

Expected and experienced barriers for the implementation of sick day guidance in community pharmacies

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6430767 | FA-MA 203 | 27 juni 2023

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Samenvatting

Patiënten met verminderde nierfunctie hebben een verhoogd risico op acuut nierfalen als gevolg van uitdroging. Uitdroging kan optreden gedurende zogenaamde 'sick days' en tijdens een hittegolf. 'Sick days' zijn periodes waarin iemand braakt, diarree of koorts heeft. Op die dagen moeten bepaalde medicijnen die de vochthuishouding beïnvloeden tijdelijk worden aangepast, omdat het risico op acuut nierfalen toeneemt. De implementatie van de richtlijnen hiervoor in de eerstelijnszorg blijkt echter moeilijk.

Dit onderzoek, uitgevoerd als onderdeel van het SIDRIK-onderzoek, heeft als doel de verwachte en ervaren belemmeringen voor de implementatie van *sick day* adviezen in Nederlandse openbare apotheken te identificeren. Verwachte belemmeringen werden geëvalueerd aan de hand van semigestructureerde contextanalyse-interviews met openbaar apothekers. De ervaren belemmeringen werden maandelijks geëvalueerd.

24 apotheken namen deel aan het onderzoek. De interviews, gebaseerd op het *Consolidated Framework for Implementation Research (CFIR)*, werden uitgevoerd door drie onderzoekers, meestal in duo's. De interviews werden opgenomen en woordelijk getranscribeerd met behulp van Amberscript. De codering werd uitgevoerd met behulp van NVivo versie 14. Maandelijkse evaluaties werden telefonisch uitgevoerd.

Apothekers noemden voornamelijk belemmeringen in verband met een hoge werkdruk, personeelstekorten en het herkennen van *sick days* door apothekersassistenten. Daarnaast werd ook het moeilijk kunnen betrekken van thuiszorg, het beperkte vertrouwen van huisartsen en patiënten in apothekers en de cognitieve beperkingen van patiënten opgemerkt.

Dit onderzoek identificeerde meerdere barrières die de implementatie van *sick day* adviezen in openbare apotheken belemmeren. Deze bevindingen benadrukken de noodzaak van op maat gemaakte implementatiestrategieën gericht op het opnemen van de *sick day* adviezen in bestaande werkprocessen en betrokkenheid van apothekersassistenten en thuiszorg.

Abstract

Background

Patients with impaired renal function are at increased risk for acute kidney injury (AKI) during dehydration. Dehydration can occur during so called 'sick days' and or due to high environmental temperatures. In these situations certain medications should be adjusted as the risk for AKI is increased. Implementation of sick day guidance in primary care remains difficult.

Aim

This study aimed to identify the expected and experienced barriers for the implementation of sick day guidance in Dutch community pharmacies.

Method

Semi-structured interviews with community pharmacists were performed to identify expected barriers. The interviews were based on The Consolidated Framework for Implementation Research (CFIR), and were conducted by three researchers, mostly in duos. Interviews were recorded and transcribed verbatim using Amberscript. The coding was done in NVivo version 14. Experienced barriers were evaluated through monthly progress evaluations, which were performed by telephone.

Results

A total of 24 pharmacies participated. Pharmacists mostly mentioned barriers associated with high workload, staff shortages and recognition of sick days by pharmacy technicians. Additionally, the challenging communication with home care organisations, the limited trust of general practitioners and patients in the pharmacists and the cognitive limitations of the patients were also noted.

Conclusion

This study identified multiple barriers that impede the implementation of sick day guidance in community pharmacies. These findings highlight the need for tailored implementation strategies focused on integration into existing work processes and involvement of pharmacist technicians and home care.

Abstract word count: 236

Introduction

Patients with impaired renal function are at increased risk for acute kidney injury (AKI) during dehydration [1]. AKI is a rapid loss in kidney function, which is identified by a reduction in urine output and elevated levels of serum creatinine. A common cause for AKI is volume depletion, which can occur due to dehydration [2]. The risk for dehydration is increased during episodes of diarrhoea, vomiting or fever, on so called '*sick days*', or due to high environmental temperatures. When a patient with impaired renal function experiences a sick day and uses certain medications (i.e. diuretics, ACE-inhibitors) that compromise renal homeostasis, the risk of AKI is increased [1].

