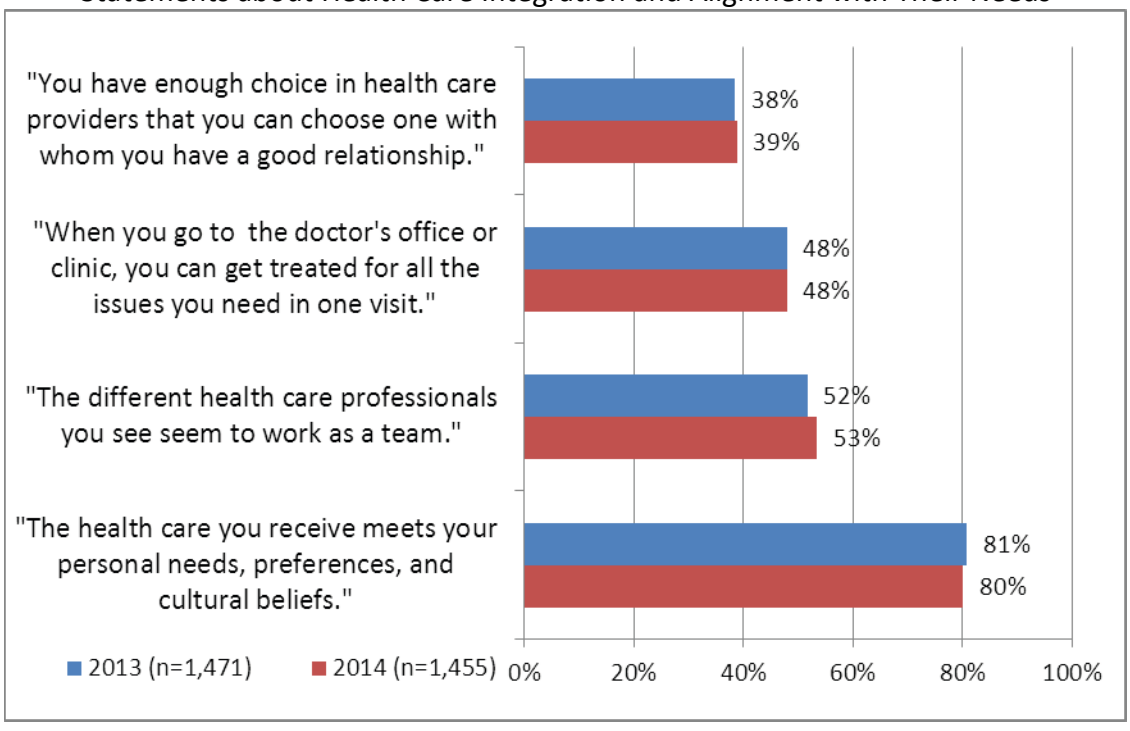
existing health care services than those who did not attend OHC, and as such more likely to respond favorably to an additional service. Similarly, people who were already satisfied with the care they were receiving may have been less likely to seek care at OHC, and could not have become more satisfied if they did. The perception of one resident illustrates this point; "The OHC has not provided any additional benefits over those available previously through my family doctor."

To attempt to adjust for this potential bias, analysis of temporal differences in residents' responses to questions about health care were also stratified according to their views on the adequacy of their health care before OHC opened. In other words, these analyses sought to determine whether the 'effect' of OHC was different for people who were already satisfied (versus dissatisfied) with their health care before OHC existed. Because it requires individual-level data from both points in time, this additional analysis was restricted to respondents who completed both surveys (n=362). The results of these analyses show no evidence of an effect of OHC; however, this lack of a measureable effect may be partially due to the small numbers involved.

OHC and Integrated Care Based on Client Needs

The residents' survey asked respondents to indicate their level of agreement with several questions regarding their perceptions of the degree to which the health care available to them is integrated and aligned with their needs. Figure 3 shows the proportion of respondents who agreed with each statement.

Figure 3: Proportion of LHA 69 Residents Agreeing with Statements about Health Care Integration and Alignment with Their Needs

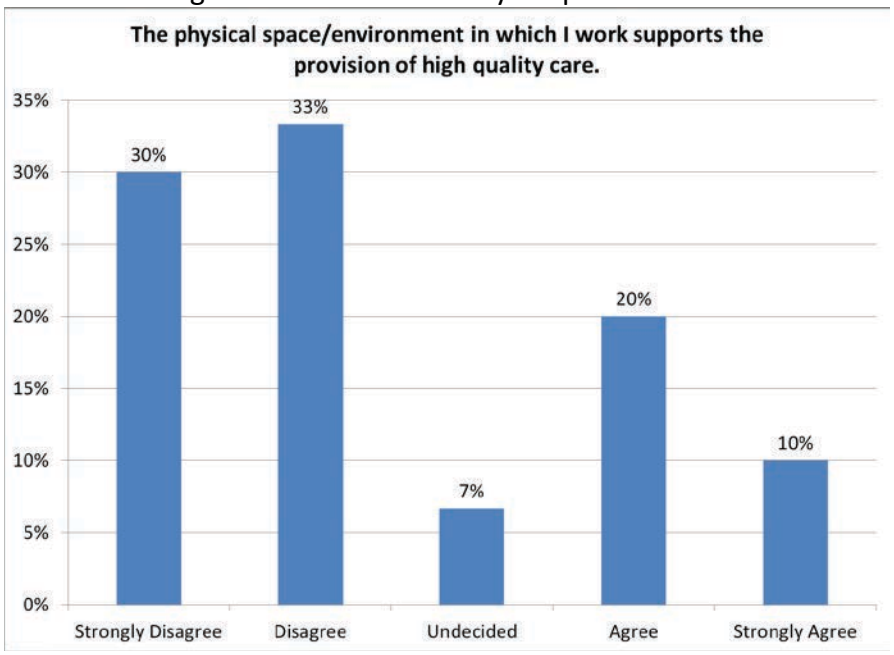


These responses suggest that while most people living in Oceanside felt the health care they received met their needs before OHC opened, there was considerable dissatisfaction with certain aspects of it. For example, only 38 per cent of respondents reported feeling they had enough choice in health care providers, and only 48 per cent reported they could have all relevant issues addressed during a single visit. There were no statistically significant differences in these responses in 2014.

Differences in how responses to these questions changed over time among Oceanside users and non-users were also tested after stratifying respondents according to their levels of agreement in 2013, and again no significant differences were found; again likely due to low numbers of individuals responding to both surveys.

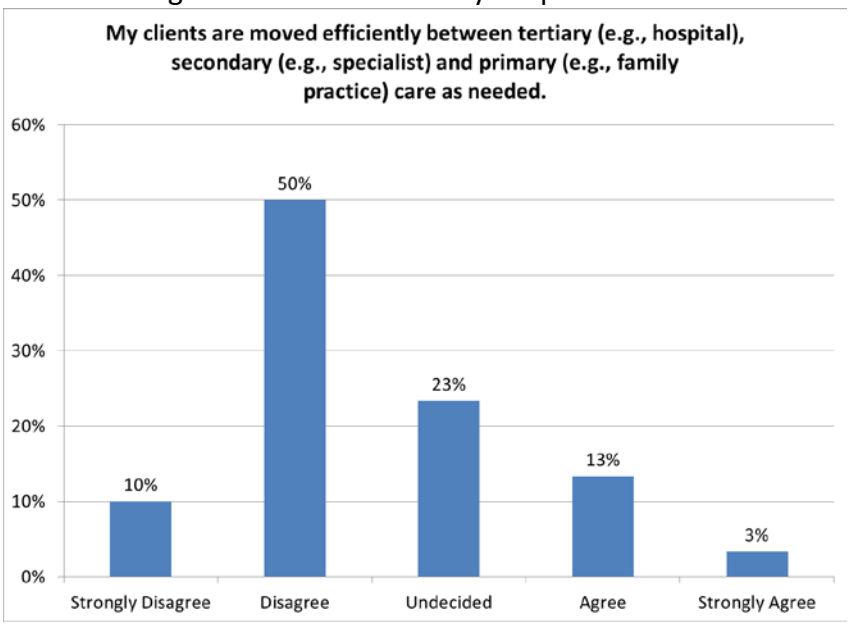
The survey of OHC staff asked respondents several questions about their perceptions of the care provided at the facility (Figures 4 – 6).

Figure 4: OHC Staff Survey Responses 2014



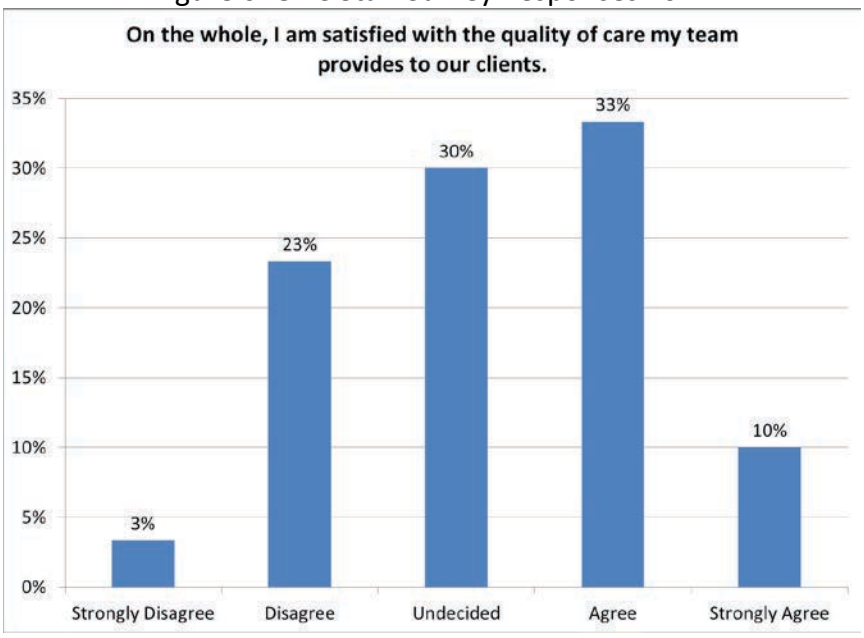
Most (63 per cent) of respondents reported in 2014 that the physical space in which they worked does not support the provision of high-quality care; 30 per cent reported the opposite. This diversity of opinion was also evident in the interviews and focus groups where a number of participants noted that there were space issues, difficulties with the information technology systems, challenges with the reorganization of teams' physical work space; particularly on the second floor.

Figure 5: OHC Staff Survey Responses 2014



Most respondents (60 per cent) to the staff survey in 2014 disagreed with the statement that their clients are moved efficiently between levels of care as needed. Sixteen per cent agreed with the statement, while 23 per cent were undecided. As one participant noted, "we need to be really intentional about what the handover looks like"; another reported that, "wrap-around care is getting closer", for example through 'warm' handovers to primary care or the home-based services from urgent care." It was also noted that undertaking 'warm' handovers required additional time to make sure both sides of the team were able to be present at the same time to engage in the handover.

