



WHICH ELEMENTS OF THE ANNUAL MEDICATION CONSULTATION ARE CONSIDERED MOST EFFECTIVE BY PHARMACY TEAMS, AND HOW DO THEY INFLUENCE THE QUALITY AND SUSTAINABILITY OF THIS INTERVENTION?

Author: Marès de Ruiter

Student number: s5077346

Bachelor Research Project IIb Bachelor Pharmacy Faculty of Science and Engineering Rijksuniversiteit Groningen

Supervisor: prof. dr. ir. C.E.M.J. (Liset) van Dijk

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#### **Preface**

I feel pleased to share my bachelor's thesis: 'Which elements of the Annual Medication Consultation are considered most effective by pharmacy teams, and how do they influence the quality and sustainability of this intervention?'

This research provides insight into the experiences and perceptions of Dutch pharmacy teams regarding the Annual Medication Consultation, and it provides insight into how this intervention can be successfully implemented on a routine basis in pharmacies. I have written this thesis for my Pharmacy Bachelor at the University of Groningen, from April 2025 to June 2025.

I would like to thank prof. dr. ir. C.E.M.J. (Liset) van Dijk for supervision of this research. Furthermore, special thanks to Nivel for their support throughout this research process.

Marès de Ruiter

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#### **Abstract**

Background and objective: In recent years, pharmacists have taken on a more active role in promoting safe and effective medication use. One such innovation is the Annual Medication Consultation (AMC), a low-threshold intervention aimed at improving medication adherence. As part of the ZonMw STIP-4 programme, three regional living labs have explored the implementation of the AMC in daily practice. Despite promising results, little is known about which elements of the consultation contribute most to its success and long-term sustainability. The aim of this study was to explore which elements of the Annual Medication Consultation are considered most effective by pharmacy teams, and how these elements influence the quality and sustainability of this intervention. Insights from this research will contribute to the development of a national toolbox to support broader implementation of this intervention across Dutch pharmacies.

Method: This qualitative study used semi-structured interviews with open questions to explore which elements of the AMC are considered most effective by pharmacy teams, and which factors support or hinder its sustainable implementation. Ten participants — including pharmacists, pharmacy technicians, a pharmaceutical consultant, and a medication reviewer — were included in this study. Interviews were transcribed and analyzed using inductive thematic analysis.

Results: Stakeholders with prior implementation experience emphasized that the AMC fosters patient-pharmacy interaction, improves adherence, and strengthens the pharmacy's professional role. Key enabling factors included team training, clear ICT guidance, patient selection and structured scheduling. However, barriers such as staff shortages, lack of reimbursement, and low patient response were reported. A complete, practical toolbox was considered essential for sustainable implementation. Stakeholders without implementation experience anticipated similar benefits and highlighted the need for simple, structured support tools, including example materials, consultation guidance, and reimbursement. However, context-specific adjustments may be necessary to the proposed toolbox elements, including a risk assessment, a kick-off presentation, communication materials for the pharmacy team, conversation support tools, and sample invitation texts for patients, among others.

Conclusion: This study demonstrates that several elements are crucial for the effective and sustainable implementation of the AMC. Key factors include structured appointment scheduling, team engagement, a clear conversation protocol, and the targeted selection of suitable patients. Communication training plays a central role in ensuring consultation quality and boosting staff confidence. ICT-readiness, such as integration into existing pharmacy software, use of Track & Trace systems, and proper documentation, is equally important. A complete and user-friendly toolbox can facilitate implementation and encourage broader adoption of the AMC. However, long-term sustainability depends heavily on structural reimbursement. Without financial support, the AMC remains vulnerable to disruption, particularly during periods of staff shortage or high workload.

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#### 1. Introduction

In modern pharmaceutical care, the focus is shifting from simply dispensing medications to actively supporting patients in the proper and consistent use of their treatments. In recent years, efforts have been made to expand the healthcare functions of pharmacies, with medication reviews being one of the most widely recognized interventions [1]. In addition, research has shown that the integration of clinical pharmacists into general practice teams can significantly improve medication safety [2]. Building on this development, the Annual Medication Consultation (AMC) has recently been introduced as a new intervention to further strengthen the role of the pharmacy in patient care. The Annual Medication Consultation is an annually scheduled review of a patient's medication use that takes place in the pharmacy and is conducted by pharmacy technicians. Each consultation takes approximately 15 to 20 minutes [3]. These consultations offer the opportunity to discuss adherence, side effects, or concerns. The consultation aims to optimize treatment, based on both the individual needs of the patient and their personal circumstances. The AMC is conducted among patients that use medication chronically. The main goal is to improve medication use including medication adherence. The World Health Organization (WHO) defines medication adherence as "the degree to which the person's behavior corresponds with the agreed recommendations from a health care provider." [4] Furthermore, the consultation is thought to foster a bond of trust between the pharmacy and the patient [3]. The use of a private consultation room reinforces the patient's sense of personal attention and care. Besides, patients who are unable to visit the pharmacy in person can also receive the consultation by telephone. To support the consultation, patients may be asked to bring all their medications to the pharmacy, allowing the pharmacy technicians to gain a clearer understanding of their adherence. Important aspects are documented in the electronic patient record after the consultation. Lastly, the interaction between pharmacists and general practitioners is highly valued in implementation of the Annual Medication Consultation, through pharmacotherapy meetings (FTOs).

Medication reviews and the Annual Medication Consultations have several features in common. Both are meant to discuss medication with chronic medication users, and both can lead to follow-up actions. Still, medication reviews and the Annual Medication Consultation are two fundamentally different types of interventions, each with its own purpose and focus. Medication reviews thoroughly evaluate pharmacotherapy against clinical standards, often leading to therapeutic adjustments [5]. Also, medication reviews are widely implemented. However, even when interventions such as medication reviews prove effective in controlled settings, their scalability to routine care remains a major challenge. Hogervorst et al. [6] aimed to explore which factors influence the scalability of medication adherence interventions for patients using medication for cardiovascular disease. While many interventions are effective in controlled trials, they often fail to be implemented on a broader scale in real-world settings. Six critical domains that influence whether adherence interventions – like medication reviews or Annual Medication Consultations – can be upscaled successfully, were identified: complexity, training, customization, driving force, technical infrastructure, and stakeholder involvement [6]. In contrast to medication reviews, the Annual Medication Consultation has just recently been introduced and serves as a low-threshold intervention, designed to proactively explore practical issues that patients may encounter in medication use [5]. After the Annual Medication Consultation, follow-up actions may be taken, if necessary, such as initiating the more extensive medication review or enrolling the patient in a repeat prescription service [3]. While the medication review focuses on the therapy, the conversation in the Annual Medication Consultation is more flexible in the directions it can take, depending on the patient's individual needs and concerns. Currently, there is no established reimbursement or tariff for pharmacies to claim the Annual Medication Consultation from insurers [3].

Pharmaceutical care in modern healthcare does not only focus on the medication itself, but also on how patients take their medication and on adherence. Poor medication adherence can have serious consequences, including higher hospitalization rates and increased healthcare costs. Therefore, adherence-enhancing interventions such as the Annual Medication Consultation can be highly effective [7]. However, several barriers, such as lack of communication skills of pharmacy technicians, time constraints, or low patient responses may hinder successful implementation. Therefore, these barriers must be overcome. Addressing these may support pharmacy teams in integrating the Annual Medication Consultation into their own pharmacy. Furthermore, beyond initial implementation, a deeper understanding of the factors that contribute to long-term sustainability of the consultations is essential. This ensures that it does not remain a temporary project but becomes embedded in routine care instead. To address this issue, the Dutch funding organization ZonMw launched the STIP-4 programme, which aimed to support the real-world implementation of proven adherence-enhancing interventions.

