

| RECOMMENDATIONS FOR RESEARCH |

Quitline Service Offering Models: A Review of the Evidence and Recommendations for Practice in Times of Limited Resources

In response to a request from NAQC members to summarize the evidence and provide recommendations on how to most effectively use resources when determining service offering options, NAQC developed an Issue Paper. The full paper is intended to serve as a resource for the multiple audiences involved with tobacco quitlines, including decision-makers within state, provincial, and national organizations that fund quitline services, service providers who offer guidance to their clients, and other quitline and cessation professionals. In addition, providers and payers of privately funded quitlines may find this paper relevant given current efforts to promote public-private partnerships for quitline services. An [executive summary](#) was also created to serve as a quick reference for quitline decision makers.

The full paper also made many recommendations for research. This document summarizes these recommendations in the context of [NAQC's Research Agenda for Quitlines](#).

RECOMMENDATIONS FOR RESEARCH RELATED TO SERVICE MODEL OFFERINGS

The review of the evidence contained in the full [Issue Paper](#) points to the need for additional research to answer several critical questions related to service model offerings.

1. **Reactive Service Models** Quitlines that have shifted from a proactive to a reactive service model due to decreased funding will be in a position to inform the field, and collaboration between these quitlines and tobacco control researchers should be encouraged. There is a need to examine:
 - a. The value-added benefit that is provided beyond the initial reactive call, when callers have the option to reactively contact the quitline at any time for additional support.
 - b. The cost effectiveness of reactive service models.
2. **Proactive Service Models** There is a need to examine:
 - a. The optimum number, length, and timing of completed calls.
 - b. Which call attempt protocols are most cost-effective.
 - c. Which counseling elements are most critical to support quitting and prevent relapse and should be preserved under abbreviated proactive protocols.
 - d. Differences in the effectiveness of proactive protocols with different types of callers.
 - e. Methods for classifying callers into subgroups that would allow quitlines to more effectively allocate counseling resources.
 - f. The feasibility of providing a flexible menu of service options that callers can choose from. This includes investigating whether or not callers who would benefit most from a more intense call protocol (e.g., poorer quitting history, higher levels of dependence) would be more or less likely to choose it.
3. **Fax-referral Programs** There is a need to examine:
 - a. What impact fax-referral programs have on promoting quitlines, extending the reach of quitlines (in particular among those who otherwise would not be motivated to contact a quitline), engaging providers in the cessation process, and increasing rates of quitting success for those who are referred to quitlines.
 - b. Which approaches are most effective in achieving high rates of contact and enrollment.
 - c. How many attempts should be made to contact referrals and over what period of time they should occur.
4. **Medications** There is a need to examine:
 - a. How much NRT callers are using and how much is wasted.
 - b. How willing and able callers are to obtain NRT on their own.
 - c. The feasibility of limiting NRT to groups that are most likely to benefit from receiving it and methods for identifying which groups those would be.

RECOMMENDATIONS FOR RESEARCH FOR EXPANDING SERVICE OFFERINGS THROUGH PHARMACOTHERAPY

Areas for additional research include:

1. The impact of amount of medication supplied on quitline utilization, clinical outcomes, and cost effectiveness.
2. The impact of delivery mechanisms for medications (direct mail, vouchers, others) on quitline utilization, clinical outcomes, and cost effectiveness.
3. The impact of de-linking the provision of NRT from extended quitline counseling.
 - a. Does connecting with tobacco users whose primary motivations are to obtain NRT provide an opportunity to encourage enrollment in quitline counseling as well as an opportunity for brief, effective interventions with those not opting for counseling?
 - b. Are “medication-only” protocols used during times of high demand for services where callers are given the option to receive the medications (with additional follow-up calls to assess medication use) rather than requiring them to enroll in proactive counseling effective?
4. The impact of providing prescription medications (bupropion and varenicline) through quitlines.
5. The amount of NRT being used, the extent to which NRT is used correctly, and the impact of both of these variables on quit rates.

RECOMMENDATIONS FOR RESEARCH FOR EXPANDING QUITLINE SERVICE OFFERINGS THROUGH ADVANCES IN TECHNOLOGY

1. Additional research is needed on the feasibility and effectiveness of quitline services coupled with automated text messaging, IVR, and web-based technologies. How are these technologies being used by quitlines? What role can these technologies have in extending reach to different groups of tobacco users, increasing tobacco abstinence, and lowering costs?
2. Research is needed to identify who is reached with these technologies that might not otherwise be reached and how users are engaging with these technologies to support their quitting process.
3. The cost effectiveness of these technologies should be investigated.
4. Randomized controlled trials may struggle to keep pace with the rapid emergence and evolution of new technologies. Quitlines currently using these technologies should be supported to evaluate these tools and disseminate their findings.
5. While not included in this review, there is a need for research on mobile applications to support quitlines. This area is important given a recent study that found that iPhone apps for smoking cessation have low adherence to evidence-based cessation, with few applications recommending or linking the user to quitlines, counseling, and/or pharmacotherapy.¹¹¹

RECOMMENDATIONS FOR RESEARCH PRIORITIES

Generally, quitline research has been underfunded and needs to be identified as a priority area for federal funding. This review identified several areas for further research which were summarized at the end of Sections One -Three. A summary of research areas viewed as highest priority for addressing quitline service model offerings are presented below.

Table 15. Research Priorities for Addressing Service Model Offerings

<p>Reactive Service Models</p> <ul style="list-style-type: none"> • How cost-effective are reactive service models?
<p>Proactive Service Models</p> <ul style="list-style-type: none"> • What are the optimum number, length, and timing of proactive calls? • Which call attempt protocols are most cost-effective? • Which counseling elements are most critical to support quitting and prevent relapse and should be preserved under abbreviated proactive protocols?
<p>Fax-referral Programs</p> <ul style="list-style-type: none"> • Which approaches are most effective in achieving high rates of contact and enrollment? • How many attempts should be made to contact referrals and over what period of time

should they occur?

- **Medications**

- What impact does the amount of medication supplied have on quitline utilization, clinical outcomes, and cost effectiveness?
- What is the impact of de-linking the provision of NRT from extended quitline counseling?
- What impact does different delivery mechanisms for medications (direct mail, vouchers, other technologies) have on quitline utilization, clinical outcomes, and cost effectiveness?

Advances in Technology

- What is the feasibility and effectiveness of quitline services coupled with automated text messaging, IVR, and web-based technologies?
- What role can these technologies have in extending reach to different groups of tobacco users, increasing tobacco abstinence, and lowering costs?
- How cost-effective are these technologies when used in conjunction with quitlines? ❄️