



CANADIAN ASSOCIATION OF PAEDIATRIC HEALTH CENTRES  
ASSOCIATION CANADIENNE DES CENTRES DE SANTÉ PÉDIATRIQUES



**CAPHC Patient Safety Collaborative**  
*CAPHC-SHN! Paediatric Medication  
Reconciliation Collaborative*

**Medication Reconciliation**  
*Bringing Intervention to Practice*

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# Medication Reconciliation

## *Bringing Intervention to Practice*

Today's presentation will;

- Provide a history of the journey of the CAPHC SHN!- Paediatric Medication Reconciliation Collaborative (PMRC);
- Review the audit data and;
- Summarize the key learnings from the experiences of the PMRC teams.

# The CAPHC-SHN! Paediatric Medication Reconciliation Collaborative (PMRC)

- The CAPHC – SHN! Paediatric Medication Reconciliation Collaborative was initiated in August 2005
- Since August 2005, 17 centres across Canada have established 23 paediatric MedRec teams
- Patient populations vary from children admitted to paediatric wards in community hospitals to complex populations including nephrology, mental health and respiratory medicine within acute care settings
- At a system-wide level the collaborative has made significant progress in **implementing practice change and improving medication safety**

## PMRC: The early days or “Yikes”

- Following the inaugural workshop, sites began to form implementation teams, collect baseline data and establish the groundwork for implementing MedRec
- From these early days it quickly became evident that a process that seemed so simple in concept was going to be very complex and challenging to implement

*“It is recognized that developing a new form, will not by itself improve the medication history and order process and that we will need to look at our work processes. If the changes are perceived to increase or duplicate work, they will not be well accepted”*

## PMRC: *Audit Data*

- Audit data, tracking the changes in medication order discrepancies, is the main outcome measure used to track progress
- Teams began submitting audit data late 2005
- By the end of 2007, 23 teams had begun to submit audit data
- Data collected on a median of 96 patients (range 29 to 712 patients) per team and a total of **4475** patients have been reviewed

## PMRC: *The Baseline Data*

- As teams began to collect data, the audits and the patient stories were making a strong case for MedRec
- Baseline audit data was collected on a median of 20 patients (range 10 to 94) per team - a total of 635 patients were reviewed

## Baseline Data: *the stories*

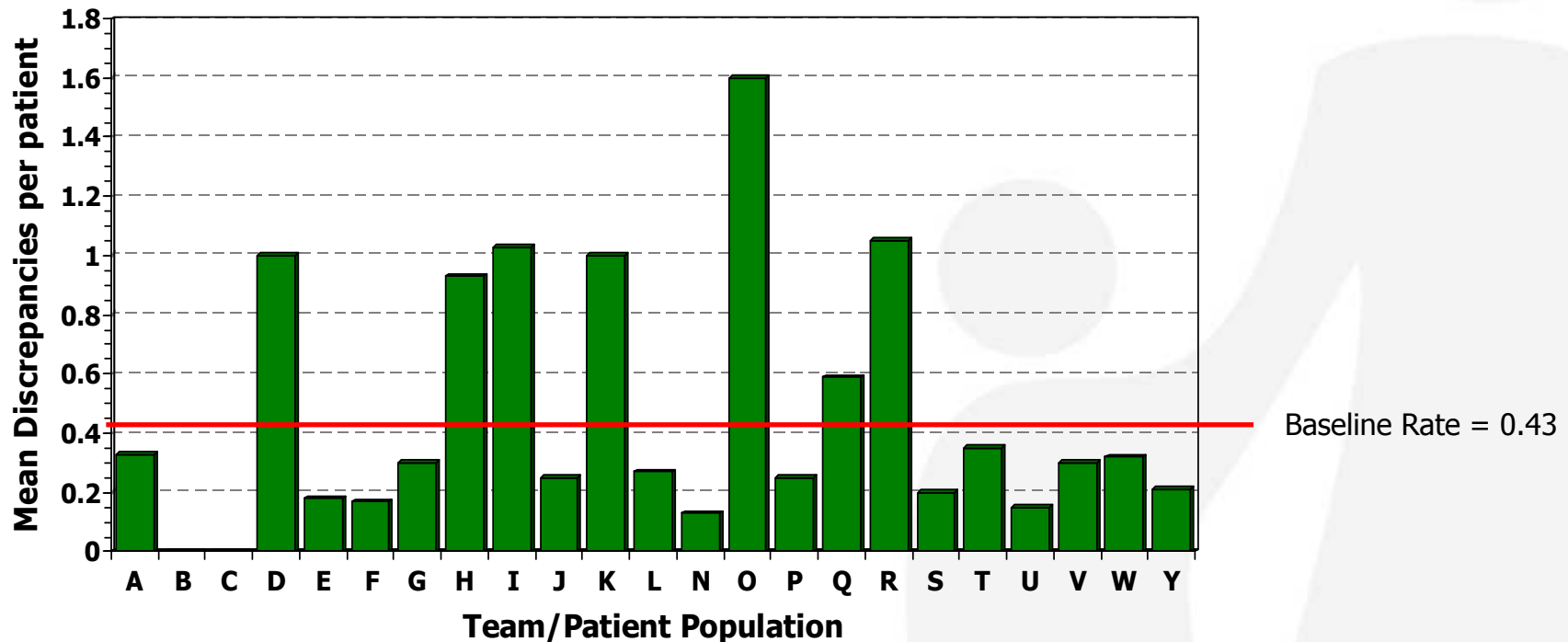
*A school aged patient with chronic renal failure received a regular antihypertensive at home. Admission medication history documentation indicated “no medications at home.” No antihypertensive was ordered on admission.*

