



CaSS | **Medication Services Queensland**
A CLINICAL AND STATEWIDE SERVICE

Improving medication continuity from history and reconciliation to discharge medication records

Jennie McKay



Background

■ Admission

- Omitted on admission 0.54 ± 1.0 (0-5)
- Discrepancies 0.28 ± 0.98 (0-11)
- Omissions and discrepancies often continue until discharge

■ Discharge

- ~20% patients have adverse event post discharge ~70% related to medication
- 98% ADEs occur within 28 days of discharge
- Omission of 1 medication from discharge summary 2.3 x risk unplanned readmission



What Works

- Reconciliation on admission
 - Reduction in discrepancies and omitted medications (~50%)
- Reconciliation on discharge
 - Reduction in errors (~70%)
- Improved liaison on discharge
 - Reduction in AMEs (~60%)
 - Reduced risk of unplanned readmission



Multi-Faceted Approach

- Training

- Competency framework for pharmacists

- Competency modules

- Medication history and reconciliation

- Discharge reconciliation

- Forms and guidelines

- Medication Action Plan

- Electronic tools - eLMS



eLMS – Medication Liaison Tool

- Software designed to capture
 - Admission medication histories
 - Discharge medication records
- Snapshots of information
- Patient Centric
 - Patients linked across QH
 - Designed primarily to assist patients



Patient Details

UR Number:	492781
First Name:	Mary
Surname:	Directory
Sex:	F
DOB:	7/08/1962

Refreshed At - 28/10/2009 12:59:00 PM

General

Phone numbers

Health insurance

Languages

Community

UR Number	Title	Given Names	Surname
492781	Mrs	Mary	Directory

Address:

Sex:
DOB: **Age:** 47

Postcode:

GP:

Country:

CP:

Episode of Care

Adverse Drug Event

Medical History

Medication Problems

Administration of Medicines	Recommendations Hx	Charts/Forms/Letters Hx	Communication Hx
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New Episode	OPD Date	PAC Date	Admission Date	Discharge Date	Other Date	
PAH	MAP		13/08/2009	18/08/2009		DELETE
PAH	MAP			29/12/2008		DELETE
PAH	MAP			22/05/2008		DELETE
RBWH	MAP			11/04/2008		DELETE
PAH	MAP			2/04/2008		DELETE
PAH	MAP			19/03/2008		DELETE
PAH	MAP			4/03/2008		DELETE
PAH	MAP			6/09/2007		DELETE

UR: 9326954

PRINCESS ALEXANDRA HOSPITAL TRAINING PHARMACY DEPARTMENT

Ward: W5A Medical & Ophthalmology

If you have any questions, please phone (07) 3240 2557 and ask for the pharmacy department.

DISCHARGE MEDICATION RECORD FOR PETER PAGE

Pharmacist: Jennie McKay

Date: Wednesday, 3 May 2006

Medicine Names	Brand Name	Used for	Directions	Daily Time Table				Changes
				Morning	Noon	Evening	Night	
Aspirin 100mg Tablets	Cardiprin 100	Prevent blood clotting	Take 1 tablet in the MORNING	1				Restarted
Insulin Neutral / Isophane 30/70, 3mL Pen	Mixtard 30/70 InnoLet	Treat diabetes	Use 10 units in the MORNING and Use 8 units in the EVENING with dinner	10 units		8 units		Changed - Decreased dose
Frusamide 40mg Tablets	Lasix Uremide	Remove excess fluid	Take 1 tablet in the MORNING	1				Unchanged
Temazepam 20mg Capsules	Temaze	Assist sleep	Take 1 capsule at NIGHT when required	Take 1 capsule at NIGHT when required				Unchanged
Oxycodone 5mg Tablets	Endone	Treat pain	Take 1 tablet FOUR times a day when required	Take 1 tablet FOUR times a day when required				New - Temporary

The following medicines were CEASED by your hospital doctor during your hospital visit:

<u>Date Ceased</u>	<u>Medicine</u>	<u>Brand Name</u>	<u>Explanation</u>
01/05/2006	Flucloxacillin 500mg Capsules	Flopen	no longer required

Allergies and Adverse Drug Events:

<u>Medicine</u>	<u>Reaction</u>	<u>Event Date</u>
Tramadol hydrochloride	vomiting	05/11/2003



Providing Continuity with eLMS

- Admission to discharge within eLMS
- Linking patients across QH
- Linking to discharge summary systems
- Sending directly to GPs via eLMS



