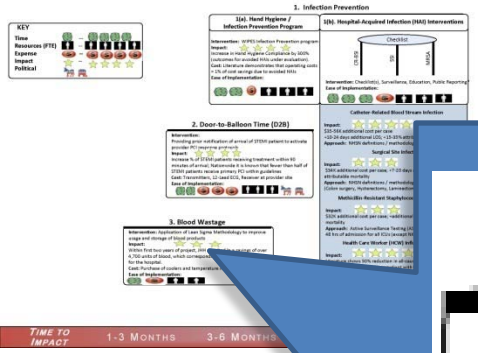
Evidence-Based Medicine Group

June 10, 2011

Maryland Health Quality & Cost Council – Time to Impact for Proposed Recommendations

Goal: Implement Evidence-Based Practices and Quality Improvement Initiatives with known cost-savings results State-Wide.



3. Blood Wastage

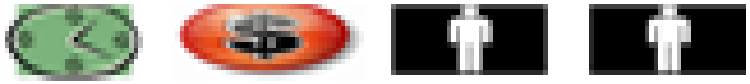
Intervention: Application of Lean Sigma Methodology to improve usage and storage of blood products

Impact:

Within first two years of project, JHH resulted in a savings of over 4,700 units of blood, which corresponds to a savings of $900,000 for the hospital.

Cost: Purchase of coolers and temperature readers

Ease of Implementation:



Maryland Blood Wastage Collaborative

Work Group Members

- Co-Chairs: Page Gambill, American Red Cross
  Donna Marquess, LifeBridge Health
- Members: Joan Boyd, JHH
  Janice Hunt, UMM
  Mary Mussman, DHMH
  Lisa Shifflett, JHH
- Facilitator: I-Fong Sun, JHM

Total Savings for State: 18 Months

(*as of June 1, 2011)

• Platelets = 898 units • Plasma = 599 units • Allo Red = -83 units • Auto/Dir Red = -222 units	• Pla • Plas • Allo Red = ($19,907) • Auto/Dir Red = ($56,354)
Total Units Saved =1497 units	Total $s Saved = $488,572

•35* out of 44 hospitals have submitted February data = 80% participation rate

*Note: The Collaborative's focus has been on platelets and plasma based on the project charters. Thus, Allo Red and Auto/Dir Red Cells have been excluded in the calculations.

Inventory Visibility System

The need is constant. The gratification is instant. Give blood.™

LOGOUT

Search

American Red Cross

Available Blood Units | My Pending Claims | My Listed Units

ADD A NEW UNIT

Home > Blood Units

Welcome Jane Doe [VA - WASHINGTON DC] (Not, Jane

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus blandit fringilla elit, no
neque arcu, quis porta libero. Ut non arcu justo. Etiam bibendum leo id leo ornare at conse
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Login successful.

Currently in 30 facilities (including those in the DC Metropolitan area) with future expansion across the Nation

Blood Units Available for Claim

This is a listing of all units that are available for claim and have not yet expired.

Product Type: <Any> | Blood Type: <Any> | CMV: <Any> | Irradiated: <Any> | GO

Type	Hospital	Expiration	Product	DIN	Type	CMVN	Irr	
Apheresis Platelets	VIRGINIA HOSPITAL CTR	11/12/2010	12710 Platelets Pheresis LR (Single or Pt 1) Notes	78976	B-	No	No	Claim
Red Blood Cells	VA - WASHINGTON DC	11/17/2010	05761 AS-3 Red Blood Cells Pheresis LR/Irr Bag2	33333344	O+	Yes	Yes	
Red Blood Cells	VA - WASHINGTON DC	11/20/2010	04741 AS-3 Red Blood Cells Pheresis LR Bag1	3333335	AB-	No	No	
Red Blood Cells	VIRGINIA HOSPITAL CTR	11/21/2010	05710 AS-1 Red Blood Cells LR/Irr	111119	Rh-	No	Yes	Claim
Red Blood Cells	VIRGINIA HOSPITAL CTR	11/21/2010	05761 AS-3 Red Blood Cells Pheresis LR/Irr Bag2	111119	Rh-	No	Yes	Claim
Red Blood Cells	HOPKINS HEMAPHERESIS TRTMT CTR	11/25/2010	55555	5465464	O+	Yes	No	Claim
Red Blood Cells	VA - WASHINGTON DC	11/27/2010	04360 CPDA-1 Red Blood Cells LR	222225	O-	No	No	Remove
Red Blood Cells	HOPKINS HEMAPHERESIS TRTMT CTR	11/27/2010	444444444444444444	54643.41	A+	Yes	No	Claim
Red Blood Cells	HOPKINS HEMAPHERESIS TRTMT CTR	11/27/2010	88888888888888888	54643.41	A+	Yes	No	Claim
Red Blood Cells	HOPKINS HEMAPHERESIS TRTMT CTR	12/10/2010	04761 AS-3 Red Blood Cells Pheresis LR Bag2	88888	B+	Yes	No	Claim