*A preschooler was admitted with iron deficiency anemia. At home, the mother gave her child FeS04 2.5 ml bid. This information was not noted when the at-home medication history was taken. Admission medication orders did not include FeS04.*

# Baseline Data and Measurement Goals

## *Undocumented Discrepancies*

*An undocumented intentional discrepancy (Type 2) has occurred when the physician has made an intentional choice to add, change or stop a medication however the choice is not clearly documented in the chart.*



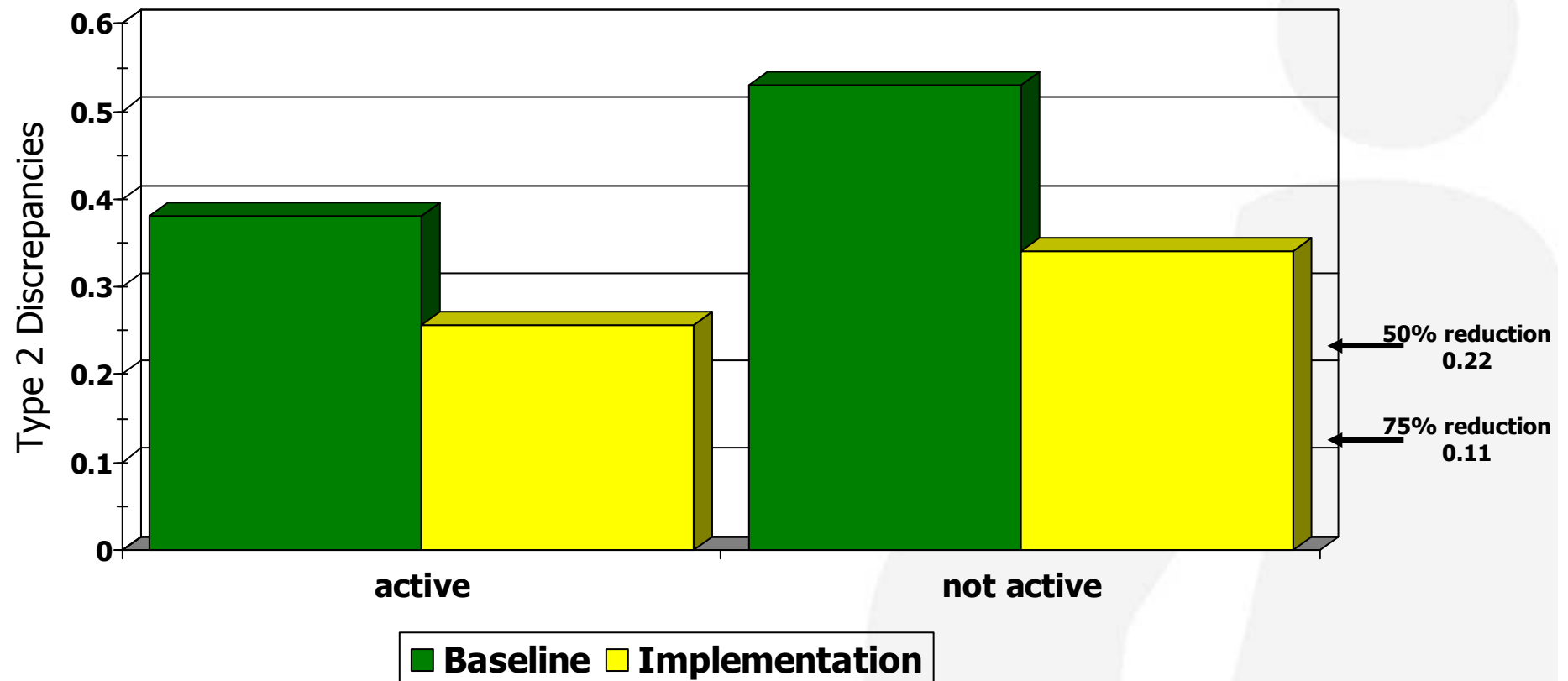
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# Baseline and Implementation Data

