Residential Care Initiative (RCI) Evaluation Report

Fraser Northwest Division of Family Practice

2017-August

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Executive Summary

Intro

The Fraser Northwest (FNW) Residential Care Initiative (RCI) program is comprised of 15 long-term care facilities with a total of 1722 beds throughout New Westminster, Coquitlam, Port Moody, and Port Coquitlam. The FNW RCI Program was intended to ensure that all patients in a residential care facility have a dedicated Family Physician MRP, committed to providing the 5 best practice deliverables: participation in an on-call program, proactive visits to residents, meaningful medication reviews, attendance at care conferences and completed documentation of resident charts. The objective of this RCI evaluation was to: (1) to evaluate the effectiveness of the Residential Care Initiative (RCI) in the Fraser Northwest community, and (2) to identify areas for quality improvement for FNW RCI Program and document lessons learned in the first year of the RCI program. These objectives were reached by answering the following evaluation questions:

A. To what extent did the program contribute to improved patient care?
B. To what extent did the program contribute to improved practice environments for residential care facility staff?
C. To what extent did the program contribute to improved practice environments for physicians?
D. To what extent does the program contribute to appropriate health care utilization and reduced system costs?
E. What worked well, what are the challenges, and what can be improved?

Methods

The evaluation approach was through a mixed-methods design (i.e. collection of both qualitative and quantitative data). Data was collected from October 2015 to August 2017.

Conclusions

Although the RCI program is still in its infancy, early results suggest that the program is effective, with significant improvements on quality of care of residents as well as improved physician and facility practice environments post program implementation. Decreased acute care visits by residents post RCI, suggests the cost-effectiveness of the RCI Program to the BC health care system.

1. About Us

The Fraser Northwest Division of Family Practice encompasses family physicians in New Westminster, Coquitlam, Port Coquitlam, Port Moody, and parts of Burnaby, representing the traditional catchment area of the Royal Columbian and Eagle Ridge Hospitals. Together, the members work to improve patient access to local primary care, increase local physicians' influence on health care delivery and policy, and provide professional support for physicians.

2. Introduction

a) Background and Context

Starting October of 2015 with a partial program launch, the Fraser Northwest Division of Family Practice (FNW DoFP) began the work of the Residential Care Initiative (RCI) program in 14 long-term care facilities within the communities of New Westminster, Coquitlam, Port Moody, and Port Coquitlam. Starting January 2016, the FNW DoFP fully implemented the RCI program. During the Spring of 2016, 2 new residential care facilities opened, and another closed down, bringing the total count to 15 facilities with a sum of 1722 residents. The FNW RCI Program intended to ensure that all patients in a residential care facility have a dedicated Family Physician most responsible provider (RCI GP MRP) committed to providing the 5 best practice deliverables.

This program intended to assist physicians in achieving the following 5 best practice deliverables:

1) Participation in one of two on-call groups (New Westminster/West Coquitlam and PoCo/East Coquitlam)

2) Proactive visits to residents (minimum once every 3 months)

3) Meaningful medication reviews (twice per year)

4) Attendance at care conferences (once per year)

5) Completed documentation of resident's charts

Please see Figure 1 Below for the Program Theory/Logic Model.

