

Clinical Engagement in Rural Hospitals

CEC NSW AMS Forum 2017
Dr. Sergio Diez Alvarez

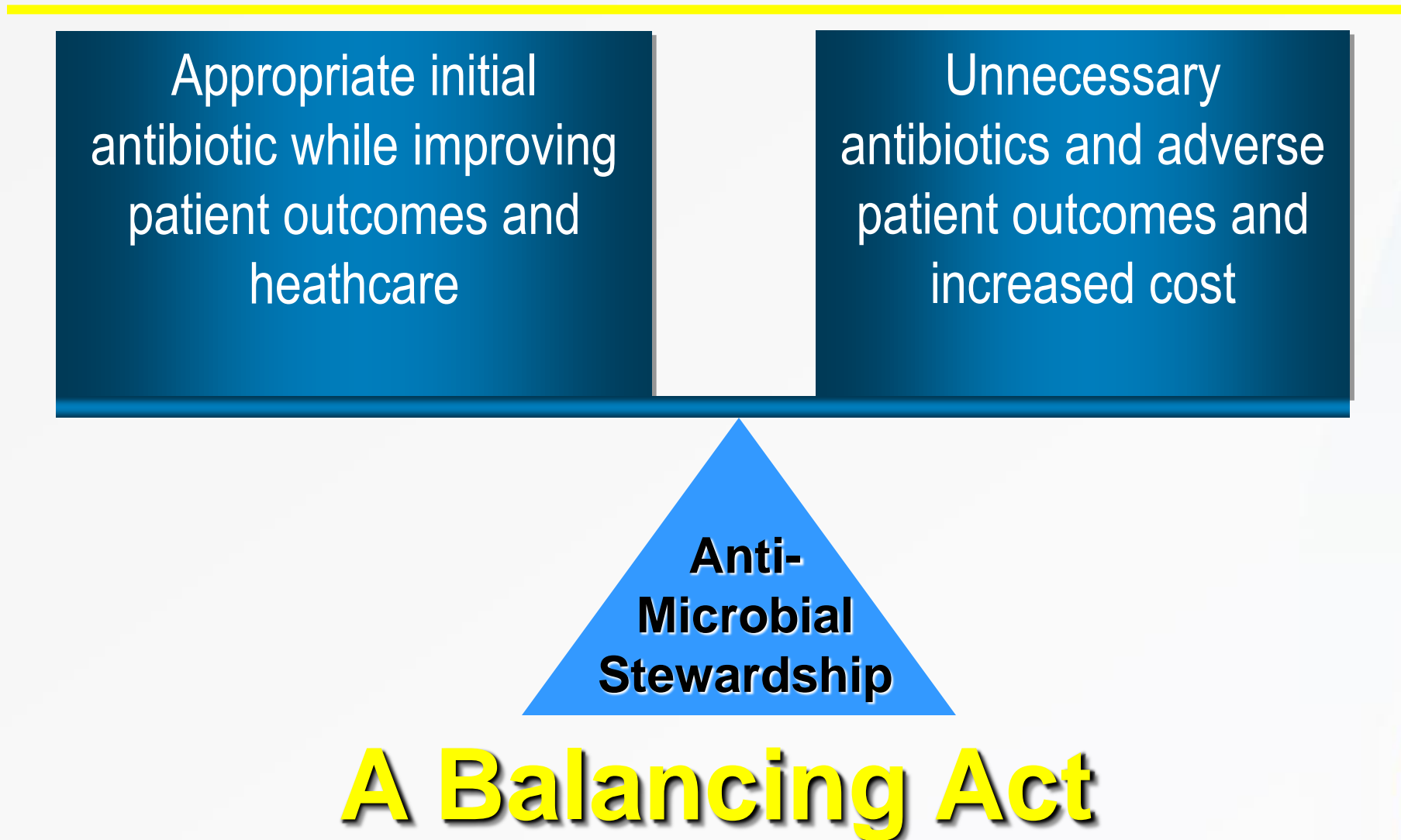


Clinician Engagement

“Clinician engagement is about the methods, extent and effectiveness of clinician involvement in the design, planning, decision making and evaluation of activities that impact the healthcare system.” Christine Jorm

Who plans, decides and evaluates care in our rural hospitals?

