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Session 13: Quality on the Front Lines: Improving Care for Complex Patients and High System Users

Moderator: Kim Baker

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Presenter Disclosures

Presenters: Kim Baker, Frank DeCicco, Karen Truter, Christina Fabbruzzo-Cota, Christine Soong

Relationships with commercial interests: None

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Disclosure of Commercial Support

This session has received no commercial support

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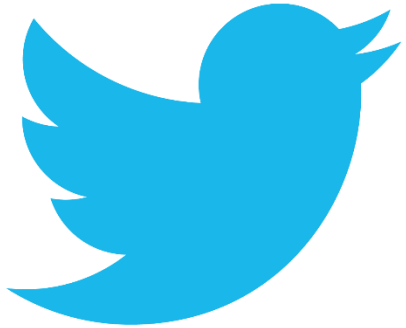

Use hashtag

#HQT2014

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Toronto East General Hospital

Sustaining Improvements

through a

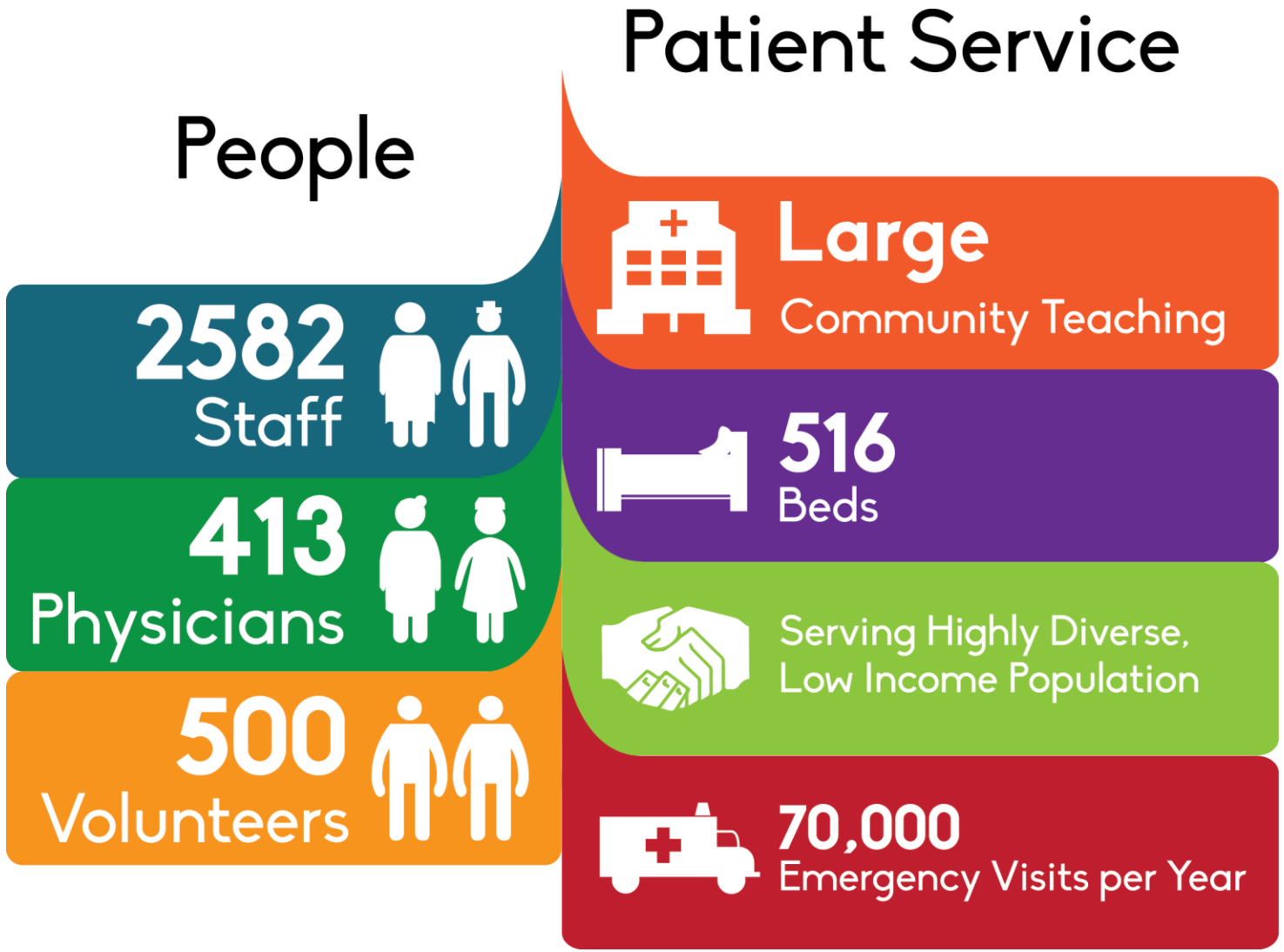
Daily Management System

Frank DeCicco

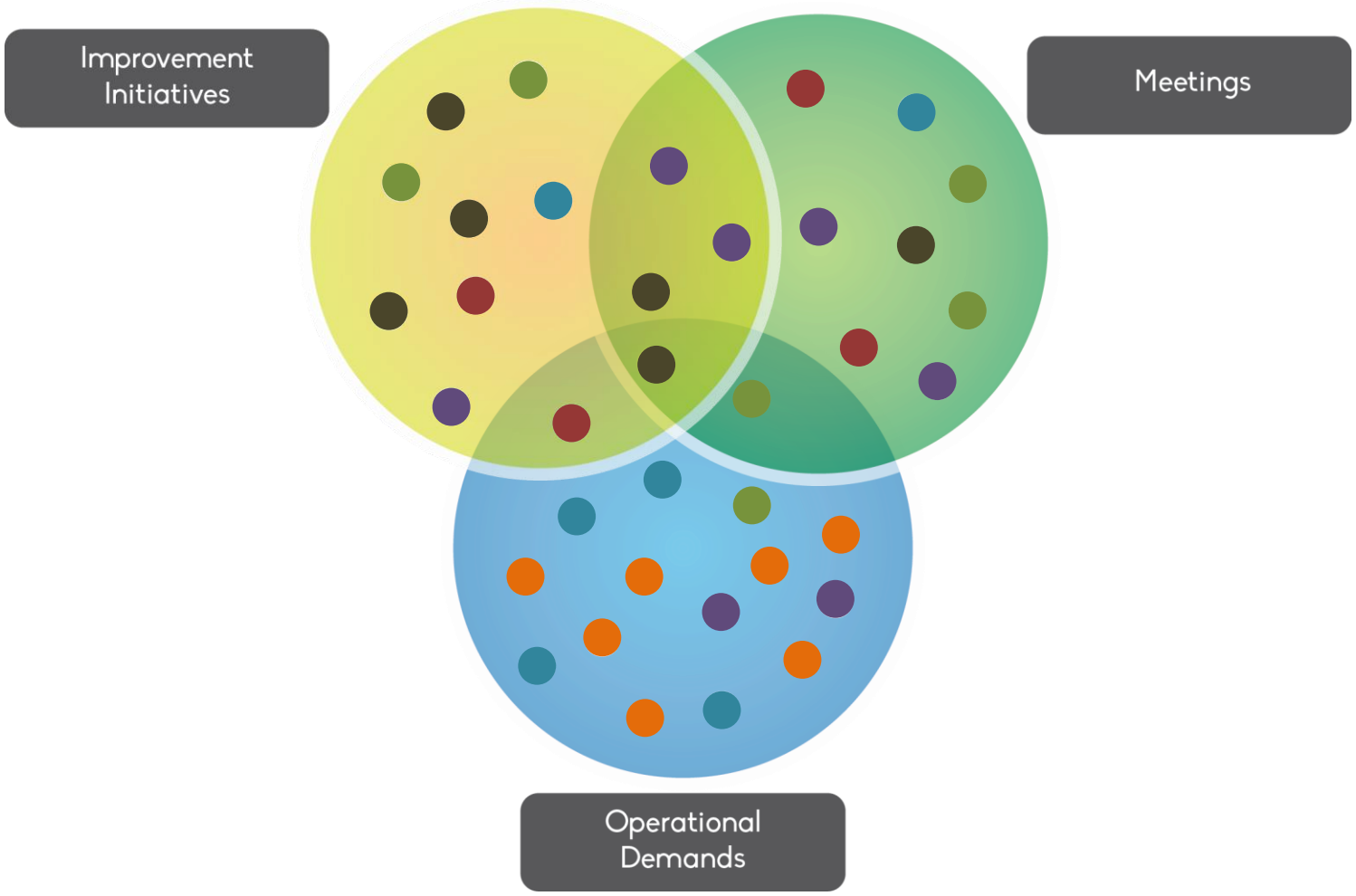
Toronto East General Hospital

TORONTO EAST GENERAL HOSPITAL

Overview



The “Sustain” Challenge



Assign Priority

- Patient Care
- Staff Training
- QIP
- Strategic Plan
- Accreditation
- Construction/ Redevelopment

Maintaining Management Excellence (MME)