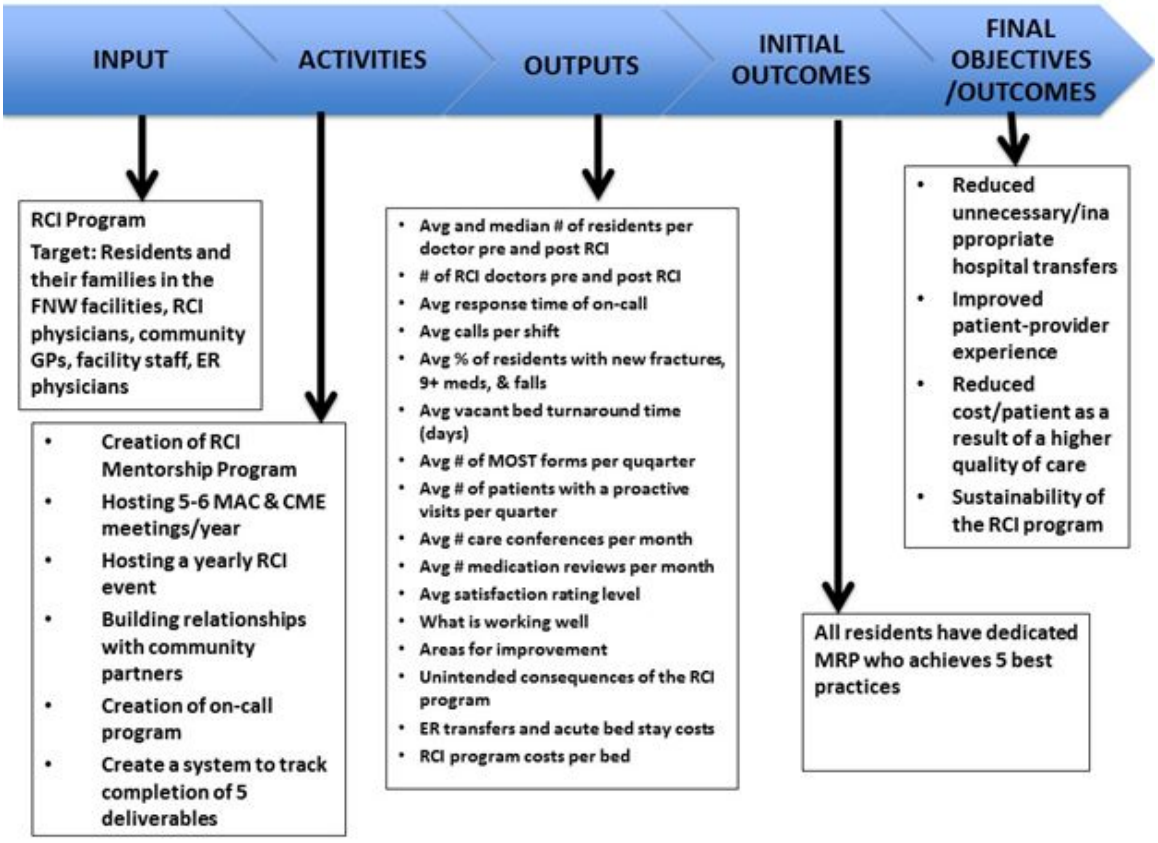

Figure 1: Fraser Northwest Residential Care Initiative Logic Model

3.Evaluation Objectives and Questions

This evaluation had two main objectives and their subsequent evaluation questions below:

1) **To evaluate the effectiveness of the Residential Care Initiative in the Fraser Northwest community**

A. To what extent did the program contribute to improved patient care?
B. To what extent did the program contribute to improved practice environments for residential care facility staff?
C. To what extent did the program contribute to improved practice environments for physicians?
D. To what extent did the program contribute to appropriate health care utilization and reducing system costs?

2) **To identify areas for quality improvement and document lessons learned for the first year of the RCI program**

A. What worked well, what were the challenges, and what can be improved?

4.Indicators By Evaluation Objective and Question

Objective 1: To evaluate the effectiveness of the Residential Care Initiative in the Fraser Northwest community

Data Source	Indicators	Evaluation Question that Indicator(s) Answers
RCI Program Database	a) Median # of residents per doctor b) Average # of residents per doctor c) # RCI doctors d) % Gender of RCI doctors e) Average # of years in practice	1.A. To what extent did the program contribute to improved patient care?

Residential Care Site Quality Performance Feedback Report:	a) Average % Residents on 9+ Medications b) Average % Residents on antipsychotics without diagnosis c) Average # of unscheduled ER transfers per 100 residents	1.A. To what extent did the program contribute to improved patient care?
GPSC facility satisfaction survey	Facility satisfaction against a) 24/7 availability b) Proactive Visits c) Med Reviews d) Completed Documentation e) Care Conferences f) Patient Provider Satisfaction	1.B. To what extent did the program contribute to improved practice environments for residential care facility staff?
Program Documentation	a) Meetings Held b) Documents that were created post-RCI implementation	1.C. To what extent did the program contribute to improved practice environments for physicians?
ER Stats	a) ER transfers b) Acute care admissions c) Average length of stay	1.D. To what extent did the program contribute to appropriate health care utilization and reducing system costs?

Table 1. Evaluation Questions and Indicator Sources for Objective 1

Objective 2: To identify areas for quality improvement for and document lessons learned for the first year of the RCI program

Data Source	Indicators	Evaluation Question that Indicator Answers
Physician Satisfaction Survey	a) What worked well for the program b) Areas for improvement	2.A. What worked well, what were the challenges, and what can be improved?
Facility Satisfaction Survey	a) What worked well for the program b) Areas for improvement	2.A. What worked well, what were the challenges, and what can be improved?