*Decrease In Undocumented Discrepancies System-Wide*



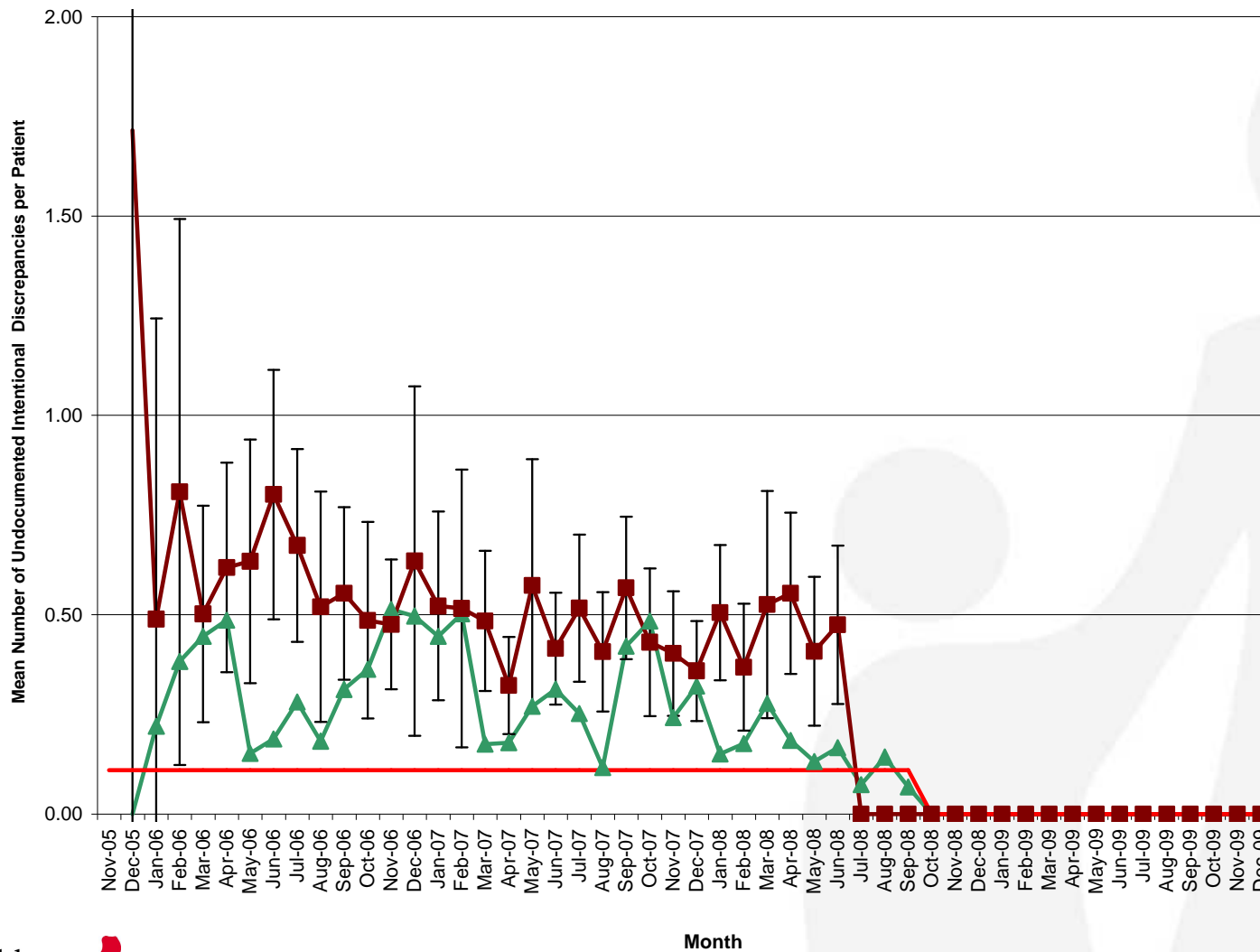
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# Undocumented Intentional Discrepancies Over Time