Structured, protected communication channels

to get the

right information

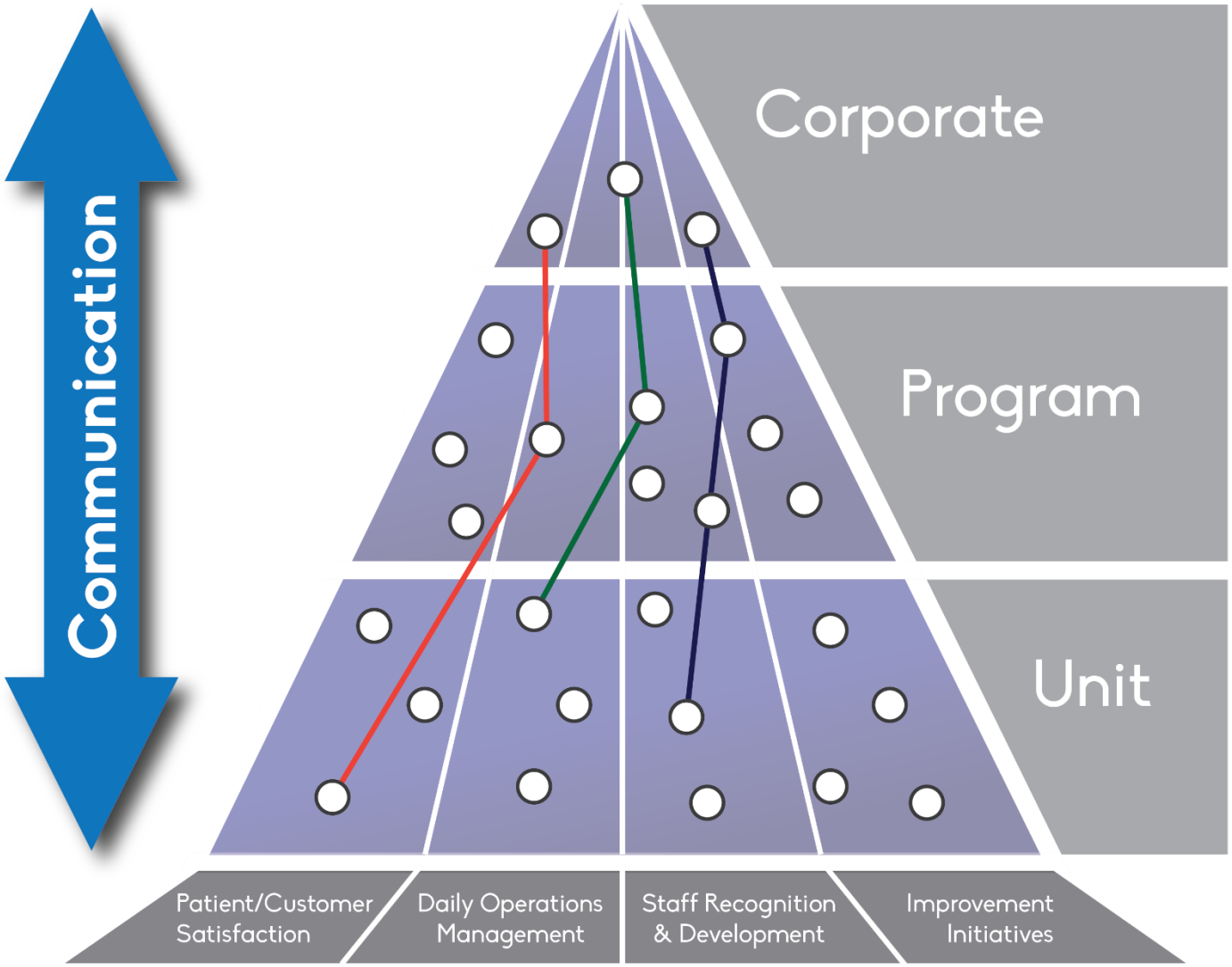
to the

right person

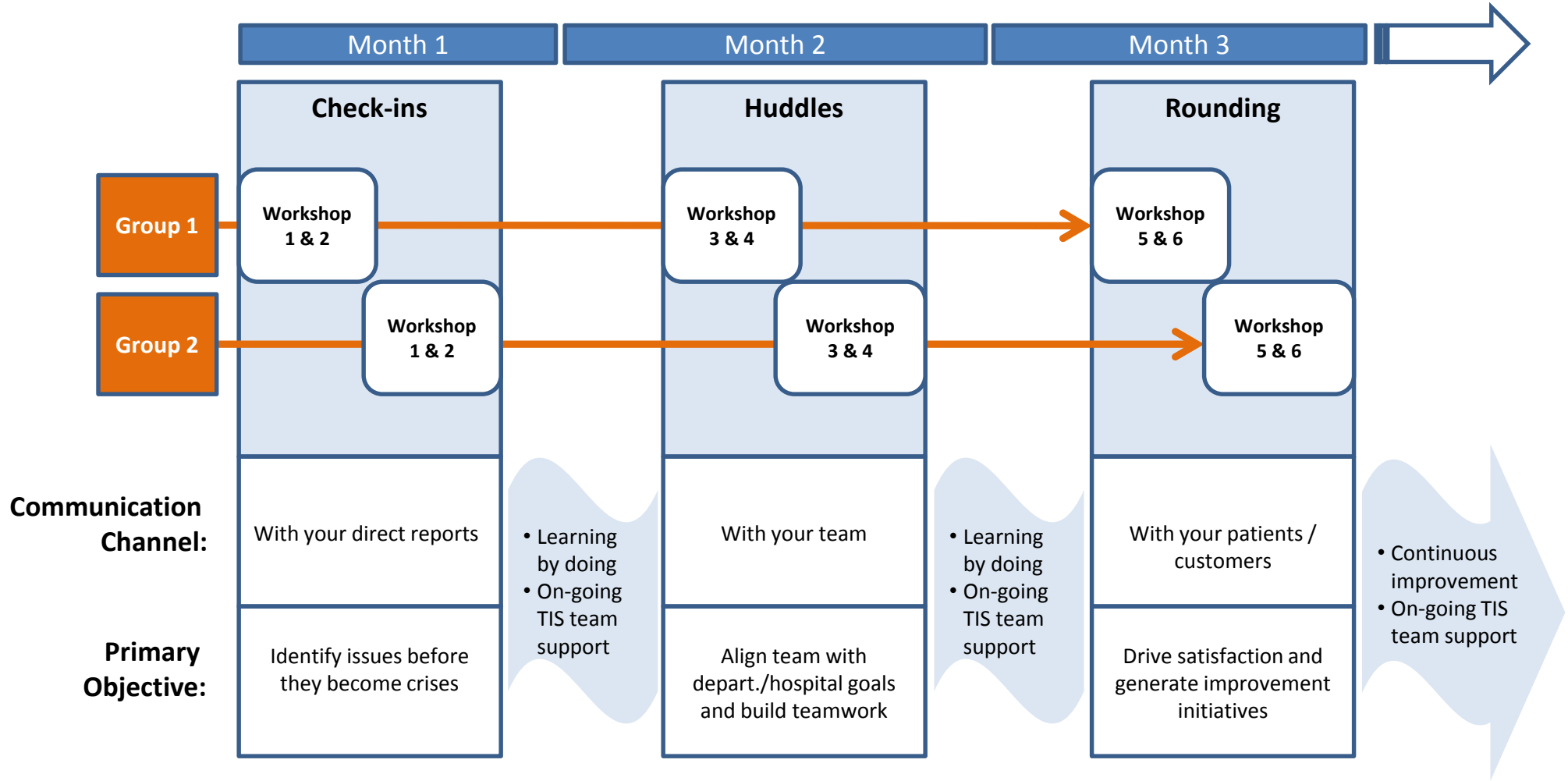
at the

right time

Organizational Alignment of Improvement Initiatives



MME Implementation Strategy



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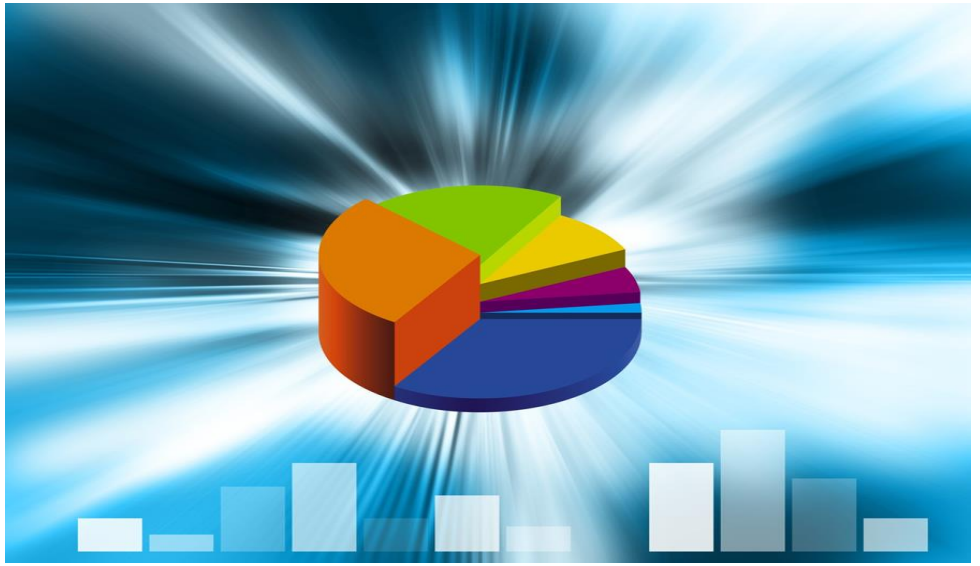
Is it Working?



