

# A Standardized Order Set with a Structured Process was Effective in Reducing Unnecessary Bloodwork in the Alternate Level of Care Inpatients

Dr. W. Sia, T. Workineh, B. Romansky, T. Meunier, Dr. J. Minsos, Dr. S. Zia, Dr. N. Bakshi

DEFINE OPPORTUNITY

## Background, Problem Statement and Goal Statement:

### Project Goals:

At the Royal Alexandra Hospital in Edmonton in the Medicine program where there are about 360 beds, we have about 30% of patients who are alternate level of care (ALC) patients (who are waiting in hospital for an institution at a lower level of care). Often the inpatient team neglects to reduce the blood draw frequency as there is no clear process highlighting this.

### Objective:

Our objective was to standardize a process to reduce unnecessary blood work.

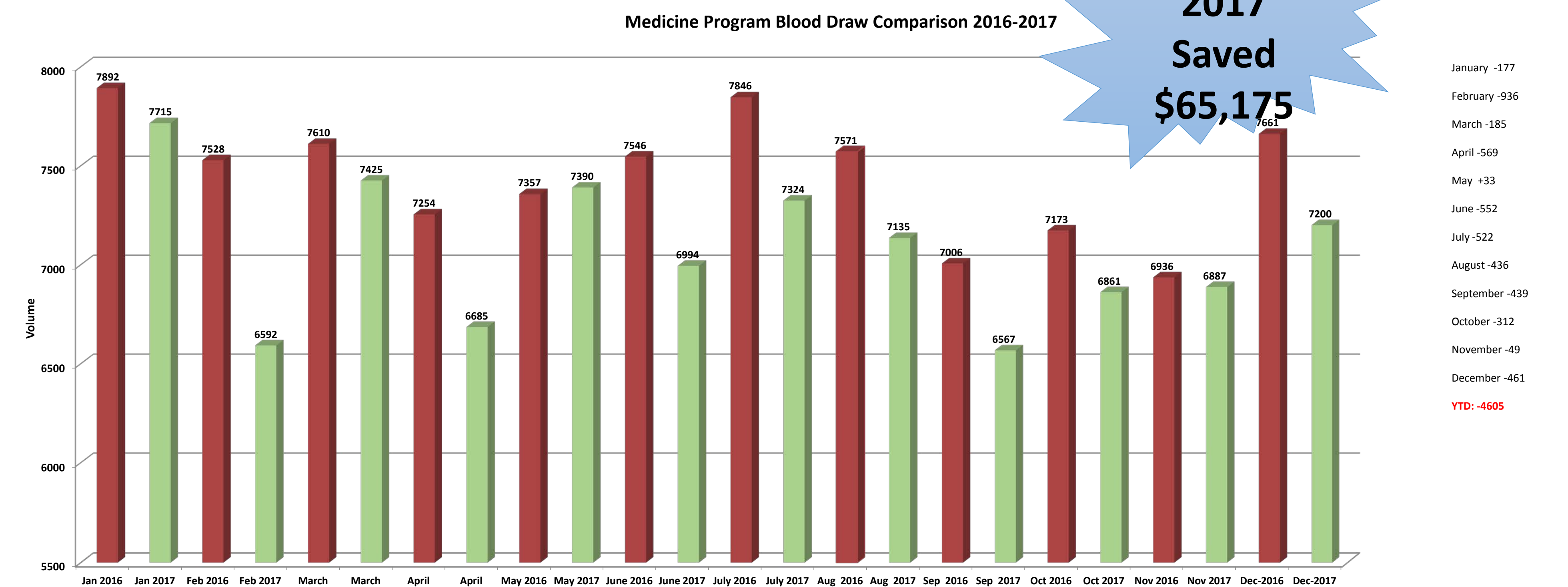
**Challenges:** One of the main challenges was to engage stakeholders in this project including physicians, nurses, unit managers and lab managers

Active stakeholder engagement led to the forming a QI team which co-designed a process employing consensus and iterative plan do study act cycles (PDSA) to determine impact of the intervention in 13 medicine wards over 9 months.

