Telehealth and Antimicrobial Stewardship

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Telehealth (vs. Telemedicine)

"..the use of electronic information and telecommunications technologies to support long-distance clinical health care, patient and professional health-related education, public health and health administration."

healthit.gov

Antimicrobial Stewardship (AS)

- Optimization of outcomes in patients with and without infectious diseases
- Slow the emergence of drug-resistant pathogens
- Decrease waste

Types of Telemedicine

- Live video-conferencing
- Asynchronous video (AKA store-and-forward)
- Remote patient monitoring
- Mobile health

Tele-Antimicrobial Stewardship

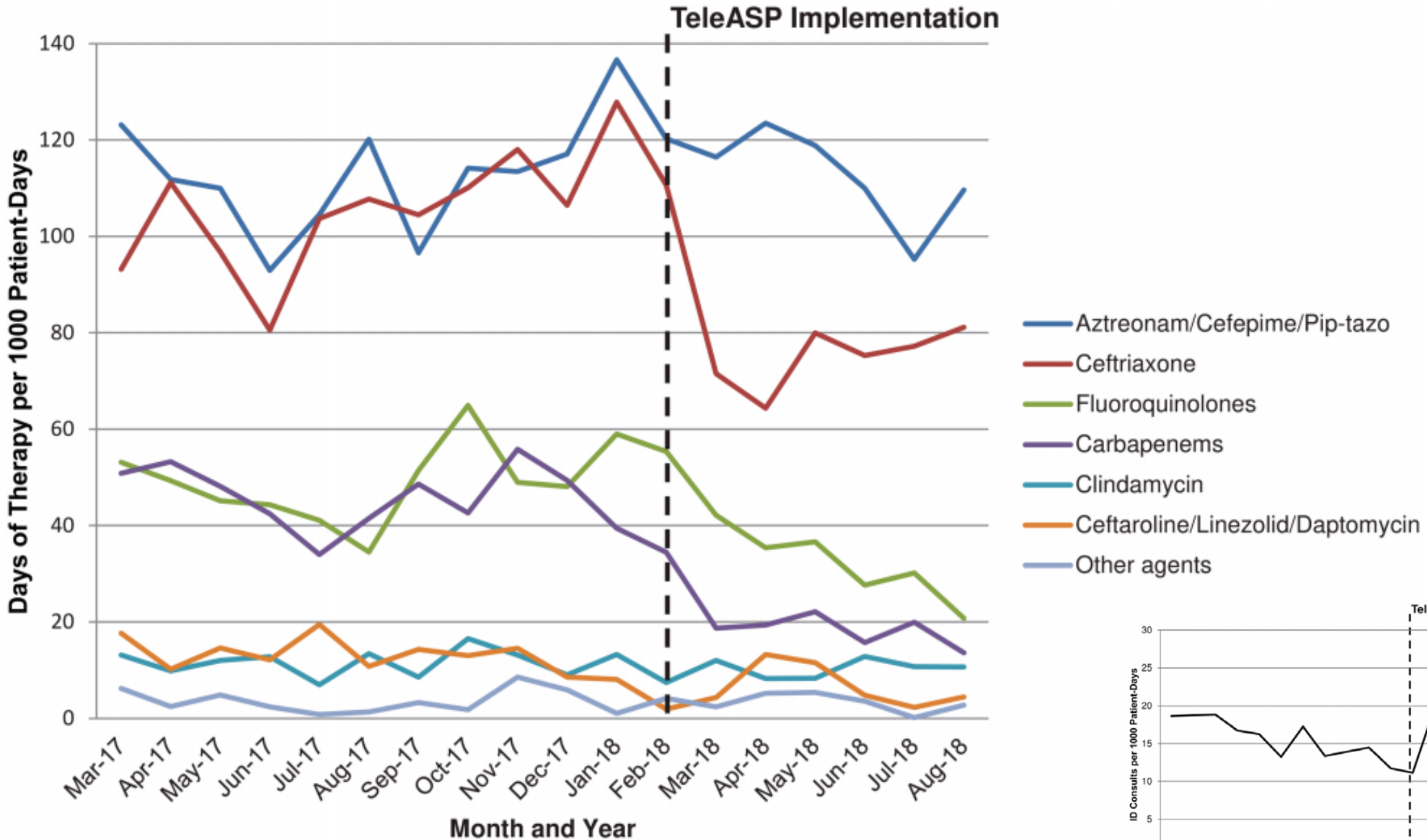
- Remote provision of antimicrobial stewardship services
- Telementoring

Impact of a Telehealth-Based Antimicrobial Stewardship Program in a Community Hospital Health System

Nathan R. Shively,[1] Matthew A. Moffa,[1] Kathleen T. Paul,[2] Eric J. Wodusky,[2] Beth Ann Schipani,[2] Susan L. Cuccaro,[2] Mark S. Harmanos,[2] Michael S. Cratty,[3] Bruce N. Chamovitz,[4] and Thomas L. Walsh[1]

- 2 community hospitals (285 and 176 beds)
- Local pharmacists trained in prospective audit and feedback
- Two to 3 times per week, remote rounds with pharmacists and ID physicians focused on broad-spectrum antibiotics, lower respiratory tract infections and skin and soft tissue infections.