Outcome Measures

- Staff Engagement Survey Results

Process Measures

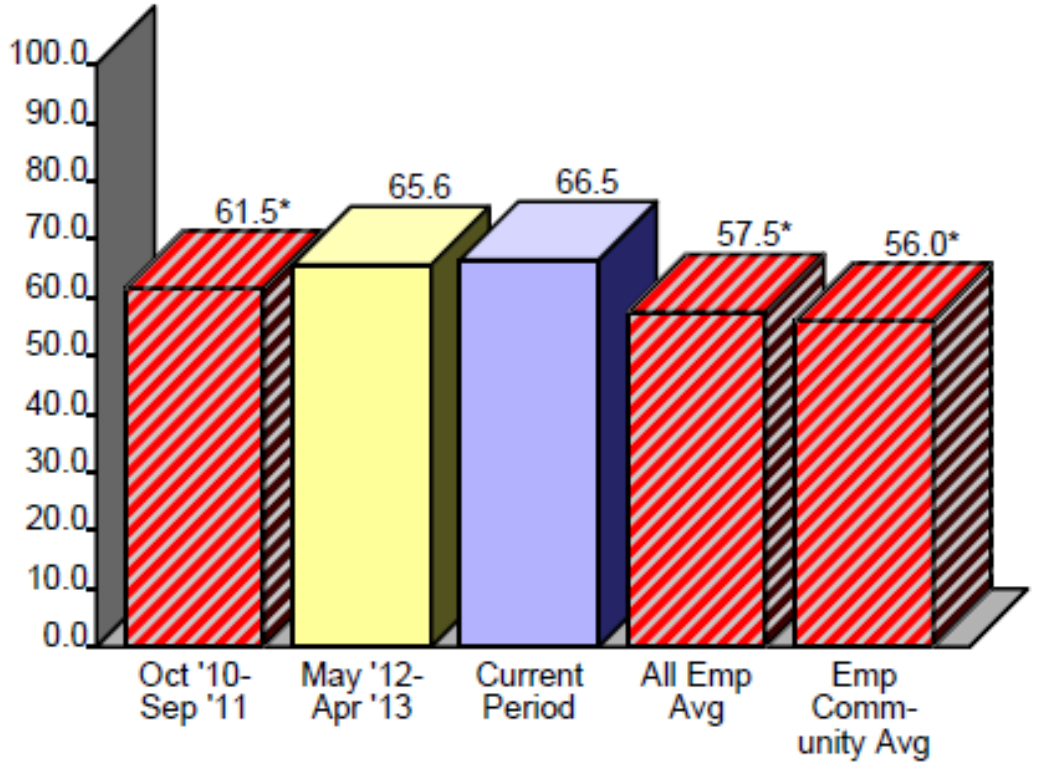
- Number of Huddles created and sustained
- Percent of Leadership (VPs, Directors, Managers) with Scheduled Check-ins & Rounding

Qualitative Measures

- Staff feedback

Staff Engagement

(National Research Corporation - Canada)



* Significantly Different from Your Current Score

Theme	Low	High	OHA	TEGH
Engagement (6 GTA hospitals)	47.6	66.5	57.5	66.5

Toronto East General Hospital

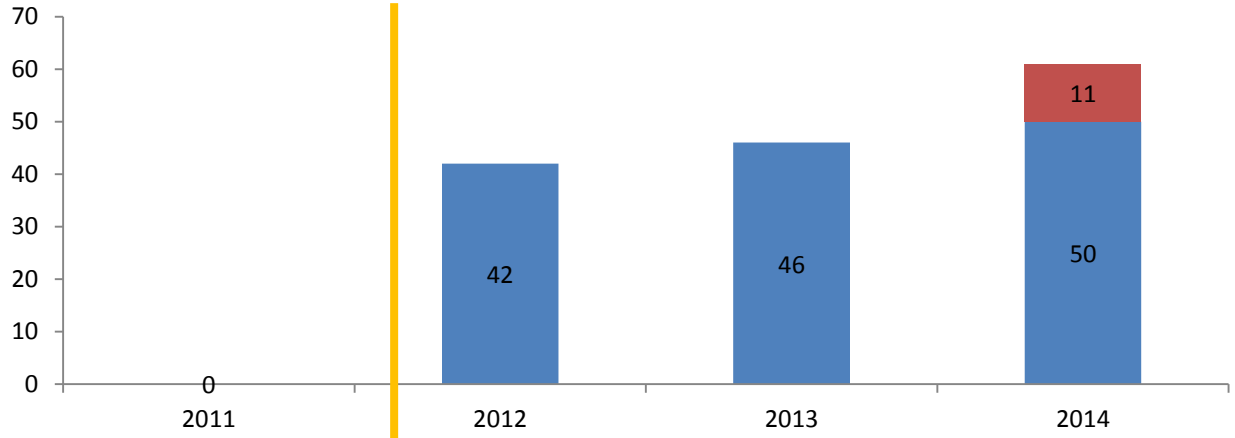
Staff Satisfaction Survey Results

(National Research Corporation - Canada)

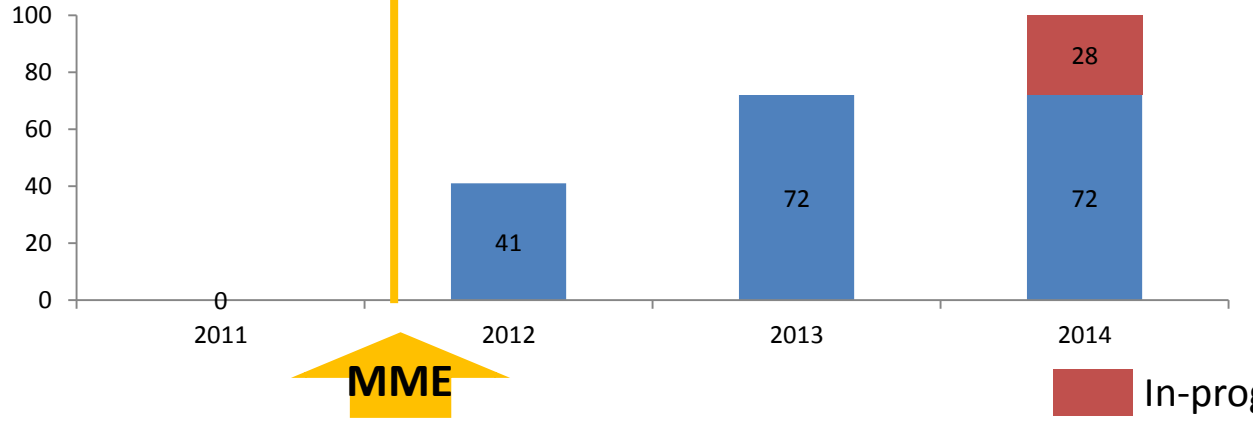
Question	2011/12	2012/13	Change	Significant?
Opportunity to make improvement in work	75.1 %	76.0 %	**+ 0.9 %**	
Opportunity to take initiative	80.1 %	82.3 %	**+ 2.2 %**	
Ability to make suggestions to improve the work of unit / team	66.5 %	67.8 %	**+ 1.3 %**	
Willingness to trust the organization	51.0 %	57.7 %	**+ 6.7 %**	

Process Measures

Number of Huddles



Percent Leadership with Scheduled Check-ins /Rounding



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Staff Feedback

"MME has helped me better understand where to **focus my attention – I can see patterns** over time, and better understand stressors for my staff."

- *Manager, Emergency Department, Toronto East General Hospital*

"The check-in meetings with managers have been invaluable. They keep our team on track weekly with quality initiatives, patient concerns and staff matters. **Gone is the day of 'Surprise! Caught you off-guard"** issues.

- *Director, Complex Continuing Care, Toronto East General Hospital*

Toronto East General Hospital

Key Success Factors

- The “WHY?” must be compelling
- Keep it simple
- Senior leadership models the way

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Improved Care for Hospitalized Seniors' through Comprehensive Gerontological Assessment, Geriatric Syndromes, and Assess and Restore Program

Presenter: Karen Truter RN(EC), BN, MN, CHPCN(C)
Northumberland Hills Hospital (NHH), Cobourg, ON, Canada

Understanding The Community We Service Northumberland Hills Hospital, Ontario

- SENIORS 65+
- 26.5% of the Cobourg, and 20.7% of the NHH catchment is 65+ compared to the provincial rate of 14.6%.
- It is anticipated that Ontario will have a 25% rate of 65+ by 2050.
- **As such NHH is significantly ahead of the curve in realizing the impact of serving such a high number of seniors.**

Purpose of the Assess & Restore Program

- Avoid iatrogenesis in acute care and therefore trial direct admissions from emergency
- Provide Comprehensive Gerontological Assessments and corresponding interventions
- Base the care around the immediate health need (from the person and/or caregiver perspective)
- Identify the underlying gerontological needs (syndromes)

Program Overview

- Timelines: pilot length Feb 13 – March 31st, 2014 (46 days)
- N=10
- Challenges in admitting to Assess & Restore – Surge, Patients waiting for LTC
- Direct admissions from emergency – 70%
- Staff ratios and continuity of care achieved -
- 1RN to 4 patients, 6RNs covered 24hr/7day
- 1 OT/PT Therapy Assistant

Patient Demographics

- 60% male, 40% female

Age	/	% of Pt population
65-70		20%
71-75		20%
76-80		0%
80-84		10%
85- over		50%

Indicators

Every patient will have a Comprehensive Gerontological Assessment by NP/IP team

100%

Each patient will be followed up with a telephone call within 48hrs by the NP

100%

50% of patients will have a 10 point increase in Functional Independence Measure (FIM)

88%
Ave 24.4
Points

50% of patients will return home

75%

Shorter LOS than the average combined LOS of Acute/Restorative Care

= 33.75 days

15.9
days

Geriatric Syndromes

Number of geriatric syndromes	% of patients
0-4	0%
5-9	40%
10-14	40%
15-19	20%

Incidence of Geriatric Syndrome	Type of Geriatric Syndrome
100% of patients	Mobility Risk of Falling Pain
60% of patients	Constipation
50% of patients	Caregiver stress Incontinence
40% of patients	Cognitive Impairment Weight loss/ malnutrition Complex discharge Family support
30% of patients	Delirium Depression Anxiety Sensory impairment Sleep Disturbance Ethical decisions

Frailty & Geriatric Syndromes

- *Frailty is a state of increased vulnerability where apparently small events or stressors result in a disproportionate change in health state*

- The number and type of geriatric syndromes identified through the Assess and Restore population is indicative of frailty.

- The most evidence-based process to detect and grade frailty for severity is a Comprehensive Gerontological Assessment.

(Clegg, Young, Iliffe, Rikkert, Rockwood, 2013).

Relevance of Pilot

- Assess and Restore not only provided state of the art practice in identifying frailty but went further in basing all care on the gerontology syndromes.
- Identified the significance of geriatric syndromes and the need to assess and treat through gerontological approaches
- High incidence of geriatric syndromes indicated we were capturing the most frail population
- Contrast with acute stays where care would focus on medical diagnosis rather than geriatric syndromes and CGA

Lessons Learned

- **SYSTEM EFFICIENCY**
- Admitting from emergency directly to Assess and Restore within post acute care services is not only feasible but ideal.
- Significant positive effect on patient flow, decreased utilization of acute care
- Use geriatric syndromes to improve length of stay, re-admission rates and ALC rates
- Significant reduction in Length of Stay compared to combined Acute Care to Restorative Care

Lessons Learned

Using Geriatric Syndromes provided:

- meaningful engagement with RNs and interprofessional team as they felt empowered to positively affect the physical and cognitive functioning.

