

Components of a Measurable Hand Hygiene Program for Operating Suites

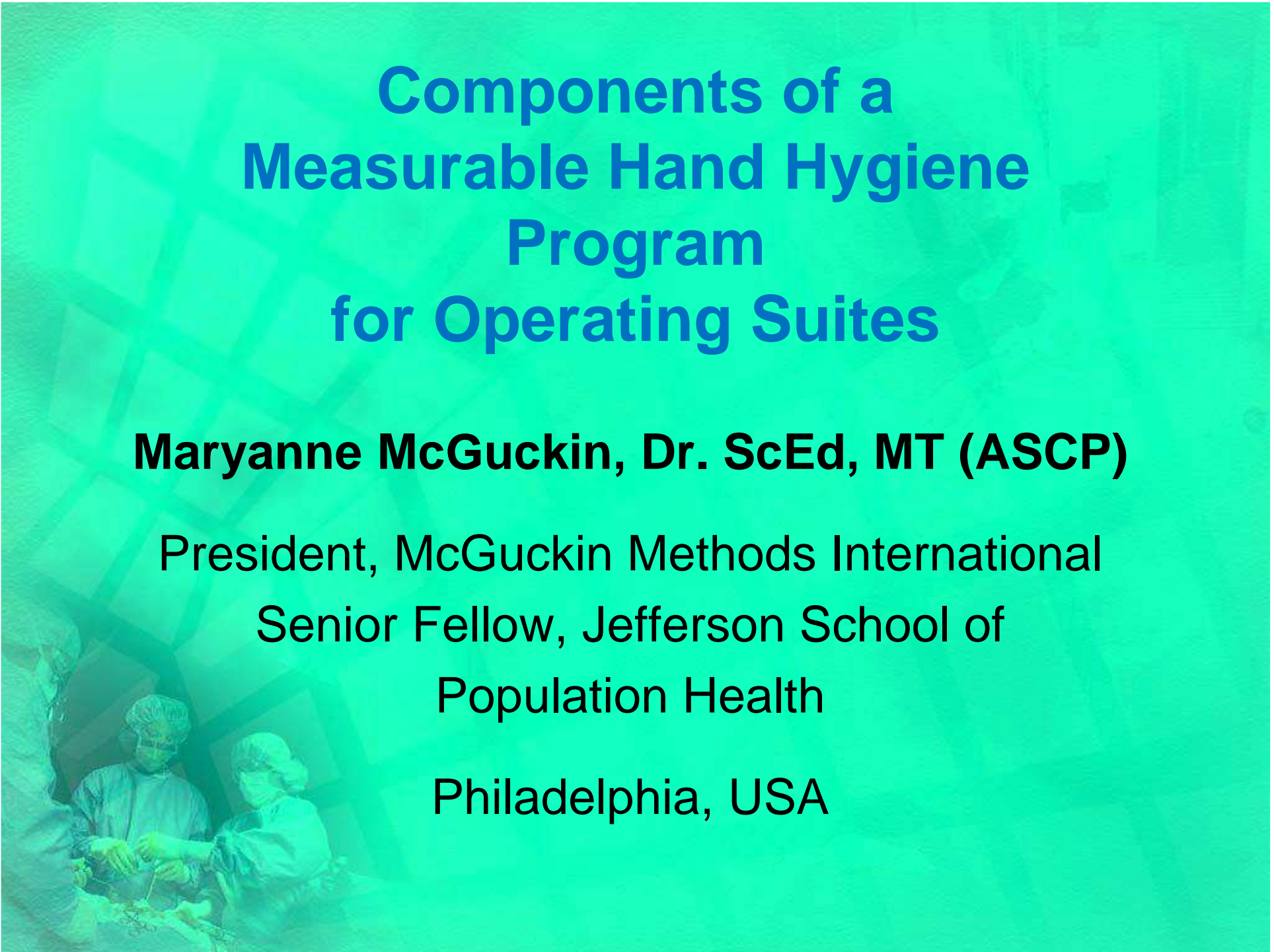
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Presentation Objectives

