

Positive Deviance (PD)

Dr. Jon C. Lloyd, MD, FACS, Plexus Institute

A Webber Training Teleclass

POSITIVE DEVIANCE
 Liberating the Secret Change Agents in Your Hospital to Prevent Healthcare Acquired Infections

Jon C. Lloyd, MD, FACS
 Tufts University, Plexus Institute


Hosted by Paul Webber
 paul@webbertraining.com

www.webbertraining.com August 12, 2010


Road Map

- Positive Deviance (PD) Primer
- Healthcare Acquired Infections (MRSA)
- PD in healthcare- VA Pittsburgh & beyond
- Results

Invisible in plain sight



The POWER of Positive Deviance




Solutions before our very eyes

The Premise:
 In every community there are certain individuals whose uncommon practices/behaviors enable them to find better solutions to problems than their neighbors who have access to the same resources

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Sternins Introduce PD, Vietnam 1991 Childhood Malnutrition



www.positivedeviance.org

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Positive Deviance Steps Taken by the Community

- Define- The problem & preferred future
- Determine- Presence of PD's
- Discover- PD behaviors & strategies
- Design & Do- Action plan to amplify PD PX's
- Discern- quantitative, qualitative outcomes
- Disseminate

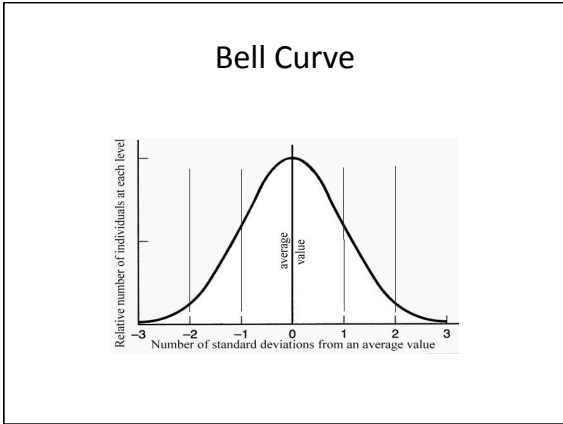
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PD: Focus on practice rather than knowledge

"It's easier to **ACT** your way into a new way of THINKING, than to THINK your way into a new way of ACTING"

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PD enables us to act TODAY

The presence of Positive Deviants demonstrates that it is possible to find successful solutions TODAY before all the underlying causes are addressed!

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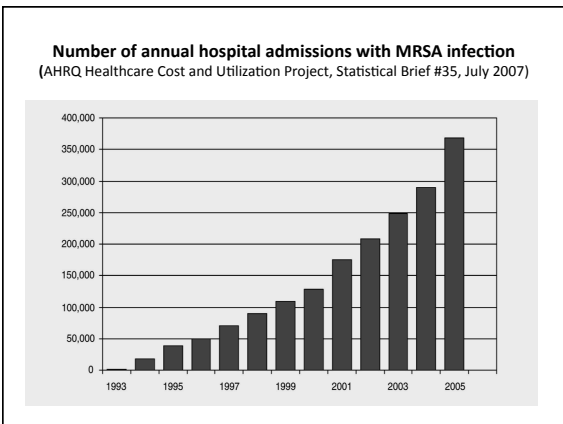
Healthcare Acquired Infections in US

- 2 million people develop HAI's/year
- 99,000 die
- Survivors and their families suffer
- HAI's contribute \$33 billion in costs

(FAHQ's Florida Quality News, January 2010. Ref. AHRQ data)

Medical News TODAY
www.medicalnewstoday.com

HHS 2009 Quality Report Shows Increase In Hospital-Acquired Infections
15 Apr 2010




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MRSA Overview



Approx. 100,000 Invasive MRSA infections annually

87% HA-HO or HA-CO

1 in 5 (20,000)
Patients with invasive MRSA infection will die

JAMA. 2007 Oct 17;298(15):1763-71

5.1 million people ...

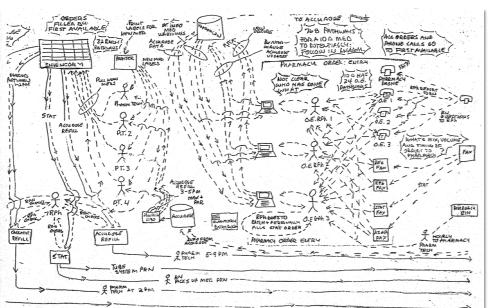
were asymptomatic MRSA carriers in 2005
(up from 2.4 million in 2001) ...