- Understanding complexity through geriatric syndromes provides (1) specific metrics (2) staff competency (3) improved patient outcomes

Questions

A cross-sectional study of referral patterns of 2052 cases from the Champlain BASE eConsult service

Dr. Erin Keely
Chief, Division of Endocrinology and Metabolism, The Ottawa Hospital

Dr. Clare Liddy
The Ottawa Hospital Academic Family Health Team, Bruyère Research Institute

Amir Afkham
Senior Project Manager, Champlain LHIN

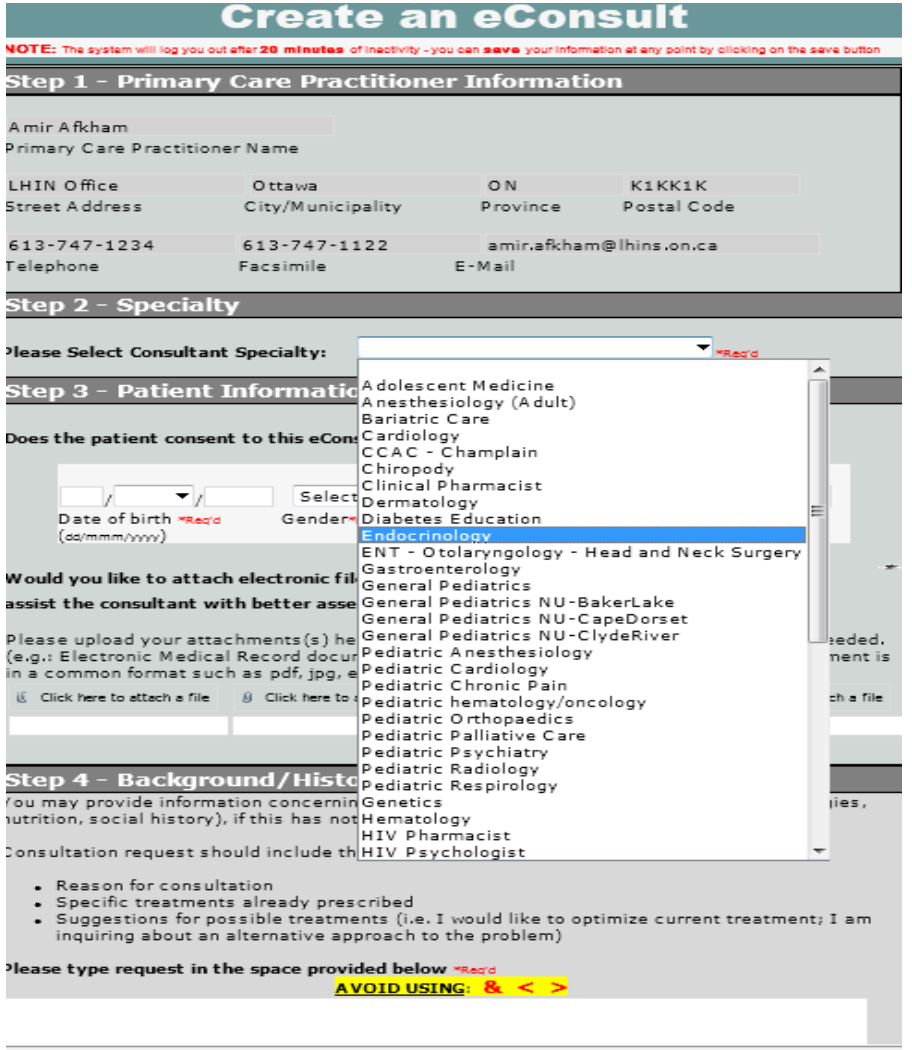
Background

- Excessive wait times for accessing specialist care is one of the most significant problems facing the Canadian Health Care system
- Wait times are getting worse, not better
- There is an opportunity to improve access to specialist care through innovative eHealth platforms such as eConsultation

Barua B, Esmail N. Waiting Your Turn: Wait Times for Health Care in Canada. Fraser Institute, 2013. http://www.fraserinstitute.org/uploadedFiles/fraser-ca/Content/research-news/research/publications/waiting-your-turn-2013.pdf

Champlain BASE eConsult service

- Developed in 2010
- Secure, easy to use web based platform
- Simple template for PCP to complete
- Assigned to appropriate specialist
- Answer expected within 7 days
- May be back and forth communication
- PCP closes eConsult and completes mandatory survey



Objectives

To report on the impact of the Champlain BASE service, in particular

- referral patterns to different specialty groups
- avoidance of face-to-face referrals across specialty groups
- the type of advice received (new advice or confirmatory)
- cost savings to the patient based on type of advice

Methods

- Cross sectional study of all cases submitted between April 15, 2013 – December 31, 2013
- Participants included all PCPs registered to use the eConsult service who had completed at least one eConsult
- Data came from ongoing utilization information collected by the system and mandatory brief close-out survey. Analyzed in total and then by individual specialty service (top 8 only)
- Cost analysis assumptions
  - PCP's postal code proxy for patient location
  -specialist location assumed to be at tertiary hospital (location of eConsult specialists)
  -roundtrip fuel costs $0.54/km
  -assumed 44% of patients referred for a specialist visit would need to miss work (based on own unpublished data)
  -used median 2011 income in province of Ontario to calculate loss wages

Results

- A total of **199** PCPs completed **2052** cases to **27** different specialty groups during the study period

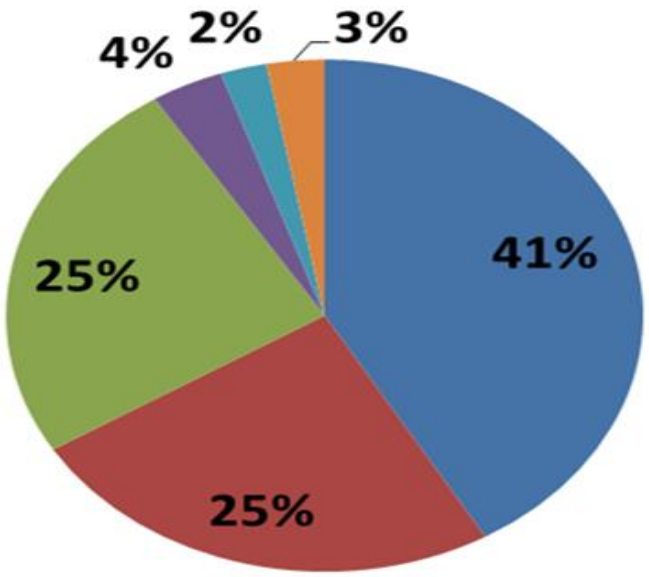
- The specialty groups receiving the highest number of eConsults were:
  - dermatology (18.3%)
  - endocrinology (10.7%)
  - neurology (9.5%)
  - hematology (9.1%)
  - cardiology (7.6%)

- Median specialist response time was 18 hours, with 75% of cases responded to within 2.8 days

- Self reported time it took specialist to complete eConsult <10 min in 60% of cases, 10-15 min in 28% and 15-20 min in 10%

Impact of e-Consultation on Referral

[*from PCP survey responses completed for each case*]

