Improving the collaboration between ID and other specialists: keys for success

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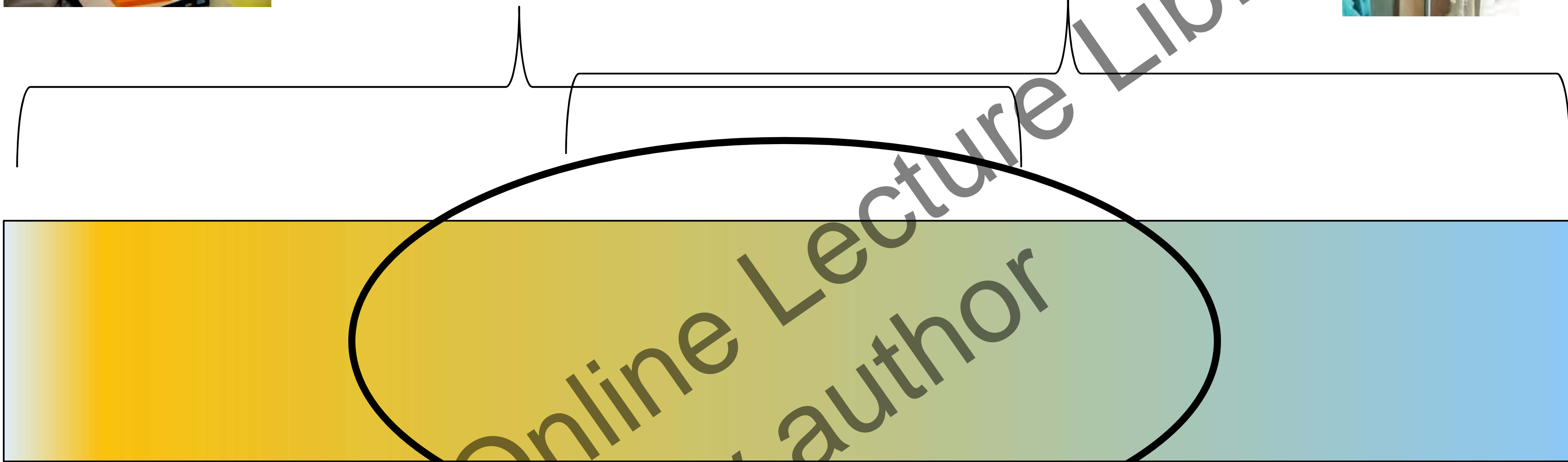

CM and ID collaboration

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Typical ID activities

- Own patients (ID is the final responsible for outcomes)
  - Outpatient clinic
  - ID ward
  - (OPAT)
- External clients (the client is the final responsible for outcomes)
  - (Solicited) consultation
  - Bacteraemia service, MDR pathogens service, etc
  - Antimicrobial stewardship
  - Infection control