#### 1.1 ZonMw

The Dutch national organization that funds health research and stimulates the implementation of evidence-based innovations in healthcare, ZonMw, operates among others under the authority of the Ministry of Health, Welfare, and Sport (VWS) and the Dutch Research Council (NWO). ZonMw collaborates with a broad range of partners, including policymakers, citizens and experts, researchers, and many more. Their work is centered around three core activities: programming and funding, connecting and translating into practice, and identifying and setting agendas [8].

#### 1.2 STIP-4

STIP-4 (Stimulering Toepassing In de Praktijk—Ronde 4) is a funding programme by ZonMw. Within the GGG programme (Goed Gebruik Geneesmiddelen), STIP-4 supports projects that aim to tackle broadly acknowledged problems within healthcare practice and does so in the form of living labs. These living labs contribute to the implementation of interventions for pressing challenges experienced in daily care. STIP-4 focuses on promoting medication adherence [9]. The Annual Medication Consultation is an intervention that aligns with STIP-4's objectives, as it seeks to enhance medication adherence and to provide more patient-centered care by embedding structured consultations into daily pharmacy practice.

#### 1.3 Make-It Consortium

Although many adherence-enhancing interventions have shown effectiveness in research settings, their integration into daily pharmacy practice remains limited. The Make-It consortium was formed as a part of the ZonMw STIP-4 programme and aims to successfully implement accessible medication adherence-enhancing interventions. The consortium consists of a group of researchers and is led by Nivel, Netherlands institute for health services research. It supports from project proposal to completion [10]. The Make-It Consortium supported eight living labs in the Netherlands to implement such interventions, including the Annual Medication Consultation for patients using chronic medication in Amersfoort, Friesland and Vleuten/Leiden. Each lab measured Patient-Reported Outcome Measures (PROMs), such as adherence, beliefs about medicines, and patient satisfaction [11].

#### 1.4 Living lab Amersfoort

Amersfoort was the first region to implement the Annual Medication Consultation, starting in 2020. This living lab focused on patients using the repeat prescription service. Members of an existing patient panel were given the opportunity to provide input on the optimal implementation of the Annual Medication Consultation. The panel was intentionally composed

to reflect societal diversity, including highly educated individuals, patients with a migration background, those with low literacy, and individuals with limited health literacy. The project was led by a pharmacist at Apotheek Orion Amersfoort [12]. Pharmacy technicians received training through a PAOFarmacie course, which focuses on discussing and promoting treatment adherence [13]. Unlike the other living labs, patients prepared for the Annual Medication Consultation in advance. This element was not maintained in the other living labs. The effectivity of this intervention regarding to medication adherence was evaluated for users of Direct-acting Oral Coagulants (DOACs). As a result, a significant increase in medication adherence among patients participating in the Annual Medication Consultation could be measured [14].

#### 1.5 Living lab Vleuten/Leiden

The living lab Vleuten/Leiden was led by a pharmacist as well. Pharmacy technicians participated in a team training that focused on improvement of consultation skills, offered by SIR (Institute for Pharmacy Practice and Policy). The implementation of the Annual Medication Consultation in this living lab began with so-called early adopters: at each location, two pharmacy technicians and one pharmacist initiated this intervention. After the initial phase proved successful, the remaining members of the pharmacy team followed the training and were integrated into the implementation process [15]. Living lab Vleuten/Leiden focuses on patients who make use of the repeat prescription service.

#### 1.6 Living lab Friesland

The living lab in Friesland includes the pharmacies De Drie Stellingen and Pharmium Apotheken, where two pharmacists serve as the project leads. As part of their implementation of the Annual Medication Consultation, the pharmacies invited patients who were chronic medication users. However, patients using a medication roll were excluded from this population since the pharmacy staff has contact with these patients frequently due to regular adjustments to their medication roll, making additional consultations less necessary within this group. The pharmacy team was trained by a mentalization training that focuses on how to respond to emotions, and how that influences the interaction between the patient and the pharmacy technician. The pharmacy technicians learn to enter conversations with an open and non-biased mindset. Therefore, they do not prepare extensively in advance [3].

An overview of the three living labs and their characteristics can be observed in table 1.

Table 1: Overview of the living labs Amersfoort, Vleuten/Leiden, and Friesland, including the healthcare professionals involved and their patient population.

Living lab	Healthcare professionals	Patient population
Amersfoort	Three community pharmacies and collaborating general practitioners	Patients who make use of the repeat prescription service
Vleuten/Leiden	Fourteen community pharmacies and collaborating general practitioners	Patients who make use of the repeat prescription service
Friesland	Two groups of community pharmacies and collaborating general practitioners	All patients who use medication chronically

#### 1.7 Research objectives

Despite the growing implementation in the living labs, there is still limited understanding of which elements within the Annual Medication Consultation contribute most effectively to success. This thesis addresses the research question: Which elements of the Annual Medication Consultation are considered most effective by pharmacy teams, and how do they influence the quality and sustainability of this intervention? This question provides insight into the experiences and perceptions of stakeholders, including pharmacists, pharmacy technicians, pharmaceutical consultants, and medication reviewers. This research also provides insight into how the Annual Medication Consultation can be successfully implemented on a routine basis in Dutch community pharmacies.

#### 1.8 Aim

This study aims to identify key components – which will form part of a toolbox – as well as the factors that influence long-term sustainability and any practical barriers. The living labs serve as a foundation for the development of a comprehensive toolbox that enables structured implementation and scaling the Annual Medication Consultation up to other pharmacies.

#### 2. Methods

#### 2.1 Study design

This study uses a qualitative design to investigate which elements of the Annual Medication Consultation (AMC) are perceived as most effective by pharmacy teams, and to identify factors that influence successful implementation and long-term sustainability in Dutch pharmacies.

The first part of this project was to refine the Annual Medication Consultation implementation toolbox. The first draft of the toolbox was created by the three living labs, and contained materials such as templates, instructions, and posters. However, it lacked a clear structure. The goal of the refinement process was to improve its usability by reorganizing the content and enhancing clarity, particularly for pharmacy teams who are unfamiliar with the Annual Medication Consultation. Once the toolbox was restructured, its content became clearer and easier to navigate. Therefore, this provided a solid foundation for the next step in this study: conducting interviews with stakeholders.

#### 2.2 Participant selection

Two groups of participants were selected using purposive sampling to ensure a range of perspectives:

- 1. Healthcare professionals who have already implemented the Annual Medication Consultation (i.e. from living labs, among others).
- 2. Healthcare professionals who are interested in implementing the Annual Medication Consultation, and who have no prior experience.

This approach allowed the study to include both experienced and prospective users of the intervention. Participants included pharmacists, pharmaceutical consultants, medication reviewers, and pharmacy technicians. A total of ten participants were involved in this study. Participants with experience could reflect on practical challenges and lessons learned, while those without experience provided insight into expectations, perceived barriers, and support needs prior to implementation. The inclusion of both perspectives in this study contributed to the development of a more comprehensive implementation toolbox.

Participants for the interviews were recruited via contact details provided by professionals involved in the living labs or by researchers from Nivel. In addition, an open call was posted on LinkedIn, so that interested stakeholders could reach out voluntarily.

