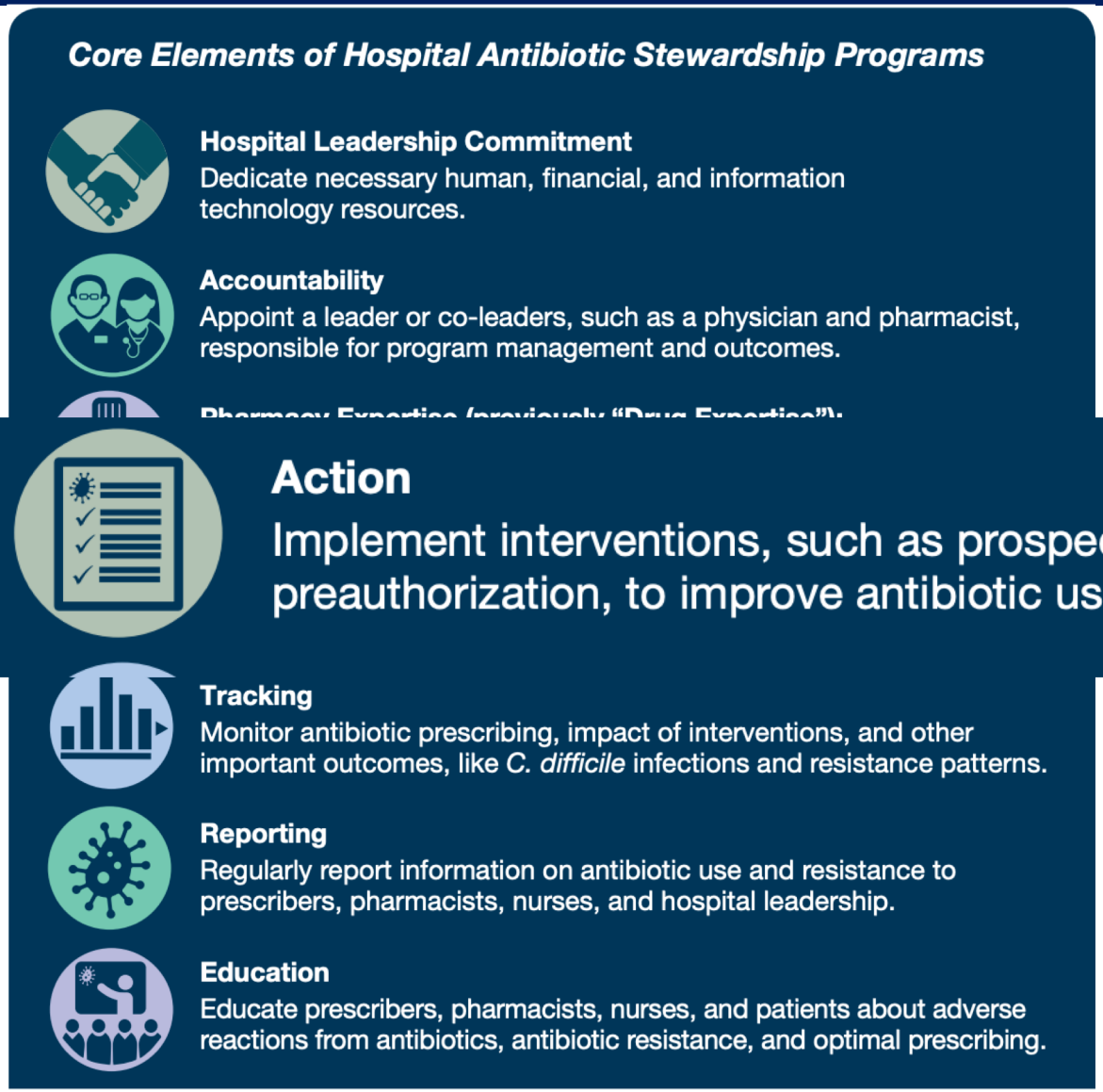
UWTASP
tele-antimicrobial stewardship program

