# Integrated Medication Management System Implementation

## The Problem
Federal regulation required BIDMC to pilot an eMAR (electronic Medication Administration Record) by 2013 in an effort to eliminate preventable harm.

A group was charged with the FY12 AOP goal of creating the ideal medication use process which in turn drove the development of a multi-year organizational effort.

## Aim
BIDMC administers 4 million does of medication every year. Medication management impacts patient safety & quality outcomes. The team aims to design a system to combine the ideal workflow with the best technology to implement a medication management system which is:

- Patient centered / Patient driven
- Safe (zero errors)
- Effective (5 rights of medication ensured)
- Respects our staff (no strain or overburden)
- Provides best care (post-discharge success)

## The Interventions & Progress to Date

### FY11/12
- Early IMMS Planning work:
  - IMMS Vision defined with input of frontline staff and patients
  - Current condition reviewed
  - Workflow definition of current and future state
  - Benchmarking with area hospitals
  - Hardware evaluation and selection
  - System requirements defined
  - Imbedded Pharmacist trial

### FY12/13
- RN Units Live on eMAR - (5 units total!)
  - ST 5, Reisman 12, CC6, PACUW, Farr 9

### FY13
- eMAR System - Continued Iteration:
  - Self-administration process for Transplant
  - Complex Oncology orders
  - ICU eMAR tools
  - Step-down unit enhancements
  - OB Unit enhancements
  - Pharmacy
  - Management Reporting

### FY14
- RN Units targeted by end of FY14:
  - CC7, Farr 7, 2, 10, 11, 5, 6, PACU East, ED

### FY14/15 IMMS Workflow Goals:
- Integration with eClinical Documentation
- Keep development of eMAR consistent with IMMS vision

### FY15
- RN Units targeted by end of FY15:
  - Farr 3, ICUs, OB, Oncology

### FY16/17
- Aspirational Goals for IMMS Improvement efforts:
  - Decision support tools for patients and clinicians
  - Single source documentation
  - Increased Interoperability for example, Smart pump integration
  - Medication Storage and Delivery closer to the patient
  - Automated Patient plan for the day
  - Enhanced discharge bedside medication delivery and counseling by pharmacist
  - Increase pharmacy involvement in bedside care team

### FY15 IMMS Workflow achievements:
- Bedside medication delivery at discharge
- Nursing and Pharmacy time studies
- Standardized access to patient education

## Lessons Learned
- Right people involved in initial planning: front line staff, managers, users, leaders and patients
- Attention was paid to developing a detailed, realistic multi-year budget
- Robust project management support is critical to meeting goals
- Adapt and adjust approach to suit challenges and meet goals
- Communication of goals allowed eager alignment of other groups
- Align related work, e.g. Moore Grant, Medication Lockbox install, Electronic Clinical Documentation, PACT, Reconciliation - PAML

## The Team

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<tr>
<th>Sponsors:</th>
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<tbody>
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<td>eTesting Team</td>
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### FY13 IMMS Workflow:
- RN Units targeted by end of FY13: ST 5, Reisman 12, CC6, PACUW, Farr 9

### FY14 IMMS Workflow:
- RN Units targeted by end of FY14:
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### FY15 IMMS Workflow:
- RN Units targeted by end of FY15:
  - Farr 3, ICUs, OB, Oncology

### FY16/17 IMMS Workflow:
- RN Units targeted by end of FY15:
  - Farr 3, ICUs, OB, Oncology

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