Shively, CID, 2020



Shively, CID, 2020

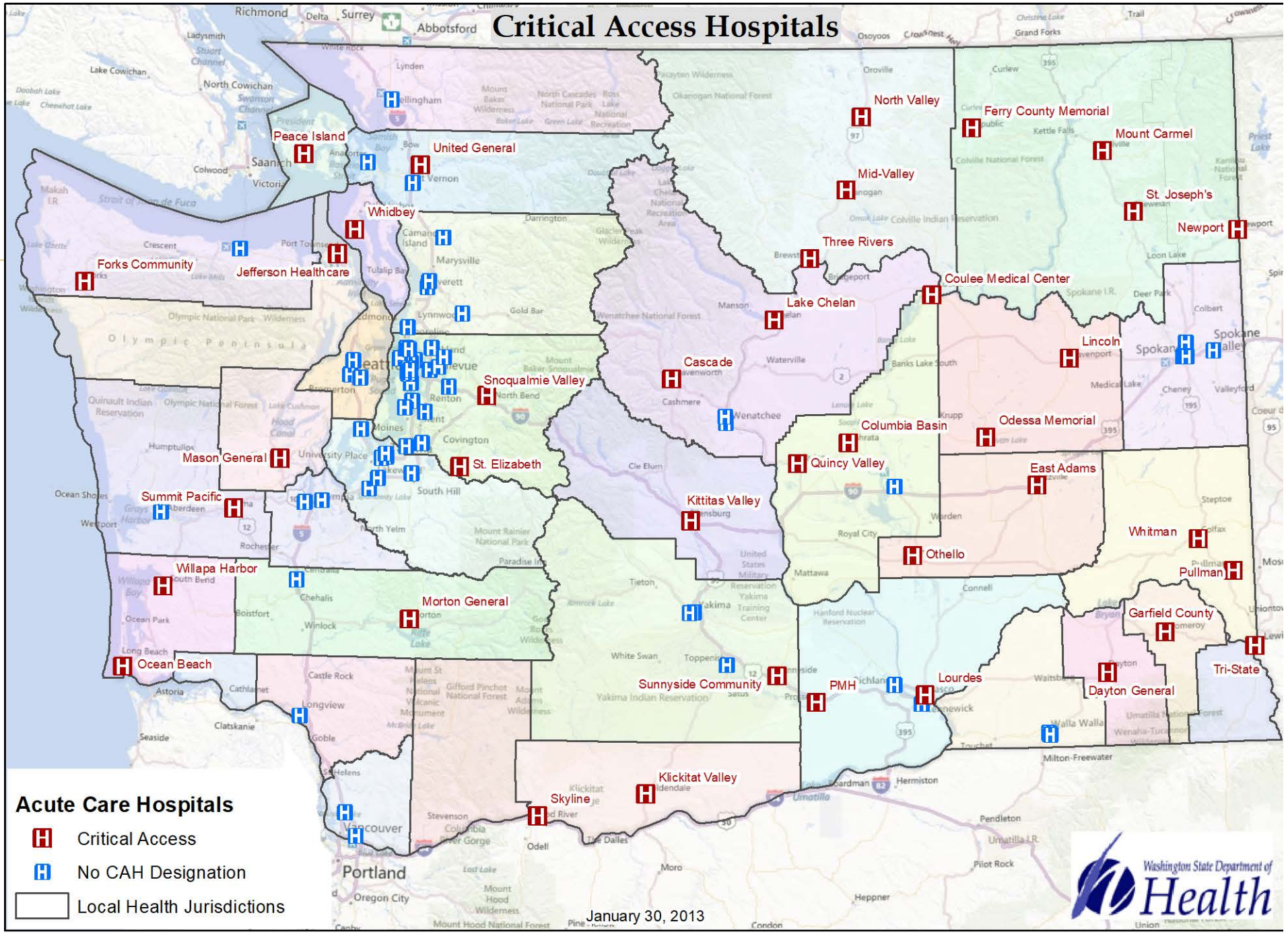
Remote AS

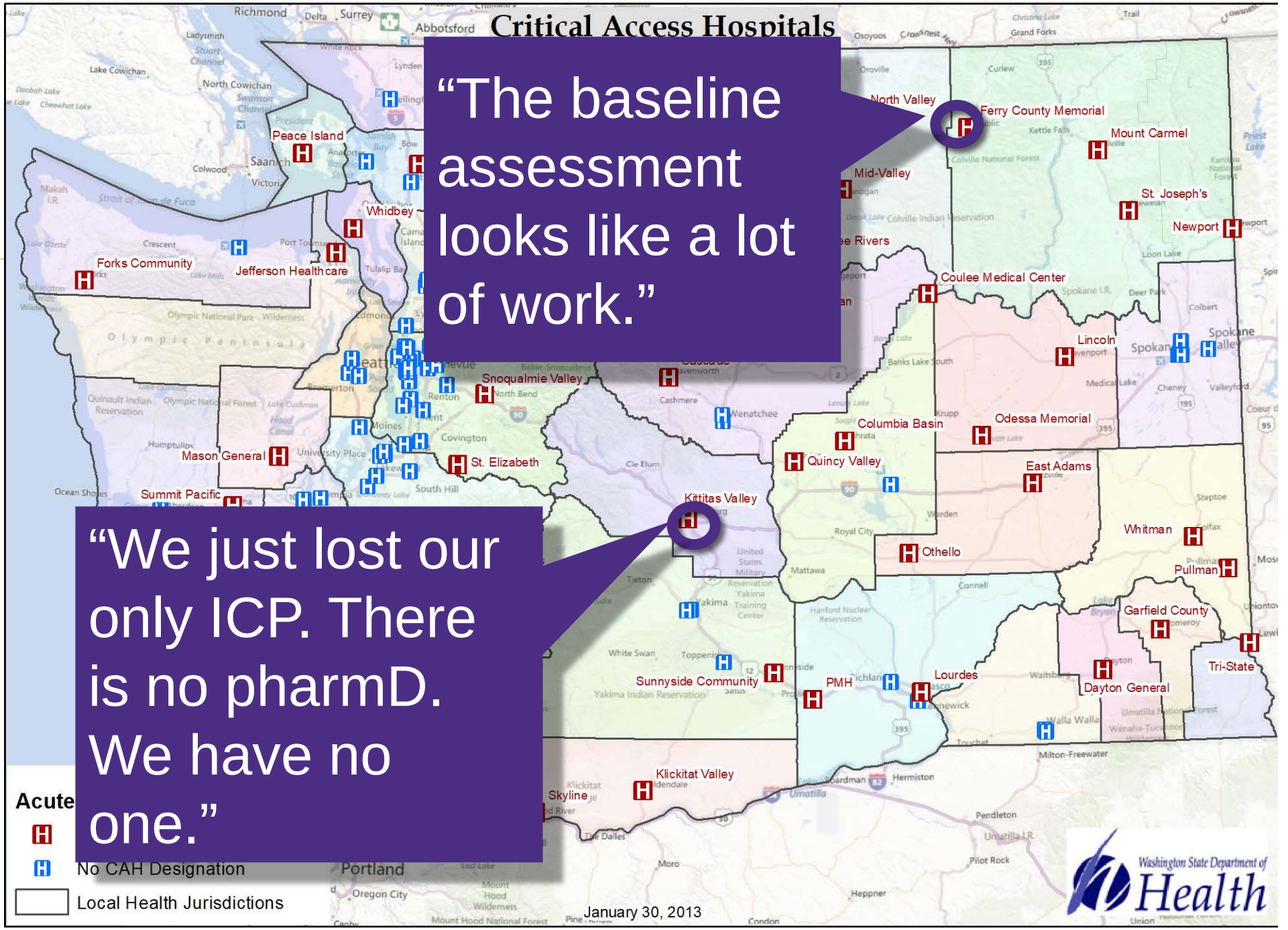
- Replicates "traditional" AS program
- Access to data
- Requires access to medical record
- Generally limited to systems
- Limited collegial interactions

