2016 American Nurses Association Annual Conference

Connecting **Quality**, **Safety** and **Staffing** to Improve Outcomes

Changing the Culture

Catheter-associated Urinary Tract Infection Prevention in the Progressive Care Unit

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MARCH 9–11, 2016 LAKE BUENA VISTA, FL www.nursingworld.org/ANAconference

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Culture

"Culture is the atmosphere created by shared beliefs, practices, attitudes, etc., which shape our behavior. In a strong safety culture, everyone feels responsible for safety and pursues it on a daily basis."

- Drivers for culture change:
  - Front line "buy-in"
  - A system of accountability
  - Ongoing measurement and feedback
    - Communicate results and celebrate successes
  - An interdisciplinary steering committee
  - On-going support

(Occupational Safety & Health Administration, n.d.)

Objectives

- To support culture change through interdisciplinary collaborative practice while improving quality and safety for patients

- To adopt and implement a standardized approach in order to reduce process variability and improve team member accountability

CAUTI Facts

- Catheter-associated urinary tract infections (CAUTI) remain the most common nosocomial infection (Tambyah & Oon, 2012).

- CAUTIs lead to increased hospital costs, length of stay, morbidity, and mortality
  - More than 500,000 CAUTIs occur yearly in the US
  - Single largest source of bacteremia in hospitalized patients
  - Average cost per CAUTI varies from $980 to $2900
  - Annual cost is over $424 million

- With appropriate infection prevention measures
  - 20% to 70% of CAUTIs may be preventable
  - nearly 9,000 deaths could be prevented annually

(Tambyah & Oon, 2012; Halm & O'Connor, 2014)

Guidelines & Recommendations

CDC Guidelines (2009)

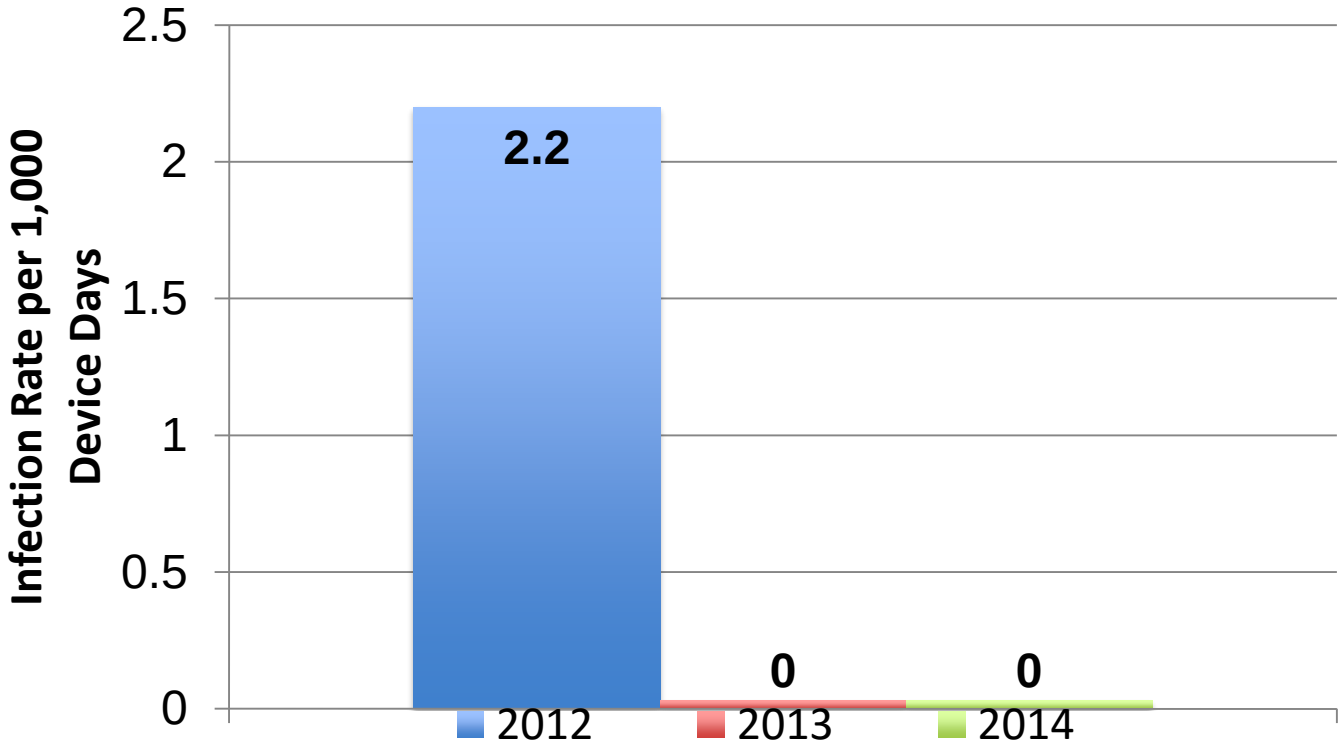
- Proper insertion technique including aseptic technique
- Proper securement
- Minimize catheter use and duration in all patients
- Daily review of continued need
- Quality improvement programs should entail:
  - monitoring adherence to criteria for appropriate utilization
  - periodic in-service training and CAUTI education
  - provision of performance feedback
  - standardized format of documentation in EMR