Table 2. Evaluation Questions and Indicator Sources for Objective 2

5. Methodology

The evaluation approach was through a mixed-methods design (i.e. collection of both qualitative and quantitative data). Quantitative data was collected from facility and program administrative records and Fraser Health Authority databases dating back before 2014. Qualitative data from surveys and interviews with facility staff, physicians, Division staff and management, and program administrators was collected over the past year. Data collected was separated into two categories Pre-RCI and Post RCI[1].

a) **Before full RCI Implementation (2014 - 2015) = Pre-RCI**

b) **After full RCI Implementation (Jan 2016-August 2017) = Post-RCI**

6. Results

Please see Appendix A, B, and C for tables summarizing the raw data organized by data source. Below are results organized by Evaluation Question Number.

Evaluation Question 1.A: To what extent did the program contribute to improved patient care?

Post RCI, the number of doctors committed to providing the RCI five best practices in residential care in Fraser Northwest doubled (with a significant increase in the ratio of female to male physician), decreasing the number of residents per most responsible physician (MRP). See Table 3 for a summary of changes in RCI program metrics. Post-RCI, with a more established mentorship program, younger doctors new to residential care were recruited.

A year after the RCI program started, there is a decrease in the average number of residents on antipsychotics and number of unscheduled ER transfers per 100 residents (see Table 4). Data collected shows an increase in the average % of residents on 9+ medications pre and post RCI implementation, but current numbers are on a downward direction. It could be speculated that as more patients in residential care now had a RCI GP MPR visiting them regularly, adjustments in medications were needed to resolve previous health issues.

[1] The partial launch period of Oct-Dec 2015 is group with the Pre-RCI period statistically, as during this three month period only administrative changes were introduced. Starting Jan 1, 2016, the full clinical best practices changes were implemented and facility statistic data was collected.

RCI Program Metrics	Difference in Change (Post Minus Pre)
# of MRPs practicing in RCI	 Pre= 10 Post= 20
Median # of residents per MRP	 Pre= 80 Post= 35
% Female MRPs	 Pre=0 Post = 8
Average years of practice per MRP	 Pre= 35 Post = 24

Table 3. Comparison in Residential Care Physician Metrics Post RCI Implementation

Facility Metrics for Quality of Care	Difference in Change
Average % Residents on 9+ Medications	 Pre= 34.3% Post 35.1%
Average % Residents on antipsychotics without diagnosis	 Pre=20.9% Post 17.4%
Average # of unscheduled ER transfers per 100 residents	 Pre=14.4 Post 12.7

Table 4. Comparison of Facility Quality of Care Metrics Between Post RCI and Pre RCI Implementation

Evaluation Question 1.B. To what extent did the program contribute to improved practice environments for residential care facility staff?

Satisfaction for FNW facilities increased for physician availability 24/7 and care conferences post RCI. Facilities have commented in the facility satisfaction survey that a positive improvement since the RCI program began was the availability and quality of on-call physicians. Satisfaction in responsiveness from the 24/7 availability has been well received by the facilities as they have also reported that residents are seen in a timely manner with consistent medical coverage.

Changes in satisfaction for facilities across the 5 best practice deliverables were consistent with changes across Fraser and British Columbian facilities (Table 5).

Program Outcomes	Difference in Change for FNW	Difference in Change for FHA	Difference in Change for BC
24/7 Availability	⬆	=	⬆
Proactive Visits	=	⬆	=
Medication Reviews	**N/A**	**N/A**	**N/A**
Completed Documentation	=	=	=
Care Conferences	⬆	=	=
Patient Provider Experience	=	=	=

Table 5. Comparison of Changes in Satisfaction for Facilities (Post-Pre) Across Regions

Evaluation Question 1.D. To what extent did the program contribute to appropriate health care utilization and reducing system costs?

The findings show that the program is contributing to the appropriate use of health care services. Decreased measures of acute care utilization were found Post RCI implementation. Residential client emergency department (ED) visits, acute care admission, and length of stay (LOS) data was compared in the FNW community(Table 6).