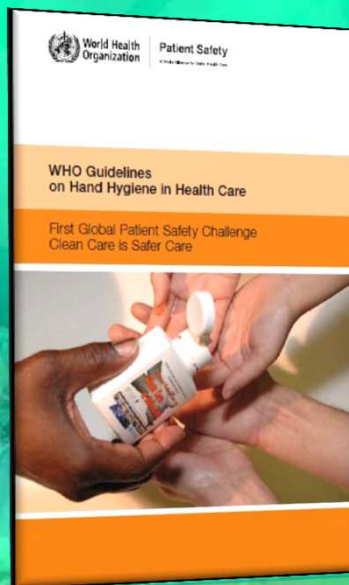
1. Review hand hygiene measurement methodology
2. Identify steps for hand hygiene product measurement in the operating room/operating suite (OR/OS)
3. Review operating room hand hygiene rates: US, Europe, South America
4. Identify steps for empowering the surgical patient

Hand Hygiene Measurement Methods

- Observation
 - Designated healthcare worker watches and notes hand hygiene practices of other staff members
- Product Use
 - The volume of soap and hand rub is compared to the number of patients admitted to the unit, or, number of surgical procedures
- Automatic
 - Electronic sensors monitor hand hygiene activity

Which is the “Best Method”?

- W.H.O., C.D.C. (US), and Joint Commission recommend use of more than one method
- Best practice: multimodal



April 2012



Aseptic Surgery Forum - Paris



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Hand Hygiene in OR/OS: Facts



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Hand Hygiene Compliance for OR/OS

1. Adherence to hand hygiene (HH) guidelines in OR/OS is low
2. Leads to bacterial contamination and increases risk of healthcare-associated infections (HAIs)
3. Leadership and accountability are needed
4. Monitor and provide feedback to healthcare workers on their HH performance

Evidence – How Bad is It?



**"You wouldn't believe
how many patients
he sees in one single day!"**

University Medical Centre, Utrecht, Netherlands

Findings: Observed 28 procedures, 60 hours
8.4 staff in OT at same time

363/333 opportunities for HH:

2% (7/363) entering

8.4% (28/333) leaving

Summary: 3 to 4 members of team touched
the patient or surgical implements repeatedly
without HH

A.C Krediet. HH Practices in the OT: an
Observational Study. British J of Anesth.
June 2011

Dartmouth Medical Center, New Hampshire, USA

Findings: 164 Cases

Bacterial Transmission to IV Stopcock 11.5%
(19/164)

47% (9/19) Anesthesia Provider

89% (146/164) environment of which 12%
(17/146) from provider

Summary: Hands source of transmission

Loftus RQ et al. Hand Contamination of
Anesthesia Providers. Anesth Anal. Jan
2011

Dartmouth Medical Center, New Hampshire, USA

- Findings: controlled study
- 30 days post surgery HCAs **decreased 17.2% to 3.8%** when **HH increased on OR//OS from 0.15-0.38 to 7.1-8.7 HH per hour**

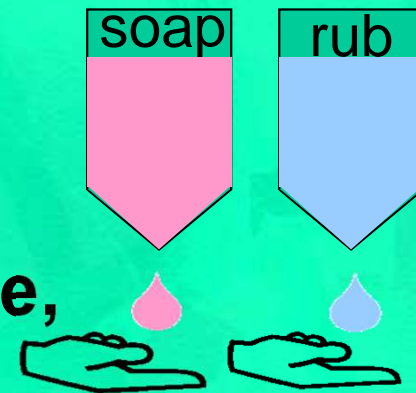
Koff MD et al. Reduction in intraoperative bacterial contamination. *Anesth.* 2009

Solution

- Multimodal program for measuring compliance and providing feedback
 1. Measure product use - ongoing
 2. Observe problem areas (where product is not being used, or where outbreaks occur)
 3. Use reports as feedback for team
 4. Patient empowerment
 5. U.S Non-Payment Policy