The developed standard label, order book and process was simple yet effective

## Data:

The baseline number of blood draws were calculated for 2016. Since the intervention was implemented in January 2017, there has been an overall reduction of blood draws, which equated to 4345 over 9 months' time. Assuming each lab draw costs about \$15, we have so far saved \$65,175, not to mention the labour cost, time saved, and the blood saved from our patients. The total number of ALC patients remain constant pre- and post-intervention.



BUILD UNDERSTANDING

## Process Assessment:

**Did you know ...**  
**Approximately 25% - 30%**  
**of Medicine Patients are Non Acute.**

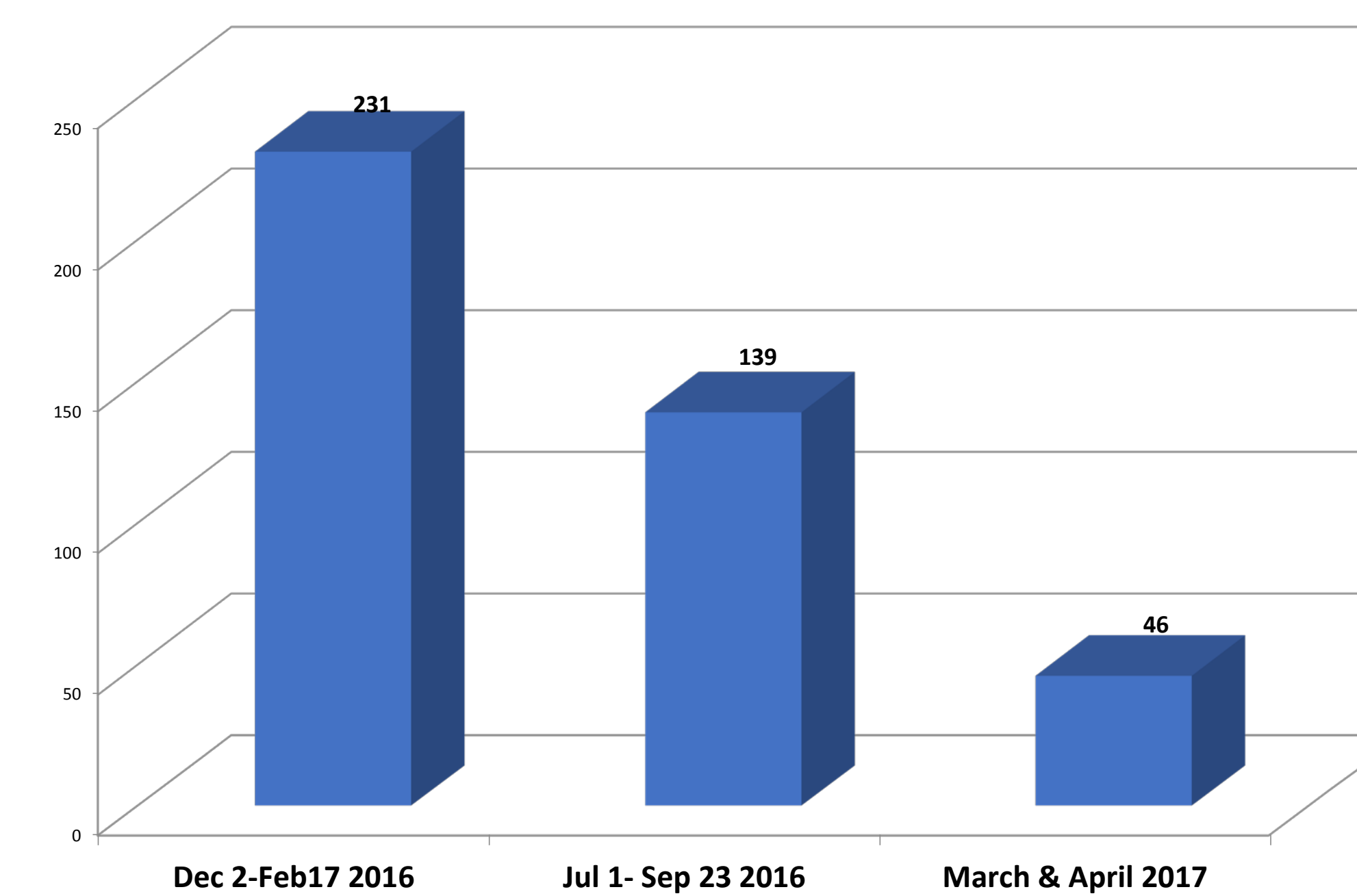
**Approximately 90% ALC Patients**  
**DO NOT NEED**  
**DAILY BLOOD WORK !!!!!**