In order to prevent AKI, several guidelines have been developed. For example, the National Institute for Health and Care Excellence (NICE) emphasizes the need to consider temporary discontinuation of medicines at times of intercurrent illness [3]. Similarly, The Dutch general practitioners (GPs) guideline suggests to consider to temporarily discontinue or halve the dose of certain medicines during periods with increased risk of dehydration. However, despite these guidelines, implementation in primary care remains difficult [4].

The National Health Service (NHS) developed a Medicine Sick Day Rules card as a part of the campaign '*Think Kidneys*', to make patients and health care professionals aware of the potential risk of AKI [5,6]. Martindale et al. [7] examined the implementation of these sick day guidance cards in primary care. It appeared that the card as a standalone intervention was not enough to prevent the harm associated with AKI, especially for patients with poor self-management skills. Further, Morris et al. [4] found that the following aspects of implementation appeared to be complex: engagement within and across services, consistency of clinical message and resources available for implementation. Thus, sick day rule implementation requires appropriate resourcing as well as customized training support for both patients and health care professionals. Faber et al. [8] found that Dutch general practitioners do not frequently advise high-risk patients to discontinue high-risk medication during sick days. Hence, more research has to be done to fully understand the barriers for implementation.

As a matter of fact, evidence suggests that only about half of the available medical and public health innovations are used in practice [9]. Guideline development has been narrowly focused on clinical practices and only slightly focused on public health practices. Implementation science studies the use of strategies to customize and use evidence-based interventions in targeted settings to sustain improvements to population health. In this way the use of evidence-based practice can be accelerated [10].

The Sick Day Rule Implementation to prevent acute Kidney injury in community-dwelling patients (SIDRIK) study aims to implement and evaluate sick day guidance in Dutch community pharmacies to prevent acute kidney injury. This study, which is part of the SIDRIK study, evaluates possible barriers that are expected and experienced by community pharmacists during the implementation of sick day guidance in primary care.

Methods

Design and setting

This study was conducted between February 2023 and June 2023. The SIDRIK study starts with a pharmacotherapeutic meeting group, where agreements are made between pharmacists and general practitioners (GPs) about the working method during the study. Afterwards, patients at risk are identified and informed about sick days and the importance of reporting them to a health care professional. When a patient reports a sick day, consultation takes place and certain medicines are temporarily adjusted until the risk of dehydration has passed.

This study was conducted in compliance with the requirements of the Institutional Review Board of the division Pharmacoepidemiology & Clinical Pharmacology, Utrecht University (reference number UPF2216).

Study population

Participants are community pharmacists involved in the SIDRIK study. The participating pharmacists were recruited in various ways, including: the UPPER newsletter, LinkedIn, *Leids Academisch Netwerk Apothekers* (LANA) and through participations in previous research. Pharmacists could take part in this study under the condition that at least one linked GP would co-operate. All pharmacists involved in the SIDRIK study were asked to take part in the context analysis interview and monthly evaluation moments.

Data collection

Interviews

Semi-structured context analysis interviews were conducted between 1-4 weeks after the pharmacotherapeutic meeting, before the actual start of the implementation. The aim of the interview was to assess the context of each setting. Three researchers conducted the context analysis interviews (TC, ES or LB) mostly in duos.

The topic guide for the context analysis interview was based on The Consolidated Framework for Implementation Research (CFIR) (see Appendix 1). CFIR provides a method to assess contextual factors that can facilitate or hinder the implementation [10].

Duration of the context analysis interview was aimed at 30-45 minutes. The participants could choose whether the interview was conducted by video-calling or face-to-face at the pharmacy.

Before the start of the interview, the participant received an informed consent form and was asked permission to record the interview.

Evaluation data

After the context analysis interview, pharmacists also took part in monthly evaluations by telephone. The first monthly evaluation was intended to get a global overview of the progress. The second evaluation was more detailed and also focused on experienced barriers for the implementation of sick day guidance. The interview guides are shown in Appendices 2 and 3.

Field notes

During the project field notes were made. These notes included short notes on interviews, evaluation moments and other contact moments with the pharmacists.