## *National vs. Paediatric Teams*



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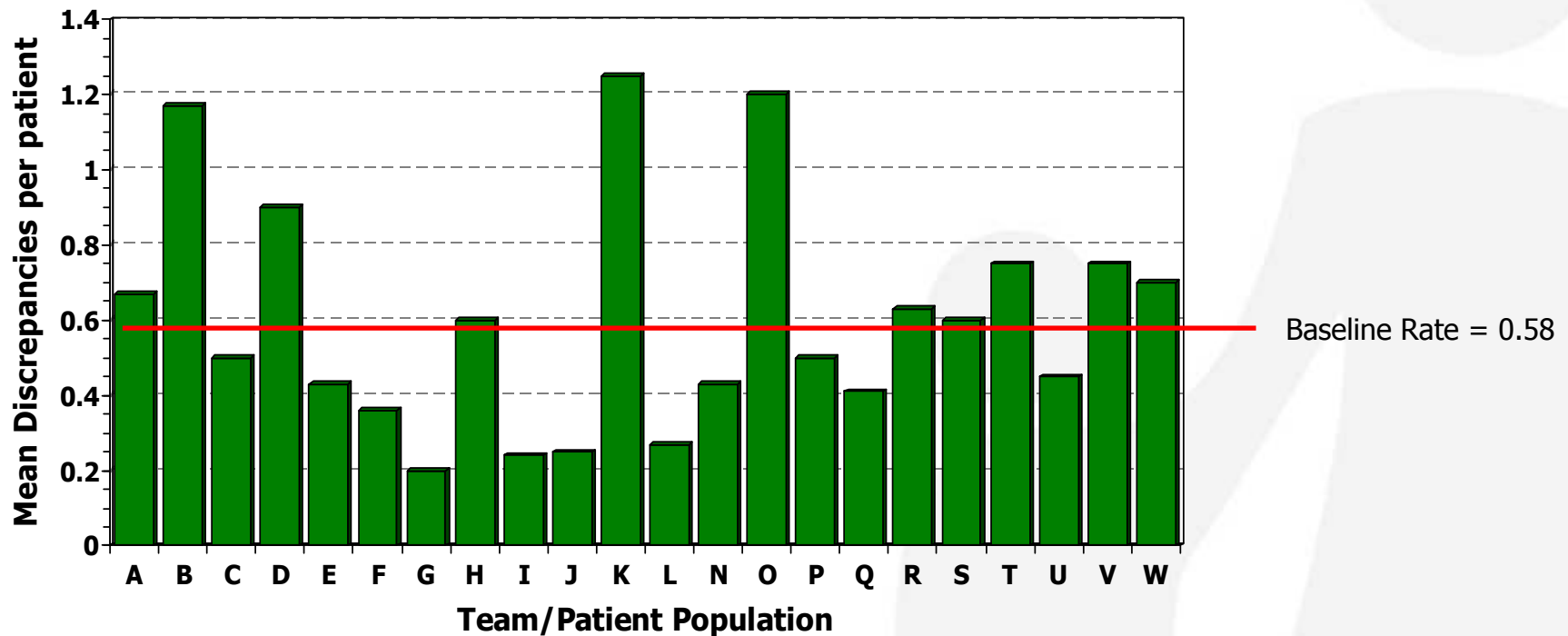
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# Baseline and Measurement Goals