That's an increase of 130% !!

It's a NATIONAL EPIDEMIC

The "system"

...for ordering/administering Tylenol 3.
How much more complex is MRSA prevention?!



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PD in healthcare

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- HAI's: a complex problem requiring behavior and social change**
- Not primarily a knowledge problem. We already know what to do – Hand hygiene and barrier precautions were introduced 163 ago. Resistant pathogens and active surveillance emerged 50 years ago
 - Traditional best practice, industrial approaches and regulation & enforcement alone either fail outright or tend to achieve modest & frequently transient improvement without spreading within or between healthcare institutions
 - Time is ripe for a solution that matches the complexity and nature of the challenge.
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- Why Positive Deviance for HAI Prevention?**
- Because HAI's represent a complex problem requiring both technical and behavior & social change.
 - Because solutions to MRSA and other HAI's already exist in every hospital.
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Where are the shrimps, crabs & greens in healthcare?!

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Infection Prevention is **Everyone's** job!

*In general, lots of people are **smarter** than a few people... especially **front line staff***

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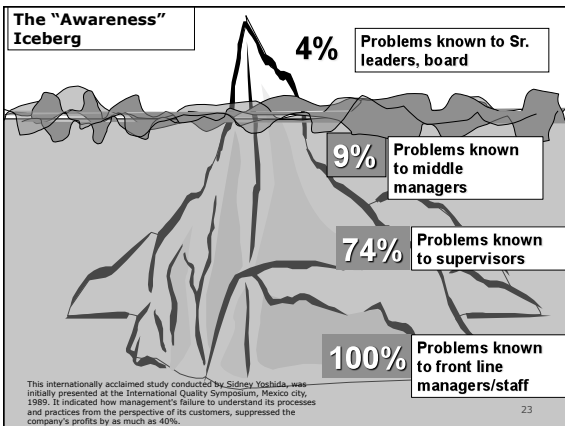
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Have you ever asked yourself: ***Who knows best...**

- How, when & where transmissions of resistant bacteria are taking place?
- How to prevent these transmissions?

*How the system works & how to improve it

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So who knows best? Could it be... the "touchers?"

The people who have direct patient contact and touch them with hands, clothing and equipment are clearly in the best position to know how, when and where (MRSA) transmissions occur in their work area and how to prevent them.

Unlikely suspects found in places rarely visited are the real gurus.

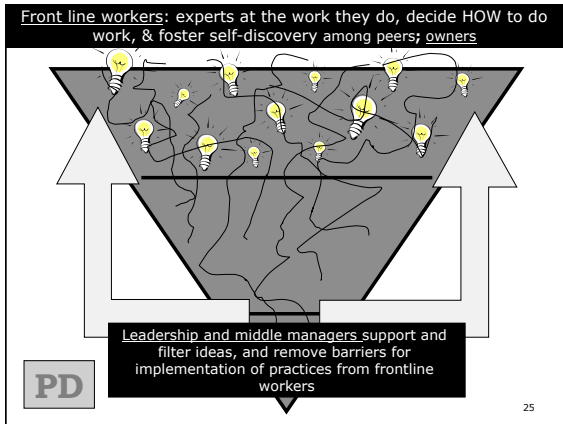
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- “WHAT” we ALL need to DO (Evidence-based precautions*)**
- Identify the reservoir of infected and colonized patients – active surveillance
 - Wash hands before and after every interaction with a patient and before and after putting on gloves
 - Protect clothing from becoming a transmission source by wearing gloves and gown when interacting with an infected or colonized patient- PPE’s
 - Keep equipment from becoming a transmission source by cleaning or using designated equipment
 - Effectively clean the patient care environment
- * SHEA Guideline (doesn’t implement itself)
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- So...the questions we must ask ourselves are:**
- How are we going to unleash the solutions from the “touchers?”
 - What are we going to do once the transmission sites and causes have been exposed and solutions have been proposed by those who know best?
 - What can we start doing today to address these issues?
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- ## Positive Deviance
- Provides the “HOW”
 - Enables staff to co-create additional ways of preventing transmissions
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- ## Positive Deviance Steps Taken by the Community
- Define- The problem & preferred future
 - Determine- Presence of PD’s
 - Discover- PD behaviors & strategies
 - Design & Do- Action plan to amplify PD PX’s
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- ## Define & Determine
- Day 1—Kick-Off (2-3 hours)
 - Senior Leader Introduction
 - MRSA overview
 - Personal Stories
 - *Reflection*
 - The Positive Deviance (PD) Story
 - *Reflection*
 - Examples of PD used for MRSA
 - *Reflection*
 - Invitation to Volunteer Meeting
 - Day 2—Volunteers Meet
 - Organize for action
 - Launch Expanded Discovery and Action Groups
 - Plan Measurement
 - Plan Communication
-
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Volunteers meet after the Kick Off