- The RAH laboratory can perform more than **600** phlebotomies per day.
- **A Non-standardized lab book** = up to 1 minute per patient for a phlebotomist to verify.
- **Standardized lab books** = less than 30 seconds per patient.
- **Standardized lab books = time savings of up to 300 minutes or 5 hours per day.**

## Reinforce Ownership, Measurement, & Continuous Improvement:

### Reduction of Duplicate Lab Orders

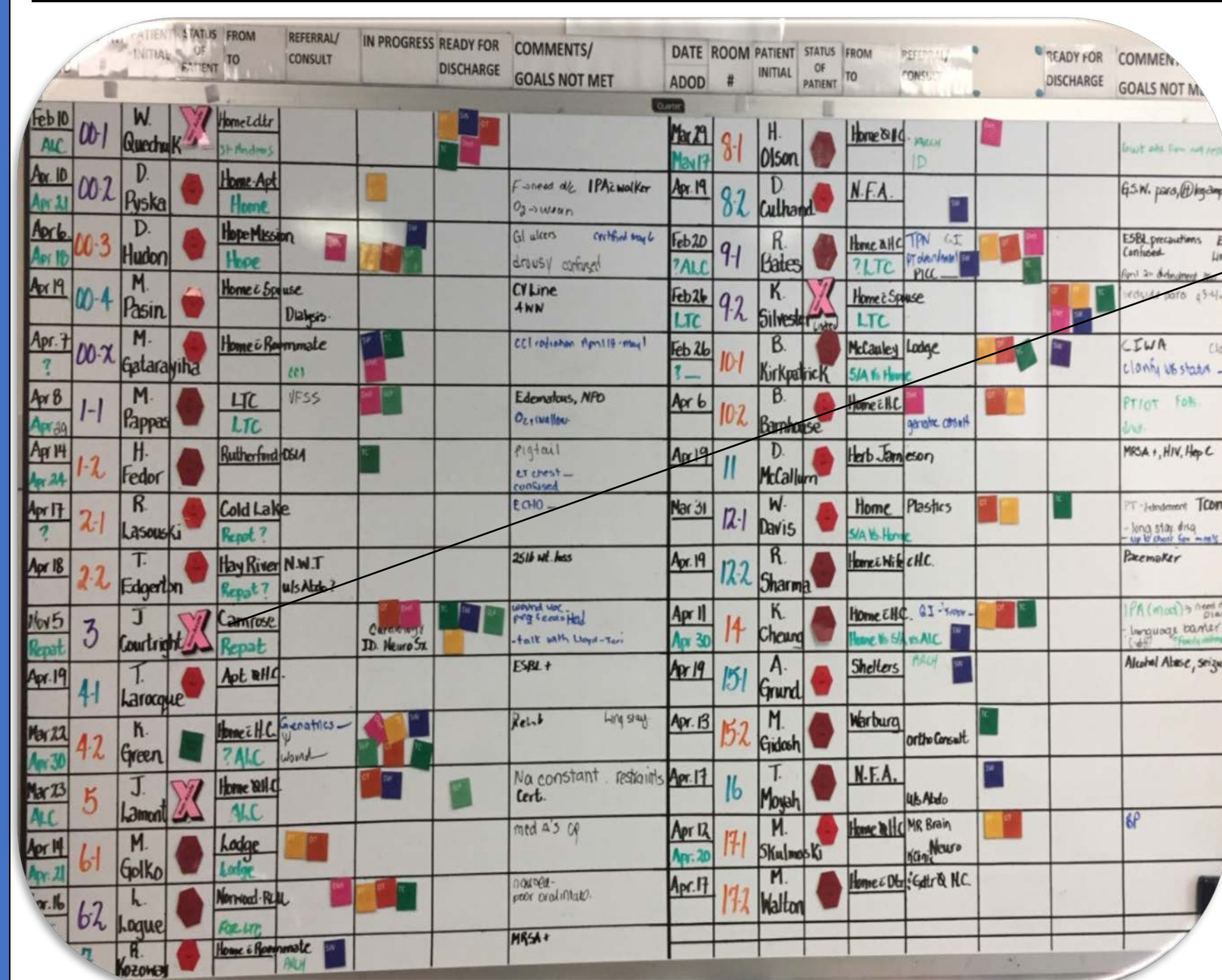


### Focus :

- Staff Education
- Standardized Unit Clerk Handover Days to Evenings
- Improved Physician awareness of existing bloodwork orders

MANAGE CHANGE

## Collaboration & Communication Strategies:



**Non-Acute Status Change**

Date: \_\_\_\_\_ Time: \_\_\_\_\_

• Patient is Medically Non-Acute

• Vital Signs

○ V/S q Weekly (Unless otherwise specified)

○ V/S q \_\_\_\_\_ (Please give rationale for why more frequent)

• Blood Work

○ INR \_\_\_\_\_ (Max 2 times weekly)

○ CBC-D/Lys/Cr \_\_\_\_\_

○ \_\_\_\_\_ Weekly (Monday)

○ \_\_\_\_\_ Every 2 weeks

○ \_\_\_\_\_ (Please give rationale for why more frequent bloodwork)

Physician Signature: \_\_\_\_\_ Date: \_\_\_\_\_

• Transition Coordinator Aware of Non-Acute Status

○ Yes Aware

○ No Not Aware

Alberta Health Services

Physician's Orders & Progress Report

NOTE: Use Ball Point Pen. Press firmly, you are making multiple copies.

Allergies:  None known

Date / Time: \_\_\_\_\_

Orders

Non-Acute Status Change

• Patient is Medically Non-Acute

• Vital Signs

○ V/S q Weekly (Unless otherwise specified)

○ V/S q \_\_\_\_\_ (Please give rationale for why more frequent)

• Blood Work

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Physician Signature: \_\_\_\_\_ Date: \_\_\_\_\_

• Transition Coordinator Aware of Non-Acute Status

○ Yes Aware

○ No Not Aware

## Lessons Learned:

Engaging in frontline staff and using a simple, pre-printed label with order set and incorporating in a standardized process on the ward were effective in reducing unnecessary blood draw in a significant proportion of hospitalized patients and resulting in healthcare cost savings.

Using visual cues was an effective tool that was simple to use and can be widely adopted.

## Why this QI matters To Patients

Reducing inappropriate blood draws saves patients the pain and discomfort and interruptions of "pokes," as well as reduces the potential for irritation, bruising, infection, and nosocomial anemia

## To Albertans and the healthcare system

At the same time, this saves thousands of dollars per year, reduces the workload for hospital & laboratory staff, giving them more time for other core activities supporting patient-centred care.

ACT TO IMPROVE

SUSTAIN RESULTS

SHARE LEARNING

