Appendix 5. In-depth Interview Approach

Overall study frame

The in-depth interviews were Aim 3 part of the project and they addressed the experiences of patients referred to Quitlines. Briefly, the study intervention included making changes to the electronic health record (EHR) and expanding medical assistants' (MA) roles to facilitate the documentation of the patient's tobacco use, readiness to quit, and willingness to be connected to a QL counselor. If the patient was interested in being connected to a QL counselor, the MA placed a EHR referral order which sent a secure message to the QL provider, prompting a proactive call to the patient to invite them to enroll in counseling sessions.

Quitline e-referral process

The procedures of the QL e-referral process are detailed in the main document and study protocol. Briefly, The QL e-referral process begins with the identification of all smokers seeing their primary care provider for a routine visit. The MA is the individual who rooms the patient and goes through a preliminary set of questions, including whether the patient is still smoking. If the patient answers affirmatively, the MA was instructed to provide brief advice to quit, and to assess whether the patient was interested in receiving assistance for smoking cessation. If the patient answered 'yes', the MA electronically sent a referral to the Ohio Quitline. Once an electronic referral was sent to the QL, the QL attempted call the participant within 24 hours. Counselors at the QL make 5 attempts to contact referred patients over the course of 2 weeks. If no contact is made, that participant is considered 'unreachable'. If contact is made, the participant can choose to 'decline' or 'enroll' in the program.

During the first QL call, the participant goes through a short intake process before the counseling begins. The intake portion of the call involves gathering demographic information about the participant and their history of smoking, including asking questions about which tobacco products they use, how often they use tobacco, past use of medications and nicotine replacement therapy (NRT), and any past quit attempts. Participants are also given the opportunity to enroll in receiving self-help text messages, mailed information, and other tools to help them quit. In order to receive NRT the participant must be willing to enroll in the QL and make a quit attempt in the next 30 days. They must also be 18 years of age or older, must not be pregnant, and must not have medical issues that would interact with the NRT.

Once enrolled, the QL provides five counseling session calls (the first one can be during the enrollment call if the patient agrees). The QL makes three attempts to reach the patient for each counseling call, and leave messages if the patient does not answer his or her phone. Participants are able to provide the QL with best times to call. After enrollment, participants can choose to disenroll either by formally declining further participation or becoming unreachable, and may do so either initially or after one or more counseling sessions. Participants who complete all five counseling calls are considered to have completed the program. The interviews conducted for this study could occur at any point along the engagement timeline.

Sampling

Monthly QL data was requested from National Jewish Health and included variables pertaining to the patients' progress through the QL program, such as QL enrollment status and reason, number of coaching calls, and nicotine replacement therapy orders. This data was then linked using a unique study identifier with data from the MetroHealth EHR to get patient characteristics including age, gender, race/ethnicity, and insurance type. From this combined data, patients were then divided into three QL outcome categories: enrolled participants had completed the enrollment process had had some counseling; dis-enrolled patients had previously been enrolled but subsequently completed the program, declined further participation, or were unreachable; not enrolled participants were those who had never been enrolled due to either declining when the QL called, or being unreachable. In order to reduce recall bias, patients with the most recent office visits were selected from each of the three categories for recruitment. This resulted in a sample of patients who were at varying stages of the e-referral to QL process. (need to better convey/clarify this)

Recruitment

Patients selected for recruitment were first sent an email or postal letter notifying them that they may be eligible to participate in a study and that a study team member would contact them by phone. The study team made multiple attempts to reach participants to invite them to participate. If there was no answer a brief message with a return number was left and study team attempted calling participants back at their preferred time.

Data collection

Patients who agreed to participate were interviewed by one of two study team members, both of whom were trained in conducting in-depth interviews. The interviews were conducted using a semi-structured interview guide. The first iteration of the interview guide consisted of questions written to elicit participants' thoughts on the electronic referral process and interactions with clinical staff and QL counselors. The participants were asked specifically about their experience with the MA during the referral process, why they decided to accept or decline the referral, their experience interacting with the QL, and their thoughts about using nicotine replacement therapy and medications to help them quit. After several interviews, the interview guide was modified to include additional probing questions to try and understand what was most helpful in their interactions with the QL, why some participants remained unreachable by the QL, or why some participants declined contact with the QL. During the interview, the individual's current smoking status and their current engagement with the QL were noted. Additional questions inquired about participants' practice of answering 1-800 phone numbers, their expectations of what would happen after the referral, and if they remembered seeing their after-visit summary showing the phone number for the QL. More questions about the participants' past history of smoking were also added to provide more historical context to participants' current progress or barriers with quitting. Interviews lasted between 9 and 34 minutes, with an average of 18 minutes, and were audio recorded. Data collection took place between September 2017 and August 2018.

Analysis approach

All interviews were transcribed verbatim. We used a phenomenological approach in our data analysis in order to understand how people make meaning of their lived experience and to develop a deeper understanding about the common features that are shared among individuals who agreed to be connected to the QL.[19] Analysis began with careful and repeated reading of several transcripts by three trained analysts to identify salient themes of the QL referral process. Based on this initial round of thematic analysis, an initial set of coding categories was created. As additional transcripts were read, the coding categories were modified as necessary to better fit the themes that emerged.

Next, two of the analysts each independently coded all 55 transcripts, meeting regularly to discuss coding, and reach consensus on any discrepancies. Additionally, the two analysts met with a third analyst to review and discuss emerging themes. Interviews were conducted until the point of data saturation was reached for each of the QL final disposition categories (program complete, declined, and unreachable).