

Project Funding 2012/2013 «LOST IN TRANSITION»

The award of CHF 70'000.-- is granted to the following project:

Facilitating discharge from hospital of patients requiring intravenous antibiotics: prospective evaluation of a pilot project

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Abstract

Background and rationale

Patients with infections sometimes require intravenous anti-infective treatment. Traditionally such patients have been kept in hospital. Some centres abroad have developed outpatient parenteral antibiotic treatment (OPAT) units which ensure intravenous anti-infective treatment in the outpatient setting for patients, whose general condition allows them otherwise to stay at home. In Switzerland no such OPAT unit exists.

We have evaluated that at the CHUV there are about 4-6 patients per week who could benefit of an earlier discharge from hospital, if a unit could ensure appropriate medical and anti-infective care during this transitional phase between in-hospital stay and the care ensured by the general practitioner.

We plan to set up an OPAT program which will permit earlier discharge of a significant number of patients from the CHUV to their homes. The cornerstones of such an OPAT program will be the following:

- A team consisting of a physician and a nurse with the responsibilities of evaluating eligible patients for outpatient antibiotic treatment, follow-up during the transitional phase, teaching of involved health care workers in the community, active promotion of the OPAT program.
- Use and development of novel approaches of intravenous antibiotic deliveries in the outpatient setting.

The implementation of a new OPAT program needs to be monitored and evaluated as recommended in the guidelines of the Infectious Disease Society of America. This evaluation component is the subject of the present project.

Study objective

To evaluate the safety, the outcome of infections, the patient satisfaction, the costs and the feasibility of an OPAT program in the context of the Swiss health care system.

Study design

One-year prospective observational study of the OPAT program in Lausanne.

Study outcomes

The primary outcome will be the proportion of readmitted patients during the period of antibiotic therapy as a measure of patient safety. Secondary outcomes will be additional measures of safety (number of deaths, complications related to antibiotics and venous access), outcome of infections, level of patient satisfaction, costs and feasibility of the OPAT program.

Study procedures

The study will be conducted during the first year of activity of the OPAT program. During this period, we will record several parameters to assess the above outcomes, mainly number of eligible patients actually entered in the program out of total number of patients screened, demographics, type of environment, type of disease, type and duration of antibiotics, number of ambulatory visits, type of medical and nursing procedures, number of patients and reasons for readmissions, time to full recovery, time to return to normal activities, number of health professionals and relatives/friends involved, patient satisfaction along the process and total costs of outpatient management.

Sample size

We estimate to recruit over 200 patients. This is a pragmatic sample size based on estimation made in the preparatory phase. This sample size should allow to draw conclusions on the main endpoints.

Expected outputs

The proposed study should help to decide on the relevance of implementing an OPAT program at a larger scale in Lausanne and the vicinity, and, if successful, should serve for the development of similar programs in other regions of Switzerland.