

IMPROVEMENTS IN WARD PHARMACY MANAGEMENT BY PHARMACEUTICAL STAFF

Abstract number: 2SPD-023 ATC code: -

M. Stalder, D. Bornand, H. Plagge

University Hospital Basel, Hospital Pharmacy, Basel, Switzerland

Objectives

In the University Hospital Basel (UHB) as well as in many other Swiss Hospitals the ward pharmacies are managed by nursing teams according to a survey conducted by the Swiss Association of Public Health Administration and Hospital Pharmacists (GSASA). But the logistical process of drug delivery is not the primary goal of the nurses. Therefore it was

discussed whether the management of the ward pharmacies could be overtaken by a team of the hospital pharmacy. It was the aim of the study to create a leaner and more efficient process. Mainly the expenditure of time for the nursing and the pharmacy teams were assessed. Furthermore, the financial impact was analyzed.

Methods

The introduced ward pharmacy service included the optimization of the drug dispensary once in the beginning, the order of the drugs and finally the stock placement after the delivery four times a week as well as the control of the expiry dates once a month. After

the introduction of the service in four different wards at the UHB a financial evaluation was done using our ERP system SAP. Additionally we registered the required time for the nursing team with or without the ward pharmacy service.

Results

The ward pharmacy management by the hospital pharmacy clearly reduced the effort for the nursing team by five hours per week (reduction for order of 58%, for stock placement of 85% and for the expiry date control of 100%) [Tab. 1]. On the other side the same time had to be invested by the pharmacy team.

Reduction of effort for the nursing team:		→ Reduced effort for a nursing team 5 hours per week and ward (corresponding 15 % of a full time equivalent) → Absolute effort for order and stock placement: 30 minutes each Data collection on a single surgery ward (4 weeks before and with pharmacy service)
Activity	Effort reduction by	
Order	-58%	
Stock placement	-85%	
Expiry date control	-100%	

Tab. 1 Effort reduction for the nursing team

We could also achieve a reduction of the number of packages delivered between 14% and 19% [Tab. 2], and the sales volume could be reduced between 4% and 54% [Tab. 2]. Furthermore, we achieved substantial cost savings in an overall reduction of the drug dispensary value by 7.3% (5'600 CHF eq. 4'800 €) [Fig. 1].

Finally the medication safety was improved by a better arrangement and knowledge of the stock and a systematic refill with less out of stock [Fig. 2].

Ward	Surgery 4.1	Surgery 6.2	Surgery 7.2	ICU
Duration of data collection	6 months	12 months	6 months	2 months
Drug sales before [CHF]	155'680	393'093	115'745	142'559
Drug sales with pharmacy service [CHF]	113'463	377'269	53'045	130'287
Change	-42'217 (-27.1%)	-15'824 (-4.0%)	-62'700 (-54.2%)	-12'272 (-9.4%)
Delivery quantity before [number of packages]	17'942	41'928	9'248	8'212
Delivery quantity with pharmacy service [number of packages]	14'537	34'985	7'943	6'878
Change	-3'405 (-19.0%)	-6'943 (-16.6%)	-1'305 (-14.1%)	-1'334 (-19.4%)

Comment surgery 6.2: Extended pharmacy service established before data collection

Tab. 2 Details of drug sale and quantity reduction by the ward pharmacy management by pharmaceutical staff

