Victoria Division of Family Practice
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GPSC
General Practice Services Committee

Victoria And South Island Divisions Of Family Practice

Patient Summaries Pilot

September 2021

Executive Summary

This report presents findings from a case study of *the Patient Summaries Pilot,* delivered in Victoria, British Columbia, from September 2015 to July 2019. This case study covers the development of the patient summaries pilot over the first four years of operation, describing the pilot implementation, local network of project partners, technical components of the patient summaries' development, provider perspectives, and project outcomes. A discussion of the conditions for success is included. As part of the General Practice Service Committee's (GPSC) ongoing evaluation of Patient Medical Home (PMH) initiatives in BC, this case study helps to build a provincial picture of PMH innovation and implementation. Additional GPSC case studies can be found here.

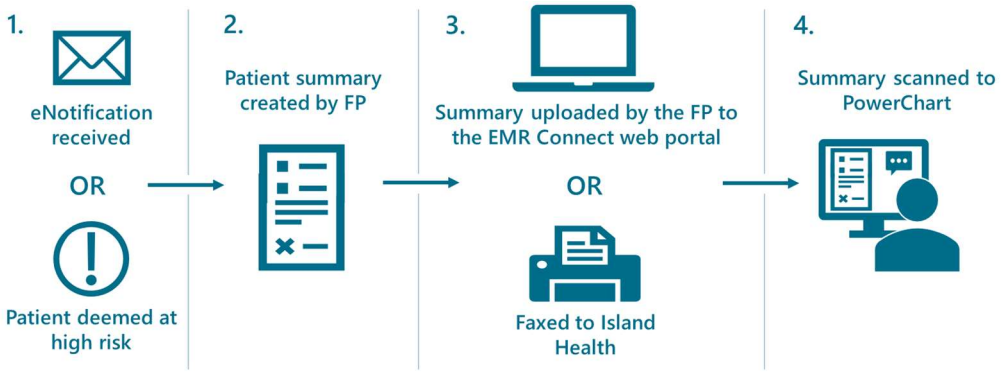
Background

The Patient Summaries Pilot was a key activity within the larger Victoria/ South Island Transitions in Care (TiC) project. It was overseen by the Victoria and South Island Divisions of Family Practice, in collaboration with Island Health. The pilot was funded through the Shared Care Committee, a partnership between Doctors of BC and the Government of BC. The summaries project is a continuation of the eNotification[1] project that began in the Victoria and South Island communities in 2013. eNotifications were sent from hospitals to community physicians, triggered by patient admissions, deaths in hospital, and discharges from hospital. The eNotifications were designed to improve the informational continuity between hospital and community settings, and to support care for frail, vulnerable, or chronically ill patients by sharing timely and relevant information between health care providers. The content of the eNotification initially provided patient identifiers, facility identifiers, a number to call for an exact patient location, and instructions if the notification was in error. However, due to technical limitations, no clinical information could be included in the alert, a major limitation when relaying information for complex patients.

As the use of eNotifications expanded, both family physicians and hospitalists realized that the notifications were highly beneficial to patient care. The limitations of the technology involved with the notifications prompted providers to explore more advanced options for sharing critical information. The exploration process lead to the creation and development of the patient summaries pilot, a more sophisticated communication process than the existing eNotifications. The pilot project supported family physicians to create and share summaries of their patient's medical history with hospital-based clinicians at two hospitals in Victoria, BC: Royal Jubilee Hospital and Victoria General Hospital. The pilot was conducted in three cycles: Cycle 1 (September 2015 to March 2016); Cycle 2 (October 2016 to April 2017); and Cycle 3 (April 2018 to July 2019). Summaries were initially shared via fax, and later via direct electronic upload to PowerChart, the hospital's EMR. The process is shown in Figure 1 below.

[1] eNotifications: Hospital physicians could leave a notification on the hospital information system, Cerner, which then sent the notification to an external software platform. The platform could then send the notification to a FPs EMR, or make the notification available for FPs to access on the platform if the FP either did not have an EMR, or their EMR was not compatible.

Figure 1: The final process for sharing patient admission summaries



Methods

The case study drew on data from multiple sources, collected from September 2015 through October 2019. Sources included: data from Island Health on the number of summaries sent; project documents; survey and interview data gathered from family physicians and hospital clinicians; and clinical outcome data from Island Health for patients who had a patient summary and those who did not.

