

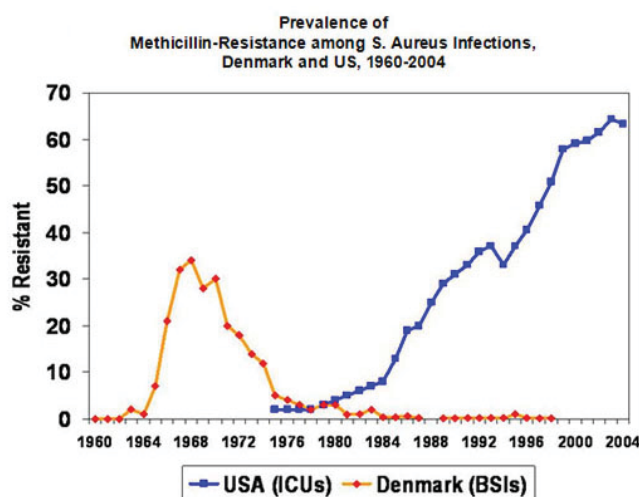
Maryland Patient Safety Center Announces Leading Edge Initiative To Combat MRSA Transmission In The Mid-Atlantic Region's Healthcare Facilities



For decades methicillin-resistant *Staphylococcus Aureus* (MRSA) rates have relentlessly increased. According to the Centers for Disease Control and Prevention (CDC), the burden of MRSA among patients with “Staph” infection in intensive care units in 1985 was 20%. Today this burden is an almost inconceivable 70%.

Our region has the **HIGHEST** measured burden of MRSA in the United States and the US unfortunately ranks second in the world.

- More than 70% of the MRSA infections in our region are **HEALTHCARE-ASSOCIATED**.
- People sickened by this dangerous bug face prolonged exposure to potent antibiotics, risk losing limbs, and are **TWICE** as likely to die as those infected with antibiotic susceptible strains of *Staphylococcus Aureus*.
- Conservative estimates of **ADDED** hospital **COST** for each MRSA infection exceed **\$27,000** per patient with 19 additional days of hospitalization.
- The human toll of these infections is eroding patient trust and increasing personal safety concerns among our employees.
- Recent national attention to healthcare-associated infections has resulted in efforts by the CDC, the Institute for Healthcare Improvement (IHI), and the Joint Commission to expand the focus on MRSA eradication as a key patient safety issue.



The Maryland Patient Safety Center MRSA Prevention Initiative will expose and guide hospitals, nursing homes and dialysis units to use an innovative behavior-based approach called **Positive Differences (PD)**, which is aimed at dramatically improving adherence to established prevention strategies and uncovering hidden practices that can lead to reductions in MRSA burden on a scale that has been considered unattainable in the past. Facilities participating in the MPSC MRSA Prevention Initiative will have access to coaching from the world's foremost PD experts. The team of trainers includes Jerry and Monique Sternin of Tufts University; Lisa Kimball, PhD and Sharon Benjamin, PhD of the Plexus Institute; Jon Lloyd, MD of the Veterans Administration; Margaret Toth, MD of the Delmarva Foundation and many others. This *Fact Brief* contains an overview of the approach and details regarding the initiative components and requirements.

The Maryland Patient Safety Center MRSA Prevention Initiative is co-sponsored by CareFirst BlueCross Blue Shield in partnership with the Centers for Disease Control and Prevention (CDC), the Plexus Institute and the Positive Deviance Initiative.

MRSA infection is almost always spread from the hands, clothing, and equipment of healthcare workers and others in our hospitals, nursing homes, dialysis units, and other healthcare facilities.



Our failure to combat this epidemic is **NOT** because of a lack of serious concern among healthcare institutions. Instead, previous efforts focused on reducing MRSA through traditional hand washing campaigns, facility policies, and best practice implementations have been disappointing because they were **NOT** able to harness the will, insights, and passion of our healthcare workers.

Our approach involves stimulating changes in human behavior and habits at the core of MRSA transmission. Our goal is that healthcare workers will automatically default to using precautions that prevent transmission and become an army of 1000's watchfully identifying and counteracting the countless unseen opportunities for transmissions in our healthcare facilities.

Our innovative approach—called *Positive Differences (PD)*—has its origins in combating seemingly intractable problems such as malnutrition, HIV transmission, and infant mortality in the developing world.

