

# PREVENTING CATHETER- ASSOCIATED URINARY TRACT INFECTIONS

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# The Frame

- The Picture
  - Scope of the Problem
- The Paint
  - General Education per various guidelines
- The Sketch-In
  - Our Project in its infancy & teen years

# INDWELLING URINARY CATHETERS are NOT Benign

- #1 Problem = Urinary Tract Infection (UTI)
  - Most common form of hospital acquired infections
  - Increases mortality: *6.6% vs. 1.5% of those not catheterized*
  - 70-88% of all UTIs follow urinary catheterization, known as catheter associated urinary tract infection (CAUTI)
  - Each case of CAUTI extends the LOS by 3 days and costs an additional \$500-3000 per IHI
  - CAUTI is Preventable ~CMS Healthcare Acquired Condition

# INDICATIONS FOR INDWELLING URINARY CATHETERS

- Monitoring critically ill patients
- Manage urinary obstruction
- Manage urinary retention
- Manage severely impaired skin integrity
- Manage terminally ill patients
- Provide bladder irrigation



# BEST PRACTICE IN PREVENTING CAUTI

- Use indwelling catheters only when necessary
- **Remove as soon as possible!**
- Aseptic technique when inserting indwelling catheters
- Maintain closed catheter drainage system
- Secure catheter
- Maintain unobstructed urine flow
- Hand washing
- Wash meatal area with soap and water daily



# BEFORE RESORTING TO AN INDWELLING URINARY CATHETER

- Modify Environment
  - Call bell nearby
  - Avoid restraints
  - Side rails down
  - Elevated toilet seat
  - Urinal or bedpan
  - PT/OT referral
- Non-Pharmacological Treatments
  - Scheduled toileting
  - Habit training
  - Prompted voiding
  - Bladder training
  - Avoid bladder irritants (coffee, alcohol)

# Project Goals

- Eliminate CAUTIs
- Decrease Catheter days

# Project Phase I

- Increase awareness: Educational Blitz
- Avoid unnecessary catheters: Criteria for Insertion
  - Target high insertion areas: ED, OR
  - Use Bladder Ultrasound
- System for tracking catheter days
- Assure prompt removal
  - Revise order sets: SCIP POD2 removal
  - Midnight report
  - Daily review of necessity at rounds
- Pilot Units
  - Unit Champions
  - Small tests of change



