A “Triage” Approach to Quitline Callers: Research and Implementation in Canada and the U.S.

The word “triage” brings to mind different things for different people within the quitline community. Over the past few years, we have seen various models and approaches to triage emerge, including:

- triaging callers according to the most appropriate level of intervention;
- triaging callers according to insurance status, transferring those with a cessation benefit back to their insurer and reserving quitline services for those without insurance; and
- triaging callers based on most appropriate method of intervention (for example, web-based cessation; quitline; community referral).

Quitline service providers and administrators who have added a triage function to their protocols view it as a way to get tobacco users who want to quit what they need in the most cost effective and efficient manner. While the different triage approaches are still being tested and evaluated, it is important to consider what has been learned so far.

| Different Strokes for Different Folks: Triaging Smokers into Levels of Cessation Treatment |
| **Paul McDonald, PhD, University of Waterloo** |

**Introduction**

For nearly five years and in four different studies, Paul McDonald, PhD, (along with partners in research, quitline operations and funding) has been trying to answer some very important questions related to triaging smokers into varying levels of cessation treatment.

The current competition among existing cessation programs for clients, promotion and funding, coupled with scarce resources being wasted when providing smokers with more intensive (expensive) treatment than is necessary led Dr. McDonald and his team to ask four primary research questions related to triage. Each one is highlighted below.
Can we identify a small, easy to use set of questions to form the basis of a triage tool?

This study began by pulling together a panel of experts who were responsible for providing advice on a number of key elements, including the generation of potential triage items for each variable of interest.

Once the triage items had been identified, they were tested in late 2003. 23,633 telephone numbers were selected randomly using RDD from across Canada. 529 people completed the initial interviews and 426 (81%) people completed interviews 7 to 10 days after the initial interview. Each respondent completed “gold standard” measures for each of the six variables below, plus potential triage items for:

- Nicotine dependence
- Readiness to quit smoking
- Co-morbidity for schizophrenia, depression, substance abuse (no standard available)
- Self efficacy
- Social support
- Stress

The result, of course, was the first generation triage tool.

Does triage produce superior outcomes relative to current clinical guidelines (counseling for all + NRT for those who smoke 10+ cigs/day)?

The purpose of the second study was to test the validity of the triage tool. Using a random selection of phone numbers from northern British Columbia, 1,476 people met the study eligibility criteria and were randomized into one of the following treatment conditions:

- **Standard care (NICC)**
  - Encouraged to call NICC program to book appointment
  - Receive 1 to 3 face to face counseling sessions (mean = 1.1 sessions per client; each session lasted an average of 63 minutes; mean of 68.4 minutes contact per client)
  - Follow-up telephone counseling at 1 wk., and 1, 3, and 6 months after first visit (1.87 calls/client; 14.9 min/call; 27.8 min. contact per client)
  - Eligible smokers given free 4 week supply of NRT
  - Email follow-ups (.10 per client)

- **Triage condition**
  - 1 - Mailed a self help book and web address for self help, OR
  - 2 - Encouraged to call Quitnow by Phone (20 minute counseling), OR
  - 3 - Encouraged to call Quitnow by phone and mailed 4 wks of NRT, OR
Encouraged to call NICC (same as standard care)

In all, 706 people were assigned to the standard treatment at baseline (561 completed 7 month follow-up (79%)) and 726 people were assigned to treatment via triage at baseline (559 completed 7 month follow-up (77%)).

After being triaged into a treatment group, participants were called back in 21 days to ensure receipt of materials and to encourage treatment use. 7-month follow-up telephone interviews were conducted in order to learn the following:

- How triage participants were distributed across treatments
- Adjusted quit rates at 7 month follow-up, by condition
- Compliance with treatment recommendations
- Quit rates by treatment condition, for those who used treatment
- Results for other behavioral outcomes at 7 month follow-up
- User satisfaction at 7 month follow-up (for people who used a service)
- User satisfaction within the triage condition
- Preliminary cost comparison

The study team learned that triage was equally effective as providing >1.5 hours of individual counseling plus NRT for every eligible smoker and that overall utilization was higher in the triage condition. However, utilization of telephone counseling was low. While triage users were less satisfied with treatment, this may be an artifact of expectations created by the study design (All study participants were told that they might be randomized into a treatment condition that includes free NRT. Those who did not receive free NRT were less satisfied.). Lastly, preliminary estimates suggest that triage would reduce costs by at least 40% (i.e., you could help 40% more people with the same amount of resources).