Data analysis

Interview data

The audio recordings were transcribed verbatim using Amberscript. The generated transcripts were manually verified by the researchers. Participating pharmacists were assigned a study number, which was also used in the transcript. Data analysis of the interviews was performed in NVivo (version 14) using a combination of deductive and inductive coding. The initial codebook was based on the CFIR framework. During coding, new codes were added. The first three transcripts were coded by three researchers (TC, ES and LB). After the first three transcripts, a consensus meeting was held. Hereafter, the researchers independently coded the transcripts, but consulted each other if one was unsure about which code to use. After coding, main- and subthemes were derived from the data. The themes are described in the result section with illustrative quotes.

Evaluation data

An Excel file was used to structure the barriers named during the evaluation moments. These barriers were compared to the earlier mentioned barriers in the interviews.

Field notes

In the Excel file of the evaluation data, field notes regarding the expected and experienced barriers were also tracked.

Data management

Interview data

Each participating pharmacy was assigned a research code. Research codes and personal data were linked in a key file. This file is encrypted, managed by the principal investigator and stored separately from the data. For each interview, an audio recording was made with a recording device. After the interview, the sound file (.wav file) was placed on OneDrive as soon as possible and removed from the recording device. The audio recording and the written notes were processed together in the verbatim typed transcript. If identifiable names or places were mentioned in the interviews, they were anonymised. The transcripts were then read into NVivo 14, the program used for the analysis. The sound recording, notes and transcripts were accessible to the principal investigator, the supervisors and the research students involved during the course of the research.

Evaluation data

Answers to the evaluation questions were saved on OneDrive. Notes did not include personal data.

Field notes

In the field notes document only coded data was written down.

Results

Participant characteristics

A total of 24 community pharmacies were included in the study. Characteristics of the study population are presented in Table 1.

Table 1: Characteristics of the study population

Variable	n	%
Number of participating community pharmacies	24	
Number of different pharmacotherapeutic meeting groups	13	
Number of pharmacies participating individually	6	25
Number of pharmacies situated in a health care centre	13	54
Patient is instructed to contact the:		
Pharmacy	11	46
GP	3	13
Pharmacy or GP	10	42
Average number of registered patients per pharmacy*	9643	

*3 responses missing

Expected barriers

The context analysis interviews were conducted with each of the 24 pharmacies. Duration of the interviews varied between 22 and 57 minutes, with an average duration of 33 minutes. The contact person, a community pharmacist, was present and in some settings other colleagues attended the meeting as well. During these interviews different barriers for implementation were observed.

Experienced barriers

Through monthly evaluations, various experienced barriers were identified. 17 out of 24 pharmacies (70.8%) had undergone the first monthly evaluation, while 10 out of 24 (41.7%) had completed the second monthly evaluation.

Overview of the barriers

Below, an overview of the expected and experienced barriers for implementation of sick day guidance is provided. The barriers are categorized under different topics.

Barriers related to the health care setting

During the interview, the majority of the pharmacists identified high workload as one of the biggest barriers for implementation. Several reasons were mentioned for recognizing this as a barrier.

Pharmacists indicated that there is often a staff shortage, leading to high workload.

“The workload is the biggest barrier, because we will have to inform 20, 30, 40 people. (...) There are two pharmacy technicians in the pharmacy, and that means that the information provision depends on the quiet moments. And if they can't do it, it means I have to do it, and I don't have an empty schedule either.”

(Pharmacist (Ph) 802)

Another barrier is that several pharmacies are transitioning to a different pharmacy information system. This already causes stress in the workplace, because the staff needs to learn how to use the new system. Pharmacists mentioned that the project will likely be overshadowed by this transition.

Prioritizing the project also emerged as an expected barrier. Some pharmacists stated that due to the high workload in the pharmacy, the project is something that easily gets neglected.

“ I believe the biggest factor is actually myself. It's about how to ensure that the project takes off and that the daily activities do not constantly take precedence over this project. That, in my opinion, is the biggest challenge.”

(Ph 205)

In the monthly evaluations, prioritizing the project did come forward as a barrier. Pharmacists called out on staff shortages and high workload. The exact cause was not always known by the researchers, but several reasons that came forward were: staff sickness, maternity leave, vacations or a general labour market tightness. Pharmacists mentioned that staffing shortages and high workload make it hard to prioritise the project and to find a moment to inform the patients.