#### 2.3 Data collection

Data were collected through semi-structured interviews, consisting of open-ended questions. Interviews explored topics such as: experiences with the Annual Medication Consultation, crucial supporting elements that healthcare professionals require for implementation, team training, barriers for implementation, and suggestions for improvement. Interviews were conducted individually. The audio fragments were transcribed with each participant's consent. To support contextual understanding, the PRISMA symposium hosted by the KNMP was helpful. In addition, two Nivel-researchers contributed to this project by providing feedback on the interview questions. The first interview was conducted with a pharmacist from one of the living labs, both to collect data and to assess the completeness and clarity of the interview questions.

Tables 2a and 2b provide an overview of the main- and subtopics of the interview questions.

*Table 2a: Overview of the main- and subtopics of the interviews from respondents who have prior implementation experience.* 

Main topics	Subtopics
Experiences and Perceptions	Lessons learned, added value, essential elements,
	insight into medication use, bond of trust,
	addressing emotions
Team training	Type of training, consultation skills, helpful/
	missing elements within the training
Toolbox	Essential elements/missing elements
Implementation	Challenges, routine care, external communication
Future improvements and Scalability	Sustainable implementation requirements,
	challenges, advice, scalability requirements

*Table 2b: Overview of the main- and subtopics of the interviews from respondents who have no prior implementation experience.* 

Main topics	Subtopics
Perceptions	Added value, implementation challenges/support
Toolbox (& example elements)	Expectations, essential elements, elements that are already included
Future	Implementation support by a toolbox, toolbox suggestions

The full sets of interview questions are to be found in appendix A. Importantly, separate sets of interview questions were developed for different groups of participants: one for pharmacists with prior implementation experience, one for pharmacists without prior implementation experience, and one for other stakeholders (pharmacy technicians, pharmaceutical consultants, medication reviewers) without prior implementation experience.

#### 2.4 Data analysis

Interviews were transcribed and analyzed using inductive thematic analysis, a qualitative method that is used for identifying, analyzing, and reporting patterns or themes within data. This inductive approach allows insights to emerge directly from the data, without influence from existing theoretical frameworks.

#### 3. Results

Table 3 provides an overview of the respondents, their professional roles, and whether or not they had prior experience with the intervention.

*Table 3: Overview of participants of the interviews, their professional roles, and their experience with implementing the Annual Medication Consultation.* 

Respondent 1	Pharmacist	Experienced
Respondent 2	Pharmacy technician	Non-experienced
Respondent 3	Pharmacist	Experienced
Respondent 4	Pharmaceutical consultant	Non-experienced
Respondent 5	Hospital pharmacist	Non-experienced
Respondent 6	Pharmacist (intern)	Experienced
Respondent 7	Medication reviewer	Non-experienced
Respondent 8	Pharmacist	Non-experienced
Respondent 9	Pharmacist	Experienced
Respondent 10	Pharmacist	Non-experienced

Although respondent 6 had prior implementation experience, the interview was conducted using the question set designed for pharmacists without prior implementation experience. This decision was based on the fact that the respondent had not made use of implementation elements, while the other experienced interviewees did make use of it. As a result, the questions aimed at non-experienced participants were deemed more appropriate for exploring the perspective of respondent 6.

# 3.1 Perspectives from stakeholders with practical implementation experience of the Annual Medication Consultation

Pharmacists from three early-adopting pharmacies, including two pharmacists from the living labs Vleuten/Leiden and Friesland, shared their experiences with implementing the Annual Medication Consultation.

#### 3.1.1 Lessons learned following implementation of the Annual Medication Consultation

An important lesson learned was the need for controlled appointment scheduling. In one of the implementing pharmacies, the agenda was initially left open for patients to freely select a time slot. This accidentally resulted in multiple consultations scheduled on the same day. Based on this, the pharmacy adjusted the scheduling process to better distribute the consultations. Furthermore, two respondents advised not to start or schedule consultations during periods with many public holidays or staff absences, as it disrupts continuity. On top of that, one respondent emphasized that restarting the intervention was challenging, and that persistence is essential. Additionally, the team started each day by reviewing the number of scheduled consultations and determining which pharmacy technician would conduct the consultations. Another respondent mentioned that many patients independently choose a fixed time to take their medication. As a result, the pharmacy team now asks patients about their preferred intake moment during the first dispense, so that this information can be added to the label of the medication for both adherence support and clarity. Besides, some patients were unnecessarily dividing their medications in multiple phases throughout the day, even though simultaneous intake was clinically acceptable. This insight led to increased attention to help patients simplify their intake routines. Yet another respondent identified the challenge of selecting the right patients for the Annual Medication Consultation, compared to a medication review. This interviewee recommends distinguishing potential patients for each intervention. "Some patients would genuinely benefit from the Annual Medication Consultation, while other patients require deeper clinical assessment, such as a medication review" – Respondent 6.

#### 3.1.2 Impact of the Annual Medication Consultation on pharmacy staff and patients

All respondents with experience with the AMC noted that it is a good opportunity to connect or reconnect with patients about their medication use. In some cases, patients may go years without speaking to a healthcare provider about their treatment. The Annual Medication Consultation addresses this problem. One example is that many patients from the repeat prescription service pick up their medication from medication lockers, making personal interaction difficult. The consultation allows the pharmacy to re-engage with this group of patients. The intervention thus strengthens the professional role of the pharmacy and fills the communication gap between patients and healthcare professionals. Furthermore, as one respondent stressed patients like to have a moment to discuss their medication use. A new intervention such as the Annual Medication Consultation introduces greater variety into the daily work of pharmacy technicians as one respondent noted. At the same time, it allows pharmacy staff to gain a better understanding of their patients, increasing the quality of personalized care. Thus, the AMC helps to improve their medication intake. In addition, patients are more likely to return with questions, often remembering the staff member they previously spoke with. This strengthens the pharmacy's ability to provide patient care. Besides, the AMC is seen as an opportunity to improve adherence. "In cases where medication seems ineffective, adjustments to dosage or treatment regimens are frequently made. However, non-adherence may be the actual cause of therapeutic failure. Enhancing adherence thus contributes to more efficient pharmaceutical *care*." – respondent 3.

#### 3.1.3 Essential elements to conduct the Annual Medication Consultation with effective results

When asked for essential elements to conduct the AMC, respondents came up with a variety of answers. One respondent stressed that financial compensation is a key element for continuing the Annual Medication Consultation, as time spent on consultations limits the time for other reimbursed aspects. Therefore, the respondent claims that sustainability is difficult without funding. The same respondent pointed out that integration of the AMC-software into existing pharmacy software would also greatly improve the efficiency. Other respondents provided arguments more related to the patient-pharmacy relationship. One respondent stressed that having the conversation about adherence with the patient asks for an open mind and thus preparation was limited. This respondent stressed the importance of documenting information after the consultation, so that after a year, when the patient returns, the pharmacy technician can read notes from the previous consultation to evaluate whether problems have been resolved. Another respondent argued that building a relationship with the patient was the most important aspect of the AMC. Significant effort was invested in training the pharmacy technicians with a training about mentalization, encouraging an open mindset during consultations, as well as patient engagement: "It is not about the exact words that you use, you can feel someone's intention." - respondent 9. One respondent recommended identifying non-adherent patients in advance (ZZ-rule) to allow targeted inclusion of these patients in the Annual Medication Consultation.

