



Con il patrocinio di:



ROMA

REGIONE LAZIO
SALA TEVERE

Via Cristoforo Colombo, 212

23 GENNAIO 2020

FOCUS

**LOTTA ALLE INFEZIONI CORRELATE
ALL'ASSISTENZA**

**MOTORE
SANITA'**
Innovazione Sostenibile

Nicola Petrosillo

**Direttore, Dipartimento Clinico e di Ricerca in Malattie
Infettive**

INMI «L. Spallanzani», IRCCS-Roma

Expanding responsibilities of the hospital epidemiologist

Major issues	Responsibility description
The science of infection prevention	Creating and interpreting the evidence base for infection prevention practices
Implementation of best practices	Translating efficacy of reported interventions into effective provider practices

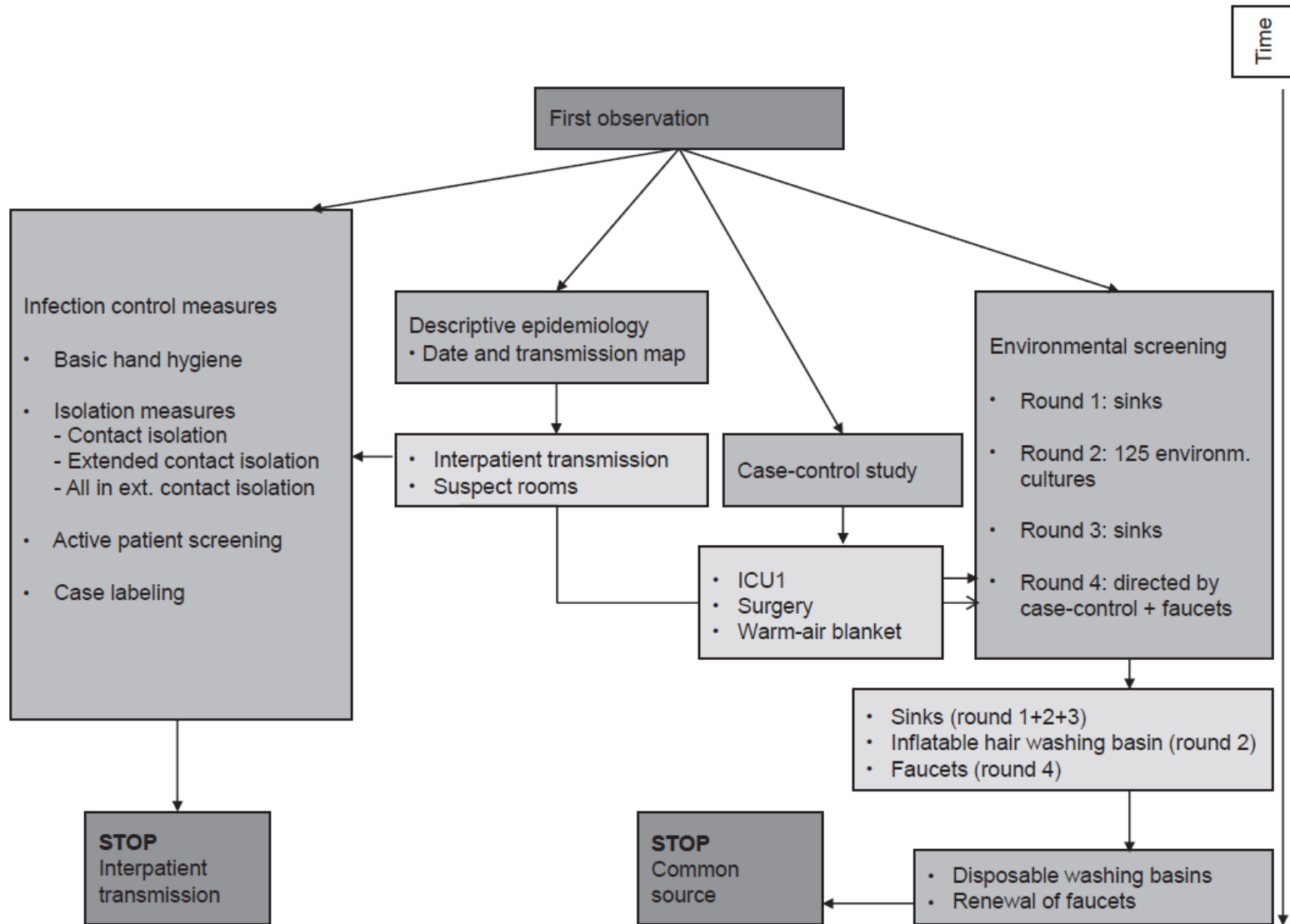
Expanding responsibilities of the hospital epidemiologist

Major issues	Responsibility description	Challenges	Opportunities
Mandatory reporting and regulations		Maintaining knowledge of and compliance with rules and regulations from various external sources	
Emergency preparedness		Planning and implementing a program to prepare for potential infectious and non-infectious emergencies	