Sustaining and Expanding

- Phase one:

- Initial implementation

- Process mapping and implementation plan

- Phase two:

- Specific rural and remote strategy

- Interface with Enterprise Discharge Summary

- Phase three:

- Incentive payments

- “Refresher” training

- Remote training – videoconference, Webex



Incentive Payments

- Clinical Practice Improvement Centre
- Phase 1
 - High risk patients that receive Discharge Medication Records
 - ≥65 years old, 4 or more medicines
 - ≤18 years old, 4 or more medicines
- Phase 2
 - As above plus **ALL** change information completed
 - Increased payments for rural and remote

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Pharmacist: Jennie McKay

Date: Wednesday, 3 May 2006

Information on changes to medications to be completed

Medicine Names	Brand Name	Table		Changes	
		Morning	Night		
Aspirin 100mg Tablets	Cardiprin 100			Restarted	
Insulin Neutral / Isophane 30/70, 3mL Pen	Mixtard 30/70 InnoLet	units		Changed - Decreased dose	
Frusumide 40mg Tablets	Lasix Uremide	Remove excess fluid	Take 1 tablet in the MORNING	1	Unchanged
Temazepam 20mg Capsules	Temaze	Assist sleep	Take 1 capsule at NIGHT when required	Take 1 capsule at NIGHT when required	Unchanged
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The following medicines were CEASED by your hospital doctor during your hospital visit:

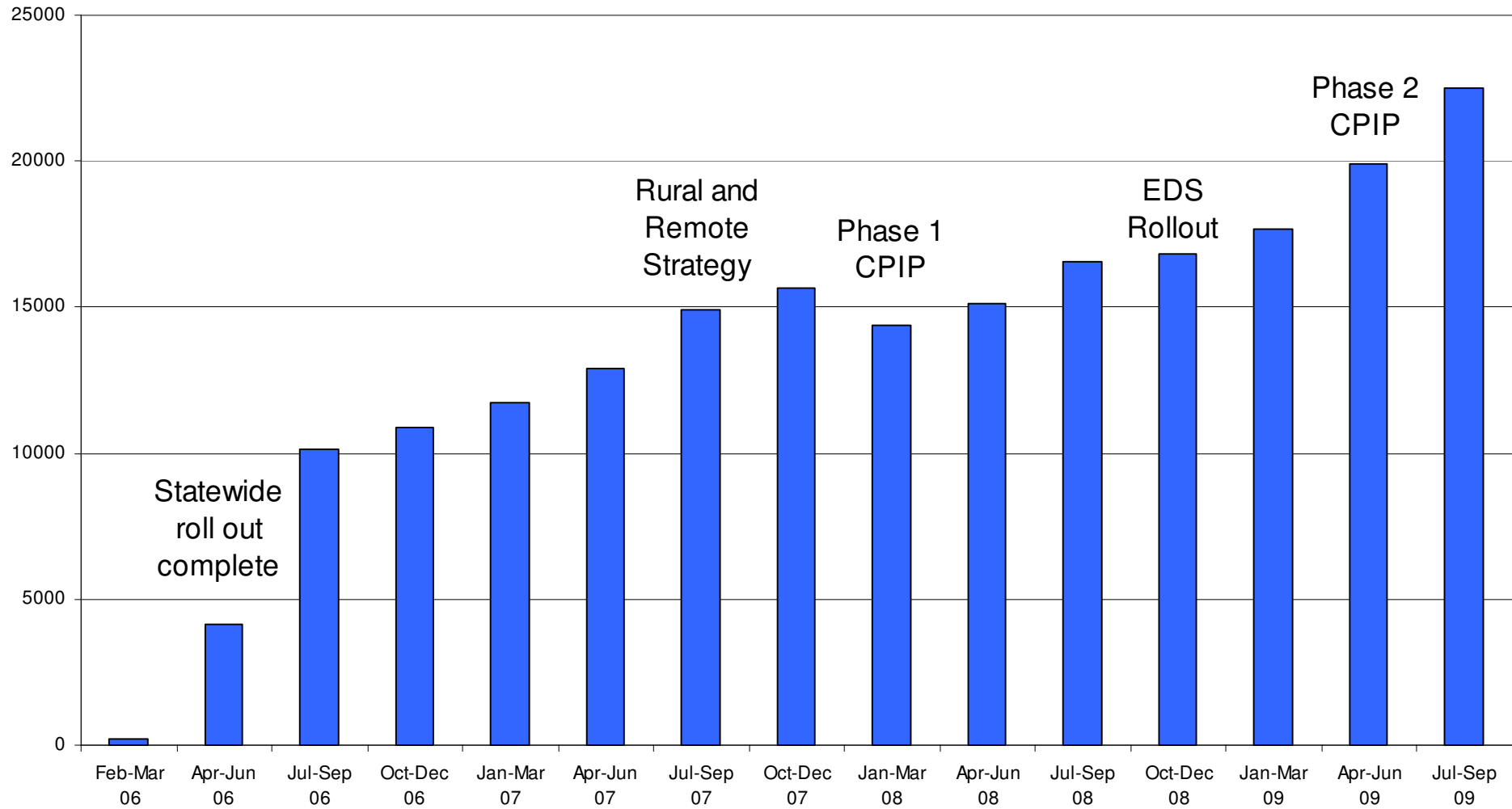
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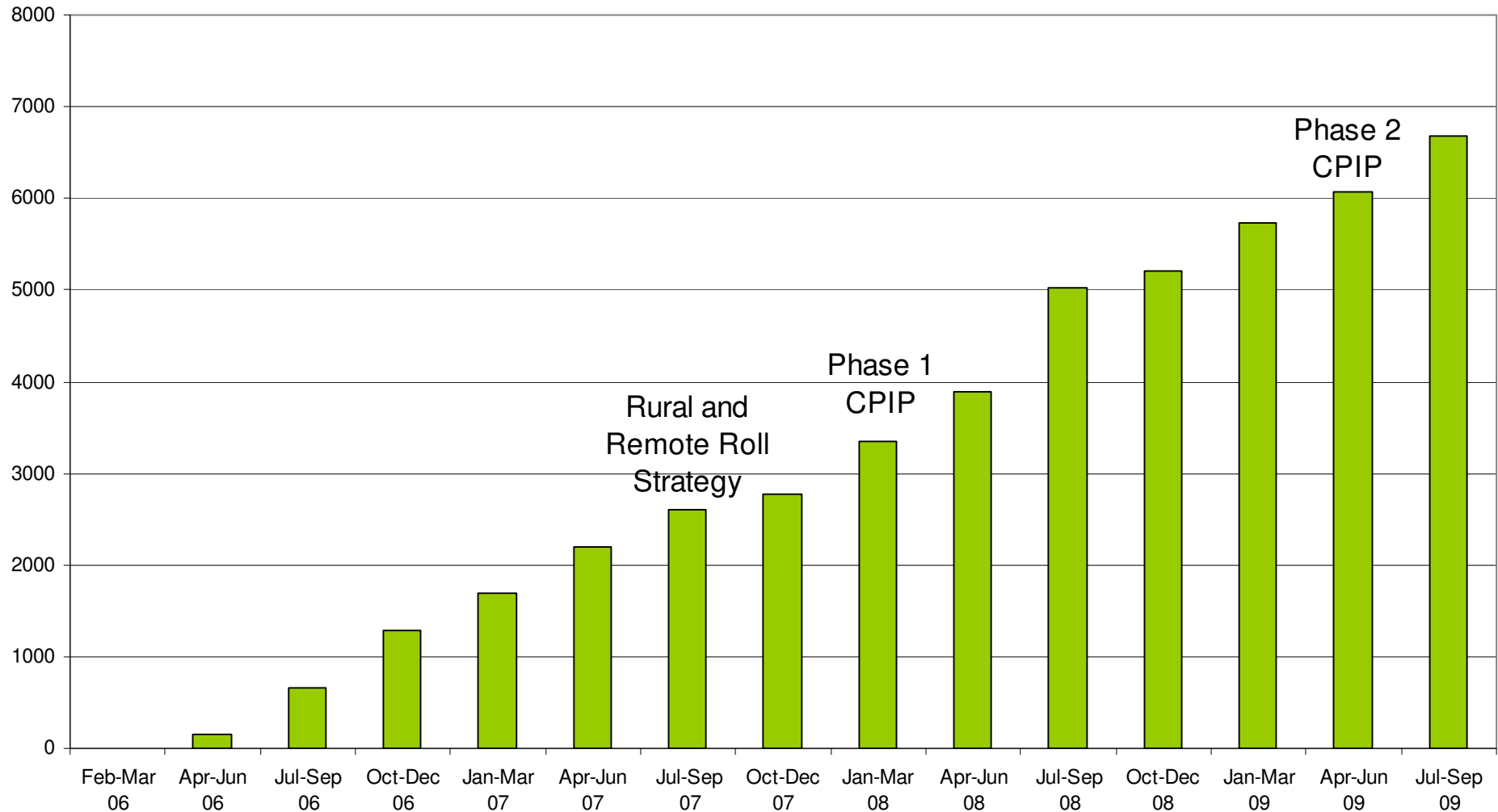