(Gould et al., 2009)

Project Triggers

- There were four CAUTIs on the Progressive Care Unit in 2012
- The Unit Nurse Practice Council (UNPC) perceived a variability in practice
  - Missing NHSN/OH criteria on catheter insertion orders
  - Catheters inappropriately placed
  - Inconsistent catheter care and documentation
  - Daily review of necessity not consistently discussed in collaborative rounds
  - Concerns about insertion techniques and staff knowledge
  - Improper anchoring of device
- Participation in the Comprehensive Unit-based Safety Program (CUSP)

CAUTI Rates


Infection Rate per 1,000 Device Days
2.5
2
1.5
1
0.5
0
2.2
0
0
2012
2013
2014

Unit Nurse Practice Council

- Purpose: to examine and evaluate the practice of nursing on South Seminole Hospital's progressive care unit and to develop methods to improve quality of patient care and staff satisfaction (Orlando Health, n.d.).
- Meets monthly for 2 hours
- Led by a chair and co-chair
- All PCU team members are participants
  - 25 – 30 members in attendance monthly
- Shared leadership approach
  - Nurse leaders are involved

Team for Success

- **Staff engagement**
  - Unit Nurse Practice Council led initiative
  - Interdisciplinary team assembled:
    - RNs
    - Nursing assistants
    - Learning specialist
    - Clinical Nurse Specialist
    - Unit leadership
      - Nurse Manager
      - Assistant Nurse Manager
    - Executive leadership support
    - Physicians

Methodology

- **Education**
  - Competency demonstration check-off required for all RNs during 2013 annual skills fair and new staff orientation
  - Monthly education briefs shared with staff included:
    - Orlando Heath policy regarding indwelling catheters
    - evidence-based best practices for CAUTI prevention
  - One on one education
    - Registered nurses educated to address daily necessity during collaborative rounds with physicians
    - Nursing assistants educated on catheter care and documentation
  - MD Chief Quality Officer and urologist collaborated to develop educational music video titled “Get the Foley Out”