Additionally, another commonly mentioned barrier in the interviews was the recognition of sick days by the other staff of the pharmacy. Pharmacists expressed concerns about the fact that without frequent repetition of the information, the pharmacy technicians may forget to provide sick day guidance. In some participating pharmacies, the role of pharmacy technicians is limited, as it is agreed that the patient should contact the GP when experiencing a sick day (See Table 1).

Alternatively, a select group of pharmacy technicians may be involved in patient education, or the

technicians may not be involved in the process at all. One of the pharmacists mentioned that when a pharmacy technician has limited involvement with sick day guidance, the information is less likely to be retained.

“ I notice that for the technicians sick day guidance is more incomprehensible, and they have the feeling that they already have to acquire a lot of knowledge. Because it is a topic they are only indirectly involved in, I think it has less impact and therefore the knowledge doesn't stick as well. Take a project like a new medicine for diabetes. They deal with that several times a week, so they become familiar with it over time. But in this case, they may not encounter it for weeks in a row, and eventually, it fades from their focus.”

(Ph 204)

Other reasons for mentioning this barrier were that there is no notification in the pharmacy information system that makes pharmacy technicians alert for sick day guidance.

Furthermore, the communication with home care facilities or nurses was often seen as a barrier. Within a region, various home care organisations can be active, making it difficult to inform all of them about sick days. Additionally, in some pharmacies, the relationships with home care organisations were not well-established, and there was a lack of easy communication channels or regular meeting moments. However, pharmacists acknowledged the important signalling role of home care and emphasized the significance of informing them about sick days.

“The home care nurse who visits these patients is the first to notice if something is different and decides whether contact with health care professionals is needed or medication changes have to be made. This was also emphasized by the general practitioners during the pharmacotherapeutic meeting. However, it can be challenging to coordinate with home care, but they are likely one of our primary signalling sources, so it is crucial to consider their input.”

(Ph 801)

Lastly, a few pharmacists mentioned the lack of confidence of GPs in the pharmacists' abilities to provide sick day guidance. Apparently, GPs find it difficult to trust the pharmacists with signalling serious situations when it comes to sick days.

"The general practitioners are reluctant to delegate work and actually have a sort of distrust, like questioning if the pharmacist can handle it. I think they will actually expect that pharmacy fails, and they will be surprised if that doesn't happen. However, the relationship is such that they have the attitude of "let her just give it a try." As with many general practitioners, there is still the notion "we can do it better, it's our job."

(Ph 802)

Additionally, during the evaluation moments it came clear that few pharmacists had communicated with the GPs about the project. Patient selection was often discussed, but that was typically the extent of it. For instance, when conducting inquiries, pharmacists often did not know whether or how the general practitioners had informed their team about the project. However, the reasons for this lack of contact are unknown.

Barriers regarding patients

The majority of pharmacists doubted whether the information about sick days would be memorized by the patients. The population consists of elderly individuals, many of whom are vulnerable patients.

"If we only call the patients once. If you're a bit older, slightly forgetful, would you still remember in two or three months to contact the pharmacy or GP when you have a sick day? I'm wondering if just one phone call is enough, or if there should perhaps be another action added to it."

(Ph 801)

Regarding the ability of patients to recognize a sick day, pharmacists responded that it will vary per patient. In addition to potential forgetfulness, some patients may misjudge the severity of a sick day, which can result in not seeking medical advice at all or seeking advice too quickly. The criteria for contacting health care professionals may not be well understood.

"People still have that mentality of "it will be fine" and "everything will work out." That's kind of the mindset of the people here, so I think that can be a barrier."

(Ph 501)

Additionally, patients may have fears and resistance towards changing their medication regimen. Some pharmacists mentioned that patients might assume their GP or hospital specialist is monitoring their medications, and they do not wish to discuss it with the pharmacist.

"Some people may not accept the pharmacists involvement and may say, "That's the doctor's responsibility."

(Ph 131)

The expected patient barriers corresponded to those experienced. Pharmacists added that patient education was more-consuming than anticipated. Some patients are unaware of their impaired renal function, requiring additional explanation besides the already comprehensive information regarding sick days. Besides, one pharmacist noted that patients tend to digress into unrelated topics, prolonging the duration of conversations beyond the planned timeframe. Other pharmacists indicated that it is difficult to explain concisely and clearly what the core message is.

