

COWICHAN VALLEY DIVISION OF FAMILY PRACTICE

Program Data Summary Report

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2019

Providing leadership in healthcare innovations,
in collaboration with our community.

2018-19 Program Data Summary Report

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2018-19 Program Data Summary Report

Introduction

In 2013, the Cowichan Valley Division of Family Practice (CVDFP) took on the collection and analysis of its program data from Impact BC, with whom a Quality Improvement contract was originally held. The resulting data collection and analysis framework developed by CVDFP now serves to support the organization's strategic priorities, day to day operations and long range planning by documenting progress of its measurable initiatives, analysing performance and functionality, identifying gaps and successes, and highlighting areas of improvement in real time.

This report includes statistical summaries of CVDFP's primary, measurable initiatives for the 2018-19 year; where applicable, the report identifies how the data framework and processes allowed for changes to be made during the year to create improvement; and, where data is available, identifies multi-year trends and provides year over year statistical analysis.

With six years of comparable data now in hand, longer term trends can now be identified for the more established initiatives. Any such notable trends have been highlighted throughout the report.

Data Summary

Family Practice Hospital Support Program / Inpatient Care

INITIATIVE OVERVIEW

Developed by CVDFP in 2010, and put in place to replace the original Doctor of the Day program at Cowichan District Hospital, the Family Practice Hospital Support Program (FPHSP) provides support to GPs who provide inpatient care to patients admitted to Cowichan District Hospital without a family doctor. FPHSP is structured so that unattached patients are assigned one at a time to participating physicians, on a rotating basis.

Funding for care delivery is provided by the Ministry of Health, but administered and distributed by CVDFP. FPHSP physicians are provided \$150 per assigned patient, plus a quarterly network incentive, an annual amount of \$219,000 (\$54,750 per quarter) divided evenly among the FPHSP participants.

During 2017-18, considerable time and effort was invested in finding ways to further support family doctors working in hospital, with an immediate goal to prevent further attrition from both the FPHSP program and inpatient care in general, and with the ultimate goal to grow the number of participating physicians further.

As a result of these efforts, additional funding in the amount of \$500,000 per year was secured through the GPSC to support the continuation of inpatient care in seven mid-size communities in the province. In Cowichan, these funds have been used to financially incentivize weekend hospital work, and to enhance the existing FPHSP per-patient compensation. See more detail on page 5.

DATA COLLECTION PROCESS

Data for the Family Practice Hospital Support Program (FPHSP) is collected from several sources:

Cowichan District Hospital (CDH) provides copies of patient assignment sheets from the emergency department, including patient Medical Health Record (MHR) number, date of assignment, and name of the GP assigned to the patient. This offers absolute data on overall FPHSP patient volumes and, once analyzed, provides a record of how many patients are referred to the respective GPs and how often. The CDH information also offers sufficient data to identify repeat admissions through the ER.

CDH also supplies CVDFP with the weekend call sheets, showing which physicians were providing coverage for the various call groups. These schedules are used to calculate the weekend call stipend while simultaneously providing a snapshot of which family doctors are actively providing inpatient care. This information is used for assessing the number and percentage of GPs providing inpatient care within the community, including geographic breakdown.

CVDFP Finance Department provides a summary of GP billings, including patient Personal Health Number (PHN), patient category, and whether the patient is known to have been attached. These records provide information on billing trends, patient attachment levels, and the types of unattached patients seen.

All incoming data and data formulas are reviewed for accuracy prior to being extracted for inclusion in the CVDFP master data sheets.

Protection of personal information

- *Patient names are not included in any of CVDFP's data collection processes; CDH information is provided in the form of MHRs, CVDFP billing data in the form of PHN.*
- *Patient identifiers such as PHN and MHRs are held in raw data form only, and are not included in any data summaries or other publicized reports.*
- *All data is stored securely and is used only by authorized CVDFP staff.*
- *Raw data is shared only as necessary for data assessment purposes or in specific instances where troubleshooting is required.*

INPATIENT CARE / FPHSP TRENDS & COMPARISONS

PARTICIPANT NUMBERS

As noted in last year's report, CVDFP no longer has access to privileging information through Island Health. Accordingly, data collection and analysis is now done using weekend call sheets, averaged over the year. This change of data stream creates a small margin of error that may impact comparisons from 2018-19 onward, to years prior.

- **Notable trend:** At the end of the 2018-19 year, there had been an average of 51 family physicians actively providing inpatient care, comprising 59% of the average number of family doctors within the CVDFP area for the 2018-19 year (86). This is a decrease over the 61% recorded in 2017-18, and is a consistent trend for the past 7 years (see table, pg. 10).
 - Narrowing the parameters to focus on just those communities within the CDH catchment area (subtracting Ladysmith physicians from the calculations), we find that 67% (51 of 76) of family doctors were providing regular inpatient care, compared to 70% recorded in 2017-18.
 - Q2 and Q4 had the lowest average number of family doctors providing inpatient care at 50; Q1 had the highest average number at 53.
- **Notable trend:** Of the 51 family doctors providing inpatient care, an average of 39% participated in the Family Practice Hospital Support Program over the year, a decrease over the 44% recorded in 2017-18; simultaneously, raw numbers of participants decreased from an average of 23 in 2017-18 to an average of 20 in the 2018-19 year.
 - Over the 2018-19 year, there were 2 GP participants who departed the roster; 1 who changed from family practice to addictions medicine, another who withdrew as the balance of their clinic no longer participated.
 - There were no new additions to the roster over the 2018-19 year.
- Although FPHSP participation and inpatient care generally continued to trend downward during the 2017-18 year, anecdotally, participation is more stable than in previous years indicating that interventions implemented late 2017, and early 2018 are having a positive impact. These included:
 - **Intervention #1 – surgical MRP:** Starting September 2017, surgeons at CDH agreed to take on MRP for their patients, decreasing overall FPHSP volumes (see stats on next page)
 - **Intervention #2 – enhanced financial incentives:** Additional funding in the amount of \$500,000 secured through the GPSC to support the continuation of inpatient care in Cowichan utilized to incentivize weekend call and increase per patient amounts for unattached patients.
 - **Intervention #3 – RADU:** The Rapid Assessment Discharge Unit takes on care of certain patients in the ER less than 24 hours such as those with psychiatric or substance use concerns. If after 24 hours these patients cannot be discharged, they will be admitted to the FPHSP program or their own family doctor if they have one.