Methodology

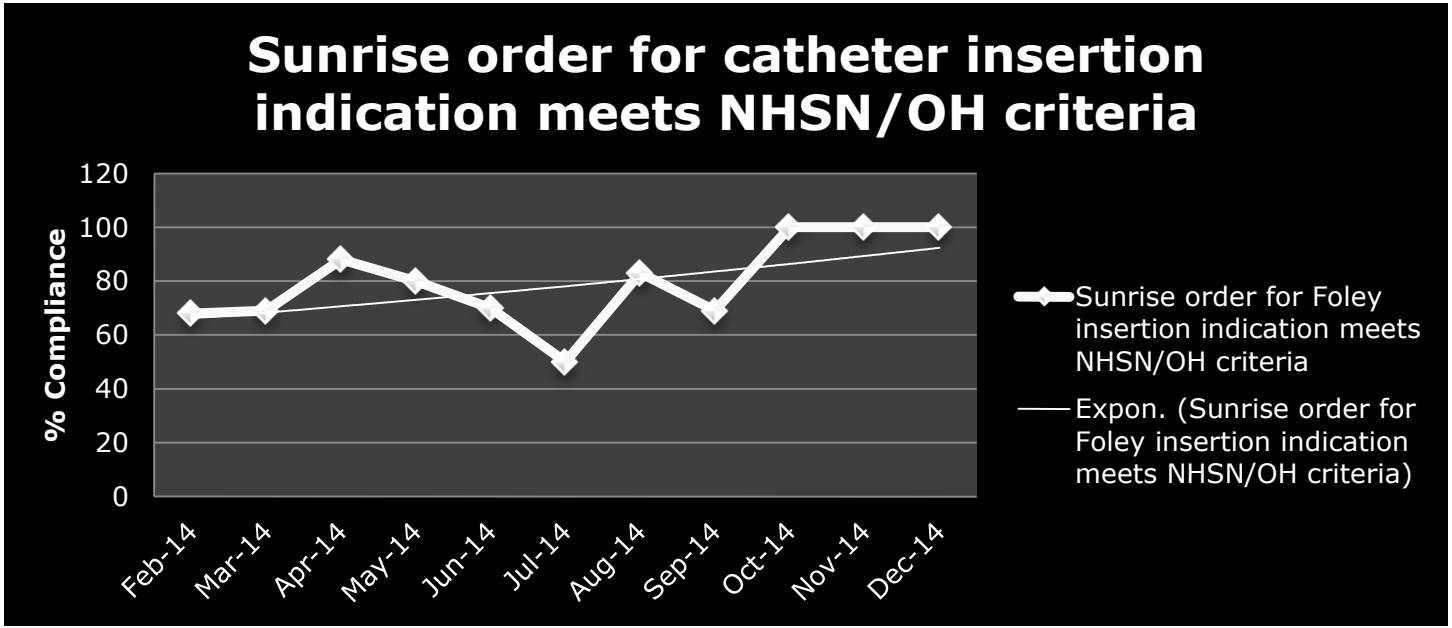
- **Surveillance of Process Compliance**
  - Weekly auditing completed by bedside nurses
  - Works to facilitate accountability and reinforcement
  - Process metrics:
    - Insertion order meets NHSN/OH criteria
    - Daily catheter care documentation
    - Presence of catheter securement device
    - Review of necessity on the day of the audit
  - Immediate feedback provided at time of audit
  - Charge nurses address catheter necessity with primary nurse daily
  - Trends shared during staff huddles, monthly at unit practice council meetings, and via email

Process Audit Tool

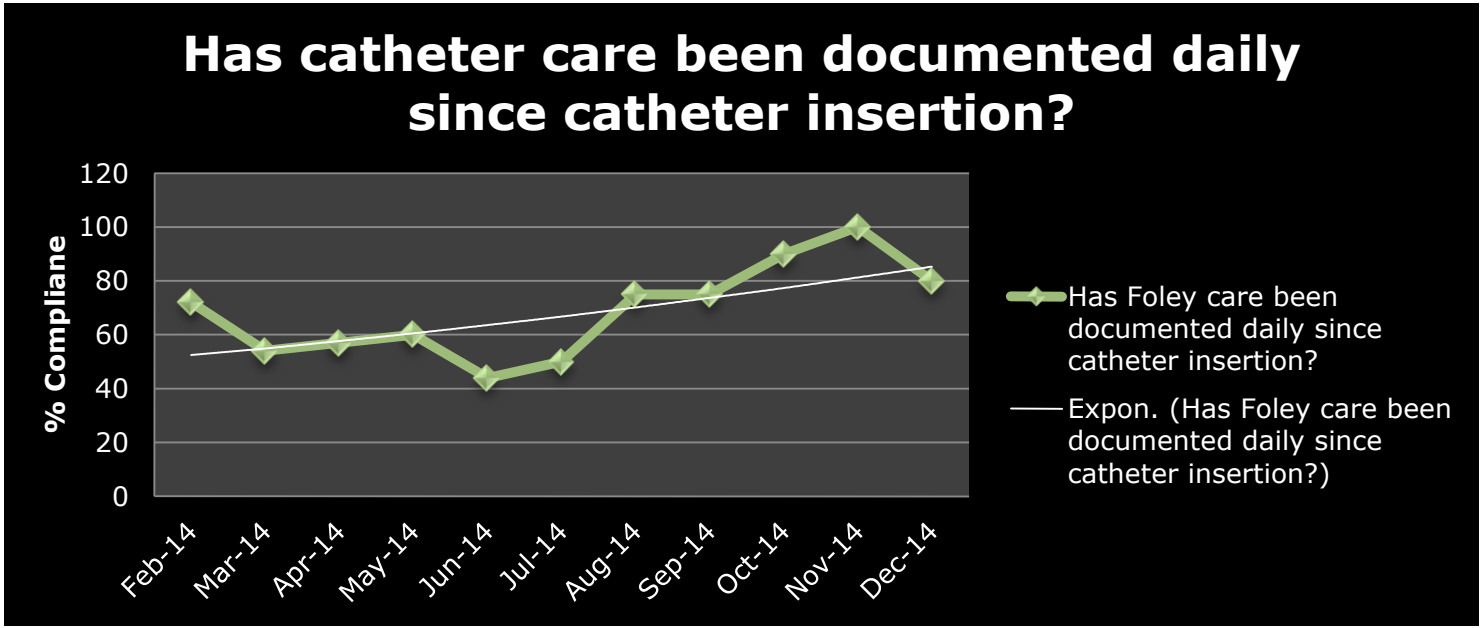
Stop CAUTI PCU **CAUTI Prevention Audit** **Date: _____**