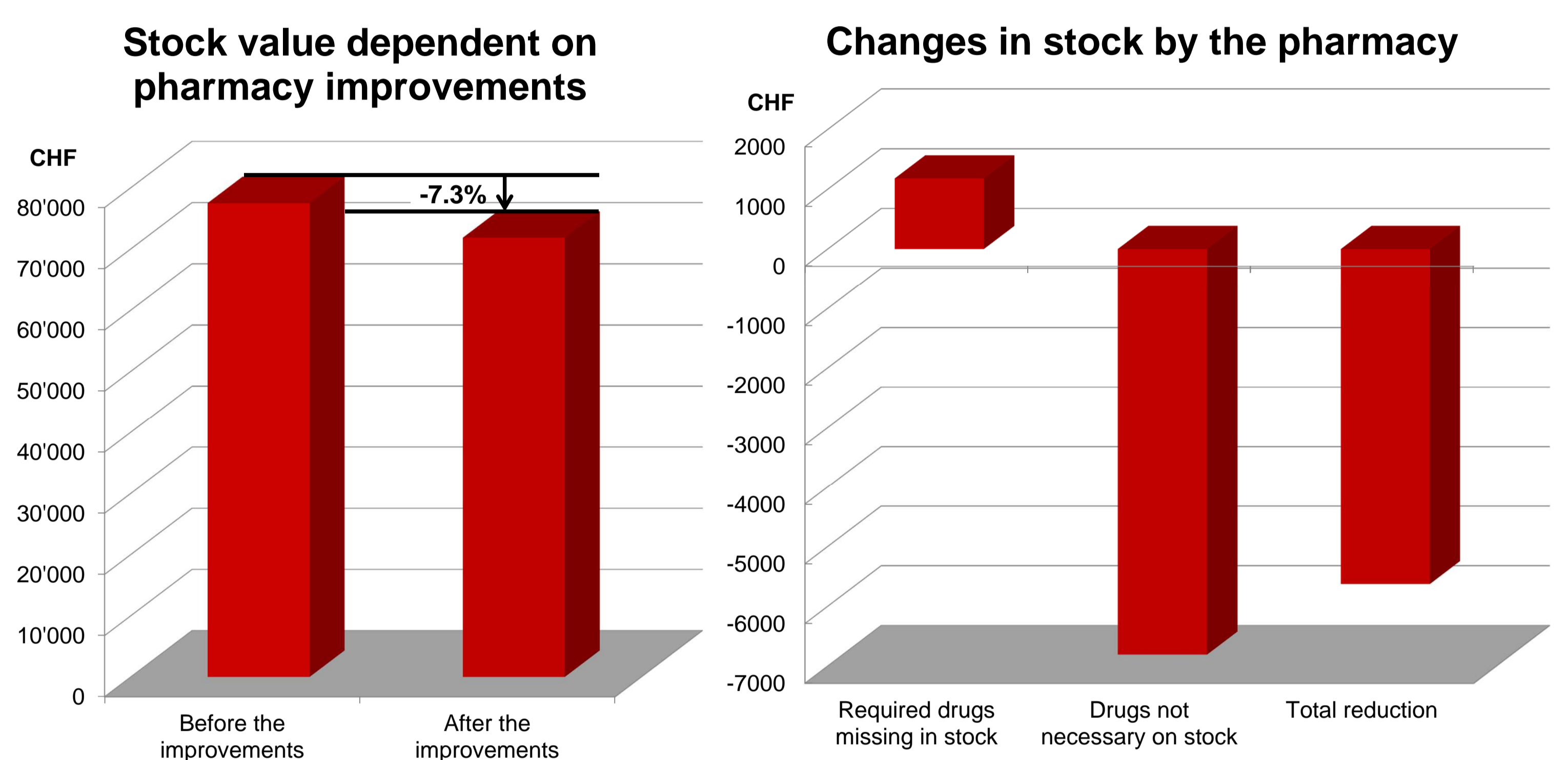


Fig. 1 Stock value and stock inventory before and after the pharmacy intervention on a surgery ward



Fig. 2 Impression of pharmacy managed ward pharmacy with good arrangement and systematic refill

Discussion

The ward pharmacy management by pharmaceutical staff was a big success which resulted in a positive feedback by the nursing team and in a substantial financial benefit. With an average of 24% reduction of the drug sales per ward and 17% in the number of

packages there is an important benefit concerning a reduction of the drug expenditure as well as a reduced effort for the nursing team.

Conclusions

This study showed that ward pharmacy management by pharmaceutical staff brought some benefits. But long term analysis are needed on different wards to confirm these results. In future also further tasks which could be done by the pharmaceutical staff as the

unit dose preparation for each single patient should be evaluated to show their possible benefits. Additionally an expansion of our existing services on more wards is planned.

Acknowledgements

A special thank goes to the nursing teams in the UHB which supported the data collection and were very helpful at the introduction of the project. Most important was the big effort of

the pharmacy team in the UHB to reach a good service quality in addition to the usual tasks.

Presentation:
EAHP-Congress
March 2018
in Gothenburg, Sweden

Corresponding author:
Martin Stalder
Universitätsspital Basel; Spital-Pharmazie
Spitalstrasse 26; CH-4031 Basel
Martin.Stalder@usb.ch

 Universitätsspital
Basel