



Healthcentric
Advisors
Qlarant

QIN-QIO

Quality Innovation Network -
Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES
QUALITY IMPROVEMENT & INNOVATION GROUP

Data Directed Technical Assistance: Using Real Time Data to Improve Resident Outcomes

Background:

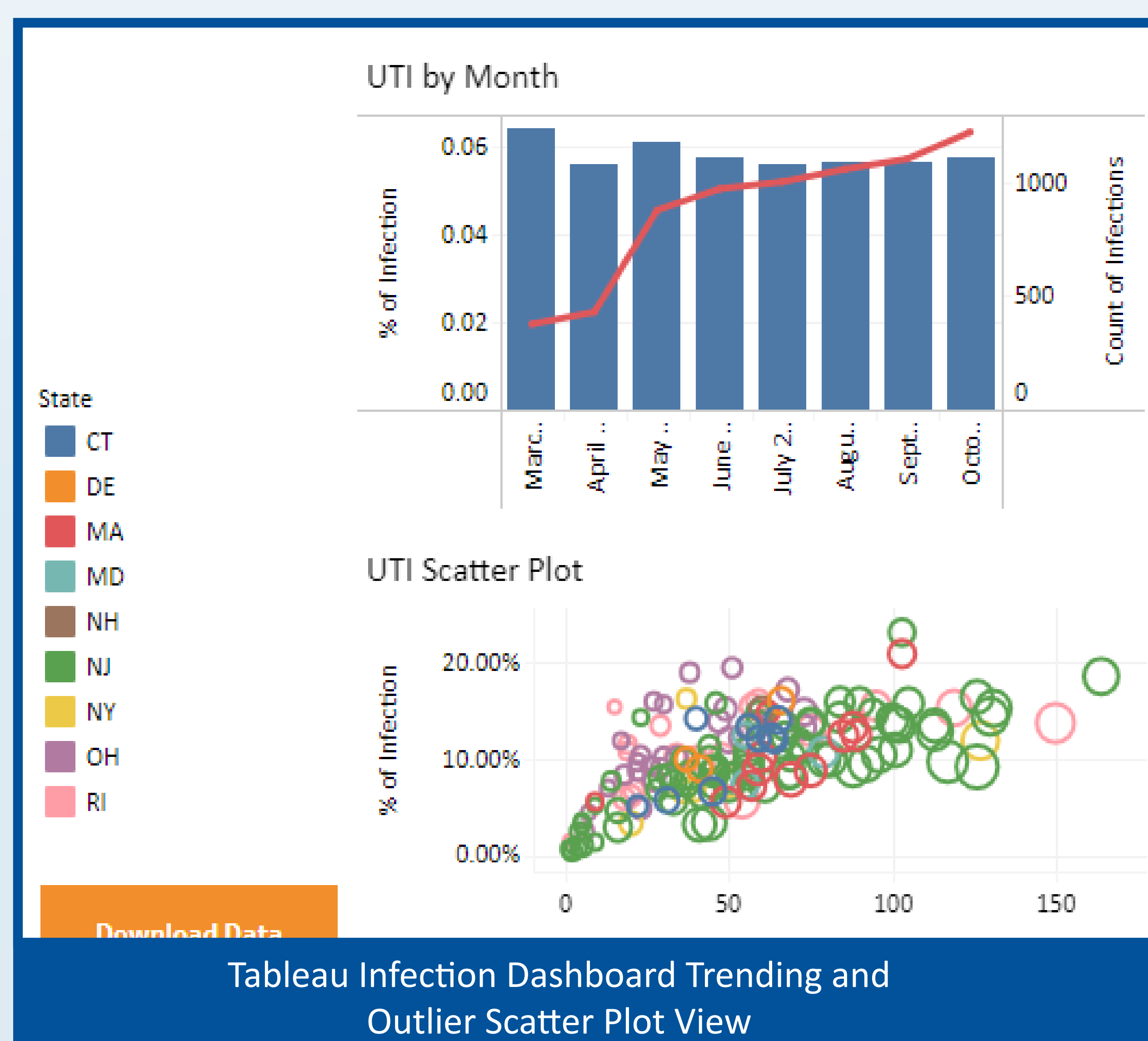
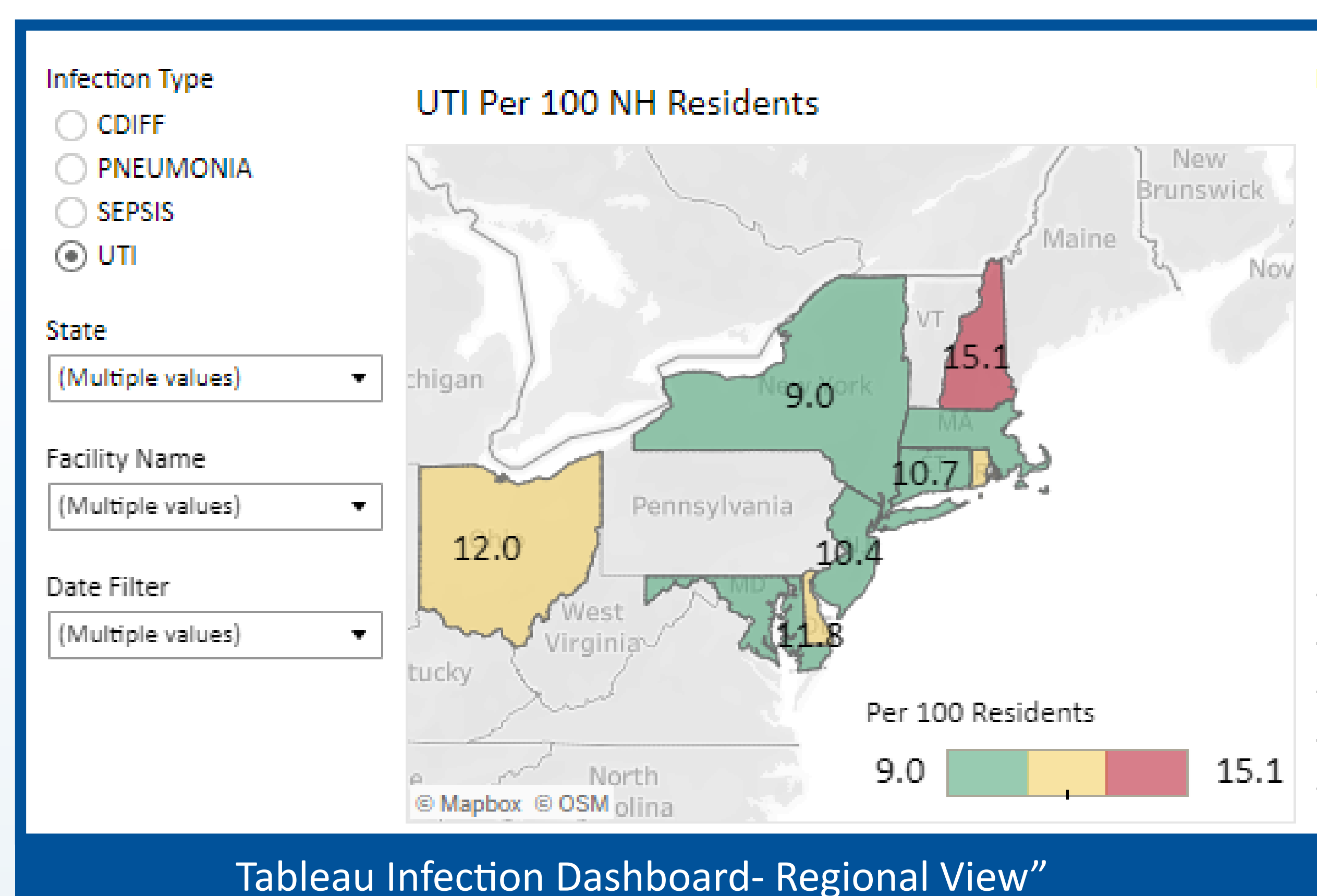
Data lag is an ongoing challenge inherent in providing infection prevention and antibiotic stewardship technical assistance to nursing homes.