Expanding responsibilities of the hospital epidemiologist

Major issues	Responsibility description	Challenges	Opportunities
Antimicrobial stewardship		Promotion of appropriate usage of antimicrobials in order to improve patient safety and decrease drug resistant pathogens and <i>Clostridium difficile</i>	
The business model of infection prevention		Performing multiple infection prevention-related services for the institution, providing staff and trainee education, while maintaining a financially productive clinical schedule	

An integrated approach to control a prolonged outbreak of multidrug-resistant *Pseudomonas aeruginosa* in an intensive care unit



Strategies for controlling transmission of multidrug-resistant (MDR) pathogens in the intensive care unit (ICU)

- **Reduce selection pressures**
 - **Improved antimicrobial (including disinfectants?) stewardship**
 - **Ensure balancing measures are also considered**
- **Prevent spread (targeted or vertical strategies)**
 - **Screening strategies**
 - **Improve infection control e.g. hand hygiene, isolation measures**
- **Consider decolonisation (Horizontal strategies)**
Reducing the reservoir and perhaps increasing colonisation resistance?

ANTIBIOTIC STEWARDSHIP IN YOUR FACILITY WILL



DECREASE

- ANTIBIOTIC RESISTANCE
- C. DIFFICILE INFECTIONS
- COSTS

INCREASE

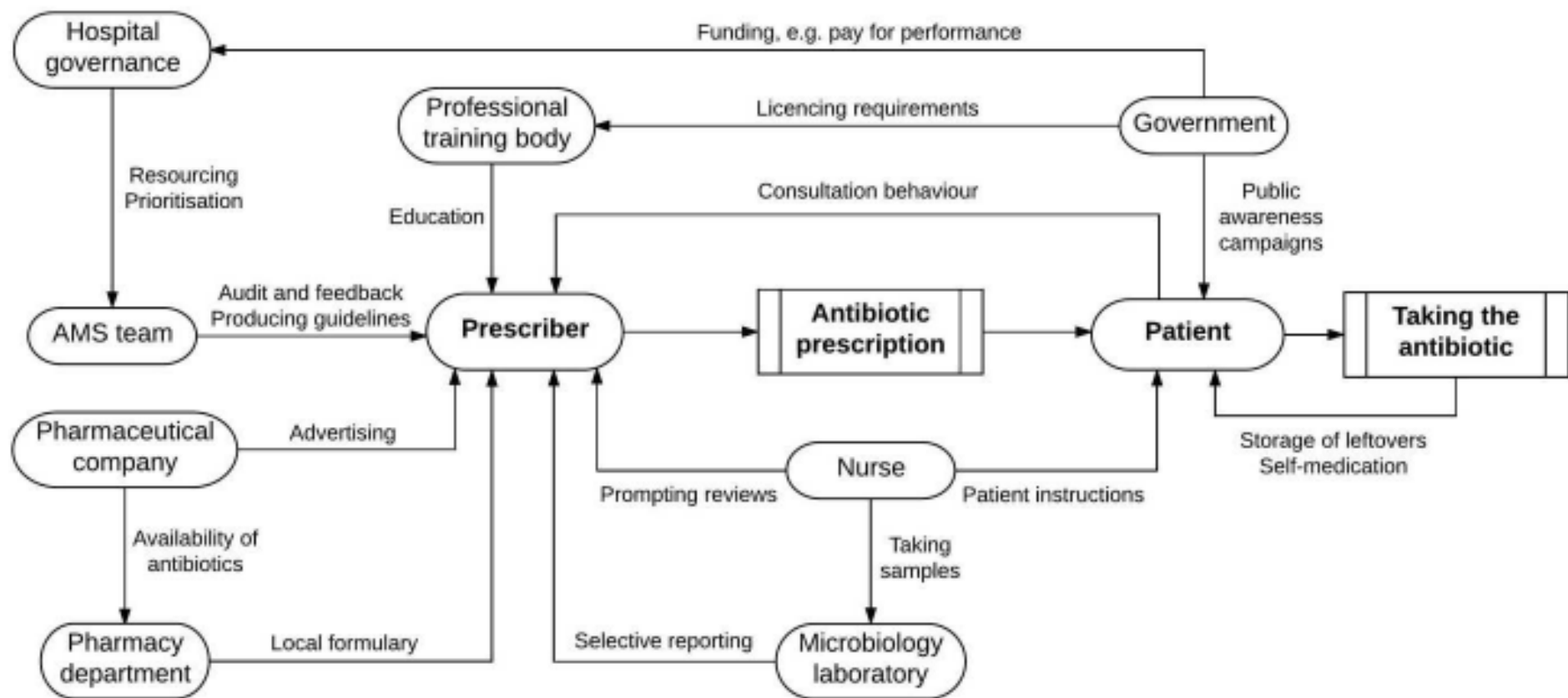
- 
- GOOD PATIENT OUTCOMES

INFECTION CONTROL AND ANTIBIOTIC STEWARDSHIP

Although the responsibilities of antimicrobial stewardship programs and infection control departments are different, collaboration between these groups is essential in

- promoting optimal outcomes,
- providing cost-effective care,
- reducing the development of resistance, and
- preventing the spread of infection.