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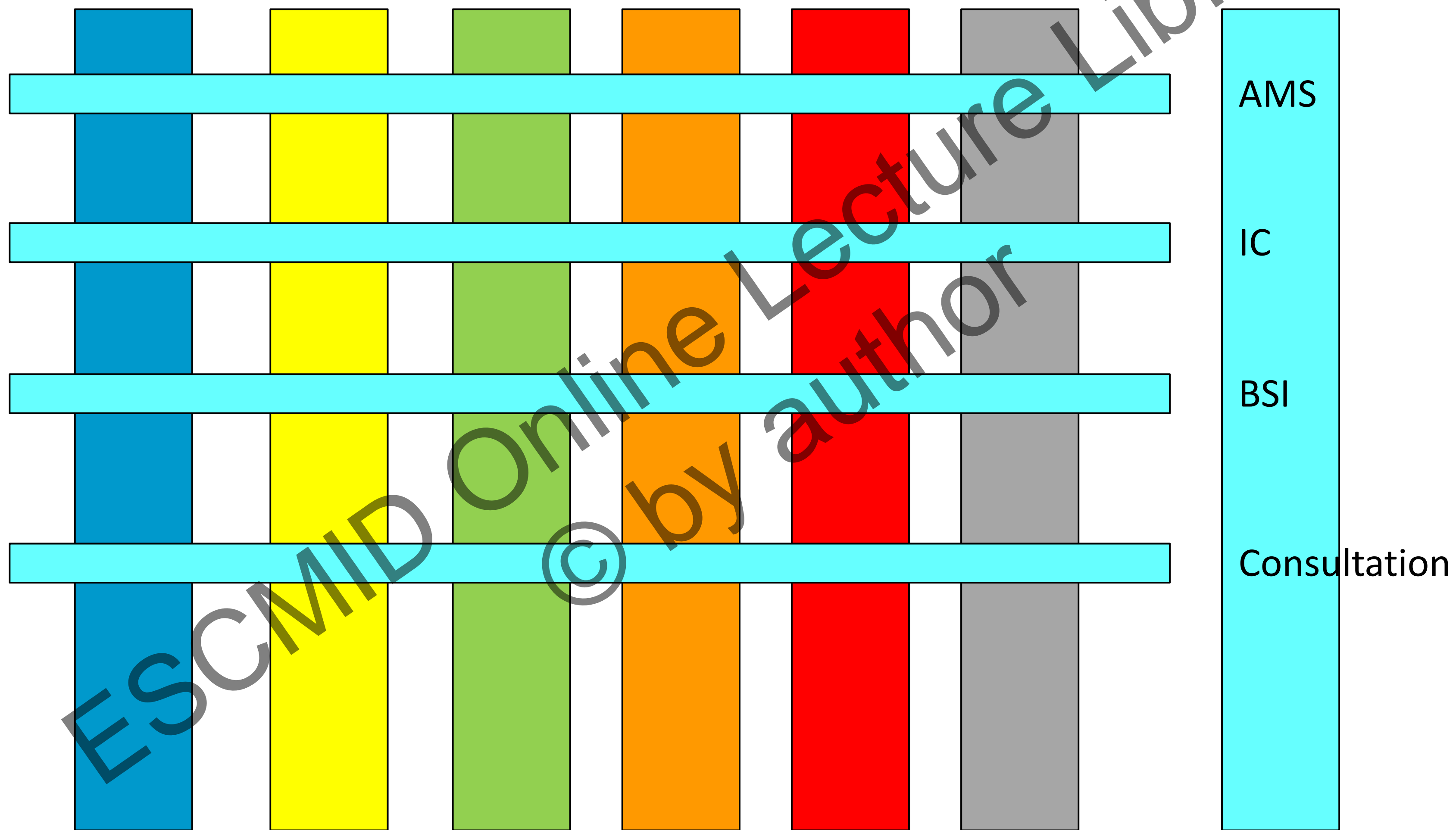

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ID strategic aims

- Increase activity → resources?
  - Increase consultations, admissions to ID ward, referrals to ID outpatient clinic…
- Benefits for patients and institution
  - Improve outcomes of infectious diseases
  - Reduce healthcare-associated infections
  - Improve antimicrobial use

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ID allies

- Clinical Microbiologists!!

- Pharmacists
- Epidemiologists (if not within ID)

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Solicited consultation

- IDs are called because they are
  - …needed (antibiotic approval, severe cases…)
  - …expected to be helpful (complicated cases, follow-up after discharge…)
- Key questions
  - Why was I consulted? What are the client's needs? What am I expected to achieve?
  - What is the client baseline knowledge on ID?

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Unsolicited consultation

- IDs are not called but actively
  - …offer/provide unsolicited advise
  - …intervene
- Typical examples: difficult to treat infections/pathogens
  - Bloodstream infections, endocarditis, osteoarticular infections, meningitis, etc.
  - MDR organisms, *C. difficile,* fungal infections, etc.

