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ScienceDirect
Research in Social and Administrative Pharmacy 12 (2016) 622–626
RESEARCH IN SOCIAL & ADMINISTRATIVE PHARMACY

Research Brief

netCare, a new collaborative primary health care service based in Swiss community pharmacies

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Abstract

Background: The Swiss Pharmacists Association has launched a new collaborative project, netCare. Community pharmacists provide a standard form with structured triage based on decision trees and document findings. As a backup, they can collaborate with physicians via video consultation.
Objective: The aim of the study was to evaluate the impact of this service on the Swiss health care system.
Method: All pharmacists offering netCare completed two training courses, a course covering the most common medical conditions observed in primary health care and a specific course on all of the decision trees. The pharmacists were free to decide whether they would provide the usual care or offer netCare triage. The patient was also free to accept or refuse netCare. Pharmacists reported the type of ailment, procedure of the consultation, treatment, patient information and outcomes of the follow-up call on a standardized form submitted to the study center.
Results: Pharmacists from 162 pharmacies performed 4118 triages over a period of 21 months. A backup consultation was needed for 17% of the cases. In follow-up calls, 84% of the patients who were seen only by pharmacists reported complete relief or symptom reduction.
Conclusions: netCare is a low-threshold service by which pharmacists can manage common medical conditions with physician backup, if needed. This study showed that a pharmacist could resolve a large proportion of the cases. However, to be efficient and sustainable, this service must be fully integrated into the health care system.

Keywords: Primary health care; Community pharmacy; Pharmacy service; Decision tree

Introduction

As in many other countries, in addition to having increasing costs, Switzerland's health care system is facing a relative shortage of general practitioners (with half of them retiring within the next 10 years) and overload of emergency rooms.[1–3]

Between 2007 and 2011, outpatient departments (OPDs) of acute care hospitals in

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http://dx.doi.org/10.1016/j.sapharm.2015.08.010

Switzerland observed a 32% increase in visits.[2] Bednall et al, who analyzed emergency department visits, reported that 19% of cases could have been treated by a GP. However, 42% of those could have also been handled by a community pharmacist.[4] Hammond et al found that GPs felt that 7% of their cases could have been handled by a community pharmacist.[5] Therefore, primary health care would greatly benefit from a low-threshold entry into the health care system, as offered by telemedicine or pharmacies, where efficient primary triage would then treat or dispatch patients to the appropriated setting according to the severity and urgency of the cases.

Primary triage is a basic skill and is a daily task for pharmacists. Pharmacists provide information and advice related to health issues, including, if appropriate, prescribing OTC medication with guidance on their use. In specific situations, according to the Swiss legislation, the pharmacist is allowed to treat the patient with prescription medication.[6] With the exception of the distribution and sale of prescription medication, the work of the pharmacist is not well documented. Furthermore, pharmacists rarely receive feedback from patients and/or physicians; therefore, they can hardly assess the validity of their primary triage. In Switzerland, there are no central health care databases with diagnostic and outcome data. Therefore, evaluations of the outcomes of triage (irrespective of the setting in which the triage was performed) are very rare in the Swiss Healthcare system.

The Swiss Pharmacists' Association (pharmaSuisse) has launched a collaborative project, netCare. Participant community pharmacists provide primary triage using a structured decision tree for 24 common conditions, and they document the findings on a standardized assessment form. As a backup, they can request a real-time video consultation with a physician. By evaluating the documented daily triage work of the pharmacist, pharmaSuisse's objective is to establish the community pharmacist as a health service provider (instead of only as a vendor of medication) who provides primary access to health care. Furthermore, the low threshold for access without the need for an appointment may contribute to efficient resource usage in a low cost setting.

The aim of the study was to evaluate the impact of this new service as well as the added value for the health care system.

Method

netCare's main feature is the decision-tree based triage of community pharmacists. Twenty-four decision trees were developed by pharmaSuisse and validated by senior physicians at the Swiss Centre for Telemedicine in Basel, which provides medical backup. The decision trees were chosen to focus on common ailments that are encountered in an everyday GP's practice or pharmacy, covering situations in which structured triage would be appropriate and contingent on evidence-based guidelines. The decision trees also included recommendations for treatments that depended on the severity of the case. These recommendations, updated annually, rely on evidence-based criteria.

All pharmacists offering netCare completed two training courses, a course covering the most common medical conditions observed in primary health care and a specific course on all of the decision trees. The pharmacists were free to decide whether they would provide the usual care or offer netCare triage. The patient was also free to accept or refuse netCare.

To ensure privacy, netCare triage always took place in a separate room. The first step in the assessment was to check for the exclusion criteria, which included patients with severe co-morbidities, unclear clinical situations or alarming symptoms. The second step was to assess the patient with the specific decision tree, which had the following three outcomes:

a) Management by the pharmacist and, if needed, dispensing OTC or (as defined by Swiss law[6]) prescription only medication.
b) Management by the pharmacist with physician backup via the telemedicine center with a secure video consultation. If required, the telemedicine physician would prescribe the medication and send the prescription to the pharmacy.
c) Referral to either an emergency room or GP for a face-to-face consultation.

During each netCare triage, the pharmacist filled out a standardized form. The form contained patient information (age and sex), whether the patient had a GP, what his/her alternative choice of care would have been, the type of ailment, the triage decision and the type of treatment dispensed. The patient gave his or her informed consent to participate in the study with his/her signature.