BusinessOnLine
www.businessol.com

American Red Cross

Next Steps

- Collaborative Meeting on June 15, 2011
- Inventory Visibility System
  - Provide feedback on usage metrics
  - Potential to increase type of products listed
- Press Release listing Collaborative Savings

Maryland Health Quality & Cost Council – Time to Impact for Proposed Recommendations

Goal: Implement Evidence-Based Practices and Quality Improvement Initiatives with known cost-savings results State-Wide.

1(a). Hand Hygiene

Intervention: JHH WIPES campaign

Impact:

Increase in Hand Hygiene Compliance by 300% (outcomes for avoided HAIs still under evaluation).

Cost: Literature demonstrates that operating costs = 1% of cost savings due to avoided HAIs

Ease of Implementation:

1(b). Hospital-Acquired Infections (HAIs)

Checklist

CR-BSI | SSI | MRSA

Intervention: Checklist(s), Surveillance, Education, Public Reporting?

Ease of Implementation:

Catheter-Related Blood Stream Infection

Impact:

$35-56K additional cost per case

+10-24 days additional LOS; +15-35% attributable mortality

Approach: NHSN definitions / methodology for ICUs (except NICU)

Surgical Site Infection

Impact:

$34K additional cost per case; +7-20 days additional LOS; +9% attributable mortality

Approach: NHSN definitions / methodology for specific procedures (Colon surgery, Hysterectomy, Laminectomy, Hip/Knee, CABG)

Methicillin-Resistant Staphylococcus Aureus (MRSA)

Impact:

$32K additional cost per case; +additional LOS; + attributable mortality

Approach: Active Surveillance Testing (AST) by nasal culture w/in 48 hrs of admission for all ICUs (except NICU)

Health Care Worker (HCW) Influenza Vaccination

Impact:

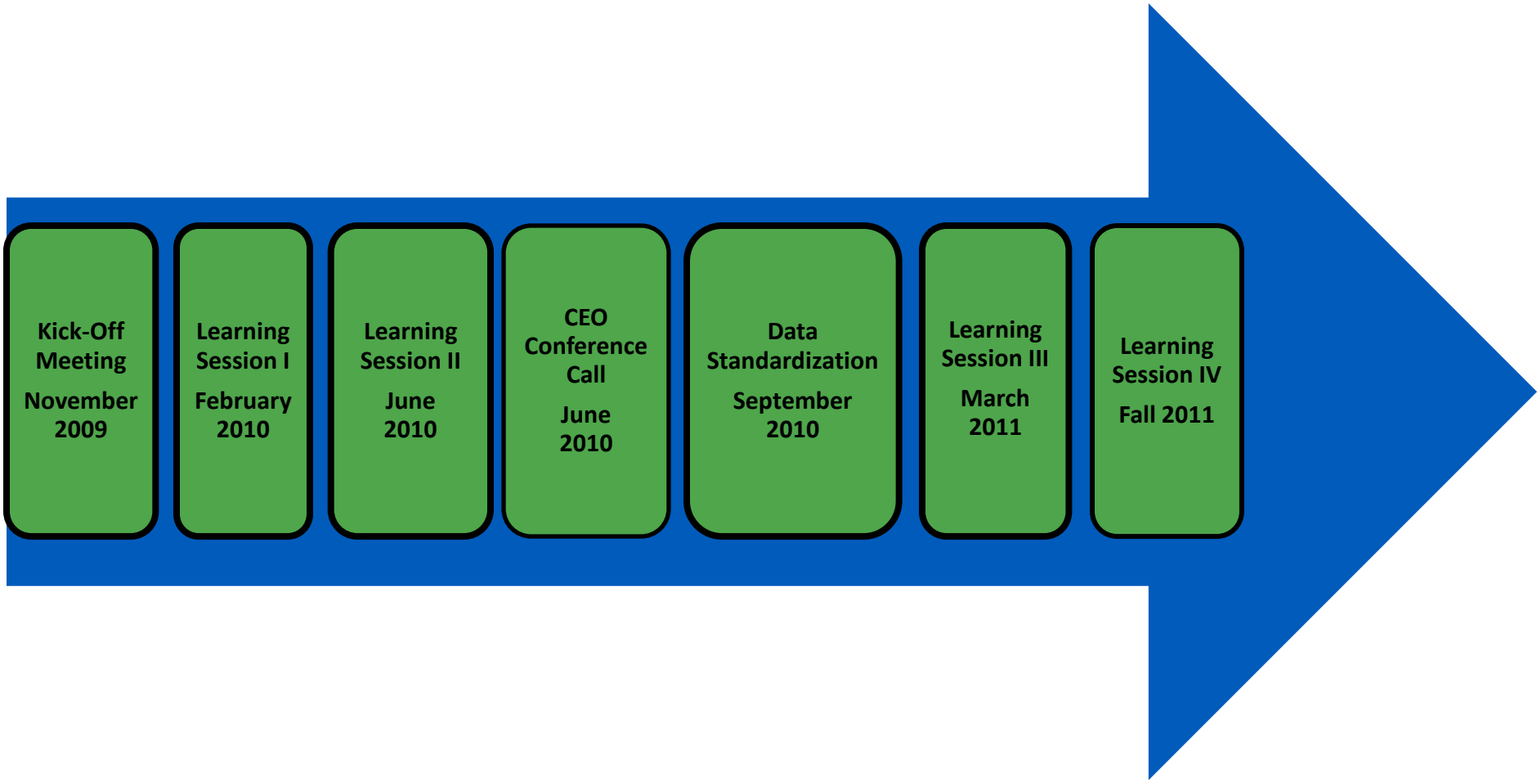
Literature shows 50% reduction in all-cause mortality among patients treated by HCWs compliant with Influenza vaccination

Approach: Compliance tracking for acute care facility HCWs

Collaborative Objectives

- **Provide a *standardized measurement* approach**
- ***Improve hand hygiene* compliance and awareness**
- **Ultimately *reduce HAIs***

Key Events


Kick-Off Meeting
November 2009
Learning Session I
February 2010
Learning Session II
June 2010
CEO Conference Call
June 2010
Data Standardization
September 2010
Learning Session III
March 2011
Learning Session IV
Fall 2011

Process Measures Survey

- **Leadership Engagement and Support Aides**
- **Monitoring Performance and Feedback Mechanisms**
- **Educational Resources and Communication**
- **Environmental Optimization**