PATIENT VOLUMES

- In total, the FPHSP program saw 1,293 (an average of 108 per month, 3.5 per day).
 - This is a significant decrease over the 1,518 admitted patients (an average of 127 per month, 4 per day) admitted to FPHSP over the course of the 2017-18 year, primarily due to the removal of surgical MRP from FPHSP and introduction of RADU.
 - When comparing to just ER admits from the previous year, the variation is more modest – a 6% decrease from the 1,374 (115 per month, 3.8 per day) in 2017-18.
- There was a high of 122 patients admitted to FPHSP in January 2019, compared to a high of 154 the previous year (May 2017 – ER data only).

- There was a low of 88 patients admitted to FPHSP in February 2019, compared to a low of 87 the previous year (Feb 2018 – ER data only).

GP ASSIGNMENT VOLUMES

- There was an average of 5.5 patients per month assigned to each FPHSP physician over the course of the year.
 - This equals the 5.5 patients per GP per month assigned during both the 2016-17 year and 2017-18 year; however, previous years would have included a small proportion of surgical pre-admits.
 - Statistically, participating GPs received on average 1 patient assignment every 6 days over the year, a comparable average to the previous two years.
 - The number of patients per month and frequency of patient assignments has remained consistent for three years running, despite declining patient volumes. This is reflective of the simultaneously decreasing FPHSP participation.
 - Highest average per-GP patient assignments occurred in June 2018, at an average of 6.3 per GP per month, a decrease over the high of 7.2 recorded in 2017-18.
 - The peak number of assignments to an individual GP was 8; this occurred in June 2018 for three physicians, in August 2018 for two physicians, and in January for two physicians.
 - This is a decrease over the peak patient assignments per individual GP of 10 recorded the previous year.

PATIENT ATTACHMENT CATEGORIES

- Over the year, 2% of patient assignments reported to CVDFP were not categorized, a decrease over the 4% recorded in 2017-18.
- As such variance would skew the patient category breakdown, percentages have been calculated using only those encounters for which a patient category was recorded. See below for details.

PATIENT CATEGORIES – CODED ENCOUNTERS

PATIENT CATEGORY	2013-14		2014-15		2015-16		2016-17		2017-18		2018-19	
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
No family doctor (14081)	98	12%	94	12%	109	13%	123	11%	167	16%	184	17%
GP with no privileges (14082)	338	42%	328	41%	304	37%	553	48%	500	49%	534	49%
GP who is out of town (14083)	378	46%	385	48%	410	50%	487	42%	363	35%	375	34%
Total coded encounters	814	100%	807	100%	823	100%	1162	100%	1030	100%	1093	100%
No category provided	5		20		48		28		42		24	
Total reported encounters	819		827		871		1191		1072		1117	

- As the preceding table demonstrates, based upon the reported, categorized FPHSP encounters, patient volumes have shown the following trends:
 - **Notable variance:** The volume of truly unattached patients has shown growth over the past two years after remaining very consistent for the four years prior, increasing by another 1 percentage point over 2017-18.
 - The percentage of patients who have a family doctor without hospital privileges has remained steady at 49% of all FPHSP patients.

- The percentage of patients who have a family doctor outside of the Cowichan region has decreased 7 percentage points over the 2016-17 year, from 42% to 35%.
- Expressed as numbers of patients, all categories have shown increases; however, this will be due to an increased number of patient billings (see further detail below under Billing Trends).

ADMISSION FREQUENCY

- There were 69 patients over the course of the year who had two or more ER admits in a given month, down slightly from the 71 recorded in 2017-18.
- There were 162 patients who had two or more ER admits over the course of the year, compared to 181 in the previous year. Of the 162, there were:
 - 118 patients with 2 admits during the year
 - 31 patients with 3 admits
 - 6 patients with 4 admits
 - 3 patients with 5 admits
 - 2 patients with 6 admits
 - 2 patients with 8 or more admits.
- **Notable trend:** This is the second year in a row that showed a decrease in the overall number of patients with multiple admissions, as well as a decrease in nearly all frequency categories. *See chart below for year over year comparisons.*

Admission frequency, multi-year comparison

Multiple admissions, further breakdown	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
2 visits / year	69	80	86	139	130	118
3 visits / year	19	19	16	37	31	31
4 visits / year	2	7	5	9	10	6
5 visits / year	3	0	5	8	7	3
6 visits / year	3	1	1	1	2	2
7 visits / year	0	0	0	4	1	0
8 visits / year	0	0	0	0	0	1
9+ visits / year	0	0	0	0	0	1
	96	107	113	198	181	162

BILLING TRENDS

- On average, 86% of FPHSP patients were reported to CVDFP in 2018-19, and 86% of FPHSP patients were billed, compared to 71% in both categories during 2017-18.
 - **Notable trend:** After years of seeing reporting and billing levels at or near 65%, these levels have now increased for two years in a row. The 2018/19 year represents the highest volume of reported and billed encounters to-date.

PATIENT ATTACHMENT

- **Notable variance:** There was an average of .8 patients attached via the FPHSP program each month, for a total of 9 over the year, or 5% of the truly unattached.
 - This is a decrease over 2017-18 which saw 14 patients attached, 8% of the truly unattached.
 - All previous years recorded attachment levels ranging from 42% to 49%.
 - This trend is likely the result of decreasing FPHSP participation, capacity issues within practices, and FPHSP physicians being generally overburdened.