Finally, a few pharmacists observed that some patients did indeed exhibit reluctance. They are resistant to medication adjustments. Some patients mentioned that they are under the care of the hospital specialist and that they have more confidence in the specialist's expertise. It was also mentioned that some patients fail to understand the purpose of sick day guidance. Pharmacists mentioned that they think this could be of impaired cognition. It is a lot of information for patients to take in.

Barriers related to research procedures

Several barriers regarding research procedures came to light. First of all, the documentation of research data emerged as a barrier. After a sick day notification, the handling process needs to be registered using a form. Several pharmacists expressed concerns about forgetting to complete these handling forms. Additionally, a lack of confidence was mentioned that when a GP handled a sick day notification, the forms would not reach the pharmacist.

"Once the patients at risk have been informed and included, the main barrier is to document the sick day notification properly so that the researchers can benefit from it. I think the advising part will take place, but documenting it is a step further. Like: where is that form again? Do I need to do something with it? And if the notification ends up with us, do we fill it out? And if the sick day notification goes to the general practitioner, how do we find out?"

While gathering information, you can expect that some things will get lost here and there. That's something you already know in advance."
(Ph 804)

Furthermore, patient selection was a barrier in certain pharmacies. A few pharmacies had limited numbers of patients who fell into the at-risk group and could be included in the study. The researchers stated a minimum of 25 patients for pharmacies to participate in the study. This barrier could also have to do with a limited number of involved GPs.

Lastly, a barrier for patients to participate in the research, according to pharmacists, primarily lies in the informed consent process. Patients' concerns arise about how their data will be used and the time commitment involved.

"Especially if they don't fully understand it themselves, they will struggle with signing something because they don't exactly know what they are signing up for."
(Ph 121)

The barrier related to the informed consent process also came forward during the monthly evaluation moments. Patients did not want to be included in the study as they did not want to share data, do not want anything to be changed about their medication or just don't feel like participating in the study.

Discussion

This study gives an overview of the expected and experienced barriers for the implementation of sick day guidance in primary care. Time constraints, staff engagement, communication with home care providers, lack of confidence from GPs and patients, and the cognitive limitations of the patients were identified as significant barriers.

It has to be noted that time related barriers are not specifically related to implementation of sick day guidance, but time is actually a prerequisite for any project. These barriers also came forward in previous implementation studies in community pharmacies [4, 7, 12, 13, 14]. The high workload in the pharmacy setting makes it challenging to find sufficient time to dedicate to the implementation of the project. This is further compounded by staff shortages and difficulties in prioritizing tasks. To overcome these challenges, it is crucial to integrate the implementation of sick day guidance with existing work processes [4, 13]. Efforts that interrupt the normal workflow may not be able to be maintained over time, even if they have shown positive effects on patient care [15]. Sick day guidance could be integrated into the workflow by taking it up in the initial dispensing counselling session or medication reviews [4].

In many settings, pharmacy technicians' involvement in sick day guidance is limited, leading to potential knowledge decay. However, they do have a signalling role as they are the ones who answer the phone, so it is important that the information is retained. When scaling up the project, it would be advisable to increase the involvement of the pharmacy technicians. Engagement of the staff facilitates implementation as it, according to Siu et al. [16], promotes social coherence and team unity. Moreover, when the entire staff is engaged, it could also facilitate a more efficient workflow [12]. Pharmacist technicians could be provided additional tasks like involvement in information provision. Furthermore, for the pharmacists it is advisable to actively remember the staff by calling it out in working meetings or through other internal channels.

Communication with home care facilities poses another significant barrier. Pharmacists consider it important to involve home care because they can play a signalling role when it comes to sick days. Sick day guidance is provided to a vulnerable population, potentially with limited cognition. This concern was also raised by Martindale et al [7]. Involving home care organisations could help provide better support for these patients. When a patient experiences a sick day, home care could contact a health care professional. Additional information meetings could be organised to educate home care providers about sick day guidance.