Antimicrobial Therapy



How Rural is Rural practice?

- workforce limitations
- limited AMS resources
- governance deficits
- culture of medical paternalism & autonomy
- sense of isolation
- limited CPD opportunities
- lack of data services
- limited patient health literacy



Building The Team



Antimicrobial Stewardship Strategies

- Front end: Formulary restriction and preauthorization
- Back end: Interventions after antimicrobials have been prescribed
- BOTH: Prospective audit with intervention and feedback

Supplemental Strategies

- Education, guidelines, clinical pathways
- Dose optimization via PK-PD
- De-escalation/Streamlining
- Antimicrobial order forms/order sets if CPOE
- IV-PO switch
- Computerized decision support
- Antimicrobial cycling
- Combination therapy

Dellit TH, et al. CID 2007;44:159-77


Hand K, et al Hospital Pharmacist 2004;11:459-64

Paskovaty A, et al IJAA 2005;25:1-10

Barriers to AMS in rural sites

- Advice is hard to come by
- Teams are hard to come by - The Lone Ranger
- Good data is hard to come by
- Good IT systems are hard to come by - no IT solution
- CULTURE, CULTURE, CULTURE
- my patient's needs versus the Public Good

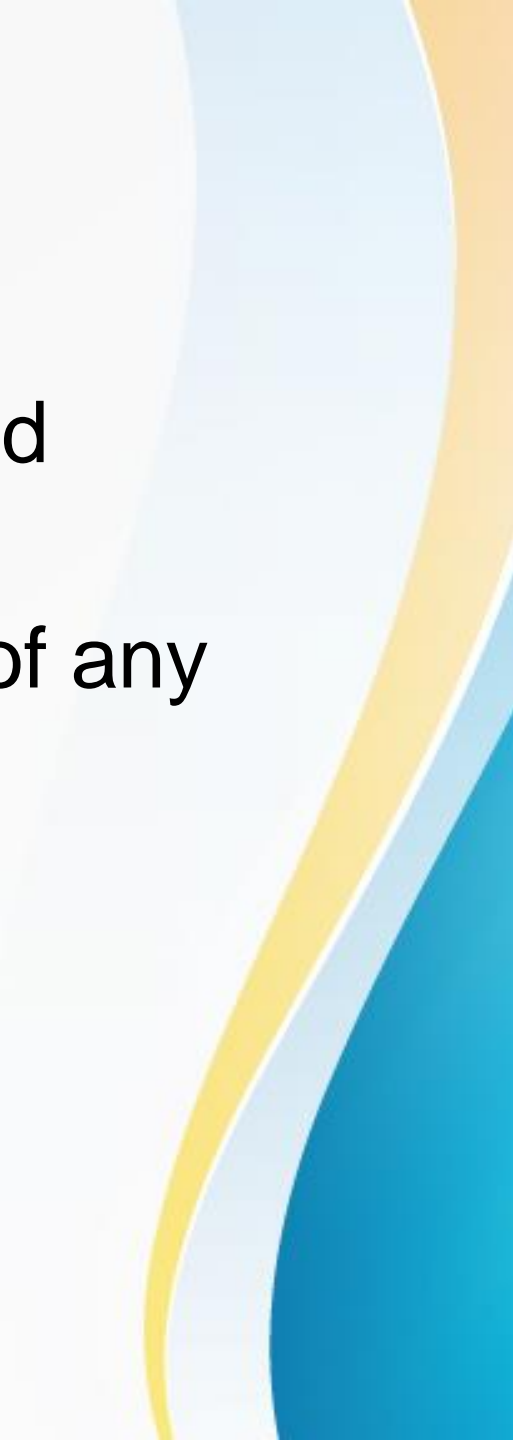
Program Incentives and prescribing disincentives

- Common Purpose
 - Generosity
 - Mastery
 - Continuous Improvement
 - Learning
 - Solidarity
 - Respect
 - Policies or Guidelines
 - Peer Pressure
- 
- A decorative graphic on the right side of the slide, consisting of several overlapping, curved, wavy shapes in shades of light blue, yellow, and a darker blue at the bottom right corner.