	% Difference ED Visits	% Acute care admissions	% Difference ED LOS
Change Post-RCI Implementation	-5%	-9%	-19%

Table 6. Comparison of Emergency Department Statistics Between Post RCI and Pre RCI Implementation

Analysis of ED data reveals that there has been a reduction in ED visits, acute care admissions and ED LOS by residential care patients in the FNW, and therefore signifies a significant reduction in system costs. Specifically, by comparing actual costs of these factors before and after RCI implementation, the data suggests that over this period, the RCI program has contributed in cost savings to the overall healthcare system. Cost savings can be compared by looking at 2014 and 2015 (Pre-RCI) and 2016 (Post RCI) data. The downward trend in cost for the ED visits and number of admissions from residential care clients reveals the impact the RCI program has made in the FNW community, for a cost savings of $1,555,238 comparing the year Pre and Post RCI implementation (Table 7). These figures were calculated from FHA data for the approximate 1300 FHA subsidized residents, by extrapolating the data to a standard of 1722 residents, which is the number of residential care clients within FNW[2], and using a conservative estimate of $723 for each ED visit [3], and FHA data for the cost per day of a standard medical ward bed of $1235. See Appendix D for calculation details.

[2] 1722 divided by FHA RC clients multiplied by FHA ED visits. To truly compare all division residential care clients, extrapolated data includes privately funded beds and Vancouver Coastal beds that in our division.

[3] $723 was found by adding the following expenses: BC ambulance $160, FHA ER hospital visit fee $346, MSP fee guide chest x-ray $35, MSP fee guide basic lab work $50, MSP fee guide ER physician fee $100. MSP fee guide ECG $32.

Year	ED Visit cost	Admission cost	Total Cost
2014	$684,355	$6,055,815	$6,740,170
2015	$622,334	$6,738,171	$7,360,505
2016	$544,898	$5,260,368	$5,805,266
			Total Cost Savings between 2015-2016
			$1,555,238

Table 7. Comparison of yearly ED visit costs and ED admission costs including LOS for FNW Residential Care clients.

Data from the first six months of 2017 shows this trend has continued in all three measures (Table 8 & Appendix D). Considering the RCI program is funded $400/bed or $688,000 annually, there is confidence that the program has contributed to overall reduced system costs, and more appropriate health care utilization, by freeing up ED and acute care beds, and providing more care for RC patients in their RC home and not the hospital.

Quarters (1st 6 months of each year)	ED Visit Cost	Admission Cost
Q 1&2 2014	$350,293	$3,266,970
Q 1&2 2015	$326,639	$3,350,671
Q 1&2 2016	$259,074	$2,256,395
Q 1&2 2017	$256,074	$1,681,036

Table 8. Comparison of first 6 months ED visit costs and ED admission costs including LOS for FNW Residential Care clients.

Evaluation Question 2.A. What worked well, what were the challenges, and what can be improved?

Data was collected from a physician satisfaction survey and a facility satisfaction survey to obtain feedback on the indicators of what has been working and areas for improvement.

Main themes of successes - RCI Physician Satisfaction

1) Improved RCI GP MRP rating on themselves in delivering all 5 best practice expectations. Scale from 1-5 of themselves pre-RCI implementation was 3.4 and scale from 1-5 post-RCI implementation was 4.5. This indicator reveals increased optimization of the 5 best practices in the Fraser Northwest.
2) Improvement of infrastructure for RCI GP MRPs access to receive relevant education, to network, to learn from each other and express shared goals.
3) Positive reassurance for patient coverage during after hours and weekends due to the on-call network that was created.

Main themes of areas for improvement - RCI Physician Satisfaction

1) The realization that there are gaps when working in Residential Care that involve conversation, research & review with care that cannot be billed for.
2) There needs to be improvement in communication regarding the financial aspects of payment.
3) Recognition that facility staff need to be more aware and educated in the purpose and benefit of the RCI program.

Main themes of successes - Facility Satisfaction

1) Consistent and improved on site and on call medical coverage.
2) Overall satisfaction with the RCI program score was 4.38 out of 5 (very satisfied).
3) Improved access and communication with RCI GP MRPs.

Main themes of areas for improvement - Facility Satisfaction

1) Acknowledgement that the nurse practitioner should also be recognized in this initiative's improvements.
2) Feedback that data collection is tedious and time consuming.

7. Discussion Around the Impact of the RCI Program in the Fraser Northwest Residential Care Community

The results of this evaluation suggests that the RCI Program contributed to improvement across four areas:

1) **Patient care**
2) **Facility practice environments**
3) **Physician practice environments**
4) **Healthcare utilization by residents and subsequent decreased healthcare system costs**

1. Improved Patient Care

As seen in the results, post RCI, the number of available RCI doctors per resident has increased. The number of FNW RCI doctors has doubled from October 2015 to present. Thus, it can be inferred that the quality of care for residents in the FNW community has improved due to the fact that now every resident has a dedicated MRP in the community. Additionally, with a significant increase in the number of female physicians, from 0 to 8, residents are more able to access female physicians if desired, and the makeup of the RCI physicians is more similar to the member base of the Fraser Northwest, showing increased physician engagement. As well, as the median age of RCI doctors in the community has decreased, the sustainability of this quality of care has improved, as there are younger doctors to sustain this level of care when older doctors retire.