Additionally, according to pharmacists, some GPs have little confidence in the capabilities of pharmacists. Besides, patients themselves might also express a lack of confidence. These observations were also highlighted by Mustafa et al. [17] and Weir et al. [12]. GPs have more extensive patient records compared to pharmacists. This barrier can be difficult to overcome, because it is a matter of trust and visibility. Nevertheless, this project can be seen as an opportunity to enhance the added value and visibility of pharmacists. By taking on the role of patient education and providing sick day guidance, they can profile themselves more as health care providers.

The expected barriers closely corresponded to the experienced barriers. Although it was not mentioned in the interviews that contacting GPs would also be difficult, this did emerge from the evaluations. Cooperation of GPs and pharmacists is important for this study, as it will promote implementation. This could be achieved by holding regular meetings to evaluate the process of sick day guidance.

Furthermore, the process of informing patients proved to be more time-consuming than expected. Moreover, patients exhibited hesitancy towards medication adjustments, preferring to rely on the expertise of hospital specialists, which is in line with Martindale et al. [7]. Weir et al. [12] also identified such patient-related barriers as factors that influence implementation of innovations in community pharmacies. They found resistance to change or advice and perceiving 'pharmacists as drug suppliers only' to be hindering factors. To address the identified patient-related challenges, a concise communication guideline is needed to facilitate clear communication of the necessary information. Additionally, trust and confidence in the expertise of the pharmacists should be established. This could be done through patient education programs that emphasize the role of the pharmacists in medication management.

Strengths and limitations

The study had a large number and high diversity of participating pharmacies, yielding multiple insights. Recommendations can be provided that are broadly applicable for the implementation of sick day guidance in pharmacies in the Netherlands.

This study poses several limitations. Firstly, not every pharmacy received a second, more comprehensive monthly evaluation. As a result, only the expected barriers could be collected, not the experienced barriers. Ideally, more time should have been allowed between the start of implementation and the evaluation moments to create a better overview of the actual experienced

barriers. Moreover, only a small portion of the pharmacies had initiated patient education, limiting the visibility of patient-related barriers and the effects of sick days guidance.

Furthermore, interviews were primarily conducted in duos, but occasionally a researcher conducted an interview individually. In such cases, the interviewers could not complement each other in targeted follow-up questions. However, a semi-structured protocol was used to ensure consistent coverage of topics during interviews and to minimize interview bias. Besides, most of the coding was done individually which creates the possibility of inconsistency in the interpretation and assignment of codes to the data. This risk was limited by jointly coding the first three transcripts.

Lastly, not all evaluations involved thorough questioning or complete note-taking. Consequently, certain reasons for issues such as staff shortages remained undisclosed.

Conclusions

This study identified multiple barriers that impede the implementation of sick day guidance in community pharmacies. These findings highlight the need for tailored implementation strategies. To overcome these barriers implementation strategies for sick day guidance should consider the following aspects: integration into existing work processes, involvement of pharmacist technicians and home care, establishing steady relationships with pharmacists and GPs, and providing clear instructions for patient education.

The implementation of sick day guidance in primary care is considered of great importance. For a detailed understanding of the expected and experienced barriers, a more extensive study should be conducted. This study could also explore strategies to overcome these barriers, thereby facilitating the development of a definite implementation plan.

Funding: No funding was received for this study.

Ethical approval: This study was conducted in compliance with the requirements of the Institutional Review Board of the division Pharmacoepidemiology & Clinical Pharmacology, Utrecht University

Competing interests: The author has no competing interests to declare.

Acknowledgements: I would like to thank the participating community pharmacies for giving the opportunity to conduct this research in their setting. Besides, I like to thank my supervisors for their support.

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Appendix 1: Interview guide

[General introduction]

[Informed consent]

1. Characteristics of the setting

Characteristics of the pharmacy

1. Broad question: How would you describe the culture in your pharmacy? (Consider: beliefs about patient care, general atmosphere in the workplace, norms and values)
2. Do you think the SIDRIK project aligns with the culture of your organization?
 - a. How do you think the culture might influence the project?
3. Do you have any existing agreements regarding the safe handling of medications in patients with reduced kidney function? If yes, what are these agreements?
4. Have you had experience with previous projects in the pharmacy, with or without collaboration with other healthcare providers? If yes, what type of project was it?

