

Implementation of a structured Outpatient Parenteral Antimicrobial Therapy (OPAT) service by the hospital pharmacist in a regional hospital

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TO OPAT or TO NOPAT?

- **OPAT (Outpatient Parenteral Antimicrobial Therapy)** demonstrates to be safe and effective. Therefore it has widespread application outside Belgium.
- Based on international literature and local experience, a structured OPAT program was implemented at Imelda hospital in close collaboration with primary and secondary health care providers.
- Our goal was to set up a framework to establish and expand qualitative and safe OPAT care.

METHODS

- Literature analysis
- Retrospective analysis of OPAT patients of Imelda hospital including a pharmaco-economic analysis
- Surveys questioning health care providers' point of view:
 - Antimicrobial Management Teams of 94 Belgian hospitals (with support of BAPCOC and in collaboration with UZ Gent)
 - Physicians Imelda hospital
 - Primary care providers in hospital's region

RESULTS

PAST (OPAT IMELDA HOSPITAL, 2015)

- Most frequently treated infections: urinary tract, bone and joint, and genital tract infections
- Main prescribing physicians: urology, pediatrics and geriatrics
- Most frequently prescribed antibiotics: ceftriaxone and temocilline
- Majority of OPAT patients (74%) treated in day care hospital
- Average duration of OPAT therapy: 11 days
- Number of hospitalisation bed days saved: 822 days

PRINCIPLES OF OPAT SERVICE

- **Multidisciplinary approach**
- **Patient selection based on defined criteria**
- Antibiotics and IV fluids delivery via **community pharmacy** (except short term backup and hospital restricted antibiotics)
- IV administration sets and trained nurses via **external home care provider**
- **Validated tools and information leaflets:**
 - flowchart and checklist for hospital care providers
 - patient selection criteria
 - general OPAT information brochure for patients
 - pricelist
 - informed consent form
 - form for home care provider
 - administration and monitoring instructions (per antibiotic) for home care nurses

PRESENT (OPAT IMELDA HOSPITAL 2016)

- **More than twice as many patients on OPAT at home compared to 2015**
- Approval and conduct by Antimicrobial Management Team
- **Cooperation with external home care provider**
- **Tools and information leaflets available on intranet**
- Participation in consortium in the scope of future reform of hospital financing

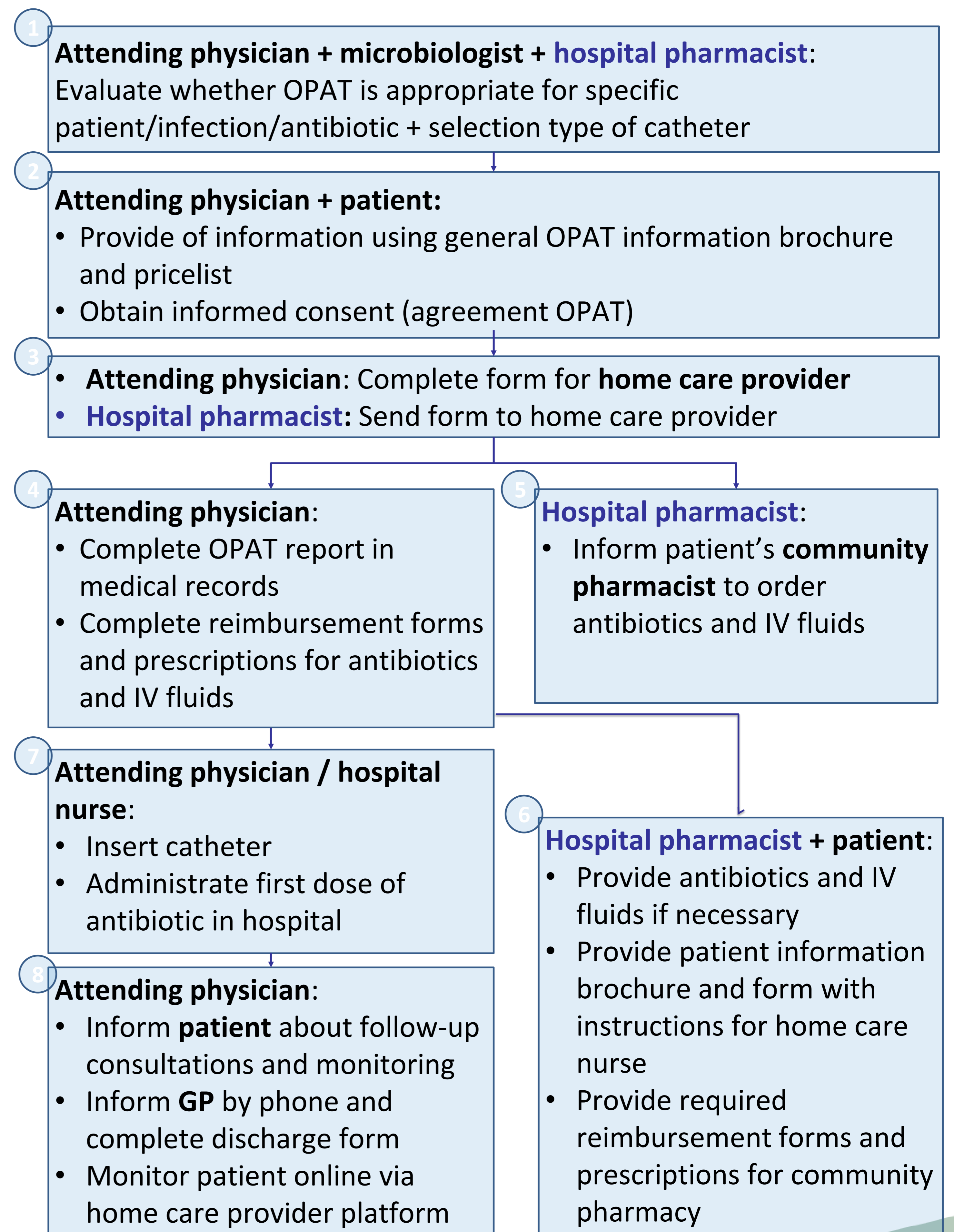
FUTURE

- Raise awareness and train primary and secondary health care providers
- Conduct **patient satisfaction survey**
- **Intensify follow-up:** registration and analysis of outcomes, side effects, complications and readmissions
- Perform risk analysis and audit of OPAT service

HEALTH CARE PROVIDERS' POINT OF VIEW

- Small scale application throughout Belgian hospitals
- Acknowledgment of benefits and potential
- Need for national OPAT program or guidelines
- Drawbacks: lack of information and procedures, high costs for patient, restrictive legislation regarding drug delivery
- **Central role of hospital pharmacist:** informing patients and health care providers, delivery of hospital restricted antibiotics, contact person after discharge

OPAT SETUP FLOWCHART



References:
• Seaton, R.A. and D.A. Barr, *Outpatient parenteral antibiotic therapy: principles and practice.* Eur J Intern Med, 2013, 24(7): p. 617-23.
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