#### 3.1.4 Patients' insight into medication use

Respondents participating in this study work in different neighborhoods. One respondent is based in an area where many patients have limited health literacy. As a result, patients in this setting often have little understanding of their medication. Therefore, the AMC offers an opportunity to have a conversation with a pharmacy technician that would otherwise not take

place. However, this respondent states that actual changes in medication insight are difficult to measure on short term. In contrast, another respondent pointed out that their pharmacy is located in a wealthy and high-educated area. As result, many patients demonstrate strong medication insight and actively monitor their health. Two respondents mentioned that, while many patients have a clear understanding of their medication, others are less aware and uncertain about the purpose of their treatment. This latter group tended to continue medication indefinitely without questioning it and showed less trust in the pharmacy, especially when their advice differed from what the general practitioner had said. One of these respondents also emphasized that differences in medication insight are closely linked to patients' educational background and health literacy. However, one respondent highlighted that clear differences in patients' medication insight could be observed.

#### 3.1.5 Bond of trust

Building a trustworthy relationship with patients is one of the aims of the AMC. Although trust was not directly measured, the pharmacy team perceived that patients seemed more inclined to approach the pharmacy for questions or concerns, indicating a strengthened sense of trust and accessibility. One respondent also noted that pharmacy technicians noticed a stronger bond of trust with patients following the implementation of the AMC. This experience was similar to previous improvements in trust observed during medication reviews, indicating that structured one-on-one conversations contribute positively to the patient-pharmacy relationship. However, another respondent expressed uncertainty about whether the AMC strengthened the relationship with patients. While the intention was to offer the consultation annually, the pharmacy was unable to sustain it for a full year. As a result, no follow-up appointments were conducted, which may have affected patient trust. However, the same respondent stated that conducting the consultations in a private consultation room allowed for a calm and focused environment, signaling to patients that time and attention were being dedicated to their care, gaining a bond of trust.

#### 3.1.6 Addressing emotions

It was noted that strong emotions rarely occur during consultations. In addition, one respondent could not recall many emotional situations during the consultation, as the consultations had taken place some time ago. However, respondents stated that, when emotions arise, pharmacy technicians are well equipped to handle them, as they are used to encounter emotions at the pharmacy counter as well. Furthermore, an interviewee emphasized that pharmacy technicians were encouraged not to settle with superficial answers when emotions arise, as emotions can be an inherent part of these consultations. By asking follow-up questions, deeper concerns or underlying issues can often be uncovered.

#### 3.1.7 Team training for consultation skills improvement

Three respondents mentioned that their pharmacy teams participated in a consultation training tailored to the AMC, of which two respondents mentioned that the training improved the practical consultation skills of the pharmacy technicians. Furthermore, it was highlighted that such a training helps to build confidence among staff in how to approach and formulate questions during the consultations. The overall experience with training was positive among the respondents. However, one respondent noted that individual differences remained, with some pharmacy technicians being more proactive and confident than others. Besides, a respondent stated that a training is particularly effective for patients who do not feel confident in conducting the AMC. Interviewees also highlighted that different training approaches may work for different settings. Common elements in a training include role-playing, which was mentioned as an effective method to prepare staff for real patient interactions, as well as case discussions, and structured guidance questions during consultations. Moreover, it was

recommended to record consultations for pharmacy technicians to reflect on their communication approaches. Although no major shortcomings were identified within the training, one respondent suggested that an additional training that focuses on communication with patients with limited health literacy could be beneficial.

#### 3.1.8 Toolbox: essential elements to include

Respondents emphasized the need for clear ICT instructions and step-by-step implementation support through a toolbox. Ready-to-use templates and guidance that can be adapted to the local setting would significantly reduce the workload for other pharmacies and support smoother implementation. According to one respondent, the toolbox would ideally offer integration within the software system of the pharmacy, in which patients can schedule their own appointments. Importantly, early team involvement and clear leadership is essential when implementing the AMC. All four respondents used a broad set of tools to support implementation, including FTO meetings, newsletters and posters, narrowcasting, and a manual for Track & Trace systems to send appointment invitations, and recommended including these elements in the toolbox. One respondent emphasized the importance of a document on factors for success and implementation barriers. Besides, this interviewee highlighted the importance of a consultation protocol for step-by-step conversation guidance. Lastly, training materials and defined expectations of the consultations were also considered essential.

#### 3.1.9 Implementation challenges

All four respondents discussed various challenges encountered during the implementation of the AMC. While two respondents pointed out that the AMC is seen as a daily practice within the pharmacy, one respondent mentioned that it is still perceived as an additional task. However, the latter respondent emphasized that interventions as such require many years to become a standard practice. Another respondent claimed that the AMC was initially part of the pharmacy's daily routine, but that implementation gradually declined after external support by SIR had ended. Moreover, an interviewee highlighted that patients' response rates were initially low, which led the pharmacy to increase the number of patients invited for the consultations. It was also noted that additional barriers included reaching patients who use home delivery services or medication pickup lockers, as well as those with limited digital skills or without email addresses. Multilingual communication might become another challenge when scaling up the AMC, as well as staff shortage. One respondent pointed out that the Annual Medication Consultation should not turn into a medication review. They highlighted that, in cases where more in-depth discussion or evaluation is needed, a medication review could be scheduled as a follow-up appointment. Besides, all ICT-related aspects should be arranged before starting to make implementation more feasible. Another respondent mentioned that technical difficulties occurred with the online agenda. However, the 'mijngezondheid.net' platform offered an alternative, though not all patients utilized this platform. Most respondents also mentioned that general practitioners were informed in advance via an FTO to make implementation easier, of which outcomes were positive.

# 3.1.10 Preconditions for effective and sustainable implementation, and advice for other pharmacies that want to implement the Annual Medication Consultation

A toolbox will be required to scale the AMC to other pharmacies, as well as reimbursement. Respondent 3 specifically described the need for a shift in reimbursement models: "Pharmacies should be compensated for providing care rather than for volume of medication dispensed." Besides that, an interviewee mentioned that endorsement by the KNMP might be valuable to enable broader implementation. Another respondent gives the advice not to overthink potential obstacles, and to have a trial-and-error mindset. Pharmacies should start by training their team and should evaluate frequently. On top of that, it was also suggested to regularly check whether

the process is still running smoothly, especially the ICT-systems. For the implementation process, it is advised to start small and to scale gradually. Team engagement and leadership will be key elements for sustainability. However, certain patient groups require more effort to bring into the pharmacy for a consultation. Therefore, additional efforts may be necessary to ensure their participation. For the future, one respondent suggested that the use of AI – such as a chatbot to answer patient-specific questions – could support medication adherence and reduce the pharmacy's workload. When this chatbot is unable to assist, patients can be referred to a pharmacy technician. During times that implementation is stable, thematic approaches can be explored, such as focusing on diabetes or COPD for a certain period. Lastly, interviewees expressed their concern about staff shortages affecting the ability to sustainably conduct the AMC.

# 3.2 Insights into the expected value and implementation needs of the Annual Medication Consultation from stakeholders with no prior implementation experience.

The interviews with stakeholders who have not yet implemented the Annual Medication Consultation revealed that they expect the consultations to offer several key benefits for their patients.

