



The Emergency Department as a Platform for Tobacco Cessation Utilizing Pre-Health Professional Students as Research Associates



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BACKGROUND

There is untapped potential for public health interventions in the emergency department (ED). Clinical ED personnel focused on caring for the patient’s emergent problems cannot be expected to provide such additional services.

However, pre-health professional students looking for clinical experience may offer a willing work force who could accomplish this value-added activity.

Specifically, the current study examined the ability of such individuals to refer ED patients and their visitors who use or used tobacco products to cessation services.

The RA Program at St. Vincent’s Medical Center in Bridgeport, CT formalized a system model using Research Associates (RAs) to enroll large numbers of study participants over short time frames. RAs are college students and post-bacs considering a career in the health professions. They **volunteer** a minimum of one 4-hour shift per week. They identify and enroll participants in EM research studies.

In 2009, this program expanded to the National Alliance of Research Associates Programs (NARAP), a growing consortium of hospitals using the same RA model.

NARAP Participating Charter Institutions:

1. St. Louis University School of Medicine
2. Hackensack University Medical Center
3. University of Vermont College of Medicine
4. St. Vincent’s Medical Center / Quinnipiac University School of Medicine
5. University of Massachusetts Medical School
6. NARAP
7. University of Arizona School of Medicine
8. University of Rochester Medical Center



METHODS



Study Objectives

Using pre-health professional students (RAs) to:

1. Assess tobacco use among ED patients and their visitors.
2. Determine number of referrals to state Quitlines accepted by identified tobacco users.

Design

Prospective, interventional, convenience sample.

Setting

Academic medical center, community teaching hospital and regional hospital EDs with inner-city, suburban and rural catchment areas.

Type of Participants

Non-emergent ED patients and their visitors.

Protocol

- RAs approached as many non-emergent patients and their visitors 18 years of age or older as possible.
- After obtaining informed consent, RAs used a scripted format to record demographic information and take a detailed tobacco history.
- If participants used tobacco products for > 30 days at any time in their lives (“tobacco users / lifetime”), RAs offered them referrals to their respective state Quitlines that provide free, validated tobacco cessation services.
- Those who indicated an interest in stopping tobacco use or wanted help maintaining their tobacco cessation had referral requests sent to their state’s Quitline.



RESULTS

Top-Level Numbers

1,084 RAs served **5,544** four-hour shifts
31,728 patients or their visitors were approached
20,393 (64%) were eligible
19,149 consented (**94%** of those eligible)

Demographic Characteristics

76% patients; **24%** visitors
54% male; **46%** female
59% white; **24%** black
15% ethnically Hispanic/Latino
50% some post-secondary education
51% had private insurance



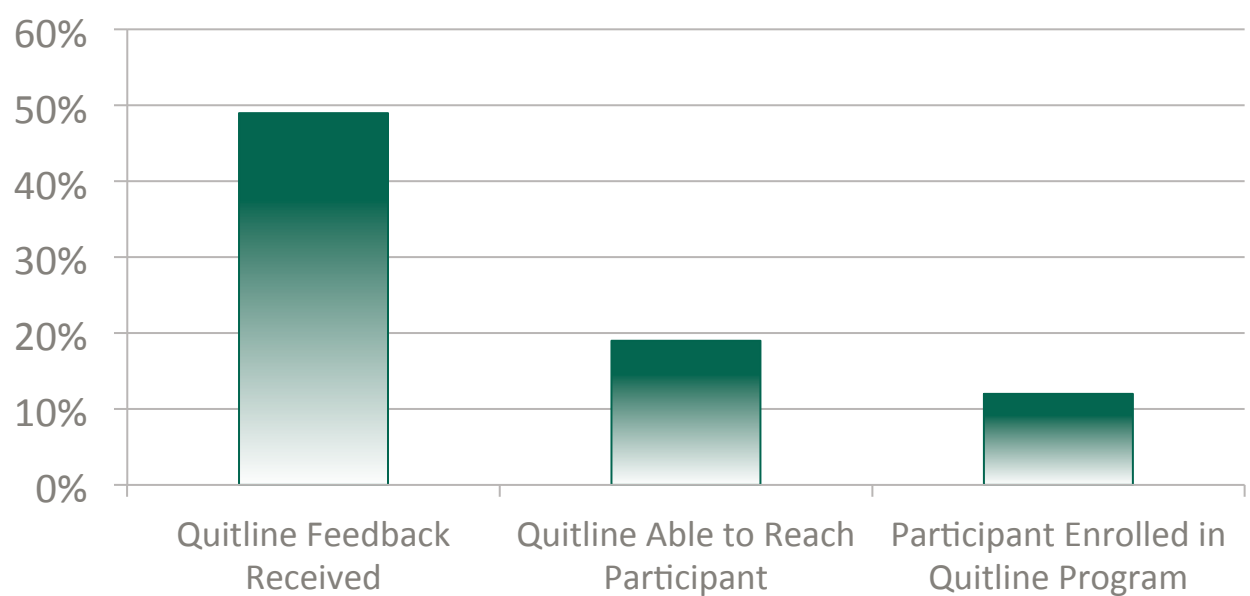
Tobacco-Related Findings

10,300 (54%) were tobacco users / lifetime
2,151 (21%) accepted Quitline referral
5,277 (28%) used tobacco in prior 30 days
1,917 (36%) accepted Quitline referral

Quitline Feedback Findings

Quitlines provided faxed feedback for a subset of referred participants (n = 1,057)

Percentage of Referred Participants



CONTEXT

4th Largest

prospective, interventional study ever in the U.S.

3 numbers demonstrate the potential of the RA model:

- > **50%** More than half the U.S. population go to EDs as a patient or their visitor each year
- 4 hrs** Duration of average ED visit
- > **500 K** Estimate of “pre-meds” each year



Evidence for Sustainability

- Always more patients and their visitors in the ED
- Always more “pre-meds”
- No labor costs for enrolling participants

Discussion

- Among ED patients and their visitors, RAs identified tobacco users and arranged referrals to a free tobacco cessation service for a sizeable proportion of these individuals.
- This study demonstrates the potential to use the RA model for a substantive public health intervention and large scale research in the ED with minimal impact on clinical and financial resources
- The RA model also looks to stack these public health interventions as a continuing service in their EDs. For example, new and substantively different research is being done in 2013.

After completing enrollment on this current study, RAs ask the index question:
“... used tobacco products > 30 days in your life?”
and then, if requested, make Quitline referrals.

- For the RAs, this model provides considerable hands-on education and clinical experiences, which are increasingly important preparations for health professional school and not readily available for many pre-health professional students.