Prior to the RCI program, a standardized 24/7 call system was not available or included in all FNW facilities and system of tracking the 5 best practices for all doctors in residential care was not being completed or monitored. Some medical directors may have been performing all of these expectations, but perhaps not necessarily all doctors with residents in the community. Thus, post implementation facilities now know they can reach a doctor after hours, reducing the need to send a resident to the emergency department if it is not needed, and have confidence that their RCI doctors are optimizing care through the 5 best practices.

2. Improved practice environments for residential care facility staff

Before the RCI Program came into existence, the network of RCI physicians was fractured, with facilities having to scramble to recruit physicians if their main physician caring for their residents retired or moved to another community. After the RCI Program was implemented, facilities and physicians were provided access to a well structured network of RCI doctors committed to the program and better relationships and new partnerships were formed. Due to this, two brand new residential care facilities in the FNW opened their doors with fully established medical teams and because of the RCI Program, facilities could reach a physician 24/7 due to the creation of a standardized on-call system for all 15 facilities in the community. In addition, this program and network found MRPs, for over 250 residents, within 3 weeks, when a doctor retired unexpectedly. Prior to this initiative, this task would not have been possible in this period of time and points directly to the impact the RCI has made in this community. Finally, the RCI program assisted facilities to develop a system for tracking best practice deliverables for quality improvement, such as physician attendance at care conferences and medication reviews. Facilities have mentioned that they now have better access and communication with their RCI GP MRPs and that their residents are seen in a timely manner.

3. Improved practice environments for physicians

The RCI program developed a local residential care Medical Advisory Committee, where RCI GP MRPs had a forum to collaborate on common FNW residential care issues, strengthening the local network of physicians and facilities, improving quality of care through associated CME presentations and partnering with the Division on RCI goals. After the RCI Program was implemented, a mentorship program for a physician interested/embarking in residential care was offered. This allowed many physicians who were newer to residential care the opportunity to train under an experienced RCI physician. This was a great program as it allowed the RCI Program Leadership team to double the number of doctors practicing under the RCI program in less than 6 months and provide physicians an opportunity to create a sense of community among their residential care colleagues. This RCI community was further enhanced by the yearly RCI community engagement event, which also allowed physicians an opportunity to engage with their facility administration, further improving practice environments for RCI physicians. Finally, the RCI Program provided 5 educational CME opportunities specific to residential care, allowing physicians to hone their skills in their area of practice.

4. Improved appropriate health care utilization and reduced system costs

Post RCI Program implementation, ED visits, acute care admissions and length of stay in acute beds have decreased, which will thereby decrease the costs of the healthcare system for acute care utilization. A reduction in ED visit costs and acute care admission costs by $1,555,238 in the first year of RCI implementation conveys the cost-effectiveness of this program. A distinct change in reduced system costs can be seen in the ED with the implementation of the FNW RCI program in 2016 and this reduction in cost has continued into the first 6 months of 2017.

8. Lessons Learned

The major themes surrounding lessons learned collected by facilities and physician stakeholders are:

Communication needs to be clear and ongoing. Stakeholders on both the facility and physician sides need to be engaged through all the learning curves of a successful initiative. Issues that arise regarding financial payments and billing matters, should be addressed promptly and communication should be open and frequent. A lesson learned in the first year of implementation revolved around doctor roster payments. This unanticipated hiccup provided reason to further examine the initiative's budget forecasting. Facility staff also need to be provided with ongoing and updated information and education about changes with the RCI program.

Keep things simple. Optimizing care through the 5 best practices is the key focus of this initiative. The program needs to keep things simplified and streamlined as it develops and evolves. It is a complex and intricate program with many exciting pieces that benefit the residential care population, and managing to coordinate all the moving parts takes effort and persistence. A lesson learned in the first year of fruition, is that improvement will occur through finding the gaps and realizing challenges of communication, transparency and data collection.

Physicians are okay with being on call. The first year of this program tested the availability and interest of RCI doctors to be on call. Interest in being on call was greater than anticipated, and the process of signing up and receiving calls has been straightforward. Overall, most call shifts have been filled without significant difficulty, though holiday shifts, especially the extended December holiday period have proven more difficult to find coverage for.