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**Does triage produce superior outcomes relative to self referral to treatment?**

In a second validation of the triage tool, in which it was tested against self-referral to treatment, 1,449 randomly selected, eligible smokers from across Prince Edward Island (PEI) were randomized into one of the following treatment conditions:

- Self referral
  - Participants sent a list of ALL quit aids available on PEI

- Triage condition
  - 1 - mailed a self help book and web address, OR
  - 2 - Encouraged to call Smokers Helpline (20 minute counseling), OR
  - 3 - Encouraged to call Smokers’ Helpline and mailed 4 weeks
The study design consisted of recruitment, assignment, and baseline data collection by telephone; a call back in 21 days to ensure receipt of material and encourage treatment use; and 7 month follow-up telephone interviews. In all, 702 people were assigned to self referral at baseline (548 completed 7 month follow-up (78%)) and 747 people were assigned to treatment via triage at baseline (604 completed 7 month follow-up (81%)).

The results of the study indicate that triage is no more effective than self referral; however, when triaged:

- More people participate in treatment
- People tend to use less intensive counseling
- Pharmacotherapy is more appropriate
- People use fewer treatments
- Fewer people use non-effective treatments
- User satisfaction is slightly increased

Can people triage themselves?

In this fourth study, the research team tested whether or not people could self-administer the triage tool as effectively as those trained to administer the tool to others.

406 current smokers from Cape Breton and Thunder Bay were recruited by telephone and assigned to one of three administration methods – web-based, pencil and paper, or automated telephone. Overall, the majority of self administrations produced the same treatment recommendation as the trained administration:

- 82% reliability for web-based,
- 79% for telephone,
- 77% for pencil and paper.

**Michigan Quitline Triage Protocol and Implementation**  
Karen Brown,  
*Michigan Department of Community Health and Kim Hollister and Kimberly Corbett, American Cancer Society Quitline*

The Michigan Quitline began operations on October 22, 2003. At this time, there were 11 large insurers that offered their own tobacco cessation quitline service. Rather than compete with insurers, and more importantly, in order not to duplicate services, Michigan chose to triage callers by insurance type. Callers are screened and if they have quitline coverage, are sent back to their insurer for service...hence, the Michigan Quitline operating as a provider of last resort.
The Michigan Quitline serves all uninsured residents, their 5 partner health plans and all Medicaid fee-for-service patients. Currently, there are 10 major health plans that have their own quitline or choose to contract with a different vendor. An average of 205 callers are triaged back to one of the 10 plans every month.

Below is a flow-chart that captures the Michigan triage approach.

Questions, Ideas & Concerns Noted from the Conference Call

What went into Paul McDonald’s cost per quit calculation?
The calculation includes direct and indirect costs including training, calls, supervision, staff...all costs really.

We have some question about whether or not a quitline can be an objective agent when a triage system is in place. We think that there is some potential for conflict of interest considering service providers are often paid per call. What are your thoughts?

We don’t have this issue in Canada so I really don’t have any suggestions for this.

In Minnesota, we decided to contract with an independent call center that is responsible for doing the triaging to the different services.

In states like New York, we would have customer service issues if triage was in place, as people would be upset if they were told that they couldn’t get the full package of services – especially if they did not receive the NRT. We have run up against this issue however, we have found that providing a brief explanation for folks has worked. We tell them that we are using scarce resources in the most useful way so that more get people ultimately get served.
If a caller is triaged into the quitline for brief counseling, is this one session or more than one session?
In BC, this was one extended session, but that is not standard across the board. For instance, in PEI a person triaged into brief counseling could receive multiple calls. In our study, we drew an arbitrary line and said that less than 1 hour is brief.

What has been the callers’ initial acceptance of the service they were triaged to? Could they choose something else if they wanted to?
I don’t know but I don’t think it was much of an issue. Remember, we proactively called a group of identified smokers and asked them if they were interested in participating but that they would be triaged into a service. The lack of choice was really implicit in their acceptance to join the study.

Another point is that Canadians, as a function of our healthcare system, are not used to the same level of choice in healthcare as Americans are.

How many states are still offering quitline services to anyone who calls, regardless of insurance status?
Arizona does. Now this is becoming an issue as funding grows tighter. We believe that a lot of insurers are taking advantage of this service.

Paul mentioned that his study got a 79% follow-up rate at 7 months? Were incentives provided?
No – we just obtained consent when they enrolled. However, each person did receive some level of service so perhaps were returning the favor.

Was the follow-up survey done by person or automated service?
No – we called people back in-person.

Does Michigan offer NRT?
Yes, to uninsured residents.

Paul’s pilot study sample were identified smokers who were contacted proactively. Does this have a possible impact on response rate?
Yes. There really is no way to compare, as we did not set the study up this way, but it is a possibility. We wanted to demonstrate effectiveness to a wide variety of smokers. There is still the question of how it will work when it is not such a proactive approach.