Figure 6: OHC Staff Survey Responses 2014



While a total of 43 per cent of respondents agreed that the care their teams provided was satisfactory, a total of 26 per cent disagreed, and 30 per cent were undecided. Focus groups with staff and leaders in OHC over the course of the implementation and stabilization of care processes repeatedly illustrated the challenges that staff had in understanding the goal of the change intended by the establishment of OHC. Even more challenging was their ability to then associate particular care practices with that change. For instance, at times, the goal of the change process was explained at a relatively micro-level as being about taking part in morning huddles. These strategies evidently linked back to the Care Delivery Model Redesign (CDMR) initiative examined under the Retrospective Evaluation and represented an effort to draw strategic initiatives forward into new settings for health care delivery. At other times, the goal for change that OHC was designed to achieve was a much more conceptual, macro-level goal evidenced by the introduction of the Nuka model[5]. For staff who had years of experience working in relative collegiality within geographically isolated but functionally coherent groups (e.g., community case managers and home care nurses; mental health teams; diabetic care teams, etc.), such organizational disruption can be expected to be responded to in the negative. With a coherent narrative about the benefits of a new service model – in terms of the work environment and/or the provision of care for patients – employees might be more likely to overlook such disruptions in order to participate in support of a new model. Our interactions with OHC staff indicated that such a narrative was not experienced by them as being evident during the first year of operations.

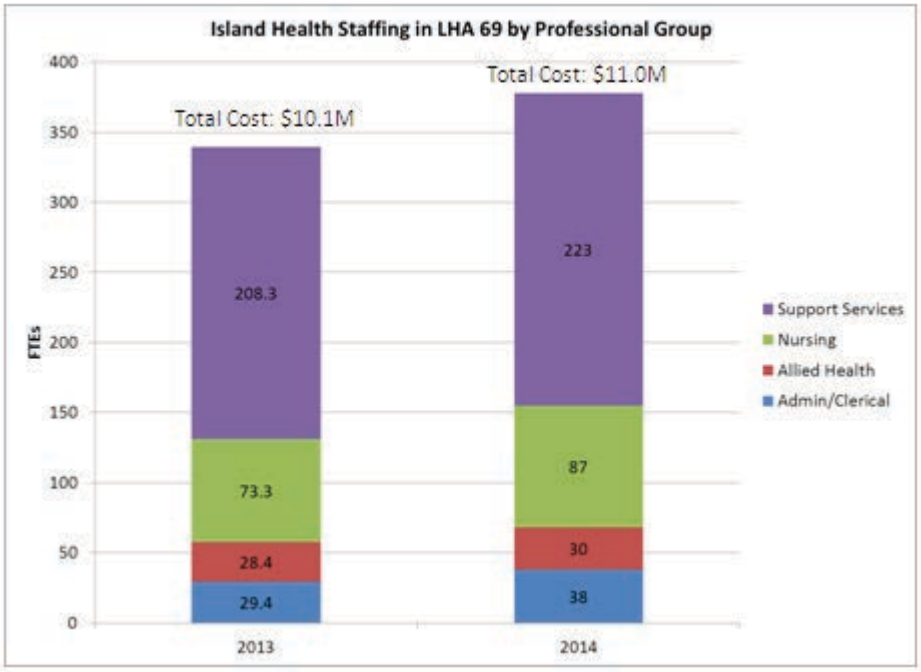
Future initiatives of this sort would benefit from the collaborative development of a clear and relevant goal for the changes in the composition of teams, the focus of their practice and regular opportunities to evaluate staff satisfaction with the change process. Staff at the OHC reported experiences of significant personal alienation from the planned changes; that change was imposed from above and with insufficient recognition of already existing good practice and good outcomes, how those practices could be incorporated into achieving new goals and how those outcomes could be preserved in new care models.

OHC and Costs

Although the costs of specific services provided by Island Health cannot be measured directly with the organization's existing information systems, staffing costs for LHA 69 can be directly measured (Figure 7).

[5] "Nuka" is an Alaska Native word that means a strong, living, and large structure. Anchorage's Southcentral Foundation applies the term Nuka to describe a system of caring for patients (and the community of Alaska Natives Southcentral serves) that prioritizes achieving physical, mental, emotional, and spiritual wellness." (nlm.nih.gov/medlineplus/podcast/transcript072213.html)

Figure 7

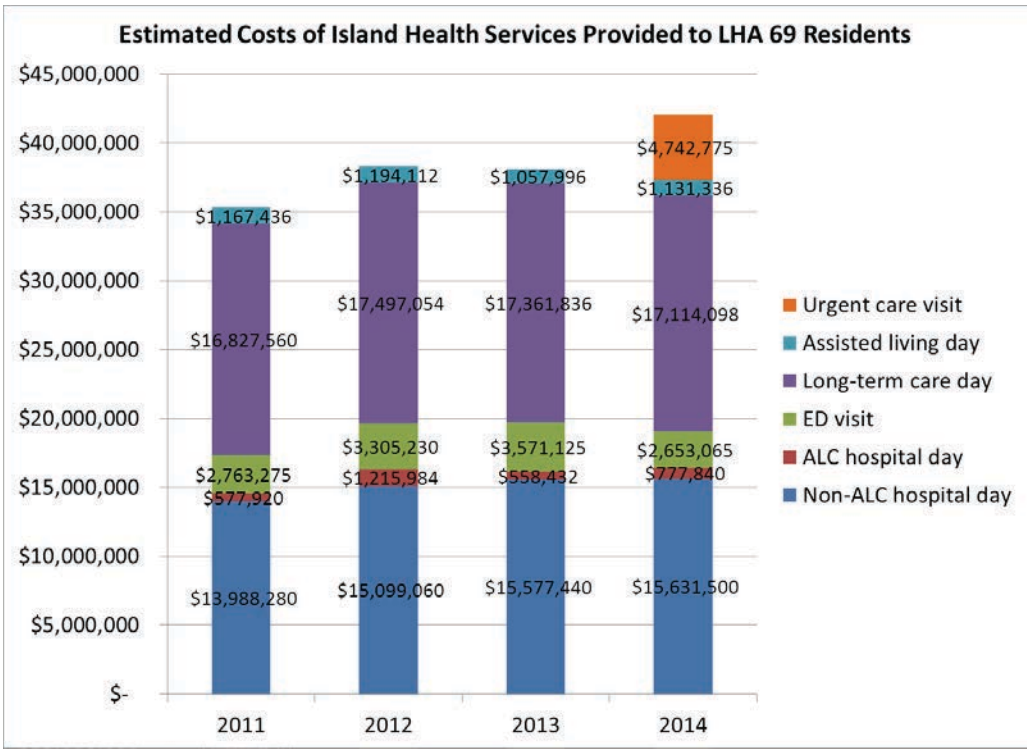


Costs to Island Health for staffing LHA 69 (including but not limited to OHC) were $11 million in 2014, nine per cent higher than they were in 2013. Staffing for LHA 69 grew by 11 per cent overall in FTEs (from 330.5 to 367.9) and 16 per cent in head count (from 591 to 684 [not shown here]) between 2013 and 2014. The growth in staffing costs associated with this increase is nine per cent. The largest area of growth in FTEs was in the administrative/clerical group, which grew by 29 per cent. Nursing grew the most by head count, increasing by 27 per cent. The professional group with the smallest growth was allied health, which grew by six per cent in FTEs and five per cent in head count.

Based on Island Health administrative records on the volumes of different types of health care services provided to residents of LHA 69, and estimated average costs of each of those types of services in 2014[6], the total costs to Island Health of providing those services to LHA 69 were estimated (Figure 8). The volumes of health care services provided by Island Health to residents of LHA 69 were about the same in 2014 compared to 2013, with three exceptions: ED visits, which were fewer in 2014; ALC days, of which there were more in 2014; and Urgent Care visits, which did not happen prior to OHC opening in 2013.

[6] Note that home nursing care and home support are not included in these estimates as the numbers of these services provided to LHA 69 residents could not be estimated accurately in 2013 and 2014 from existing Island Health data.

Figure 8



Based on the volumes of ED and Urgent Care visits, for the reduced costs associated with the fewer ED visits to offset the additional costs of providing Urgent Care visits, the average Urgent Care visit would have to cost no more than 19 per cent of the cost of an ED visit[7].

Evaluation participants offered a range of perspectives on the costs associated with OHC and its model of service delivery. Several viewed increased costs as an inevitable consequence of the vision behind OHC:

- "We think that the return on investments will be profound over the long term."
- "The model of care at Oceanside [Health Centre] is more expensive than what it replaced. This is not surprising; if you are using a multidisciplinary team to address care, it will be more expensive than solo-physician care. The quality of care is higher, the word will spread, and patient demand will increase."
- "When we are providing poor quality of care, improving that quality of care costs money. You can't expect to do it in such a way that improves the quality and cuts back on costs. [You] need to face up to that at the beginning."

[7] The true average cost of a visit to Oceanside's Urgent Care department could not be measured with Island Health's existing information systems at the time of this writing. For illustrative purposes, the value used to create Figure 8 assumes that the average cost of an Urgent Care visit is the same as the average cost of an ED visit. In reality an Urgent Care visit may be less costly than an ED visit.

- "It's a hugely expensive model of care, because it addresses demand or requirement for service that wasn't being met before at all."
- "The savings will be down the road, not a year after opening."

Others expressed concern that any cost increases would be viewed as reflecting poorly on the initiative:

- "It may take more money than is budgeted, which is realistically part of the problem. One of the things that will put this place in jeopardy is holding back on allowing extra money to be spent if that's what is needed. It will fade before it gets the chance to become the success it was envisioned to be. It would be short sighted, and unfair to the vision."
- "There is a risk for [OHC] itself because it is in its formative stages, and there are still lots of heavy lifting quality improvement work that needs to be done to have all components functioning at the desired level."

In order to determine the average return on Island Health's investment on OHC, it is necessary to wait until those returns have fully materialized. Although this is beyond the timelines of the SIEP, Island Health can use the evaluation instruments and economic evaluation framework provided through the SIEP to monitor its impacts over time. The above analyses have demonstrated, in part, the application of those tools in estimating the costs to Island Health associated with the services it provides to the residents of OHC's catchment area.

Cross-Cutting Themes

In the preceding sections, we have reviewed findings directly in line with our specific evaluation questions about the difference OHC is making. In this section, we provide a description of cross-cutting themes arising out of our analysis that provide some explanation as to why those impacts have occurred, and why others that may have been anticipated have not yet been realized. These themes represent points of recurring challenge for Island Health, its staff, its partners and those members of the community seeking access to health care for themselves or their family members. It is our assessment that these themes illustrate some important elements of Island Health's organizational culture that impact – both positively and negatively – the ability of the organization to achieve its long-term vision.

Assessing Needs

The common view among the Oceanside residents, family physicians, and Island Health staff who participated in this evaluation is that OHC – both the building and the service model within it – were developed without fulsome understanding of the needs and perspectives of community members or Island Health staff, and without appropriate assessment of the types and quality of care already being delivered prior to implementation of a new model through the OHC. The most common complaints received from residents through focus groups and surveys about the health care available to them, before and after OHC opened, refer to primary care issues. This finding, coupled with the fact that the

majority of cases seen through Urgent Care are for issues that could be dealt with in a primary care setting, support this view and suggest that the most pressing health care needs of Oceanside residents were not adequately assessed prior to planning the volume and mix of services to be provided through OHC, and designing and constructing the building to support their provision.