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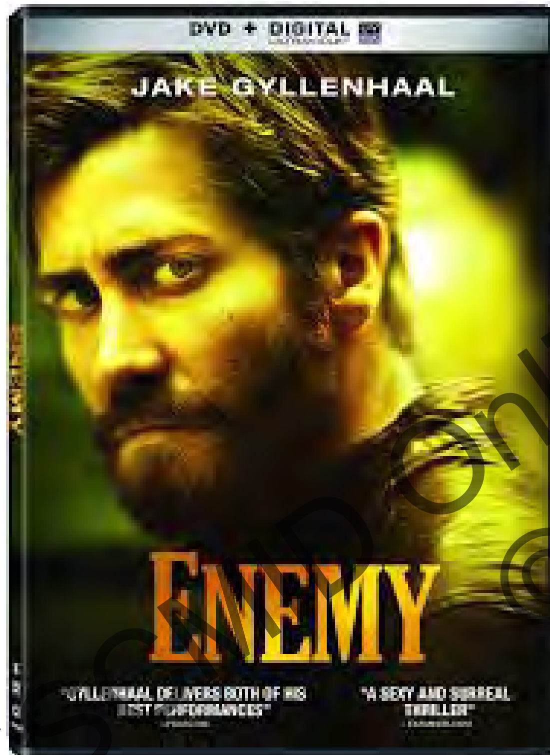
Are we seen as…



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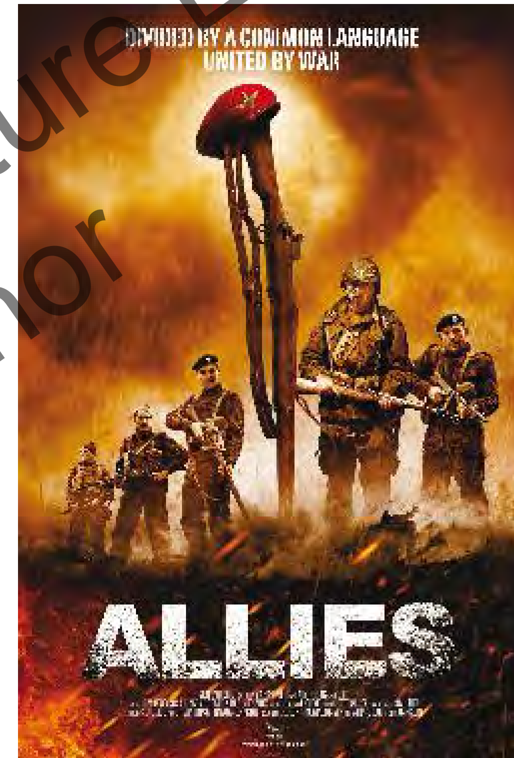

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Unsolicited consultation: key aspects for acceptance

- Recognised leadership
- Activity included in a specific (quality) program
  - Evidence-based or perceived benefit
- Institutional (approved/supported by hospital director)
- Previous agreement on procedure
  - Recommendations (written or verbal) vs prescription change
- Feed back
- Careful with
  - Client role
  - Potential contradictions (information to patients, etc.)
  - Legal issues
  - Conflicts of interest

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Impact of Infectious Diseases Specialists and Microbiological Data on the Appropriateness of Antimicrobial Therapy for Bacteremia

Baudouin Byl, Philippe Clevenbergh,* Frédérique Jacobs, Marc J. Struelens, Francis Zech, Alain Kentos, and Jean-Pierre Thys

Clinical Infectious Diseases 1999;29:60–6

Improving early management of bloodstream infection: a quality improvement project

Jane Minton,[1] James Clayton,[2] Jonathan Sandoe,[2] Hugh Mc Gann,[1] Mark Wilcox[2]

BMJ | 23 FEBRUARY 2008 | VOLUME 336

Current management of bloodstream infections

Expert Rev. Anti Infect. Ther. 8(7), 815–829 (2010)

Jesús Rodríguez-Baño[†1,2], Marina de Cueto[1,3], Pilar Retamar[1] and Juan Gálvez-Acebal[1,2]

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Table 4. Panel of proposed indicators of quality related to bacteremia.