Figure 2. Examples of actors and actions within antimicrobial stewardship

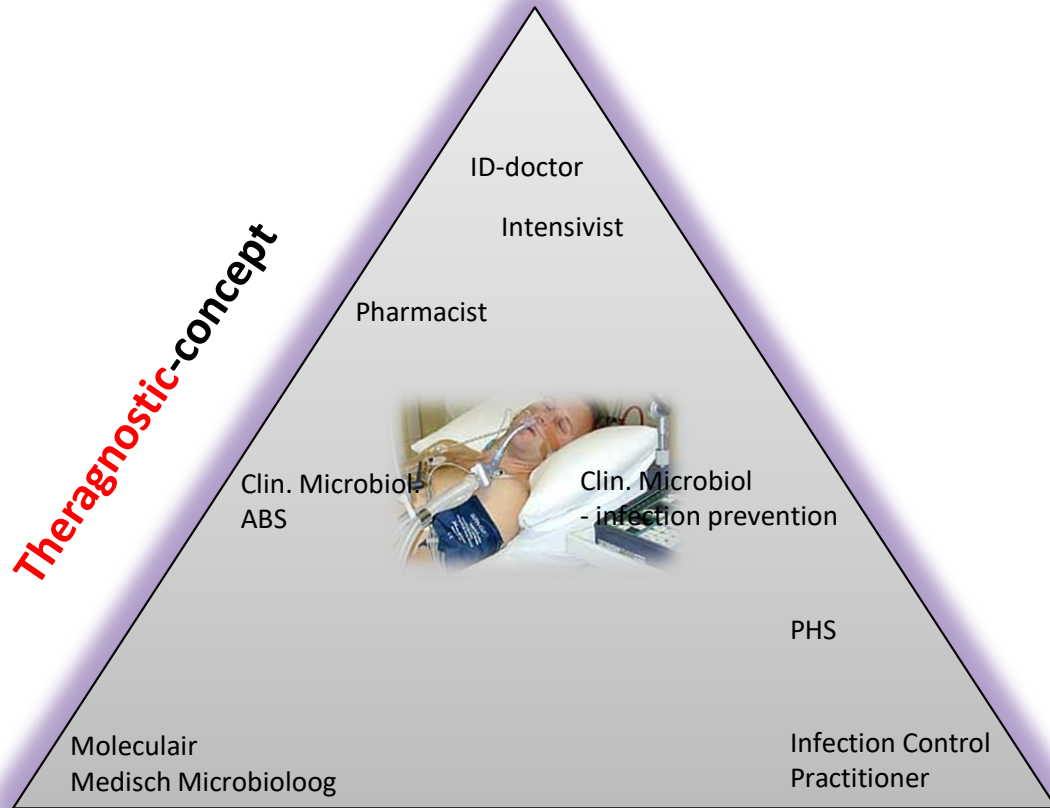


How we can be good antimicrobial stewards

Actor	What it means to be good antimicrobial stewards	Example actions
Prescriber	I use antimicrobials responsibly by	<ul style="list-style-type: none"> • Making accurate diagnoses • Following local antimicrobial guidelines
Nurse	I help ensure antimicrobials are used responsibly by	<ul style="list-style-type: none"> • Regularly reviewing the need for therapy • Taking cultures at appropriate times
Patient	I use antimicrobials responsibly by	<ul style="list-style-type: none"> • Ensuring patients understand how to take antimicrobials on discharge • Taking antimicrobial courses as recommended by the prescriber
Antimicrobial stewardship team	We help others in our institution use antimicrobials responsibly by	<ul style="list-style-type: none"> • Not storing or using leftover antimicrobials • Developing guidelines for antimicrobial use • Supporting audit and feedback for prescribers • Educating prescribers
Hospital governance	Our institution uses antimicrobials responsibly by	<ul style="list-style-type: none"> • Ensuring sufficient sustainable and dedicated funding for antimicrobial stewardship teams • Monitoring antimicrobial use and resistance • Investing in a Clinical Decision Support System • Enabling formulary restrictions
Producer/farmer	I use antimicrobials responsibly by	<ul style="list-style-type: none"> • Diagnosing selectivity • Not using antimicrobials as growth promoters
Pharmaceutical company	Our company ensures antimicrobials are used responsibly by	<ul style="list-style-type: none"> • Limiting advertising of antimicrobials, especially broad spectrum • Helping ensure there is a continuous supply of antimicrobials
National policy maker	Our country uses antimicrobials by	<ul style="list-style-type: none"> • Prioritizing and funding antimicrobial stewardship activities • Supporting the use of quality metrics and pay for performance

From competence to meta-competence

Thera-py Antimicrobial Stewardship (A-Teams)



**Dia-gnostic
Stewardship**

**Infection
Prevention
Stewardship**