Remember the shared goals. Feedback throughout the first year remains consistent that the participating RCI doctors share the same focus for optimizing care. Doctors who are interested in becoming part of the program understand that the culture of care is moving forward to a palliative care approach. Other shared goals include a focus to move towards quality improvement work, keeping connections with fellow RCI doctors

and continuance with residential care based education.

9. Limitations of Evaluation

This evaluation report showed significant improvements in resident quality of care, as well as improved facility and physician practice environments post RCI. However, as with all evaluation reports, there are limitations. The main one for this RCI report was the fact that the evaluation plan was not put into place until one year after the RCI program was implemented, causing barriers to gathering data pre-RCI in 2 areas:

(1)Tracking of 5 deliverables and On-Call Statistics:

No standardized system for on-call or a way to track the 5 deliverables was in place prior to the RCI. Therefore, it is difficult to compare if RCI physicians are improving across these deliverables with no baseline to compare it to. Additionally, how much improvement is considered “improvement/significant” still needs to be determined.

(2)Physician Satisfaction: Because physician satisfaction was not measured at baseline, the RCI Program leadership team had to rely on word of mouth to know if in general that physicians are more satisfied now compared to before.

10. Conclusions

One year after the RCI Program implementation, every resident in the FNW community has a dedicated MRP. Thus, the RCI Program has been successfully implemented according to its original objective.

Although the RCI program is still in its infancy, early results suggest that the program is significantly effective, with improvements on quality of care of residents as well as improved physician and facility practice environments post program implementation. Decreased acute care visits by residents post RCI, suggests the cost-effectiveness of the RCI Program to the BC health care system.

10. Appendix

A. Raw Data Table for Data Collected on Indicators for Evaluation Objective #1

Data Source	Indicators	Before RCI	After RCI
RCI Program Database	median # of residents per doctor avg # of residents per doctor # RCI doctors	a) Median number of residents per MRP before RCI initiative = 80 residents b) Average mean number of residents per MRP before RCI initiative = 109 residents c) # MRPs in RCI prior to FNW RCI Initiative: 10 Doctors and 1 NP	a)Median number of residents per MRP after RCI starts = 35 b)Average mean number of residents per MRP after RCI starts = 70 residents c) # MRPS in RCI after FNW RCI Initiative started: 20 and 1 NP
	% Gender of RCI doctors	% Female MRPs in RCI prior to FNW RCI Initiative: 0%	% Female MRPs in RCI after FNW RCI Initiative started: 40%
	Avg # of years in practice	Average years of practice of MRP before RCI initiative = 35 years	Average years of practice of MRP after RCI = 24 years

Residential Care Site Quality Performance Feedback Report (FHA):	Avg % Residents on 9+ Medications	Pre RCI Oct -Dec 2015 34.3%	Post RCI Oct-Dec 2016 35.1%
	Avg % Residents on antipsychotics without diagnosis	20.9%	17.4%
	Avg # of unscheduled ER transfers per 100 residents	14.4	12.7

B. Raw Data Table for Data Collected on Indicators for Evaluation Objective #2

Data Source	Indicators	RCI Program Pre (2015-2016)	RCI Program Post (2016-2017) average #
Physician Satisfaction Survey (Average response)	a) Satisfaction in practicing in Residential Care Initiative (Scale 1-5)	**NA**	1= unsatisfied 3=somewhat satisfied 5= very satisfied a) 3.25
	b) For purposes of this initiative, a dedicated GP MRP is defined as one who delivers care according to the best practice expectations. How would you rate yourself in delivering these best practices pre and post RCI implementation? (Rarely-Always)		

	raw data average (scale 1-5) 1=terrible 3= fair 5=excellent	
	MRP Self rated "pre" RCI implementation	MRP self rated "post" RCI implementation
Delivering 24/7 availability and on-site attendance when required?	3.23	4.62
Proactive Visits at least every 3 months	3.25	4.38
Meaningful Medication Reviews (2xs yearly)	3.5	4.63
Completed Documentation (admin history on chart, progress notes, updated MOST form)	3.38	4.38
Attendance at Care Conference	3.62	4.62
Total averages	**3.375**	**4.525**

Data Source	Indicators	RCI Program Pre (2015-2016)	RCI Program Post (2016-2017)
Physician Satisfaction Survey (raw data)	comments/feedback c) What Worked	**N/A**	**c) see next row**

c) What is working well for you in the Residential Care Initiative Program?