Stakeholder Engagement

Participants in staff and community focus groups, as well as participating private practice physicians, repeatedly characterized Island Health's decision-making as 'top-down' and 'autocratic'. Although participants acknowledged that Island Health made some effort at sharing information before and after OHC opened, this was viewed as an ineffective engagement mechanism. As one participant described them, the occasions where Island Health engaged with local stakeholders appeared designed merely as a forum for Island Health to inform them what was going to be done as opposed to an opportunity for stakeholders to have their views heard and considered. A physician reported that, "They [Island Health] have managed to alienate the whole of the physicians in the community because of their [ham]-fisted approach to doing this. It's senseless to polarize a group like that." Similarly, another clinician advised that, "Before you implement a new model, sit down with the caregivers that will be responsible for making it fly and see what they think - as opposed to the apparent approach of making it work come hell or high water. This comes at the expense and loss of quality caregivers." This comment suggests the layers of explanation that might be required when implementing the scale of change represented by the OHC model:

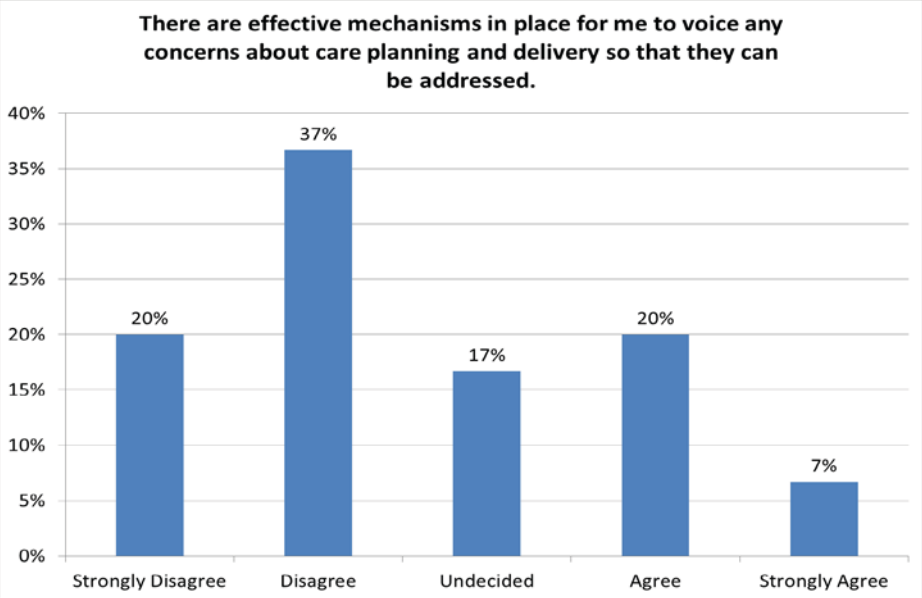
- Establishing a vision for the overall goal of the project (e.g., To improve attachment of residents to primary care services and to deliver an integrated model of care to residents who are, and will continue to live in the community, not in residential care);
- Distinguishing this model of care delivery from the existing, largely unarticulated, model of loosely connected, individual delivery by general practitioner's (GPs) in private practice;
- Articulating the anticipated relationships between those services Island Health is responsible for and those provided by existing, community-based providers; and
- Engaging in explicit dialogue about the change – for everyone – in practicing differently in order to accomplish the vision.

Participants throughout the organization and the community expressed a strong interest in retaining – or at least receiving acknowledgement of the pre-existing benefits of – local approaches and priorities to care delivery. Whatever engagement strategy was in place for these participants was inadequate to incorporate these perspectives, allowing those frustrations to fester over time. As a result, their overall experience of the introduction of OHC was that it represented something wholly new that was implemented as though the community had no other services in place prior to the Centre opening its doors. While OHC clearly brought new capacity and new opportunities to the community, most of the Island Health staff, community-based physicians, community-based health and social service agencies, as well as members of the wider community were looking for a health service delivery partner who could

extend what they were already providing. Instead, they experienced what they described as a large organization moving into town and imposing new requirements for how health care would be delivered into the future without consideration of what the community itself wanted or had already developed itself. In short, these groups found that Island Health seemed unwilling to partner with them in a meaningful way.

Several OHC staff, during focus groups, expressed a sense of frustration at not having sufficient input into how services were to be planned and delivered at the site. Illustrative of this concern are staff survey responses[8] (Figure 9).

Figure 9: OHC Staff Perceptions of Communication Mechanisms 2014



Most respondents to the 2014 OHC staff survey (57 per cent) disagreed that there were effective mechanisms for them to voice concerns about care planning and delivery in order for these concerns to be addressed. Twenty seven per cent reported that there were such mechanisms, while 17 per cent were undecided. These data are consistent with staff focus group discussions where participants repeatedly described both fear of reprisal and frustration as a result of trying to voice concerns to people in management positions. One participant reported feeling that it was "… not safe to disagree or have different perspective with leadership", while others described feeling enormous pressure to simply 'keep their heads down'.

[8] As noted earlier, the minimal response to the 2013 staff survey means that 'baseline' or pre-OHC values of these measures are not available as a point of reference.

Participants from community agencies noted that there is a "need to develop greater/clearer partnerships to identifying gaps in services with the local partners in the community. This is an important next step to understand all types of services, what's being provided by community and what by VIHA so that gaps can be identified." Representatives of these agencies described to us in detail their efforts – over an extended period of time – to first find, and then be acknowledged by, OHC personnel with whom they wished to build effective working relationships. These agencies have established relationships with important and often difficult to reach population groups (e.g., seniors, single-parent families, people living with mental health challenges, people living in poverty) that Island Health has expressed interest in engaging with through OHC, and described a strong desire to work with appropriate personnel at OHC to provide service to these groups. However, they reported to us that the OHC personnel they tried to contact either did not return phone calls or, if they did, told them they would need to wait until services were settled sufficiently in order for such cross-institutional relationship building to begin. When we spoke to these groups last in October 2014, they were still waiting.

Similarly, while some Island Health leaders described a resistance to change by some private practice physicians as a challenge to OHC's success, some participating physicians suggested that any resistance Island Health experienced from physicians may have been a result of the way in which Island Health chose to engage those physicians, and indicative of an interest in partnering with Island Health as opposed to merely resistance to change. As one physician put it, "Physicians who are disruptive are so because they are frustrated because they don't know how to get things done [with] the organization. If you help them and show them, it works really well."

It should be noted, however, that several participants described recent efforts by OHC leadership to improve communication and relationships with these stakeholders groups – for example, through the local Collaborative Services Committee – as helpful and a foundation for potential future progress. One physician also noted that the existing Integrated Health Networks (IHNs) may also be another mechanism for collaboration but, "At the time of initiation [of the IHNs], it wasn't very well explained, so in reality only 9 – 10 doctors in the community signed up for it. This led to some inequities in access to certain services for patients, but if all doctors were included it would be a good model." Such efforts indicate that some OHC personnel view such partnerships as valuable to Island Health's goals.

Communication

Island Health's communications – both internal and external – about the services offered at OHC was consistently described by multiple stakeholder groups as frustrating. Externally, it seems that the focus of communication efforts to date, such as newsletters aimed at nearby residents, has largely been on pushing information out as opposed to providing the basis for engaging with stakeholders. Despite this there remains considerable confusion among residents and community groups about what services are and are not offered at OHC, and which services (e.g., primary care) are accessible to whom. As one participant noted, for example, "Lots of docs working in the community do not know about [the services

provided through the second floor of OHC].” This lack of understanding of OHC’s services is exacerbated by repeated unscheduled closures and changes to operating hours and procedures, and also suggests that Island Health has yet to make full use of its considerable communications resources to reach relevant stakeholders.

Internally, there are substantial inconsistencies within and between different parts of Island Health, from the Executive team to the front lines, in what they consider to be OHC’s purpose. This is perhaps most clearly demonstrated by the apparently conflicting directives front-line staff feel they are receiving from those in leadership positions: on the one hand they are being told that OHC is to emphasize holistic, integrated, patient-centred care; on the other they are being told “just get the numbers up.”

The communication approach seems to have contributed to a confusion regarding a commitment to the model of care at OHC. This lack of commitment is demonstrated by the fear hesitancy described by staff in providing feedback or input to local or senior leaders; because they are unsure who supports which model, they do not feel safe in expressing commitment to any one of the several models that have been introduced over the first year of operations. As a result, the culture at OHC is one where significant numbers of staff describe feeling alienated from their work rather than moving towards a sense of ownership of the Centre or the care that is delivered through it.

A New Practice Model

As noted above, there remains confusion – from the Executive table to the bedside – about ‘the model’ in use at OHC, and there are still no clear and consistent goals for what is expected of OHC staff by senior leaders in Island Health, and this lack of clear expectations has hindered OHC’s success. Another hindrance has been a lack of clarity on the rationale behind that model. When interviewed, many participants talked about the Nuka model, and some speculated that perhaps this model was chosen in an effort to give staff a “vision” for how practice should be conducted in the Centre. What was not clearly articulated by any participant was why that particular model – an American model designed for a small, apparently cohesive Native American community context (Gottlieb, 2013) – was deemed the most appropriate choice for OHC, and by whom. This is particularly surprising given how positively participants, usually unprompted, described other, existing models of service integration such as the Integrated Health Networks instituted across the province.

As one participant reported, “Good management and good leadership is important, the principles surrounding this model are wonderful, but the problem is that we are trying to emulate a model, as opposed to adapting it to this specific context.” Another reported that, “What I constantly run up against is that the vision is designed and created in the US health care system, which has a different dynamic. Translating it into the Canadian context, with hugely different funding schemes has been a huge challenge.” One year into implementation, participating OHC staff predominantly described the service

model there as an "imposition" by Island Health rather than in terms of its capacity to offer principles for practice that might be adapted for use at OHC.

Despite broad awareness of the Nuka model, the three elements of the Centre – primary care, urgent care, and home and community care – appear to still be largely distinct and, for the most part, functionally isolated from one another. This is contrary to the sort of integration that the Nuka model promotes. The prevailing perception among participating front-line staff, as well as some directors, is that most planning for OHC has to date been focused on the construction of the building and co-locating various services and programs within it, and not enough on coming up with a clear plan for how these programs and services are to actually work in concert with each other to benefit clients. As one participant described it, "What Island Health is very good at is building buildings. It is not at all good at anything around getting the people to work in the right way, and setting up the conditions in the local working environment in order to make the building work well."

That said, there were some anecdotal reports of progress being made on the integration front. Examples of promising practice approaches such as 'warm' handovers and efforts to link with community-based palliative care offerings were described by some participants, and there was general agreement among participating front-line staff that the principles underlying the model being established at OHC – more patient-centred, integrated, team-based care – represent a potentially important step forward.

Leadership

The challenges described by the various evaluation participants reveal a number of things about the ways in which leadership is practiced at the Centre but also by Island Health's senior leadership more broadly. Leadership to date with regard to OHC seems to have been characterized by a highly centralized, some might say "autocratic", leadership style. The emphasis of site leadership appears to have been focused – at the apparent urging of Island Health's Executive – on day-to-day operational issues of getting each of the distinct services (especially Urgent Care and Primary Care) operating smoothly *as* distinct services, perhaps with the view that once they are operating smoothly alone, then the work of integration of those services might be tackled. More broadly, descriptions from participants of how OHC has been handled by Island Health senior leaders suggest that their approach has been characterized by reactions to short-term challenges as opposed to proactively supporting the achievement of its long-term goal of integrated, patient-centred, community-based care.

