The effectivity and feasibility of integrating nondispensing pharmacists into primary healthcare centres

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The integration of a pharmacist in the primary care, which has up to now not been studied in the Netherlands, could enable more efficient interventions to resolve drug therapy problems and help to build collaborative working relationships between...

Ethische beoordeling	Positief advies
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON20964

Bron
Nationaal Trial Register

Verkorte titel
POINT (Pharmacotherapy Optimization through Integration of Nondispending pharmacist in a primary care Team)

Aandoening

Medication Therapy Management - Farmacotherapie management
Medication errors - Medicatiefouten
Drug Utilization Review - Medicatiebeoordeling
Polypharmacy - Polyfarmacie
Aged - Ouderen
Primary Health Care - Eerste lijns zorg
Pharmacists - Apothekers
Hospitalization - Hospitalisatie

Ondersteuning

Primaire sponsor: ZonMw
Achmea

Overige ondersteuning: ZonMw

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

medication-related hospital admissions in elderly patients with multimorbidity, cardiovascular disease and polypharmacy.

Toelichting onderzoek

Achtergrond van het onderzoek

The prevalence of suboptimal prescribing of medications is considerable. Patients are often undertreated or subjected to
interacting drug treatments that are potentially harmful. This frequently results in medication related hospital admissions that
are potentially preventable. Improvements to the healthcare system are needed in order to maximize the benefits of
pharmacotherapy. It has been demonstrated that pharmacists can improve prescribing, reduce healthcare utilization and
medication costs, thus contributing to clinical improvements in many chronic medical conditions. The integration of a
pharmacist in the primary care team, as the key provider of pharmaceutical care to individual patients, has the potential to
address many of the present barriers to effective pharmaceutical care, by improving access to patient information, addressing
logistical communication challenges between pharmacists and GPs (general practitioners). The integration of a pharmacist in
the primary care, which has up to now not been studied in the Netherlands, could enable more efficient interventions to resolve
drug therapy problems and help to build collaborative working relationships between pharmacists and physicians. This project
is designed to study the effect and the feasibility of integrating a nondispensing pharmacists into primary healthcare centres. In
this project we intend to compare adverse medication related events and clinical parameters of the pharmaceutical care
process in elderly patients with multimorbidity and polypharmacy, in three different models of pharmaceutical care delivery in
the primary care setting:
A) a nondispensing pharmacist as an integral member of the primary healthcare team based

in the GP practice (nondispensing
pharmacist group)
B) a pharmacist in a community pharmacy with a predefined training, performing structured medication reviews (education
group)
C) a pharmacist in a community pharmacy (control group of usual care).
Medication related hospital admissions will be the primary outcome measured. The secondary outcomes are changes in
prescription (number of drugs, number of prescriptions, discontinuation of drugs, starting a new drug, switch to a new type of
drugs, dose, strength, refill compliance), prescription indicators, monitoring of effective and safe pharmacotherapy,
bloodpressure, laboratory markers, number of medication reviews, cardiovascular events, number of referrals to specialists,
and number of documented falls.
As hospitalisations are often a cost driver, keeping patients out of the hospital is an important goals of the care provided by the
pharmacists and might be cost-effective. By improving pharmaceutical care within primary care the quality of the care might
improve and may lead to cost savings in secondary care. We will perform a cost analysis mainly based on resource utilisation
to provide more information on costs within different groups of this the study. The outcomes of interest in this economic
evaluation will be: hospitalisation costs, annual resource utilisation costs, annual medication costs and costs of the
nondispensing pharmacist.

Doel van het onderzoek

The integration of a pharmacist in
the primary care, which has up to now not been studied in the Netherlands, could enable more efficient interventions to resolve drug therapy problems and help to build collaborative working relationships between pharmacists and physicians.

Onderzoeksopzet

Routine healthcare data from primary care can be anonymously linked to the Achmea/Agis Health database. The extraction of patient data will be performed by the U-PRIM system, a software application that is installed in all participating general practices. Information will be available of the electronic medical records (EMRs) in each general practice, combined with SFK data from the community pharmacies including medication dispensing data and combined with the Achmea/Agis Health
database including reimbursement data.Outcomes will be extracted from the database during the intervention period of 12 months and 12 months prior to the intervention. Outcomes will be extracted from the database from the ‘care as usual’ arm and from the ‘pharmacist with

additional training’ arm in the same period as the intervention of the nondispensing pharmacist will take place. As all required
data are already routinely collected, all datacollection is prospective, also in the pre-intervention period. No changes in this data
collection routine are foreseen during the study period.
Whether hospital admissions are related to medication will be assessed by two independent clinical pharmacists based on
discharge information, medical history and medication history, according the algorithm by Kramer et al.

Onderzoeksproduct en/of interventie

In a prospective, non-randomised controlled intervention with pre/post comparison (quasi experimental design) the outcomes of
three implementation strategies with three models of pharmaceutical care provision will be compared:
A) In the nondispensing pharmacist arm, 10 GP practices with a total of 250000 patients will be involved with an integrated
pharmacist as a member of the primary healthcare team;
B) In the community pharmacists with additional training arm, 10 pharmacists and their collaborating GP practices will be
involved. The pharmacists will attend the ‘PIAF’ or the ‘Service ApotheekFarmacotherapie Expert’ clinical pharmacy course and is th trefore expected to work according to the guideline polypharmacy in the elderly.
C) In the usual care arm, 10 pharmacists will be involved with their collaborating GP practices.

Contactpersonen

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Patients ≥ 60 years;
- Polypharmacie (≥ 5 different chronic medications);
- Use of cardiovasculair medication (ATC B/C);
- Multi-morbidity (Frailty index ≥ 0.20)

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

None

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Niet-gerandomiseerd
Blindering:	Open / niet geblindeerd
Controle:	Actieve controle groep

Deelname

Nederland

Status:	Werving gestart
(Verwachte) startdatum:	03-03-2014
Aantal proefpersonen:	8550

Type:	Verwachte startdatum

Ethische beoordeling

Positief advies

Datum:	07-01-2014
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL4244
NTR-old	NTR4389
Ander register	METC-protocolnumber and ZonMw dossier number : 13-432/C and 80-83600-98-10206

Resultaten