- Everything except payment changes.
- Good Nursing / Staff interaction.
- The reassurance that the on call team is doing a good job; this allows me to disconnect from work after hours, when in the past I was always getting calls and scared to put my phone away.
- Well structured meetings. Generally good communication.
- Good collaborative group, feel supported.
- I like getting to know my patients. I appreciate the standard of nursing care, and willingness to communicate. On-call is unpredictable, and can be busy, but the patients need to be looked after, and we are, after all, a service profession.
- Improved understanding of the provider challenges at my facility - nursing staff, aides, OT/PT, dietary, etc.
- Nothing has improved. There was an on-call program in place previously and the requirements of pro-active visits, MOSTs, care conferences and documentation were being met. Since the RCI there has been no by an on-call physician that has prevented a transfer to the ER in the 3 facilities where I am most involved (as corroborated by the respective DOCs).
- Group discussions and organization.
- The improvement in infrastructure and giving a voice to often isolated physicians.
- The education we have received. Up to date research. De-prescribing. More willing to prescribe appropriate opioids when needed.It's a whole different way of practicing medicine, compared to office or hospital.
- Educational aspects. Feedback. Shared goals.
- Increased collegiality. Coverage for my own patients in RCI facilities.

Physician Satisfaction Survey (raw data)	comments/feedback d) Areas for Improvement	**N/A**	**d) see next row**

d)What can areas do you feel require improvement?

- Figuring out payments and getting paid. Having my facilities get what is going on. Communication with the division.
- Improved payments, less difficult paperwork for my facility.
- The focus should move from on-call services (which have not decreased transfers to ER) to supporting pro-active physician work in the residential care settings. Also, the RCI should accept that in the 21st century that the basis of care for LTC patients is the interdisciplinary team. The present purely physician driven interventions should make use of the team's strengths. That also includes accepting nurse practitioners as a fact of life that are used to great extents in other provinces (and Coastal Health) and will inevitably do so here.
- More managerial support for Dr Petropolis.
- I think there could be more "tools" available to RCI physician to deal withÂ more acute issues for our patients (ie. epistaxis tray).
- Improved communication skills with NH staff when they call RCI on call.
- The financial remuneration for rostering has not been done as had been described prior to the RCI. The information given about this did not suggest that the available money would be given to on-call services to the detriment of rostering payments, as has now occurred.
- I still spend a lot of time at the facility doing things I can't bill for. Reviewing results, reading up on topics. I only bill for patients I actually see.
- Financial constraints.
- None.
- none.
- Staffing abilities at different sites.

Data Source	Indicators	RCI Program Pre (2015-2016)	RCI Program Post (2016-2017) Average #
Facility Satisfaction Survey	1) Rating of physicians ability to provide 5 best deliverables (1-5) a) Proactive Visits (at least every 3 months) b) Completed Documentation c) Care Conference Attendance d) Meaning Medication Review e) On-call availability including on site attendance if requested.	**N/A**	1= unsatisfied 3= somewhat satisfied 5= very satisfied a) 5 b) 4.4 c) 4.5 d) 4.6 e) 4.6 overall average 4.62
	2) Rating of physicians availability and openness to feedback (1-5)	**N/A**	4.5
	3) Impact of RCI to residents and families (1-5)	**N/A**	4.5
	4) Satisfaction with RCI program (1-5)	**N/A**	4.375

Facility Satisfaction Survey (raw data)	comments/feedback	**N/A**	**see next row**
	Areas for Improvement - do not see how there is measurable criteria to assist with the doctor's accountability e.g. evidence of decreased ER unscheduled visits etc. Why is a NP not in the mix; their services and availability are undervalued. - need NP into the mix as valuable resources under utilized. Increased unnecessary cost to medical system e.g.those homes that don't or who never had any problems with coverage for res doctors or On Call schedules; i.e. the doctor's workload has not changed but nonetheless; their wages have increased~ $1,000 to $2,000 per month, (dependent on # res. in their care), with no change in outcomes.		
	What is working well - Availability & quality of the on-call physician. Consistent medical coverage. - care homes who have difficulty with getting doctors for residents and consistent coverage for on call. - Responsiveness of on-call GPs. - Better access and communication with RCI physicians. They respond in timely manner and makes weekly visits to our site. Med reviews are done regularly. Care conferences being attended. Schedules for care conferences, med reviews,MOST/ACP reviews and resident/family visits are worked out better with our RCI physicians and nurse practitioner. - residents seen in a timely manner.		