Washington State Hospital Association

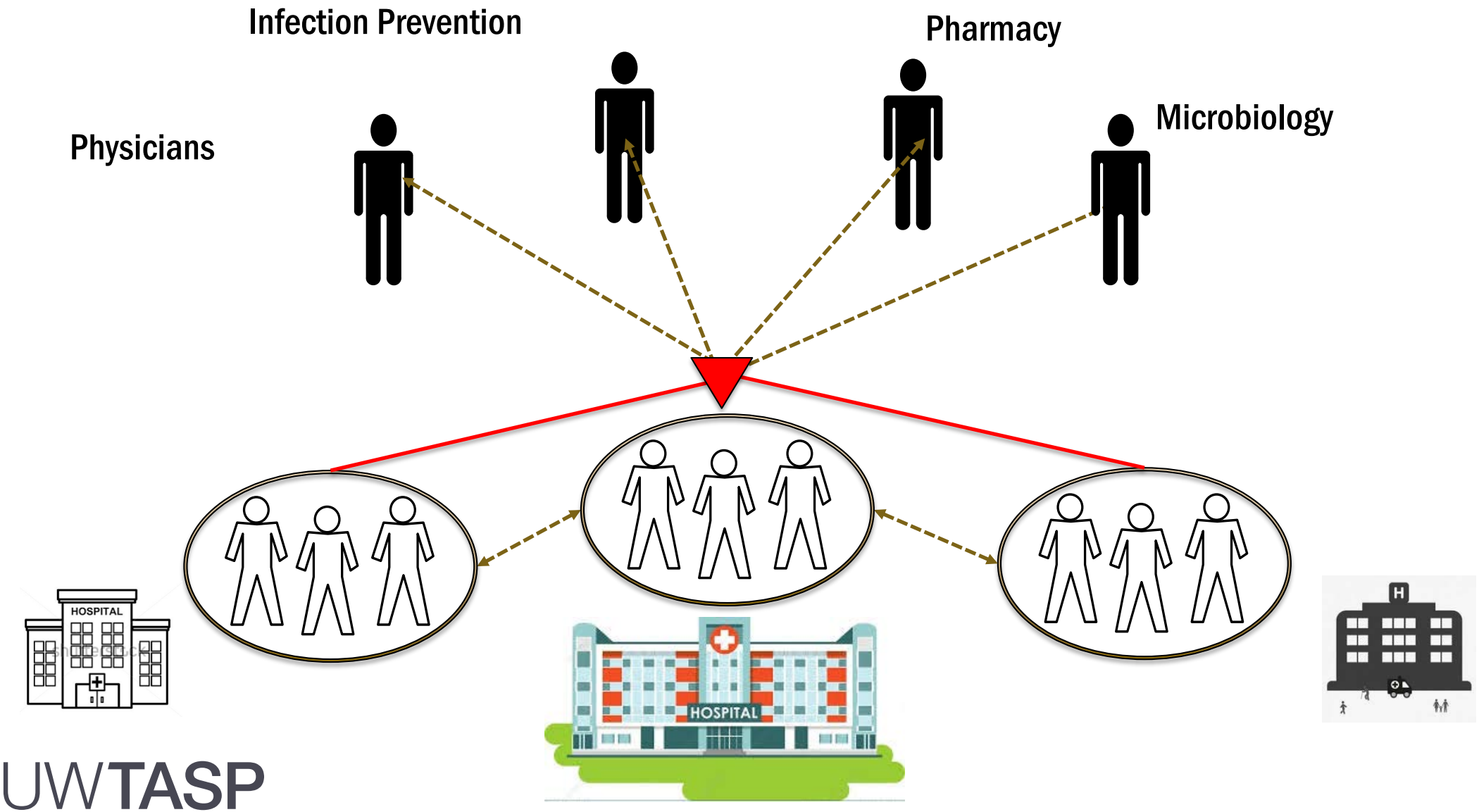
Washington State Department of Health

Critical Access Hospitals




Critical Access Hospitals
"The baseline assessment looks like a lot of work."
"We just lost our only ICP. There is no pharmD. We have no one."
Richmond
Delta
Surrey
Abbotsford
Lake Cowichan
North Cowichan
Peace Island
Saanich
Colwood
Victoria
Whidbey
Forks Community
Jefferson Healthcare
Olympic Peninsula
Snoqualmie Valley
Renton
Covington
Mason General
St. Elizabeth
Summit Pacific
South Hill
Kittitas Valley
Wenatchee
Cashmere
Quincy Valley
Columbia Basin
Odessa Memorial
Coulee Medical Center
North Valley
Ferry County Memorial
Mount Carmel
Mid-Valley
St. Joseph's
Newport
Lincoln
East Adams
Othello
Whitman
Pullman
Garfield County
Tri-State
Dayton General
Lourdes
PMH
Sunnyside Community
Yakima Training Center
Hanford Nuclear Reservation
Klickitat Valley
Skyline
Hermiston
Milton-Freewater
Pendleton
Pilot Rock
Heppner
Portland
Oregon City
Moro
Acute
No CAH Designation
Local Health Jurisdictions
January 30, 2013
Washington State Department of Health