ROLE OF COWICHAN MATERNITY CLINIC

The Cowichan Maternity Clinic, although not formally included on the FPHSP roster, serves a specific role in providing care to pregnant unattached patients admitted to Cowichan District Hospital. When such patients are admitted, they are not assigned a GP through the FPHSP roster; rather, they are assigned to the maternity clinic. These patients are then found a permanent family doctor through the CMC's attachment efforts. Specific details can be found under the Maternity Clinic section of this report (*see page 12*).

PHYSICIAN SURVEY RESULTS

No physician survey was conducted during the 2018-19 year.

MENTORSHIP PROGRAM:

With rolling intake and varying completion timelines, statistics for the Inpatient Care Mentorship Program will be tracked from the beginning of the program (spring of 2017), and will be reported to the publication date rather than the fiscal year end.

Participation

- To date, there have been 22 mentor-mentee pairs registered for the inpatient care mentorship program.
- Of these 22, five are currently active, 17 have reached the official conclusion of the program.
- Of the 17 concluded pairs, 15 (88%) fully completed the mentorship program.
 - The 2 mentees who did not complete the program were from the first intake; there have been no further incomplete participants.
 - Of the 2 mentees who did not complete the program, 1 departed the area during the program term; the other opted out but continued practicing in the community, but without doing hospital work.
- Of the 22 registered pairs, there were 5 pairs which included a repeat mentor.
- Of the 22 registered pairs, there has been 1 former mentee shift to a mentor role.

Outcome

- Of the 17 concluded pairs, 15 (88%) continued to provide inpatient care after the end of the program, or 100% of those who successfully completed the program.
- There have been 9 pairs who concluded the program 2 years ago or more.
 - Of those 9 pairs, 4 (44%) continue to provide inpatient care in Cowichan. Of the 5 who do not, 4 are no longer practicing in the community in any capacity.
- Of the 17 concluding pairs, 3 mentees (18%) joined the Doctor of the Day program.
 - Of those 3, only one has reached the 2 year mark after completion of the program, and they continue to participate in the DOD.

Mentee Survey

- Of the 15 fully completed pairs, 10 mentees (67%) had submitted completion surveys at the time of publication. Of those 10 respondents:
 - 100% said they felt more comfortable working in hospital than at the start of the program.
 - 100% indicated they intended to continue providing inpatient care after the end of the program.
 - 100% said they felt more prepared to practice in Cowichan.
 - 100% felt the stipend was adequate, while on a sliding scale where 1 is not at all and 5 is significantly, respondents averaged 2.7 on how much the funding influenced their decision to participate, with a range of 1 to 5.
 - 100% indicated they would recommend the program to others.
 - Mentee participants invested an average of 17.7 hours into the official term of the project, with a range of 8 hours to 40 hours.

Mentor survey:

- Of the 15 fully completed pairs, 12 mentors (80%) had submitted completion surveys at the time of publication. Of those 12 respondents:
 - 10 (83%) indicated they were first time mentors.
 - 6 (50%) said they felt that serving as a mentor expanded their own knowledge.
 - 6 (50%) felt that their participation had no impact on their practice; all 6 (50%) felt their participation had a positive impact on their practice. No respondents felt their participation had negatively impacted their practice.
 - 10 (83%) would serve as a mentor again.
 - 100% felt the stipend was adequate, while on a sliding scale where 1 is not at all and 5 is significantly, respondents averaged 2.4 on how much the funding influenced their decision to participate, with a range of 1 to 3.
 - 100% indicated they would recommend the program to others.
 - Mentee participants invested an average of 11 hours into the official term of the project, with a range of 2 hours to 16 hours.

FPHSP / INPATIENT CARE SUMMARY

Having altered the data source for privileging information during the previous year, the FPHSP / inpatient care / mentorship data collection mechanisms are once again stabilized and operating smoothly.

Data collection and statistical analysis of Division-based inpatient care programs have been sufficiently comprehensive to provide an effective appraisal of operations, and to support CVDFP in achieving certain strategic priorities for the FPHSP program; specifically, monitoring the level of success of certain interventions, identifying gaps, and highlighting areas for improvement. The results align, support or otherwise compliment data analysis done by Island Health that conducts some similar analysis internally, but delves further into hospital-based trends, such as average length of stay, number of beds occupied by FPSHP patients at midnight census, disease diagnoses, and similar statistics.

The Division's program information supports discussions with stakeholders and planning for longer term solutions and sustainability.

YEAR OVER YEAR COMPARISONS, 2011-2019

Measure	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Multi-year Average
Total number of FPHSP patients <i>New admits</i>	n/a	n/a	1273	1332	1321	1825	1518	1293	1427
Number of FPHSP patients admitted through ER *	n/a	n/a	987	1039	1016	1488	1374	1293	1165
Average number of FPHSP providers <i>(As a % of GPs providing inpatient care)</i>	20	23 <i>(37%)</i>	30 <i>(53%)</i>	31 <i>(53%)</i>	32 <i>(54%)</i>	27 <i>(42%)</i>	23 <i>(44%) **</i>	20 <i>(39%)</i>	26 (46%)
Average # of family doctors in CVDFP catchment area	80	77	72	78	80	85	85	86	80
FPs within CVDFP catchment area doing inpatient care (%)	n/a	82% <i>(62 of 76)</i>	78% <i>(57 of 73)</i>	74% <i>(58 of 78)</i>	74% <i>(59 of 80)</i>	74% <i>(64 of 87)</i>	61% <i>(52 of 85)</i>	59% <i>(51 of 86)</i>	72%
FPs within CDH catchment area doing inpatient care (excludes Ladysmith) **	n/a	94% <i>(62 of 66)</i>	93% <i>(57 of 61)</i>	87% <i>(58 of 67)</i>	84% <i>(59 of 70)</i>	85% <i>(64 of 75)</i>	70% <i>(52 of 74)</i>	67% <i>(51 of 76)</i>	83%
% FPHSP patients truly unattached	12%	12%	12%	12%	13%	11%	16%	17%	13.1%
% FPHSP patients with out of town GP	53%	49%	46%	48%	50%	42%	35%	34%	44.6%
% FPHSP patients with GP but no privileges	35%	39%	42%	41%	37%	48%	49%	49%	42.5%
Total patients attached	n/a	n/a	42 <i>(42%)</i>	42 <i>(45%)</i>	53 <i>(49%)</i>	56 <i>(46%)</i>	14 <i>(8%)</i>	9 <i>(5%)</i>	36 (32.5%)
Number of patients with >4 ER admits in the year	n/a	n/a	8	8	11	22	20	13	14
% FPHSP patients reported	n/a	n/a	64%	62%	66%	65%	71%	86%	69%
% FPHSP patients billed	n/a	n/a	61%	61%	62%	64%	71%	86%	67.5%