C. Comparison of the Average Facilities' Satisfaction Across 5 deliverables for FNW, Fraser and BC

Program Outcomes	FNW 2015-2016 (Pre-RCI)	FNW 2016-2017 (Post-RCI)	Fraser 2015-2016 (Pre-RCI)	Fraser 2016-2017 (Post-RCI)	BC 2015-2016 (Pre-RCI)	BC 2016-2017 (Post-RCI)
24/7 Availability	3.5	4	4	4	3	4
Proactive Visits	3.5	3.5	3	3.5	3	3
Medication Reviews	N/A	N/A	N/A	N/A	N/A	N/A
Completed Documentation	3	3	3	3	3	3
Care Conferences	3.5	4	3	3	3	3
Patient Provider Experience	4	4	4	4	4	4

Legend:

1=Not Satisfied

2=Sometimes Satisfied

3=Usually Satisfied

4=Satisfied

*Pre RCI = Average of first 8 months of implementation data (i.e. Oct 2015-Jun 2016)

*Post RCI = Average of 8 month post implementation data (i.e. Jun 2016-Jan 2017)

D. Fraser Health Authority Health & Business Analytics Raw Data - # of RC clients, ED Visits, Admissions, Avg LOS

Year	Quarter	# of RC clients	ED Visits	Admissions	Avg LOS
2014	1. Jan - Mar	1280	182	91	9.1
2014	2. Apr - Jun	1279	178	108	10.6
2014	3. Jul - Sep	1288	173	100	8.5
2014	4. Oct - Dec	1291	173	103	8.2
2015	1. Jan - Mar	1306	175	104	8.1
2015	2. Apr - Jun	1301	167	96	12.6
2015	3. Jul - Sep	1255	131	79	14.1
2015	4. Oct - Dec	1262	168	106	8.4
2016	1. Jan - Mar	1276	144	98	8.7
2016	2. Apr - Jun	1428	136	66	9.6
2016	3. Jul - Sep	1468	171	106	10.4
2016	4. Oct - Dec	1459	165	98	9.2
2017	1. Jan - Mar	1489	175	97	6.5
2017	2. Apr - Jun	1418	125	61	8.5

Extrapolated data calculations					
Year	Quarter	Standardized # of RC clients	Extrapolated ED Visits	Extrapolated Admissions	Avg LOS
2014	1. Jan - Mar	1722	245	122	9.1
2014	2. Apr - Jun	1722	240	145	10.6
2014	3. Jul - Sep	1722	231	134	8.5
2014	4. Oct - Dec	1722	231	137	8.2
2015	1. Jan - Mar	1722	231	137	8.1
2015	2. Apr - Jun	1722	221	127	12.6
2015	3. Jul - Sep	1722	180	108	14.1
2015	4. Oct - Dec	1722	229	145	8.4
2016	1. Jan - Mar	1722	194	132	8.7
2016	2. Apr - Jun	1722	164	80	9.6
2016	3. Jul - Sep	1722	201	124	10.4
2016	4. Oct - Dec	1722	195	116	9.2
2017	1. Jan - Mar	1722	202	112	6.5
2017	2. Apr - Jun	1722	152	74	8.5

Cost Savings Calculations		
	Cost of ED visit	Cost of admit
	(extrap # ED visit x $723)	(extra # admit x avg LOS x $1235)
Q1 2014	$177,024	$1,369,044
Q2 2014	$173,269	$1,897,926
Q3 2014	$167,225	$1,400,168
Q4 2014	$166,837	$1,388,678
Q1/2 2014	**$350,293**	**$3,266,970**
Total 2014	**$684,355**	**$6,055,815**
Q1 2015	$166,827	$1,366,214
Q2 2015	$159,812	$1,984,456
Q3 2015	$129,957	$1,882,654
Q4 2015	$165,738	$1,504,847
Q1/2 2015	**$326,639**	**$3,350,671**
Total 2015	**$622,334**	**$6,738,171**
Q1 2016	$140,502	$1,416,669
Q2 2016	$118,572	$939,726
Q3 2016	$145,025	$1,590,656
Q4 2016	$140,799	$1,313,317
Q1/2 2016	**$259,074**	**$2,356,395**
Total 2016	**$544,898**	**$5,260,368**
Q1 2017	$146,324	$902,656
Q2 2017	$109,750	$778,379
Q1/2 2017	**$256,074**	**$1,681,036**