Outstanding Issues in Medication Reconciliation

Margaret Colquhoun, B.Sc.Phm., FCSHP

Project Lead, ISMP Canada

http://www.ismp-canada.org/medrec/

CSHP PPC Satellite Symposia
Sponsored by Hospira Healthcare Corporation

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Complimentary Online Continuing Education Module

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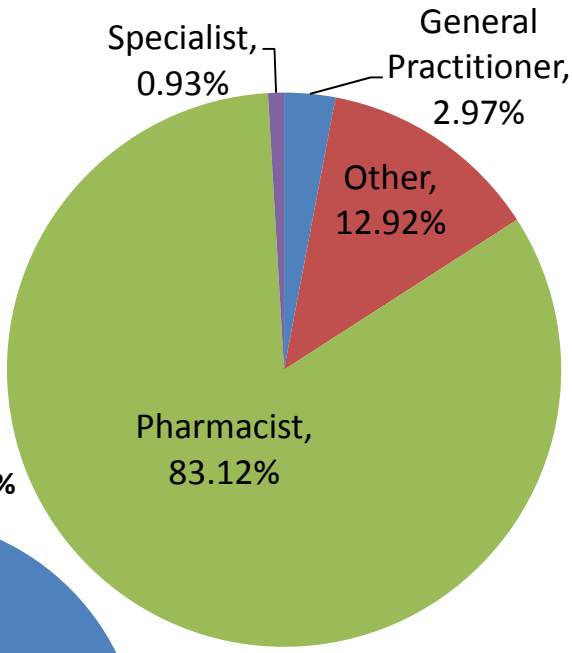
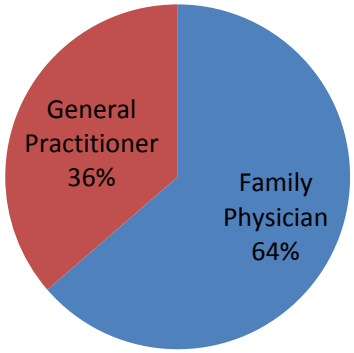
Rx Briefcase 2013

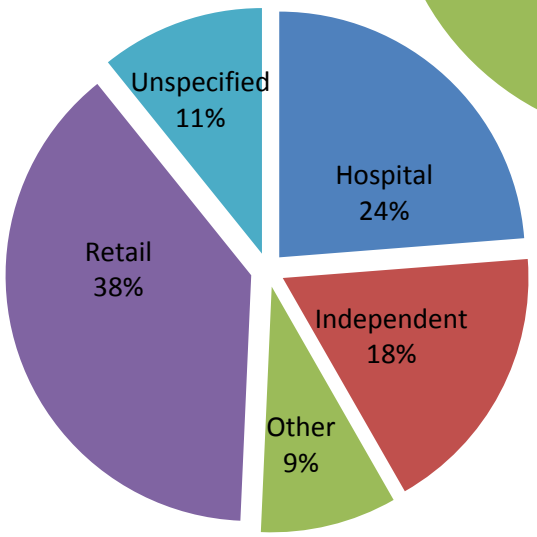
1425 participants



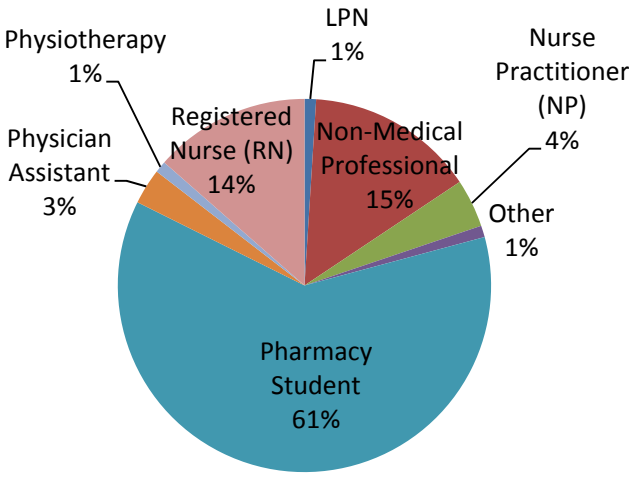
General Practitioner – 2.9%



Pharmacist 83%



Other 12.9%



Thanks also to……..

- Canadian Patient Safety Institute
  - 2005 – 2014 MedRec Intervention

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MedRec 2007

- Unknown – did not know what we did not know
- Systems not in place
- Measures not in place
- Studies not driving practice change

National Collaboration Now in its Ninth Year

2005

Safer Healthcare Now! (SHN) launched

MedRec education sessions begin

MedRec Acute Care Getting Started Kit (GSK)

2006

MedRec enrollment highest in SHN

Online MedRec community for sharing averages 1800 hits per month

2007

MedRec Long-Term Care GSK

Canadian BPMH language appears internationally

2008

National MedRec monthly calls begin

MedRec Acute Care GSK V.2

World Health Organization chooses Canada to lead MedRec in the High 5s

BPMH Interview Guide

2009

High 5s Assuring Medication Accuracy at Transitions of Care: Standard Operating Protocol

MedRec in Home Care Pilot Project finds approximately 2.3 discrepancies/client

2010

Virtual series on implementing MedRec in Home Care attracts national teams

MedRec Home Care GSK

2011

Canadian inter-professional joint statement endorsed by 13 associations

MedRec National Summit of over 70 healthcare leaders identified 9 themes required to move MedRec forward in Canada

MedRec Acute Care GSK V.3

Virtual series on MedRec at Discharge attracts national teams

National MedRec Strategy Year End Report

Canadian survey identified practice leaders, barriers and facilitators

2012

MyMedRec iPhone app (portable up-to-date health record) available on the App Store

Cross Country MedRec Check-Up Map highlighting Canadian success

Knowledge is the Best Medicine website

MedRec Long Term Care GSK V.2

Medication Reconciliation in Canada: Raising the Bar

Snapshot of MedRec in Canada

2013

High 5s Medication Reconciliation Map

MedRec Quality Audit Tool to assess the quality of the MedRec process

National MedRec monthly calls attract 400 teams

Over 500 SHN teams are enrolled in MedRec

Objectives

To highlight:

- Current state
- Recent data
- Getting to where we want to be
  - Leadership
  - Measurement and Monitoring Quality
  - Role of technology
  - Role of pharmacy staff
- Updated Accreditation Canada ROPs

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Tonight's Audience

- MedRec Implementation ?
  - Inpatient – Admission, Transfer, Discharge
  - Ambulatory
- Model of MedRec
  - Who collects BPMH – Pharmacy Staff, Nursing, Physicians?
- Use of Technology
  - Using technology for MedRec process?

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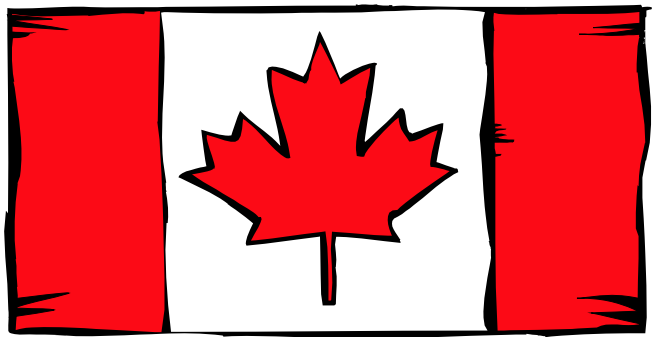
Current State



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CSHP 2015 Survey

May 2013

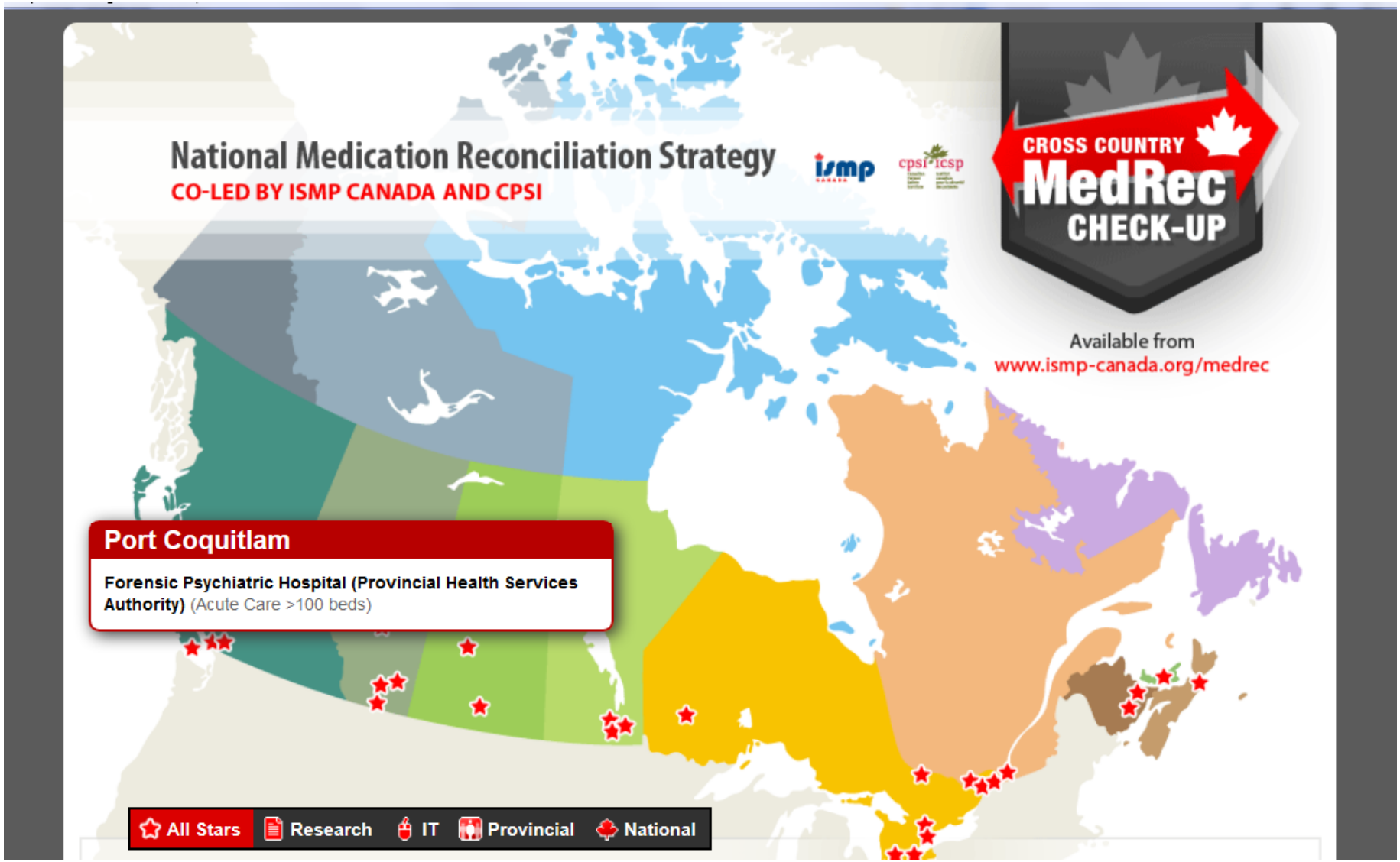
Objective 1.1**	In **100**% of hospitals[1] and related healthcare settings, pharmacists will ensure that medication reconciliation[2] occurs during transitions across the continuum of care (admission, transfer and discharge).