What might work?

- Set the platform for change - make it theirs
- Assemble a strong coalition - influential clinicians
- Establish effective communication
- Meaningful data sharing & comparative data - antibiograms

What might work?

- Formulary restrictions
 - Environmentally appropriate core evidence-based stewardship interventions
 - Measurement strategies to demonstrate impact of any intervention
 - Consolidate success/gains
- 

Antibiotic use in residential aged care facilities



Ching Jou Lim, Rhonda L Stuart, David CM Kong

Despite 84% of suspected UTIs not fulfilling the minimum clinical criteria to support antimicrobial initiation, 75% of these episodes were treated with antibiotics. MJA, 2014

Data & Education

- Therapeutic/Restrictive formulary
- Antimicrobial guidelines
- Data about antibiotic consumption
- Data about local antimicrobial resistance profiles
- Regular training of prescribers on antibiotic use
- Individual antimicrobial prescribing profiles
- Pharmacist/microbiologist/ID advice on antibiotic use
- Regular audits assessing antibiotic use

Target entry point & key decision makers



Some high yield targets

- Unnecessary antibiotic treatments for colonization (e.g. asymptomatic bacteriuria, bronchiectasis)
- Limit antibiotic prophylaxis (e.g. UTIs, cellulitis)
- Unnecessary antibiotic treatments for viral infections
- Unnecessary use of topical antibiotics
- Absence of reassessment of antibiotic therapies at around day 3 - comprehensive de-escalation strategy
- Longer-than-necessary duration

How serious are we anyway?

- AMS is a niche area of some sub committee
- There are no AMS KPIs outside of the infection control sub committee

AUSTRALIAN COMMISSION
ON SAFETY AND QUALITY IN HEALTH CARE

TRIM: 87241



**Standard 3: Preventing and controlling
healthcare associated infections**

Antimicrobial Stewardship Criterion

DOCTORS CASTIGATED FOR OVERPRESCRIBING ANTIBIOTICS



The Chief Medical Officer has sent out more than 5000 letters to GPs with the highest prescribing rates SHESHTYN