Discharge Medication Records from eLMS 2006-2009



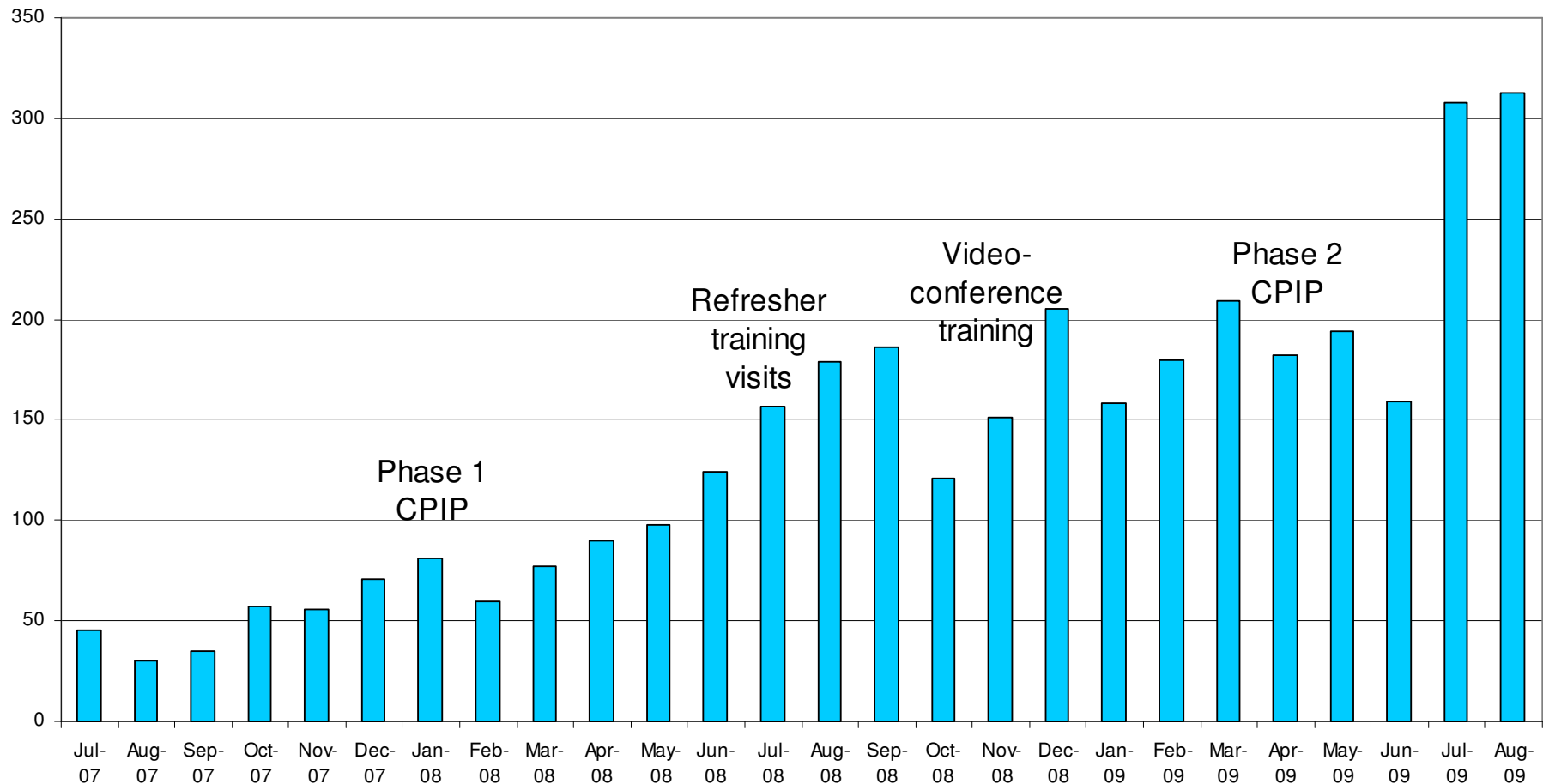


Admission Histories Captured in eLMS 2006-2009



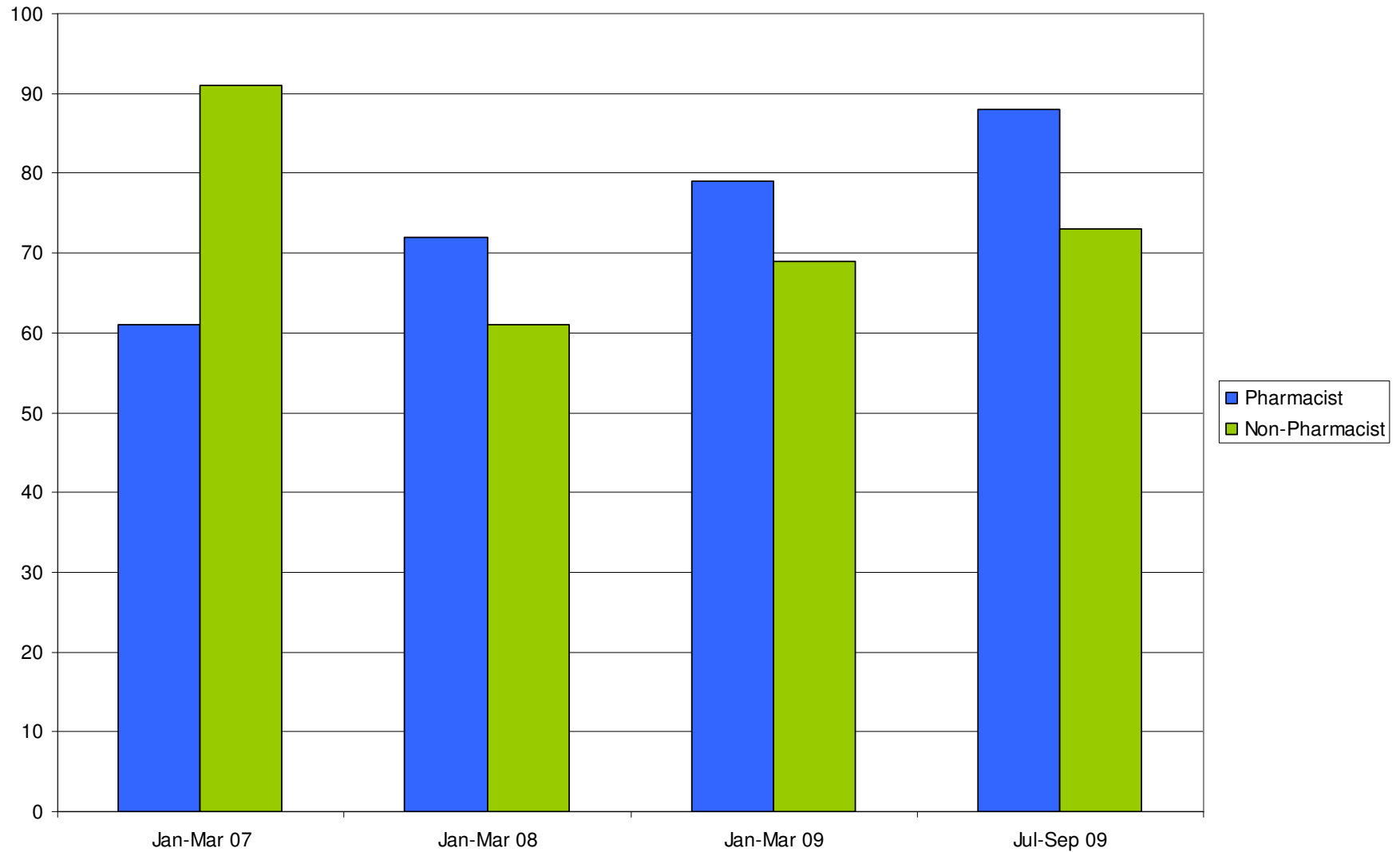


Discharge Medication Records from eLMS Non-Pharmacist Sites July 2007 – August 2009





Percent "High-Risk" Patients with all Change Information Completed on DMR – Phase 2 CPIP





Next Steps

- Assuring quality of information
- Determining key performance indicators for District Health Services
 - Eg number of discharge summaries with eLMS profile
- Maintaining links with users
 - Most valuable input