BASELINE	PROGRESS (2011/12)	British Columbia	Prairies+	Ontario	Quebec	Atlantic@
Admission 69% (2009/10)	85%	58%	97%	98%	77%	83%
Transfer 41% (2009/10)	47%	42%	38%	73%	39%	22%
Discharge 36% (2009/10)	44%	19%	50%	54%	43%	44%

Within 15% of target or surpassed

Within 16 to 30% of target

More than 30% from target



Relatively few <u>self-identified</u> "MedRec All-Stars" who have MedRec in place across admission, transfer and discharge

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Health Council of Canada Report

2014

Ref: Health Council of Canada, “Where you live matters, Canadian Views on Health Care Quality”, 2014

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It is still happening!!!

Recent Data

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Got Med Wreck? Targeted Repairs from the Multi-Center Medication Reconciliation Quality Improvement Study (MARQUIS)

Jeffrey L. Schnipper, MD, MPH, FHM
Director of Clinical Research, BWH Hospitalist Service
Associate Physician, Division of General Medicine,
Brigham and Women's Hospital
Associate Professor, Harvard Medical School

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Review of 26 Studies

shm MARQUIS
Multi-Center Medication Reconciliation Quality Improvement Study

STUDY DESIGN

- 10 RCT
- 3 Non-RCT
- 13 Pre-Post

INTERVENTIONS

- 15 Pharmacist
- 6 IT-related
- 5 “Other” = staff education, use of standardized med reconciliation tool

QUALITY SCORE

(Based on USPSTF Criteria)

- 6 “Good” Quality
- 5 “Fair” Quality
- 15 “Poor” Quality

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Conclusions

- Most robust literature is for pharmacy-related interventions:
  - 15/26 studies included
  - 4/6 good quality studies
  - Examined clinical outcomes (ADE, utilization)
- Successful interventions included:
  - Intensive pharmacy staff involvement
  - Focus on high risk subset of patients

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Dr. Schnipper National Call

- Listen to the recording of this great call:
- Dr. Schnipper call

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ROI from Readmission Prevention

Additional ROI based on Readmission Reduction due to Counseling at Discharge

Table 1: ROI ASSUMPTIONS TABLE

The following assumptions are made about the "model" hospital. These assumptions drive all cost figures in the ROI analysis table below. Each hospital must provide its own information into this assumptions table to derive institution-specific estimates for the ROI analysis. Updating the assumptions table will automatically revise figures in the ROI table.

Number of inpatient admissions per year	35,000
% of patients that are high-risk using MARQUIS criteria	25%
Number of patients that would need pharmacist discharge counseling	8750
Proportion of 30-day readmissions due to adverse drug events(A)	7%
Proportion of 30-day readmissions due to ADEs considered preventable or ameliorable(B)	65%
Expected proportion of 30-day readmissions due to ADEs that can be prevented by MARQUIS discharge counseling	22%
Number of 30-day readmissions that can be prevented per year	135
Cost of a readmission (e.g., under bundled payments and capitated contracts, not including VBP plus reduced risk of Medicare and MassHealth penalties)	$9,600
Annual savings to hospital as a result of avoided harmful medication errors	$1,293,600
Time (in minutes) required per admission for pharmacist to complete high-intensity pharmacist counseling (C)	39
Pharmacist hours required per year to perform medication reconciliation	5,688
Pharmacist FTE required per year to perform medication reconciliation	2.7
Pharmacist FTE needed to add to budget to staff FTEs (benefit time, etc)	3.6
Pharmacist salary	100,000
Pharmacist fringe benefit rate	35%
Total labor cost per pharmacist FTE	$135,000
Total labor cost for all additional pharmacist medication reconciliation FTEs	$479,883

Slide Courtesy of Dr.Jeff Schnipper
Safer Healthcare Now! Webinar Jan, 2014

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Pennsylvania Patient Safety Advisory -2013

- 501 reports involving MedRec breakdowns in 1 year
- 69% at admission
- Events most often at prescribing (40%)
- Drug omission most frequent (26.7%)

REF: Breakdowns in the Medication Reconciliation Process, Pa Patient Saf Advis 2013 Dec;10(4):125-36.

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Figure. Medication-Reconciliation-Related Events That Occurred from November 1, 2011, through November 31, 2012, by Node, as Reported to the Pennsylvania Patient Safety Authority (N = 501)

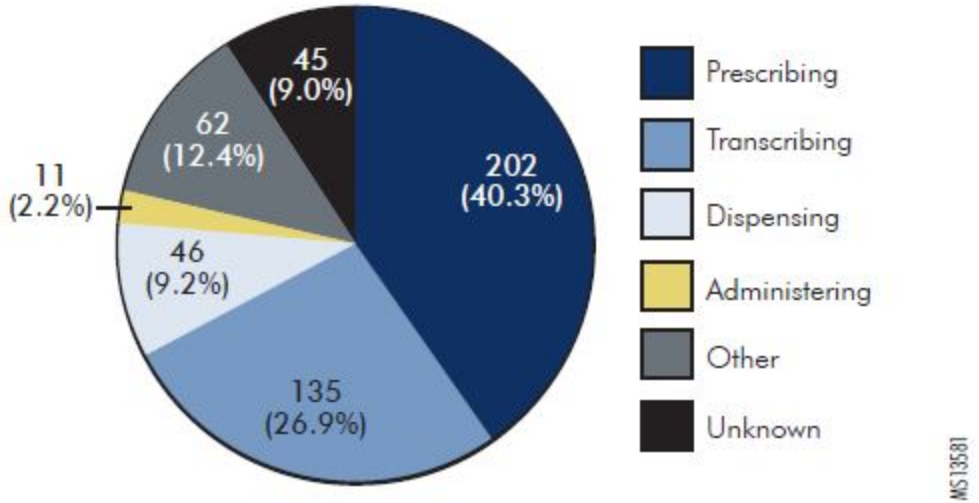

Table. Top Five Event Types Associated with Medication-Reconciliation-Related Events That Occurred from November 1, 2011, through November 31, 2012, as Reported to the Pennsylvania Patient Safety Authority

EVENT TYPE	NO. OF EVENTS (%) BY CARE TRANSITION				
	Overall (N = 501)	Admission (N = 347)	Transfer (N = 43)	Discharge (N = 50)	Unknown (N = 61)
Drug omission	134 (26.7)	90 (25.9)	11 (25.6)	12 (24.0)	14 (23.0)
Wrong dose	102 (20.4)	75 (21.6)	2 (4.7)	11 (22.0)	14 (23.0)
Additional drug or dose	90 (18.0)	55 (15.9)	14 (32.6)	9 (18.0)	12 (19.7)
Unknown	61 (12.2)	31 (8.9)	13 (30.2)	8 (16.0)	9 (14.8)
Wrong drug	40 (8.0)	31 (8.9)	1 (2.3)	4 (8.0)	4 (6.6)

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Pilot Study

Impact of an Outpatient Pharmacist Intervention on Medication Discrepancies and Health Care Resource Utilization in Posthospitalization Care Transitions

Journal of Primary Care & Community Health
2014, Vol 5(1) 14–18
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DOI: 10.1177/2150131913502489
jpc.sagepub.com
SAGE

Emily M. Hawes[1,2], Whitney D. Maxwell[3], Sarah F. White[4], Jesica Mangun[1,2], and Feng-Chang Lin[1]

- Prospective, randomized pilot study
- Effects of phmy clinic visit focused on MedRec after discharge on readmsissions and ED visits
- Of 61 pts 54% had discrepancies at discharge; 50% resolved in Phm. arm of study vs 9.5% in usual care arm
- Significantly lower rates of 30 day readmits and ED visits

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Objectives

To review:

- "Current state" in Canada
- Recent data
- **Getting to where we want to be**
  - **Leadership**
  - Measurement and Monitoring Quality
  - Role of technology
  - Role of pharmacy staff
- Updated Accreditation Canada ROPs

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LEADERSHIP ACCOUNTABILITY

"Senior leadership commitment is critical to ensuring MedRec is implemented successfully across an organization.
Accountability must rest with the CEO with clear reporting expectations at the board level."

REF: Optimizing Medication Safety at Care Transitions: A National Challenge, 2011
http://www.ismp-canada.org/download/MedRec/MedRec_National_summitreport_Feb_2011_EN.pdf

Stories from Safer Healthcare Now tell us that THIS IS TRUE!!!!!