PAOLA — 30/06/2017

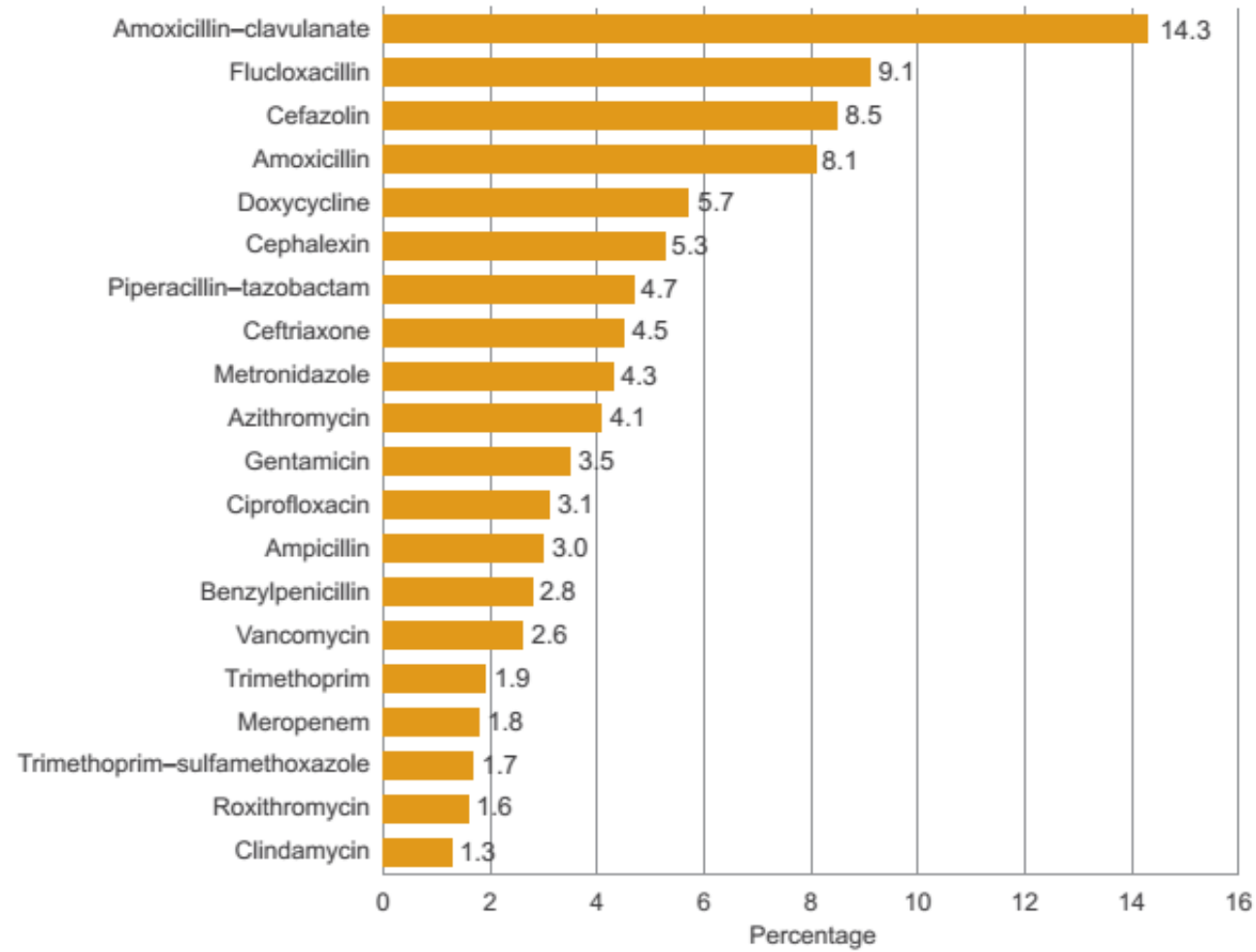
AURA 2016

First Australian report
on antimicrobial use
and resistance in
human health



What is the status quo?