February 11th, 2020

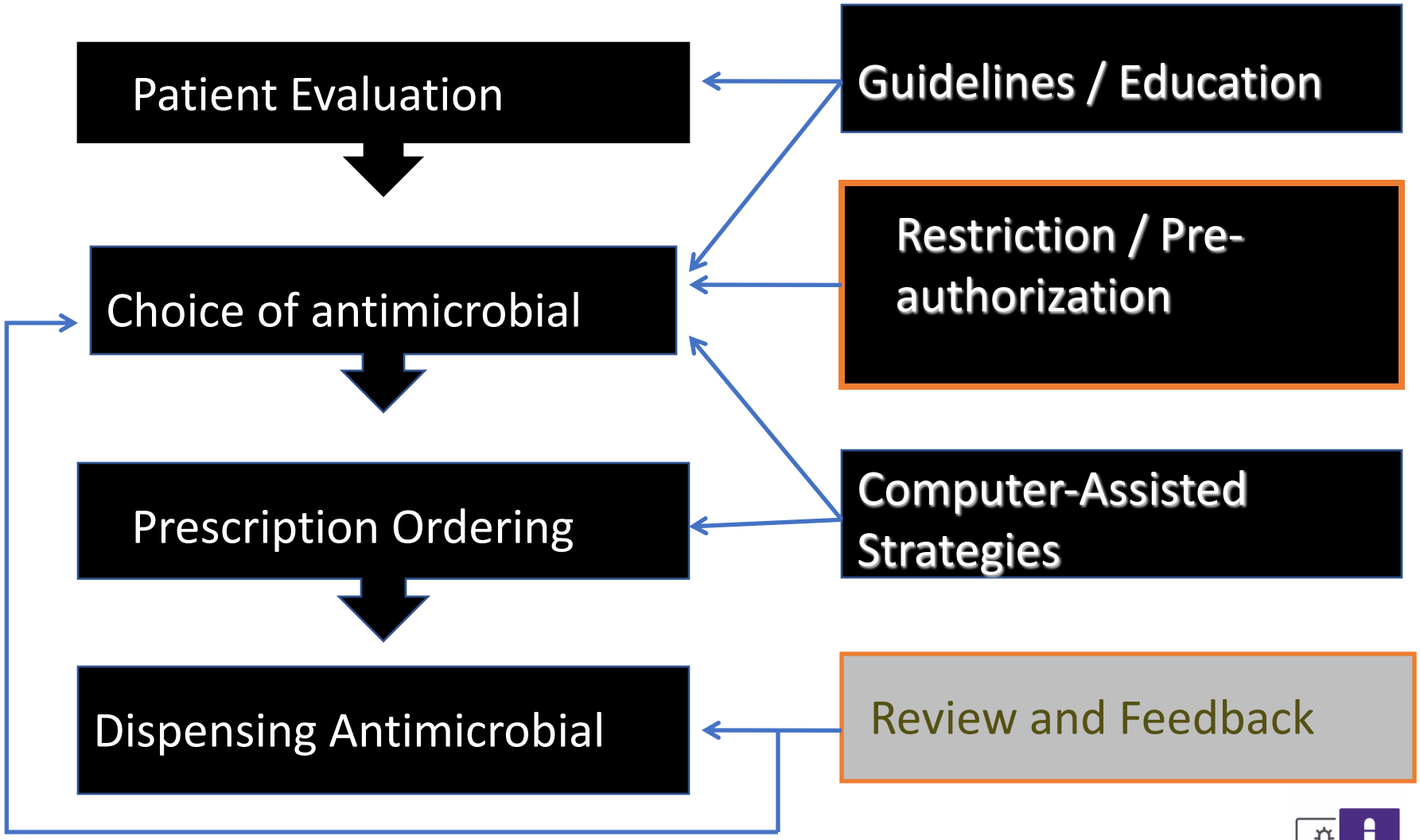
Audit and Feedback

- Speaker: *Rupali Jain, PharmD*
- Case Discussions
- Announcements

What is audit and feedback?



Pay it forward



Adapted from *Clin Micro Rev.* 2005;18(4) 638.

What is it?