The majority of program data for 2011-12 and 2012-13, under the term of the Impact BC QI contract, was not collected, was incomplete or could not be confirmed as reliable.

** Surgical pre-admits were removed from the FPHSP program during the 2017-18 fiscal year, leaving only ER admits from September 2017 onward. For accuracy, ER admissions have been separated out for the multi-year comparison.*

*** Privileging data source altered in 2017-18, with focus narrowed from GPs with privileges to GPs regularly providing inpatient care. Certain stats will be impacted as a result.*

Data Summary

Cowichan Maternity Clinic

INITIATIVE OVERVIEW

Opened in March 2011, the Cowichan Maternity Clinic (CMC) was developed to fill a growing void in the community, with a steadily decreasing number of family doctors providing obstetric care. Located in the Cowichan District Hospital, CMC provides maternity care to pregnant women up to 6 weeks post-partum.

One of the clinic's goals is to help close the care gap faced by Indigenous women, who face unique cultural, socioeconomic and medical needs during pregnancy. This population has consistently comprised around 30% of CMC patients. The clinic's mandate also includes attaching patients who did not previously have a family doctor. Statistical details of both areas of focus are found in the data summary on the following pages.

The CMC is staffed by family physicians, an RN, a contracted part-time dietician and an MOA.

DATA COLLECTION PROCESS

Cowichan Maternity Clinic (CMC) data is collected directly from CMC staff as raw data. Although some manual records are used, the majority of data is extracted from the clinic's Electronic Medical Record (EMR).

All incoming data and data formulas are reviewed for accuracy prior to being extracted for inclusion in the CVDFP master data sheets.

Protection of personal information

- *No patient identifiers are included in the data exchange.*

CMC TRENDS & COMPARISONS

PATIENT VOLUMES

- Total patients cared for by the CMC in the 8 years since opening stands at 4,417.
 - *Note: returning patients are not re-counted; the total number of patients cared for equals the total number of patient charts held by CMC.*
 - This cumulative number of CMC patients, a number including moms and the babies delivered, grew by 457 patients during 2018-19 year, 46 patients fewer than in the previous year.
- There was an average of 143 active patients each month, a decrease of 11 patients per month over the 2017-18 average.
- **Notable variance:** There was an average of 205 different patients seen each month (down by 14 from 2017-18, and the lowest level since opening in 2011)
- There were an average of 389 appointments booked per month (down slightly from the average of 390 in 2017-18).
- There was an average of 32 postpartum mothers being seen by CMC each month, down from the average of 40 per month seen in 2017-18.
- There was an average of 23 new patients each month, down slightly from the 26 in 2017-18, 49% of whom were referred by GPs (down from the 54% the previous year).

- **Notable trend:** From year 2 through 7, the proportion of GP-referred patients had steadily decreased from a high of 87% to just 49% in 2018-19:

REFERRALS TO COWICHAN MATERNITY CLINIC

	Year 1 (2011-12)	Year 2 (2012-13)	Year 3 (2013-14)	Year 4 (2014-15)	Year 5 (2015-16)	Year 6 (2016-17)	Year 7 (2017-18)	Year 8 (2018-19)
Self-referred	15%	13%	14%	20%	29%	44%	46%	51%
GP referred	85%	87%	86%	80%	71%	56%	54%	49%

INDIGENOUS NATIONS PATIENTS

- **Notable variance:** In 2018-19, Indigenous patients comprised 30% of active patients, a marked increase over the 25% recorded in 2017-18, which had been a significant decrease over the 34% recorded 2016-17.
 - The increase in proportion of Indigenous patients is more in line with the multi-year average and indicates that the levels recorded in 2016-17 may have been an anomaly. See table on page 14 for further detail.
 - **Notable trend:** During 2018-19, there were a total of 53 new Indigenous patients (an average of 4 per month), a decrease over the 65 recorded in 2017-18. This number has continued to trend downward in recent years and will be monitored going forward.
- Of the active Indigenous patients, an average of 14% lived on Penelakut Island, a slight increase over the 13% recorded in 2017-18, and closer to the multi-year average. See table on page 15.

The Cowichan Maternity Clinic has attached a total of **828 patients** Since opening in 2011

PATIENT ATTACHMENT

- Over the 2018-19 year, the clinic saw an average of 5 unattached patients per month, the same as in 2017-18, for a total of 65 for the year.
- **Notable variance:** CMC attached a total of 72 patients to a family doctor during 2018-19, comprised of 45 CMC patients and 27 family members. This is a decrease of 46 patients over 2017-18 which saw 78 CMC patients, plus 40 family members attached, and is the lowest number of patients attached since the clinic opened.
- During the 2018-19 year, CMC reported receiving 2 unattached patient from the CDH ER, patients who, if not pregnant, would have been assigned to a physician on the FPHSP roster. This is a decrease over the 5 reported in the 2017-18 year. This is potentially a reporting gap rather than an actual decrease in patients.