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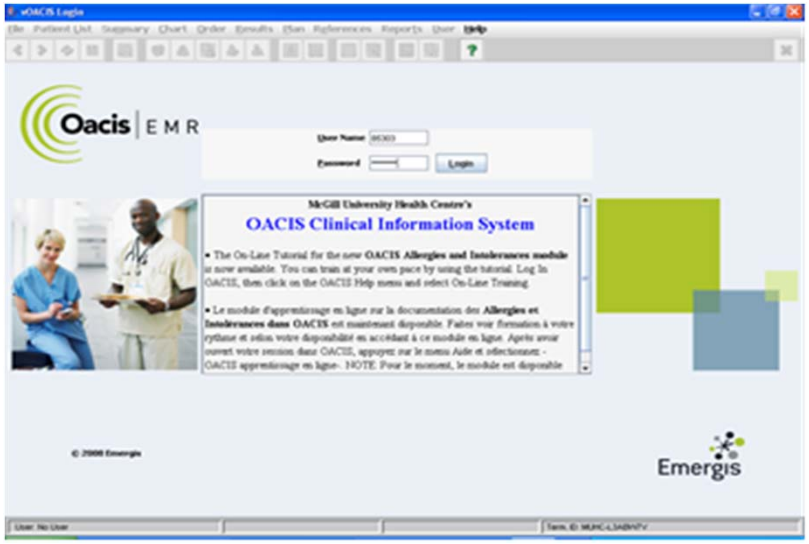
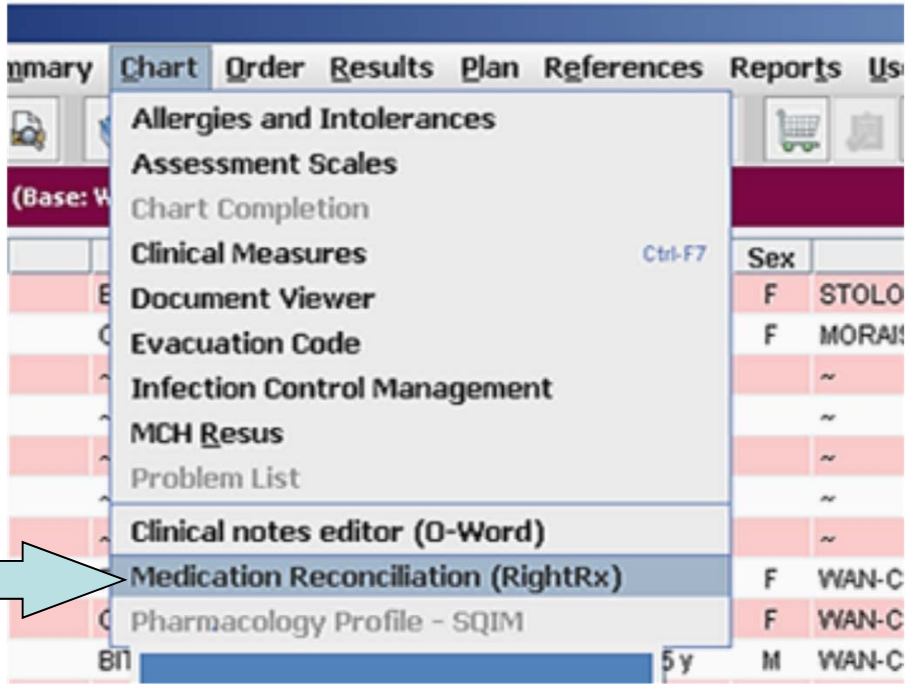
McGill – Moxxi Project





RightRx uses this “real-time” linkage to the Quebec health insurance agency (Régie de l’assurance maladie du Québec: RAMQ) to retrieve information on community medications and medical services.

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RESEARCH ARTICLE Open Access

Medication reconciliation at admission and discharge: a time and motion study

Ari N Meguerditchian[1,2,3*], Stanimira Krotneva[1], Kristen Reidel[1], Allen Huang[4] and Robyn Tamblyn[1,5,6]

Table 3 Time to complete medication reconciliation tasks at admission per hospital unit

Medication reconciliation tasks	Geriatrics				Internal medicine			
		Time (minutes)				Time (minutes)		
	N (%)	Mean (SD)	Min	Max	N (%)	Mean (SD)	Min	Max
Overall	21	92.2 (44.3)	46.1	202.5	20	46.2 (21.1)	22.5	94.6

Table 4 Time to complete medication reconciliation tasks at discharge per hospital unit

Medication reconciliation tasks	Geriatrics				Internal medicine				General surgery			
		Time (minutes)				Time (minutes)				Time (minutes)		
	N (%)	Mean (SD)	Min	Max	N (%)	Mean (SD)	Min	Max	N (%)	Mean (SD)	Min	Max
Preparing the discharge prescription	21	29.0 (23.8)	5.2	91.7	21	19.4 (11.7)	1.2	44.0	20	9.9 (18.2)	1.9	84.0

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Time and Motion Study McGill

- Workflow inefficiencies
- Lack of coordination, specialized training, agreement on roles, possible variability in quality and time required
- Standardization and use of electronic tools could improve efficiency

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REQUIRED
ORGANIZATIONAL
PRACTICES

COMMUNICATION

Improve the effectiveness and coordination of communication among care and service providers and with the recipients of care and service across the continuum

MEDICATION RECONCILIATION AS A STRATEGIC PRIORITY

NOTE: Accreditation Canada will move towards full implementation of medication reconciliation in two phases.

- For on-site surveys between 2014 and 2017, mediation reconciliation should be implemented in ONE service (or program) that uses a Qmentum standard containing the Medication Reconciliation at Care Transitions ROP. Medication reconciliation should be implemented as per the tests for compliance for each ROP.
- For on-site surveys in 2018 and beyond, medication reconciliation should be implemented in ALL services (or programs) that use Qmentum standards containing the Medication Reconciliation at Care Transitions ROP. Medication reconciliation should be implemented as per the tests for compliance for each ROP.

The organization has a strategy to partner with clients to collect accurate and complete information about client medications and utilize this information during transitions of care.

GUIDELINES

Medication reconciliation is widely recognized as an important safety initiative. In Canada, Safer Healthcare Now! identifies medication reconciliation as a patient safety priority. The World Health Organization (WHO) has also developed a Standard Operating Protocol for medication reconciliation as one of its interventions designed to enhance patient safety. Properly conducted medication reconciliation reduces the possibility that medications will be inadvertently omitted, duplicated, or incorrectly ordered at transitions of care. Medication reconciliation can be a cost-effective way to reduce medication errors and can reduce the re-work that can be associated with managing client medications.

Safer Healthcare Now! offers a "Getting Started Kit" for various sectors (including acute care, long-term care, and home-care) at www.saferhealthcarenow.ca.

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Objectives

To review:

- "Current state" in Canada
- Recent data
- Getting to where we want to be
  - Leadership
  - **Measurement and Monitoring Quality**
  - Role of technology
  - Role of pharmacy staff
- Updated Accreditation Canada ROPs

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MEASUREMENT

- Effective January 2014 Accreditation Canada's MedRec Required Organizational Practices (ROP) includes a **test for compliance in which organizations are required to monitor compliance with their medication reconciliation process, and make necessary improvements.**

The audit tool is a user friendly method for meeting this ROP.

(More info at: http://www.accreditation.ca/uploadedFiles/News_and_Publications/Publications/ROP_Handbook/SupplementROP-06-2013_en.pdf

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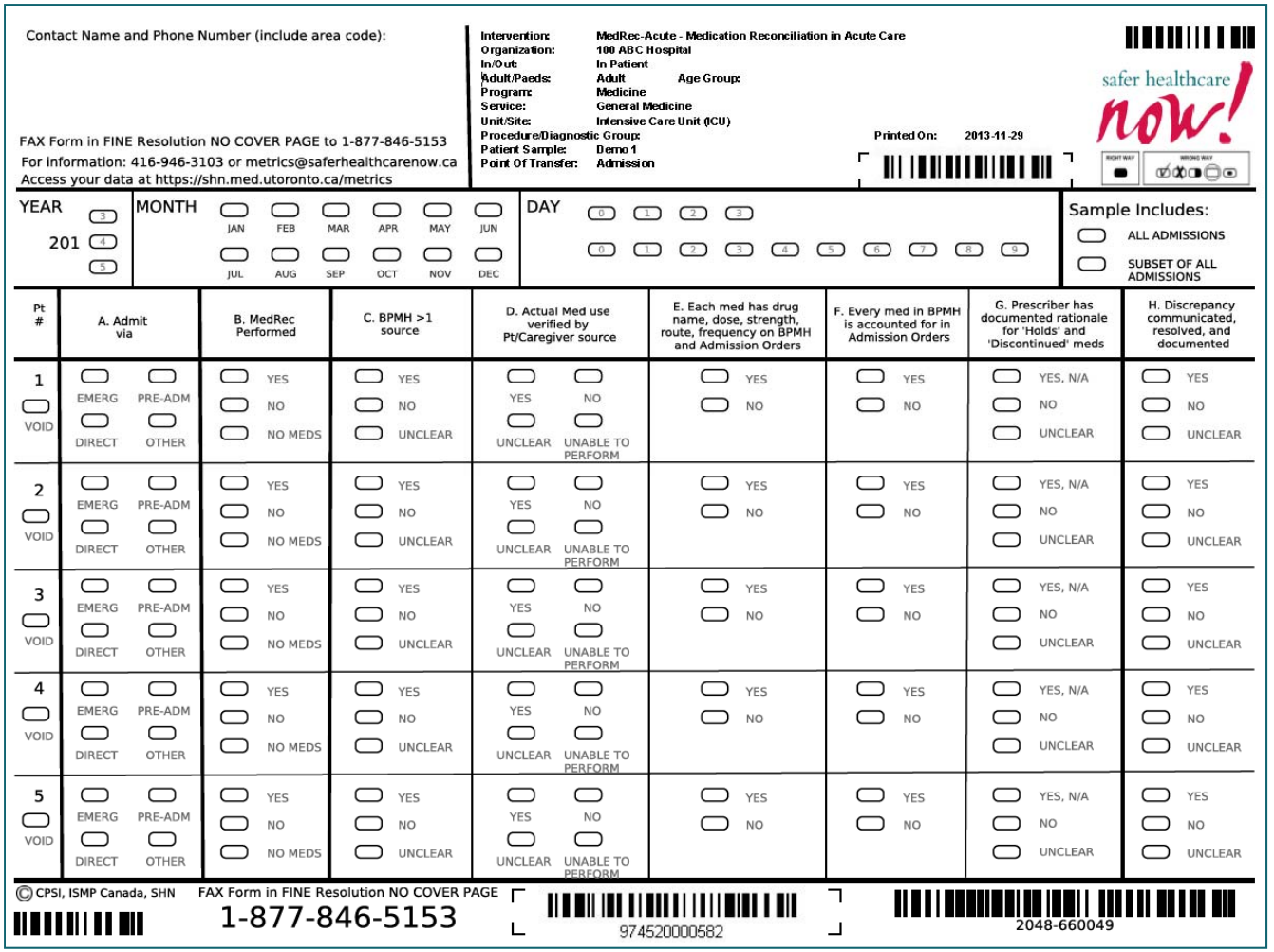

Contact Name and Phone Number (include area code):

FAX Form in FINE Resolution NO COVER PAGE to 1-877-846-5153
For information: 416-946-3103 or metrics@saferhealthcarenow.ca
Access your data at https://shn.med.utoronto.ca/metrics

Intervention: MedRec-Acute - Medication Reconciliation in Acute Care
Organization: 100 ABC Hospital
In/Out: In Patient
Adult/Paeds: Adult Age Group:
Program: Medicine
Service: General Medicine
Unit/Site: Intensive Care Unit (ICU)
Procedure/Diagnostic Group:
Patient Sample: Demo 1
Point Of Transfer: Admission

Printed On: 2013-11-29

safer healthcare now!