- External review of antibiotic therapy by an expert (yes, that's you) with a suggestions to optimize use
- Occurs after prescription is written

Examples:

- Compare prescribed treatment to hospital guidelines (CAP, UTI, SSTI)
- Drug specific reviews
- Duration of therapy

Audience Response

Are you doing audit and feedback at your site?

a) Yes, all IV antibiotics
b) Yes, IV and PO antibiotics
c) Yes, select antibiotics
d) No
e) Something in between

Audience Response

Who is doing audit and feedback?

a. Pharmacist
b. RN
c. Pharmacist + RN
d. Pharmacist, RN and Provider
e. Other

Data behind audit and feedback

Clinical Infectious Diseases

MAJOR ARTICLE

Sustainability of Handshake Stewardship: Extending a Hand Is Effective Years Later

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Background. Children's Hospital Colorado created a unique method of antimicrobial stewardship, called handshake stewardship, that effectively decreased hospital anti-infective use and costs in its pilot year (2013). Handshake stewardship is distinguished by: (1) the lack of prior authorization; (2) a review of all prescribed anti-infectives; (3) a shared review by the physician and the pharmacist; and (4) a daily, rounding-based, in-person approach to supporting providers. We sought to reevaluate the outcomes of the program after 5 years of experience, totaling 8 years of data.

Methods. We retrospectively measured anti-infective (antibiotic, antiviral, antifungal) use hospital-wide by unit and by drug for an 8-year period spanning October 2010 to October 2018. Aggregated monthly use was measured in days of therapy per thousand patient days (DOT/1000 PD). The percentage of children admitted ever receiving an anti-infective was also measured, as well as severity-adjusted mortality, readmissions, and lengths of stay.

Results. Hospital-wide mean anti-infective use significantly decreased, from 891 (95% confidence interval [CI] 859–923) in the pre-implementation phase to 655 (95% CI 637–694) DOT/1000 PD in post-implementation Year 5; in a segmented regression time series analysis, this was a rate of -2.6 DOT/1000 PD (95% CI -4.8 to -0.4). This is largely attributable to decreased antibacterial use,