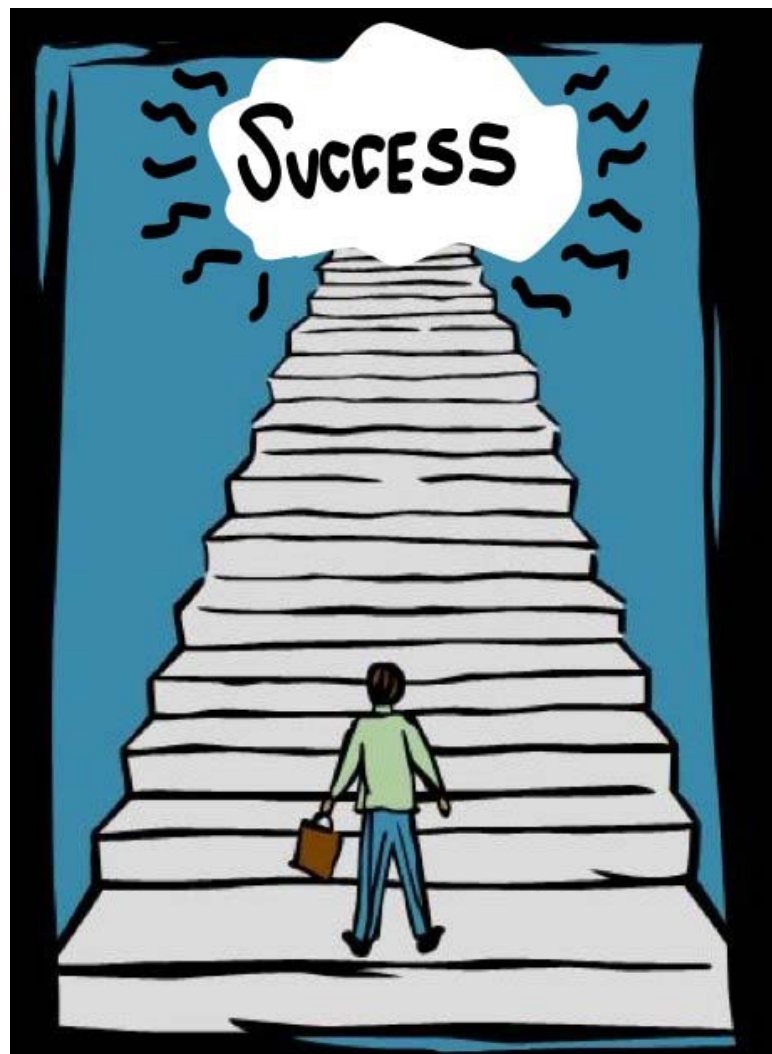
# Challenges

- Physician Culture: independent contractors
- Nursing Culture: empowerment challenged
- Transition to EMR: resources taxed
- Leadership turnover
- Spread: Adding voices adds time

# Lessons Learned

- Education is not synonymous with buy-in
- Constant & chronic messages must be combined with rounding
- Top→Down or Bottom→Up Approach? **DO BOTH!**
- No discussion is a waste of time

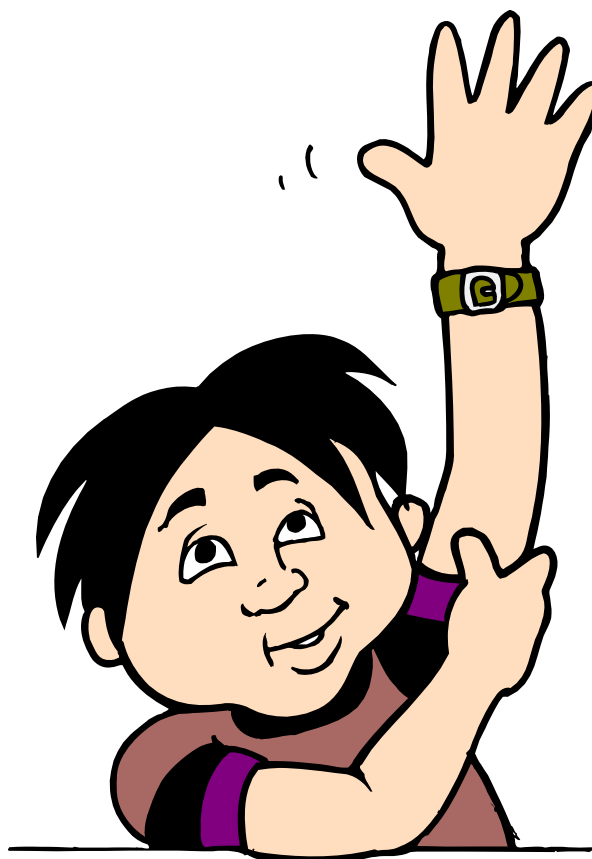
# Next Steps?



# Project Phase II

- Spread to other units
- Develop Nurse Driven Protocol
- Criteria for Insertion Checklist added to kits
- Competency Testing: Aseptic Technique

# Questions?



# Resources

- CDC Guidelines for Prevention of Catheter-associated Urinary Tract Infections
- IHI Improvement Map <http://www.ihl.org/imap/tool>
- Agency for Healthcare Research & Quality: *Catheter-Associated Urinary Tract Infection*
- APIC: *Guide to the Elimination of Catheter-Associated Urinary Tract Infections*
- SHEA: *Compendium of Strategies to Prevent Healthcare-Associated Infections in Acute Care Hospitals*