Vermont Oxford Networks’ iNICQ 2017
Choosing Antibiotics Wisely – Year 2!
Internet-Based Quality Improvement Collaborative
Core Curriculum Webinars

iNICQ Pre-Launch Webinar(s)*
Target Audience - iNICQ QI Project Leadership Teams

January 18, 2017 3:00 PM Eastern / or / January 19, 2017 3:00 PM Eastern
*NOTE: Session repeated on 2 consecutive days for your convenience. Please choose 1 date for your leadership team to attend.
CME / CNE is not provides

iNICQ Official Launch – January 25, 2017

Target Audience for 2017 Core Sessions
- Every care team member responsible for caring for infants who may receive antibiotics in your setting (newborn nursery, step-down unit, or NICU).
- Pediatricians, Pediatric Hospitalists, Obstetricians, Nurses, Pharmacists, Respiratory Therapists, Educators, CNSs, QI Leaders, Senior Leaders, Data Analysts

iNICQ 2017 – Project Driver Diagram
January 25, 2017  3:00 PM Eastern
iNICQ Core Curriculum Session 1 – iNICQ 2017 Launch! Choosing Antibiotics Wisely

VON Learning Management System Pre-Work

- Links to Lessons for Year 1 Teams
  Ideally Teams Will Review as a Group– or – Individually - Prior To This Session

Potential Better Practice / Drive Focus

PBP Introduction 1-4. Emphasis on 1, 2.

Session 1 – Title
The Quest to Halt the Resistance! Doubling Down With Disciplined Improvement Efforts

Learning Objectives

1. Convene clinicians from obstetrics neonatology, senior leaders, and parent improvement advisors to identify antibiotic stewardship as an important strategic priority for your team’s 2017 QI efforts.

2. Conduct a brief evidence review focused on the developing human micro-biome and the impact of mode of delivery, dietary exposures, antibiotic exposures on health outcomes.

3. Identify the “top 5 compelling reasons” why every clinician must engage in and “own” antibiotic stewardship practices.

4. Compare and contrast antibiotic stewardship improvement strategies in a community Level 1 nursery and a Level 3-4 nursery setting.

5. Review the Model for Improvement and learn how to craft a “SMART” clinical aim and a family-centered care aim for your team’s antibiotic stewardship project.

6. Discuss the importance of measurement and the “plot the dot” antibiotic utilization rate campaign to guide the progress of your local quality improvement project.

Core Session 1. Lesson Plan
The Quest to Halt the Resistance! Disciplined Improvement Efforts

3:00 Welcome to iNICQ 2017
Drivers of Improved Antibiotic Stewardship Practices – The Year Ahead

3:05 Evolving New Evidence In Brief - The Impact of a Lifetime - Examining Delivery Mode, Human Milk vs. Formula, and Antibiotic Exposure on the Infant's Microbiome

3:20 Questions / Answers / Dialogue

3:30 Lessons From the CDC: The Top Five Reasons Every Team Member Must “Own” Antibiotic Stewardship

3:45 Questions / Answers/ Dialogue

3:55 QI Micro-Lesson; the Model for Improvement / Crafting a SMART AIM

4:05 Improvement Story 1 – Lessons From a Level 1 & 2 Community Newborn Nursery
4:12 Improvement Story 2 – Parent Matters
4:19 Faculty Dialogue
4:25 Local Team Exercise – Crafting a SMART Aim
4:30 VON Broadcast Adjourns / Team Time Launches
4:30 – 5:00 Local Team Time Exercise - Crafting a SMART Aim

**Key Resources for Team Time and Action Period 1 Team Deliverables**

- SMART AIM Worksheet
- NHS QI Toolkit
- Driver Diagram Worksheet
- Charter Worksheet
- PDSA Cycle Worksheet
March 8, 2017  3:00 PM Eastern
iNICQ Core Curriculum Session 2 – Choosing Antibiotics Wisely

VON Learning Management System Pre-Work

- Links to Lessons for Year 1 Teams
  Ideally Teams Will Review as a Group– or – Individually - Prior To This Session

PBP Focus  PBP 2, 3

Session 2 – Title
Evidence-Based Policies and Protocols to Diagnose Infection
Focus on Diagnostic Test Accuracy

Session Learning Objectives

1. Identify common use and misuse of laboratory testing to diagnose infection in the perinatal period.
2. Compare and contrast the sensitivity, specificity, positive predictive value and negative predictive value of each test.
3. Explore the use and potential misuses of the sepsis risk calculator.
4. Analyze the costs and unintended consequences of overuse of common diagnostic strategies.
5. Brainstorm and identify key potentially better practices to test in your NICU using PDSA methods.
6. Refine policies, procedures and guidelines for commonly encountered conditions.