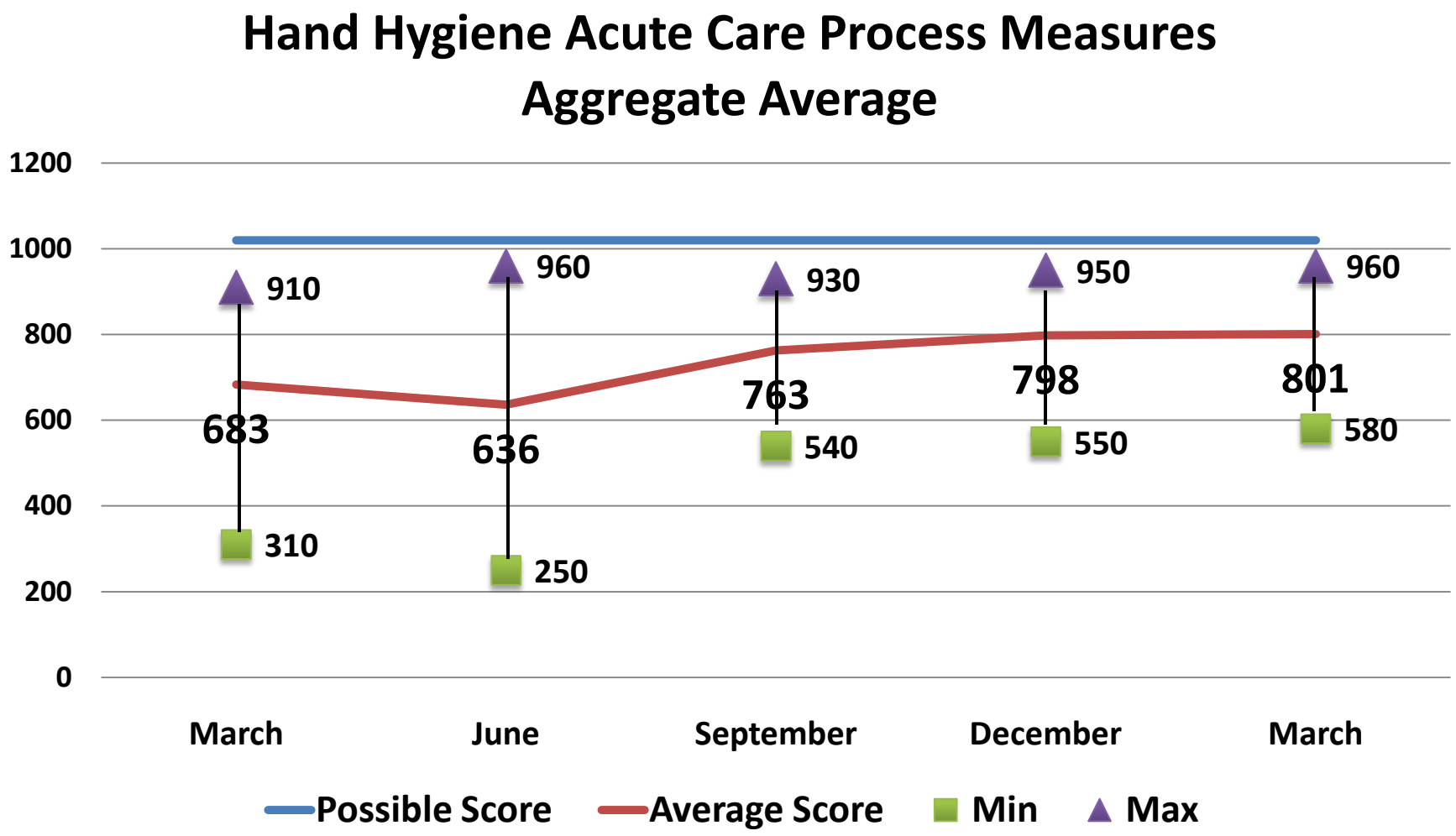
Maryland Hospital Hand Hygiene Collaborative

