Antibiotic Management Team: a short survey

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1 member of the Association for the Prudent Use of Antibiotics (APUA: http://www.apua.org)
Antimicrobial resistance is a major problem in hospitals …

Factors that may increase antimicrobial resistance in hospitals.

- Greater severity of illness of hospitalized patients
- More severely immunocompromised patients
- Newer devices and procedures in use
- Increased introduction of resistant organisms from the community
- Ineffective infection control and isolation practices and compliance
- Increased use of antimicrobial prophylaxis
- Increased empiric polymicrobial antimicrobial therapy
- High antimicrobial usage per geographic area per unit time

NOTE. Modified from McGowan JE Jr.

You can act upon these parameters by a rational policy of use!

But what can we do?

• Local
  – organism isolation (efficiency)
  – susceptibility pattern and reporting
  – **Antibiotic Management Team**
  – Isolation and Hygiene

• Regional/National
  – resistance and antibiotic consumption data
  – setting up guidelines
  – coordination
Antibiotic Management team

Multidisciplinary team …

Infectious diseases MD
Clinical pharmacist trained in ID
Delegation
MD from departments using antibiotics
Pharmacist
Microbiologist
Hygienist
Position within the hospital organization

**Medical Direction**

**Medico-pharmaceutical Committee (MPC)**
- formularium

**Antibiotic Management Team**
- all activities described here

**Committee for Hospital Hygiene (CHH)**
- prevention of hospital infections
- epidemiology of resistance

**Delegate for Antibiotic Management**
(1 to 4 persons, according to hospital size)
- MD with clinical responsibilities
- MD/PharmD with laboratory activities (microbiology)
- Pharmacist

Must follow a training organized by the Ministry of Health in cooperation with Universities

**Wards**
- actual use of antibiotics

- report
- inform
- dialogue
Priority tasks

- **Mandatory interventions**
  - Hospital formularium for antibiotics (with the MPC)

- **Required interventions**
  - Guidelines (for the wards)
  - Local epidemiology (in collaboration with the CHH)

- **Priority interventions**
  - Evaluation of consumption (in collaboration with Pharmacy)
  - Link between consumption and epidemiology
  - Providing advice about antibiotic use (for all hospital)
  - Limitation and control of antibiotic usage (in collab. with MPC)
  - Staff education (all wards)
  - Annual report to the "Belgian Antibiotic Policy Coordination Committee" (Ministry of Health)
Financial support

• Range: 10,000- 81,700 euro per hospital according to number of beds

• Annual budget: 3,609,208 euro (National Budget)  
  → mainly to cover the costs of hiring the Delegates of the Antibiotic Management Teams)
How are new Antibiotic Management Teams set up?

1. Determine human resources that are needed and available

2. Describe the current situation

3. Establish the committee adapted to YOUR hospital
History project

• October 2002 AMTs in 37 acute care hospitals
  (Financing: Royal Decree 25 April 2002)

• July 2006 AMTs in 61 acute care hospitals
  (Financing: Royal Decree 10 November 2006)

• July 2007 AMT in all acute care hospitals and chronic care hospitals with >150 beds
  (Financing: Royal Decree 19 June 2007)
  (Tasks: Royal decree 12 February 2008)
Successes and Difficulties of the antibiotic management teams

- accepted as a reference in the hospital for
  - evaluation of consumption
  - prescription habits
  - detection of inappropriate use
  - reminding of guidelines

- Diffusion of information
- Communication
- Data availability
- unlinked softwares (laboratory vs. pharmacy)
- Heaviness of evaluation
Surveillance of ESBL-producing Enterobacter aerogenes in Belgian hospitals

- Decrease in proportion/incidence of ESBL+ E. aerogenes since 2006/2
- No difference in incidence by hospital nbr of bed size
- 2.5 fold higher incidence in hospitals with DMS > 9 days

BAPCOC effect? (Implementation of the Antibiotic Management Teams)

Hand hygiene
National campagnes?

BICS guidelines for infection control of MRSA in hospitals?

ISP/WIV report 2008/2