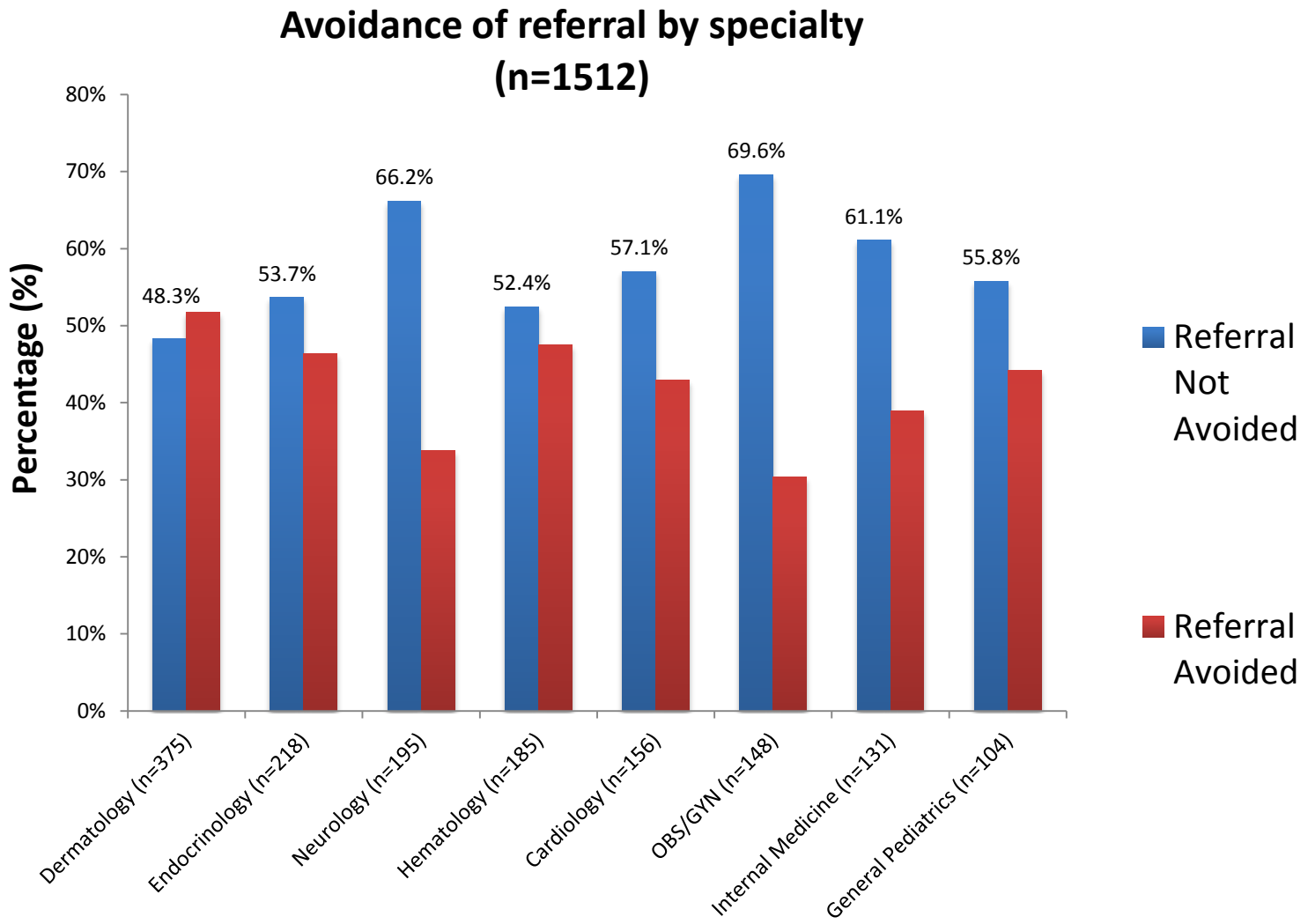


1. Referral was originally contemplated but now avoided at this stage
2. Referral was originally contemplated and is still needed - this eConsult likely leads to a more effective visit
3. Referral was not originally contemplated and is still not needed - this eConsult provided useful feedback/information
4. Referral was not originally contemplated, but eConsult process resulted in a referral being initiated
5. There was no particular benefit to using eConsult in this case
6. Other (please comment)

N=2044 cases

41% of cases led to a referral being avoided

Referral Avoidance by Specialty Service

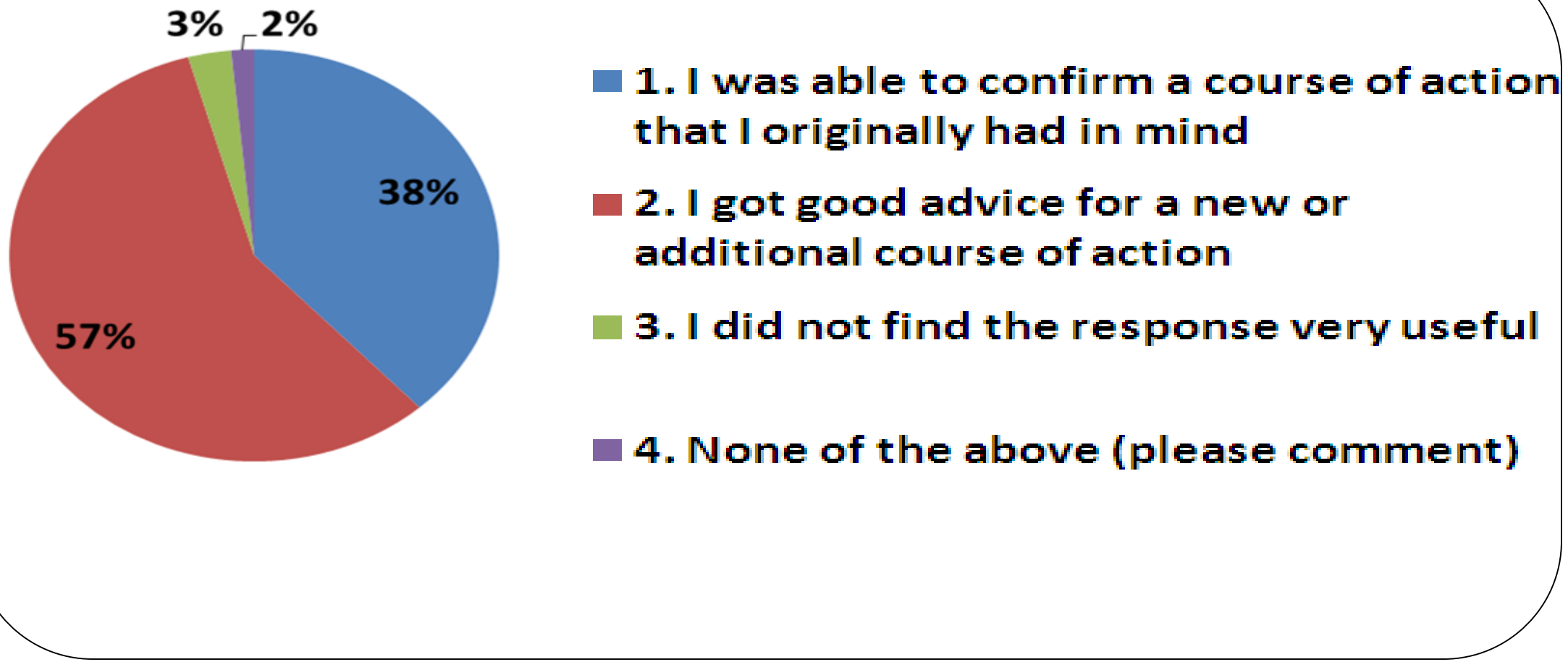


Overall, 41% referral avoidance rate

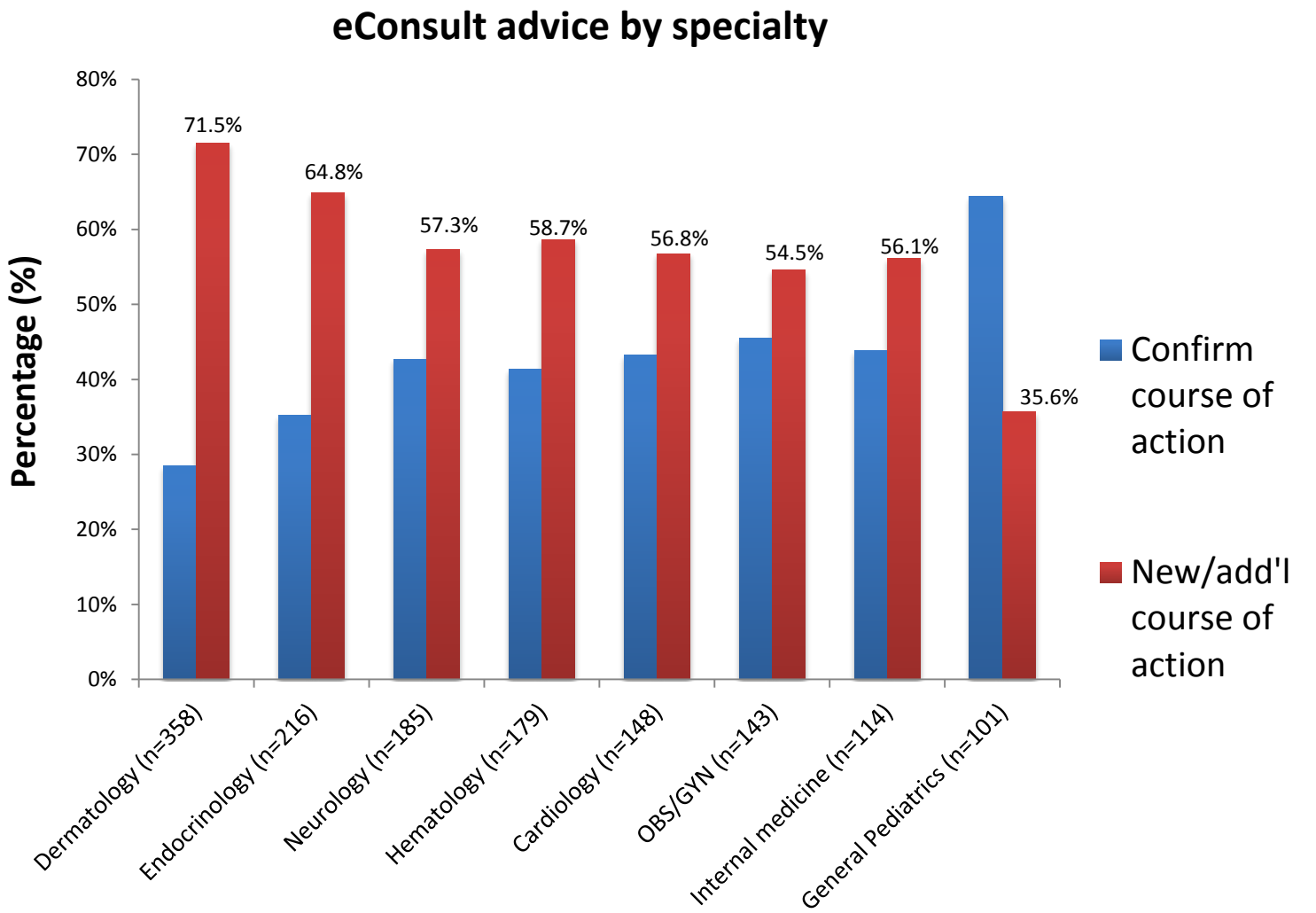
Dermatology had the highest rates of referral avoidance (51.7%) while Obstetrics & Gynecology had the lowest (30.4%).

Type of Advice Received

[*from PCP survey responses completed for each case*]



Type of Advice Received by Specialty Service



PCPs reported receiving new advice for a new or additional course of action most often when directing cases to Dermatology (71.5%) and least often to General Pediatrics (35.6%)

Cost Savings Analysis

- Weighted average cost across all specialties per eConsult was **$42.32.** In the absence of eConsult, the comparable average cost for traditional referral would have been **$133.83.**

- Patients saved on average **$83.49** each time a face-to-face specialist visit was avoided in terms of time off work, parking, travel/gas costs, and parking.

	Rural (n=79)	Urban (n=959)	Total (n=1038)
Gas (Roundtrip)	14,077.80	19,057.25	33,135.05
Meal ($10)	790.00	9,590.00	10,380.00
Parking ($13)	1,027.00	12,467.00	13,494.00
Time off work	4,194.84	25,461.07	29,655.91
Total	**$ 20,089.64**	**$ 66,575.32**	**$ 86,664.96**
Cost Saved per eConsult avoided	**$ 254.30**	**$ 69.42**	**$ 83.49**

What did we learn?