While there is criticism from some participants of the approaches that have been taken by different leaders with respect to managing OHC, none of them can really say whether OHC is meeting expectations because of the continued lack of agreement across the organization about what those expectations are. For example, there still does not seem to be consensus, even within Island Health's executive team, about exactly is meant by integrated, patient-centred, community-based care and, certainly there is no consensus on the right process for achieving it. Despite this lack of consensus, we

did hear of some small but highly innovative efforts on the part of some local providers, both in OHC as well as through non-Island Health facilities, who were adapting their practices to enable residents to live well and be well supported within the community. Because these practitioners are actively engaged in health and social care delivery in the community, their ability to articulate the details of such integrated community-based care is readily available if opportunities for sharing such experience with Island Health could be created.

No one we spoke with argued with the fact that setting the vision for care delivery within Island Health – at OHC and elsewhere – is a core responsibility of the senior leadership team. What just about everyone at every level of the organization commented on, however, was: a) a lack of understanding about how and where such "vision" was developed; and b) an uncertainty that, once developed, the vision would remain the same, could be shared with staff and other key stakeholders and that the vision could then be entrusted to implementation at the local level. This is what we assess to be at issue when stakeholders in OHC express their concerns over "ownership" for the change process associated with OHC. Participants talked about being afraid to try anything new, even where they were confident that the new practice was aligned with organizational vision. As one participant put it, "I am seeing a whole lot of indecision because people are not sure who to please anymore." Another reported that, "We have to allow people to really own it [Oceanside Health Centre and the model of care practiced there]. This was a small enough project that we could have had a lot of nimbleness but we didn't do that – we made it all about permission and then it's about pleasing people."

Following on this point, several senior leaders in the organization were able to articulate specific, practical expectations for what integrated care at OHC would look like. But they expressed these expectations in ways that suggested they did not feel authorized to set such expectations. Yet managers and staff, who generally seem desperate to do the right thing, are always listening for such messages. They expect that senior leaders should set the vision, and when they hear a clear and consistent message regarding that vision, they can be confident in their ability to implement the vision, to take ownership of the vision at the local level. Without such clarity, staff and managers are left feeling uncertain and needing to seek permission for even the most minor of innovations. This seems to be the situation at OHC.

There appear to be two closely interrelated issues at play here:

1. The importance of the relationship between the responsibilities of senior leadership for establishing a shared vision for the delivery of high quality care, those of the local leaders who support and communicate the vision, and those of clinicians to understand, embrace and implement the vision; and
2. The importance of creating shared ownership for practice innovation.

Both of these issues are closely connected to using change management processes grounded in the principles of inclusion and engagement supported by clear and consistent communication amongst all stakeholders, including the public. While groups spoke to these interrelated issues differently, the frequency and centrality of them to so many of our discussions suggest that they are critical determinants of the health of Island Health as an organization.

A Culture of Evaluation

Island Health has experienced changes among its senior leaders during the early stages of OHC's operation. The people in the roles of Island Health's Chief Executive Officer, Chief Medical Officer, Chief Nursing Officer, Chief Financial Officer, Vice President of Planning, and OHC Site Director have all changed since June 2013. Frequently changing leadership may be contributing to an apparent decrease in awareness of both OHC and the SIEP exhibited among Island Health's senior leaders between 2013 and 2014. In 2013, OHC was variously hailed by most of members of the Executive Team as a 'flagship' model, 'the future', a higher-quality approach to community-based health care that would help to transform the way Island Health helped to fulfill its organizational mission. At the same time, the SIEP was repeatedly held up as the beginning of a 'culture of evaluation' that would be fostered within Island Health so as to promote the use of evidence in decision-making across the organization. As such, the findings were highly anticipated as a means of informing organizational decision-making at operational and strategic levels.

In 2014, several participants noted that the SIEP was not highlighted as a priority at leadership meetings, while others demonstrated a lack of awareness and understanding of OHC's service model. This may be a result of personnel change among the Executive team's members, changing views among its members, or both. More broadly, during the interviews there did not seem to be any clear sense of ownership for OHC among the Executive team, nor did there seem to be much consideration for how OHC could provide important evidence that Island Health could use to guide the implementation of future innovations in community based care.

Another finding suggesting a lack of consideration of evidence is that there was no evidence of any change undertaken based on the SIEP findings to date. Several members of the Executive team reported being unaware that the report on the retrospective evaluation was submitted before the prospective evaluation began. This appears to bear out, at least in part, concerns expressed by several participants that their efforts to contribute to the SIEP would be wasted due to what they perceived to be a lack of interest in evidence among Island Health leaders. What seemed at the outset of the study to have been a shared organizational commitment to community-based care and evidence-based decision-making is no longer evident.

Pre-Existing Community Dissatisfaction

Data from the residents' survey (e.g., Figure 3) as well as resident focus groups suggest another major factor affecting the success of OHC is a high degree of pre-existing dissatisfaction with the health care particularly, but not limited to, primary health care available in the Oceanside community. There were comments from most residents in focus groups and from most respondents to the survey regarding this issue. Most frequently – both before and after OHC opened – these were in regards to problems they encountered with accessing primary care.

The most common issues reported were not being able to get an appointment with their family physician for two weeks or more, feeling rushed during appointments, and only being allowed to discuss one issue per appointment. As one resident reported, "I feel that my appointment is rushed!!! Doctor does not give you time of day to answer questions/explain further - does not discuss blood test results unless asked for (even when results are okay, patient still need to know). When a question is asked, I'm told 'your time is up'." In contrast, some respondents commented very positively on the primary care available to them. As one respondent reported, "My doctor takes time to explain things to me and he listens to my concerns. I'm happy with my doctor and other professionals that I see." Another issue raised frequently by residents was difficulty accessing specialist physician services. The report from one resident that "I have to wait months to see specialists" was frequently echoed by others; for example, "…for seeing a specialist the wait is far too long - in my case 14 months." Another commented that, "Waits are far too long for cancer diagnosis & treatment in our area. It costs people a possible cure & survival."

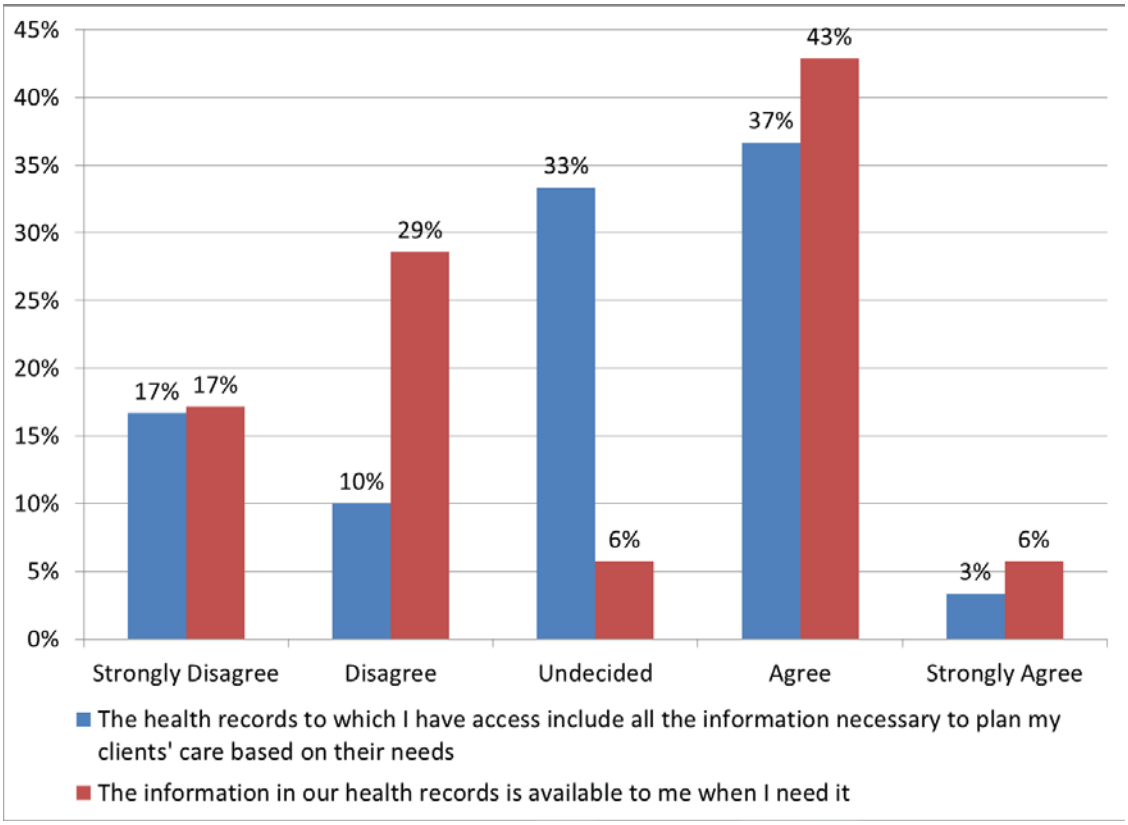
These data, together with the high volumes of apparently inappropriate use of Urgent Care (Figure 1), suggest a high need for primary health care not being met by either family physicians in private practice or the primary care team at OHC. As one resident commented, "[The] problem is not with access to urgent care, but timely access to non-urgent health care." This might have been better addressed by OHC had the originally planned number of primary care teams been implemented.

Electronic Health Records

The electronic health records systems being implemented at OHC were identified by participants as being both a driver and a constraint to OHC's success. On the one hand, participants reported that these systems can and have facilitated more comprehensive, integrated, and patient-centred care. On the other hand, the initial goals of "One Person, One Record, One Plan of Health" and a "single electronic health record" (VIHA, 2012) are not perceived, except by some members of the Executive team, as being a priority for Island Health. Participants at OHC report that even coordinating the multiple Electronic Health Record (EHR) systems in place within the building remains a challenge, with no apparent expectation of a unified system within the building. While the EHR system was positively regarded by a few staff and physicians, several staff also reported that they have been required to spend what they perceive as unnecessarily large amounts of time trying to learn to use these systems to the detriment of

other patient care responsibilities. Illustrative of the multi-faceted impact of EHRs on OHC are the levels of agreement of OHC staff with statements about health records in general (Figure 10).

Figure 10: OHC Staff Assessments of Health Records



Although 40 per cent of respondents agreed that the health records to which they have access include all the information necessary to plan their clients care and that this information was available when needed, a smaller but still substantial proportion (27 per cent) disagreed.

Dedication of Front-Line Staff

The factor most consistently identified as contributing to the success of OHC is the dedication of its front line staff. Although many residents reported challenges with accessing care at OHC due to confusion about opening hours, services offered, and other factors, there were several glowing reports regarding the quality of care received once those barriers were overcome. For example:

- "The Oceanside health centre is a first-rate facility and is a real boon to this area. It is pleasant to visit and from my experience the staff is doing good work."
- "When I visited the OHC, I went voluntary for [a] check-up because I was shaken up. X-rays were taken and all was well. I received excellent care and attention whilst there."
- "As a new resident to BC my personal experience with the medical primary care team at OHC is excellent."