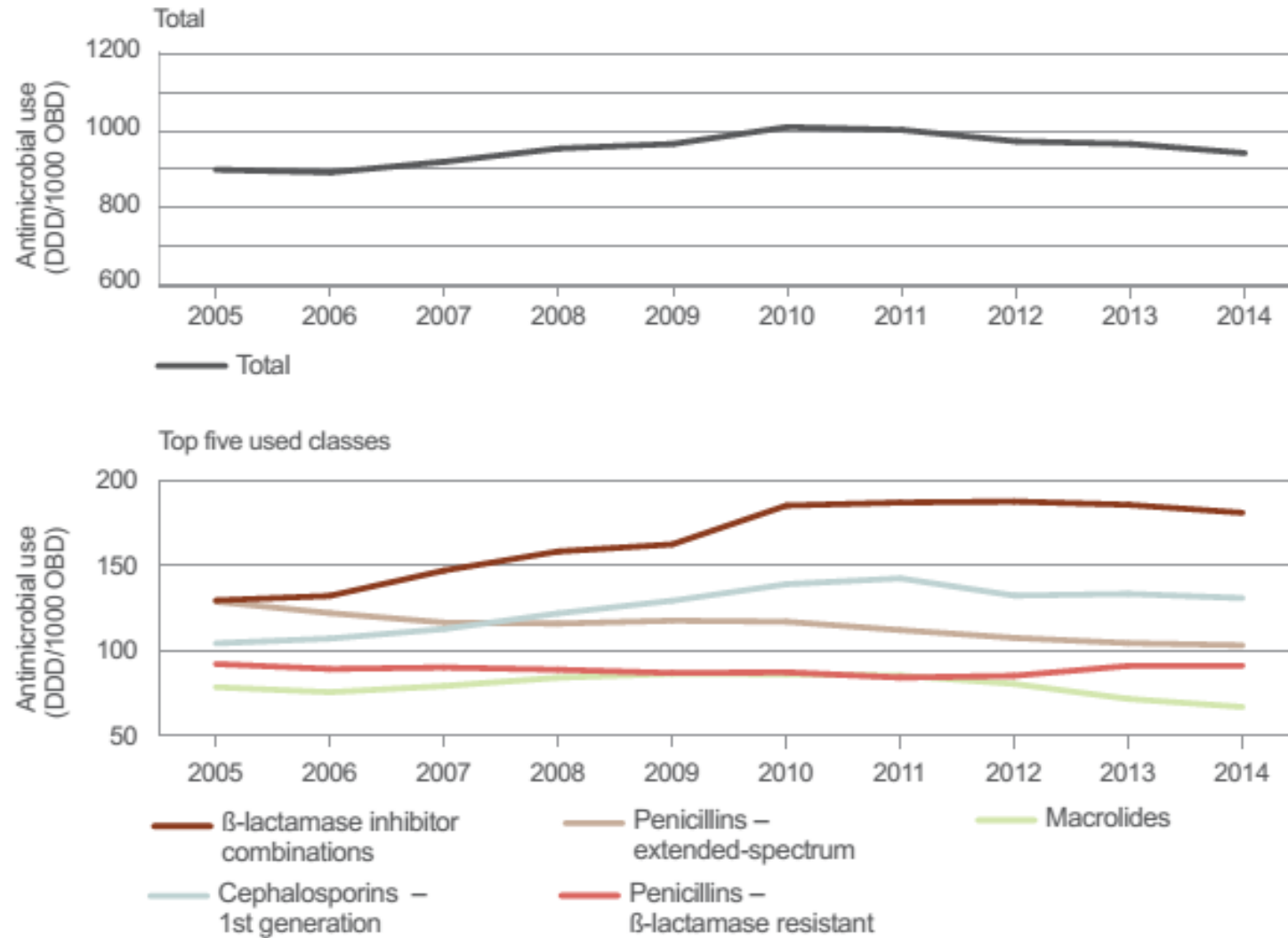
Figure 3.2 Top 20 antimicrobials used in Australian hospitals, 2014



Source: National Antimicrobial Utilisation Surveillance Program report, 2014

Are we there yet?

Figure 3.1 Total-hospital annual antimicrobial use in hospitals participating in the National Antimicrobial Utilisation Surveillance Program, 2005-14