Core Session 2. Lesson Plan

3:00 Welcome! Setting the Pace for Improvement

3:05 An Infusion of Evidence: Infection Specific Diagnostic Test Accuracy – Informing Policies and Guidelines

- PART 1. Nailing the Basic Principles and Commonly Used Tests
  - Sensitivity, Specificity, Positive Predictive Value, Negative Predictive Value
  - CBC, CRP, Blood Culture, Amniotic Fluid Culture, Placental Culture
  - Future Use? Pro-calcitonin, Rapid-Multi-Plex PCR, Mass Spectrometry

3:25 Questions / Answers / Dialogue

3:40 PART 2. Pragmatic Tips for the Use of the Sepsis Risk Calculator

- Term vs. Preterm
- Use / Misuse
- Population-Based Screening vs. Secondary Screening
- SRC – Implementation Story

3:55 Questions/ Answers / Dialogue

4:05 PART 3. Costs and Unanticipated Consequences of Over-Use

- Over-Use and EOS Evaluation

4:20 Questions / Answers / Faculty Dialogue

4:25 Team Time Exercise - Planning Your Next PDSA Cycle

4:30 VON Broadcast Adjourns / Team Time Launches

4:30 – 5:00 Local Team Time Exercise – Plan Your Next PDSA Cycle
Relevant Team Time Resources

- Your LOCAL current guidelines for evaluation for sepsis for 1 key condition of your choosing (including diagnostic testing). For example EOS, LOS, surgical site / wound infection evaluation.
- Planning a PDSA Cycle Worksheet
- Driver Diagram Worksheet
May 17, 2017
Core Session 3 – Choosing Antibiotics Wisely
Pharmacy-Driven Interventions

VON Learning Management System Pre-Work

- Links to Lessons for Year 1 Teams
  Ideally Teams Will Review as a Group– or – Individually - Prior To This Session

PBP Focus
Emphasis on PBP 3.

Learning Objectives

1. Analyze the impact of evolving national guidelines on local practice.
2. Reflect on how local unit culture and the presence or absence of standardized protocols influences prescribing practices.
3. Review your local VON Day Audit data; perform a gap analysis identify key opportunities for improvement.
4. Identify 3 key pharmacy-driven interventions to improve antibiotic use in newborns.
5. Foster a dialogue including key members of your obstetrics, nursery, NICU, and pharmacy team aimed at developing care systems that will assure treatment of the right patients, with the right dose and duration of antibiotics and conversely, that these agents are discontinued promptly when no longer indicated.
6. Review key examples of an annotated run chart and a statistical process control chart and huddle with your team to interpret this data.

Core Session 3. Lesson Plan

3:00 Welcome! Setting the Stage for Improvement

3:10 Evidence Update: Committee on the Fetus and Newborn – Informal Update on the Early Onset Sepsis Statement

3:20 Questions / Answers / Dialogue

3:30 Snapshot of VON Day Audit #3 – Opportunities to Improve Pharmacy-Driven ASP Interventions
- Do You Have the Right Team? Pharmacists, Infection Prevention Practitioners, and HIT
- Do You Have Complete Medication Orders? Examining Dose, Duration and Indication
- Do You Use Prospective Audit and Feedback for Prescribers?
- DO you Employ Antibiotic Timeouts?

3:45 Improvement is Possible!
- Engaging Key Team Members
- Hardwiring “Complete” Medication Orders (Dose, Duration, Indication)
- Prospective Audit and Feedback – Real-time Consults and Standardized Documentation
- Implementing Antibiotic Timeouts

4:00 Questions / Answers / Dialogue
4:15 Part 2 Pharmacy-Driven Antibiotic Stewardship Interventions – Run Charts Tell the Story

- Antibiotic Stewardship “Radar Screen”
- Compliance Audit and Feedback
- Limiting Unnecessary Vancomycin Use
- Owning Our AUR

4:15 Questions / Answers / Dialogue

4:25 Plot the Dot - Using Your Run Chart to Track and Minimize Variation

4:30 VON Webinar Broadcast Adjourns: Team Time Activity

4:30 – 5:00 Team Time Exercise – VON Day Audit Review and Action Planning

Relevant Team Time Resources

- Your LOCAL VON Day Audit results / as well as the network benchmark.
- Planning a PDSA Cycle Worksheet
- Driver Diagram Worksheet
June 14, 2017
Core Session 4 – Open Microphone and Coaching Call
Questions? Speed Bumps? Barriers to Improving Your AUR?

VON Learning Management System Pre-Work
- Links to Lessons for Year 1 Teams
  Ideally Teams Will Review as a Group— or – Individually - Prior To This Session

PBP Focus

Learning Objectives

1. Address improvement questions, challenges, speed bumps and barriers to improving your AUR.
2. Review the anatomy of a run-chart and identify how to annotate the run chart with your PDSA cycles.
3. Learn how to best "share" your improvement story in an abstract, poster, or plot the dot campaign.
4. Participate in robust question / answer and dialogue with faculty and teams.