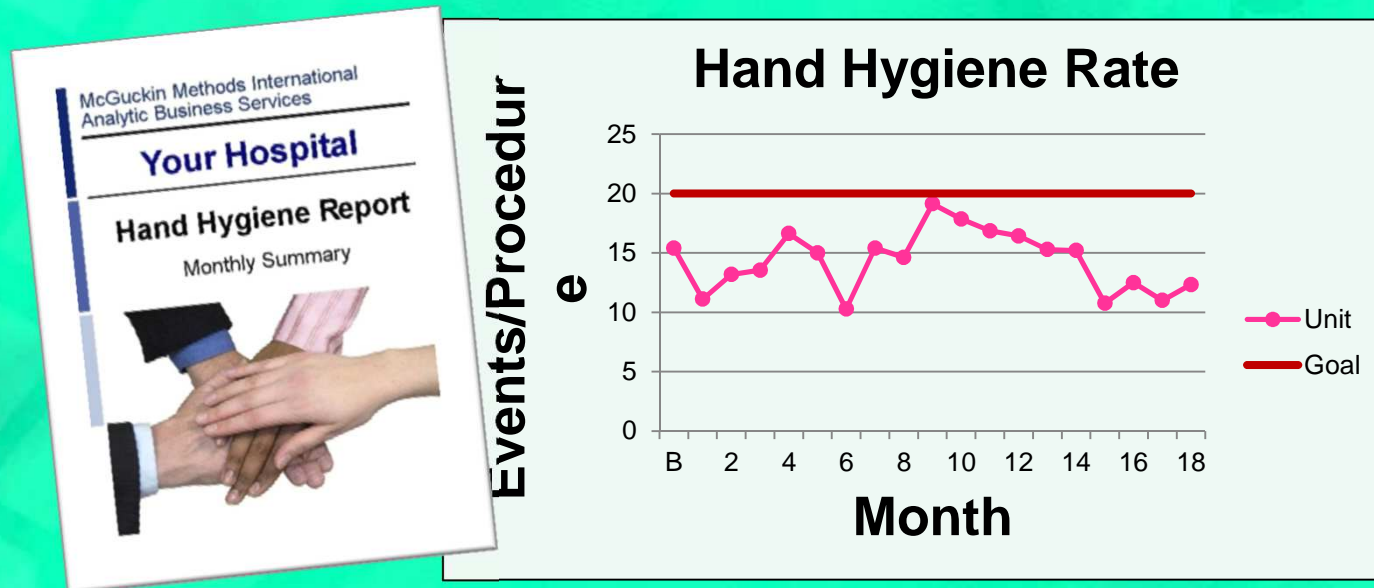
Product Consumption

**Ongoing surrogate, cost-effective,
time efficient**



- The volume (in milliliters) of soap and hand rub is summarized monthly
- The total number of patient procedures in the OR/OS is summarized monthly
- Data entered into international database and used to calculate the number of hand hygiene events per patient visit/procedure.

Feedback: Product Consumption Report



Compare current month to past months

Compare units and share success strategies

When hand hygiene rate is below goal, discuss barriers for performing hand hygiene and conduct observation