YEAR 201 (3 4 5)
MONTH: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
DAY: 0 1 2 3 / 0 1 2 3 4 5 6 7 8 9

Sample Includes:
ALL ADMISSIONS
SUBSET OF ALL ADMISSIONS

Pt #	A. Admit via	B. MedRec Performed	C. BPMH >1 source	D. Actual Med use verified by Pt/Caregiver source	E. Each med has drug name, dose, strength, route, frequency on BPMH and Admission Orders	F. Every med in BPMH is accounted for in Admission Orders	G. Prescriber has documented rationale for 'Holds' and 'Discontinued' meds	H. Discrepancy communicated, resolved, and documented
1 VOID	EMERG, PRE-ADM, DIRECT, OTHER	YES, NO, NO MEDS	YES, NO, UNCLEAR	YES, NO, UNCLEAR, UNABLE TO PERFORM	YES, NO	YES, NO	YES, N/A, NO, UNCLEAR	YES, NO, UNCLEAR
2 VOID	EMERG, PRE-ADM, DIRECT, OTHER	YES, NO, NO MEDS	YES, NO, UNCLEAR	YES, NO, UNCLEAR, UNABLE TO PERFORM	YES, NO	YES, NO	YES, N/A, NO, UNCLEAR	YES, NO, UNCLEAR
3 VOID	EMERG, PRE-ADM, DIRECT, OTHER	YES, NO, NO MEDS	YES, NO, UNCLEAR	YES, NO, UNCLEAR, UNABLE TO PERFORM	YES, NO	YES, NO	YES, N/A, NO, UNCLEAR	YES, NO, UNCLEAR
4 VOID	EMERG, PRE-ADM, DIRECT, OTHER	YES, NO, NO MEDS	YES, NO, UNCLEAR	YES, NO, UNCLEAR, UNABLE TO PERFORM	YES, NO	YES, NO	YES, N/A, NO, UNCLEAR	YES, NO, UNCLEAR
5 VOID	EMERG, PRE-ADM, DIRECT, OTHER	YES, NO, NO MEDS	YES, NO, UNCLEAR	YES, NO, UNCLEAR, UNABLE TO PERFORM	YES, NO	YES, NO	YES, N/A, NO, UNCLEAR	YES, NO, UNCLEAR

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National MedRec Quality Audit Tool

(for use at Admission for Acute and LTC)

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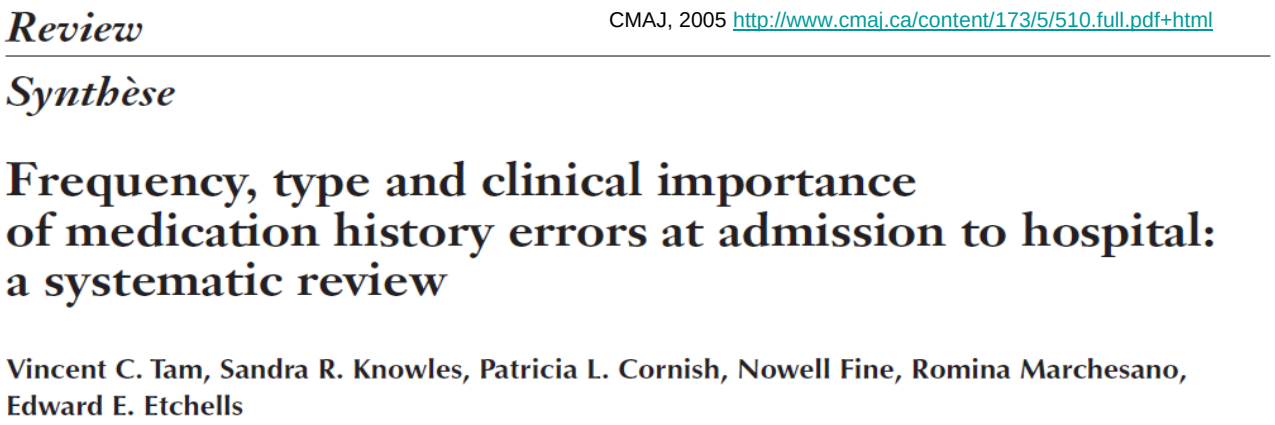
Literature suggests…..



Review

CMAJ, 2005 http://www.cmaj.ca/content/173/5/510.full.pdf+html

Synthèse

Frequency, type and clinical importance of medication history errors at admission to hospital: a systematic review

Vincent C. Tam, Sandra R. Knowles, Patricia L. Cornish, Nowell Fine, Romina Marchesano, Edward E. Etchells

- A review of published articles found that **10-67%** of patients had **at least 1 prescription medication history error**
  - when non-prescription medications were included the frequency of errors was **25-83%**
- Authors suggest: “should be a comprehensive medication history that includes an interview, inspection of medication vials or lists, or both and contact with community pharmacies, or family physicians.”

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Contact Name and Phone Number (include area code):

Intervention: MedRec-Acute - Medication Reconciliation in Acute Care
Organization: 100 ABC Hospital
In/Out: In Patient
Adult/Paeds: Adult Age Group:
Program: Medicine
Service: General Medicine
Unit/Site: Intensive Care Unit (ICU)
Procedure/Diagnostic Group:
Patient Sample: Demo 1
Point Of Transfer: Admission

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MONTH: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

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Sample Includes: ALL ADMISSIONS / SUBSET OF ALL ADMISSIONS

Pt #	A. Admit via	B. MedRec Performed	C. BPMH >1 source	D. Actual Med use verified by Pt/Caregiver source	E. Each med has drug name, dose, strength, route, frequency on BPMH and Admission Orders	F. Every med in BPMH is accounted for in Admission Orders	G. Prescriber has documented rationale for 'Holds' and 'Discontinued' meds	H. Discrepancy communicated, resolved, and documented
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4 VOID	EMERG, PRE-ADM, DIRECT, OTHER	YES, NO, NO MEDS	YES, NO, UNCLEAR	YES, NO, UNCLEAR, UNABLE TO PERFORM	YES, NO	YES, NO	YES, N/A, NO, UNCLEAR	YES, NO, UNCLEAR
5 VOID	EMERG, PRE-ADM, DIRECT, OTHER	YES, NO, NO MEDS	YES, NO, UNCLEAR	YES, NO, UNCLEAR, UNABLE TO PERFORM	YES, NO	YES, NO	YES, N/A, NO, UNCLEAR	YES, NO, UNCLEAR

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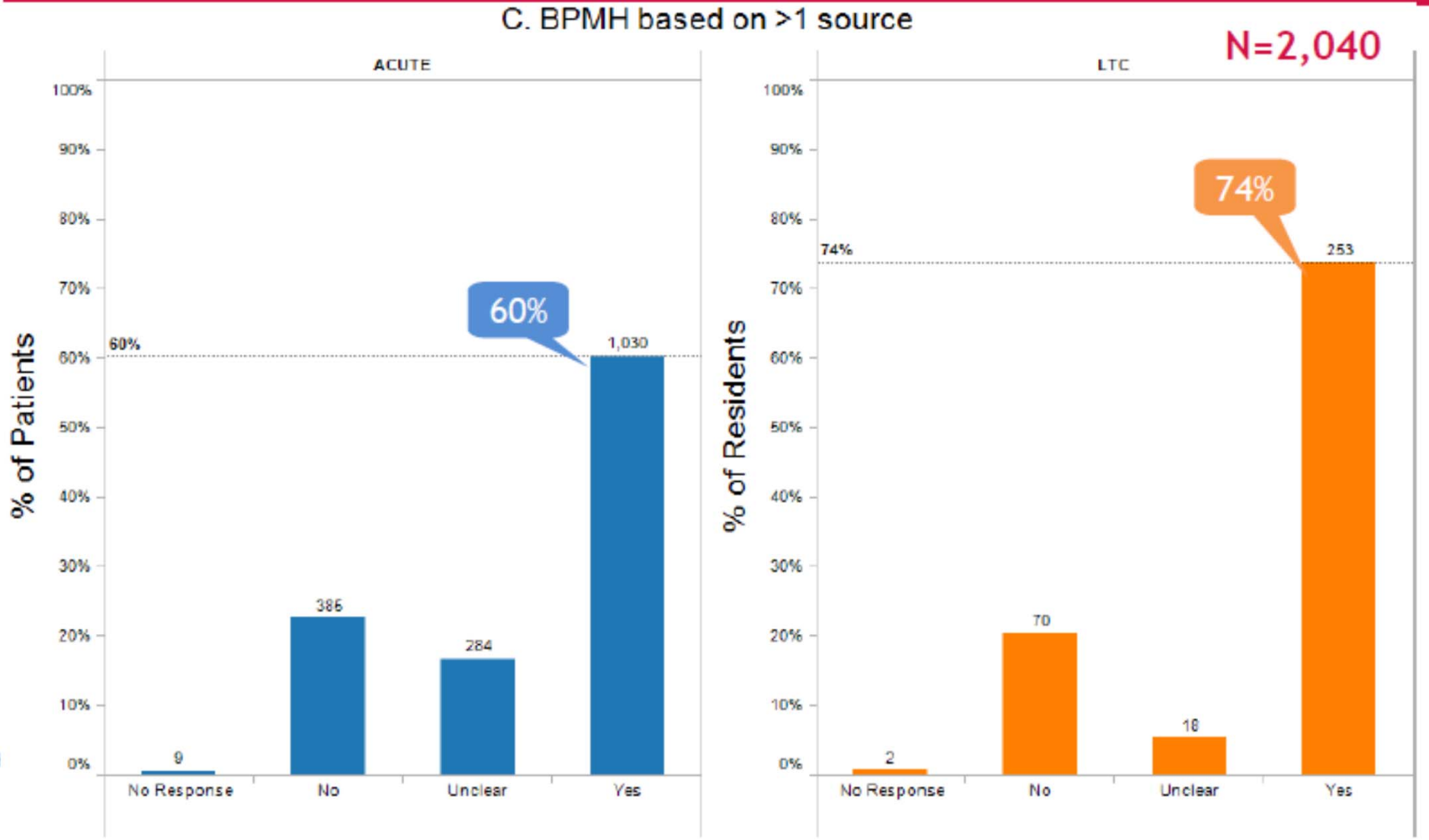
C. 'BPMH -greater than one source'



Literature suggests...