## *Unintentional Discrepancies*

*An unintentional discrepancy has occurred when the physician has unintentionally changed, added or omitted a medication the patient was taking prior to admission*



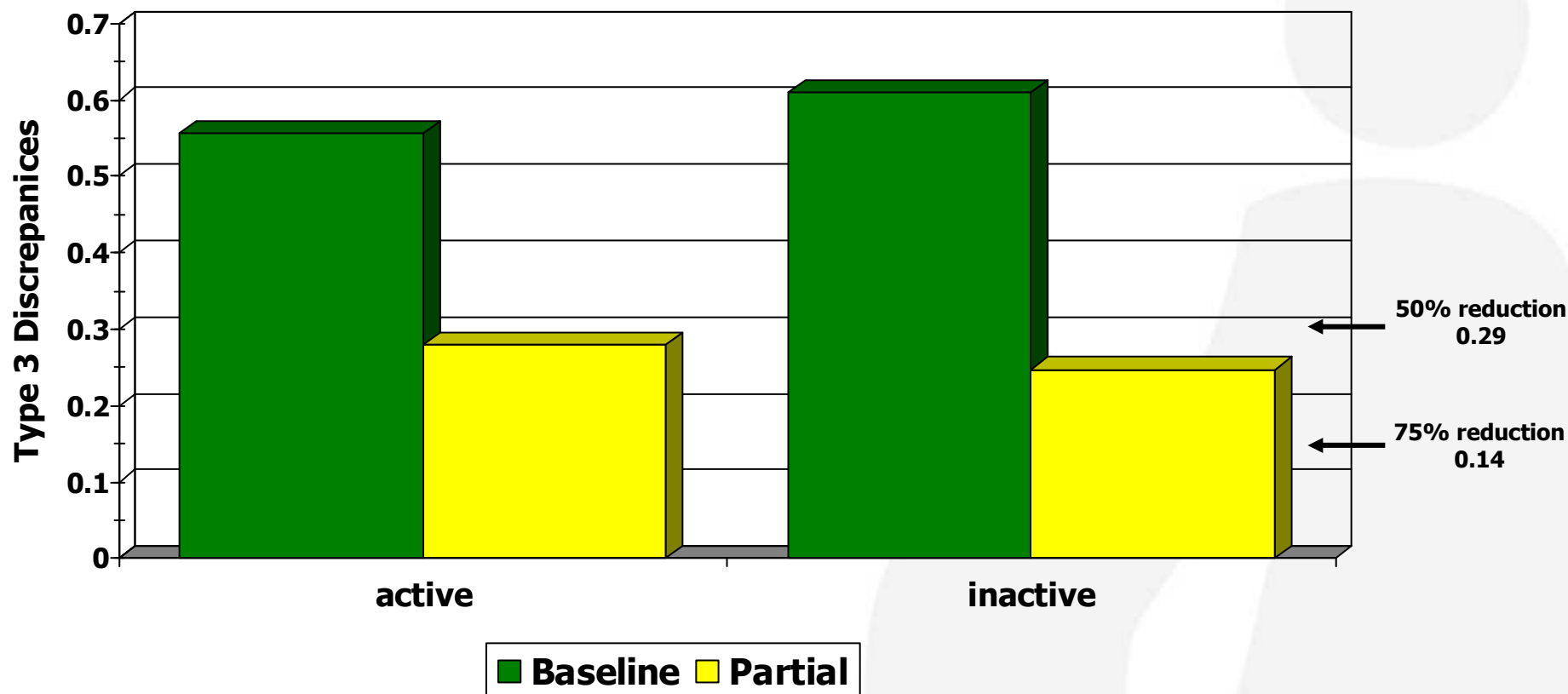
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# Baseline and Implementation Data