- "Services provided by health care professionals of OHC and other hospitals have been very good. Family Doctor and specialists working in concert, good sharing of information and levels of care."
- "I'm pleased we have OHC. It's close to our home & the personnel I have met were great."
- "OHC is a terrific service and the care they give is the best I have ever received."

These sorts of positive encounters between OHC staff and patients represent an important foundation on which to continue building toward the model of integrated, patient-centred community-based health care envisioned for the facility.

Summary of Findings

The prospective component of the SIEP sought to measure the impacts of OHC on four types of outcomes: the health of individuals in the community; the ability of those individuals to remain at home; the integration and alignment of its services with client needs; and costs – and to determine what factors may be supporting or hindering those impacts. The evaluation analyses indicate that, at this stage:

- OHC has not yet had a quantifiable impact on health at the population level, although there is a mix of qualitative reports of some positive and negative impacts on health at the individual level.
- OHC is now providing a large amount of health care that was previously less accessible – or not accessible at all – to area residents. More specifically, the evaluation data suggest that OHC has contributed to a reduction in ED use by residents of its catchment area, which has coincided with high volumes of use of its Urgent Care department but little change in the volumes of use of other, pre-existing Island Health services.
- There is room for improvement in integration and alignment – of both services delivered by Island Health as well as existing community health and social service partners – with patient needs, although there are some reports that this is improving.
- OHC has contributed to a substantial increase in the costs to Island Health of providing care to the residents of its catchment area.

Discussion

Planning and being accountable for the delivery of quality health services is an inordinately important task. Evaluating the success of complex initiatives implemented as part of that task demands methods that can take account of changes over time. Evaluating such an initiative has been a large but important undertaking for the Strategic Initiative Evaluation Project (SIEP). By investing in an extensive external evaluation of its strategic initiatives, Island Health showed a commitment to understanding and being accountable for the processes of change associated with them. By also investing in and enhancing its internal capacity to conduct these evaluations, and communicate their findings, on an ongoing basis, Island Health also demonstrated commitment to incorporating the process of changing and learning into its regular operations. Such commitment is rare among health care organizations. Island Health has indicated its commitment to position the findings of the retrospective and prospective evaluations in ways that will inform future policy developments as they navigate through a complex and rapidly changing health care environment.

The impacts of a major change in health care delivery and investment such as OHC will likely take several years to fully materialize. However, the SIEP timelines restricted the evaluation of its impacts to those which could be measured within roughly one year of its opening. The SIEP findings, therefore, should be used to provide insight into how the development and implementation of OHC have progressed and to identify potential areas for improvement in the future. They do not provide a definitive description of the ultimate effectiveness of OHC, but the lessons learned should be helpful to Island Health as it moves forward with its transformational change.

As noted earlier, throughout the SIEP Island Health has undergone significant changes in addition to those included within the scope of this evaluation. In addition to changing its name, the organization's Board and several members of its Executive team, including but not limited to the Executive sponsors of the SIEP, Island Health's SIEP coordinator, as well as director of OHC itself have also changed. In addition, Island Health was undertaking strategic initiatives other than those included in the SIEP, such as its IHealth initiative. Finally, during the latter stages of the SIEP Island Health was in the process of reorganizing the geographic structure of how its services and programs are organized, planned and delivered. The findings of the SIEP need to be interpreted within this context of broader – and quite significant – organizational change.

It was initially expected that provincial registry data could be used to identify an appropriate sample of LHA 69 residents to whom a survey about health care could be directly distributed. However, consultations with the British Columbia Ministry of Health revealed that this would not be permitted under provincial privacy legislation. The use of Island Health's databases – which would have yielded a biased sample because of their inclusion of only people who had accessed its services – for this purpose was not permitted for the same reason. As a result, the survey was instead distributed as unaddressed

ad-mail by Canada Post. Although a large number of responses were received to both iterations of the survey, a direct-mail, addressed survey may have achieved a higher response rate. In a similar vein, the low response rate to the 2013 staff survey prohibited comparisons of responses to it over time. Considering the vital importance of Island Health's relationships with the general public and its staff to the organization's success, some in-depth investigation of potential means of overcoming these challenges is warranted.

As noted above and in the retrospective evaluation, Island Health's information systems currently do not systematically capture patient- or service-based costs. Analyses of costs reported here are therefore based on estimated average per-service costs provided to the evaluation team by Island Health. Addressing this limitation will be necessary to allow for economic evaluations of Island Health programs or initiatives.

Home nursing care, home support, and other community-based services provided by Island Health are an integral part of the model of service delivery at OHC. However, as noted earlier, inconsistencies over time in the accuracy and consistency of reporting of home nursing care and home support data precluded an analysis of how the use of these services has changed since the opening of OHC.

Despite these limitations, this evaluation has produced evidence and lessons that have profound implications for Island Health. The qualitative analyses show some successes in terms of team-delivered care and increased access to more coordinated services for residents of the Oceanside community. It also illustrates some concerning organizational practices – particularly regarding stakeholder engagement and communication – that may, if not addressed now, undermine innovations and the laudable goals of a more responsive and localized health service delivery system in the future. The quantitative analyses show little measurable impact of OHC on helping people to remain at home, integrating care around patient needs, or costs at this stage, aside from decreased ED use and high volumes of Urgent Care use.

The data provided by the SIEP participants offer a compelling explanation for the current state of OHC. Simply put, they suggest that both the conceptualization and implementation of OHC were conducted by Island Health without adequate consideration of the needs or perspectives of that community or their care providers, or of whether the service model chosen was adequately aligned with those needs. Given this information, it is perhaps not surprising that so many challenges have been encountered.

The most consistently identified barrier to the success of OHC has been ineffective stakeholder engagement. This is especially unfortunate because the primary focus of the Nuka model – identified as the basis for the way OHC is to function – is building and maintaining relationships (Gottlieb, 2013). Recent efforts by OHC leaders to begin to amend this problem have not gone unnoticed by the local community, however, and represent a basis for improving these relationships – and, by extension, the

prospects for OHC meeting its potential – going forward. Moreover, there were reports from participants that there was little effort to connect existing initiatives (e.g., Integrated Health Networks) with the model and services at OHC. Not only would connections with existing initiatives improve integration but it would also provide mechanisms for engagement with stakeholders, including physicians.

As far as the services it provides, neither the high volumes of potentially inappropriate use of OHC's Urgent Care nor their associated wait times are looked upon favourably by any stakeholder. The fact that most Urgent Care visits seem to be for problems that could be dealt with in a primary care setting, together with two years' worth of resident surveys in which the most common complaints were to do with inaccessibility of primary health care, it seems logical for Island Health to consider investing further in OHC's Primary Care services, if only to offset some of the burden on Urgent Care.

More broadly, the evidence provided through this evaluation will only have value if it is acted upon by Island Health's senior leaders. For instance, sharing the SIEP findings now would provide an important opportunity for strengthening relationships between Island Health and its key stakeholders by being seen to promote a culture of transparency, understanding, and value for evidence-informed decision-making.

Key Messages

The full impacts of OHC will only become clear in the longer term. Although the data gathered after one year of operation do not allow for a definitive analysis of OHC's ultimate effectiveness, they do reveal several important themes that have significant implications for Island Health.

I. By investing in the SIEP, Island Health has demonstrated a commitment to fostering a culture of evaluation and quality improvements within the organization. It is important that Island Health's senior leadership engage its key stakeholders in making direct use of the SIEP findings and lessons learned to inform both its operational and strategic planning on an ongoing basis.

II. There is a need for Island Health senior leadership to discuss and better understand its vision and expectations for integrated care delivery at OHC and to ensure that vision is inclusive of the organization's future interests in advancing integrated care delivery elsewhere in the Health Authority, and then communicate this vision clearly to OHC leaders and staff.

III. It will be important for Island Health to continue to monitor the changes in health delivery at OHC's and the impacts on outcomes-of-interest in the future so as to continue to identify means of improving its performance and inform organizational decision-making more broadly. The investments it has made in building organizational capacity for evaluation through the SIEP will contribute positively to this ongoing monitoring.

IV. The quantitative and qualitative analyses from SIEP are both indicative of high levels of unmet need and demand for health care – particularly primary health care – in the Oceanside area prior to the opening of OHC. These analyses also suggest that considerable misalignment between services and need remains (e.g., related to primary health care). This is perhaps most visibly demonstrated in the high volumes of apparently inappropriate use of OHC's urgent care services. It therefore seems important for Island Health to consider investing further in increasing timely access to its Primary Care service at OHC, not only to further address this unmet need, but also to offset some of the burden on Urgent Care. Success in shifting activity from urgent care to primary care will require effective communication with residents to explain the different goals of urgent and primary care.

V. There is a perception among most SIEP participants across Island Health – from the executive table to the provider-patient interface – as well as stakeholders in the Oceanside community, that both the building and service model within it, although well-intentioned, were conceived and implemented without adequate assessment of the needs and perspectives of residents, physicians, Island Health personnel, or other stakeholders in the area. This has been identified as an ongoing hindrance to improving health care services in the Oceanside community as it has contributed to considerable dissatisfaction among both residents and care providers, including physicians as well as Island Health personnel. Future Island Health initiatives would greatly benefit from the development and application of population-level measures of health care needs, as well as comprehensive stakeholder engagement strategies, to inform decisions around service provision. As stated throughout this report, steps have been taken to address this engagement gap.

VI. During the prospective evaluation, Island Health experienced significant personnel change amongst members of its leadership, along with other significant organizational changes. Coincident with these changes has been a marked decrease in the apparent collective level of understanding of and interest in OHC among Island Health's leadership, especially in terms of OHC as an exemplar of new ways for providing integrated, community-based care for island residents into the future.

VII. Although some members of Island Health's Executive team report that the information in the retrospective evaluation were used to inform some of the organization's strategic thinking, there was no evidence that its findings and recommendations – particularly as they pertain to organizational transparency, communications, and vision – have been incorporated into Island Health's organizational practice. By making more fulsome use of its existing communication resources to disseminate the SIEP findings, they can be better inform the organization's future work and serve as evidence of accountability to its key stakeholders.

VIII. This report, together with the other outputs of the SIEP, has provided Island Health with a set of tools and a foundation from which to conduct its own evaluations of its programs and services on an ongoing basis. More broadly, the investment Island Health has made in the SIEP has yielded valuable evidence that forms a strong potential basis for engaging with its various stakeholders, and for being seen by these stakeholders to value and incorporate that evidence into its decision-making. Making use of that potential will contribute directly to the organization's achievement of its mission.

Capacity Building

A major component of the SIEP has been supporting Island Health's capacity to design and implement evaluations and to advance a sustainable evaluation culture within the organization. A collaborative partnership between Island Health, the WHO/PAHO Collaborating Centre on Health Workforce Planning and Research at Dalhousie University and the University of Victoria continues to be foundational for capacity building activities.

The capacity building activities undertaken through the retrospective evaluation were described in that report. These included the development of a longer-term capacity building plan for the organization, which may inform future directions and initiatives on the Island. The external team has continued to meet regularly not only with the SIEP working group, but also with its Executive Sponsors, with Island Health's Executive Director and Executive Medical Director of Community Health, as well as with Oceanside's Director to engage them in the evaluation process.

The practical experience gained by Island Health personnel in participating in the SIEP, together with the evaluation framework and tools it produced, provide a foundation on which Island Health can build a stronger culture of evaluation, ongoing quality improvements and evidence-informed decision making.

