Appendix 3 Explanation of the T2 interview topic guide

Construct	Explanation
RE-AIM framework*	
Reach (not evaluated)	The absolute number/proportion and representativeness of individuals participating in the intervention as recipients (e.g. patients). This includes barriers and facilitators to participation, explanations regarding variations of participation across study sites, and reasons behind participation (or not). *This construct is not assessed in this present study because the number of participants is highly limited by the effectiveness study. . A proper evaluation of reach can therefore not be performed.*
Effectiveness	The impact of an intervention on important outcomes, such as potential negative effects, quality of life and economic outcomes. This includes the conditions and mechanisms that could lead to the effects, and explanations about the variation across study sites.
Adoption (not evaluated)	The absolute number/proportion and representativeness of individuals participating in the intervention as intervention agents (e.g. HCPs). Adoption can have multiple nested levels within an organization. This includes reasons that affect provider participation. *This construct is not assessed in this present study because the number of intervention agents is highly limited by those in the effectiveness study. A proper evaluation of adoption can therefore not be performed.*
Implementation (see fidelity)	The fidelity (adherence) to the key components of the intervention, including deviations and adaptations made and the underlying reasons. *This construct is evaluated in more detail using the fidelity framework described below.*
Maintenance	The extent to which the intervention becomes institutionalized or part of routine practice, and includes steps taken to ensure maintenance of the intervention in that particular general practice and barriers to sustained use.
Fidelity framework	
Content	The active ingredients of the intervention. The active ingredients are described below.
1) A scale measuring burden	The scale of the ABCC-tool is the first step in its five-step cycle. The scale should be completed by the patient (either digitally or with a paper-based questionnaire) and copied to the information system in case a paper-based questionnaire was used. All questions have to be answered for this step to be completed.
2) Visualization of burden	The visualization of the outcomes of the questionnaire, being the second step, is performed automatically by the information system upon clicking the "show balloon chart" button in-screen). The visualization should be clearly visible by both HCP and patient and used as guidance for the conversation topics.
3) Shared decision making	The HCPs should engage the patient to have an active role in the care conversation based on the principles of shared decision making in the third step. The shared decision making process should include: selecting balloons/domains as a topic of conversation together, exploring the burden within that domain, and opting for a personalized care plan.
4) Constructing a care plan	After the shared decision making process a personalized care plan is made in the. This care plan should be described as clearly as possible, for which we recommend the SMART-principles (40).
5) Monitoring the progress	After the patient is sent home, the fifth step of the cycle takes place: monitoring. The new assessment of burden is depicted in color, while the previous will be in grey. The HCP should compare both situations (i.e. height of the balloons) and use this information to monitor the patient's progress.
Coverage	These three constructs are more generally known and described as the dose of the intervention. The ABCC-tool should be used in all participating patients (i.e. coverage), during all check-up visits (i.e. frequency), and should take no longer than the regular available time period for a check-up (i.e. duration). The use of the ABCC-tool should be maintained throughout the study period (i.e. at least 12 months). The frequency of regular visits is dependent on the
Frequency	
Duration	

	condition (i.e. regular check-ups occur about once a year for people with COPD or asthma, and about four times a year for people with T2DM).
Constructs that did not originate from theoretical frameworks	
Experiences	The self-expressed lived experiences with working with the ABCC-tool. This construct is added to identify those aspects that have gained most attention from the HCP themselves, and which should at least be discussed.
Barriers and facilitators	The identified barriers and facilitators from the T0 and T1 interview are reflected upon again in this interview.
Training	An additional question is asked about whether training necessary for HCPs with no experience with the ABCC-tool, which aspects should be covered during a future training, to whom the training should be offered, and who should be the trainer.
Recommendation	To conclude the interview, the HCP is asked to reflect on whether they would recommend the ABCC-tool to a colleague, including the reasons behind their answer.

An overview of the frameworks used in the T2 interview, including additional questions that did not come from theoretical frameworks. * All explanation are directly from the RE-AIM website: https://www.re-aim.org/about/what-is-re-aim/ and the qualitative inquiries as suggested by the RE-AIM QUEST framework (34). ** The explanations are derived from those proposed by Carroll et al (14).