Database Goals and Benchmarking

Literature

- No. HCWs per procedure 8
- No. of opportunities of HH/procedure 14

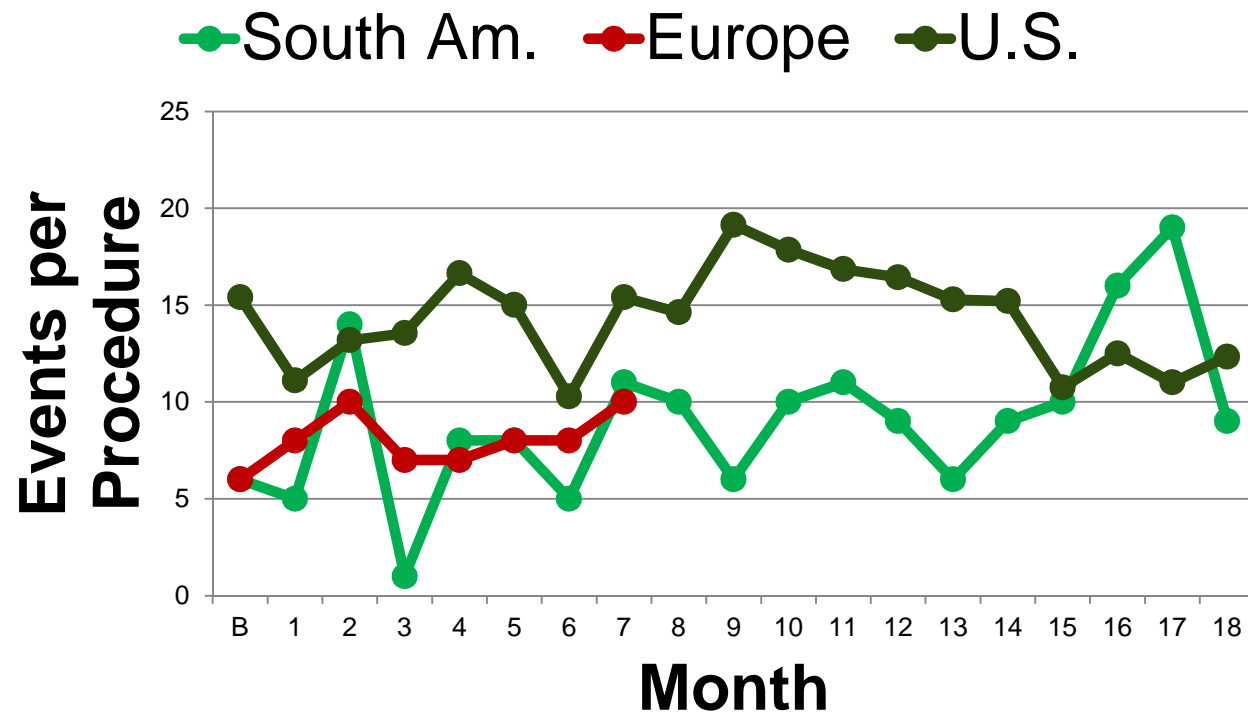
IP/OR Team

No. HCWs per procedure 6-8

No. of opportunities for HH procedure 30-40

Database Results From Three Countries

- South Am. (1), Europe (1), US (10)



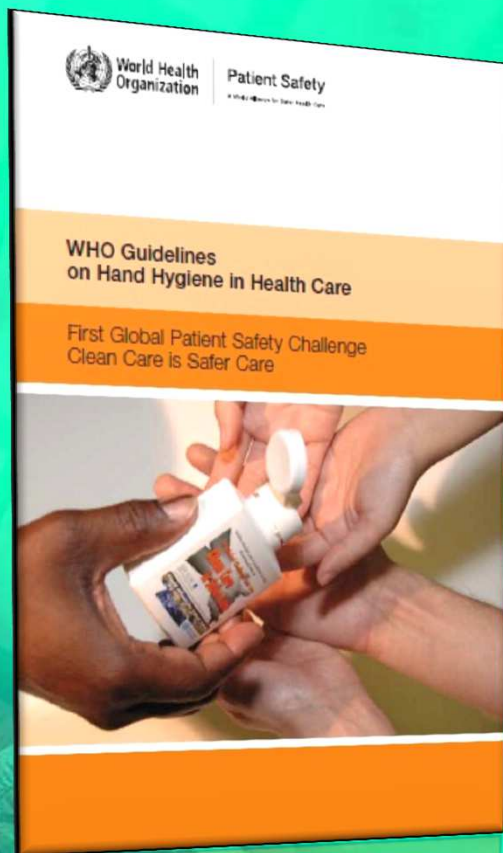
Mean for all:

Baseline = 9

Month 9 = 13

Month 18 = 11

Patient Empowerment



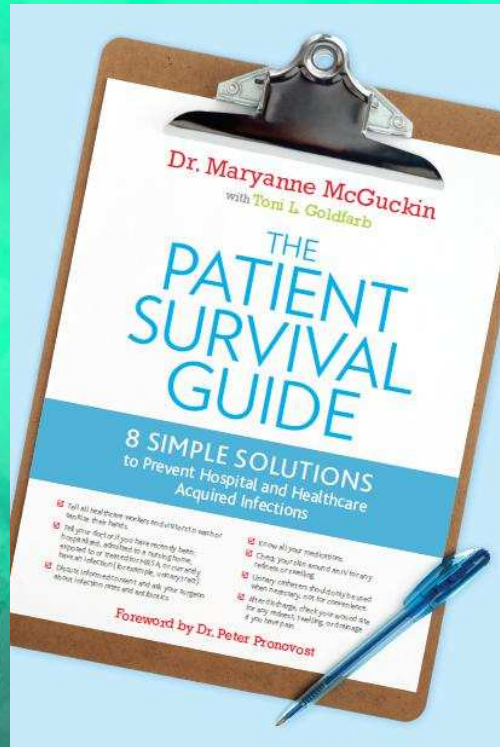
- "A process in which patients understand their role, are given the knowledge and skills by their health-care provider to perform a task in an environment that recognizes community and cultural differences and encourages patient participation."
- WHO Guideline on Hand Hygiene in Health Care (2009)

A Win-Win Strategy



- Healthcare workers are empowered when they educate patients and invite them to ask questions
- Patients are empowered by participating in decisions helping to address medical errors
- Further reading: McGuckin M, Storr J, Longtin Y, Allegranzi B, Pittet D. **Patient empowerment and multimodal hand hygiene promotion: a win-win strategy.** Am J Med Qual. 2011 Jan-Feb;26(1):10-7.

The Patient Survival Guide: 8 Solutions to Prevent Healthcare-Associated Infections



“ Following on from her pioneering work in championing patient empowerment in health care, Maryanne McGuckin goes a step further in *The Patient Survival Guide* to give the patient the knowledge needed to make the health care experience a safe one. This book is written in simple language to demystify the ‘coded’ jargon for the layman consumer, but with all the experience of a confirmed and respected healthcare infection control expert.” — **Didier Pittet, MD, MS**

“ This is the best book I’ve ever read that explains everything a lay person needs to know about hospital-acquired infections. If you want to survive your hospital stay without an infection, read it.” — **Rosemary Gibson, Author, *Wall of Silence* and *The Treatment Trap***

Surgical Patient Checklist

1. Take a shower or bath the night before, and the morning of, your surgery using a chlorhexidine cleanser, available at your local pharmacy.
2. Ask about pre-operative antibiotics and be sure they are administered within one hour before the first surgical incision is made.
3. Make sure your surgical site will not be shaved
4. Ask to have your blood sugar tested before surgery. If the surgery is elective, discuss your current hemoglobin A1c level with your doctor.
5. Ask that your body temperature be monitored and controlled during and after surgery.

Checklist (continued)

6. If you were given antibiotic medication during surgery and are still receiving it after 24 hours, ask why it has not been discontinued.
7. Make sure that you and every visitor and healthcare worker who comes in contact with you washes or sanitizes their hands before approaching your bed.
8. Know the signs and symptoms of surgical site infection.
9. Monitor your wound and any intravenous catheters daily for signs of infection.
10. Contact your doctor if you have any concerns.