- Our service is sustainable and has enabled rapid access to specialist advice with a significant reduction in need for face to face referrals

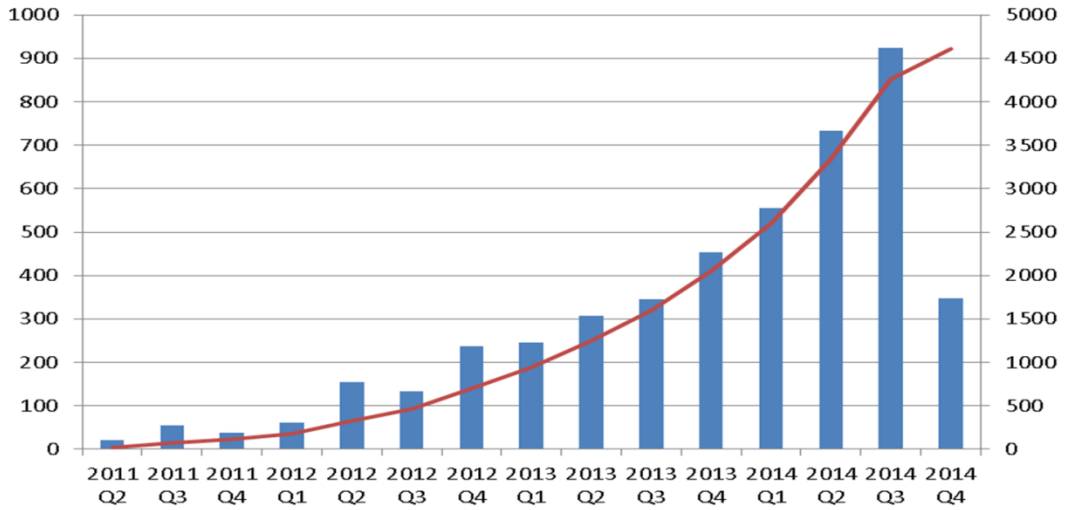
- Our multi-specialty service is unique and has enabled us to explore differences between specialty groups with regard to outcomes and avoidable visits

- Results increase our understanding of the impact of eConsults, referral patterns and community needs and will help inform next steps as other regions implement similar services

Where are we now?

As of Oct 31, 2014

- 4611 cases completed
- 527 PCPs (427 MDs, 100 NPs) from 143 clinics
- 53 different specialty services
- We continue to monitor and report utilization



Ongoing research activities include

- Impact on specialist referral rates
- Role and impact of eConsult on medically complex patients (chronic pain, HIV, diabetes)
- Development of an eReferral system
- Analysis of eConsult questions to inform CPD

The Champlain BASE eConsult Team

A collaboration between:

- The Ottawa Hospital (TOH)- Dr. Erin Keely
- The Bruyère Research Institute
- Winchester District Memorial Hospital (WDMH)
- Champlain Local Health Integration Network

Funding:

- TOHAMO AFP Innovation Fund
- Champlain LHIN
- e-Health Ontario
- MOHLTC
- CIHR

Research and Operations Team

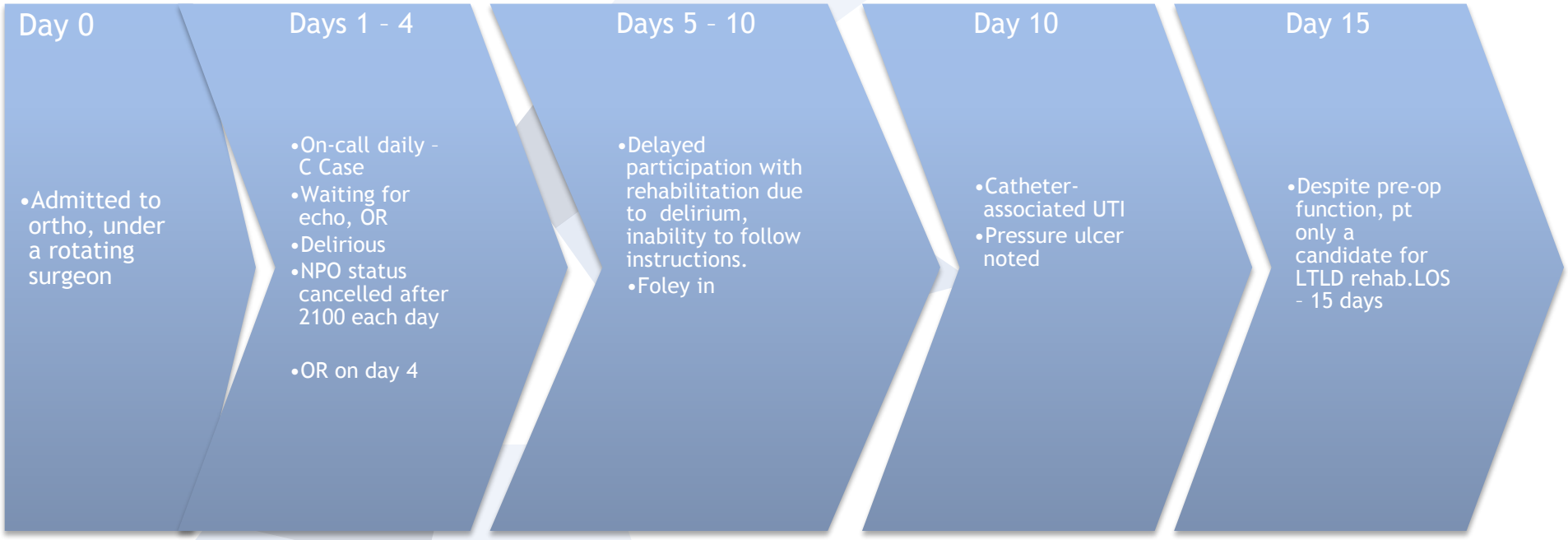
- Paul Drosinis
- Lois Crowe
- Justin Joschko
- Melanie Rebelo
- Valerie Blazhko

MOUNT SINAI HOSPITAL
Joseph and Wolf Lebovic Health Complex

A Team Approach-Caring for Medically Complex Hip Fracture Patients

Christina Fabbruzzo-Cota, RN, MN
Anh-Dao Lavery, PT, Paul Kuzyk, MD,
Simon Kuzyl, RN, MSc, Angela Wong,
OT, Keri West MSW (Intern), Sue
Worrod, SW, Christine Soong, MD,
MSc

Hip Fracture Case Circa 2009



Hip Fractures

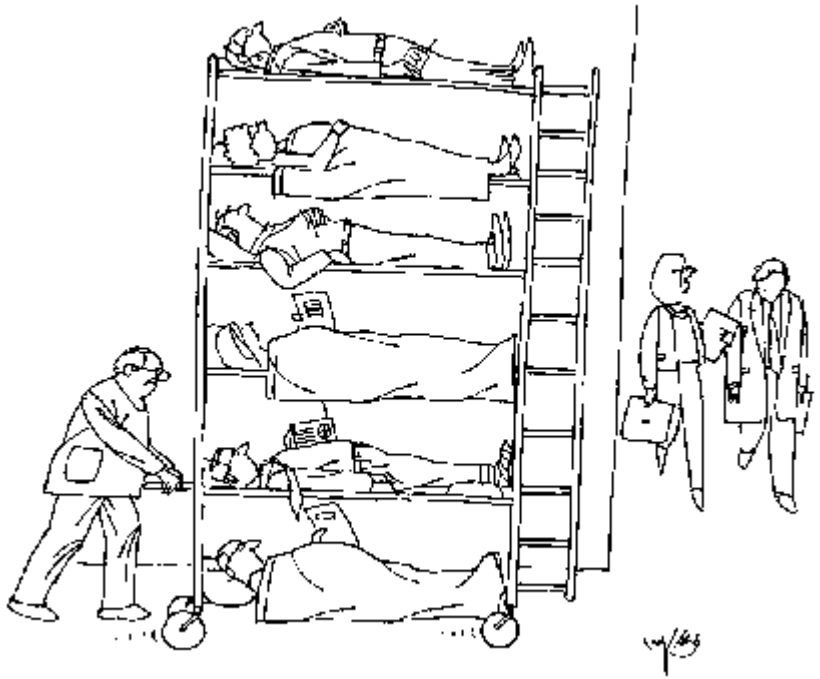
- Most common injury from falls in the elderly
- Can be a catastrophic event:
  - Devastating and life altering
  - Result in functional impairment
  - Increase in morbidity and mortality rates
- Projected volume increase
- Significant financial burden

Existing Infrastructure

- Hospital based Hip Fracture Steering Committee.
- Hospital commitment to improving patient outcomes.
- Multidisciplinary team focus.
- Strong team relationships.