Findings

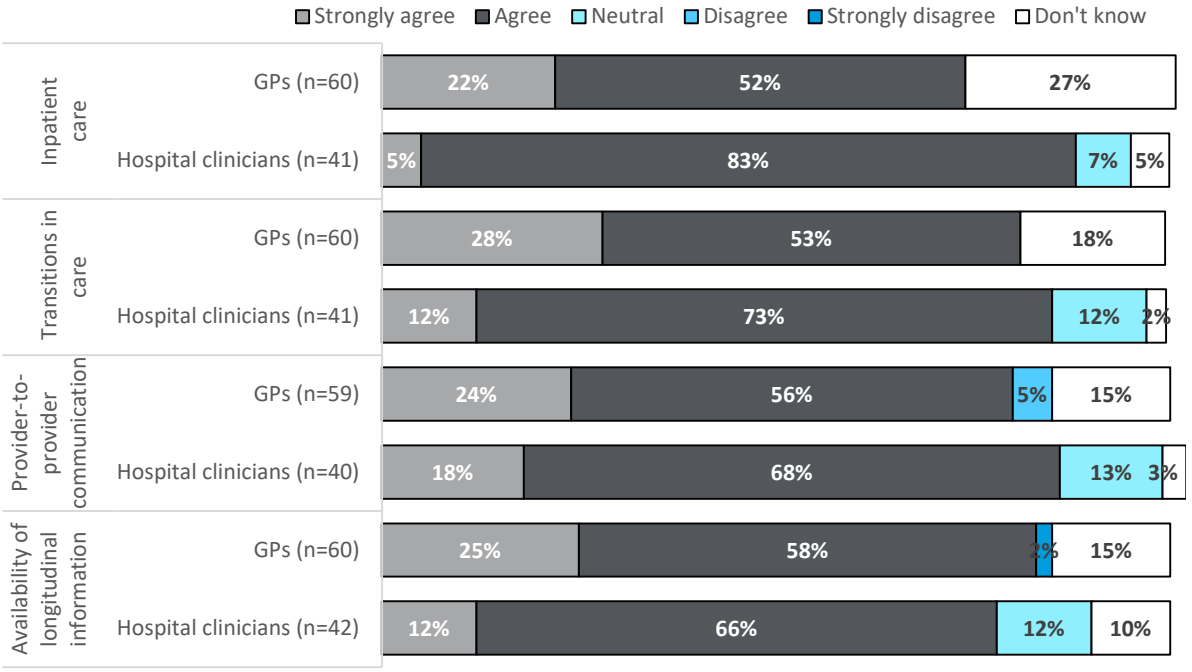
Overall, a total of 486 family physicians (FPs) from across Island Health submitted patient summaries between April 2017 and October 2019, more than four times the original 101 FPs formally invited to participate in the pilot. Across the three project cycles, more than 5,000 summaries were sent[2]. More than 10% of summaries sent from September 2018 to October 2019 were from FPs located outside the South Island region, and not remunerated pilot participants, indicating the breadth of the project's innovation spread. The number of summaries sent and the number of FPs sending summaries increased throughout Cycle 3. FPs continue to create patient summaries, even after the pilot ended in July 2019. More than three quarters of hospital clinicians surveyed after the end of Cycle 3[3] (76%, n=68) had seen a patient summary in PowerChart. Of these, 81% had used a summary to inform a patient's care.

Physician Perspective

Feedback from FPs and hospital-based clinicians surveyed indicated that the patient summaries pilot had been a valuable use of their time, and had a positive impact on patient care, data access, and provider-to-provider communication (Figure 2). Hospital clinicians used the summaries to learn about past diagnoses and tests, as well as a patient's social history and family information. Hospital clinicians reported the summaries being particularly useful for cognitively impaired, non-verbal, and complex patients.

[2] Tracking for Cycles 1 and 2 was completed manually by physicians. Given the manual tracking process there is likely some undercounting due to physician omission.
[3] In September 2019

Figure 2: Proportion of FPs and hospital clinicians who agree that the patient summaries pilot improved intended aspects of care (Cycle 3)



Family physicians reported the value patient summaries had on their work, and how summaries helped them to feel more connected to their patients' care, which was particularly true when hospital staff had contacted FPs for additional information, or when hospital staff shared examples of when they had used the patient summary to support patient care. In the evaluation of Cycle 2 of the pilot, 100% of FPs surveyed (n=30) indicated that the patient summaries pilot had been a valuable use of their time.