Dissemination of AS expertise



UWTASP
tele-antimicrobial stewardship program

Development

Inception

Summer 2016

UW Approval

Fall 2016

"Go Live"

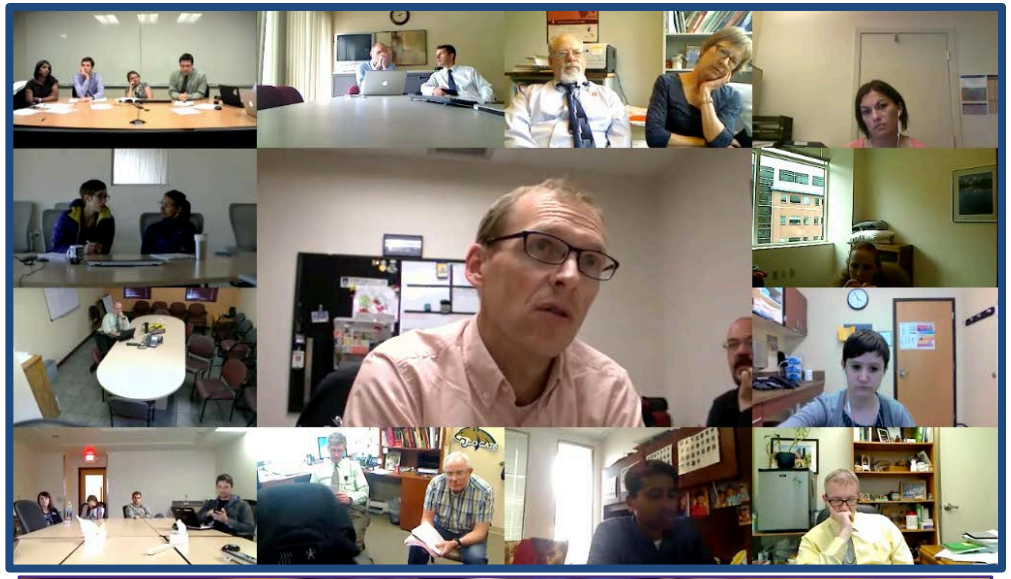
Jan 2017

Vision

- ✓ Support WA hospitals with ASP implementation or refinement
- ✓ High-quality ID fellow training
- ✓ Financially self-sustaining
- ✓ Partnerships with WSHA & WA-DOH