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Discovery & Action Dialogue

Be genuinely curious – the answers are in the room



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Discovery & Action Dialogues

Facilitator starts with basic questions

- How do you know whether your patient has MRSA or carries the MRSA germ?
- In your own practice, what do you do to prevent spreading MRSA to other patients or staff?
- What are the barriers that prevent you from doing these things all the time?
- Is there anyone or any unit that has a way of doing things that enables them to overcome these barriers?
- Do you have any ideas about getting rid of barriers?
- What would it take to make that happen here?
- What seems possible to you now? Who should be involved?
- Who wants to help make it happen?

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Design & Do –

Front line staff act on and own their solutions



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Staff owned/operated Solutions



Dedicated stethoscopes, thermometers, tourniquets and disposable blood pressure cuffs in isolation rooms

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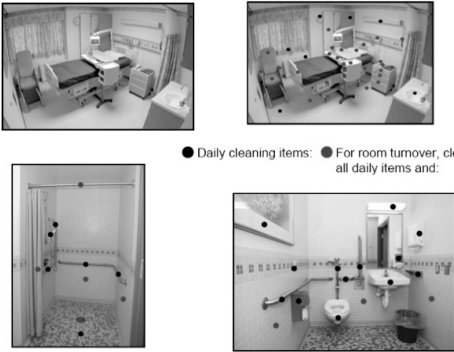
Transporting MRSA Positive Patient



Before & After Bible Hygiene



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● Daily cleaning items: ● For room turnover, clean all daily items and:

Created by EMS and Infection Control staff

What PD Tells Us – *that is different*

Solutions imported from external sources – result in a “social” immune response in the same way our bodies reject foreign bodies.

Best Practices “imported” from the outside are not as durable or scalable as local best practices discovered from the inside.

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Buy-In vs Ownership

***Buy-In:** Someone else has developed the idea, made the decision, designed an action plan and then asks and needs the staff to implement it.

Ownership: Front line staff develops the idea, makes the decisions, designs the action plan and acts on it.

* Buy-in is the opposite of ownership and a danger signal that tells you that your development and implementation process are missing the essential ingredient of involving everyone who needs to be.

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Discern - Performance Grid

Front line efforts are “bathed” in data

Unit	Nares Culture Rates-Adm.	Nares Culture Rates-D/C	Hand Hygiene Adherence	Contact Precaution Adherence	HA-Transmission Rates	HA-Inf. Rates

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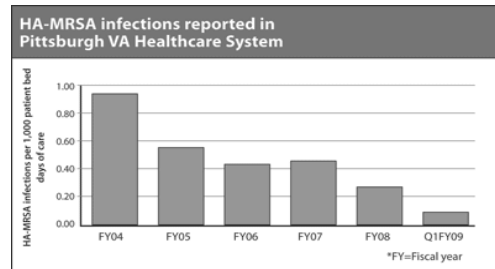
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What's different here?

- Defect-based vs. asset-based
- Target, recruit, select vs. invite, volunteer, self-select
- Experts vs. expertise (unlikely suspects)
- Roles change- leaders, "management," front line
- "Empowerment" vs. unleashing power
- "Buy-in" vs. ownership
- Data- report card vs. staff selects performance parameters
- Dissemination- "Roll out" vs. "viral" spread
- Holding people accountable vs. choosing to be accountable
- Beyond solutions – relationships trump solutions

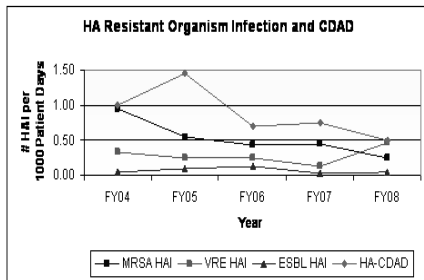
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VAPHS HA MRSA Infection Rates



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VAPHS-UD MDRO Infection Rates



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Robert Wood Johnson Foundation