Core Session 4 – Lesson Plan

3:00 Welcome!

3:05 Why is Change So Hard?
- Unlearning Old Practices
- Data by Data Overload – The Power of Simplicity
- Fear of Medico-Legal Repercussions
- Reimbursement Disincentives

3:20 Open Microphone – Bring Us Your Barriers and Challenges
- No Parents on Our Team / or / Not Sure What To Do With them?
- Problems With Staff “Buy-In”
- Measurement Challenges
- Small Tests of Change . . . How Small
- Infection Outbreaks Derailed Our Course
- What Else?

3:45 Reporting Your Results!
Learning by Example – Run Chart and SPCC Interpretation

4:15 Questions / Answers / Dialogue

4:25 Final Tips for Building an Abstract/ MOC Part IV

4:30 VON Webinar Broadcast Adjourns

4:30-5:00 Team Time Activity - Abstract Building

Relevant Team Time Resources
- Run Chart Tutorial, Links, and Readings
- VON Abstract Guidelines / Link to SQUIRE Guidelines
- MOC Part IV Made Simple
July 12, 2017
iNICQ Team Check-In
Faculty Open Office Hours for Antibiotic Stewardship and QI Consultations

PBP Focus

PBP 1-4.
September 13, 2017
Core Session 5 – Choosing Antibiotics Wisely!
Local Measures / National Comparisons
Deeper Dive Into the NHSN Antimicrobial Use and Resistance Module

VON Learning Management System Pre-Work

- Links to Lessons for Year 1 Teams
  Ideally Teams Will Review as a Group– or – Individually - Prior To This Session

PBP Focus

PBP 1, PBP 4

Learning Objectives

1. Identify the current gaps in local, regional and national data on antibiotic use and resistance in the neonatal population.
2. Review the goals and key components of the NHSN AUR / Resistance Module.
3. Learn about the key technology tools used for automated data extraction and submission to the CDC.
4. Reflect on how teams who are submitting NHSN data, are actively engaged in using this data to improve their outcomes.
5. Perform an informal readiness assessment exercise.

Core Session 5. Lesson Plan

3:00 Welcome! Setting the Stage for Improvement
3:05 CDC Call to Action – Aiming for AUR/ Resistance Neonatal Data
3:20 Questions / Answers/ Dialogue
3:30 Using NHSN AUR / Resistance Data to Improve!
3:55 Question / Answers/ Dialogue
4:05 Shooting the Gap – Preparing for NHSN AUR Data Submission
4:20 Questions / Answers / Dialogue
4:25 QI Lesson: Team Time Exercise – Developing a Plan for NHSN Submission
4:30 VON Webinar Broadcast Adjourns
4:30-5:00 Team Time Exercise

Relevant Team Time Resources

- NHSN AUR / Resistance Module Resources
- NHSN Readiness Assessment
- Roadmap for Submission
October 27, 2017
iNICQ / NICQ Symposium – Live Choosing Antibiotics Wisely Sessions
Presented in Chicago Only!

PBP Focus

PBP 1-4.

PLEASE NOTE: Live participation in the iNICQ / NICQ Symposium is included in fees for the Intensive Curriculum. Core curriculum members are welcome to attend; however, additional meeting fees apply.

Relevant antibiotic homeroom sessions from Chicago will be recorded and shared post-event on the VON Learning Management System.

November 15, 2017
Core Session 6 - The Power of Crowd-Sourced Learning
Lessons From Our “Virtual” Homeroom

VON Learning Management System Pre-Work

- Links to Lessons for Year 1 Teams
  Ideally Teams Will Review as a Group– or – Individually - Prior To This Session

PBP Focus

PBP 1-4

Learning Objectives

1. Reflect on your teams clinical, value and family-centered care aims – and evaluate your progress towards measurable improvement.

2. Invite your senior leader or administrative champions to join the iNICQ Webinar to learn from the experiences of other centers.

3. Critically review the impact of families on improvement and your progress towards engaging their expertise and in improving antibiotic-related care.