- 66% of Canadians have sometimes used non-prescription medication in the past six months.
- 57% sometimes took vitamins and minerals, while 34% sometimes took herbal and natural products.

2004 Survey of Canadians' Use of OTC Medications http://www.bemedwise.ca/english/usagesurvey.html

- Adherence- "the extent to which a person's behavior [in] taking medication...corresponds with agreed recommendations from a health care provider" (World Health Organization, 2003).

- 12% of patients don't fill their prescription at all.
- 12% of patients don't take medication at all after they fill the prescription.
- 22% of patients take less of the medication than is prescribed on the label.

Adult Meducation http://www.adultmeducation.com/OverviewofMedicationAdherence_2.html

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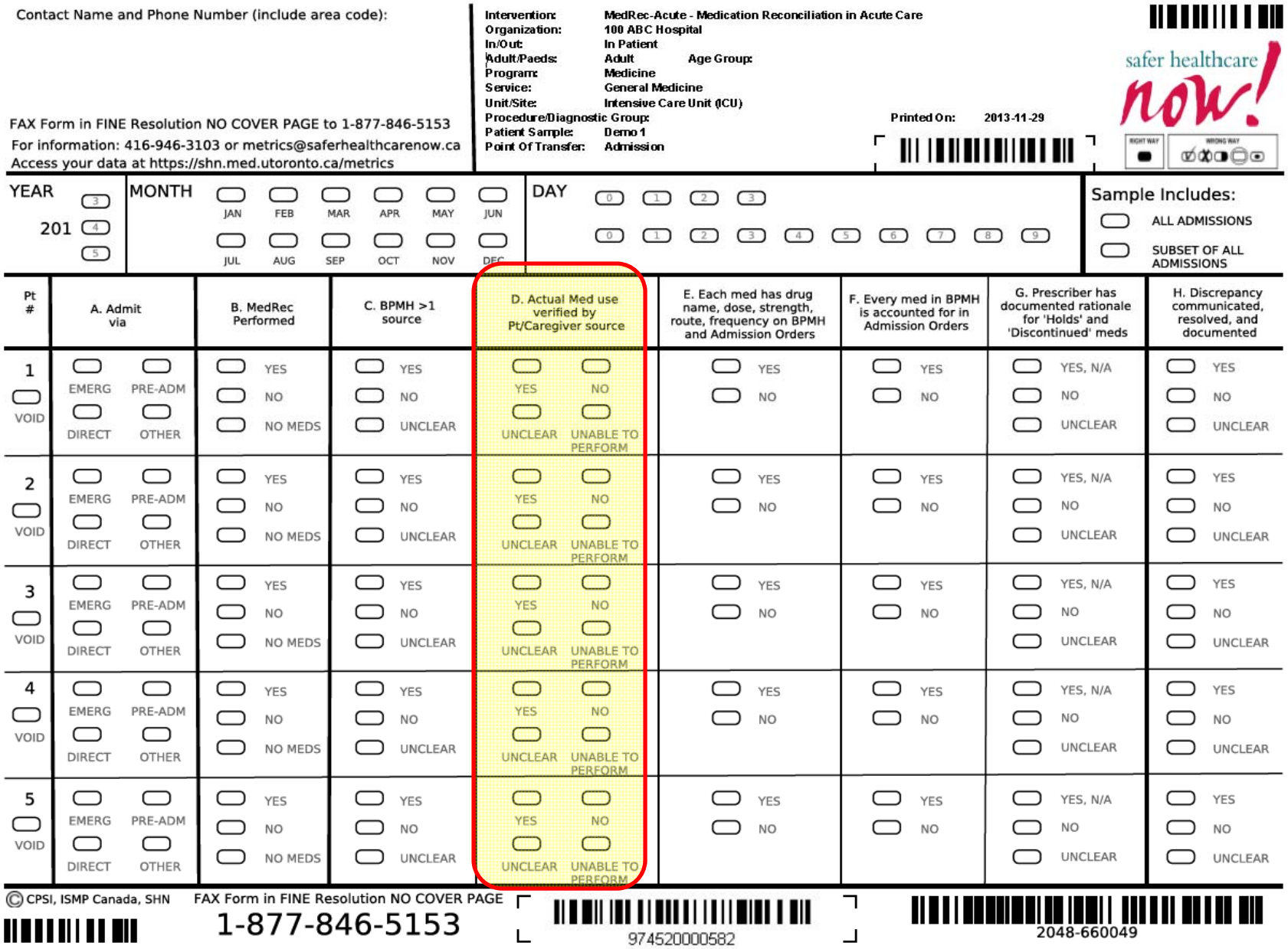

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For information: 416-946-3103 or metrics@saferhealthcarenow.ca
Access your data at https://shn.med.utoronto.ca/metrics

YEAR 201 3 4 5
MONTH JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
DAY 0 1 2 3 / 0 1 2 3 4 5 6 7 8 9
Sample Includes: ALL ADMISSIONS; SUBSET OF ALL ADMISSIONS

Pt #	A. Admit via	B. MedRec Performed	C. BPMH >1 source	D. Actual Med use verified by Pt/Caregiver source	E. Each med has drug name, dose, strength, route, frequency on BPMH and Admission Orders	F. Every med in BPMH is accounted for in Admission Orders	G. Prescriber has documented rationale for 'Holds' and 'Discontinued' meds	H. Discrepancy communicated, resolved, and documented
1 VOID	EMERG, PRE-ADM, DIRECT, OTHER	YES, NO, NO MEDS	YES, NO, UNCLEAR	YES, NO, UNCLEAR, UNABLE TO PERFORM	YES, NO	YES, NO	YES, N/A, NO, UNCLEAR	YES, NO, UNCLEAR
2 VOID	EMERG, PRE-ADM, DIRECT, OTHER	YES, NO, NO MEDS	YES, NO, UNCLEAR	YES, NO, UNCLEAR, UNABLE TO PERFORM	YES, NO	YES, NO	YES, N/A, NO, UNCLEAR	YES, NO, UNCLEAR
3 VOID	EMERG, PRE-ADM, DIRECT, OTHER	YES, NO, NO MEDS	YES, NO, UNCLEAR	YES, NO, UNCLEAR, UNABLE TO PERFORM	YES, NO	YES, NO	YES, N/A, NO, UNCLEAR	YES, NO, UNCLEAR
4 VOID	EMERG, PRE-ADM, DIRECT, OTHER	YES, NO, NO MEDS	YES, NO, UNCLEAR	YES, NO, UNCLEAR, UNABLE TO PERFORM	YES, NO	YES, NO	YES, N/A, NO, UNCLEAR	YES, NO, UNCLEAR
5 VOID	EMERG, PRE-ADM, DIRECT, OTHER	YES, NO, NO MEDS	YES, NO, UNCLEAR	YES, NO, UNCLEAR, UNABLE TO PERFORM	YES, NO	YES, NO	YES, N/A, NO, UNCLEAR	YES, NO, UNCLEAR

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974520000582
2048-660049

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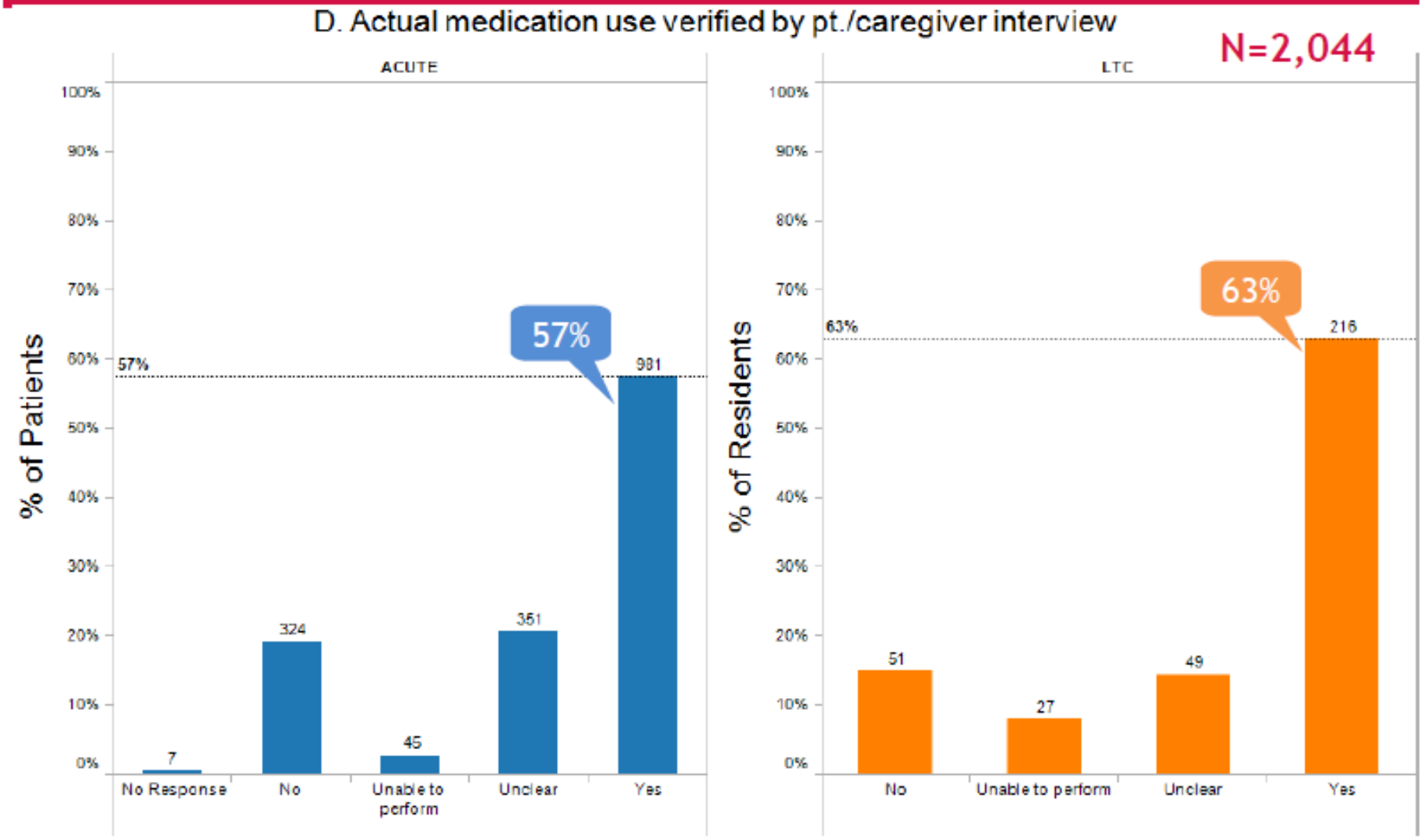
D. 'Med Use Verified by Pt/Caregiver'



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Literature suggests....