# 3.2.1 Perceived benefits of the Annual Medication Consultation for both the individual patient and the pharmacy team

All respondents believed that the AMC enhances the professional satisfaction of the pharmacy technicians by shifting the focus from administrative, logistic and reimbursement-related tasks toward meaningful patient-centered care, creating increased visibility of the pharmacy as care provider. Respondent 8 mentioned: "Even when less enjoyable topics arise, the overall interaction becomes more positive for both staff and patients." Personal attention is one of the main benefits of the AMC for patients. Elaborating on this, the AMC creates a private moment for patients to ask questions. This reduces the barriers of patients who might hesitate to raise concerns at the pharmacy counter due to pressure of other waiting customers. Overall, the respondents note that the AMC provides a valuable opportunity to check patients' medication adherence, but also to discuss potential side effects. Furthermore, one respondent suggested that the consultation might also be a good opportunity for deprescribing. Another respondent highlighted that the added value of the AMC depends on the patient group; for those using chronic medication, discussing adherence annually is expected to bring significant benefits. As a result, patients may be more likely to approach the pharmacy for other health concerns.

# 3.2.2 Challenges for implementation of the Annual Medication Consultation and suggestions for supporting elements to overcome these challenges

According to the interviewees, time constraints will form a key barrier for implementation, leading to scheduling difficulties. However, one of these respondents elaborates on this by suggesting to focus on patients who benefit most. This could be supported by a tool that provides pop-up suggestions for suitable interventions per patient. This tool should also highlight relevant prompts based on specific medications to support pharmacy technicians during the consultations. Another interviewee states that communication skills of pharmacy technicians might be a practical barrier during implementation as they are trained for more directive, one-way interactions rather than open dialogues. Therefore, example consultations might give support by providing conversation examples that illustrate how to uncover issues such as medication holidays, forgetfulness, or confusion. Furthermore, three respondents stressed the importance of reimbursement, since lack of financial compensation might hinder

successful implementation. One of these respondents argues that even pharmacy students could carry out the AMC with proper instructions, reducing financial costs, although reimbursement will still be crucial for sustainable implementation. In addition, varying levels of motivation among pharmacy technicians could be a practical barrier within the implementation process, as some pharmacy technicians might be enthusiastic, while others show less interest. Therefore, it is advisable that those who are best suited to the intervention conduct the consultations. Team support was furthermore considered essential for sustainable implementation, while proper documentation was mentioned as another key challenge that requires attention.

#### 3.2.3 Expectations of a toolbox and essential elements to include

Firstly, the toolbox is expected to include training resources for pharmacy technicians. One of the respondents mentioned that training would not only enhance consultation quality, but that it also serves as a strong signal to health insurers that the consultations are conducted by qualified staff. The toolbox should function as a 'structured project package', including invitation templates, as well as posters, or flyers for patients. Several respondents emphasized the importance of practical and accessible guidance within the toolbox. One mentioned the need for a clear guide on patient selection, while others suggested including consultation guides with example conversations for extra support during consultations, as well as for phone calls. In addition, the toolbox should be written in simple and accessible language to ensure that it is user-friendly for all pharmacy technicians. To support a smoother implementation process, a checklist might be beneficial to guide pharmacy staff step-by-step. Besides, one interviewee recommended including FTO materials and additional tips for successful implementation. Since there is no reimbursement yet, a financial overview could be beneficial to clarify the cost implication of AMC implementation.

#### 3.2.4 Toolbox elements

Several suggestions for possible toolbox elements were presented to the respondents without implementation experience, including a risk assessment, a document on strategy (factors of success and barriers), a kick-off presentation and communication materials for the pharmacy team, conversation support tools (SIR/TRIAGE), sample invitation texts for patients (email, Track & Trace, and texts at the pharmacy counter), instructions for ICT setup (Microsoft Bookings), and materials for patients (newsletters, posters, website texts) and healthcare professionals (FTO materials). All six respondents supported the inclusion of all these elements in the toolbox, with two exceptions. One respondent questioned the added value of the risk assessment, noting that similar assessments are already routinely conducted for other projects. Another, working in an outpatient pharmacy, indicated that sample invitation texts will not be applicable in their setting.

#### 3.2.5 Future perspectives and suggestions

In general, all respondents expressed their confidence in the potential of the toolbox to support faster implementation. However, one interviewee indicated that, although they are now familiar with the concept of the toolbox, they remain uncertain about whether the materials will be sufficient to support successful implementation of the AMC. Furthermore, additional organizational factors (beyond the toolbox itself, such as staff capacity or team motivation) need to be addressed to ensure successful implementation. One respondent believed that, once the toolbox is available, many pharmacies would be willing to start implementing the AMC, while another respondent addressed that convincing pharmacists of starting the implementation process would remain a major challenge. Suggestions include integration of the AMC into NControl-software to enhance workflow, as well as inviting patients over the phone instead of via a Track & Trace message. Another respondent suggests to offer boundaries, such as time limits for consultations, decreasing the risk for time constraints. To keep the toolbox as simple

and user-friendly as possible, it should include short documents, clear and concise manuals, and a one-page summary outlining the expectations for pharmacy staff. Furthermore, including prompts tailored to specific medications could support pharmacy technicians in conducting more focused and relevant consultations. Consistent consultation quality can be ensured by including a consultation protocol.

#### 4. Discussion

#### 4.1 Summary

This study included interviews with ten stakeholders, including pharmacists, pharmacy technicians, a pharmaceutical consultant, and a medication reviewer, with and without prior experience in implementing the Annual Medication Consultation.

#### 4.1.1 Respondents with prior implementation experience

The AMC is believed to bridge communication gaps by offering patients (including those with limited pharmacy interaction) a dedicated moment to discuss their medication use. It improves adherence, enhances patient care, and strengthens the pharmacy's professional role. The intervention also brings more variety and patient insight into the daily work of pharmacy staff.

Key factors for effective implementation include financial compensation, integration of AMC-related software into existing pharmacy systems, and minimal (but purposeful) preparation. Controlled appointment scheduling and the pre-selection of non-adherent patients were also seen as essential to ensure efficient workflow and meaningful consultations. However, these factors must be considered alongside several practical challenges. Pharmacies reported difficulties in organizing workflows, addressing ICT-related issues, and coping with staff shortages. In addition, low patient response rates, scheduling disruptions during holiday periods, and difficulties reaching patients with limited digital skills or language proficiency further complicated implementation. While some pharmacies successfully integrated the AMC into daily practice, implementation might decline after external project support ended. Furthermore, interviewees recommended involving general practitioners (GPs) through FTOs, especially when follow-up actions are needed, including referral to a patient's GP.

Despite short-term effects being hard to measure, the AMC is considered to be a valuable moment for deeper conversations about medication use. Patients' medication insight varies, often influenced by education level and health literacy. While some patients demonstrated strong awareness and active involvement, others lacked understanding or interest and showed less trust in the pharmacy. As such, the AMC can help to strengthen trust between patients and pharmacy staff. While not formally measured, patients appeared more likely to ask questions or share concerns. Conducting the consultations in a private setting and using a structured approach contributed to a sense of professionalism and personal attention, including being prepared for emotions. Albeit emotions were generally rare during the consultations, pharmacy technicians were considered well-prepared to respond appropriately, drawing on their experience at the pharmacy counter. Importantly, emotional cues should not be ignored as follow-up questions might uncover deeper concerns when emotions arise.

Training was considered essential to prepare pharmacy technicians for the AMC. Respondents mentioned that a tailored consultation training, including role-playing and feedback sessions, helped to build skills and confidence, though individual differences remained. Trainings were seen as sufficient, but one respondent noted the need for additional focus on communication with patients with limited literacy.