Communications & Dissemination

A draft communication plan for the SIEP was developed by the evaluation working group and provided to its Executive sponsor in July 2014. The plan emphasized the importance of evidence and stakeholder engagement to inform Island Health's decision-making, and laid out a plan to ensure that the findings of the SIEP would be effectively communicated to the various stakeholder groups to whom they were relevant, including Island Health staff as well as the general public.

References

Charmaz K. (2003). Grounded theory: Objectivist and constructivist methods. In N.K. Denzin & Y. S. Lincoln (Eds.), *Strategies of qualitative inquiry* (2nd ed., pp. 249-291). London: Sage Publications Limited.

Charmaz K (2006). *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis.* Sage Publications, Thousand Oaks CA.

Earl S, Carden F, Smutlyo T. (2001). *Outcome Mapping: Building learning and reflection into development programs*. Ottawa: IDRC. Available at http://www.idrc.ca/booktique/ev-9330-201-1-DO_TOPIC.html.

Glaser B. (1965). The constant comparative method of qualitative analysis. Social Problems, 12, 436-445.

Gottleib K. (2013). The Nuka System of Care: improving health through ownership and relationships. *International Journal of Circumpolar Health, 72*:10. doi: 10.3402/ijch.v72i0.21118.

Mills J, Bonner A, Francis K. (2008). The development of constructivist grounded theory. *International journal of qualitative methods*, *5*(1), 25-35.

Pope C, Ziebland S, Mays N. (2000). Qualitative research in health care: Analysing qualitative data. *British Medical Journal*, 320: 114 – 116.

Tomblin Murphy G, Birch S, Purkis ME, MacKenzie A, Gough A, Gilbert J, Rigby J, Alder R. (2013). VIHA Strategic Initiative Evaluation Project – Retrospective Evaluation Report. Victoria: Island Health.

Victora C, Walker D, Johns B, Harmer A. (2012). *Evaluation Science*. In Merson MH, Black RE, and Milles AJ (Eds.). *Global Health, 3rd Edition*. Jones & Bartlett Learning. Burlington MA USA. ISBN-13: 9780763785598.

Vancouver Island Health Authority (2012). Oceanside Health Centre. Victoria: Author. Retrieved from http://www.viha.ca/NR/rdonlyres/447B0F2C-1306-4CBB-B640-69D74A63E1E1/0/Oceanside_pp_19march2012.pdf.

Vancouver Island Health Authority. (2013). Oceanside Health Centre – Update on Opening Timelines. News Release: March 13, 2013.

Ware JE, Kosinski M, Dewey JE (2000). How to Score Version Two of the SF-36® Health Survey. Lincoln (RI): QualityMetric Incorporated.

Ware JE, Kosinski M, Keller SD. (1996). A 12-Item Short-Form Health Survey: Construction of scales and preliminary tests of reliability and validity. *Medical Care, 34*(3):220-233.

Appendix A: Evaluation Indicators and Associated Instruments

Indicator	Admin Data Template	Resident Survey	Resident Focus Groups	Staff Survey	Staff Focus Groups/ Physician Interviews	Leadership Interviews
Resident[9]-reported physical health		•				
Resident-reported mental health		•				
Resident-reported overall self-assessed health		•				
Resident-perceived adequacy of access to primary health care		•	•			
Resident-perceived comprehensiveness of primary health care		•	•			
Resident-perceived adequacy of access to urgent care		•	•			
Resident-assessed alignment of care with needs, beliefs etc.		•	•			
Resident satisfaction with personal/family involvement in care		•	•			
Resident-assessed adequacy of information provided to access needed services		•	•			
Resident-assessed adequacy of information provided to maintain/promote health		•	•			
Resident-perceived functioning of care providers as a team		•	•			

[9] Residents of Local Health Area (LHA) 69 – identified by Island Health as the catchment area for OHC

Indicator	Admin Data Template	Resident Survey	Resident Focus Groups	Staff Survey	Staff Focus Groups/ Physician Interviews	Leadership Interviews
Challenges for residents in obtaining care		•	•			
New admissions to hospital among residents	•					
New alternate level of care (ALC) designations among residents	•					
Residents' total hospital lengths of stay	•					
Residents' total ALC lengths of stay	•					
New admissions to long-term care among residents	•					
Median wait time for long-term care admission among residents	•					
New admissions to assisted living facilities among residents	•					
Median wait time for assisted living placement among residents	•					
Number of residents receiving home nursing care	•					
Number of home nursing care visits received by residents	•					
Number of residents receiving home support	•					
Number of home support hours received by residents	•					
Number of Emergency Department (ED) visits by residents, by Canadian Triage Assessment Scale (CTAS) score	•					

Indicator	Admin Data Template	Resident Survey	Resident Focus Groups	Staff Survey	Staff Focus Groups/ Physician Interviews	Leadership Interviews
Provider-perceived alignment of care planning and delivery with client needs				•	•	
Provider-perceived comprehensiveness of health records				•	•	
Provider-perceived accessibility of health records				•	•	
Provider-perceived team climate				•	•	
Provider-perceived clarity/ambiguity of roles				•	•	
Provider-perceived adequacy of learning and practice supports				•	•	
Provider-perceived effectiveness of care-related communication				•	•	
Provider-perceived physician engagement				•	•	
Provider-assessed adequacy of OHC physical space				•	•	
Provider-assessed efficiency of processes to move patients between sectors				•	•	
Provider-perceived use of evidence/best practices				•	•	
Provider-assessed adequacy of mechanisms for sharing concerns re: care				•	•	
Effectiveness of organizational communication			•	•	•	•

Indicator	Admin Data Template	Resident Survey	Resident Focus Groups	Staff Survey	Staff Focus Groups/ Physician Interviews	Leadership Interviews
Factors affecting seamlessness/integration of care planning & delivery					•	•
Provider satisfaction with care				•	•	
Provider-assessed adequacy of supports to provide safe care				•	•	
Provider job satisfaction				•	•	
Number and type of human resources employed to provide care in Qualicum	•					
Costs to Island Health for staffing LHA 69	•					
Perceived sustainability of OHC & community services model			•		•	•

Please remember: Do not to put your name on this survey.

Appendix B: Instruments

VIHA Strategic Initiatives Evaluation Project
Community Resident Survey

Today's Date _____ (month, day, year)

WE ASK THAT THE PERSON IN THE HOUSEHOLD WHO MOST RECENTLY USED ANY HEALTH SERVICES COMPLETE THE SURVEY

Please note: In this survey, we will refer to the "care team." This means the staff members directly involved in your care, such as doctors, nurses, physiotherapists, occupational therapists, other support staff, etc.

The first three questions will be used to construct a unique ID for each individual filling out the survey. It is hoped each survey respondent will complete the survey twice; once at baseline and once at follow-up 10 to 12 months later. The baseline and follow-up data can then be linked through this unique identifier.

1. First 2 letters in your mother's maiden name:	___ ___
2. Your middle initial (if you have more than 1 middle name, use the 'first' middle name. If none, enter 0 (zero))	_____
3. The day and month of your birth (2 digits each)	____ ____ / ____ ____ D D M M

Section 1 – General Health Questions	
4. In general, would you say your health is:	Excellent ☐ Very Good ☐ Good ☐ Fair ☐ Poor ☐
5. Does your health limit you in moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf?	Yes, limited a lot ☐ Yes, limited a little ☐ No, not limited at all ☐
6. Does your health limit you in climbing several flights of stairs?	Yes, limited a lot ☐ Yes, limited a little ☐ No, not limited at all ☐
7. During the past four weeks, have you accomplished less than you would like because of your physical health?	Yes ☐ No ☐
8. During the past four weeks, were you limited in the kind of work or	Yes ☐

other activities you could perform because of your physical health?	No ☐
9. During the past four weeks, have you accomplished less than you would like because of any emotional problems (such as feeling depressed or anxious)?	Yes ☐ No ☐
10. During the past four weeks, were you limited in the kind of work or other activities you could perform because of any emotional problems (such as feeling depressed or anxious)?	Yes ☐ No ☐
11. During the past four weeks, how much did pain interfere with your normal work (including work outside the home and housework)?	Not at all ☐ A little bit ☐ Moderately ☐ Quite a bit ☐ Extremely ☐
12. During the past four weeks, how much of the time have you felt calm and peaceful?	All of the time ☐ Most of the time ☐ A good bit of the time ☐ Some of the time ☐ A little of the time ☐ None of the time ☐
13. During the past four weeks, how much of the time did you have a lot of energy?	All of the time ☐ Most of the time ☐ A good bit of the time ☐ Some of the time ☐ A little of the time ☐
14. During the past four weeks, how much of the time have you felt down-hearted and blue?	All of the time ☐ Most of the time ☐ A good bit of the time ☐ Some of the time ☐ A little of the time ☐
15. During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)?	All of the time ☐ Most of the time ☐ A good bit of the time ☐ Some of the time ☐ A little of the time ☐

Please remember: Do not to put your name on this survey.

Section 2 – Getting Health Care Services					
Please tell us your level of agreement with the following statements:	**Strongly Disagree**	**Disagree**	**Undecided**	**Agree**	**Strongly Agree**
16. You can talk to your family doctor or another health care professional within a reasonable amount of time for non-urgent or day-to-day health issues.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
Comments:					
17. You can get health care when it is urgently needed within a reasonable amount of time.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
Comments:					
18. You can get from your home to the doctor's office or clinic without much difficulty.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
Comments:					
19. You have enough choice in health care providers that you can chose one with whom you have a good relationship.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
Comments:					
20. You know where and how to get the health care needed for yourself and your family.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
Comments:					
21. When you go to the doctor's office or clinic, you can get treated for all the issues you need in one visit.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
Comments:					

Section 3 – Experiences with the Health Care System	
22. Have you received any health care in the past six (6) months?	Yes ☐ No ☐
If you answered Yes to Q. 22, please answer Q23 and Q24. If No, please go to Q25.	

Please remember: Do not to put your name on this survey.

Section 3 – Experiences with the Health Care System		
23. What health services have you used in the last 6 months? **(Please check all that apply)**	**Services at Oceanside Health Centre (OHC)** Health Care Services at Family physician office, drop-in clinic, etc. other **than at OHC** Oral health (dentists/ dental hygienists) Mental Health Services **other than at OHC** Opticians/Optometrists Physiotherapy/Occupational Therapy services Community Nursing Emergency Room visit Hospital stay Ambulance services Laboratory services **other than at OHC** Chronic disease programs **other than at OHC** Community services (such as meals on wheels, group meetings related to health, etc.) Other (please specify) _____	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
23a. If you received any health services through OHC, which of the following did you receive?	Urgent care (for conditions or injuries requiring same-day treatment) Primary care (such as pre- and post-natal care, health promotion, palliative care) Medical imaging (such as x-rays, mammograms, or ultrasounds) Telehealth (connecting to health care providers through video conferencing) Integrated Community Primary Care Teams (teams of health care professionals providing such services as end-of-life care, case management, or help after discharge of hospital) Specialty services (such as for adults with moderate to severe mental health diagnoses, or with diabetes requiring insulin pumps, or consulting a specialist outside OHC) Environmental health (services to protect against environmental hazards) Medical day care (such as cast removal, regular intravenous medications, or wound care) Laboratory services (operated by Life Labs) Not sure Other (please specify) _____	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Please remember: Do not to put your name on this survey.

