





# Medication supply problems after hospital discharge – patients' and physicians' suggestions for optimisation

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#### Introduction

After a hospital stay, patients should continue their medication as prescribed by the hospital physician. Supply problems after hospital discharge may lead to therapy interruptions.

The objectives were to investigate supply and interruptions after discharge and obtain opinions of patients and physicians about possible optimisations.

## Results

#### Characteristics

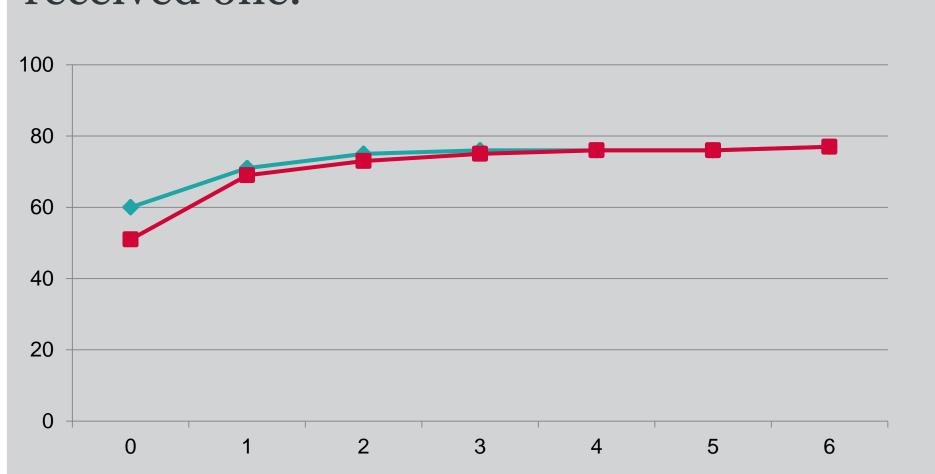
The patients were 65.6±17.4 years old, 39% female, 53% from internal medicine wards. They regularly used 5.41 ± 3.50 medicines.

The 5 physicians were 26-36 years old and had 0.3-3 years of experience on their wards. One was a senior physician, two were female. Physician's statements are presented in the bubbles.

#### **Prescription filling**

77 of 100 patients had filled their prescription until they were called. Days to fill the prescription and obtain all medication from the pharmacy are shown in figure 1.

18 patients did not fill their prescription until the 6<sup>th</sup> day and 5 claimed not to have received one.



**Figure 1**: Number of patients who filled their prescription (green) and received all their prescribed medication (red), on the day of discharge (x-axis,  $t_0$ ) until the  $6^{th}$  day ( $t_6$ ). n=100

#### Methods

- 1. Structured telephone interviews with 100 patients, on the 2<sup>nd</sup>-6<sup>th</sup> day after their discharge from surgical and internal medicine wards at a Swiss hospital. Subjects were experiences and optimisation ideas.
- 2. Semi-structured interviews with a convenient sample of 5 hospital physicians. Results from the patient interviews and possible optimisations were discussed.

«Clarification requests from community pharmacies are infrequent but justified»

(all physicians)

«A prescription is handed to patients because there is new medication and therefore filling the prescriptions should be done fast.»

(senior physician)

«There should not be any interruption due to an unlicensed drug.»

(physician 4)

#### **Supply problems**

Out of 100 interviewed patients:

- 14 patients with supply problems
- Medication not on stock
- Unlicensed medication
- Clarification needed

#### 4 patients with therapy interruptions

Patients from internal medicine had significantly more problems than those from surgical wards (RR = 5.56, p = 0.007).

Patients with problems used significantly more medication on a daily basis  $(8.0 \pm 4.32 \text{ vs. } 4.9 \pm 3.04, \text{p} = 0.010).$ 

#### Conclusion

A considerable amount of discharged patients experienced medication supply problems after discharge or did not even fill their prescription within 6 days. However, therapy interruptions were seldom. Information transfer to community pharmacies was opposed by both interviewed groups, maybe because of an unawareness of the benefits.

Further studies about discharge optimisation should focus on patients experiencing supply problems.

## Discharge optimisation

When patients were asked, if they would favour a better communication between hospital and the community pharmacy:

21% pro, to	71% contra, because
enable easier supply for patient	no problems were experienced
avoid interruptions	no medication changes experienced/ or having medication supply at home
preorder unavailable medication	too much effort for the hospital
preorder unlicensed medication	of privacy concerns

#### Pro for physicians, to:

- enable easy supply for unlicensed medication
- improve patient safety

# Contra for physicians, because:

- of pharmacyhopping of patients
- of prescription is not being ready in advance
- of too much effort

«This is a relatively good result»

(senior physician)

#### Contact



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