Respondents emphasized that the toolbox should include clear ICT instructions, invitation messages via Track & Trace, consultation protocols, training materials, newsletters, and FTO materials.

Sustainable implementation of the AMC requires regular evaluation of ICT systems, strong leadership, and team training. This highlights the importance of a complete toolbox, targeted patient selection, and motivational support. A toolbox should include clear ICT instructions, invitation messages via Track & Trace, consultation protocols, training materials, newsletters, and FTO materials. Potential enablers for sustainable implementation include Reimbursement and integration of AI tools. To scale up implementation, respondents advised starting small, maintaining a trial-and-error mindset, and ensuring endorsement by professional bodies such as the KNMP.

#### 4.1.2 Respondents without prior implementation experience

Stakeholders without prior implementation experience expect the Annual Medication Consultation to improve medication adherence, provide opportunities for deprescribing, and foster more personal, barrier-free patient interactions. The AMC is also seen as a way to enhance the professional role and job satisfaction of pharmacy staff by shifting focus from logistics to patient-centered care and restoring the pharmacy's visibility as a healthcare provider. There are also some key barriers to implementing the AMC, including time constraints, lack of reimbursement, limited communication skills among pharmacy staff, and varying motivation levels within the team. Suggested enablers include targeted patient selection, supportive digital tools, example conversations, and clear task allocation. Sustainability and proper documentation were also noted as important concerns. An accredited training was seen as a valuable addition to support quality and credibility. Reimbursement across all insurers is considered an important enabler.

For non-experienced pharmacy staff members, a toolbox to support implementation of the AMC should include practical and user-friendly materials such as invitation templates, conversation support tools, training resources, and checklists. Clear protocols, implementation tips, and patient communication materials were also considered essential. Furthermore, they recommended including a risk assessment, a document on strategy (factors of success and barriers), a kick-off presentation and communication materials for the pharmacy team, instructions for ICT setup (Microsoft Bookings), and materials for patients (newsletters, posters, website texts) and healthcare professionals (FTO materials), in the toolbox. Interviewees generally expressed confidence in the toolbox's potential to support implementation, though some noted that success also depends on broader organizational factors.

### 4.2 Linking research findings to existing literature

Prinsen's work (2022) in living lab Amersfoort identified barriers and facilitators during early AMC adoption in Dutch pharmacies [16]. Firstly, it was identified that, in only a third of the consultations (36.8%), all steps of the consultation protocol were followed, which could have influenced the effectiveness of the consultations. Therefore, structured consultation protocols might be essential in supporting understanding of this intervention. However, many pharmacy technicians do not stick to the protocol in practice. Besides, Prinsen's research showed that patients might get the feeling that using a protocol is like having to finish a question rather than having an actual conversation. Furthermore, in Prinsen's research, pharmacy technicians mentioned that consultations should preferably be documented in a patient's electronic record (in keywords). Therefore, the integration of the AMC into the pharmacy's software might be essential. In general, the pharmacy technician's view on a communication training align with the results of Prinsen's research, making it a critical precondition for successful implementation. Prinsen's study also found that the AMC can be a valuable opportunity for the pharmacy to increase visibility and trust from patients, confirming the assumptions of the respondents in this study. Lastly, respondents of this study clearly emphasized time planning as a challenging implementation barrier. Prinsen's results align with this finding as it was found that it is difficult to conduct consultations next to pharmacy technician's daily work, due to high workload and staff shortage.

According to Van Eijsden's (2022) [17] work in living lab Friesland, the relevance of the AMC differs among patients, and can change over time. Furthermore, how patients are invited is highly important. Van Eijsden emphasized the need for clear invitations that explain the purpose and added value of the intervention. Also reaching patients is important, for example by handing out flyers/posters, or uploading information on pharmacy's websites. Therefore, Van Eijsden's findings align with this study, although this study adds the inclusion of texts at the pharmacy counter as well as Track & Trace email invitations, by taking a closer look at the invitation process. As Van Eijsden also found that 13.8% of the AMCs led to referral to patients' general practitioner, including FTO-materials might indeed be an essential element in this toolbox. While Prinsen's work showed limited use of the TRIAL tool by pharmacy staff, Van Eijsden's showed that the TRIAGE tool was used in 82.5% of the consultations. It thus can be concluded that the willingness of using the tool differs between pharmacy teams. To ensure that the toolbox meets the needs of all pharmacy teams, the inclusion of the TRIAGE tool will be essential. Van Eijsden stated that staff shortage is one of the main barriers for implementation. Similarly, in this study, high workload due to staff shortage was a commonly mentioned challenge. This reinforces the need for reimbursement of the AMC for successful and sustaining implementation. Fortunately, Van Eijsden found that patients were willing to attend the following consultation, taking place the next year, showing that patient interest is sufficient to support ongoing implementation.

As stated in Hogervorst et al. (2022) [6], complexity, training, customization, driving force, technical infrastructure, and stakeholder involvement were found to be key scalability domains. These findings align closely with this study. First, the AMC can be seen as a complex intervention, involving behavioral, organizational, and communication components. Training emerged as a critical factor for success, as pharmacy teams reported that training enhances consultation quality and confidence among staff. Furthermore, the need for customization to local settings was evident: pharmacies adapted implementation strategies to fit their unique patient populations. The role of a driving force was also highlighted by respondents who emphasized the importance of motivation and team engagement for sustained implementation. Besides that, technical infrastructure was frequently mentioned, including the integration of

AMC-software into existing pharmacy software systems and ICT tools such as Track & Trace or instructions on documentation. Finally, stakeholder involvement via FTO meetings was seen as crucial, especially when follow-up or referrals are needed after the consultation.

In line with Hogervorst et al. (2023) [18], external funding is an essential element for the implementation of sustainable interventions. In this study, many respondents emphasized the need for reimbursement. Hogervorst et al. (2023) states that early involvement of health insurers, policymakers, and other stakeholders is recommended, but that the inclusion of all stakeholders in pharmaceutical care is extremely challenging. In addition, Hogervorst et al. (2024) [19] found that lack of time and insufficient reimbursement remain the most significant barriers, reflecting the results of this study.

Furthermore, pharmacies are capable of delivering other types of patient care when given necessary resources such as collaboration, technology, and training [20]. Therefore, implementation of the AMC using a structured toolbox could be a valuable addition to the pharmacy's provision of patient care.

In summary, the findings of these studies confirm, deepen, and expand previous projects on AMC implementation. Effective implementation requires more than motivation, as it demands on structured tools, efficient ICT systems, training, and reimbursement, among others.

# 4.3 Strengths and limitations

This study addresses a current challenge in pharmacy care, namely the implementation of the Annual Medication Consultation to enhance the pharmacy's role in patient care by improving patients' medication adherence. The findings of this study are therefore relevant for pharmacy teams seeking to improve medication adherence through structured consultations. Findings from this study can be directly used to refine the implementation toolbox, ensuring that the results have immediate practical value and contributed to the scalability of this intervention. Another strength of this study is the diversity of participants, which included pharmacists, pharmacy technicians, a pharmaceutical consultant, and a medication reviewer, both with and without experience with the AMC. This range of perspectives provided a more comprehensive understanding of the factors that influence the implementation and perceived effectiveness of the AMC. Finally, the use of inductive thematic analysis allowed findings to emerge directly from the data, without being influenced by existing theoretical frameworks, increasing relevance of the results.