In the last 24 months, PD has been successfully used in dozens of US hospitals—many in this region—to address the MRSA epidemic.

- While using PD, The Johns Hopkins Hospital has seen a 40% decrease in MRSA bloodstream infections from the last 2 quarters in 2006 and the first 2 quarters in 2007.
- In less than 12 months, compliance with barrier precautions at Franklin Square Hospital Center resulted in gown usage that climbed from 6,000 to 54,000 gowns per quarter and recognition of extraordinary levels of hand hygiene during a JCAHO visit.

Hospitals Currently Using the Positive Differences Approach to Combat MRSA

Project	Participants	Funder
Plexus PD/MRSA Prevention Partnership	<ul style="list-style-type: none"> Franklin Square Hospital Center; Baltimore, MD The Johns Hopkins Hospital; Baltimore, MD Albert Einstein Medical Center; Philadelphia, PA Veterans Administration Pittsburgh Health System; Pittsburgh, PA University of Louisville Hospital; Louisville, KY Billings Clinic; Billings, MT 	<ul style="list-style-type: none"> Robert Wood Johnson Foundation
Veterans Health Administration Getting to Zero Campaign	<ul style="list-style-type: none"> VA Maryland Health Care System; Baltimore MD Lebanon VA Medical Center; Lebanon PA Wilkes-Barre VA Medical Center; Wilkes-Barre PA VA Western New York Healthcare System; Buffalo, NY Michael E. DeBakey VA Medical Center; Houston TX 	<ul style="list-style-type: none"> Veterans Health Administration
Maryland Patient Safety Center MRSA Initiative CareFirst Cohort	<ul style="list-style-type: none"> Mercy Medical Center, Baltimore MD Union Memorial Hospital, Baltimore, MD Harbor Hospital, Baltimore, MD St. Joseph Medical Center, Baltimore, MD Baltimore Washington Medical Center, Glen Burnie, MD Shore Health System, Easton MD 	<ul style="list-style-type: none"> Maryland Patient Safety Center CareFirst BlueCross BlueShield
Columbia PD MRSA Beta Sites	<ul style="list-style-type: none"> Hospital El Tunal; Bogotá, Colombia Hospital Pablo Tobon Uribe; Medellín, Colombia 	<ul style="list-style-type: none"> Merck

- Since the start of its PD initiative in May 2006, the ICU/IMC team at Mercy Medical Center in Baltimore has identified 237 patients colonized with MRSA who might otherwise have traveled through the system undetected. They have seen a 42% reduction in MRSA transmissions during this period.
- The Baltimore Washington Medical Center has had a nine-fold increase in gown usage and hand hygiene adherence has increased by 15%. Ownership of infection control is disseminated among clinical and non-clinical staff with enthusiasm and daily innovation.
- At Albert Einstein Medical Center in Philadelphia, MRSA transmission data for a single ICU unit in 12 months translated to 24 avoided MRSA infections and 6 lives saved.

All of these institutions are beginning to experience profound changes in culture, activation, and cooperation from staff at all levels.

Why The Different Approach?

Positive Differences (PD) capitalizes on a “truth” that has occurred in every organization, community, and culture throughout time. In all cultures, regardless of how dire circumstances might be, some groups or individuals have practices that are different from their peers, which allow them to have superior outcomes.

Some of the poorest families in Asia have well nourished children; some of the most disadvantaged kids from East Baltimore and the District avoid drugs and violence and become educated leaders in our communities.

Some dialysis units in Maryland have substantially lower MRSA transmission rates than comparable peer units. Some busy doctors and nurses ALWAYS wash their hands and, in every hospital, there are environmental services and clerical workers quietly washing down charts and making an extra effort in every room they clean.

Instead of waiting for “Experts” to mandate “best practices,” PD facilities have looked inside their own walls for these hidden “positive differences.” Once found they are shared, amplified, and act as fuel for hundreds more small differences in behavior that cumulatively push back decades of unchecked MRSA transmission.

Our goal is to see increased adherence to a small set of well established “MRSA Prevention Actions.”

