

KlinPharm: Implementation of a joint clinical pharmacy and clinical pharmacology service in a regional hospital

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Introduction

Patients who are treated in hospitals often have complex medical and surgical problems with consequently complex pharmacotherapies, which often include polypharmacy, a high risk of adverse drug reactions and a high potential for medication errors. Furthermore, in an era in which hospital stays must be kept as short as possible and treating teams are confronted with ever-increasing amounts of data, it can be challenging to provide the highest possible level of medication safety for all patients. Clinical pharmacy and clinical pharmacology services can greatly help to reduce drug related problems in hospitals and also support staff as they perform their duties in caring for patients. Until September 2018, at our institution, pharmaceutical support was provided solely by the hospital pharmacy and remote pharmacological support was provided by the Department of Clinical Pharmacology at the regional University Hospital.

Methods

A concept for “buying in” the services of a full-time clinical pharmacist and a part-time clinical pharmacologist (1 day per week) was drawn up by the hospital director, chief pharmacist and head of internal medicine in collaboration with the University Hospital in the same region. The service is known as KlinPharm and is available for all three hospitals in the Kantonsspital Baselland group. An observational study was conducted to compare service-provision (e.g. number of patient consultations, patient-specific inquiries, drug-related problems and reports of adverse drug reactions) before and after implementation of KlinPharm.

Results

In the 12 months prior to the introduction of KlinPharm, two remote consultations provided by the University Hospital's Department of Clinical Pharmacology were requested and six adverse drug reactions were reported to the Regional Pharmacovigilance Centre. Since starting the service in September 2018 (3 years), we carried out 205 patient consultations, have answered 481 patient-specific inquiries, have advised on 2707 drug-related problems and have reported 228 serious adverse drug reactions to the national drug authority, Swissmedic (cf. figure 1 and 2). These figures represent a 3456% and 1166% increase per month in patient consultations and pharmacovigilance reporting, respectively.

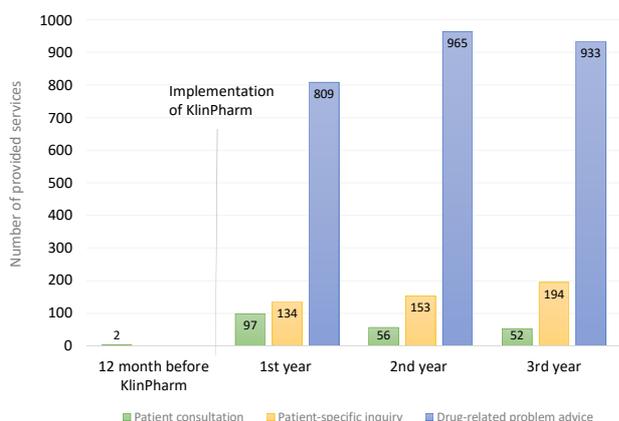


Figure 1: Number of provided services before and after implementation of KlinPharm

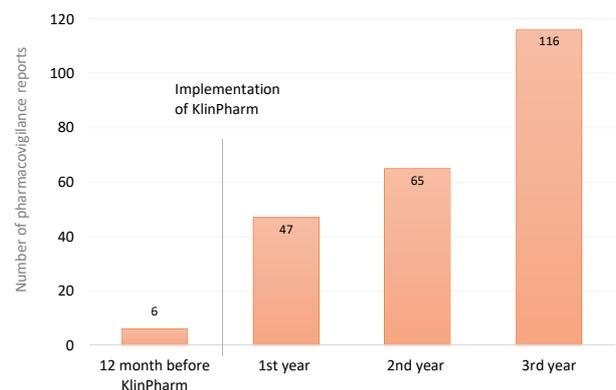


Figure 2: Number of pharmacovigilance reports before and after implementation of KlinPharm

Conclusion

KlinPharm service, comprising synergistic clinical pharmacy and clinical pharmacology support, have been well accepted and utilized since their implementation. The need and utilization for this service was not anticipated based on the number of consultations or pharmacovigilance reports carried out before its implementation.