



**Vilnius
University**

MUR pilot Lithuania

Pharmacy and pharmaceutical care in Lithuania

- 2721 pharmacists
- 1900 pharmacy assistants
- 1515 community pharmacies
- Pharmacy services – inhaler technique management only

Pilot protocol

- Start of protocol – spring 2019
- The research team developed by May
- Participating pharmacists and GP's included by beginning of July
- Protocol registered by Vilnius regional bioethics committee - the end of August
- The end of November – no permission received

YET



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- **Original protocol adopted**

- patients to be included and the consent formed signed at the GP's office

- additional checklist for the pharmacists added

- online platform for pharmacist's GP's communication created, that would imitate communication on e-prescription platform

Medicine used	ATC and active sub.	Pharmaceutical form	Dosage	Doses per day	Way of consumption	Other notes	Medication problems (tick x)	
							First visit	Second visit
						The patient does not know why the drug should be used (does not know the therapeutic indication of the drug);	<input type="radio"/>	<input type="radio"/>
						The patient does not follow (change) the regimen	<input type="radio"/>	<input type="radio"/>
						The patient missed taking the medication;	<input type="radio"/>	<input type="radio"/>
						The medicine was taken at the wrong time	<input type="radio"/>	<input type="radio"/>
						There was a problem trying to swallow the medicine	<input type="radio"/>	<input type="radio"/>
						Adverse reaction	<input type="radio"/>	<input type="radio"/>
						Interaction with other medicinal products	<input type="radio"/>	<input type="radio"/>
						other	<input type="radio"/>	<input type="radio"/>
Overall assesment								

Reasons the permission was not granted:

1. If this is an international study, the research commissioner should be from abroad
2. Vilnius university is not a health care center, and cannot be the research center
3. The protocol is not clear – who would be responsible for the mistakes?

The main question that was not answered – is the pilot study a biomedical research? (as prescribed by the LT law)

Patient cases at **GIMMICS VILNIUS**

GIMMICS VILNIUS 2019

- 20 real patient cases from Santara's clinics
- No actual contact with the patient
- Simulation of the clinical pharmacists work
- A day to solve two case's
- Written response to the GP for each case

Cases

- 20 cases (patients using 5 and more medicines)
 - 15 ambulatory patients
 - 10 had an appointment for prescriptions
 - 3 had appointment because of the pain
 - 1 needed a consultation after ultrasound
 - 1 had appointment because of worsen dimension
 - 5 hospitalized patients
 - All with the hypertension, heart diseases and comorbidities
- 12 of them had diagnoses of I10 or I11.9 with other comorbidities

Example

Man, born 1931-08-30, reason for visit – pain

Tab. Tramadoli (200mg)

Caps Pregabalini → Pregabalin increases the toxicity of ramipril and increases the likelihood of angioedema

Tab. Ramiprili →

Tab. Warfarini → Amiodarone inhibits the metabolism of warfarin, thereby increasing its plasma concentration. The possibility of bleeding increases

Tab. Amiodaroni →

Tab. Nebivololi

The message to the GP:

- Neuropathic pain is not managed enough
- Patient INRs should be evaluated. If the score is 3-4, the dose may be reduced by 10% if more than 4.5, withdraw and resume if INR is less than 4.5 at 20% lower dose.

Results:

- Fifth year students have knowledge and are capable to use it
- Some critical assessment was lacking, especially in hospitalized patients cases
- Tendency to change most of the medicines use was observed (the patients' attitudes were not assessed in this project)
- Communication skills – was major missing element in pharmacy service



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We will proceed

Pharmacy center

Biomedical science institute

Faculty of Medicine

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