*Decrease In Unintentional Discrepancies System-Wide*



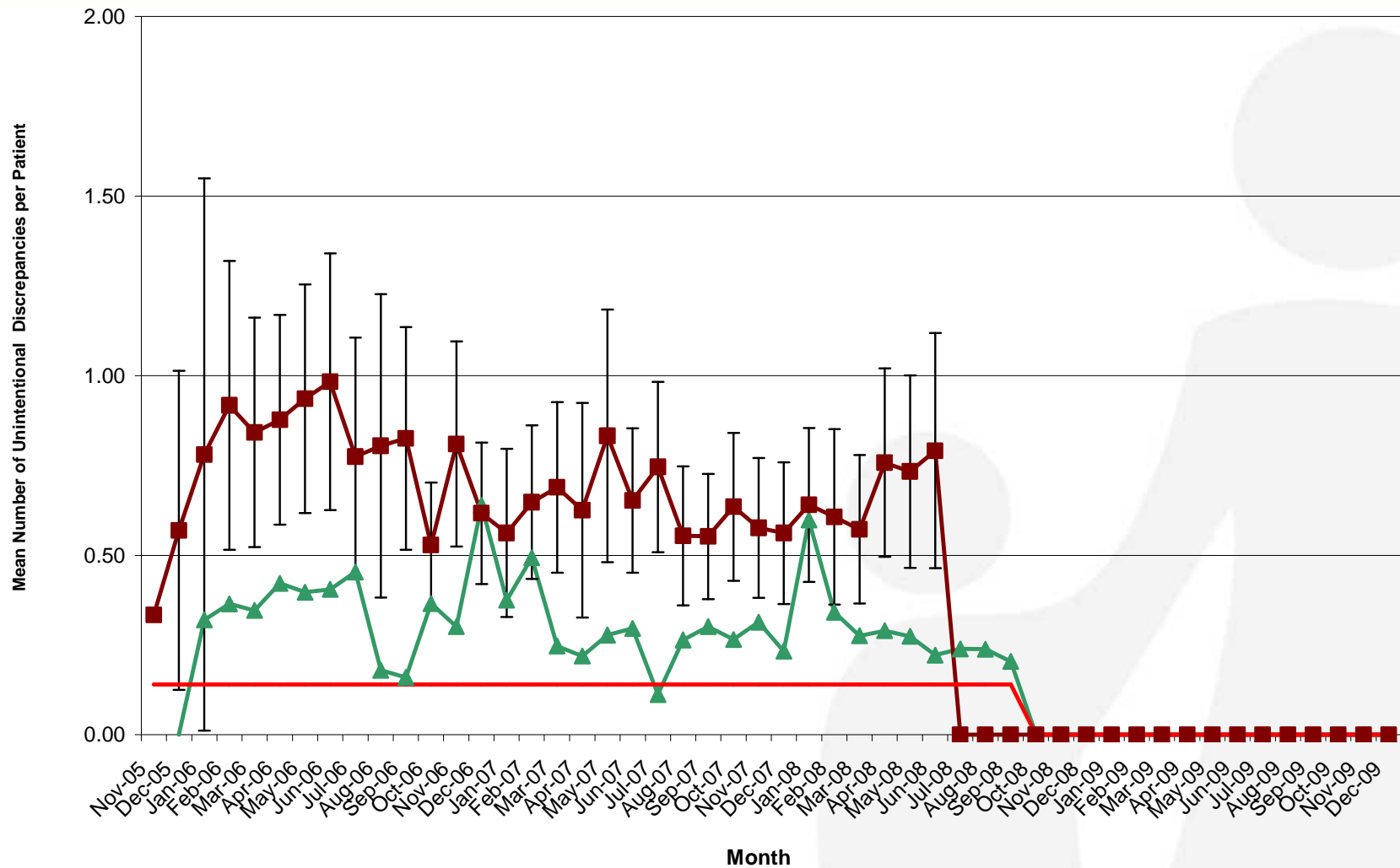
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# Unintentional Discrepancies Over Time