DELIVERY VOLUMES

- There was an average of 18 CMC patients per month who delivered at Cowichan District Hospital, with a total of 221 deliveries over the year, down slightly from the 235 deliveries in 2017-18, and the lowest number since the clinic opened.
- Delivery levels peaked at 31 in July 2018, with lowest delivery volumes seen in June of 2019 at 10 deliveries for the month.
- The CMC accounted for an average of 41% of all CDH deliveries, down 1 percentage point from 2017-18.
- **Notable variance:** There were a total of 47 patients who delivered by C-section, a measurable decrease over the 60 in 2017-18; however, the breakdown of elective versus non-elective were nearly the same:
 - Of the 47 C-Sections, 28% were elective, compared to the 27% elective in 2017-18; 72% were non-elective, compared to the 73% non-elective in 2017-18.
 - See table on page 15 for C-sections expressed as a percentage of total deliveries.

- **Notable variance:** 95% of patients delivered at or over 37 weeks, a slight increase over the 91% recorded in 2017-18, and the highest percentage since the clinic opened.
- There was only 1 patient who transferred out for delivery elsewhere over the year, a decrease over the 5 patients in 2017-18.

BALANCING DATA

- There were no patients over the course of the 2018-19 year who expressed concerns about being identified as pregnant for having attended the maternity clinic, consistent with 2017-18.
- **Notable variance:** There were a total of 21 patients over the course of the year who switched to the care of a midwife, an increase from the 13 who transferred care in 2017-18.
- **Notable trend:** There were 59 C-Section assists performed for midwives, an increase over the 46 performed in 2017-18. This number continues to trend upward in the multi-year statistics and now sits at the highest level since the clinic opened.
- There were a total of 72 call-outs logged for non-CMC patients, the same number as was recorded in 2017-18.
- The CMC roster was comprised of, on average, 10 physicians during 2018-19, an increase over the average of 8 in 2017-18. The year ended with 11 physicians on the roster.

YEAR OVER YEAR COMPARISONS, 2011-2019

Measure	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Multi-year Average
Average active patients per month (antenatal)	168	165	142	157	151	148	154	143	154
Total patients <i>Expressed as running total and net new for the year; includes charts for babies delivered *</i>	979	1525 <i>Increase: 546</i>	2003 <i>Increase: 478</i>	2501 <i>Increase: 498</i>	2970 <i>Increase: 469</i>	3457 <i>Increase: 487</i>	3960 <i>Increase: 503</i>	4417 <i>Increase: 457</i>	--
New patients (yearly total) <i>Monthly average</i>	357 (30/mo)	319 (26/mo)	297 (25/mo)	325 (27/mo)	328 (27/mo)	311 (26/mo)	314 (26/mo)	274 (23/mo)	316 (26/mo)
% new patients GP-referred	85%	87%	86%	80%	71%	56%	54%	49%	71%
Total different patients seen each month	235	238	208	222	214	214	219	205	219
Average patient visits per month	<i>Stats not avail</i>	<i>Stats not avail</i>	372	404	396	410	390	389	394
Average unattached patients per month	3	3	4	3	3	6	5	5	4
Total patients attached	112	118	84	130	96	98	118	72	104
% active patients who are Indigenous	23%	34%	32%	33%	33%	34%	25%	30%	31%
% Indigenous patients from Penelakut	11%	10%	19%	17%	16%	9%	13%	14%	14%
Total CMC deliveries	289	262	225	234	231	227	235	221	241
Percentage of deliveries at CDH	51%	45%	45%	44%	44%	40%	42%	41%	44%
C-sections, elective <i>Expressed as % of total CMC deliveries</i>	6%	12%	6%	7%	10%	10%	7%	6%	8%
C-sections, non-elective <i>Expressed as % of total CMC deliveries</i>	18%	18%	13%	11.5%	17%	14%	19%	15%	16%
Deliveries <37 weeks <i>Expressed as percentage of total CMC deliveries</i>	11%	13%	8%	8%	7%	8%	9%	5%	9%
Patients who switched to midwife <i>Expressed as total # and as % of new patients for the year</i>	22 (6%)	24 (8%)	18 (6%)	14 (4%)	8 (2%)	18 (6%)	13 (4%)	21 (8%)	17 (6%)
C-section assists for mid-wives	15	14	34	26	40	48	46	59	35
Call outs for non CMC patients	n/a	n/a	64 <i>Extrapolated</i>	43	51	67	72	72	62

** The total number of patients will reflect the number of patient charts held by the Cowichan Maternity Clinic – repeat patients will not be counted twice, which therefore skews year one higher than subsequent years.*

CMC SUMMARY

The CMC data and data collection processes are well established and operated smoothly throughout the 2018-19 year. The resulting statistical analysis has been sufficiently comprehensive to provide an effective summary of clinic operations, and for CVDFP to support the CMC in achieving certain strategic priorities; specifically, documenting outcomes and program trends, and supporting discussions around operational models and clinic sustainability.