Characteristics outside the pharmacy

1. Which other healthcare providers are involved in this project?
2. What is the relationship like with the other healthcare providers involved in the project? (Consider the relationship with the general practitioner, home care services)
3. To what extent do you collaborate with other healthcare providers outside your setting? (Consider general practitioners, home care services)
4. What type of information exchange do you have with them, both regarding procedures and general matters?

2. Implementation process of sick day guidance

Implementation of sick day guidance

1. According to you, what is the added value of implementing sick day guidance?
2. How do you perceive the complexity of the procedure? (Consider duration, reaching patients, number of steps, degree of adjustment to current care)
3. What do you see as the main barrier to implementing the procedure?
 - a. What are other barriers you anticipate?

5. What might assist you in executing the implementation?
6. Can the procedure be integrated into existing work processes? How do you plan to do that?
(Consider polypharmacy discussions or when patients pick up medications at the counter)
7. Who from the pharmacy will be involved in the project? (technicians, consultants)
 - a. What tasks will they be assigned?

Available resources

1. Do you feel that you have sufficient support from the SIDRIK team to effectively execute the procedure? (In terms of guidance and materials)
2. What additional materials would you like to have or receive?

3. Beliefs and goals

Process-related topics

1. What are specific goals you would like to set for this project?
2. To what extent do you monitor whether these goals will be achieved? How will you do that?
3. How will you ensure that all pharmacy staff members support the project? (Consider internal work meetings)
 - a. What barriers do you anticipate?
4. Do you have a timeline for the project rollout?
5. How will the e-learning be shared, and will it be mandatory to complete?
6. How will you ensure that healthcare providers outside the pharmacy also support the project?
 - a. What barriers do you anticipate?

Personal beliefs about the project

1. Do you believe the project will be effective? In other words, do you expect to receive sick day notifications? Why or why not?
2. How confident are you that the project can be implemented as intended in your setting? And why?

4. Patient beliefs

Patient wishes and needs

1. What barriers do you expect patients to encounter in participating in the project?
2. What could be done to address these barriers?
3. How competent do you think patients are in assessing sick days themselves?

Appendix 2: First monthly evaluation

[General introduction]

1. How far along are you in the project?
 - a. What are your most recent steps?
 - b. What are your next steps?
2. How has the project been progressing so far?
3. How is the collaboration with the involved general practitioners?
 - a. Has there been any contact after the pharmacotherapeutic meeting?
 - b. Can we provide support?
4. During the pharmacotherapeutic meeting, you made agreements regarding the procedure. Do you still have these procedures in mind, or have there been any changes in the approach? (Consider: selection, patient education, handling of notifications)
5. If you have started providing information: How patient education going?
 - a. What is going well?
 - b. What could be improved?
6. Optional: How is the collaboration with home care/nursing services going?
 - a. Can we still provide support? If so, in what way?
7. What is your intended timeline?
8. Is there anything we can support you with in the coming period?
9. Is there anything else that hasn't been discussed yet but that you would like to share?

Appendix 3: Second monthly evaluation

[General introduction]

Introduction

1. How has the project been progressing so far?
 - a. What is going well?
 - b. What can be improved?

Reach

2. How is the process of informing and including patients going?
 - a. How is the tracking of Excel forms?
3. Have you reached the selected patients you intended to reach?
 - a. What is going well?
 - b. What can be improved?
4. Are there any patients you have difficulty reaching?
 - a. Why is this the case?
 - b. How are you addressing this?
5. How is the collaboration with the involved general practitioners going?
6. Optional: How is the collaboration with home care/nursing services going?

Effectiveness

7. How are patients responding to the information provided?
8. Have there been any sick day notifications?
 - a. How did these notifications go?
9. Have any tasks been neglected or received less attention due to the time spent on this project?
 - c. Which tasks?

Adoption

10. In the contextual analysis interview, we asked about expected barriers that could make the implementation of sick day advice challenging. To what extent do these align with the actual practice?

11. Have any other barriers emerged?

12. What are the characteristics of your practice that actually facilitate the implementation?

Implementation

13. What has changed in the procedure compared to last month?

a. Why?

14. What are things you would like to do differently next month?

a. Why?

Conclusion

15. What is the plan for the coming month?

16. Is there anything we can assist you with in the upcoming period?

17. Is there anything else that hasn't been discussed that you would like to share?