

Medicine Strategic Clinical Network: Hospital Medicine Section
Know Your Data: Physician Audit & Feedback

Know Your Data Pilot: Executive Summary Report



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Introduction

Background

Following the AHS Review in December 2019, work commenced to investigate Acute Care Utilization across Alberta Health Services, with a view to making care better for Albertans in inpatient settings as outlined in the recommendations by the review.

As part of the planning for the future, it was noted that while physician-led quality improvement initiatives did occur across the province, physicians do not consistently have ready access to key metrics to help inform decision-making for quality improvement purposes on either an individual physician- or a clinical service level.

This paucity indicates a need for collecting, analyzing, and reporting physician-level data to engage physicians in quality improvement and provide performance metrics to physicians to help them translate knowledge into practice and make improvements in the care provided to Albertans.

Opportunity

Supported by the Hospital Medicine Section of the Medicine Strategic Clinical Network, the “Know Your Data”: Physician Audit & Feedback project was launched in December 2020. The program aims to improve data literacy and health outcomes for Albertans by providing individualized physician- and team-level data to help physicians reflect on clinical practice and identify opportunities to make improvements to patient care. More broadly, Know Your Data will also help understand how best to frame and support Audit & Feedback concepts amongst physicians in Alberta.

Know Your Data consists of the provision of physician-level data, plus a quality improvement infrastructure to support individual and team-level data-driven improvements. This is achieved through four different activities:



Reflective Practice Report Review

MDs receive their data on the care they have provided to their patients. MDs conduct self-reflection to “Know Their Data”



Reflective Practice Discussion #1

MDs facilitated in small teams aimed at identifying ways the **team** can improve the care they provide



Quality Improvement Initiatives

MDs work on implementing their top idea(s) through team-level improvement projects



Reflective Practice Discussion #2

MDs facilitated in small teams aimed at identifying ways the **team** can improve the care they provide

The target physician audience for Know Your Data is General Internal Medicine physicians and Hospitalists practicing at the 14 largest adult acute care facilities in Alberta based on activity volume. Pediatrics, locums, and sub-specialty physicians were excluded from our project.

Know Your Data Pilot

Pilot Overview

To provide proof-of-concept for spread and scale to the planned 14 acute care facilities, the Know Your Data initiative was pilot tested in Hospital Medicine specialties (Hospitalists and General Internal Medicine) at four select acute care sites. The Know Your Data Pilot commenced in September 2021 and formally concluded in June 2022. Implementation occurred within General Internal Medicine and Hospitalist physician groups at the following four sites¹, in two phases:

Phase 1: September 2021 – June 2022	Phase 2: April 2022 – June 2022
<ul style="list-style-type: none"> • Foothills Medical Centre (Calgary Zone) • Chinook Regional Hospital (South Zone). 	<i>Pilot expansion to include Acute Care Bundle Improvement (ACBI) pilot sites:</i> <ul style="list-style-type: none"> • Royal Alexandra Hospital (Edmonton Zone) • Peter Lougheed Centre (Calgary Zone).

The pilot tested the first quarter of an annual cycle of Physician Audit & Feedback including:

- A. The ability to deliver a dashboard to physicians showing data at an individual physician, service, site, zone and provincial level.
- B. The ability to conduct an individual Reflective Practice Report Review process.
- C. The ability to facilitate a Reflective Practice Review Discussion resulting in opportunities for improvement for the site to consider.

¹ In addition, during the final stages of the pilot, Red Deer Regional Hospital implemented parts of the Know Your Data process. Using locally generated data (instead of the Know Your Data dashboard), local teams under the support of the Quality Improvement Consultant working at Red Deer Regional Hospital implemented the Know Your Data processes for reviewing data individually and discussing at a team level. This approach provided an opportunity for the Know Your Data project team to test how replicable the Know Your Data processes were with minimal support from the project team.

Pilot Evaluation Overview

Evaluation Objectives

The Hospital Medicine Section of the Medicine SCN collaborated with the Health Systems Knowledge and Evaluation (HSKE) team within AHS to conduct a formal evaluation of the Know Your Data pilot. Given the limited scale and timelines of the completed pilot, the evaluation specifically focused on understanding the various stakeholders' perceptions and experiences with Know Your Data. The objectives of the evaluation were to:

- Assess the implementation process, including the key strategies and activities, at the pilot sites.
- Characterize the achievements (e.g., logistical, relationships, conceptual) realized from the Know Your Data pilot.
- Identify the strengths and challenges from the pilot that can be learned from for the full-scale implementation.