Overall trends and variances have been highlighted on the preceding pages, and can be observed in comparison table found on page 15. Cumulative data shows generally consistent overall volumes and outcomes; however, a few areas have been identified that show more significant changes over the 6-year period between April 1-2013 to March 31-2019*:

- Patient volumes
 - At 274 new patients for the year, this number is the lowest since the clinic opened in 2011.
 - Similarly, the average number of discrete patients seen in a month stands at 205, the lowest since opening.
- Percentage of GP referrals
 - The proportion of new patients who are referred by GPs has continued to trend downward.
 - This number has declined from a high of 87% in 2012-13 to 49% in 2018-19.
- Indigenous Patients
 - The total number of new Indigenous patients in 2018-19 was 53, a decrease from 65 in the previous year. However, this may be reflective of the overall decrease in patient volumes.
 - Conversely, the percentage of active patients who identified as Indigenous increased to 30%, stabilizing to more normal levels after a six year low of 25% recorded in 2017-18.
- Unattached Patients
 - The total number of patients attached has decreased significantly this year from a high of 118 in the previous year to 72 in 2018-19.
 - There were two unattached patients reported through ER admission this year.
- Delivery Volumes
 - At 221, total CMC deliveries were the lowest since the clinic opened, although as a percentage of total deliveries at Cowichan District Hospital, 41%, CMC deliveries were close to the eight year average of 44%.
 - Non-elective C-sections decreased from 19% of total CMC deliveries in 2017-18 to 15% in 2018-19.
 - Elective C-sections also decreased slightly from 7% of CMC deliveries in 2017-18 to 6% in 2018-19.
 - 95% of all CMC deliveries were at or over 37 weeks, an increase over the 91% recorded the year prior at the highest percentage since the clinic opened.
- C-section assists provided to mid-wives
 - The number of C-section assists provided to midwives has increased again this year to 59, compared to 46 the year prior and represents the highest level recorded to date.
- Transfer to midwives
 - The number of CMC patients who transferred care to a midwife increased measurably in 2018-19 to 8% of new patients, compared to 4% the previous year.

** In 2015-16, a review of early data compiled by Impact BC identified some potential inconsistencies in the data analysis between years one and two. Accordingly, certain multi-year trends are summarized starting with the 2013-14 year.*

Data Summary

Recruitment & Retention Program

INITIATIVE OVERVIEW

The R&R portfolio is comprised of two main components: physician recruitment and a locum program. While the main focus of this initiative is to fill vacancies in full service family practices within the CVDFP catchment area and to secure locum physicians for the region, the portfolio incorporates a broad scope of inter-connected services, including:

- Promoting the Cowichan region via various marketing efforts, including online presence and print media
- Participating in an Island-wide recruitment strategy, and collaborating on regional recruitment activities
- Collaboration with the health authority regarding individual physician recruitment needs, potential new recruits, and international medical graduates
- Proactive engagement of family practice residents, medical students and IMGs
- Creating greater connectivity to new and established physicians through interpersonal engagement
- Providing recruitment supports for clinics actively seeking to fill vacancies
- Providing support and resources for physicians seeking locum coverage
- Providing general supports and resources intended to keep Cowichan an appealing place for established full service family doctors to practice
- Hosting events and programs to support interaction and collegiality among the Cowichan medical community

DATA COLLECTION PROCESS

Recruitment related data is collected and documented by the Recruitment Coordinator in real-time, providing a readily available snapshot at any point in time. This is particularly useful as initial contacts may not make a final determination regarding practice community for many months, potentially skewing data and leaving outcomes unknown.

All potential leads and incoming communications are connected to the Recruitment Coordinator to ensure no gaps in data or in processes. Data fields include source of contact, scope of engagement with CVDFP, region the physician is coming from, whether they are an IMG, and final outcome of their inquiry. The breadth of the statistics help the Division to track the gaps and successes, but also to understand where best to commit resources for positive outcomes.

All incoming data and data formulas are reviewed for accuracy prior to being extracted for inclusion in the CVDFP master data sheets.

Protection of personal information

- *No patient identifiers are included in the locum or recruitment data processes; physician names are removed from statistical summaries and any publicized reports.*

LOCUM PROGRAM

Program format:

The current locum program, implemented April 2016, is comprised of a list of locum physicians actively practicing in the community; the list includes locums' contact information, scheduling availability and other pertinent information. This internal and confidential list is provided to CVDFP members upon request; physicians then contact locums directly to arrange coverage.

The program uses minimal staff time and requires fewer CVDFP resources than the previous program which employed a specific Locum Coordinator. It is also less restrictive than the original program as user policies are no longer needed to govern the equitable distribution of locum resources. It should be noted that not all locum physicians in the region appear on the list. Some locums have their own established networks or locum specifically at one clinic and do not require additional opportunities. Division staff stay in regular contact with locum physicians and ensure their awareness of the CVDFP program.

After a lull during the 2017-18 year, interest in the locum list, both by users and participants, is begin to grow again. Notwithstanding, requests for the locum list, as seen below, will be understated due to a change in staffing for six months of the 2018-19 year when this data was not captured. There is no reasonable way to extrapolate this information, so only the hard data on hand has been reported. By the time of publication, a new secure method of continually sharing the current list with local physicians had been established through use of the Pathways resource, and these particular data comparisons will likely be discontinued in future.

Locum program volumes

- The locum list started and ended the 2018-19 year with 7 participating locum physicians, the same as in 2017-18.
 - There were a maximum of 9 participating locum physicians during the year.
 - There were a minimum of 2 participating locum physicians during the year.
 - Of the 7 physicians on the list at the beginning of 2018-19, only two remained at the end of the year. The additional 5 locums on the list at the end of the year were net new, all of whom were new to the region.
 - Of the five locums who departed the list during the 2018-19 year, the majority either relocated, or were not permanent residents of Cowichan and returned to or settled in other regions. In two cases, the locums did not do hospital work, which may have limited their opportunities locally; and one of the out of town locums passed away. Another locum moved into a regular family practice position.
- In 2018-19 there were 5 different GPs who inquired about the locum list, statistically down 38% from the 8 inquiries in 2017-18.
 - These 5 inquiring GPs were from 5 different clinics, down 29% from the 7 different clinics who inquired in 2017-18.
 - With an average of 19 GP clinics in the region, this shows that 26% of clinics have connected with CVDFP about the locum list, down from the 35% recorded in 2017-18.
 - With an average of 86 GPs in the region, statistics show that only 6% of individual GPs have availed themselves of this resource.
 - The highest demand for the list in 2018-19 occurred in March 2019 with 2 requests received, compared to a similar level seen the previous year, in both May and June 2017. There appears to be no particular trends emerging around this statistic, likely due to the individuality of coverage needs.

