

**Research Associates Program at St. Vincent's Medical Center  
and  
Tobacco Cessation**

**One-Half ... 3.3 ... 500K**

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The Research Associates (RA) Program is a 501c3 organization that brings college and post-baccalaureate students considering careers in the health professions into the emergency department as volunteer data collectors for clinical research.

Now based in the Department of Emergency Medicine at St. Vincent's Medical Center in Bridgeport, this program offers the potential for large-scale public health interventions, such as initiating tobacco cessation referrals, at minimal cost and with a host of positive derivative benefits.

Our study, "An Emergency Department Intervention for Tobacco Cessation among Patients and Visitors Utilizing Pre-Health Professional Students as Research Associates," demonstrates an example of what has been done using the RA model. Our future plans provide a framework for what can be accomplished to help people to stop smoking, as well as other initiatives for the public health. Since RAs are unpaid volunteers, this can all be accomplished with minimal funding.

For each academic semester, RAs serve a minimum of one 4-hour shift per week in the emergency department. During the school year, they are mainly recruited from universities in the St. Vincent's catchment area: Sacred Heart, Quinnipiac, University of Bridgeport, Southern and Western Connecticut State Universities and Fairfield. In the summer, RAs come from

colleges around the country. While the majority of these students are returning home to Connecticut for the school break, there is a steadily increasing number who are drawn to the program from other states.

Since its inception in 1994, more than 700 RAs have volunteered thousands of hours in the emergency department enrolling over 25,000 subjects in various studies. In addition to a number of more traditional studies, they have accomplished a body of research looking at the emergency department as a site to facilitate primary care interventions. Besides the tobacco cessation study, RAs have completed studies on domestic violence, firearms injury risk reduction, and cardiovascular risk assessment. Consistent with St. Vincent's mission to address all aspects of cancer care, the RA program has carried out studies on screening referrals for cervical, breast, prostate and colon-rectal cancers.

From this long experience, the RA Program has developed a rigorous research model. RAs are trained over an intense two-day orientation on the basics of clinical research, ethical topics, especially confidentiality and informed consent, safety issues and the details of the research they facilitate for that semester. When on their shifts, they approach non-critical patients and their visitors in the St. Vincent's Emergency Department to assess if they are appropriate potential subjects for the particular study being conducted that semester. Following carefully scripted protocols approved by our Institutional Review Board, the RAs then obtain an informed consent and enroll the subjects in the research. They are supervised by members of the research cadre to insure their ability to perform the work and evaluated at least twice during the semester. Following the completion of a minimum of ten shifts, the RAs receive a composite letter of evaluation sent to their health professions adviser.

In the spring and summer semesters, 2008, 63 RAs worked on a study looking at the emergency department as a potential site to identify smokers and to help them quit their addiction to tobacco. Over just twenty-one (21) weeks, they enrolled 3,125 subjects in the study. Using their scripts, the RAs took an extensive smoking history from each subject. If the subject used tobacco for more than thirty days at any time in their lives, they were offered a referral to the Connecticut Quitline. This free, telephone-based intervention funded by monies from the

settlement with tobacco companies has a validated track record of success in helping people to quit smoking.

The RAs identified, 1682 (54%) subjects who used tobacco for > one month at some time in their lives with 681 (22%) having smoked within the preceding 30 days. Of those who ever used tobacco, 299 (18%) accepted a Connecticut Quitline referral. Among active smokers, those using tobacco during the previous month, 261 (38%) were referred to the Quitline. This represented about 40% of all Quitline referrals in the entire state for the time period of the study.

This program is sustainable. When a study shows an intervention such as referral to the Connecticut Quitline to be successful, this is included as service in future semesters. For instance, in this past spring and summer semesters, RAs enrolled subjects in a study on colon-rectal cancer screening among patients and visitors 50 years of age and older. When the screening was completed for each subject, or, after all those in the emergency department > 50 years old had completed the study, for other adult patients and visitors > 18 years old, the RAs would move into service. They would ask questions and facilitate referrals about other cancer-related screenings from the prior studies, Pap tests, mammograms, PSA tests and tobacco cessation. Indeed, more than 250 additional Quitline referrals were made from last year's work.

Three numbers show the big-picture potential from the RA model: ½, 3.3 and 500K.

- More than half the U.S. population goes to the emergency department every year as a patient or visitor.
- The average emergency visit last 3.3 hours. During that time, a patient sees a health professional for about twenty minutes. By the very nature of unscheduled care and the testing often involved in the work-up of medical problems, wait time is an inevitable part of emergency care.
- By roughest of estimates, more than 500,000 college and post-baccalaureate students are interested in going to medical school. They need as much direct work with patients as possible for their discernment, development and qualification as potential health professionals.

At this preliminary stage in their careers, however, it is difficult for them to find positions that offer such opportunities. As pre-meds, future physicians rarely have appropriate skills, other than their motivation, intelligence and willingness to work hard, that make them likely candidates for clinical work outside of research such as they do in our program. Those who travel great distances to volunteer in the RA Program at St. Vincent's, demonstrate how highly sought after such opportunities are.

If a commitment of one 4-hour shift of clinical contact like a RA program per week during the academic was a requirement for medical school admissions (as it commonly is in total hours for other health professions such as physician assistants), this would result in approximately 600 million work hours for the public good, all for some compensation other than money.

What enterprise would not make great use of a labor pool from more than half a million bright, enthusiastic college-educated people ready to work for millions of hours with the majority of the U.S. population who sit waiting in rooms for three hours once a year? What if this vast human resource was eager to do this work for some compensation other than money?

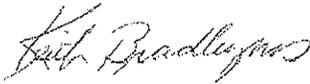
Further benefits derived from RA Programs include:

- A ready opportunity to gain clinical experience for large numbers of those interested in health care careers
- The minimal time commitment per week does not interfere with academic work
- The chance for the admissions process to health professional schools to have candidates evaluated in a key performance determinant, how well they work with patients
- Inculcation of the role of screening, preventive medicine and primary care into the education of future physicians at the very earliest stages of their careers
- The potential for many to contribute a great deal for the public good as a measure of their suitability for a career in healthcare

In the coming year, the RA Program looks to expand the research model based on our previous work to a National Alliance of Research Associate Programs (NARAP), starting with two

programs in Connecticut similar to the current program. Work has currently advanced to the pre-implementation phase for an academic center and the recruitment phase for a community hospital in the state to develop their programs with consultation from the RA Program at St. Vincent's. In addition to utilizing RAs for their intramural clinical research, these sites will conduct an enhanced study of referrals to the Quitline from the emergency department for tobacco cessation. An estimated 10,000 subjects will be enrolled in this year-long study with an anticipated start in the summer semester, 2010.

The RA Program needs administrative funding to accomplish this tobacco cessation research in Connecticut during 2010 in anticipation of rolling out a national program over the next five years of similar studies to help people stop smoking. The program will look to monies from the tobacco trust fund to support this work. Given the immediate impact to the public health for Connecticut, and the potential for even greater benefits from ½, 3.3 and 500K, we believe the Research Associates Program offers an example of the good that can come from relatively small amounts of money directed from the Tobacco Trust Fund to help people to stop smoking.



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