Quality assessment	Indicator
Performance of blood cultures	Number of blood cultures per 1000 patient days
Contamination of blood cultures	Number of contaminated blood cultures per 100 blood cultures
Early report† of preliminary results with management advice	Number of early reported preliminary results per 100 positive blood cultures
Management consultation offer	Number of cases with active specialized consultation offered per 100 bloodstream infections
Classification of bloodstream infections	Number of bloodstream infections classified by acquisition (community, healthcare, hospital), source and systemic response inflammatory syndrome (sepsis, severe sepsis and septic shock) per 100 positive blood cultures
Rate of nosocomial bloodstream infection	Number of nosocomial bloodstream infections per 1000 patient-days
Adequacy of empirical treatment	Number of bloodstream infections with appropriate empirical therapy per 100 bloodstream infections
Adequacy of treatment after early reporting	Number of bloodstream infections with appropriate therapy after early reporting per 100 bloodstream infections
Adequacy of directed treatment	Number of bloodstream infections with appropriate therapy after susceptibility reporting per 100 bloodstream infections
Mortality	Crude mortality per type of bloodstream infection

†An early report is a report of a Gram stain or molecular test results to an attending clinician within 24 h.

Rodríguez-Baño et al, Expert Rev Anti Infect Ther 2010

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Impact of an Evidence-Based Bundle Intervention in the Quality-of-Care Management and Outcome of *Staphylococcus aureus* Bacteremia

Clinical Infectious Diseases 2013;57(9):1225–33

Luis E. López-Cortés,[1,a] Maria Dolores del Toro,[1,2] Juan Gálvez-Acebal,[1,2] Elena Bereciartua-Bastarrica,[3] María Carmen Fariñas,[4] Mercedes Sanz-Franco,[5] Clara Natera,[6] Juan E. Corzo,[7] José Manuel Lomas,[8] Juan Pasquau,[9] Alfonso del Arco,[10] María Paz Martínez,[11] Alberto Romero,[12] Miguel A. Muniain,[1,2,14] Marina de Cueto,[1,2] Álvaro Pascual,[1,2,13] and Jesús Rodríguez-Baño;[1,2,14] for the REIPI/SAB group[b]

Preintervention	Early report (verbal or written) of Gram stain results was provided for all patients with positive blood cultures by clinical microbiologists in 6 of the 12 participating centers. Seven centers had an active "bacteremia program" in which unsolicited consultation for all SAB cases of BSI were provided by infectious diseases subspecialists; neither the recommendations provided nor the follow-up procedures were structured, but were done at the discretion of the infectious diseases subspecialist. Adherence to recommendations was not prospectively measured.
Intervention	1. The intervention was explained to the different services in specific educational sessions. An informative letter was also sent to all heads of services before the intervention period started. 2. Specific recommendations, based on the 6 selected quality-of-care indicators, were specifically provided at least 3 days per week by an infectious diseases specialists from the day *S. aureus* was identified from blood culture until the patient was discharged or died. The recommendations were discussed with the attending physician and were also provided in a structured form which was added to the charts (Supplementary Figure 1), and signed by the infectious diseases specialist at each visit. Adherence to the recommendations was at the discretion of attending physician. 3. The form also included a summary of the rationale for the intervention, which served as educational material.