This study also has some limitations. Firstly, one potential limitation of this study is the risk of self-selection bias. Stakeholders were asked whether they wished to participate in interviews about their experience or perceptions of the Annual Medication Consultation. As a result, it might be that those with a more positive perception were more willing to participate. This may have led to an overestimation of the positive view on this intervention.

A limitation to this intervention is that it is currently largely tailored to Dutch-speaking patients, which makes it challenging to include individuals who speak other languages or who have low literacy. This limits the accessibility of this intervention to more diverse patient populations. The extent to which this presents a barrier varies across settings. In smaller towns (or rural areas), non-Dutch-speaking patients may represent only a small fraction of the patient population. However, in large cities with more diverse populations, non-native speakers might represent a significant proportion of the pharmacy's patient population. Therefore, in such settings, the language barrier may considerably limit the reach and effectiveness of this intervention, unless specific adaptations are implemented. A possibility for future research is to have a closer look on how to approach low-literacy patients and non-native speaking patients for participation in this intervention.

This study did not include patient interviews, which limits the ability to include patient perspectives on the perceived value of the AMC. However, insights into patients' perspectives on the AMC can be found in Van Eijsden's and Prinsen's research [x], which stated that a significant proportion of patients experienced benefits from the AMC, despite the fact that this was not consistently reflected in the outcomes of MARS and BMQ questionnaires.

Lastly, one of the interviews was conducted with a pharmacist working in an outpatient pharmacy. During this interview, it became clear that the implementation process of the AMC differs between outpatient and community pharmacy settings, due to differences in workflow and patient contact. Since this study primarily focuses on implementation within community pharmacies, the inclusion of a pharmacist working in an outpatient pharmacy may have introduced perspectives that are not entirely representative for the intended setting. Despite the fact that the insights were valuable, this forms a limitation of this study. In the future, follow-up research could further explore the implementation of the AMC in outpatient pharmacy settings to reveal additional challenges and opportunities for implementation in that specific environment.

#### 4.4 Implication for pharmacy practice

This study offers several insights that are highly relevant for pharmacy teams aiming to implement the AMC in routine care. Firstly, a key practical takeaway is the importance of structured patient selection. During implementation, pharmacy teams must distinguish between patients who may benefit from a brief adherence-focused consultation and those who require a more in-depth medication review. However, a medication review can also become a follow-up action after the AMC is conducted. The TRIAGE tool can support this process and is an essential part of the implementation toolbox.

Secondly, pharmacy technicians should receive a training to improve their consultation skills. Practical trainings include role-playing, feedback, and mentalization exercises, which are effective in building confidence among the pharmacy technicians.

Thirdly, the invitation process is a critical factor in implementation. Patients can be informed about the AMC via flyers, texts at the pharmacy counter, or website texts, ensuring that the concept and the purpose of the consultation is clear to them. Patients can be invited via Track & Trace email invitations, but it should be considered that not all patients actively check their email. Therefore, in cases of low response rates, patients can be invited over a phone call. The implementation process should be tailored to the pharmacy's local population. For example, multilingual materials may be unnecessary in smaller, less diverse towns, while they could be essential in large cities with many non-Dutch-speaking patients, which must be considered in the toolbox.

Fourthly, ICT instructions (software integration and digital documentation in patient record files) are an essential part of the implementation toolbox. These ICT instructions also include Track & Trace messages for invitation.

Lastly, staffing and financial resources remain the largest barriers for practical implementation. Reimbursement and endorsement by professional organizations, such as the KNMP, may be required to support teams in sustainably implementing the AMC.

#### 5. Conclusion

This study identifies key elements for the effective and sustainable implementation of the Annual Medication Consultation. Crucial components include structured appointment scheduling, targeted patient selection, team engagement, and the use of a conversation protocol. Communication training is essential to ensure consultation quality and to build confidence among pharmacy technicians. ICT-readiness — such as Track & Trace systems and documentation procedures — is also critical. Also, there is an urge to integrate the AMC into existing pharmacy software. A complete and accessible toolbox can support broader adoption of the AMC. However, long-term sustainability depends on structural reimbursement, as lack of financial support makes the AMC vulnerable to disruption, especially in times of staff shortages and high workload. In the future, AI-chatbots and focus on specific patient groups might be valuable additions to this intervention.

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# 7. Appendix

## Appendix A

#### Appendix A.1

Interview questions for pharmacists with prior implementation experience:

#### 1. Introductie

- a. Kunt u kort iets vertellen over de apotheek en het team?

  Als de geïnterviewde niet veel verteld: Denk bijvoorbeeld aan het aantal medewerkers, het aantal patiënten dat uw apotheek bezoekt, of het een ketenapotheek is
- b. *Indien het een apotheker is die niet bij een proeftuin hoort:* Hoe bent u geïnformeerd over het jaargesprek?
- c. Sinds wanneer voert u jaargesprekken uit?
- d. Hoeveel collega's uit het team nemen de jaargesprekken af?
  - i. Indien van toepassing: selecteert u hiervoor specifieke collega's? Zo ja, waarom heeft u voor deze collega's gekozen?
- e. Hoeveel jaargesprekken per week/maand voert uw apotheek momenteel uit?
- f. Op welke manier nodigt uw apotheek de patiënten uit voor een jaargesprek?

#### 2. Ervaringen met het jaargesprek

- a. Hoe ervaart uw apotheekteam het uitvoeren van het jaargesprek?
  - i. Wat zijn leerpunten voor uw apotheek naar aanleiding van het jaargesprek?
  - ii. Wat is volgens u/ uw collega's de toegevoegde waarde van de jaargesprekken voor patiënten?
- b. Zijn er onderdelen die volgens u essentieel zijn voor een succesvol jaargesprek met effectieve resultaten?
- c. Merkt uw apotheek verschil in medicatie-inzicht bij patiënten? Zo ja, welke verschillen zijn dat?
- d. Merkt uw apotheek verschil in een vertrouwensband met patiënten?
  - i. Zo ja, hoe zorgt het apotheekteam ervoor dat deze sterker wordt?
- e. Hoe gaat het apotheekteam om met verschillende emoties van de patiënt tijdens het jaargesprek?

#### 3. Training

- a. Heeft uw apotheekteam een training gevolgd voor het voeren van het jaargesprek? Zo ja, welke? En was deze toegespitst op het voeren van een jaargesprek?
- b. Hoe heeft de training bijgedragen aan de vaardigheden van het apotheekteam? En in hoeverre bent u van mening dat de training het team goed heeft voorbereid om de jaargesprekken te voeren?
- c. Zijn er elementen wat ontbrak tijdens de training?

#### 4. Toolbox

- a. We zijn momenteel bezig met het ontwikkelen van een toolbox voor apothekers om het jaargesprek te implementeren. Welke elementen vindt u noodzakelijk in deze toolbox?
- b. Welke elementen heeft u zelf gebruikt om het jaargesprek te implementeren in de apotheek?
  - i. Wat vond u van deze elementen? Actielijsten, TRIAGE, Loxis, uitnodigingsteksten

c. Welke elementen heeft u gemist in de toolbox die volgens u nodig zijn voor succesvolle implementatie?

#### 5. Implementatie

- a. Wat waren de grootste uitdagingen bij het implementeren van het jaargesprek?
- b. Worden de jaargesprekken inmiddels als routine gezien in uw apotheek?
- c. Zijn er afspraken gemaakt binnen het team of met externe partijen om het gesprek vast te houden? Zo ja, welke?