ORIGINAL INVESTIGATION

Unintended Medication Discrepancies at the Time of Hospital Admission

Patricia L. Cornish, BScPhm; Sandra R. Knowles, BScPhm; Romina Marchesano, BSc(Hon); Vincent Tam, BSc(Hon); Steven Shadowitz, MD, FRCPC; David N. Juurlink, MD, FRCPC; Edward E. Etchells, MD, FRCPC

(REPRINTED) ARCH INTERN MED/VOL 165, FEB 28, 2005 WWW.ARCHINTERNMED.COM

- Medication discrepancy was defined as a difference between the medication use history (BPMH) and the admission medication orders.
- In the sample of patients admitted to general medicine unit:
  - **54%** of patients had at least one unintentional discrepancy identified (most common type was omission of a regularly used medication)
  - **38%** of these discrepancies were judged to have the potential to cause moderate to severe discomfort or clinical deterioration

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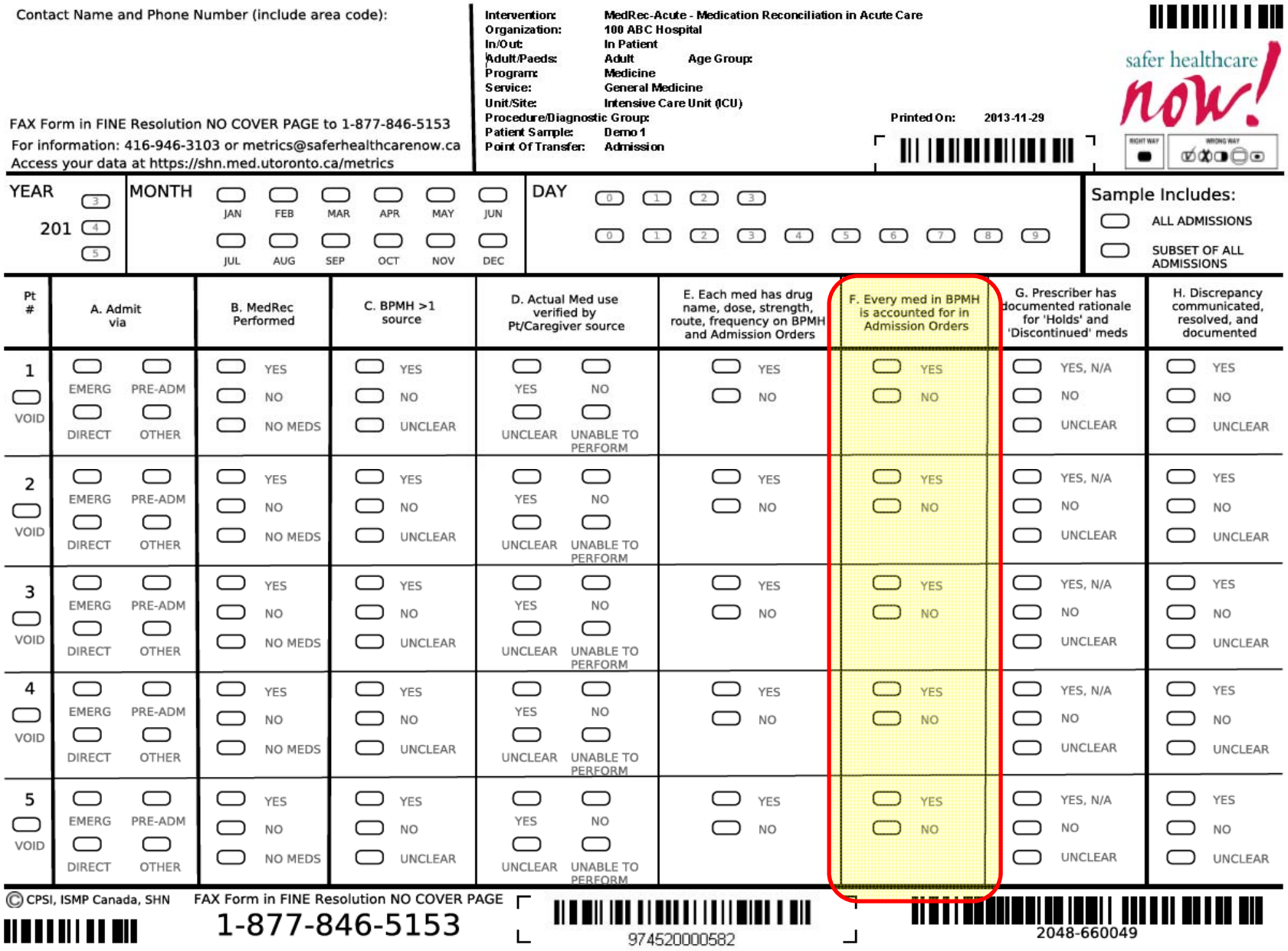

Contact Name and Phone Number (include area code):

Intervention: MedRec-Acute - Medication Reconciliation in Acute Care
Organization: 100 ABC Hospital
In/Out: In Patient
Adult/Paeds: Adult Age Group:
Program: Medicine
Service: General Medicine
Unit/Site: Intensive Care Unit (ICU)
Procedure/Diagnostic Group:
Patient Sample: Demo 1
Point Of Transfer: Admission

Printed On: 2013-11-29

safer healthcare now!

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1 VOID	EMERG PRE-ADM DIRECT OTHER	YES NO NO MEDS	YES NO UNCLEAR	YES NO UNCLEAR UNABLE TO PERFORM	YES NO	YES NO	YES, N/A NO UNCLEAR	YES NO UNCLEAR
2 VOID	EMERG PRE-ADM DIRECT OTHER	YES NO NO MEDS	YES NO UNCLEAR	YES NO UNCLEAR UNABLE TO PERFORM	YES NO	YES NO	YES, N/A NO UNCLEAR	YES NO UNCLEAR
3 VOID	EMERG PRE-ADM DIRECT OTHER	YES NO NO MEDS	YES NO UNCLEAR	YES NO UNCLEAR UNABLE TO PERFORM	YES NO	YES NO	YES, N/A NO UNCLEAR	YES NO UNCLEAR
4 VOID	EMERG PRE-ADM DIRECT OTHER	YES NO NO MEDS	YES NO UNCLEAR	YES NO UNCLEAR UNABLE TO PERFORM	YES NO	YES NO	YES, N/A NO UNCLEAR	YES NO UNCLEAR
5 VOID	EMERG PRE-ADM DIRECT OTHER	YES NO NO MEDS	YES NO UNCLEAR	YES NO UNCLEAR UNABLE TO PERFORM	YES NO	YES NO	YES, N/A NO UNCLEAR	YES NO UNCLEAR

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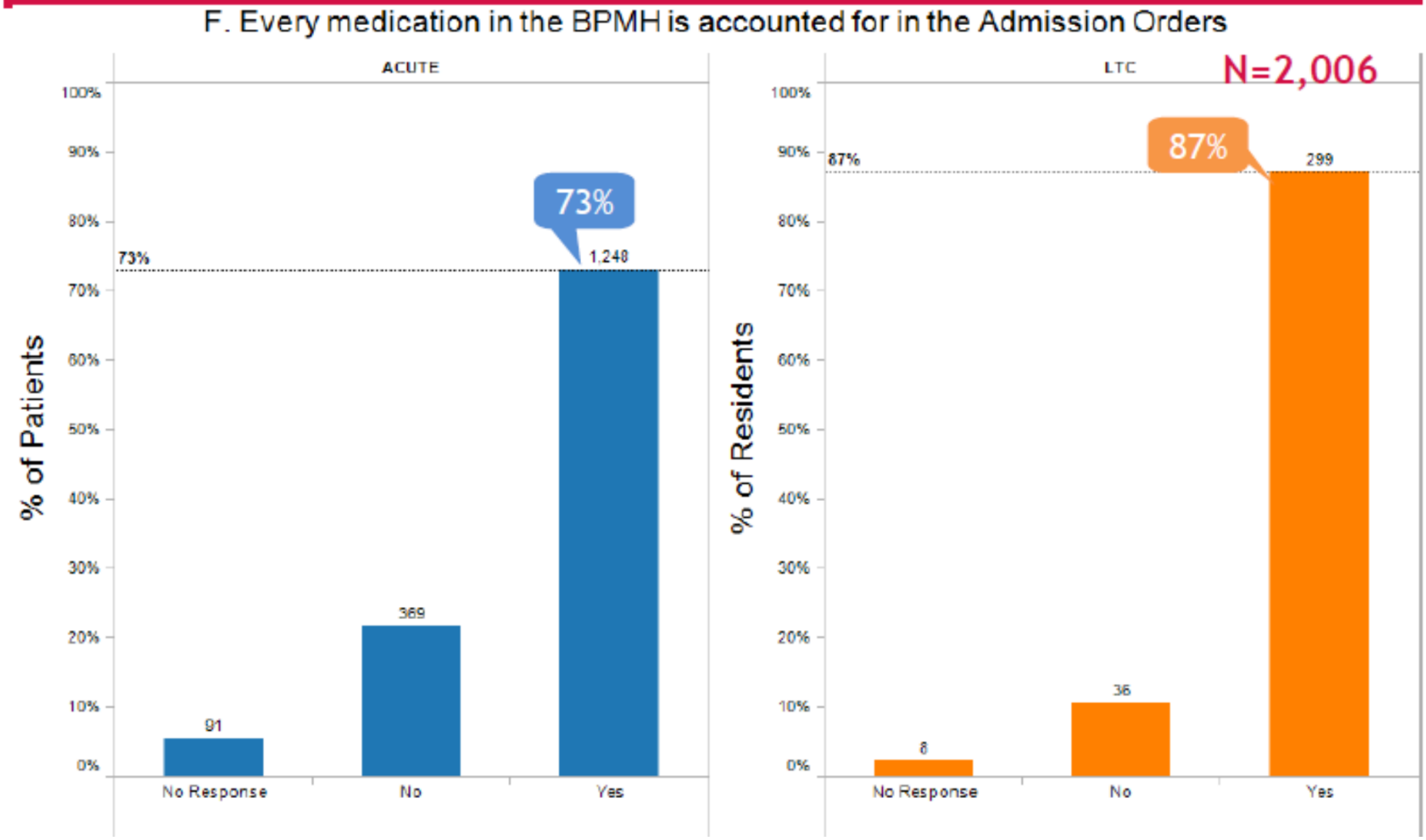
F. 'Meds on BPMH+Admin Order'