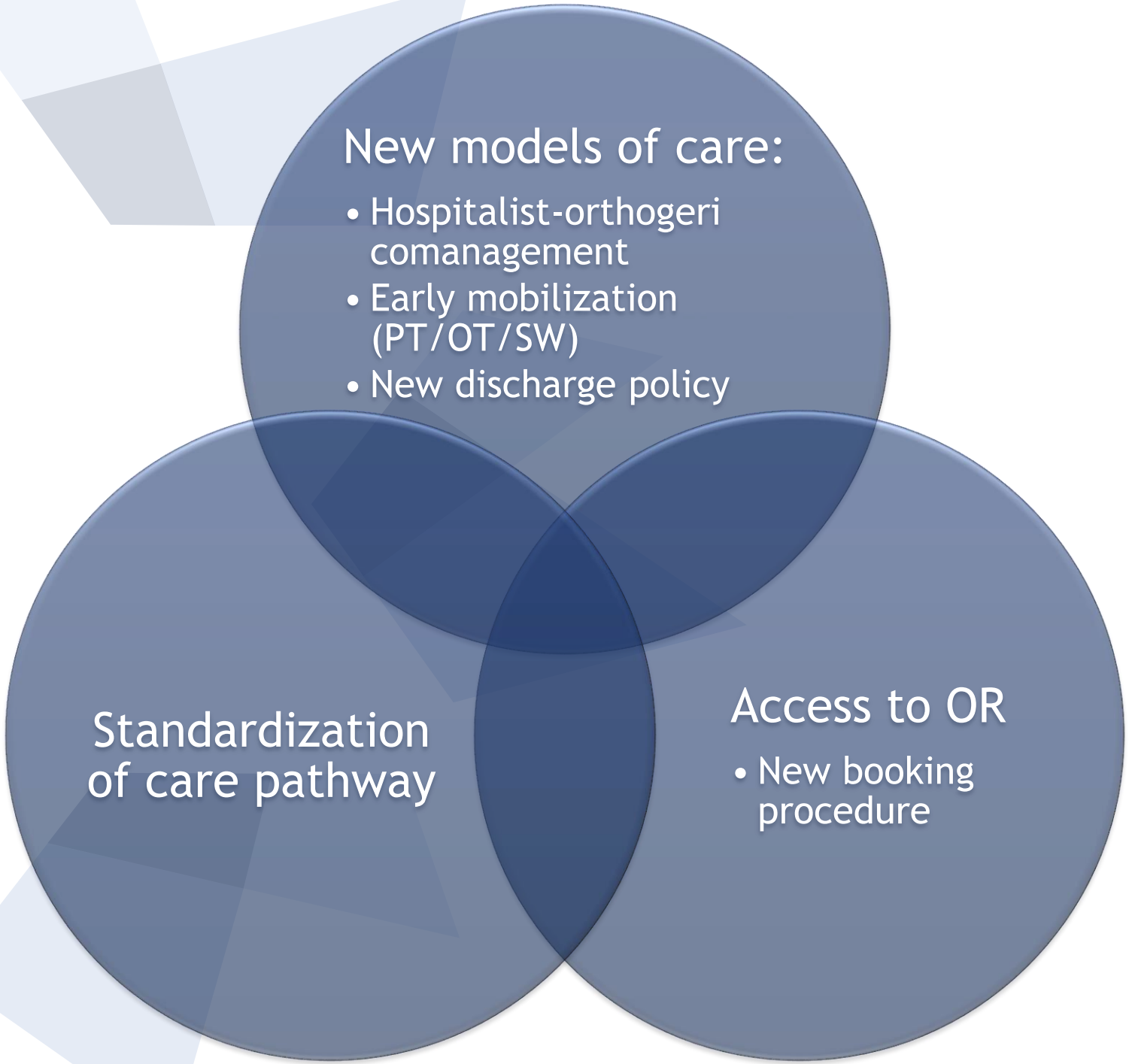
Challenges

- Care was fragmented and inefficient.
- Timely access to the Operating Room.
- Challenges with LOS and patient flow.
- Preventable adverse events?



"You have a serious bed shortage? What about patient flow?"

Cartoon by Dave Harbaugh


New models of care:
• Hospitalist-orthogeri comanagement
• Early mobilization (PT/OT/SW)
• New discharge policy
Standardization of care pathway
Access to OR
• New booking procedure

RECOVERING AFTER SURGERY FOR HIP FRACTURE

	DAY/EVENING OF SURGERY	DAY 1 AFTER SURGERY	DAY 2 AFTER SURGERY	DAY 3 to DISCHARGE
ACTIVITY	Move your feet in bed **10** times every hour 	Move your feet in bed **10** times every hour  A therapist will help you sit at the edge of the bed or in a chair  You will try to take steps	 Use the commode  Sit in a chair for meals	 Sit in a chair for meals  Try to walk to the washroom and around the room
EXERCISES	 Deep breathing and coughing exercises 10 times every hour	Continue deep breathing and coughing exercises   A therapist will give you exercises to do in bed every hour	Do leg exercises in bed every hour 	Do leg exercises in bed every hour 
PAIN CONTROL	 You will receive medication for pain through the IV	 You will be given pain medication to take by mouth	 Take pain medications REGULARLY so that you can move with ease	 Before you leave the hospital, learn about the dressing for your incision and your medications. Take pain medications REGULARLY so that you can move with ease
FOOD & DRINK	Sips of fluids 	 Regular Diet	 Regular Diet	 Regular Diet
AFTER CARE PLANNING		 The team will start working with you and your care giver(s) to make plans for discharge	You and the team will submit an application for Rehab/Homecare 	 Home OR  Rehab Hospital

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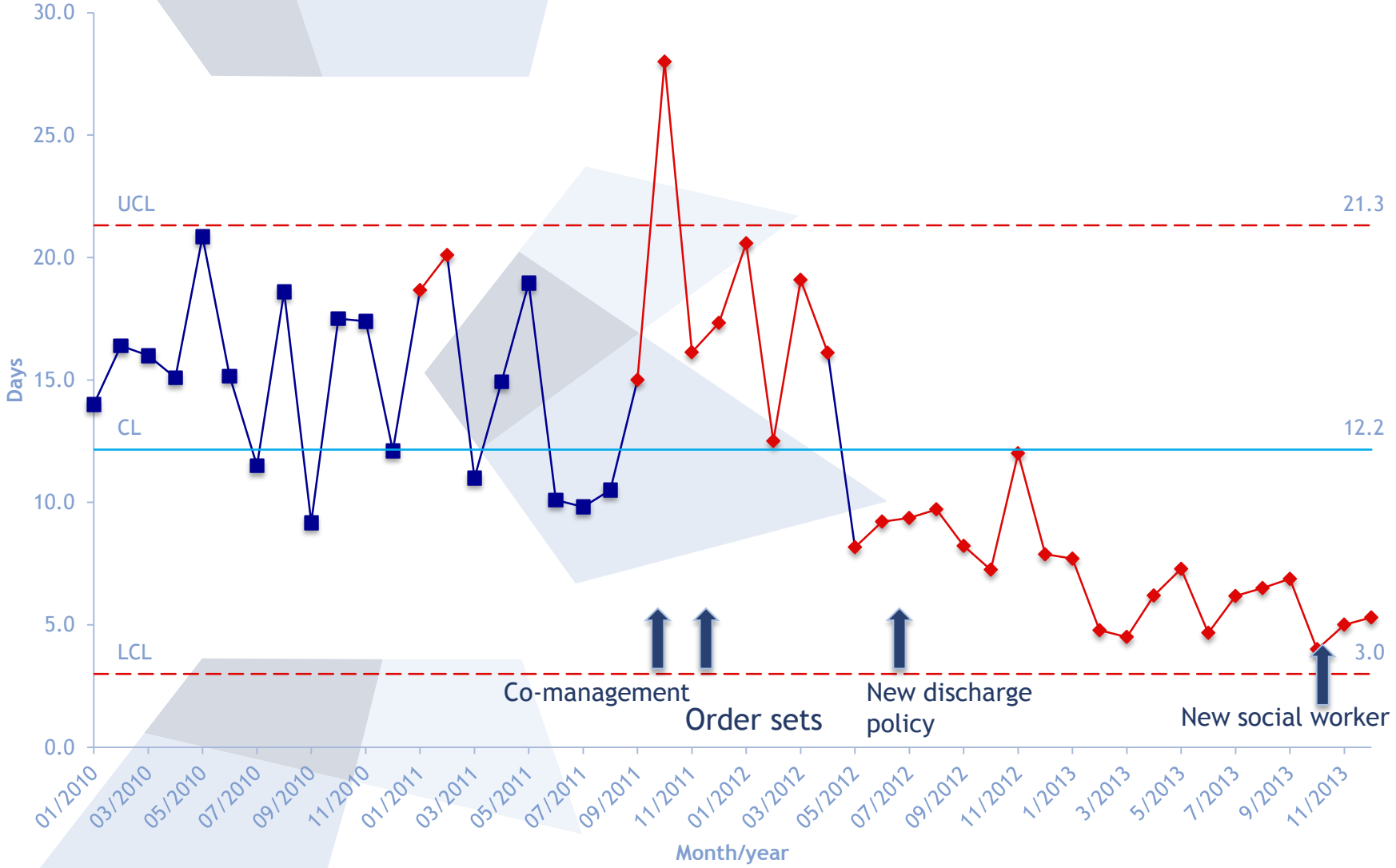
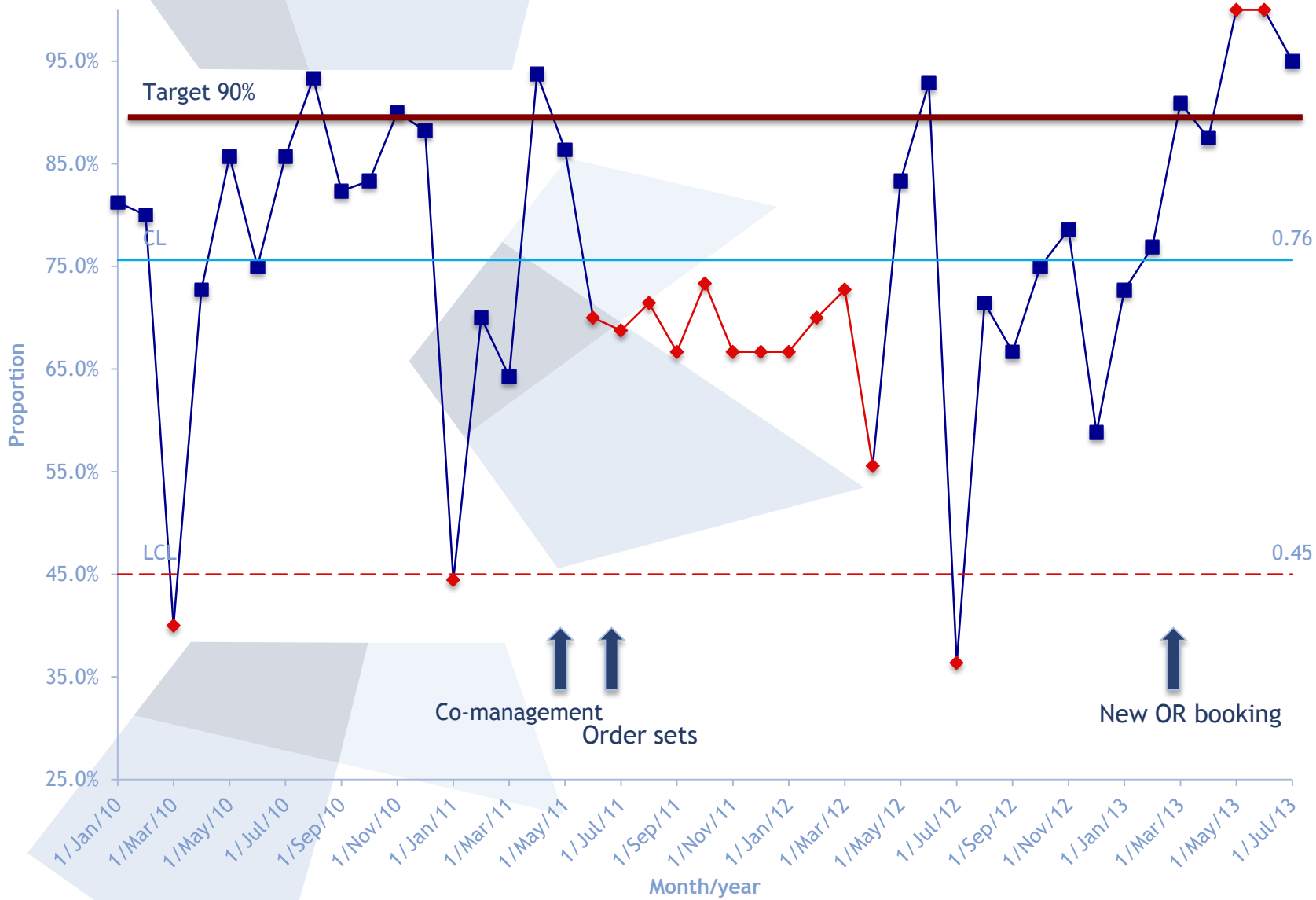
Results