Core Session 6 Lesson Plan

3:00 Welcome! Setting the Stage for Improvement

3:03 CDC Updates - The Evolving National Antibiotic Stewardship Landscape

3:15 Team Improvement Story 1
  Choosing Wisely: Learning from Level 1 and 2 Centers

3:25 Questions / Answers / Dialogue

3:30 Team Improvement Story 2
  Choosing Wisely: Impacting Antibiotic Use Statewide

3:37 Questions / Answers / Dialogue

3:42 Improvement Story 3
  Choosing Wisely: High Impact Team-Based Interventions

3:50 Questions / Answers / Dialogue

4:00 Faculty Round Robin – Lessons Learned!
4:25 Next Steps – Still Time to Improve

4:30 VON Webinar Broadcast Adjourns

4:30 – 5:00 Team Time Exercise


Key Resources

- Harvesting Good Ideas From Improvement Teams
- Where Do We Grow From Here? Our Next Steps
December 6, 2017
Core Session 7 – Choosing Antibiotics Wisely
Fighting the Resistance!
Multi-Center Progress and Strategies for Sustaining Results

VON Learning Management System Pre-Work

- Links to Lessons for Year 1 Teams
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PBP Focus

PBP Introduction 1-4. Emphasis on 1, 2.

Learning Objectives

1. Analyze your VON Day Audit #4 results and benchmark this data with the aggregated report from all iNICQ Centers.

2. Identify key data and resources, from the CDC and NHSN that will provide critical support to ongoing antibiotic stewardship and infection prevention programs.

3. Develop a plan for ongoing measurement of AUR and related infection measures that will fuel sustained local improvement in 2018 and beyond.

4. Reflect on the “number needed to influence” to sustain your antibiotic stewardship gains.

5. Celebrate excellence!

Core Session 7 Lesson Plan

3:00 Welcome Back to Your Virtual Homeroom!

3:10 VON Day Serial Audit Results –
  - The Results
  - Ongoing Opportunities for Improvement
  - Connecting the “Big Dot” Measures

3:24 Questions / Answers / Dialogue

3:25 Sustaining the Gains - Key Drivers of Improvement
  - Demonstrating Value
  - Universal Training to Sustain the Gains

3:40 Questions / Answers / Dialogue

3:50 Family Voice – Examples of Family Partners in Improvement

4:05 Questions / Answers / Dialogue

4:10 The Road Ahead . . . . Inspiration and Guidance From the CDC

4:25 Questions / Answers / Dialogue

4:30 VON Webinar Broadcast Adjourns

4:30 – 5:00 Team Time Exercise
Key Resources

- VON Day Audit -#4 – Local Serial Results
- VON Day Audit – Aggregated Results
- Score Card – How Did We Do? Next Steps to Achieve the Goal
iNICQ 2017: Choosing Antibiotics Wisely
Vermont Oxford Network’s
Internet-Based Quality Improvement Collaborative
INTENSIVE Curriculum Webinars

Intensive Session 1
February 15, 2017


Readiness Assessment for NHSN AUR / Resistance Module Data Submission
Exploring the NHSN Modules / Goals and Path to Sustainable Data

PREWORK

Novice Centers

1a. Meet with your interdisciplinary team to discuss your current state – do we have data on NICU antibiotic use? Does this data come from the EMR? From pharmacy? From Barcodes? If YES, map who, what, where, when and how you obtain and use this data to track antibiotic use.

1b. If NO – identify what you know about existing antibiotic data in your system, what you don’t but need to know, and key obstacles to getting data to fuel improvement. Consider “digging” for green or existing data. See structured field trip to ID data sources in the pharmacy, and/or microbiology lab. Complete the 1-page “Data Dig Report Back” and share with VON.

1c. Meet with senior leader to ID data analytics support for your team; integrate key “asks” for this support into your iNICQ project charter.

/or/

Advanced Centers

1a. If you are already running data queries on antibiotic use share your standard code / or strategy for data queries with VON teams.

1b. Provide a sample report to VON (de-identified) showing your antibiotic / infection data stream. (Who, where, what, how) and identify strengths, weaknesses, or opportunities to improve this data.

1c. Share a 1 page run chart or SPCC with VON of your AUR over time. Volunteer to present your strategies and lessons learned in a focused 7 minute 7 slides presentation.

iNICQ Intensive Session 2
April 19, 2017

How to Harness Health Information Technology – Tutorial Part 2.
Creating Automated / Sustainable Measures and Data to Fuel Clinical Improvement
Exploring the NHSN Modules / Goals and Path to Sustainable Data

PREWORK

Review the CDC / NHSN Reporting Modules. Perform the NHSN readiness self-assessment – Submit to VON. Meet with your NHSN Reporter / Infection Practitioner to explore feasibility and a timeline to implementation of the NHSN modules.

iNICQ Intensive Session 3
September 27, 2017

Turning Data Into Action!

PREWORK

Novice Centers

- Create a plan for sharing AUR data with the NHSN. The plan or roadmap should include at a high level who, what, where, when, how and why along with a high level project plan. Site down with your senior leader to strategize and discuss.

Advanced Centers

- Complete the Data Sharing Worksheet
- ID 3 key lessons you have learned about automated data extraction?
- Demonstrate how you have used the data to identify common cause variation, special cause variation, as well as for audit and feedback at the unit level and/or provider level to achieve compliance identify outliers, and to minimize variation.