PROCESS MEASURES AUDIT QUESTIONNAIRE

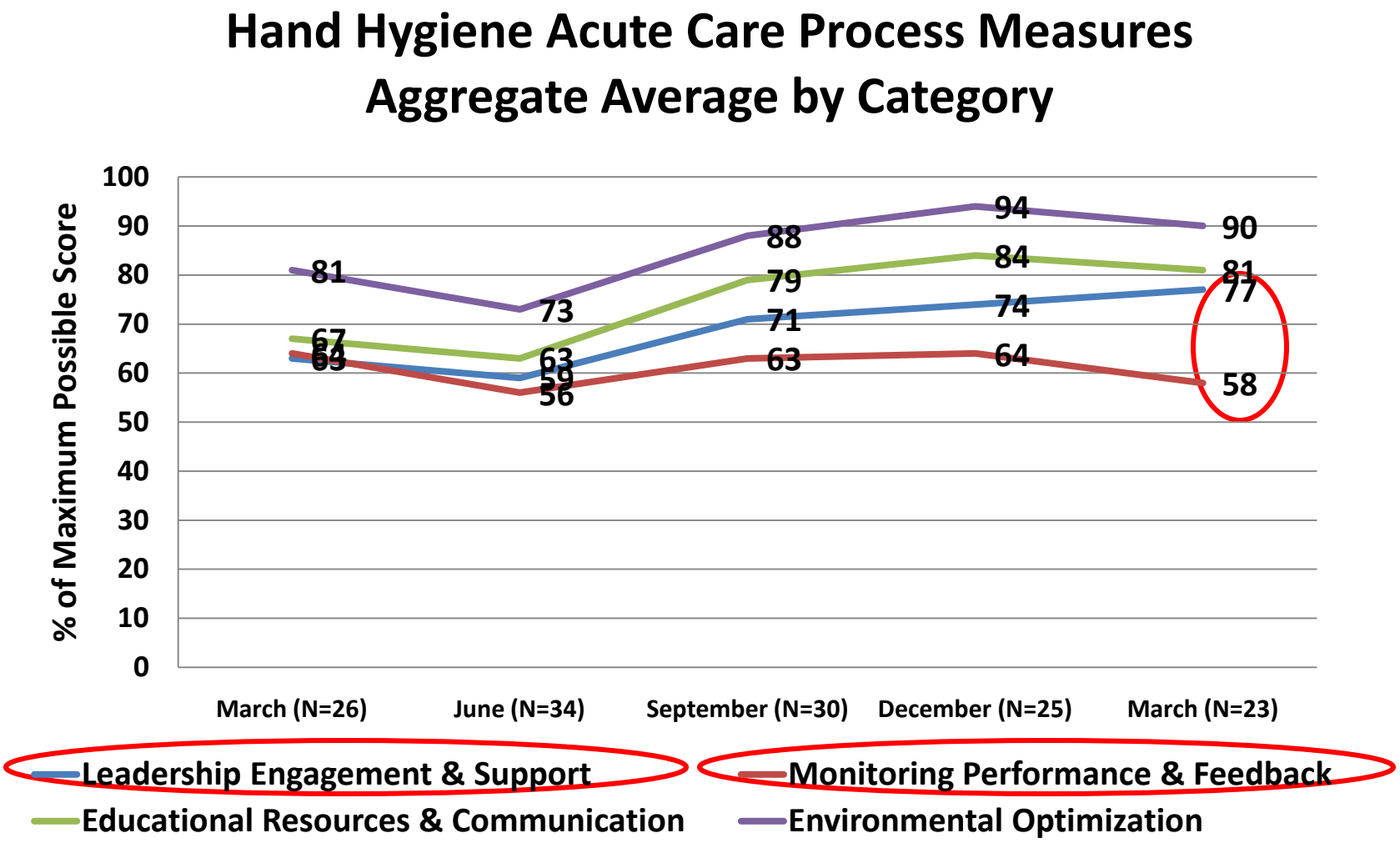
	Name (optional): **Unit:**		
	Please respond to the following questions by circling either yes or no.		
1	Does the hospital policy for hand hygiene comply with the WHO guidelines?	YES	NO
2	Does the hospital policy for hand hygiene comply with the CDC guidelines?	YES	NO
3	Does the CEO/Executive Team publically endorse the statewide hand hygiene collaborative?	YES	NO
4	Is there an Executive Sponsor responsible for oversight of the hand hygiene team efforts?	YES	NO
5	Is a multidisciplinary team utilized to implement the hand hygiene program?	YES	NO
6	Is an Infection Preventionist the designated coordinator of the multidisciplinary hand hygiene team?	YES	NO