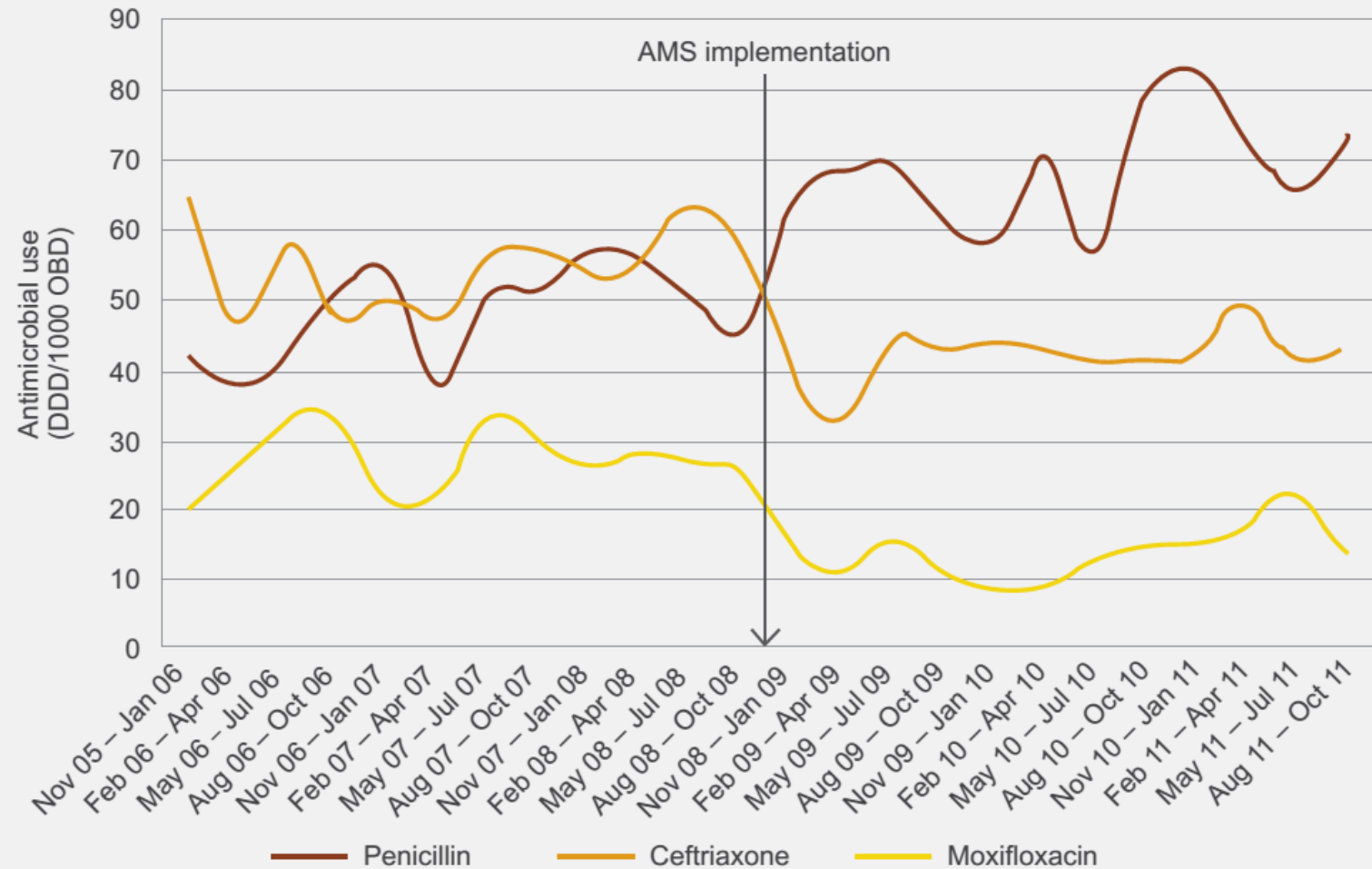
The Secret Ingredients

- Clinicians feeling a sense of **ownership** of their clinical work processes and outcomes and the need for good governance, audit and transparency in risk and outcome management.
- Clinicians who are **accountable** via performance monitoring and bench marking, thus driving long-term performance improvement.

"...large-scale, well-controlled trials of antimicrobial use regulation employing sophisticated epidemiologic methods, molecular biological organism typing, and precise resistance mechanism analysis [...] to determine the best methods to prevent and control this problem [antimicrobial resistance] and ensure our optimal antimicrobial use stewardship" and that "...the long-term effects of antimicrobial selection, dosage, and duration of treatment on resistance development should be a part of every antimicrobial treatment decision." John McGowan and Dale Gerding, 1996

what success looks like...

Figure B The hospital's trend for broad-spectrum ceftriaxone and moxifloxacin, and narrow-spectrum penicillin, November 2005 to October 2011



AMS = antimicrobial stewardship; DDD/1000 OBD = defined daily doses per 1000 occupied-bed days

Doctors found negligent after 'slavishly' following antibiotic guidelines

Michael Woodhead | 13 April, 2017 |



We also have promoted the notion that the field of clinical medicine is far simpler than it actually is. Despite our confident claims to the contrary, the diagnosis of infection is anything but an exact science. In the daily tumult that is clinical care, antibiotics have bailed us all out countless times. Blood work, radiology results, and the physical exam declare their limits to the practicing doctor every day. Often, when we are stumped and lost in caring for a patient, we turn, thankfully, to a prescription for an antibiotic. Just in case. Only hubris prevents us from admitting the number of times this approach has saved our patients' health and our reputations. Kent Septovitz



To achieve greatness, start
where you are, use what you
have, do what you can.

-Arthur Ashe

LeanLeader.org