

**Appendix C.** Illustrative examples of the expressions (translated from Finnish) mentioned by the interviewees on the well-implemented actions and actions needing development in the medication use process categorised by main categories (n=10) emerged from the interviews. (P=participant of the study)

MAIN CATEGORIES	WELL-IMPLEMENTED ACTIONS	ACTIONS NEEDING DEVELOPMENT
<b>Infrastructure level (macro)</b>		
Management of the entire medication use process	No mentions.	<p>“Well, it’s not an individual employee, but the entire medication use process should be better organised...” [representative from the hospital, P72]</p> <p>“And it also happens in primary healthcare, that they do identify a single illness or health problem but do not take account the person as a whole. This represents a fragmented way of thinking.” [representative from the university, P42]</p>
Patient information transfer and electronic health records	<p>“Electronic prescriptions have provided more clarity [to the medication use process ]... via electronic prescription, with both nurses and physician providing patient care, for example for elderly people have a more comprehensive and updated view on patients’ medication than previously. It has been a great improvement...” [representative from the university, P40]</p>	<p>“Numerous investigations have identified problems, such as lack of critical patient information or incorrect information transfer, in the medication use process. It’s scary. In a way, it pulls the plug out of many things.” [representative from the scientific society, P66]</p> <p>“Well, I think we should pay attention to how medications are recorded in the electronic health records and how information is safely visible there. That’s catastrophic, that the same medicine may be listed there many times. But instead there is no information on when medication has been started or discontinued. [Medication] lists don’t update themselves, but someone needs to reconcile them.” [representative from the healthcare center, P9]</p>
Multiprofessional collaboration	<p>“Excellent local multiprofessional models for cooperation, particularly in long-term patient care, already exist.” [representative form the national authority, P6]</p>	<p>“Healthcare professionals should know better the tasks and responsibilities of each other, and, on the other hand, should also be familiar with each other’s knowledge, and what they can and cannot do.” [representative from the university, P40]</p> <p>“Do we know the skills of different health professionals [participating in the medication use process] well enough and how we could make optimal use of them. On the other hand, can we fully trust other professions.” [representative from the professional organisation, P18]</p>
Specialist services	No mentions.	<p>“Comprehensive medication reviews... big efforts should be made to make the reviews available to patients in need, so that they don’t have to pay for them themselves. This referral policy or some other way, such as the implementation of medication reviews at the pharmacies, is still unrealised.” [representative from the professional organisation, P23]</p>

<b>Healthcare professionals level (meso)</b>		
Starting the medication	<p>“Starting the medication works rather well at the moment. It is always a physician who diagnoses a disease and counsels the patient how to manage their disease and treatment. Additionally, there is also a nurse commonly involved in counselling. Especially from the perspective of special care, this stage of the medication use process seems to work.” [representative from the hospital districts, P73]</p>	<p>“As a physician, I commonly prescribe medicines. While prescribing, there is often limited time for medication counselling. You just really manage to say that “here is your prescription and inform how patient should take her/his medication.” [representative from the patient organisation, P71]</p>
	<p>“Starting the medication, I think it works relatively well.” [representative from the university, P69]</p>	<p>“Usually, patients are not very responsive to counselling, they may not remember what they have been told during the physician’s visit. [representative from the professional organisation, P51]</p>
Advice and guidance by nurses	<p>“I do have the belief that while the nurses and midwives have limited prescribing rights, they also have a good knowledge on what to tell patients about medicines.” [representative from the patient organisation, P56]</p>	<p>“Advice and guidance given by a nurse varies greatly depending on the resources and indications.” [representative from the patient organisation, P71]</p>
	<p>“And of course, In special medical care, patients will receive the best counselling on their medicines. This concerns for example cancer patients.” [representative from community pharmacy, P64]</p>	<p>“Nurses should support their patients’ adherence.” [representative from the professional organisation, P26]</p>
		<p>“Nurses may not counsel patients much about drug-drug interactions, although it would be really crucial for all patients.” [representative from the polytechnic, P74]</p>
Medication counselling in the community pharmacies	<p>“The best knowledge about medicines is really in the community pharmacies.” [representative from the professional organisation, P50]</p>	<p>“Pharmacists should not give as much information about medicines as they currently do. It is probably because they wish to play safe and explain all the possible adverse drug reactions and all other things. It may result in decreased adherence.” [representative from the university, P78]</p>
	<p>“The process is best implemented in community pharmacies. There has been a systematic attempt to develop medication counselling for patients with certain diseases, such as asthma and other chronic diseases.” [representative from the scientific society, P59]</p>	<p>“Supporting medication adherence, I do not know, maybe it is supported in some way, but I also think there occurs [among healthcare professionals] some paternalistic ways of thinking. They may consider that there is no need to tell everything. If the physician prescribes and counsels something, the patient should just take his or her medication and follow instructions.” [representative from the university, P28]</p>

Implementing the medication use process in home care and social care	<p>“I would believe and really hope that practical nurses have a good basic knowledge on the administration of medicines.”  <i>[representative from the university, P76]</i></p>	<p>“There is quite a lot of variation in nursing education as I understand it, because the aims of the education are formulated relatively loosely, and it depends on the local possibilities.”  <i>[representative from the university, P40]</i></p> <p>“This medication use process is as strong as its weakest and less educated link, which commonly is a practical nurse or assistant or even an entirely untrained person who medicates patients. It is not certain if they have updated information and knowledge. Either they may not have for example ability to identify adverse drug reactions.”  <i>[representative from the patient association, P49]</i></p>
Treatment monitoring	<p>“Treatments are well-monitored in relation to chronic medications and chronic illnesses, such as diabetes. Then there is a regular contact with particular physician.”  <i>[representative from the university, P42]</i></p>	<p>It is really a challenge at the moment that the medication lists are not updated... And I think it is especially difficult when patient has multiple medications in use...When you have a lot of medicines which have all been prescribed in different places and by different physician, it seems that there is sometimes no one with the overall idea of the drug load.  <i>[representative from the pharmacy, P21]</i></p> <p>“Treatment monitoring, and especially the identification of potential adverse drug reactions, is perhaps the most challenging part in the medication use process. People do not know when to contact healthcare. It is also unclear how well they [ADR’s] are recognised in healthcare. That’s the challenge.”  <i>[representative from the patient organisation, P71]</i></p>
<b>Patient level (micro)</b>		
Patient	<p>“Patients with chronic illnesses know a lot about their condition and medications. They also seek information. I’m not worried about the information sources that they use. Certainly, most of them use reliable sources.”  <i>[representative from the university, P78]</i></p>	<p>“Patients do not even want to know [about the medicines they use]. This is something that healthcare professionals should recognise. They do not really remember all things that they have been told, and there is not even enough time for medication counselling during the visit with physician. In particular, when they receive a new diagnosis, they can concentrate only on that, and it is fair enough if they remember to take their pill every day, that’s enough.”  <i>[representative from the scientific society, P29]</i></p> <p>“It is really difficult to ask questions [from the physician] as patients may not know what to ask. And on the other hand, patients may be afraid that they will ask naive questions...”  <i>[representative from the university, P76]</i></p>