Collaborative Outcomes and Insights

Process Measures

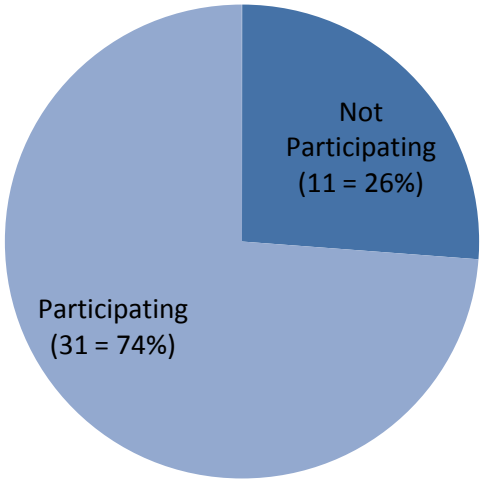


Process Measures

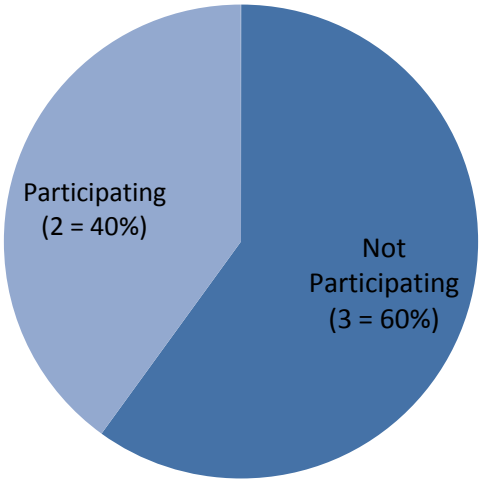


Measurement Engagement

Acute Care (N = 42)

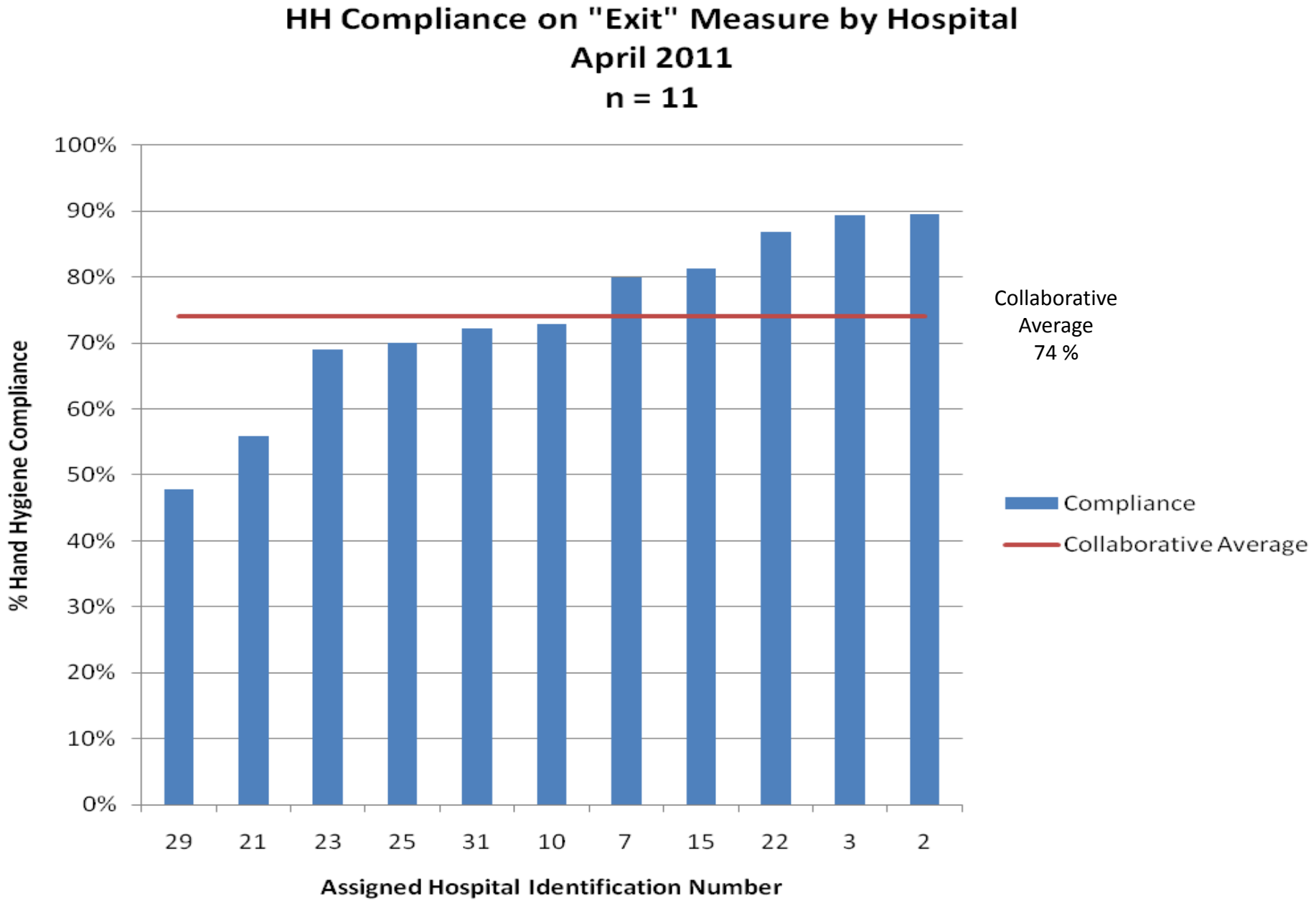


Specialty Care (N = 5)