## *National vs. Paediatric Teams*



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# The Medication Reconciliation Journey

## ***The Medication Reconciliation Journey***

- What are the **critical strategies** that move implementation towards sustainability and spread?

## ***One Size Does Not Fit All***

- What are the different ways we travel to our common outcome – reduced medication discrepancies and potential adverse drug events?



Are We There Yet ?

# Critical Strategies: *Senior Leadership Commitment*



- Engagement of and support from senior medical and corporate leadership has been a challenge for teams involved in Safer Healthcare Now! interventions across the country
- From our paediatric teams that benefited from supportive senior leadership, effective strategies have included
  - Early commitment to the initiative
  - Regular communication
  - Pharmacy, nursing and physician leadership support

# Critical Strategies:

## *The Implementation Team*



- Implementation of MedRec has required teamwork, communication and collaboration
- Successful implementation teams
  - Are Interdisciplinary
  - Maintain stability in membership while allowing for evolution
  - Include frontline staff
  - Define roles and share responsibility
  - Monitor the timelines of implementation
  - Troubleshoot audit data
  - Strategize to maintain momentum and interest

# Critical Strategies: *Resources*



- In the best case scenario, implementation teams will have designated and protected time, specifically
  - To meet, review data, plan tests of change, discuss the logistics of new processes and systems.
  - To stay connected with the front-line staff, senior leadership, and information resources
  - To have adequate staffing for data collection and management
  - To have adequate pharmacy staffing
- Over the past three years there has been much discussion around the strategies for “doing something with nothing”

# Critical Strategies: *Front-line Staff Engagement*



- All teams have faced quality improvement fatigue, practice change resistance and compliance with new forms and processes
- Continuing education, including training new trainers, is vital
- Practice change issues have been a significant challenge – finding the balance between professional practice standards and the process of good medication management

# Critical Strategies: *Models and Processes*



- MedRec is not just about creating a new form and encouraging staff to use it – implementing MedRec is a broad system change that involves changing “the way we do business”.
- For the changes to lead to sustained improvements it is important to create clinical processes that are systematically embedded within existing practice.

## Critical Strategies: *Spreading Med Rec*



- As teams move forward to practice change, the next goal is to disseminate and adopt the implemented improvement from the original pilot to other units
- Extend the learning and change principles in other parts of the organization

# As we continue our journey....

*The CAPHC Patient Safety Collaborative would like to recognize the ongoing work of all of the participating centres, for without their commitment, extraordinary efforts and leadership, this work would not be possible!*

- **Children's & Women's Health Centre of BC**
- **Alberta Children's Hospital**
- **Stollery Children's Hospital**
- **Saskatoon Health Region**
- **Winnipeg Children's Hospital**
- **Bloorview Children's Rehab**
- **Children's Hospital of Eastern Ontario**
- **Children's Hospital, London Health Sciences Centre**
- **Credit Valley Hospital**
- **Grand River Hospital**
- **Hospital for Sick Children**
- **Kingston General Hospital**
- **McMaster Children's Hospital**
- **North York General Hospital**
- **Quinte Healthcare Corporation**
- **IWK Health Centre**
- **Janeway Child Health Centre**

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