UWTASP
tele-antimicrobial stewardship program

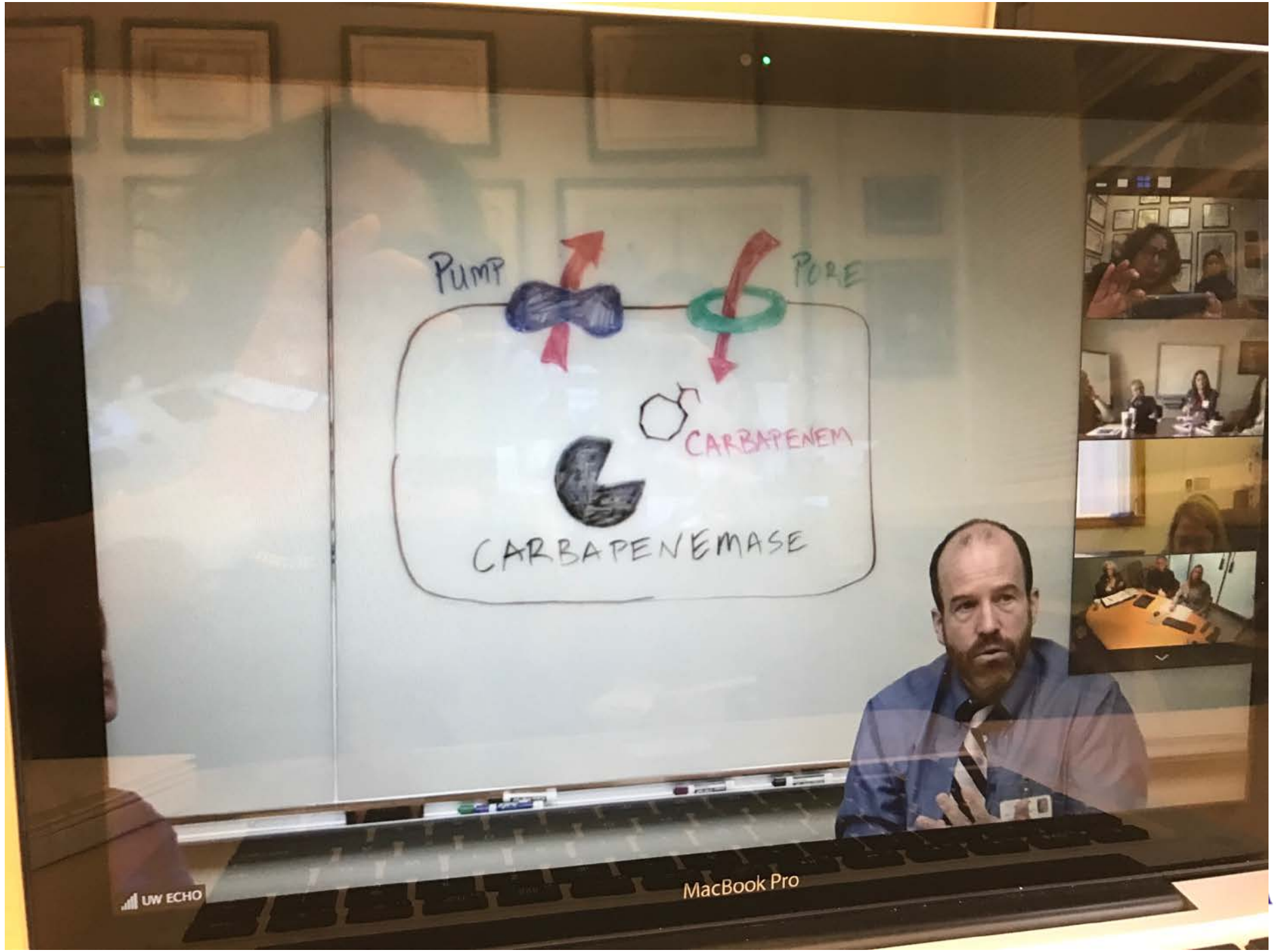
UW TASP Mechanics



- ✓ 10-15 min didactic
- ✓ De-identified cases sent in advance
- ✓ Rural clinicians present cases to specialist panel
- ✓ Multi-specialty co-management
- ✓ “Learning Loops”

UWTASP
tele-antimicrobial stewardship program

UW TASP
tele-antimicrobial stewardship program



Curriculum

Week 1 Making Tele-Stewardship Work for Your Hospital
Week 2 Metrics - Processes and Outcomes
Week 3 The Big Goal of Stewardship - Changing Behaviors
Week 4 The Key Actions and Activities of the AS Pharmacist
Week 5 Low Hanging Fruit in Antimicrobial Stewardship
Week 6 The Clinical Microbiology Lab in AS
Week 7 Double-Coverage for Anaerobes: Where's the Data?
Week 8 Markers of Infection: ESR, CRP and Procalcitonin
Week 9 Empiric Antimicrobial Therapy
Week 10 Sepsis, Part 1
Week 11 Sepsis, Part 2
Week 12 P&T : Good, Bad, Ugly?

Goals

- ✓ Actionable
- ✓ Adaptable
- ✓ Brief

UWTASP
tele-antimicrobial stewardship program

Username* Log in Project Creators sign in here

UWTASP tele-antimicrobial stewardship program

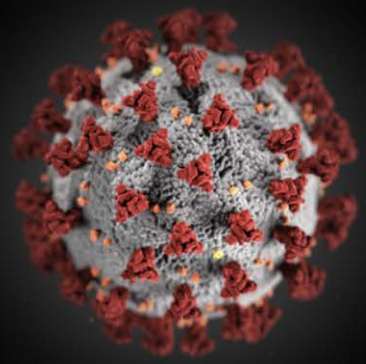
UW Medicine

Home

Novel Coronavirus (COVID-19)

UW-TASP is committed to supporting our members and the wider community in managing and preventing the spread of COVID-19.

Click here for COVID-19 resources ›



Recent Resources

- Pfizer-BioNTech COVID-19 Vaccine
- Pfizer-BioNTech COVID-19 Vaccine Preparation: Mixing Diluent and Vaccine
- Pfizer-BioNTech COVID-19 Vaccine Info Sheet | CDC
- UW Medicine Vaccine Distrbution FAQ
- Pfizer-BioNTech COVID-19 Vaccine Patient Acknowledgment