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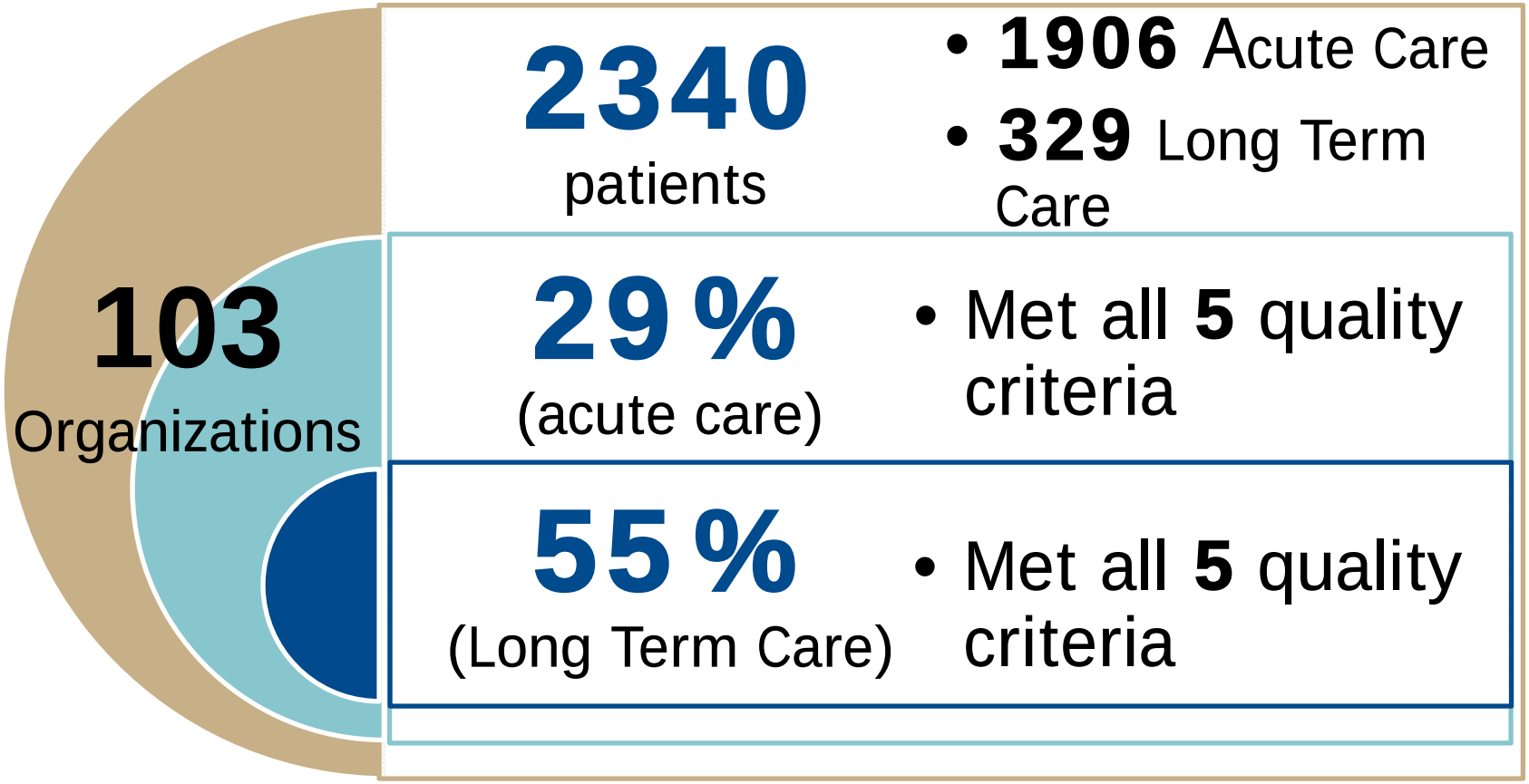
October 2013 was National MedRec Quality Audit Month



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Results Summary Comments

- Need to critically evaluate admission processes to ensure quality of MedRec processes at other transitions
- However, audit tool results demonstrate need for ongoing and specific improvements
- Many people believe they are doing MedRec but they may not be doing it well
  - The foundation of the process – the BPMH needs work

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Objectives

To review:

- "Current state" in Canada
- Recent data
- Getting to where we want to be
  - Leadership
  - Measurement and Monitoring Quality
  - **Role of technology**
  - Role of pharmacy staff
- Updated Accreditation Canada ROPs

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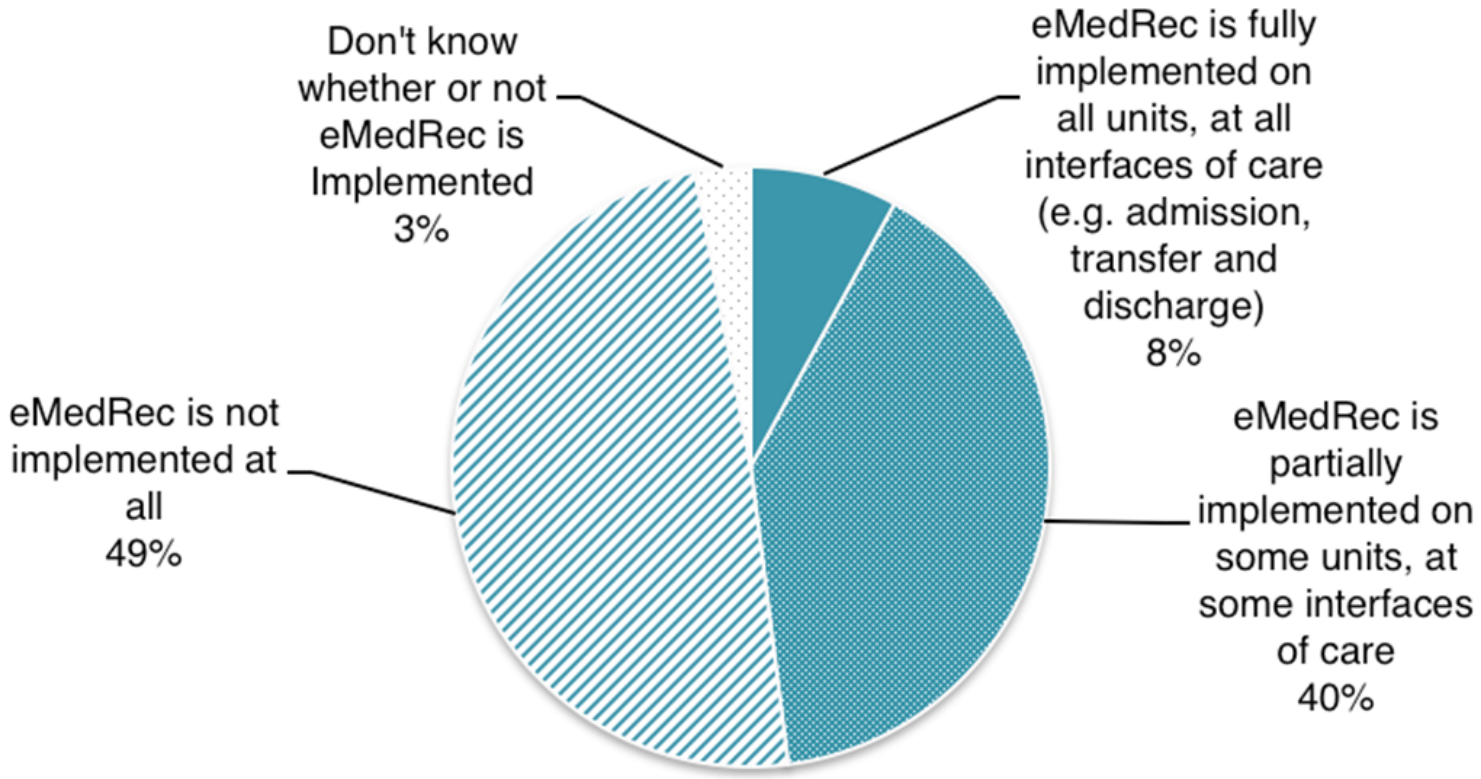
Paper to Electronic Project Online Survey*



*Response rate = 212

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“if you don’t use the right paper to electronic system you will increase medication errors”

Dr. Jeffrey Schnipper, MD, MPH, FHM
“Got Med Wreck? Targeted Repairs from the Multi-Center Medication Reconciliation Quality Improvement Study (MARQUIS)”
January 14, 2014

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Motivation for Moving to eMedRec

- Integrates electronic data from multiple sources (electronic and non-electronic)
- Provides electronic tools and user interfaces for comparing medication lists
- Facilitate discharge MedRec with multiple sources of information

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Recommendations

- Understand **current workflow** before implementing
- Understand how eMedRec can **integrate** with existing and planned health information system infrastructure
- Obtain management and financial **support** (including ongoing for sustainability)
- Need to carefully stage eMedRec implementation

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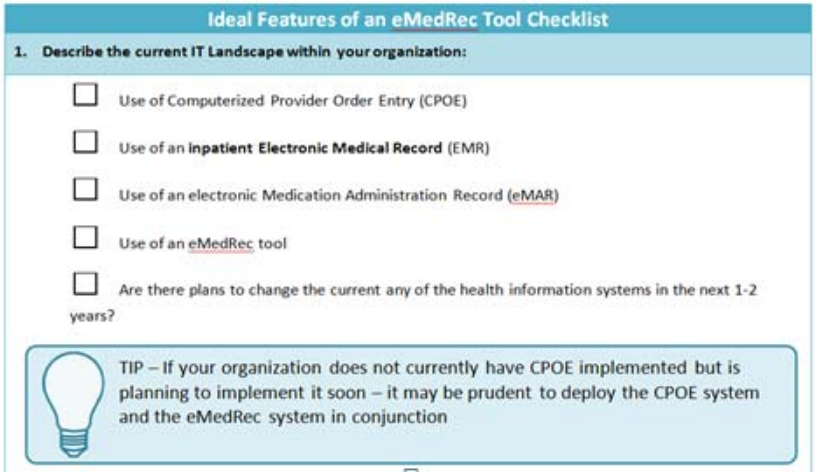
Tools / Checklists

- Organizational Readiness
- Steps to support the safe transition to eMedRec
- Ideal features of eMedRec
- Evaluation of eMedRec



Ideal Features of an eMedRec Tool Checklist

1. Describe the current IT Landscape within your organization:

- ☐ Use of Computerized Provider Order Entry (CPOE)
- ☐ Use of an **inpatient Electronic Medical Record** (EMR)
- ☐ Use of an electronic Medication Administration Record (eMAR)
- ☐ Use of an eMedRec tool
- ☐ Are there plans to change the current any of the health information systems in the next 1-2 years?