RECRUITMENT & RETENTION

Program format:

The focus of the Retention & Recruitment Committee continues to be the recruitment of full service GPs and locum physicians for the region.

CVDFP has continued to engage with both local and regional partners, supporting and benefitting from the collaborative island-wide network, while the Cowichan R&R group continued to plan and host local recruitment/retention events and promotional activities to highlight the unique attributes of the local region.

Recruitment volumes

- There were a total of 11 family physician postings during the 2018-19 year.
 - 7 of these postings were traditional full service family practice opportunities, an increase over the 5 openings the previous year.
 - Of these 7 full service family practice openings, 5 were carried forward from the previous year; 2 new opportunities arose.
 - 2 of the 11 postings were for two blended walk-in/family practice positions.
 - 2 of the 11 postings were for contract (salaried) positions through Island Health.
 - It is noted that a number of clinics appear to have continual postings, despite successful recruitment of physicians; this is likely due to the number of IMG physicians recruited, many of whom do not stay in the community beyond the end of their contracts.
- The Cowichan community saw 7 GPs new to the region begin practicing in the community during 2018-19, a significant decrease over the 15 new GPs seen in 2017-18.
- Of these 7 new physicians, CVDFP was peripherally involved in securing 4 for the region, while 3 were directly recruited.
- Of these 7 new physicians:
 - 6 were confirmed as International Medical Graduates on either a 2 or 3 year return of service program.
 - 1 was an established GP relocating from another region.
- Of the 7 new GPs:
 - 4 assumed vacated full service family practices
 - 1 joined an expanding multi-physician full service family practice
 - 2 joined developing, blended model practices (full service family practice plus walk-in services)
- The region saw several additional changes in GP practices through the 2018-19 year:
 - 1 full service GP left regular practice to work as a remote locum (vacancy filled by IMG)
 - 2 full service GPs left regular practice and relocated to other regions; 1 relocated elsewhere in the province (vacancy filled by a previous locum), 1 relocated overseas (vacancy filled by IMG)
 - 2 full service GP retired from regular practice; 1 left the region (practice absorbed by other physicians within the practice), 1 moving into locuming (vacancy filled by IMG)

Promotional activities

- CVDFP organized a community cycle tour and social event, intended to engage family practice residents from Cowichan and both the Nanaimo and Victoria programs, as well as established community physicians, both family doctors and specialists. The event was very successful with a total of 26 participants in at least one portion of the event. Of those:
 - 12 were established family physicians
 - 2 were established specialist physicians
 - 1 was a Cowichan Family Practice R2 Resident
 - 1 was a medical student
 - 10 were family members
 - 5 staff members were also in attendance at some portion of the event, but are not included in attendance counts.
 - Despite not attracting potential new recruits, the event was deemed a very worthwhile engagement event, benefiting existing physicians. It is intended to be an annual event.
- CVDFP also held an engagement dinner for Cowichan based residents and students. The event was attended by 3 residents, 4 year-three students, and 12 established physicians.
- There were a number of promotional materials purchased through the year, including: recruitment posters, banners for display at conferences, and a range of CVDFP-branded items for distribution at recruitment events.
- CVDFP placed 1 print ad during the 2018-19 year in the Canadian Medical Journal.
 - There were no specific responses recorded as a result of this marketing effort.
- CVDFP attended the annual Canadian Association of Staff Physician Recruiters (CASPR) conference in Ontario
 - There were no direct benefits recorded as a result of this marketing effort.
- **Notable variance:** There were a total of 11 new contacts made with GPs or family practice residents potentially interested in moving to Cowichan, compared to 38 in 2017-18.
 - Although this number is considerably lower, it is more in line with the previous year (18), and is likely due to several factors:
 - The data was not fully recorded during the first part of the year due to staffing changes
 - The contacts were differently defined in 2017-18, when all candidates referred to the regional team were counted, but only a portion of those actually connected with Cowichan
 - Lastly, the way in which candidates were shared with communities by Island Health changed, where only those candidates with specific interest in the region were referred
- Of the 11 connections made:
 - 3 were referred directly by Island Health; 1 of whom was enrolled in a Return of Service Program
 - 2 were referred by Health Match BC
 - 1 was referred by other Divisions of Family Practice
 - 2 were referred by another community physicians
 - 3 reached out to the Division directly; 1 was already a member who had been on maternity leave, 1 was acquainted with a member of CVDFP staff, 1 was specifically interested in the community following election of a Green party MLA.
- The CVDFP recruitment team hosted 3 GPs for community site visits, all of whom ultimately decided to settle in Cowichan.

YEAR OVER YEAR TRENDS

With changes in staffing and a disruption of data collection processes, year over year trends cannot be accurately captured for the current report. However, broader R&R processes are under development to both document CVDFP methods and capture outcomes. Future years' data capture should be more consistent and more readily compared.

R&R SUMMARY

Locum Program

Data associated with the Locum Program is minimal. The only hard data available is the number of participants, the level of which stayed the same over the year, and the number of requests for the locum list. While statistically the number of requests decreased significantly for the 2018-19 year, this is likely attributable to the change in collection processes and the fact that clinics will not necessarily repeat the request every year. At the time of writing, the list had been posted to a secure, community wide web-based resource, Pathways. Accordingly user data will not be collected going forward.

The program has proven to be an efficient use of resources in that it requires minimal manpower commitment, and requires no specific policies to regulate its use. It provides maximum flexibility to locum participants and physician users. Therefore, despite a lack of quantifiable data, the program is showing itself to be successful and should be continued. Efforts should focus on building the participant list through engaging new and interested physicians in the community.

Recruitment Program

As noted above, the 2018-19 year suffered some data disruptions and therefore cannot be effectively statistically summarized. However, numerous relationships have been formed and strengthened, providing broader resources to CVDFP staff and potential new recruits, along with a more streamlined processes. From that perspective, the portfolio continues to grow and strengthen.