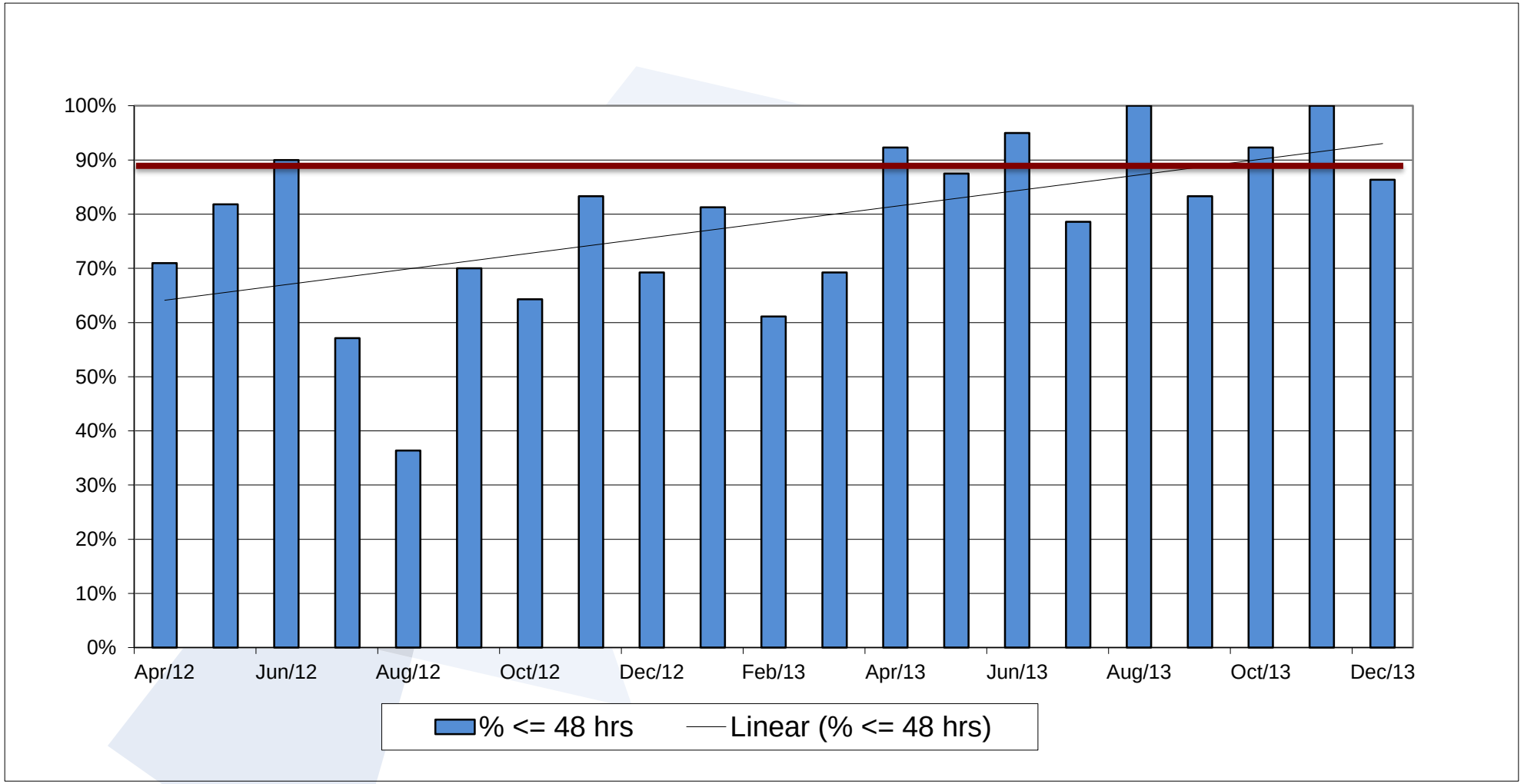
Mean LOS


30.0
25.0
20.0
15.0
10.0
5.0
0.0
Days
UCL
21.3
CL
12.2
LCL
3.0
Co-management
Order sets
New discharge policy
New social worker
01/2010
03/2010
05/2010
07/2010
09/2010
11/2010
01/2011
03/2011
05/2011
07/2011
09/2011
11/2011
01/2012
03/2012
05/2012
07/2012
09/2012
11/2012
1/2013
3/2013
5/2013
7/2013
9/2013
11/2013
Month/year

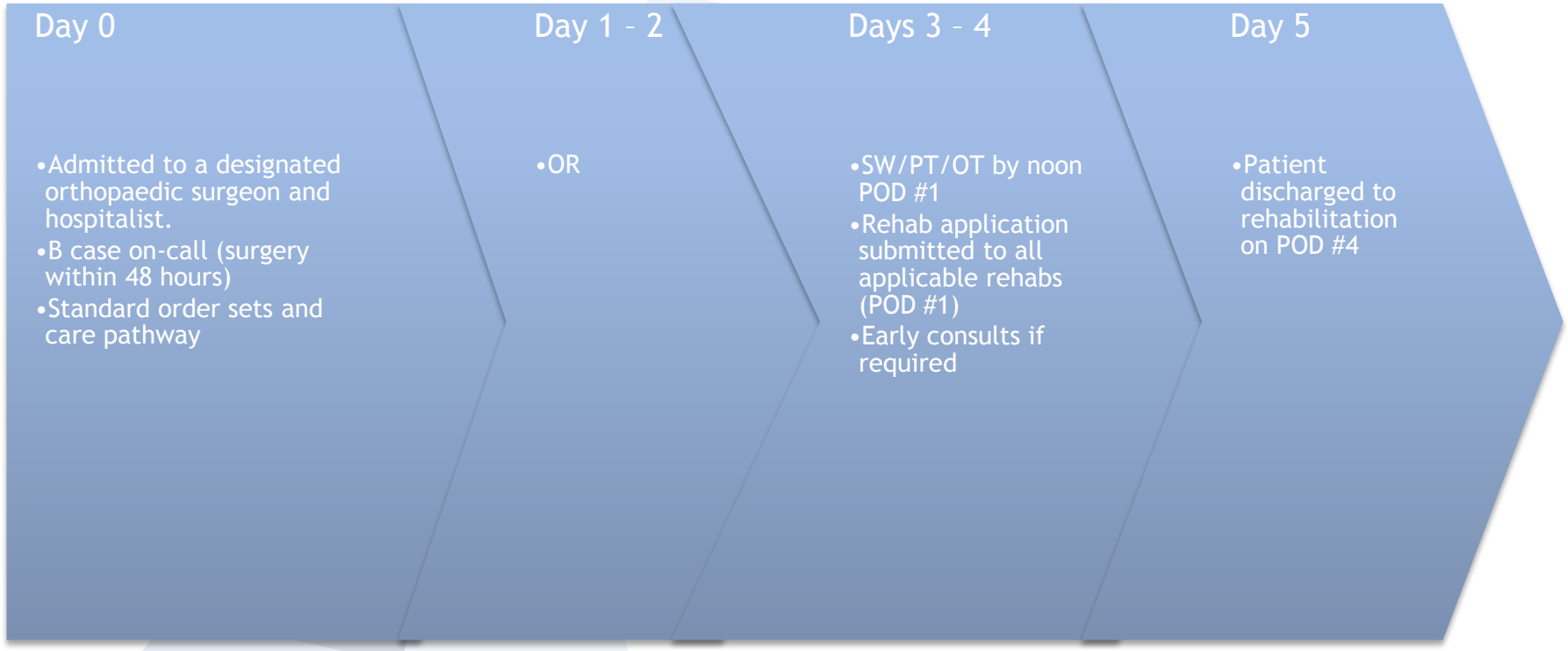
Proportion of patients to OR in <48hrs



Time to OR


100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Apr/12
Jun/12
Aug/12
Oct/12
Dec/12
Feb/13
Apr/13
Jun/13
Aug/13
Oct/13
Dec/13
% <= 48 hrs
Linear (% <= 48 hrs)

Hip Fracture Patient Current State



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Questions & Discussion