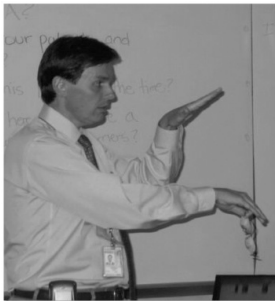
Disseminate

Reducing MRSA Infections by Using the Positive Deviance Approach to Behavior and Social Change

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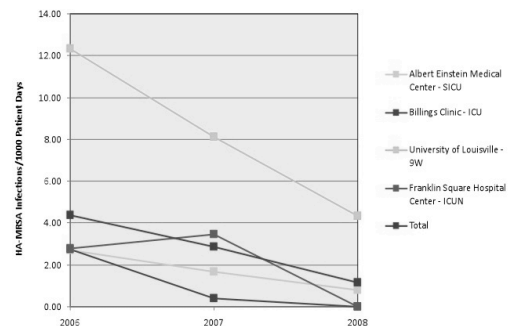
"While national rates of MRSA HAI's go up, RWJ/Plexus PD beta site rates are going down."

John Jernigan, MD, MPH



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Pilot Unit Healthcare Associated MRSA Infection Rates/1000 Patient Days - Plexus Beta Sites

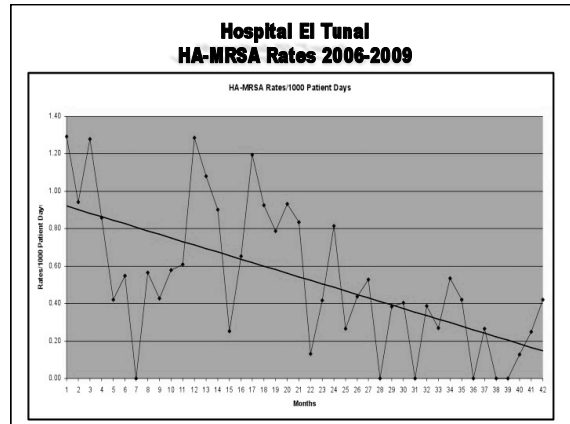
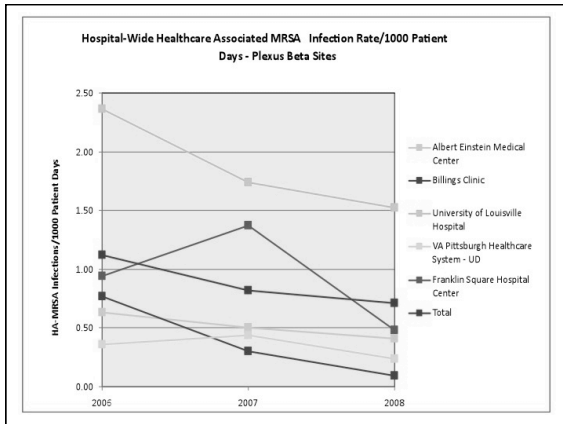


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SHEA, March 19-22, 2009
 A Successful Multi-Center Intervention to Prevent Transmission of MRSA

K Ellingson¹, N Iversen², JM Zuckerman³, D Borton³, L Goss⁴, K Lloyd⁴, P Chang¹, J Stelling⁵, A Kallen¹, M Sternin⁶, C Lindberg⁷, J Lloyd⁷, and JA Jernigan¹ for the Positive Deviance MRSA Prevention Partnership

¹CDC, Atlanta, GA
²Billings Clinic, Billings, MT
³Albert Einstein Healthcare Network, Philadelphia, PA
⁴University of Louisville Hospital, Louisville, KY
⁵Brigham and Women's Hospital, Boston, MA
⁶Positive Deviance Initiative, Boston, MA
⁷Plexus Institute, Bordentown, NJ

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Results

- Decrease in transmission and resistance in hospitals using Positive Deviance approach
- Decrease in MRSA clinical incidence
 - Intervention-associated reduction in MRSA clinical incidence (p-value 0.001)
 - Reduction sustained in post-intervention period
- Improvement in *S. aureus* antibiogram
 - Reduction sustained in post-intervention period

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Conclusion

The introduction of MRSA-specific interventions coupled with Positive Deviance to facilitate group behavioral change was associated with improvement in MRSA HAI rates at all 3 facilities