These actions include:

- Using active surveillance at admission to identify patients in “high risk” areas who are asymptotically colonized with MRSA
- Using active surveillance of all admission **NEGATIVE** patients at discharge and transfer to monitor MRSA transmissions
- Using **CONTACT** isolation and **BARRIER PRECAUTIONS** for ALL patients identified as infected or colonized with MRSA
- Using **HAND HYGEINE** before and after every patient contact **AND** before and after putting on gloves

We also anticipate a large number of **NEW** behaviors and processes that involve safer transfer of colonized/infected patients and avoid infection transmission through environmental surfaces.



Maryland Patient Safety Center MRSA Prevention Initiative Details

The Maryland Patient Safety Center MRSA Prevention Initiative will expose thirty (30) facilities to PD this fall.

FEE

- There will be *NO* participation fee for teams accepted into the initiative

APPLICATION PROCESS

- **EXECUTIVE LEADERS** are invited to attend one of two **EXECUTIVE BRIEFINGS** for an initiative overview. **EXECUTIVE BRIEFINGS** have been scheduled for October 3, 2007 in Baltimore, MD and October 4, 2007 in Washington, DC
- **FACILITY EXECUTIVE LEADERS** will be expected to complete an application for the initiative by October 19, 2007. Thirty (30) facilities will be selected for this initiative. Announcements will be made on October 23, 2007

DATA REQUIREMENTS

- **HOSPITAL** participants must agree to register for the CDC National Healthcare Safety Network (NHSN) and to provide healthcare-associated **CLINICAL INCIDENCE** data for 2006 – 2009 for **ALL** hospital units.

The **TIMELINE** for **HOSPITAL** data collection includes NHSN registration to be completed by December 31, 2007 and data extraction initiated by **MARCH 31, 2008**.

These data **DO NOT** require additional data collection or chart abstraction. They are retrieved from existing Clinical Information Systems (CIS). Hospital Information Services (IS) staff will be supported by MPSC to facilitate data extraction and submission automation. CDC is collaborating with Dr. John Stelling of the World Health Organization Collaborating Centre for Surveillance of Antimicrobial Resistance (WHO CC) to assist hospitals in data extraction and submission phases.

Hospitals will have access to real-time facility data and de-identified comparative reports.

Because data are being submitted to CDC as part of the NHSN, data are HIPAA-exempt and are afforded the same legal protection as the infection data already being submitted through NNIS/NHSN.

MPSC will be the designated “Administrator” of the data. DATA submitted to the MPSC MRSA Prevention Initiative will be used to monitor impact and effectiveness of the **INITIATIVE**. **ALL** reporting of initiative progress will be **AGGREGATED** and **DE-IDENTIFIED**.

MARYLAND PATIENT SAFETY CENTER MRSA PREVENTION INITIATIVE

- **DIALYSIS UNITS** will submit data through the NHSN in coordination with the End Stage Renal Disease Network (ESRD).
- **NURSING HOMES** will be working with their host hospitals to identify viable data monitoring strategies.

FACILITY EFFORT ESTIMATE

- We estimate an initial time commitment of up to two hours per week from a diverse group of hospital staff who will act as the MRSA Initiative “Instigators.” Recommendations for members of this group will be made during **PRE-INITIATIVE** conference calls with our coaching team. Representatives from leadership, environmental services, quality, infectious diseases, organizational development, and clinical staff are often among the members of this group.

INITIATIVE ACTIVITIES AND TIMELINE

- **PRE-INITIATIVE** conference calls will be scheduled prior to November 14th to orient facilities to the initiative and assist them with preparations for the November training.
- Teams of five (5) from each participating facility will receive a PD overview and PD skill training with Jerry Sternin and the PD team on **NOVEMBER 14, 2007** at the **PIER V Hotel in Baltimore**.
- Each facility in the project will join with one to two other **SISTER** facilities to form an **MRSA/PD HUB**. An onsite training experience with PD coaches and larger numbers of staff from each **HUB** will be conducted between **NOVEMBER 2007 and FEBRUARY 2008**.
- Facility teams will be supported through conference calls, a virtual web space, listserv, **FIELD GUIDE**, and access to the MPSC coaching team.
- **FOLLOW-UP** face-to-face skill training events will be offered in **FEBRUARY 2008 and JUNE 2008**.

QUESTIONS

If you have questions about the initiative or would like to talk to some of your peers from our local PD hospitals, please contact Margaret M. Toth, MD at (443) 534-5962; tothm@dfmc.org or Bonnie Noble at (410) 712-7451; nobleb@dfmc.org