Pt ID	**Sunrise Order Present?** **Appropriate NHSN/OH criteria on order?** • **If no, was nurse directed to obtain order?** • **If no, inappropriate indication #_____** • **If yes, indication # _____**	**YES** **YES** **YES**	**NO** **NO** **NO**
	Is securement device present?	**YES**	**NO**
	Has Foley care been documented appropriately in Sunrise?	**YES**	**NO**
	Has the nurse addressed daily necessity during collaborative rounds? • **If no, was the nurse directed to review necessity with the MD?**	**YES** **YES**	**NO** **NO**
Notes			

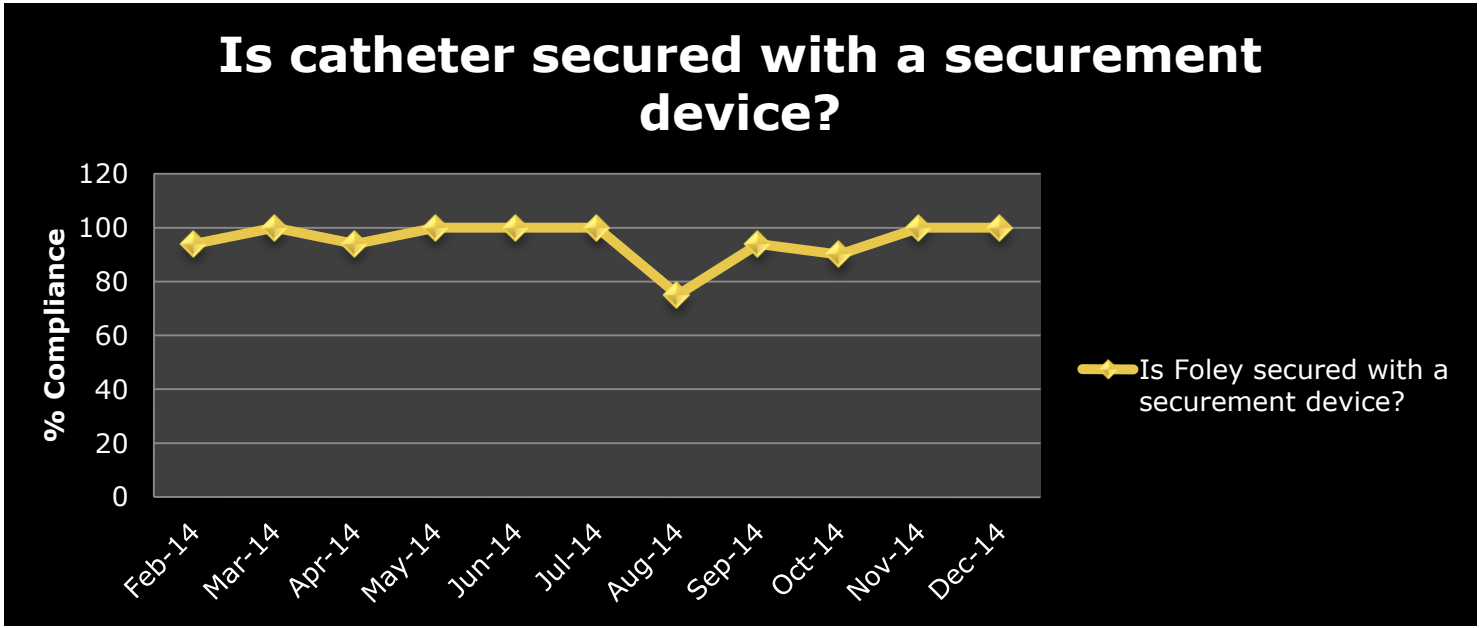
Process Audit Results



Process Audit Results



Process Audit Results



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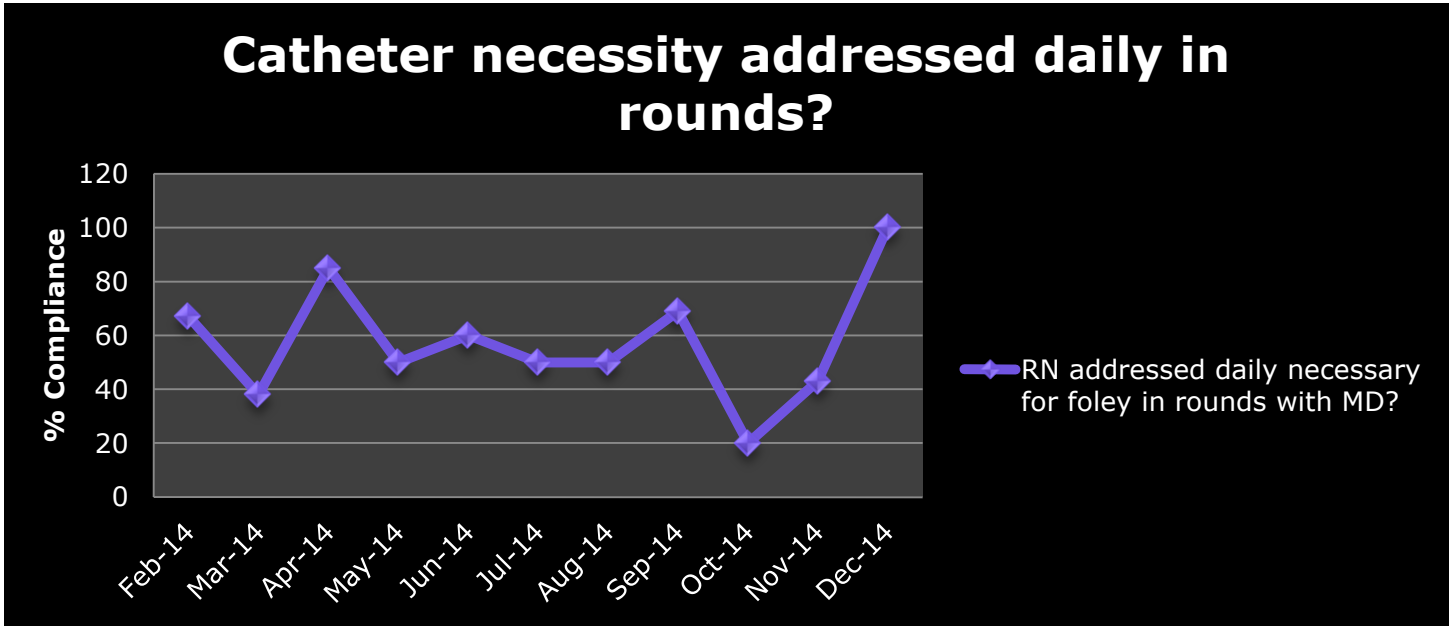