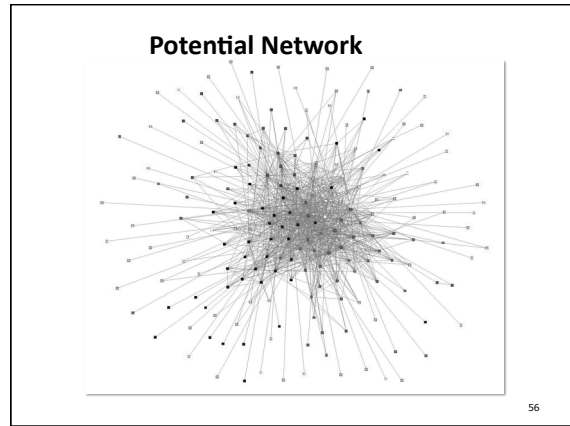
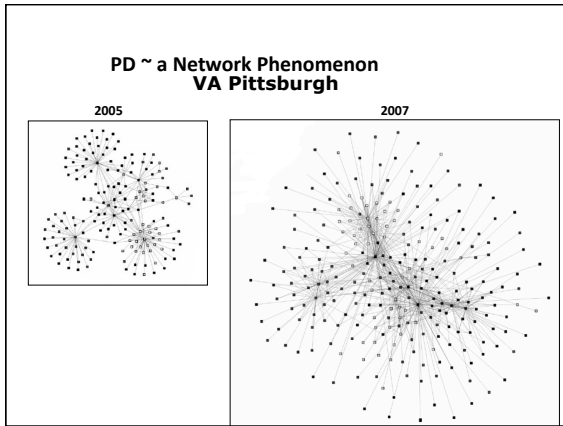


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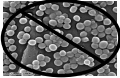
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Positive Deviance(PD)/MRSA Prevention Partnership



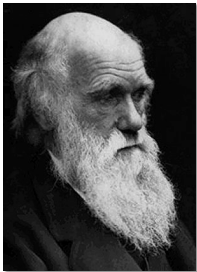
- In 2006, 6 hospitals partnered with The Plexus Institute and CDC to prevent MRSA
- In 2007, 5 VA hospitals joined the partnership
- In 2008, PD/MRSA prevention became the preferred approach in the VA system nationally
- In 2009, AHRQ provided support for 7 more hospitals to adopt PD to prevent MRSA-HAI's
- Rockefeller Foundation funding global expansion of PD for MRSA and other healthcare problems thru the *Positive Deviance Initiative*.

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PD Essentials

- Solutions already exist in your hospital- "Inside Job."
- Front line staff are the on site experts.
- Everyone wants to make a contribution that adds value.
- Find out from staff what's working or could work and enable them amplify it, to do it.
- Solutions are co-created and owned by the staff.
- The whole process is bathed in information- data, stories
- Self-discovery
- Emergence
- Relationships trump solutions


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"It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change."

Charles Darwin

"We dance around in a ring and suppose, while the secret sits in the middle and knows." — Robert Frost



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Acknowledgments

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- Cheryl Creen, RN, MSN, VA Pittsburgh Healthcare System
- John A. Jernigan, MD, MS, CDC
- Jerry and Monique Sternin, Positive Deviance Institute
- Curt Lindberg, Plexus Institute
- Margaret Toth, MD
- Robert Wood Johnson Foundation
- Beta Site Coordinators and Staff
- Plexus PD Coaches

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Thank You

THE NEXT FEW TELECLASSES

02 Sep. 10	<i>(Free South Pacific Teleclass ... Live Broadcast from the NDICN Conference, New Zealand)</i> Creating a Culture of Quality and Safety to Reduce Nosocomial Infections Speaker: Dr. Leo Celi, Harvard Medical School
09 Sep. 10	Planning for Infectious Disease Disasters in Ambulatory Care Centers Speaker: Terri Rebman, Centers for the Study of Bioterrorism and Emerging Infections
16 Sep. 10	Lessons Learned From the Canadian Listeriosis Outbreak Speaker: Dr. Franco Pagotto, Health Canada
20 Sep. 10	<i>(Free British Teleclass ... Live Broadcast from the IPS Conference, UK)</i> The Evolving Role of Epidemiology in Infection Prevention Speaker: Prof. Jacqui Reilly, Health Protection Scotland
22 Sep. 10	<i>(Free British Teleclass ... Live Broadcast from the IPS Conference, UK)</i> Preventing and Controlling ESBL's, The Future is Here Speaker: Prof. Hilary Humphreys, Royal College of Surgeons
29 Sep. 10	<i>(Free Teleclass) Voices of CHICA – Part 2</i>

www.webbertraining.com/schedule1.php

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