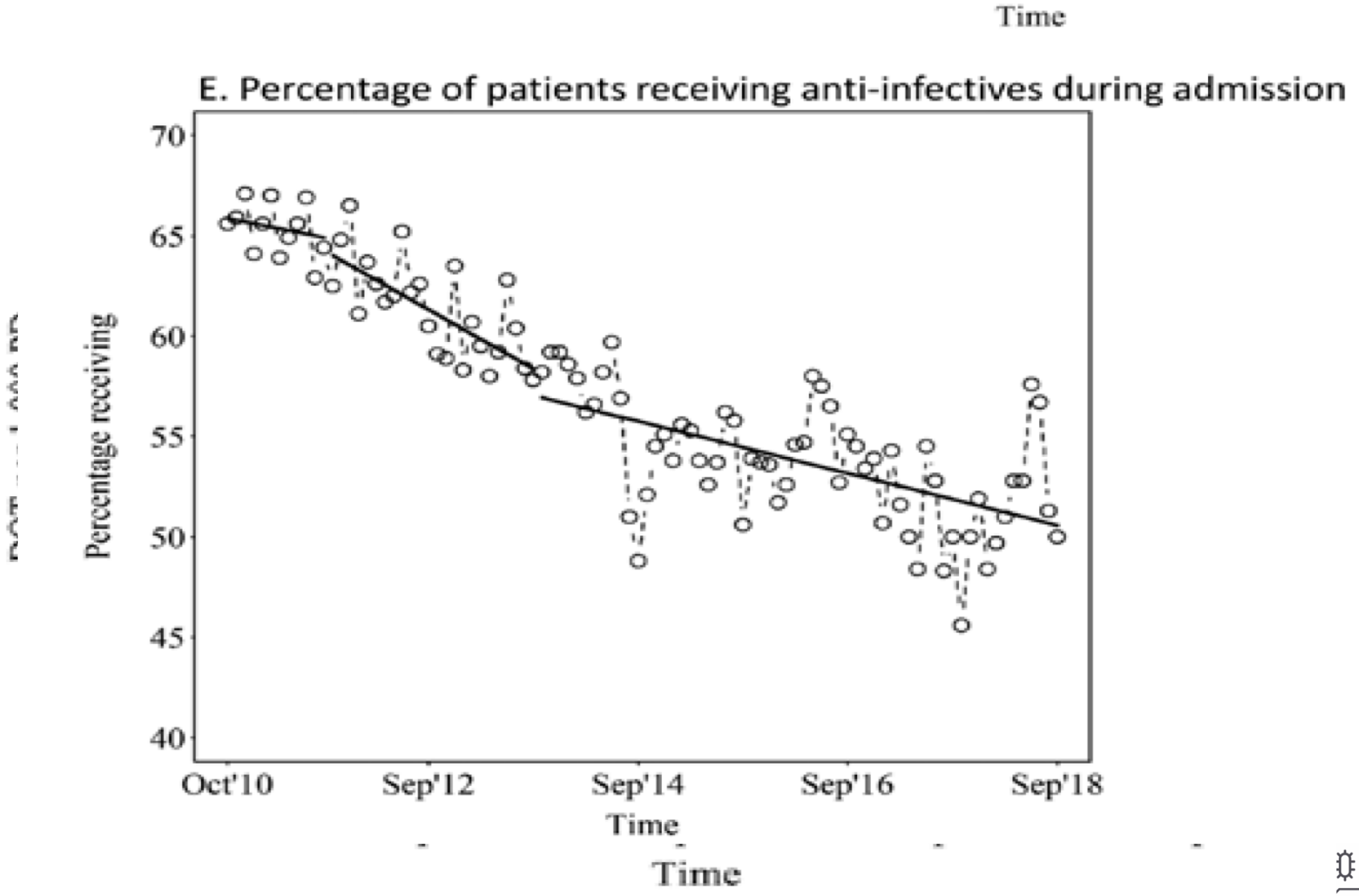
What they did

3-4 hours per day (1 physician/1 pharmacist):

- Reviewed all anti-infective orders @24h and 48-72h
- Met daily with Infection Prevention, Micro and ID
- Round in person to address any issues

18,000 orders reviewed per year -> 1800 interventions

A picture is worth….lots of DOTs



How do I start the process?

- Build a team
- Pick a problem
- Develop a criteria
- Provide feedback

My next audit & feedback…

Build a team: me an

Pick a problem: Van

Develop a criteria

Provide feedback: ca provider

- Documented MRSA infection

PLUS

- Concern for intra-abd infection

Alternatives for Intra-abd

Ceftriaxone + flagyl

Cefepime + flagyl

Others indications: see guidelines

Case

67M from SNF with new fev
breath transferred for evalu

O2 sat: 94% on Nasal cannu

CXR: bilateral infiltrates

MRSA swab negative

Blood cultures drawn and sp

Urine strep antigen: positive

Prescribed: Vancomycin and

Does this patient meet criteria?

NO, looks like pneumonia not intra-abd

Confirmed MRSA?

NO, unlikely based on MRSA swab

Next step:

Ceftriaxone 1g today for pneumonia, review tmw for IV to PO

Call pharmacist and then provider

CORE elements

Table 1. Key opportunities to improve antibiotic use

INFECTIONS	DIAGNOSTIC CONSIDERATIONS	EMPIRIC THERAPY	DEFINITIVE THERAPY Tailor to culture results and define duration, including discharge prescription.
Community-acquired pneumonia[54]	Review cases after initiation of therapy to confirm pneumonia diagnosis versus non-infectious etiology.	Avoid empiric use of antipseudomonal beta-lactams and/or MRSA agents unless clinically indicated.	Guidelines suggest that in adults, most cases of uncomplicated pneumonia can be treated for 5 days when a patient has a timely clinical response [55, 56]. Data also suggest that negative results of MRSA nasal colonization testing can help guide decisions to discontinue empiric therapy for MRSA pneumonia [57]

How to give feedback

Feedback is the fuel that drives improved performance. -Eric Parsloe

Tips:

- ✓Plan in advance
- ✓Be specific with recommendations
- ✓Be open to a dialogue
- ✓Reflect on the conversation

Georgia Hardavella, Ane Aamli-Gaagnat, Neil Saad, Ilona Rousalova, Katherina B. Sreter Breathe 2017 13: 327-333

How do you track your progress?

- Keep it simple!
- Number of interventions accepted
- Number of interventions made
- DOTs Pre and post-intervention

Audience Response

What are the barriers or frustrations with audit and feedback?

a) Don’t have time
b) Too overwhelmed to start
c) Providers don’t listen
d) We have no barriers
e) Other

Let’s discuss!

What has worked at your institution?

What has not worked at your institution?

How can we help you?