Evaluation of Participation and Approach

Multiple methods of qualitative data collection were employed to capture stakeholder perceptions of the Know Your Data project. Data sources included:

- Participant experience surveys conducted with front-line physicians alongside distribution of the dashboard and following Reflective Practice Review Discussions
- Facilitated debriefs with key project stakeholders: Site Champions, Data & Analytics, the Know Your Data Project Team and Sponsors.

Data from the above sources were analyzed to develop a list of emergent themes. The most prominent or key themes and interpretation of these data were then determined through discussion and consensus among all members of the HSKE and Know Your Data teams.

The Know Your Data dashboard was developed in Tableau and access was granted to 162 in-scope physicians during the pilot. Due to pressures from COVID-19 clinical activity, increased workload in preparation for Connect Care and other competing organizational priorities, Peter Lougheed Centre Hospitalists, Royal Alexandra Hospital General Internal Medicine physicians and Royal Alexandra Hospital Hospitalists postponed implementation of Know Your Data to fall 2022; these physician groups were excluded from the pilot evaluation.

In summary:



Know Your Data Dashboard circulated to 100 Hospitalists and General Internal Medicine physicians at Foothills Medical Centre, Chinook Regional Hospital, plus the General Internal Medicine service at Peter Lougheed Centre



39% of physicians engaged with their dashboards



8 Reflective Practice Review discussions held across both phases of the pilot.



49% of physicians participated in at least one Reflective Practice Review Discussion²



11 tangible improvement ideas generated from the latest 3 discussions at Foothills Medical Centre Hospitalists and Chinook Regional Hospital - Hospital Medicine

Key Findings from the Pilot

The key findings related to the perceived strengths and challenges from the pilot, as well as considerations for to future spread and scale of Know Your Data are summarized below.

Strengths of the Know Your Data Pilot

Participating physicians reported high levels of satisfaction and had generally positive views of the Know Your Data dashboards, in terms of both the nature of data presented and the visualization platform itself. Respondents described the dashboards as functional, easy to understand and navigate. The physician-level data was clearly presented with trends available. Participants appreciated having peer-level, comparative data and felt that the dashboard and self-reflection tool allowed them to identify personal improvement ideas.

With regards to the facilitated discussions, most physicians viewed these sessions as a good use of their time and the majority of participants reported feeling comfortable to engage in these discussions. The participants appreciated hearing more about the data from experts and the candor of improvement-focused discussion through interacting with colleagues. The participants also felt the discussions provided opportunity to discuss systemic issues beyond the clinical service. Importantly, all participants indicated they would attend future facilitated discussions and some participants requested having further discussion sessions.

² Nine physicians attended more than one session, showing acceptance and engagement with the process.

The project Leadership, which focused on building relationships and advocating for all parties involved in the project, was thought to significantly contribute to the pilot's success. In addition, the Know Your Data project team realized a number of achievements that are key to facilitating the implementation of the full-scale project.

These achievements include:

- Better understanding of data availability, integrity, quality and consistency
- Good working relationships in all contexts
- Feasibility of concurrently implementing Know Your Data in multiple sites
- Physician engagement with the concept and experience using data to improve practice
- Incentivized physician participation by linked Know Your Data to CME credit earning

Challenges from the Know Your Data Pilot

Challenges experienced during the pilot included:

- Competing priorities from internal and external factors
- Physician bandwidth to take on Know Your Data
- Project team bandwidth to support testing the processes as part of a “proof of concept” assessment
- Adjustments to scope during implementation phase

Recommendations

Based on the findings from the pilot evaluation, the following recommendations for the full-scale project implementation are proposed:

- Expand Know Your Data into Hospital Medicine Services at the remaining in-scope adult acute care sites in Alberta
- Work with key stakeholders and operational leaders to support expansion through connections into local site initiatives
- Leverage opportunities to integrate Know Your Data with existing and emerging technology and provincial improvement initiatives, where relevant
- Experience during the pilot highlighted the unit of change will be at a physician service level primarily, and at the individual physician level secondarily. Rebrand Know Your Data to place focus on team-level improvements
- Optimize Know Your Data structures by expanding the dashboard to provide additional, auditable metrics based on physician interest.