

Evaluation of a home-based service for medication review in Swiss community pharmacies: a study protocol

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Background

Polymedication and medication hoarding in patients' homes, inadequate use or management of medication may increase the risk of drug-related problems (DRPs). Community pharmacists can identify, prevent and manage these DRPs.

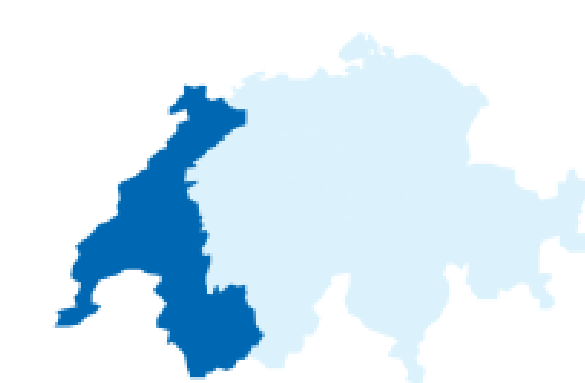
In Switzerland, no pharmacy service focusing on the management of DRPs related to patients' use or its medication management is currently recognized and remunerated. The medication use review with follow up (MRF) at patients' home, aims to detect DRPs related to medication management at home and self-medication, with an emphasis on issues that cannot be detected in a community pharmacy (CP), such as wrong medication storage. This service also provides a systematic medication use review of the patient's treatments.

Purpose

To evaluate the impact of the MRF at the patients' homes service for adults with polypharmacy in Swiss CP for the identification and management of DRPs induced by the patients use and its medication management ..

Methods

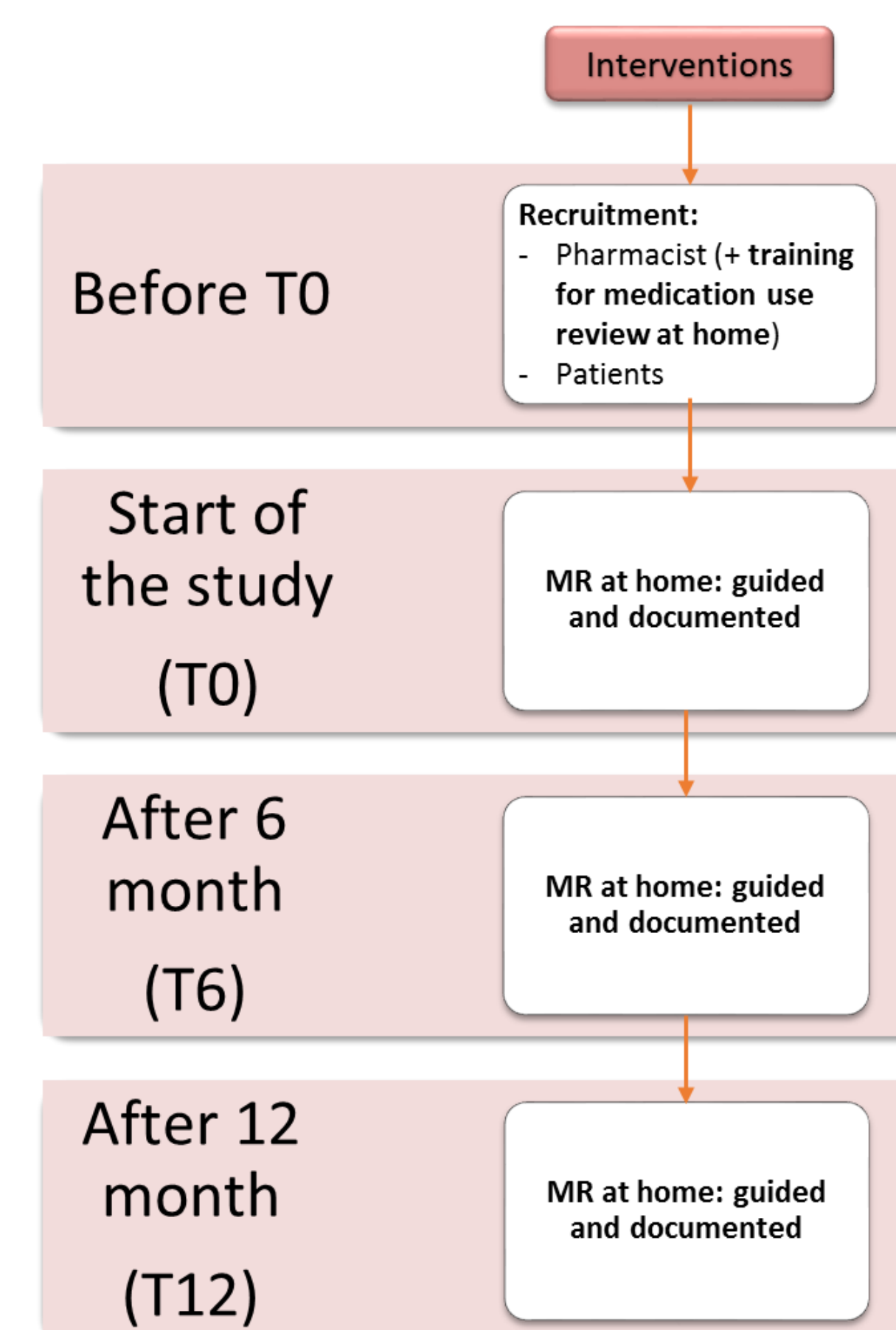
A **pre-post intervention study** will be carried out in CPs in the **French speaking region of Switzerland** for 15 months.



Volunteer pharmacists from the pharmacy group PharmaciePlus® will recruit at least 184 patients with the following inclusion criteria:

- Adults **18+**
- Who cannot visit the CP
- With at least 4 chronic drugs
- Prescribed for at least 3 months

Trained volunteer pharmacist will ask permission to conduct **three structured medication use reviews at home** at 6 month-interval each



Outcomes:

- The primary outcome of the study is the identification and management of DRPs (i.e. average DRPs divergence between T6 and T0, and T12 and T0)
- Secondary outcomes are:
 - Patients' knowledge about their treatments
 - Number of expired or stopped medications
 - Documentation of pharmaceutical interventions

Results

A funding request for the study is currently underway.

The Ethics Committee (CER-VD) concluded that the study does not fall under the Human Research Act.

The study will be carried out in collaboration with CPs from the PharmaciePlus® group.

Between 20 and 40 CPs will be enrolled to recruit at least 184 patients in the 7 French speaking cantons of Switzerland. The patients will be randomly selected from a pool of eligible patients through a sequence of computer-generated random numbers.

A validated tool (ReMeDo tool) will guide pharmacists before, during and after the consultation for the data collection and the pharmaceutical intervention documentation(1).

Training for the medication use review at home, documentation supplying and support for pharmacists will facilitate the service provision and fidelity of study protocol.

Conclusion

MRF at home is an enhanced service that aim to complete those currently provided in Switzerland in order to identify, manage and prevent DRPs induced by patients' management of its treatment. MRF at home is designed to provide a follow-up service aimed at patients that cannot come to a CP.

This study will evaluate the impact of a new service that includes structured and standardized interventions, training and supervision for CP staff, self-medication evaluation and use of home-based patient data.

1.Quintana-Barcena P, Sinner C, Berger J. Domiciliary medication review (ReMeDo): development, reliability and acceptability of a tool for community pharmacists. International Journal of Pharmacy Practice. 2021;30(2):129-35.

Topic area: medication review; home care services; pharmacists; Switzerland