24. Please tell us your level of agreement with the following statements:	**Strongly Disagree**	**Disagree**	**Undecided**	**Agree**	**Strongly Agree**
a. The health care you receive meets your personal needs, preferences, and cultural beliefs.	1 ☐	2☐	3☐	4☐	5☐
b. The professionals from whom you usually get health care (such as a family doctor) make sure you have the information you need to look after your own health.	1 ☐	2☐	3☐	4☐	5☐
c. The professionals who provide you with health care explain things clearly and make sure you have all the information you need to stay healthy.	1 ☐	2☐	3☐	4☐	5☐
d. The different health care professionals you see seem to work as a team.	1 ☐	2☐	3☐	4☐	5☐
e. You find it easy to organize and keep track of all your health care appointments, medications and so on.	1 ☐	2☐	3☐	4☐	5☐
f. You have as much input and control as you want over your own health care.	1 ☐	2☐	3☐	4☐	5☐

25. Do you or anyone to whom you provide care (such as a child or parent) have a chronic health condition like diabetes or heart disease?	Yes ☐ No ☐

If you answered Yes to Q. 25, please answer the following questions. If No, please go to Q26.

Please tell us your level of agreement with the following statements:	**Strongly Disagree**	**Disagree**	**Undecided**	**Agree**	**Strongly Agree**
a. You have all the information you need to avoid a 'flare-up' of that condition that would need health care right away.	1 ☐	2☐	3☐	4☐	5☐

26. During the past six months, have you seen a specialist physician (such as a surgeon or psychiatrist) for a health problem?	Yes ☐ No ☐

If you answered Yes to Q. 26, please answer the following questions. If No, please go to Q27.

Please tell us your level of agreement with the following statements:	**Strongly Disagree**	**Disagree**	**Undecided**	**Agree**	**Strongly Agree**
a. It seemed like the specialist was working on the same plan for your care as your family doctor and any other health care professionals you see.	1 ☐	2☐	3☐	4☐	5☐
b. After you saw the specialist, it was easy to get a follow-up appointment with your family doctor or a nurse practitioner.	1 ☐	2☐	3☐	4☐	5☐

27. If you have, during the past six months, visited an emergency room or been admitted to hospital, please answer the following questions. If you have not visited an emergency room or been admitted to the hospital, please go to Q28 (next section).

Please remember: Do not to put your name on this survey.

Please tell us your level of agreement with the following statements:	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
a. It seemed like the health care professionals at the hospital were working on the same plan for your care as your family doctor and any other health care professionals you see.	1 ☐	2☐	3☐	4☐	5☐
b. Your discharge from the hospital was delayed or complicated because of problems getting you the supports you needed in your community.	1 ☐	2☐	3☐	4☐	5☐

Section 4 – Personal profile	
28. How old are you?	____ years
29. Are you …	Male ☐ Female ☐
30. Are you …	Single ☐ Married/Common-Law ☐ Divorced ☐ Widowed ☐
31. Where and with whom do you live?	Living alone at home ☐ Home with family/ friends ☐ Living with family / friends in their home ☐ Living in Long Term Care facility ☐
32. Who completed this survey	Respondent alone ☐ Respondent with help of others ☐ Other(s) [on behalf of respondent] ☐

Please use this space for any additional comments you would like to make.

Thank you very much for your participation.
Please return using the enclosed, self-addressed envelope.

Island Health Strategic Initiative Evaluation Project

Resident Focus Group Interview Guide

(Preamble: purposes for the interview; reminder that the interview is confidential and that anonymity will be limited due to the group nature of the interview, that health is a very personal matter and that everything said in the room must be treated with great respect and not spoken about outside the room)

1. What do you know/what role have you played in bringing the Oceanside Health Centre into reality?
2. What were the health needs of this community that made the development of the OHC an important community initiative? Specific examples?
3. Is the OHC meeting that need? Specific examples?
4. Have you had a personal experience of seeking health care at the OHC? How was that similar to/different from health care encounters you may have had in other facilities?
5. One of the goals of the OHC is to provide support for people who require on-going health care to receive care and support in their homes in the community. What do you know about the OHC that would make you believe that this goal will be achieved? What might be barriers that you know of to the Centre achieving these goals?
6. Another goal of the OHC is to make transitions between care services (e.g. physician, home care, laboratory services etc.) as seamless as possible. What have you experienced to date that would make you believe that this goal will be achieved? What might be barriers that you know of to the Centre achieving this goal?
7. Is there anything else about the development and early operation of the Centre that you think it is important for us to know?

Island Health Strategic Initiative Evaluation Project
Prospective Evaluation
Focus Group Guide for OHC and VIHA Senior Leaders

1. Are you aware of any cases where Island Health services in the Qualicum LHA have had a noticeable impact on residents' health?
   Potential prompts:
   - Can you give any specific examples?
   - Are there ways in which you think the new Oceanside Health Centre (OHC) and community services could have a greater impact on residents' health? What would need to change for this to happen?

2. Do you feel like Island Health's services to Qualicum LHA are making a difference in proving residents with the supports they need to remain at home and in their communities?
   Potential prompts:
   - Can you give any specific examples?
   - Are there ways in which you think OHC and community services could do more to help residents remain at home and in their communities? What would need to change for this to happen?

3. To what degree do you feel like the care provided by Island Health is a) seamless[10], and b) based on client needs?
   Potential prompts:
   - Do you feel like the care planning and delivery processes being used in Island Health are efficient?
   - In your experience, how involved have physicians been in planning Island Health services? Do you feel this should be different in the future?
   - To what degree do you find Island Health services are driven by the needs of clients as opposed to, for example, budget constraints or clinician preferences? How much do established best practices and research evidence drive the way decisions are made? Do you feel this is appropriate?

4. Do you feel like the models of care planning and delivery Island Health currently uses are sustainable (i.e., can be maintained in the long-term)?
   - Do you feel like the care Island Health is able to provide is of sufficient quality? If not, how could it be improved?
   - Do you feel Island Health's clinicians, managers and directors have the supports you need to provide quality, safe care? If not, what other supports would be the most beneficial

[10] The degree to which different elements of a patient's care are effectively integrated with other elements of care that patient receives

- Do you feel like Island Health has the financial resources to meet the needs of the population it serves?

5. What have you learned about integration of health service delivery from the implementation of OHC?

Island Health Strategic Initiative Evaluation Project
Prospective Evaluation
Focus Group Guide for Staff and Clinicians With
Oceanside Health Centre and Community Services

The discussion will focus on the time since the OHC has opened. Since the OHC has opened:

1. Are you aware of any cases where your services have had a noticeable impact on residents' health?
   Potential prompts:
   - Can you give any specific examples?
   - Are there ways in which you think OHC and community services could have a greater impact on residents' health? What would need to change for this to happen?

2. Do you feel like your services are making a difference in proving residents with the supports they need to remain at home and in their communities?
   Potential prompts:
   - Can you give any specific examples?
   - Are there ways in which you think OHC and community services could do more to help residents remain at home and in their communities? What would need to change for this to happen?

3. To what degree do you feel like the care provided by your team is a) seamless[11], and b) based on client needs?
   Potential prompts:
   - Do you feel like the care planning and delivery processes being used are efficient? Are too many people involved? Should more people be involved in the care of patients who are a regular focus of your practice?
   - How easy do you find it to move clients between acute and primary care? Between specialist and primary care? Do you feel these transition processes could be improved? How?
   - Do you feel like different providers understand their respective roles and responsibilities within the team?
   - In your experience, how involved have physicians been in the services you provide? Do you feel this should be different in the future?
   - Are there ways in which you think OHC and community services could be made more integrated or 'seamless'?
   - To what degree do you find the services you provide are driven by the needs of clients as opposed to, for example, budget constraints or clinician preferences? How

[11] The degree to which different elements of a patient's care are effectively integrated with other elements of care that patient receives

much do established best practices and research evidence drive the way things are done on your team? Do you feel this is appropriate?

4. Do you feel like the model of care planning and delivery your team currently uses is sustainable (i.e., can be maintained in the long-term)?
   - What has it been like for you to transition into working at OHC?
   - Do you feel like the care you and your team are able to provide is of sufficient quality? If not, how could it be improved?
   - Do you feel you and your team have the supports you need to provide quality, safe care? If not, what other supports would be the most beneficial to your clients?
   - Are you happy working in this environment? Would you prefer another, such as your previous workplace (if you came from somewhere else)? Why?

Island Health Strategic Initiative Evaluation Project
Prospective Evaluation
Focus Group/Interview Guide[12] for Directors/Managers Working With
Oceanside Health Centre and Community Services

The discussion will focus on the time since the OHC has opened. Since the OHC has opened:

1. Are you aware of any cases where your services have had a noticeable impact on residents' health?
   Potential prompts:
   - Can you give any specific examples?
   - Are there ways in which you think OHC and community services could have a greater impact on residents' health? What would need to change for this to happen?

2. Do you feel like your services are making a difference in proving residents with the supports they need to remain at home and in their communities?
   Potential prompts:
   - Can you give any specific examples?
   - Are there ways in which you think OHC and community services could do more to help residents remain at home and in their communities? What would need to change for this to happen?

3. To what degree do you feel like the care provided by your team is a) seamless[13], and b) based on client needs?
   Potential prompts:
   - Do you feel like the decision-making process used to plan your services is effective? How might it be improved?
   - Do you feel like the care planning and delivery processes being used are efficient?
   - In your experience, how involved have physicians been in the services you provide? Do you feel this should be different in the future?
   - Are there ways in which you think OHC and community services could be made more integrated or 'seamless'?
   - To what degree do you find the services you direct are driven by the needs of clients as opposed to, for example, budget constraints or clinician preferences? How much do established best practices and research evidence drive the way things are done on your team? Do you feel this is appropriate?

4. Do you feel like the model of care planning and delivery your team currently uses is sustainable (i.e., can be maintained in the long-term)?

[12] Given that there are only two managers to be included in the prospective evaluation, the sessions with these managers will be conducted as individual interviews instead of focus groups.
[13] The degree to which different elements of a patient's care are effectively integrated with other elements of care that patient receives.

- What has it been like for you to transition into working with OHC?
- Do you feel like the care you and your team are able to provide is of sufficient quality? If not, how could it be improved?
- Do you feel you and your team have the supports you need to provide quality, safe care? If not, what other supports would be the most beneficial to your clients?
- Are you happy working in this environment? Would you prefer another, such as your previous workplace (if you came from somewhere else)? Why?

5. What have you learned about integration of health service delivery from the implementation of OHC?

Island Health Strategic Initiative Evaluation Project
Prospective Evaluation
Survey of Staff, Clinicians and Physicians Working in Oceanside Health Centre and Community Services

As part of its ongoing efforts to improve the services it provides, Island Health has implemented a substantial program of organizational change aimed at system-wide integration. This was based on a suite of innovative strategic initiatives (SIs) for improving specific aspects of patient care and working conditions beginning in 2008. In 2012 and in collaboration with Island Health, an external evaluation team led by Dr. Gail Tomblin Murphy was contracted to evaluate the SIs in the Strategic Initiative Evaluation Project (SIEP). The purpose of this evaluation is to determine the impact the initiatives have had, if any, on the outcomes for patients/families, health care providers, and the health care system overall.