IPRO QIN-QIO's Data Directed Technical Assistance (DDTA) project utilizes real time nursing home (NH) EHR data for quality improvement based on the current state, rather than relying on older data.

Real Time Infection Data

EHR data is available in a dashboard for on-the-spot use by the NH Quality Improvement Specialists (QIS), highlighting the count and rate of infection by month for NHs with trending over time. Data is obtained from two third-party vendors, Real Time Medical Systems and Point Click Care Corp.

The dashboard generates monthly referral lists of the top 20 NHs by highest infection count and rate. Referral lists for urinary tract infection began in August 2023 and pneumonia infection in November 2023. Referrals for *Clostridioides difficile* and sepsis infection began in February 2024.

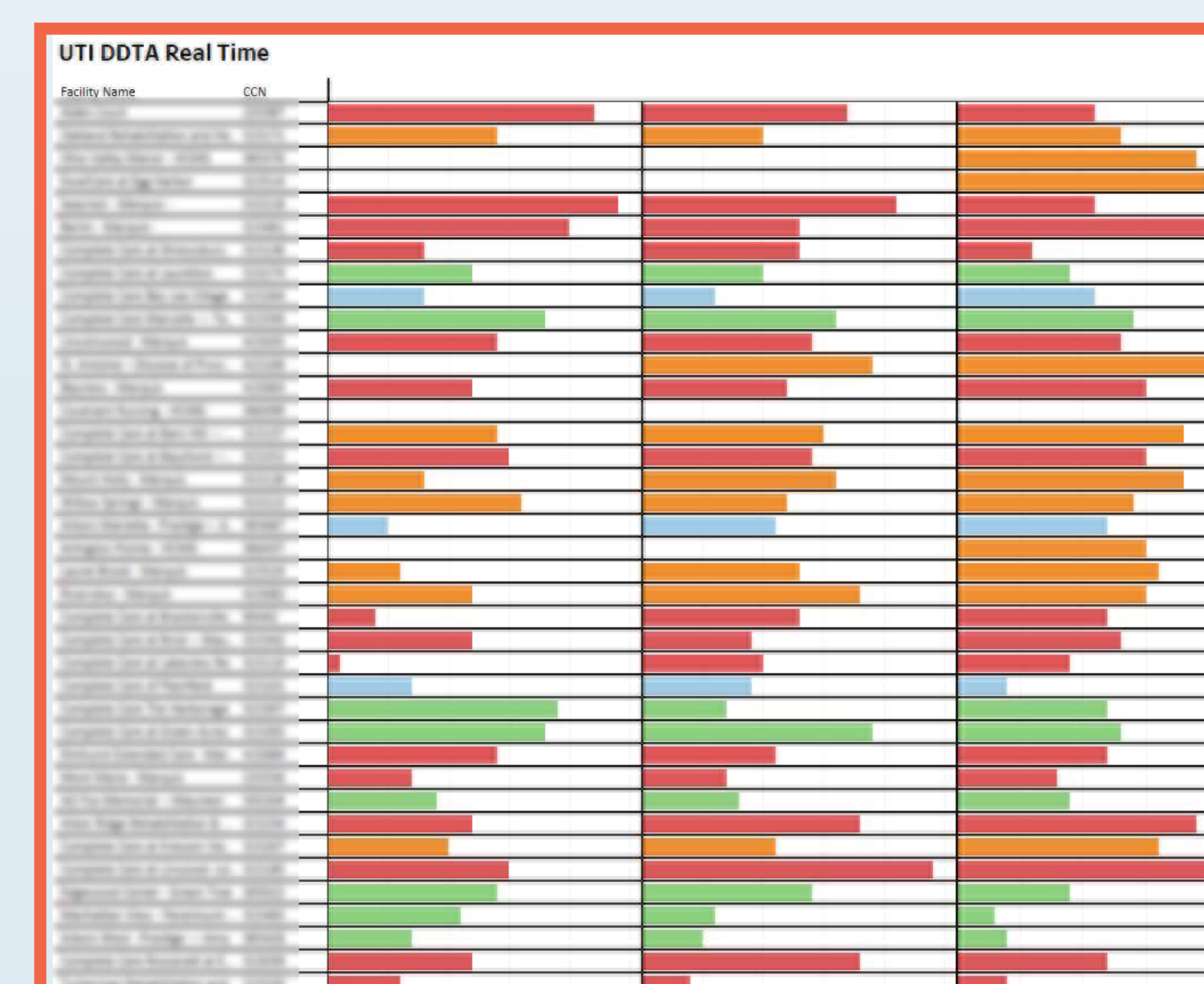


Interventions

A project specific portfolio provides the QIS with 40 infection specific evidence-based resources which support the implementation of Action Plans with goals that include education, prevention, and antibiotic stewardship. There is an action plan for each type of infection which includes an extensive resource list for technical assistance along with data collection resources. The action plans for *C. difficile* and sepsis have a nursing version and a medical provider version. A total of 322 (174 Real Time Medical Systems, 148 Point Click Care Corp.) nursing homes are reviewed for referrals based on infection count and rate monthly.

Outcomes

A total of 355 contacts have been completed to date for UTI and pneumonia, with 252 resources provided.



Summary of infection count trending by Nursing Home

Infection Outcomes (count of infections) July -October 2023		
	Urinary Tract Infection Cases	Pneumonia Cases
Number of NHs with infections consistently decreasing	12/53 (23%)	5/31 (16%)
Number of NHs with infections decreasing overall*	21/53 (39%)	14/31 (45%)
Number of NHs where infection number stayed the same	13/53 (25%)	5/31 (16%)
Number of NHs where infections increased	7/53 (13%)	7/31 (25%)

*Infections decreasing overall defined as a decrease from baseline for 2 of 3 measurements.