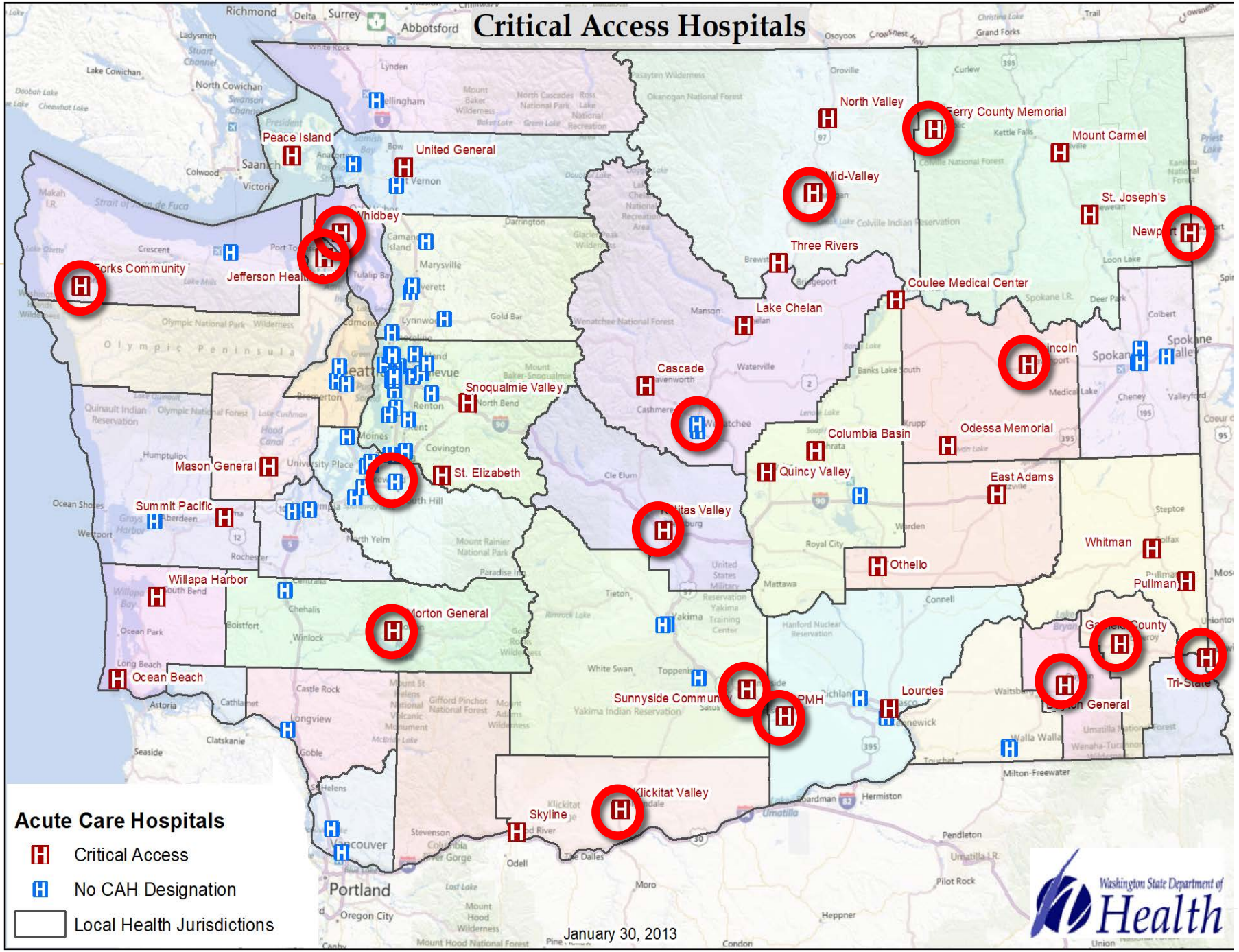
Upcoming Meetings

ASB quick hits + COVID updates/ASB study intro
Tuesday, January 5, 2021 - 9:00am to 10:00am (PST)

ASB quick hits + COVID updates/ASB study intro
Tuesday, January 5, 2021 - 12:00pm to 1:00pm (PST)

CAP quick hits + COVID updates
Tuesday, January 12, 2021 - 9:00am to 10:00am (PST)