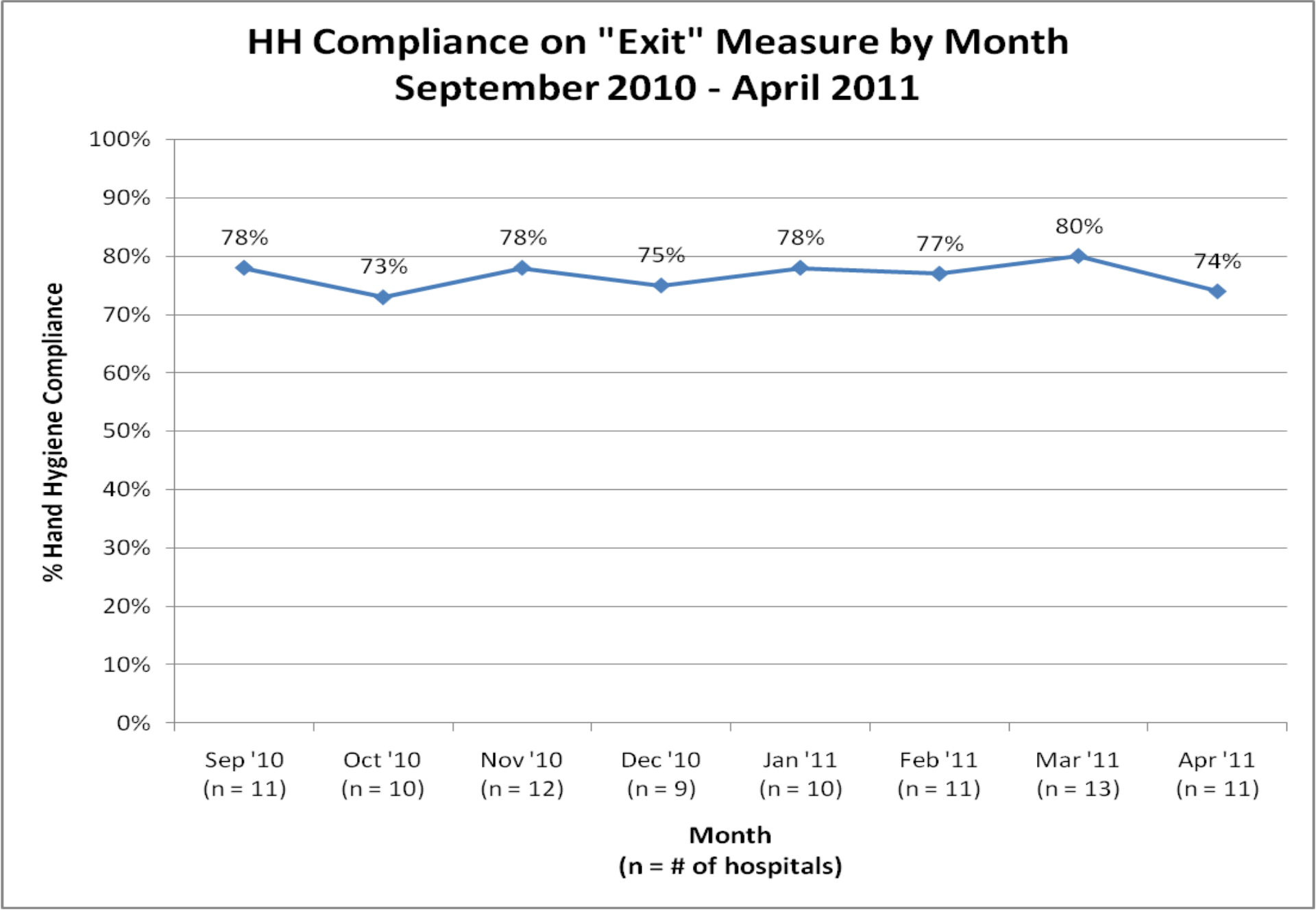


N = number of hospitals initially committed to program in 2009. Overall, 67% of Maryland acute care general hospitals are participating in the Collaborative.