Long term statistical trends will likely take several more years to form, but the measures and processes are established and work is underway to maximize efficiencies within those processes. The addition of a dedicated Recruitment & Retention Coordinator to CVDFP staff has resulted in many positive developments and stability for the portfolio.

Data Summary Patient Attachment

INITIATIVE OVERVIEW

CVDFP Patient Attachment efforts are embedded in number of established initiatives including the programs identified earlier in this report, including: FPHSP and CMC.

In addition to these program-specific attachment mechanisms, during the 2015-16 year, CVDFP implemented a public-facing, dedicated attachment service, offering a resource to patients in need of a family doctor who would not otherwise be captured through one of CVDFP's other programs.

The first iteration was a toll-free number that would direct eligible callers to the two clinics nearest their geographic area that were accepting patients. Due to administrative difficulties with the third party call service, the call line was transitioned in-house in 2017.

Diminishing family practice capacity made it difficult to find solutions for the number of individuals seeking a physician, and the call line became labour intensive and challenging. The service was then transformed during the 2018-19 year to a self-serve, online mechanism, using a survey platform to collect user data.

DATA COLLECTION PROCESS

Data on the number of patients attached is collected through the established data frameworks described and reported throughout this document.

With the exception of a single clinic, patient attachment is no longer tracked at the practice level and therefore is not included in this report.

Data associated with GP for Me Referral Service is collected through the use of a survey tool and exported into usable data summaries over relevant periods of time.

Protection of personal information

- *Although PHN (Personal Health Number) and MHRs (Medical Health Record) are included in several of the data collection instruments, patient names are not included in any of CVDFP's data collection processes.*
- *Patient identifiers such as PHN and MHRs are held in raw data form only and are not included in any data summaries or other publicized reports.*
- *With the switch to a self-serve mechanism, the GP for Me Referral Service no longer collects any personal information beyond geographic area, which cannot be used to identify an individual.*
- *All data is stored securely and is used only by authorized CVDFP staff.*
- *Data is shared only as necessary for data assessment purposes or in specific instances where troubleshooting is required.*

TRENDS & COMPARISONS

GP REFERRAL SERVICE

Patient Attachment

Despite attempts over the years, there is no viable mechanism by which to confirm attachment of GP Referral Service users.

Scope of data

Information collected is limited to GP participation and user data, collected through the use of a survey platform to create the online mechanism. The service switched from a call-in number to the online tool in September of 2018. Due to limitations of the call in service and associated struggles in collecting quality, consistent data, the months of April through August have been excluded from the summary.

GP Participation

- The 2018-19 year began with 1 GP practice on the referral roster, and ended with 2.
 - The two practices on the roster at the end of 2018-19 were located in Lake Cowichan and Shawnigan Lake, with each only accepting patients from their respective regions, creating considerable limitations on the service.
- **Notable trend:** Since the implementation of the GP referral service in May 2015, the participant levels have steadily declined from 12 participating clinics, to a low of 1 (currently 2).

User Volumes

- In 7 months of operation (September to March), the Referral Service saw a total of 421 users.
- **Notable variance:** There was an average of 60 users per month, significantly higher than the 33 incoming communications recorded in 2017-18.
 - There was a high of 96 users in March 2019, significantly above the high of 66 recorded the previous year (January 2018).
 - There was a low of 13 users in September 2018; however, given that September was transition month between the call line and online service, this number is disproportionately low. The next lowest number of users occurred in December 2018 at 41, significantly above the low of 12 recorded in the 2017-18 year (April 2017).
- Of the 421 users, 19% reported they had previously tried using the service.
- Of the 421 users, 2% indicated they did have a family doctor, at which time the survey would have ended.
- **Promotion and awareness:** Of the total users...
 - 51% learned of the service via the CVDFP website.
 - 18% learned of the service via word of mouth.
 - 14% learned of the service via a physician's office.
 - 17% learned of the service through other means, primarily 811 service (10%) and Cowichan District Hospital (3%).
- **Geographic distribution:** Of the total users...
 - 37% identified as living in the central Duncan region.
 - 25% identified as living in the Mill Bay region.
 - 18% identified as living in Ladysmith.
 - 11% identified as living in Chemainus.
 - 9% identified as living in Lake Cowichan.

YEAR OVER YEAR TRENDS

GP Referral Service

The number of users of the GP Referral Service grew significantly in 2018-19 year when compared to the previous year, and returned to levels more consistent with the two years prior, despite no targeted advertising or promotion associated with the switch to an online mechanism. This speaks to the ease of finding information online, further supported by the statistics around promotion and awareness, and is likely reflective of a growing Cowichan population.

Despite continued promotion of the service to the family practice community, GP participation has continued to be extremely low and concerns regarding the sustainability of the service remain.

Other Attachment Mechanisms

Attachment achieved through other FPHSP and CMC are reported in detail earlier in this report.

ATTACHMENT SUMMARY

GP Referral Service

Transitioning the GP Referral Service to an online self-serve mechanism has been an effective use of resources, and by using a survey platform as the basis of the tool, has made for easy data capture. With few variables, the quality of the data is high and is always available in a summarized format. Unlike the call line, the online mechanism requires minimal investment of time; however, with so few participating practices, there are regular instances of individuals reaching out directly to CVDFP staff for assistance.

After years of attempting various iterations of the GP for Me referral service, there is solid evidence that there is insufficient family practice capacity within the community to continue supporting such a service. It is hoped that the development of a Primary Care Network in Cowichan will offer an opportunity to revisit the approach to patient attachment for the community.

Information Technology Program

With no further expansion of the CVDFP Prevalence Data Dashboard through the 2018-19 year, there is no IT data summary included in this report.

At the time of writing, CVDFP had joined two other Island Divisions of Family Practice to implement the Pathways resource in the community. User statistics are expected to be captured in future data reports.