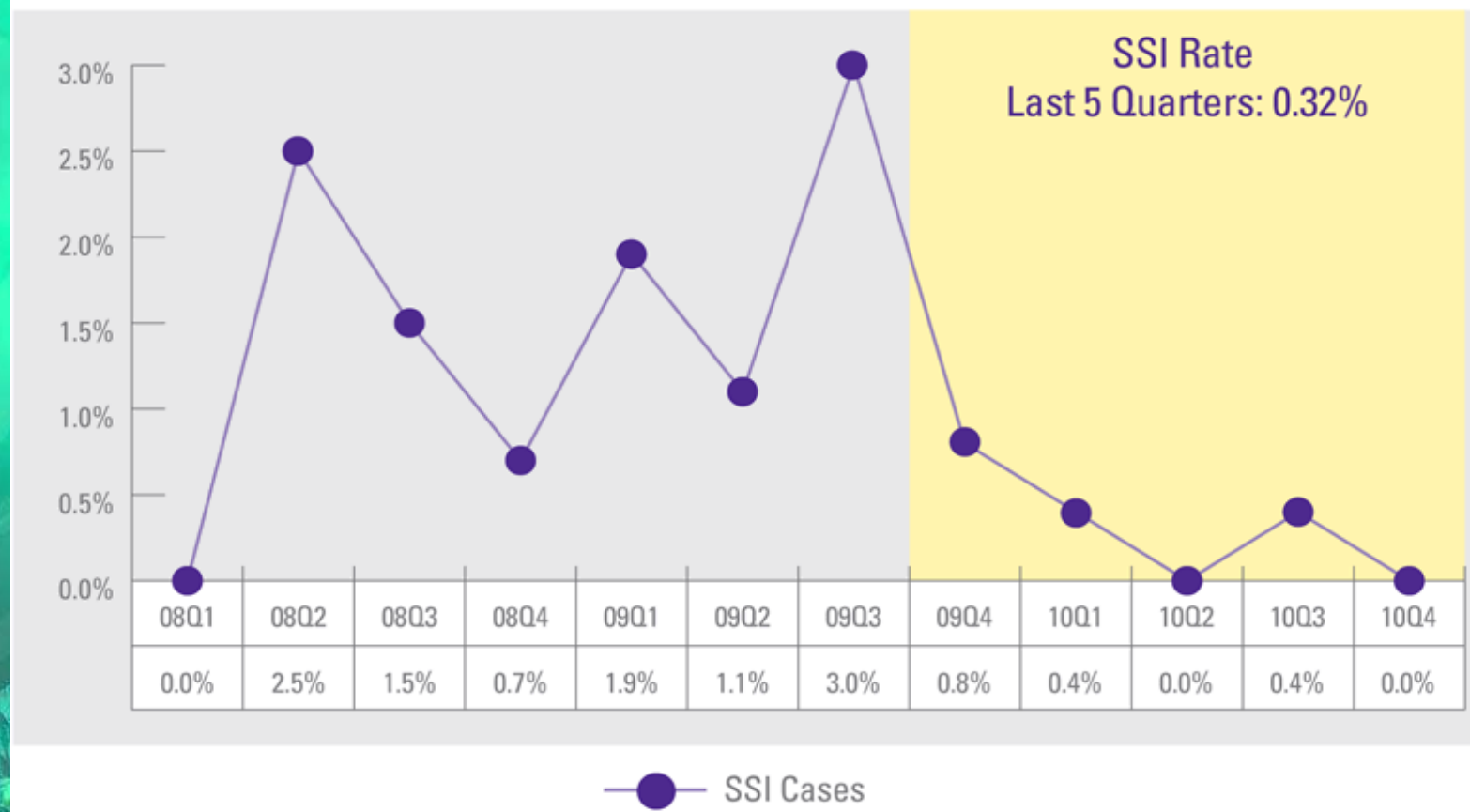
Are your patients asking you questions?

"I've caught myself washing my hands without being told to."

Prevention of SSI National Priority, Never Event-2008

NYU 2012 Quality & Outcomes Report

Surgical Site Infections for Primary Hip



Thank You

- Dr. Maryanne McGuckin
- mcguckin@hhreports.com
- www.hhreports.com for Measurement program
- www.amazon.fr Patient Book