UWTASP tele-antimicrobial stewardship program


Critical Access Hospitals
Peace Island
United General
Whidbey
Forks Community
Jefferson Healt
Mason General
Summit Pacific
Willapa Harbor
Ocean Beach
Morton General
St. Elizabeth
Snoqualmie Valley
Cascade
Lake Chelan
Three Rivers
North Valley
Mid-Valley
Ferry County Memorial
Mount Carmel
St. Joseph's
Coulee Medical Center
Columbia Basin
Odessa Memorial
Quincy Valley
East Adams
Othello
Whitman
Pullman
Tri-State
Lourdes
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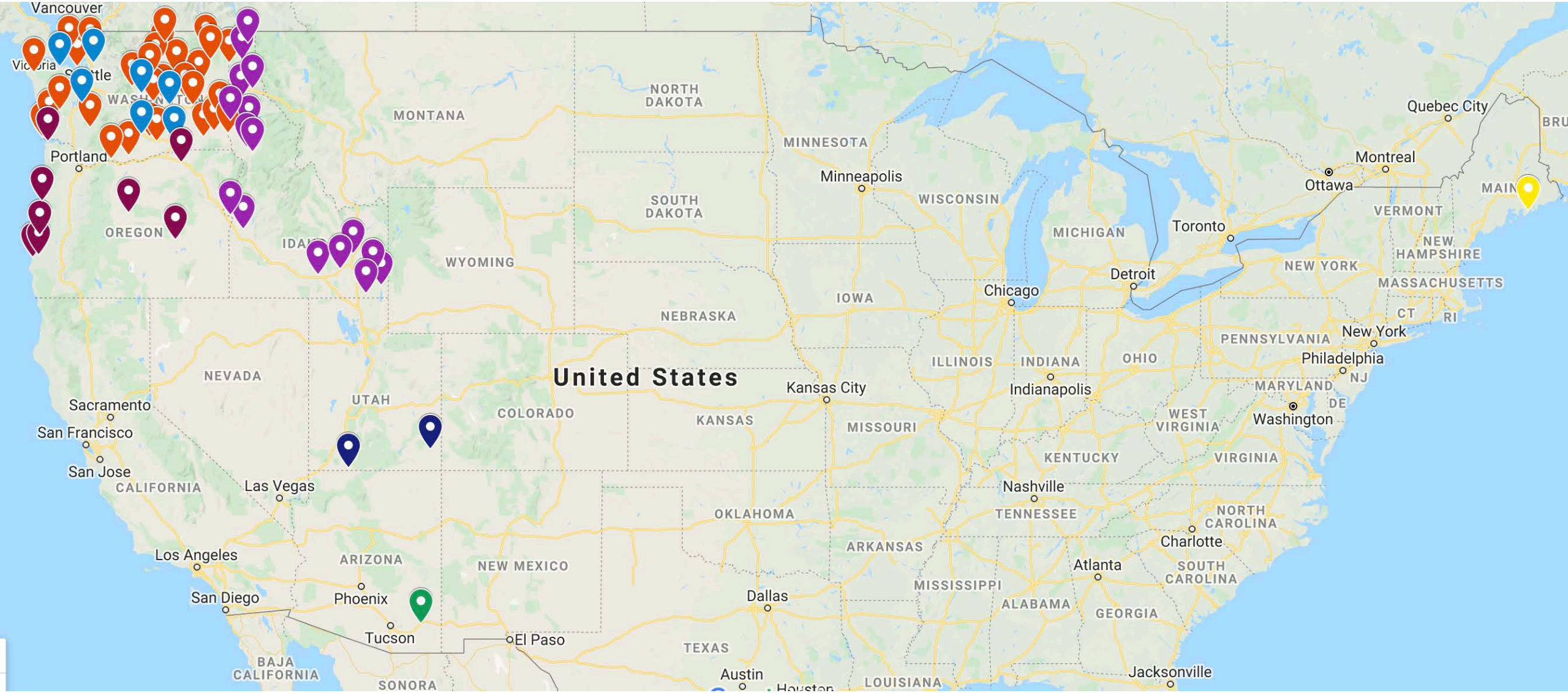
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New York
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MISSISSIPPI
ALABAMA
GEORGIA
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Dallas
Tucson
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TEXAS
BAJA CALIFORNIA
SONORA
Austin
LOUISIANA
Jacksonville

AS Telementoring

- Builds up local skill
- +Collegiality
- Broad dissemination and shared experiences
- Limited access to data
- No access to medical record
- Measurable impact?
- One Health tool?

Extending Tele-ASP

- Multiyear CDC-funded project (PI: Dr. Peter Rabinowitz, UW) to implement infection prevention & control programs in 2 model hospitals, working with MOH
- Implementation is a combination of education, on-site assessments and tele-mentoring
- Plan is to extend the IPC work to include AS mentoring with focus on c-section SSI prevention

Summary

- Antimicrobial stewardship is critical component of efforts to improve patient outcomes and to slow the emergence of MDROs
- Expertise in AS is not distributed evenly across the US or the planet and is missing from the areas with some of the greatest challenges
- The use of newer technologies provides the ability to share expertise, disseminate information, policies, and protocols, and for clinicians to communicate
- Efforts and resources to expand the use of telehealth to increase AS are needed

Thank you