The study is divided into two parts – retrospective (i.e. 'looking back') and prospective (i.e. 'looking forward'). You are now being asked to participate in the prospective part of the evaluation. This will focus on the impact of Island Health's new model of care and service in Oceanside Health Centre (OHC) and the community on four areas of interest: maintaining the health of the individuals in the community; enabling individuals to remain at home/in the community; seamlessness and integration of care planning and service delivery based on patient needs; or sustainability. This survey is designed to gather the perspectives of the staff, physicians and clinicians working within OHC on each of these areas. Research of this type is important because it will provide information and better understanding of the system-wide changes occurring at Island Health that directly affect patient care.

The first three questions will be used to construct a unique ID for each individual filling out the survey. It is hoped each provider will complete the survey twice; once at baseline and once at follow-up a year later. The baseline and follow-up data can then be linked through this unique identifier.

I. First 2 letters in your mother's maiden name: ___ ___

II. Your middle initial (if you have more than 1 middle name, use the 'first' middle name. If none, enter 0 (zero)) ___

III. The day and month of your birth (2 digits each) ___ ___ / ___ ___
D D M M

1. Although meeting client needs may be the main focus of health care, the way health care is planned and delivered can be influenced by a number of other factors. As you perceive them, please rank the following factors in terms of amount of influence they have over care planning and delivery where you work, with 1 indicating the most important factor.

   __ Client needs | __ Staff availability | __ Budget constraints | __ Practice traditions | __ Other

2. What proportion of your team's daily practice is based on established best practices and published research evidence?
   1 – All, 2 – Most, 3 – About half, 4 – Some, 5 – None
   Comments

Please indicate your level of agreement with the following statements (Q3 to Q16):

3. The health records to which I have access include all the information necessary to plan my clients' care based on their needs.
   1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree

4. The information in our health records is available to me when I need it.
   1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree

5. Team climate:
   a. My team's objectives are clear
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   b. I agree with the objectives of my team
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   c. The objectives of my team are clearly understood by other members of the team
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   d. The objectives of my team can actually be achieved
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   e. The objectives of my team are worthwhile to the health care facility
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   f. We have a "we are together" attitude
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   g. People keep each other informed about work related issues on the team
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   h. People feel understood and accepted by each other
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   i. There are real attempts to share information throughout the team
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   j. People on this team are always searching for fresh, new ways of looking at problems
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   k. On this team we take the time needed to develop new ideas
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   l. People on the team cooperate to help develop and apply new ideas
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   m. The team critically appraises potential weaknesses in what it is doing to achieve the best possible outcome
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   n. The members of the team build on each other's ideas to achieve the best possible outcome
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree

6. Role clarity/ambiguity:
   a. I feel certain about how much authority I have
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   b. Clear, planned goals and objectives exist for my job
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   c. I know that I have divided my time properly
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   d. I know what my responsibilities are
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   e. I know exactly what is expected of me
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   f. Explanations are clear of what has to be done
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   g. I have to do things that should be done differently
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   h. I receive an assignment without the human resources to complete it
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   i. I have to break a rule or policy in order to carry out an assignment
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   j. I work with two or more different teams who operate quite differently
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   k. I receive incompatible requests from two or more people
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   l. I do things that are apt to be accepted by one person and not accepted by others
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   m. I receive an assignment without adequate resources and materials to execute it
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   n. I work on unnecessary things
      1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree

7. I have the information/learning resources I need to provide high-quality care.
   1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree

8. Care-related communication with other providers on my care team is effective and contributes to high quality client care
   1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   Comments

9. My clients (and their families, as needed) have the knowledge they need to maintain their health in general.
   1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
   Comments

10. My clients (and their families, as needed) who have chronic health conditions have the knowledge they need to avoid acute episodes or 'flare-ups' related to those chronic conditions.
    1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
    Comments

11. The physicians I work with practice as parts of interprofessional care teams.
    1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree

12. The physical space /environment in which I work supports the provision of high quality care.
    1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
    Comments

13. My clients are moved efficiently between tertiary (e.g., hospital), secondary (e.g., specialist) and primary (e.g., family practice) care as needed.
    1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
    Comments

14. There are effective mechanisms in place for me to voice any concerns about care planning and delivery so that they can be addressed.
    1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
    Comments

15. In general, I feel like I have the supports I need to provide quality care.
    1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
    Comments

16. On the whole, I am satisfied with the quality of care my team provides to our clients.
    1 – Strongly Disagree, 2 – Disagree, 3 – Undecided, 4 – Agree, 5 – Strongly Agree
    Comments

17. Please describe your current overall level of satisfaction with your job.
    1 – Very dissatisfied, 2 – Dissatisfied, 3 – Neither satisfied nor dissatisfied, 4 – Satisfied, 5 – Very satisfied
    Comments

18. Finally, please indicate if you physically work within the Oceanside Health Centre.
    1 – I work full-time within the OHC, 2 – My work is split between the OHC and an external site, 3 – My work is full-time in an affiliated external site.

VIHA SIEP - Draft Prospective Administrative Data Template Part 1 –
Service Utilization

Note: Unless otherwise noted, all indicators are specific to residents of the Oceanside catchment area, i.e. LHA 69 (Qualicum)
Note: Unless otherwise noted, 2013 refers to the time period from January 1 through June 30th of that year; 2014 refers to the same 6-month period of 2014.

Indicator	Definition	2011 Value (<65)	2011 Value (65+)	2012 Value (<65)	2012 Value (65+)	2013 Value (<65)	2013 Value (65+)	2014 Value (<65)	2014 Value (65+)
Hospital discharges	**Number** of distinct discharges from a hospital among catchment area residents during time period - **For ambulatory-sensitive conditions** **Number** of distinct discharges from a hospital among catchment area residents during time period - **For all other conditions**								
ALC designations	Number of times any resident of the catchment area was a) discharged from hospital, and b) designated as ALC during time period								
Hospital lengths of stay	Total acute care days associated with all discharges (identified in #1) during the time period - **For ambulatory-sensitive conditions** Total acute care days associated with all discharges (identified in #1) during the time period - **For all other conditions**								
ALC lengths of stay	Total ALC days associated with all new ALC designations (identified in #2) during the time period								
Admissions to long-term care	Number of distinct admissions to a long-term care facility, other than an assisted living facility, in the catchment area during the time period								

Number of individuals newly assessed and awaiting admission to long-term care	As of June 30th, number of residents of the catchment area who a) have been assessed as meeting the criteria to receive long-term care, and b) are on a waiting list for admission to such a facility
Admissions to assisted living facilities	Number of distinct admissions to an assisted living facility in the catchment area during the time period
Number of individuals newly assessed and awaiting admission to assisted living facilities	As of June 30th, number of residents of the catchment area who a) have been assessed as meeting the criteria to be admitted to an assisted living vacility, and b) are on a waiting list for admission to such a facility
Long-term care wait times	Median wait time for all residents placed in long-term care facilities during time period
Assisted living wait times	Median wait time for all residents placed in assisted living facilities during time period
Number of ED visits	Total visits to VIHA emergency departments by catchment area residents during the time period **scored with CTAS 1** Total visits to VIHA emergency departments by catchment area residents during the time period **scored with CTAS 2** Total visits to VIHA emergency departments by catchment area residents during the time period **scored with CTAS 3** Total visits to VIHA emergency departments by catchment area residents during the time period **scored with CTAS 4** Total visits to VIHA emergency departments by catchment area residents during the time period **scored with CTAS 5**

	Total visits to IH emergency departments by catchment area residents during the time period **without a CTAS score**
	Proportion of CTAS 1-scored ED visits by catchment area residents during the time period which resulted in admissions to hospital
	Proportion of CTAS 2-scored ED visits by catchment area residents during the time period which resulted in admissions to hospital
	Proportion of CTAS 3-scored ED visits by catchment area residents during the time period which resulted in admissions to hospital
	Proportion of CTAS 4-scored ED visits by catchment area residents during the time period which resulted in admissions to hospital
	Proportion of CTAS 5-scored ED visits by catchment area residents during the time period which resulted in admissions to hospital
	Proportion of ED visits without a CTAS score by catchment area residents during the time period which resulted in admissions to hospital
	Proportion of all ED visits by catchment area residents during the time period which resulted in admissions to hospital
Long-term care residents	Number of residents of long-term care facilities within the catchment area between January 1 and June 30
Assisted living residents	Number of residents of assisted living facilities within the catchment area between January 1 and June 30
Home nursing care recipients	Number of recipients of home nursing care within the catchment area between January 1 and June 30
Home support	Number of recipients of home support within the

[redacted]

recipients	catchment area between January 1 and June 30	[redacted]
Long-term care days	Total resident-days of long-term care provided by facilities within the catchment area	
Assisted living days	Total resident-days of assisted living provided by facilities within the catchment area	
Home nursing care visits	Total home care visits provided to residents of the catchment area	[redacted]
Home support hours	Total home support hours provided to residents of the catchment area	
ADL scores	Mean of most recent ADL scores of people who, as of June 30th, were residents of **long-term care facilities** within the catchment area	
	Mean of most recent ADL scores of people who, as of June 30th, were residents of **assisted living facilities** within the catchment area	
	Mean of most recent ADL scores of people who, as of June 30th, were **home support clients** within the catchment area	[redacted]
IADL scores	Mean of most recent IADL scores of people who, as of June 30th, were residents of **assisted living facilities** within the catchment area	
	Mean of most recent IADL scores of people who, as of June 30th, were **home support clients** within the catchment area	[redacted]
MAPLE scores	Mean of most recent MAPLE scores of people who, as of June 30th, were residents of **long-term care facilities** within the catchment area	
	Mean of most recent MAPLE scores of people who, as of June 30th, were residents of **assisted living facilities** within the catchment area	
	Mean of most recent MAPLE scores of people who, as of June 30th, were **home support clients** within the catchment area	[redacted]

CHESS scores	Mean of most recent CHESS scores of people who, as of June 30th, were residents of **long-term care facilities** within the catchment area	
	Mean of most recent CHESS scores of people who, as of June 30th, were residents of **assisted living facilities** within the catchment area	
	Mean of most recent CHESS scores of people who, as of June 30th, were **home support clients** within the catchment area	[redacted]
CPS scores	Mean of most recent CPS scores of people who, as of June 30th, were residents of **long-term care facilities** within the catchment area	
	Mean of most recent CPS scores of people who, as of June 30th, were residents of **assisted living facilities** within the catchment area	
	Mean of most recent CPS scores of people who, as of June 30th, were **home support clients** within the catchment area	[redacted]

SIEP Administrative Data Template Part II – Staffing

Profession*	Head count of Island Health employees in LHA 69 as of June 30, 2013	Full-time equivalent (FTE) count of Island Health employees in LHA 69 as of June 30, 2013	Total salary and wages paid to Island Health employees within LHA 69, January 1 - June 30, 2013	Head count of Island Health employees in LHA 69 as of June 30, 2014	Full-time equivalent (FTE) count of Island Health employees in LHA 69 as of June 30, 2014	Total salary and wages paid to Island Health employees within LHA 69, January 1 - June 30, 2014
RNs						
LPNs						
NPs						
Physicians						
Home support workers						
Administrative and management personnel						
Other Island Health personnel						