

## IMPLEMENTATION OF A STRUCTURED PHARMACEUTICAL ASSISTANCE IN AN ADULT SURGICAL ICU

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### Background

- A close collaboration between the department of pharmacy and the ICU is essential.
- The pharmacotherapy of the ICU patients is very complex, the drugs used are among the most expensive and have restricted indications.
- As in many European countries, clinical pharmacy is only scarcely implemented in Switzerland and the need of a pharmacist support programme in the ICU is not defined.
- A pharmacist's structured activity assistance programme in the surgical ICU has been implemented in our hospital.

### Objective

Provide the medical and nursing team with a regular support in every step of the medication use:

- logistic
- storage
- prescription
- administration
- follow-up

### Design

Descriptive statistics of activities provided during the first nine months of the programme.

### Setting

- The surgical ICU of our tertiary care university hospital is a 17-bed unit admitting all kinds of surgical patients (trauma, neurosurgery, cardiac surgery, solid organ transplantation) and severe burn injury patients.
- The pharmacist takes part of grand rounds once in a week and participates at the weekly meetings of the leading team (physicians, nurses). He is also available by phone Mondays to Fridays from 8 AM to 5 PM.
- This activity represents part of the duties of this pharmacist

### Main outcome measures

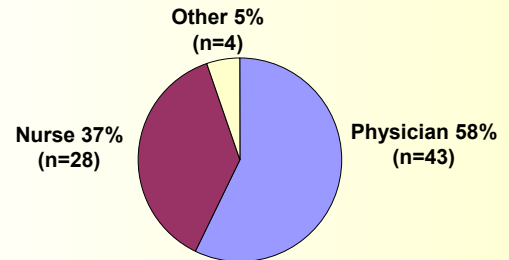
- Number and types of questions addressed to the pharmacist
- Number and types of in-depth projects initiated.

### Results

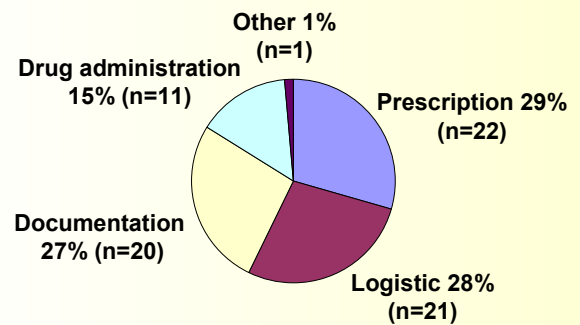
Total number of questions: 75

On site: 57% (n=43)  
By phone: 43% (n=32)

### Questions asked by:



### Types of questions



18 long-term projects related to the choice of medication used in the ICU or to the quality of pharmacotherapy are being developed with the medical and nursing teams:

#### Categories of projects:

- Introduction of new drugs in the Unit, including recommendation of use for physicians and nurses
- Re-evaluation of drug use
- Improvement of the Therapeutic Drug Monitoring
- Labelling of i.v. drugs
- Storage of drugs in the Unit
- Treatment of wounds and bandaging

#### Examples:

- Drugs not registered on the Swiss market: argatroban, oxandrolone e.g.
- COX-2 inhibitors e.g.
- Training of the team
- Creation of pre-formatted labels
- Reorganisation of the refrigerators
- Choice of ointments

### Conclusions

After nine months, the ICU team is getting used to the presence of the pharmacist. The number of questions is increasing and clinical and research projects are in development. The clinical and economic impacts of the programme remain to be determined.