

The background of the slide is a photograph of a healthcare professional in blue scrubs holding a patient's hand. A stethoscope is visible around the professional's neck. The image is overlaid with a semi-transparent blue filter.

# ANTIBIOTIC STEWARDSHIP IMPLEMENTATION JOURNEY

## GREAT PLAINS HEALTH NORTH PLATTE, NE

# Process of Identifying Need

- CDC has identified antibiotic overuse as one of the most serious and growing threats to public health today
  - Estimated 20-50% antibiotics prescribed unnecessary or inappropriate
  - 23,000 deaths annually
- Great Plains Health
  - High C.diff rate (hospital acquired infection)
  - Concern for antibiotic overuse/misuse

# Process Improvement Methods

- Joint Commission Standard
  - MM.09.01.01 Requirement for Antibiotic Stewardship Program effective Jan 1, 2017
- CMS proposed antibiotic stewardship program requirement for Medicare participants CoP June 2016
  - Could effect 6200 hospitals
  - Anticipate reduction in morbidity and mortality
  - \$284 million in net savings

# Process Improvement Methods

- PDSA
  - Plan: Team formed, charter, problem statement
  - Do: Technology development, policies/procedures and daily processes for ABS Team
  - Study: Review data and results, report creation for efficiency
  - Act: Daily review of patients, ongoing review of process
- Lean
  - Current and Future process mapping of ABS Team
  - Map processes of antibiotic ordering through delivery at GPH

# Results

- Daily Review (Monday-Friday 8:15 am)
- Utilizing Software Reports
  - 48-hour review antibiotics with culture results comparison
  - Bug-drug mismatch
  - Therapeutic duplication
  - Reportable infections
  - Resistant cultures

# Results

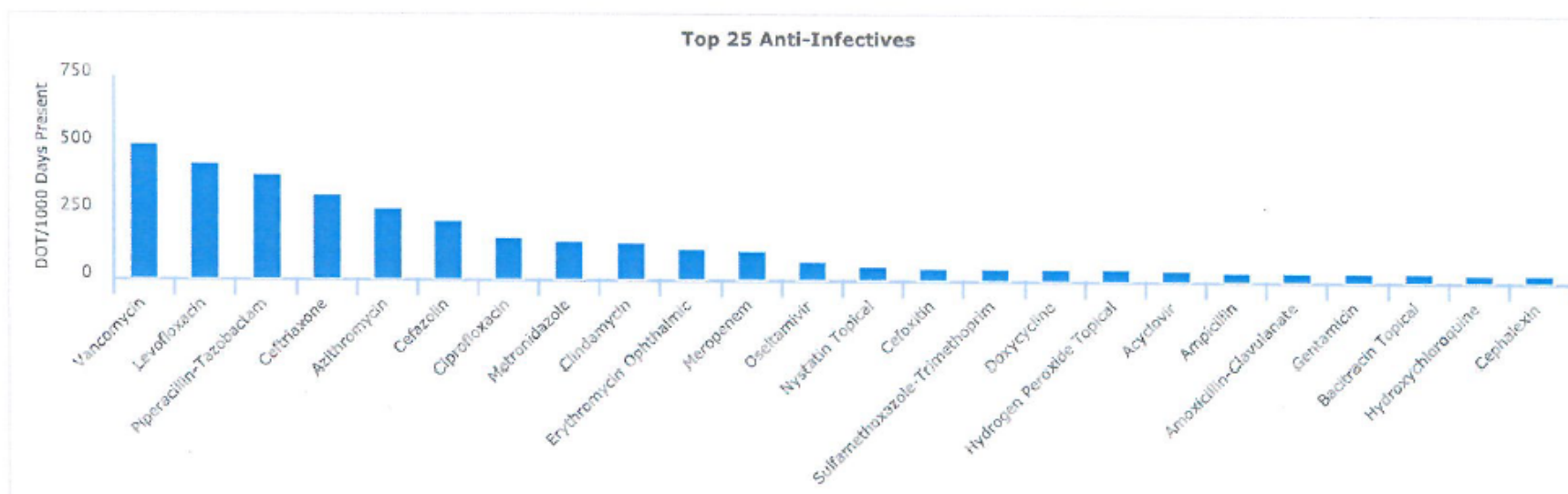
## Top 25 Anti-Infectives



Parameters:  
Time Period: Aug 2016 - Jul 2017  
Aggregation: Month  
Denominator: Days Present  
Institution(s):  
Location(s): Facility Wide Inpatients  
Medication(s): Top 25 Anti-Infectives  
Route(s): All Routes  
Secondary Axis: Unique Orders  
Sort Order: DOT/1000 (Descending)

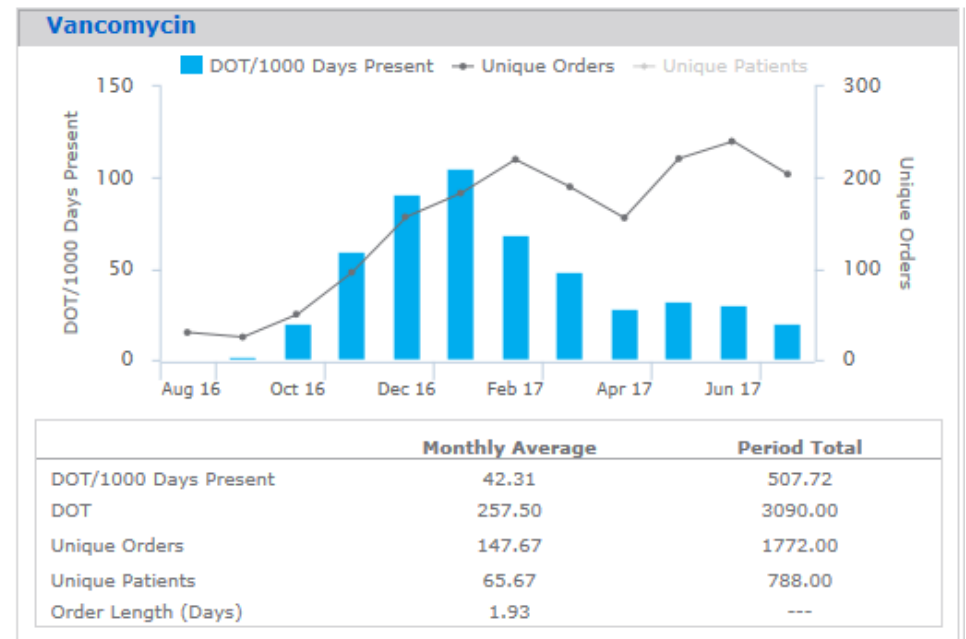
Medication Utilization Analysis – Order

Run Date/Time: 08/04/17 14:07 CDT



# Results

- Review of Days of Therapy (DOT) compared with orders
- Decreased DOT
  - Vancomycin= 183 orders/105 DOT January ↓ to 204 orders/203 DOT July
  - Levofloxacin= 114 orders/87 DOT January ↓ 80 orders/12.7 DOT
- IV to PO Conversion
  - \$47,043 1<sup>st</sup> Quarter savings





# Lessons Learned

- Required all staff education assists with effective implementation
- Physician leadership mandatory for successful implementation to providers
- C-suite support essential to drive initiatives
- Software tool vital to ensure continuity with monitoring, tracking and reporting
- Establish problem statement and monitor frequently for scope creep