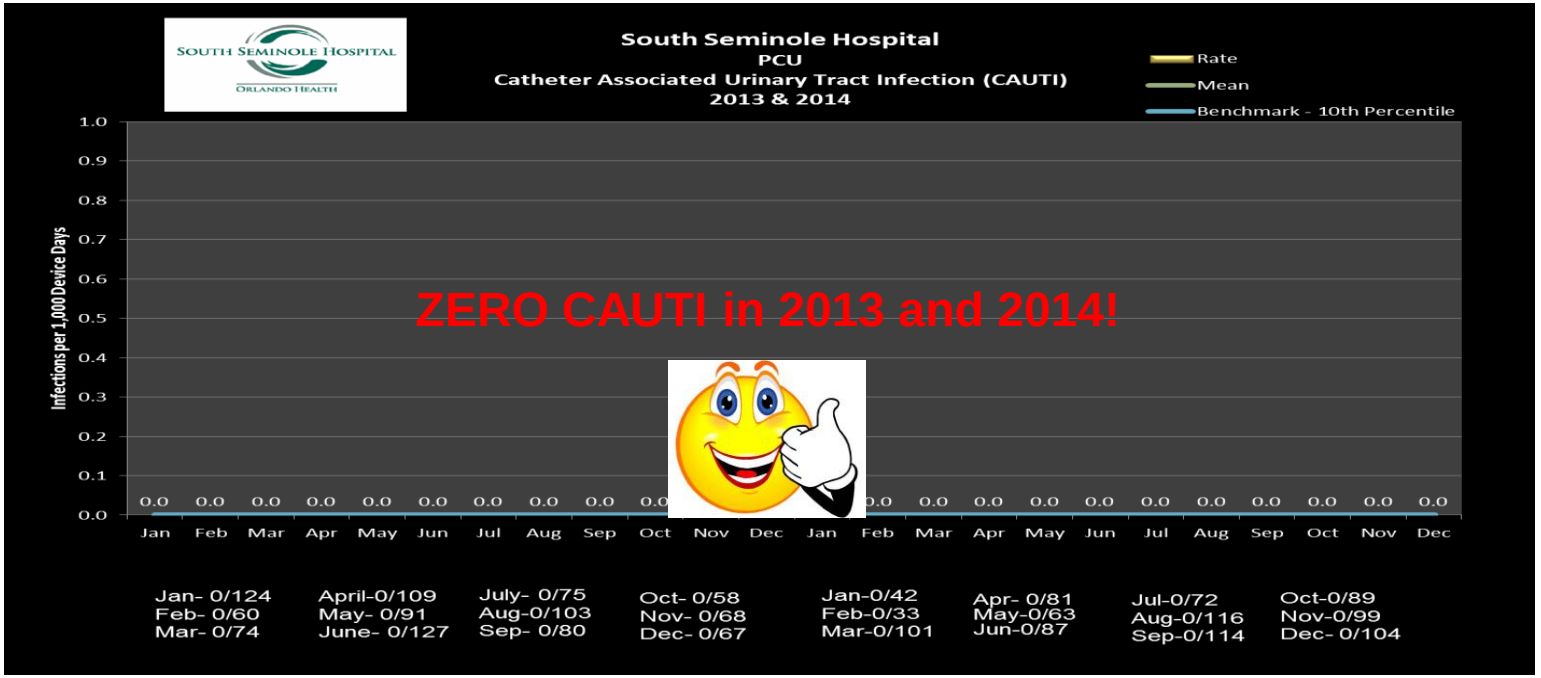


CAUTI Outcomes



Continued success: there were no CAUTIs in 2015

Outcomes

- **Maintained Zero CAUTIs since 2013!!**
- Process variability reduced
  - Improvements seen in presence of catheter orders and care documentation
  - Opportunities still exist in addressing catheters daily in collaborative rounds
- Improved accountability with staff led auditing involving real time feedback
- Positive support and collaboration with the CUSP initiative

Sustaining the Culture Change

- Our multifaceted approach proved effective in establishing a positive change in the PCU safety culture which has been sustained for over two years.
  - Process audits continue today led by front-line staff
  - Process audits have spread to all inpatient units
  - An awareness of CAUTI prevention maintained despite 57% staff turnover
  - PCU CAUTI prevention team collaborating with corporate team to standardize infection prevention efforts
  - Growing partnership with physicians

- Unit AHRQ Safety Survey & NDNQI Survey 2015 Results
  - Results of leader support of safety, learning and continuous improvement, teamwork and overall perception of safety significantly above benchmark

"A culture is a living thing, powered by and kept up to date by the people who are encouraged to be, in a meaningful way, part of it." - Micah Solomon

(Solomon, 2014)

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Thank you!
Questions?