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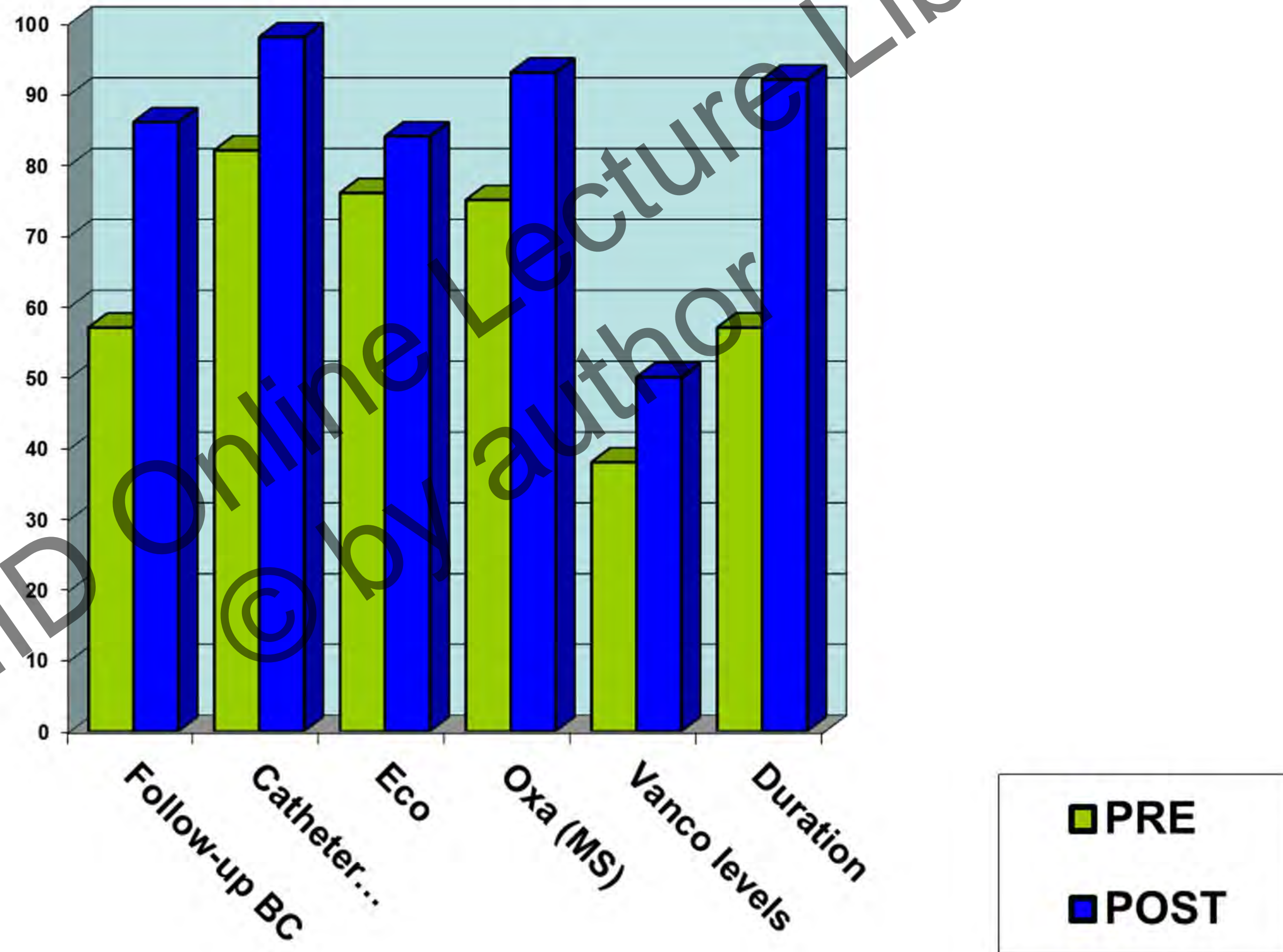
Change in adherence to key indicators after the intervention
In BSI due to *S. aureus*



López-Cortés et al, Clin Infect Dis 2013

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Behavioural issues

- Personal confidence
  - Friendly behaviour
  - Personal relationship
- Professional confidence
  - Technical expertise
  - Open to negotiation
  - Sharing doubts and difficulties
  - Positive messages
  - Supportive actions
  - Mutual learning

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ID horizontal activities at Hosp. Univ. Virgen Macarena, Seville

- Solicited consultation
- Unsolicited consultation
  - Bacteraemia*, MDRO*, *C. difficile*, other difficult-to-treat organisms*
  - Routine ward rounds: Orthopaedics, Haematology, General Surgery, Cardiology/Cardiovascular Surgery, Emergency Department
  - Antimicrobial stewardship activities (7th day, restrictive drugs)*
  - Infection control activities*

*In collaboration with Clinical Microbiology

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HUVM Multidisciplinary Teams

AMS team: 2 IDs, 2 CMs, 2 Pharmacists, 1 Pediatrician, 1 ICU, 1 Quality expert

IC team: 2 IDs, 2 CMs, 2 hospital epidemiologists, 5 nurses

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