> *"Now that this is happening, it seems ridiculous that it hasn't always been happening. It really helps me not to have to race to the hospital, it helps the patient by sharing what we know about them when they may be less able." — Participating FP*

Patient Impact

Across the three cycles, FPs provided numerous examples of how patient summaries had been used to inform patient care. Uses of patient summaries included: informing providers of severe allergies, providing information on histories of mental health and substance use concerns, and providing information on recent diagnosis, such as a Transient Ischemic Attack, which were later used to inform patient care. The impact of patient summaries on length of stay and 30-day readmission rates was explored[4]. Patients with a patient summary were less likely to have met expected length of stay targets and were also more likely to be Long Stay Outliers when compared to similar patients without a summary. This finding suggests that patients determined by physicians to benefit from a summary may

[4] Using data from Island Health's EHR and Discharge Abstract Database

represent a higher degree of complexity than those without a patient summary and need longer stays in hospital. There was no difference in 30-day re-admission rates for those with or without a summary.

> *"This was and is a great project, meaningful and impactful for family physicians giving us a voice in our patients acute care. It has also created a nice collaborative relationship with our hospital colleagues and more than all of this it facilitates improved patient care." — Participating FP*

Success Factors

Data collected through this case study provided insights into activities that enabled success, including how to best support FPs to create and share patient information, and how to support hospital clinicians to use this information effectively. Success factors are listed below:

1) Establishment of regional relational supports

- High-functioning working groups were formed and maintained over the long-term. Working groups consisted of family physicians, hospitalists, Division staff, allied health, an external evaluator, and Island Health representatives.
- Highly flexible and cooperative relationships between Island Health, the Divisions, and clinicians in hospital and community were developed and nurtured. Group members committed to work together collaboratively.
- A long-term project manager with a diverse set of responsibilities was installed to support the project. She had expertise in project design, quality improvement, facilitation, stakeholder engagement, and evaluation design and implementation.

2) Active use of patient summaries by hospital-based clinicians for patient care

- Continuous improvement cycles identified challenges in accessing and using patient summaries at the hospital in early pilot cycles. Processes were created to resolve identified challenges.
- EMR-compatible templates were developed (for IntraHealth and OSCAR EMR systems), supported by new partnerships with EMR operators. Summary format and content were standardized and made easier to use.
- Education videos produced by project staff encouraged hospital clinicians to access and use summaries.
- Proactive summaries were made accessible for Emergency Department encounters.
- The EMR Connect web-portal enabled direct upload to PowerChart, making the summaries instantly available to hospital-based clinicians, and with a clear indicator on PowerChart when this information is available.

3) High physician participation and physician champions

- In addition to the 100+ physicians officially part of the pilot, an additional 385 FPs external to the pilot began sharing summaries. Pilot physician participants discussing the project with colleagues, promotion of the summaries at regional forums, and written memos in electronic admission notifications about how to transmit summaries were cited as contributors to the expanded uptake.

4) Supports and remuneration provided to FPs for creating and sharing patient summaries.

- EMR-compatible templates were developed for patient summaries (for IntraHealth and OSCAR EMR systems). FPs using those EMRs reported that they could create summaries more easily and efficiently than with the previous methods of faxing.
- The EMR Connect web-portal, developed by Island Health for Cycle 3, enabled FPs to upload summaries directly to PowerChart (Cycle 3).
- FPs were remunerated for creating and sharing summaries, with different remuneration models tested in each cycle. FPs reported that remuneration enabled them to prioritize and protect the time necessary to create and share summaries.

Conclusion

The *Patient Summaries Pilot* was successful in engaging FPs to create patient summaries: by the end of the pilot, more than four times the number of FPs recruited to the pilot were known to have sent in at least one summary. Summaries were seen and utilized by hospital clinicians, as intended.

Four main factors influenced the pilot's success.

1. Creating IT tools that enabled electronic information exchange, as implemented in Cycle 3 of the pilot, helped simplify the process of sharing summaries, and helped to ensure that these were available to hospital clinicians.
2. A high level of engagement and communication with FPs and hospital staff during the pilot, which included hospital visits, communication with participating FPs, and promotion of the summaries at regional forums, among other methods.
3. IT tool development and ongoing engagement were supported by strong relationships between project partners, facilitated by the Discharge Planning Working Group.
4. The use of Plan-Do-Study-Act improvement cycles for each of the three pilot cycles enabled ongoing process improvements to be made at each stage of pilot project operations.

In sum, patient summaries have been used by hospital clinicians to inform care delivery for patients admitted to hospital; patient summaries were reported to be most valuable when caring for vulnerable patients, such as those with a loss of cognitive function, communication difficulties, and patients with chronic and complex care needs. To that end, the pilot was successful in supporting a key objective of the initiative—improving communication between community- and hospital-based physicians in their shared care of hospital patients.