TIP – If your organization does not currently have CPOE implemented but is planning to implement it soon – it may be prudent to deploy the CPOE system and the eMedRec system in conjunction

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INTER-PROFESSIONAL ENGAGEMENT

OFFICIAL PUBLICATIONS

Medication Reconciliation: Statement on the Role of the Pharmacist (2009)

THE CANADIAN SOCIETY OF HOSPITAL PHARMACISTS AND THE INSTITUTE FOR SAFE MEDICATION PRACTICES CANADA SUPPORT THE LEADERSHIP ROLE OF PHARMACISTS IN ENSURING COMPREHENSIVE AND TIMELY MEDICATION RECONCILIATION. PHARMACISTS ARE UNIQUELY QUALIFIED TO LEAD THE DEVELOPMENT, IMPLEMENTATION, EVALUATION, AND IMPROVEMENT OF MEDICATION RECONCILIATION PROCESSES.

Canadian Society of Hospital Pharmacists
Société canadienne des pharmaciens d'hôpitaux

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Evidence-Derived Clinical Pharmacy Key Performance Indicator Critical Activity Areas (Doucette 8)

- Best Possible Medication History
- Admission Medication Reconciliation
- Patient Care Rounds
- Pharmaceutical Care
- Disease or Drug-Specific Quality Indicators
- Patient Education/Discharge Counseling
- Discharge Medication Reconciliation
- Post-Discharge Follow-Up

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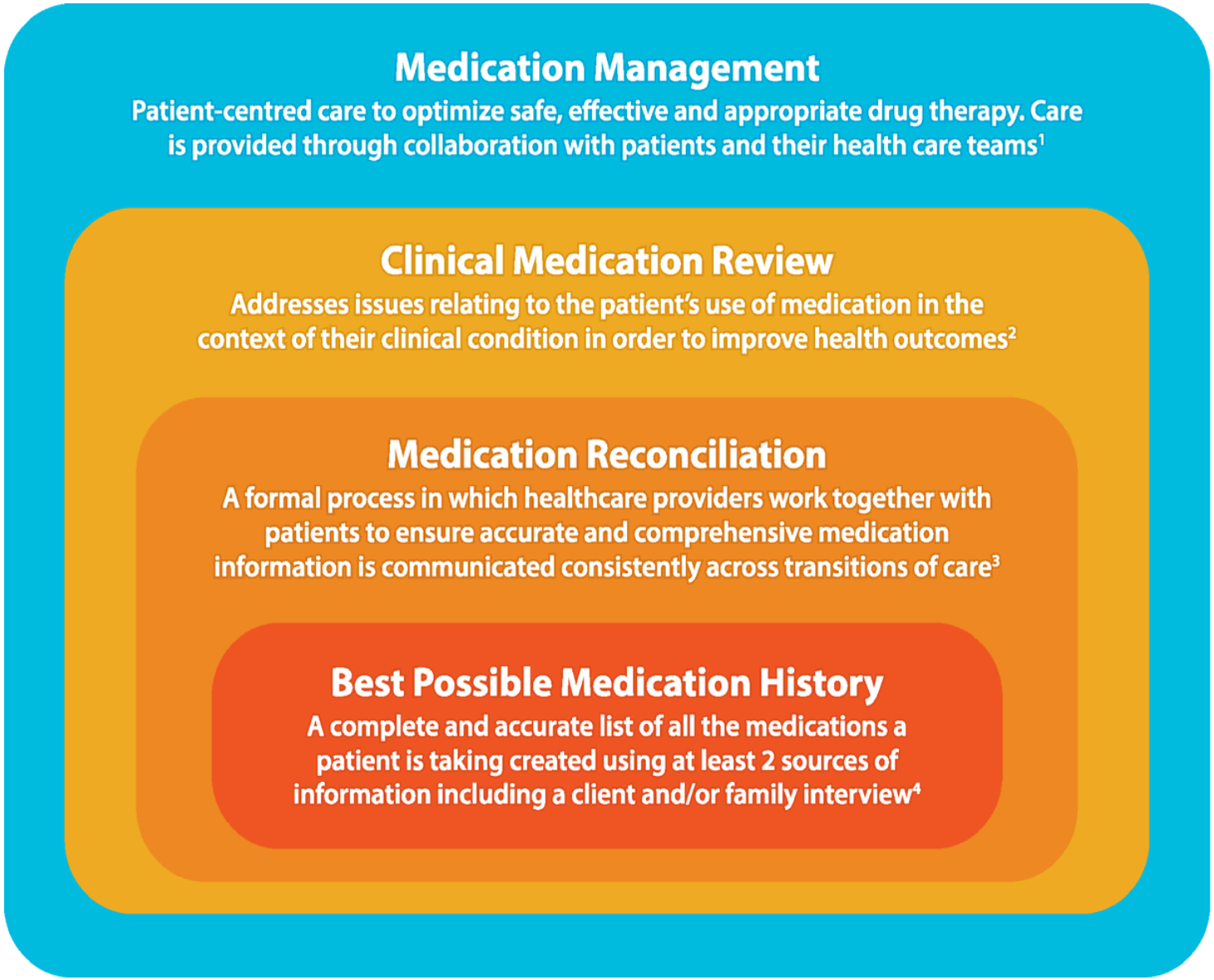

1. Developed collaboratively by the Canadian Pharmacists Association, Canadian Society of Hospital Pharmacists, Institute for Safe Medication Practices Canada, and University of Toronto Faculty of Pharmacy, 2012
2. www.health.gov.bc.ca/pharmacare
3. ISMP Canada. Medication Reconciliation in Acute Care: Getting Started Kit. 2011
4. ISMP Canada. Medication Reconciliation in Acute Care: Getting Started Kit. 2011

Adapted from
Fraser Health, Providence Health Care, Provincial Health Services Authority, Vancouver Coastal Health

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Dan Med J 60/4 | April 2013 DANISH MEDICAL JOURNAL | 1

Medication reconciliation is a prerequisite for obtaining a valid medication review

Mette Bjeldbak-Olesen[1], Anja Gadsbølle Danielsen[2], Dorthe Vilstrup Tomsen[1] & Tomas Joen Jakobsen[3]

Retrospective review of 75 patient charts found:

- **198** medication discrepancies were identified (mean 2.6 per patient)
  - 15% of the discrepancies were deemed potentially serious or fatal
  - 62% were potentially significant
  - 23% were potentially non-significant
- **129** drug-related problems were identified by medication review (mean 1.7 per patient)
  - 35% were potentially serious or fatal
  - 29% were potentially significant
  - 36% were potentially non-significant

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Role of the pharmacy technician

EDUCATION AND TRAINING

Case studies - views from the frontline

50% could benefit from refresher classes on medication reconciliation

50-70% never received training in how to take a BPMH

80% never received feedback on the quality of pre-admission medication histories

60% not given sufficient time to take a BPMH

60-75% not given sufficient time to do med rec well in high-risk patients

70% feel hospital doesn't have enough staff allocated for med rec in high-risk patients

50% never been trained in 'teach-back' or use it as part of DC education

50% never received training in communicating with low health literacy patients

Slide Courtesy of Dr.Jeff Schnipper
Safer Healthcare Now! Webinar Jan, 2014

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a place of mind

Medication-Reconciliation Interprofessional Event

January 13, 2014

Nursing students are invited to join more than 400 Pharmacy third year and Medicine fourth year students in an innovative Medication-Reconciliation Interprofessional Event to be held at UBC on **Monday, January 13, 2014.**

Groups of eight multidisciplinary learners will participate in an engaging and collaborative problem-solving session related to a patient's medication use across transitions of care. Situated in a hospital patient discharge planning meeting setting, students will assess the patient's records for unintentional medication discrepancies and the risk of adverse drug events.

Teaching Medication Reconciliation Through Simulation: A Patient Safety Initiative for Second Year Medical Students

Lee A. Lindquist, MD MPH[1,3], Kristine M. Gleason, RPh[2], Molly R. McDaniel, PharmD[2], Allan Doeksen, BA[1], and David Liss, BA[1]

[1]Northwestern Center for Patient Safety, Institute for Health Care Studies, Northwestern University Feinberg School of Medicine, Chicago, IL, USA; [2]Northwestern Memorial Hospital, Chicago, IL, USA; [3]Division of Geriatrics, Northwestern University Feinberg School of Medicine, Chicago, IL, USA.

Undergraduate Healthcare Practitioner Education

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  - Role of pharmacy staff
- **Updated Accreditation Canada ROPs**

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Accreditation Canada ROP Changes for 2014

For services that use standards that contain an applicable MedRec ROP:

- For on-site surveys between 2014-2017, MedRec must be implemented across admission, transfer and discharge in ONE service
- For surveys 2018 onwards, MedRec must be implemented across admission, transfer and discharge in ALL services

http://www.accreditation.ca/sites/default/files/rop-handbook-2014-en.pdf

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Accreditation Canada ROPs Changes in 2015

Inclusion of MedRec in Emergency Department for NON-ADMITTED patients

REVISED for on-site surveys starting January 2015

MEDICATION RECONCILIATION AT CARE TRANSITIONS

Emergency Department

For the Emergency Department Standards

With the involvement of the client, family, or caregiver (as appropriate), the team generates a Best Possible Medication History (BPMH) and uses it to reconcile client medications for clients with a decision to admit and at visits where the client is at risk of potential adverse drug events.* Organizational policy determines which types of visits require medication reconciliation.

*Clients are at risk of potential adverse drug events when their care is highly dependent on medication management AND client factors or the medications typically used are known (based on available literature and internal data) to be associated with potential adverse drug events.

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To Review: Objectives

- "Current state" in Canada
- Recent data
- **Getting to where we want to be**
  - **Leadership**
  - **Measurement and Monitoring Quality**
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