

# Development of a clinical pharmacy service in an outpatient dialysis centre

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## Background and Objective

Clinical pharmacy services are well established for inpatients in our hospitals but not yet in the outpatient setting. The aim of this study was to assess the quality of patient care in our outpatient dialysis centre (ODC) and evaluate how the clinical pharmacist (CP) could play an active role in the management of the patients' drug therapy.

## Design

The CP first elaborated and implemented a medication record adapted to the needs of the ODC (figure 1). He regularly updated this document by means of medication reconciliation.

In addition, the pharmacist administered a quality of life questionnaire and a questionnaire on pharmaceutical care to the haemodialysis patients.

Furthermore, he participated actively in the monthly ward rounds and the weekly staff meeting.

Quality indicators (QI) were defined to assess patient care improvement in anemia and phosphate / calcium management.

## Setting

Outpatient dialysis centre, regional hospital of Sion, Switzerland.

Figure 1. Medication record

Patient data		Allergies/intolérances		Diagnoses		Allergies/intolérances		Abrasions		Remarques	
Prénoms	Noms	Diabète	Autre	Diabète	Autre	Diabète	Autre	Diabète	Autre	Diabète	Autre

Médicament	Date	Vieillesse	Dose	Forme	Posologie	Remarques	Date	Vieillesse	Dose	Forme	Posologie	Remarques
Carbamé	lv	1 g	3-3x/sem									
Diabète	glic	2 sps	3x/sem									
Vitamine C Straud	lv	500 mg	1x/sem									
Vitamines	lv	-	1x/sem									
Lipylone	cath	salin proctose DM										
Tasmo-Lock	cath	salin proctose DM										
Autlyse	Imgmt	cath	salin proctose DM									

- date of administration  
 - week day  
 - dispensed dosage

## Main outcome measures

Evolution of QI, patients' needs.

## Results

Thirteen patients were included.

The medication record was successfully implemented and well accepted by the dialysis team. Over a three months period one medication reconciliation per patient was conducted and discrepancies were discussed with the prescriber.

We were not able to show any change in QI (figures 2, 3).

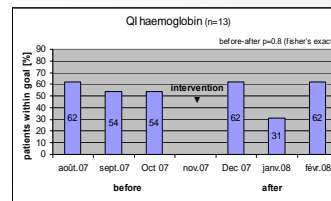


Figure 2. QI haemoglobin

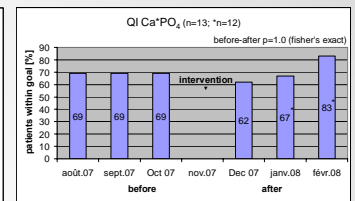


Figure 3. QI phosphocalcic product

Following areas of improvement were identified thanks to the questionnaires:

- the amount and quality of information given to the patient about his medication (85% of the patients didn't get any information about newly prescribed medication, patients clearly expressed their need for information on goal, duration, mechanism of action and adverse effects of their medication)
- patient's awareness of the importance to talk about their difficulties to take drugs correctly (dialysis patients take an average of 10-12 drugs, e.g. phosphate chelators have an important potential of interactions, are large and of bad taste; but patients are not used to address these issues to the healthcare team)
- patient's adherence to his medication (in one case, a simple switch in the drug formulation resolved the patient's problem of poor adherence).

## Conclusion

This study helped to define the role of a CP in an ODC and led to his permanent integration into the dialysis team with the following tasks: medication reconciliation, participation in the weekly staff meeting (information exchange) and in the monthly ward rounds (recommendations concerning patient-specific drug therapy) and development of activities in the identified areas of improvement.