Bijvoorbeeld: afspraken met huisartsen...

#### 6. Toekomst, verbeterpunten en opschaling

- a. Als je kijkt naar de toekomst, wat is er dan in jullie apotheek nodig om het jaargesprek vrijblijvend te implementeren?
- b. Wat zijn eventuele uitdagingen hierbij?
- c. Wat is uw advies dat u mee zou willen geven aan een apotheek-collega die interesse heeft in het starten van het jaargesprek in zijn/haar apotheek?
  - i. Wat is volgens jullie nodig om het jaargesprek op te schalen naar andere apotheken?

#### Appendix A.2

#### Interview questions for pharmacists without prior implementation experience:

#### 1. Introductie

- a. Kunt u kort iets vertellen over de apotheek en het team?

  Als de geïnterviewde niet veel verteld: Denk bijvoorbeeld aan het aantal medewerkers, het aantal patiënten dat uw apotheek bezoekt, of het een ketenapotheek is....
- b. Aan welke vormen van consultvoering doet u momenteel? *Bijvoorbeeld: medicatiebeoordelingen...* 
  - i. Zo ja, kunt u daar wat over vertellen?
- c. In hoeverre bent u bekend met het jaargesprek? Bijvoorbeeld: wat weet u van het jaargesprek? Waar heeft u over het Jaargesprek gehoord?

  Indien niet bekend: uitleggen wat het is en vragen om mening.
- d. Wat zijn voor u en uw team de belangrijkste redenen om het jaargesprek nog niet te hebben geïmplementeerd?

#### 2. Verwachtingen en houding tegenover jaargesprek

- a. Wat voor toegevoegde waarde denkt u dat het jaargesprek kan hebben voor uw patiënten?
- b. Wat voor toegevoegde waarde denkt u dat het jaargesprek kan hebben voor de apotheek en het team?
- c. Als u denkt aan implementatie van het jaargesprek in uw apotheek, wat zijn dan volgens u uitdagingen daarbij?
  - i. Wat kan u helpen om het te implementeren?
- b. Kunt u de motivatie van het team beschrijven tegenover de implementatie van het jaargesprek?

#### 3. Toolbox

De proeftuinen die het jaargesprek geïntroduceerd hebben, ontwikkelen momenteel een toolbox om apotheekteams te ondersteunen bij de implementatie van het jaargesprek.

- a. Wat verwacht u van een ondersteunende toolbox?
- b. Wat zouden voor u belangrijke elementen zijn die de toolbox moet bevatten zodat het uitvoeren van het jaargesprek voor u makkelijker gaat?

#### 4. Elementen van de toolbox

- a. Hoe waardevol zou u onderstaande hulpmiddelen vinden om het jaargesprek te kunnen opstarten? Kunt u dit toelichten?
  - i. Risico-inventarisatie
    - Laten zien en uitleg (in toolbox-document): Het in kaart brengen van knelpunten in de eigen apotheek zoals een hoge werkdruk, beperkte personeelsbezetting of beperkingen binnen het ICT-systeem.
  - ii. Document over strategie, successactoren en barrières

    Laten zien en uitleg: gebaseerd op ervaringen uit de proeftuinen en kan u helpen
    om valkuilen te vermijden en successactoren te benutten.
  - iii. Startpresentatie en communicatiemateriaal voor het team *Laten zien en uitleg: hoe te starten?*
  - iv. Gespreksstructuur en gesprekshulp (SIR, TRIAGE) *Laten zien en uitleg*
  - v. Voorbeeldteksten voor uitnodiging van patiënten (e-mail, Track & Trace, balieteksten)

Laten zien en uitleg

- vi. Instructies voor ICT-inrichting (bv: Microsoft Booking instructie) *Laten zien en uitleg*
- vii. Informatieve hulpmiddelen voor patiënten (nieuwsbrief, poster website tekst) en voor andere zorgverleners (FTO, communicatielijnen huisarts) *Laten zien en uitleg*
- viii. Trainingstraject voor apotheekmedewerkers Laten zien en uitleg

#### 5. Toekomst

a. Nu u bovenstaande punten heeft doorgenomen... denkt u dat de toolbox u het mogelijk maakt om het jaargesprek op termijn te implementeren?

#### 6. Afsluiting

a. Heeft u nog suggesties of adviezen voor de toolbox voor de ondersteuning van de implementatie van het jaargesprek?

#### Appendix A.3

Interview questions for pharmacy technicians/pharmaceutical consultants/ medication reviewers without prior implementation experience:

#### 1. Introductie

a. Kunt u kort iets vertellen over de apotheek en het team?

Als de geïnterviewde niet veel verteld: Denk bijvoorbeeld aan het aantal medewerkers, het aantal patiënten dat uw apotheek bezoekt, of het een ketenapotheek is

b. In hoeverre bent u bekend met het jaargesprek?

Bijvoorbeeld: wat weet u van het jaargesprek? Waar heeft u over het jaargesprek gehoord? Indien niet bekend: uitleggen wat het is en vragen om mening.

#### 2. Verwachtingen en houding tegenover jaargesprek

- a. Wat voor toegevoegde waarde denkt u dat het jaargesprek kan hebben voor uw patiënten?
- b. Wat voor toegevoegde waarde denkt u dat het jaargesprek kan hebben voor de apotheek en het team?
- c. Als u denkt aan implementatie van het jaargesprek in uw apotheek, wat zijn dan volgens u uitdagingen daarbij?
  - i. Wat kan u helpen om het te implementeren?
- d. Kunt u de motivatie van het team beschrijven tegenover de implementatie van het jaargesprek?

#### 3. Toolbox

De proeftuinen die het jaargesprek geïntroduceerd hebben, ontwikkelen momenteel een toolbox om apotheekteams te ondersteunen bij de implementatie van het jaargesprek.

- a. Wat verwacht u van een ondersteunende toolbox?
- b. Wat zouden voor u belangrijke elementen zijn die de toolbox moet bevatten zodat het uitvoeren van het jaargesprek voor u makkelijker gaat?

#### 4. Elementen van de toolbox

- a. Hoe waardevol zou u onderstaande hulpmiddelen vinden om het jaargesprek te kunnen opstarten? Kunt u dit toelichten?
  - i. Risico-inventarisatie

Laten zien en uitleg (in toolbox-document)

ii. Document over strategie, successactoren en barrières

Laten zien en uitleg

iii. Startpresentatie en communicatiemateriaal voor het team

Laten zien en uitleg

iv. Gespreksstructuur en gesprekshulp (SIR, TRIAGE)

Laten zien en uitleg

v. Voorbeeldteksten voor uitnodiging van patiënten (e-mail, Track & Trace, balieteksten)

Laten zien en uitleg

- vi. Instructies voor ICT-inrichting (bv: Microsoft Booking instructie) *Laten zien en uitleg*
- vii. Informatieve hulpmiddelen voor patiënten (nieuwsbrief, poster website tekst) en voor andere zorgverleners (FTO, communicatielijnen huisarts)

Laten zien en uitleg viii. Trainingstraject voor apotheekmedewerkers Laten zien en uitleg

#### 5. Toekomst

a. Nu u bovenstaande punten heeft doorgenomen... denkt u dat de toolbox u het mogelijk maakt om het jaargesprek op termijn te implementeren?

# 6. Afsluiting

a. Heeft u nog suggesties of adviezen voor de toolbox voor de ondersteuning van de implementatie van het jaargesprek?