Hospitals Using Unknown Observers & Collecting Exit Observations



**Includes only acute care hospitals reporting a minimum of 30 exit/entry observations per month on at least 80% of required units (med/surg, peds, ICUs) **



**Includes only acute care hospitals reporting a minimum of 30 exit/entry observations per month on at least 80% of required units (med/surg, peds, ICUs) **

Recent Implementation Innovations

- **Staff re-commitment**
- ***Weekly* report cards**
- **Internal Competition**
- **Observer champions**
- **Performance feedback and consequences**
- **Low cost internal promotion**
- **Physician champions**

Hand Hygiene Next Steps

- **Hospital Report Cards**
- **Site Visits- Lt. Governor**
- **Re-engagement - Letter to CEOs**
- **FY2012 Planning**

Maryland Hospital Hand Hygiene Collaborative Report Card

Insert Organization Name Here

Current and Prior Activity

	Your hospital				MD State Collaborative	
	# Observed Units	# Total Observations	Overall Hand Hygiene Compliance (all observed measures at your hospital)	Hand hygiene compliance (based on Exit only)	Hand hygiene compliance (based on Exit only)	Process Measures Reported
October						
September						
August						
July						
June						

Technical Assistance Outcomes:

% of required units (med-surg, peds, ICU's) participating in observations

STATE OF MARYLAND
DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

May 23, 2011

Dear Hospital CEO:

Governor O'Malley created the Maryland Health Quality and Cost Council to focus on priorities for improving health care across the state. Chaired by Lieutenant Governor Anthony G. Brown, the Council brings together health care leaders to collaborate on ways to improve quality and contain costs across the public and private sectors. I am writing to support your participation in one of the initiatives championed by the Council and our partner organizations over the eighteen months related to hand hygiene.

The Centers for Disease Control and Prevention (CDC) and the World Health Organization have shown that adherence to common-sense hand hygiene protocols can dramatically lower hospital infection rates. The Maryland Health Quality and Cost Council, at its June 2009 meeting, recommended Maryland hospitals undertake a coordinated, statewide hand hygiene campaign with standard reporting. Nearly all hospitals committed to join a collaborative effort in November 2009.

However, ____ is one of a few hospitals that have not yet done so. I have asked the Maryland Patient Safety Center to reach out to your office with additional information. I also am working with the Maryland Hospital Association to have a meeting for non-participating hospitals to resolve any questions or concerns that they might have.

Maryland is working on many fronts to address HAIs and success depends on our combined efforts. Working together we will continue to improve and protect the health of all Marylanders. Thank you for your consideration.

Sincerely,

Joshua M. Sharfstein, M.D.
Secretary, Department of Health and Mental Hygiene

Broad Solicitation for Future Projects

Request for ideas specified ideas should be:
evidence-based,
improve quality,
decrease cost,
be fairly easy to implement and
include inpatient hospital focus

ALL SUBMISSIONS POSTED ON QUALITY & COST COUNCIL WEBSITE

Recommendations

- Next EBM Project:
  - Link Healthcare Acquired Infections (HAIs) to Hand Hygiene Compliance Rates
- Potential Projects Requiring Additional Consideration by Workgroup and Potential Partners:
  - Implement Hand Hygiene Campaign in other care setting
  - Care Transitions—possibly standardize hospital to NH transfer process
  - Mandatory influenza vaccine for healthcare workers, focus on physicians
  - Pressure Ulcer Reduction Program

Recommendations (cont.)

- DHMH to research best methods, solicit partners, and develop implementation plan for two projects:
  - Referral to Maryland QuitLine at hospital discharge to satisfy Joint Commission requirement for follow up after discharge
  - Academic Detailing to provide office-based, unbiased information to physicians to counteract presentations from pharmaceutical manufacturer's representatives