

Using a web-based educational program to enhance nurses' referral of patients to the quitline in 2 states

UCLA School of Nursing

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Background

Nurses, the largest group of healthcare professionals, are pivotal to national smoking cessation efforts, including increasing referral to state quitlines that can provide smokers support after hospital discharge. Previous projects suggest that nurse-tailored, state-specific web resources and printed materials significantly improved the proportion of nurses who consistently provided cessation interventions to patients who smoke.

Goals/Objectives

The goal of *Registered Nurses Referral to Quitlines – Helping Smokers Quit* (RNQL-HSQ), an educational program including a webcast and nurse-tailored printed materials, was to increase nurses' delivery of smoking cessation interventions (Ask, Advise, Assess, Assist, Arrange and refer to a quitline) at 6-months.

Methods

A pre-post, correlational design was used with a cross-sectional sample of nurses from Kentucky and Louisiana, two high smoking prevalence states. Nurses completed an online survey at baseline, then at 3- and 6- months after the educational program, assessing the 5As and referral to the quitline. Improved clinical practice was defined as consistently (i.e., usually/always) intervening.

Recruitment:

8 Hospitals (4 in KY, 4 in LA) of ≥ 100 beds were invited to participate. A convenience sample of RNs providing direct patient care to adult patients (>18 years of age) were recruited via usual hospital communication methods using announcements sent out by the Chief Nursing Officers.

Surveys:

A valid and reliable Web-based survey (using Research Electronic Data Capture – REDCap) assessed nurses' self-reported performance of tobacco dependence interventions. Nurses' demographic, personal and professional characteristics were assessed. For each of the 5As and referral to the quitline, nurses were asked about frequency of intervention (always, usually, sometimes, rarely, never).

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Registered Nurses Referring to Quitlines – Helping Smokers Quit (RNQL-HSQ) St. Elizabeth, Edgewood KY

For a larger font size, please press the RESIZE FONT icon in the upper right page corner or press CTRL + on your keyboard.

Please check the box that most closely relates to your care of adult patients, using the scale below.

When you care for a patient who smokes, how often do you:

	Always	Usually	Sometimes	Rarely	Never
Ask about a patient's smoking/tobacco use?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Advise a patient to quit smoking?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assess if patients are interested in stopping smoking?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist a patient with smoking cessation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Arrange smoking cessation follow-up?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recommend the use of a telephone quitline for smoking cessation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tell a patient to tobacco cessation resources (counselors, clinics, counseling, etc.) in the community?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide recommendations for tobacco cessation medications?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Review barriers to quitting with patients who are wanting to make a quit attempt?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recommend to patients and family members the importance of creating a smoke-free home environment after leaving the hospital?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

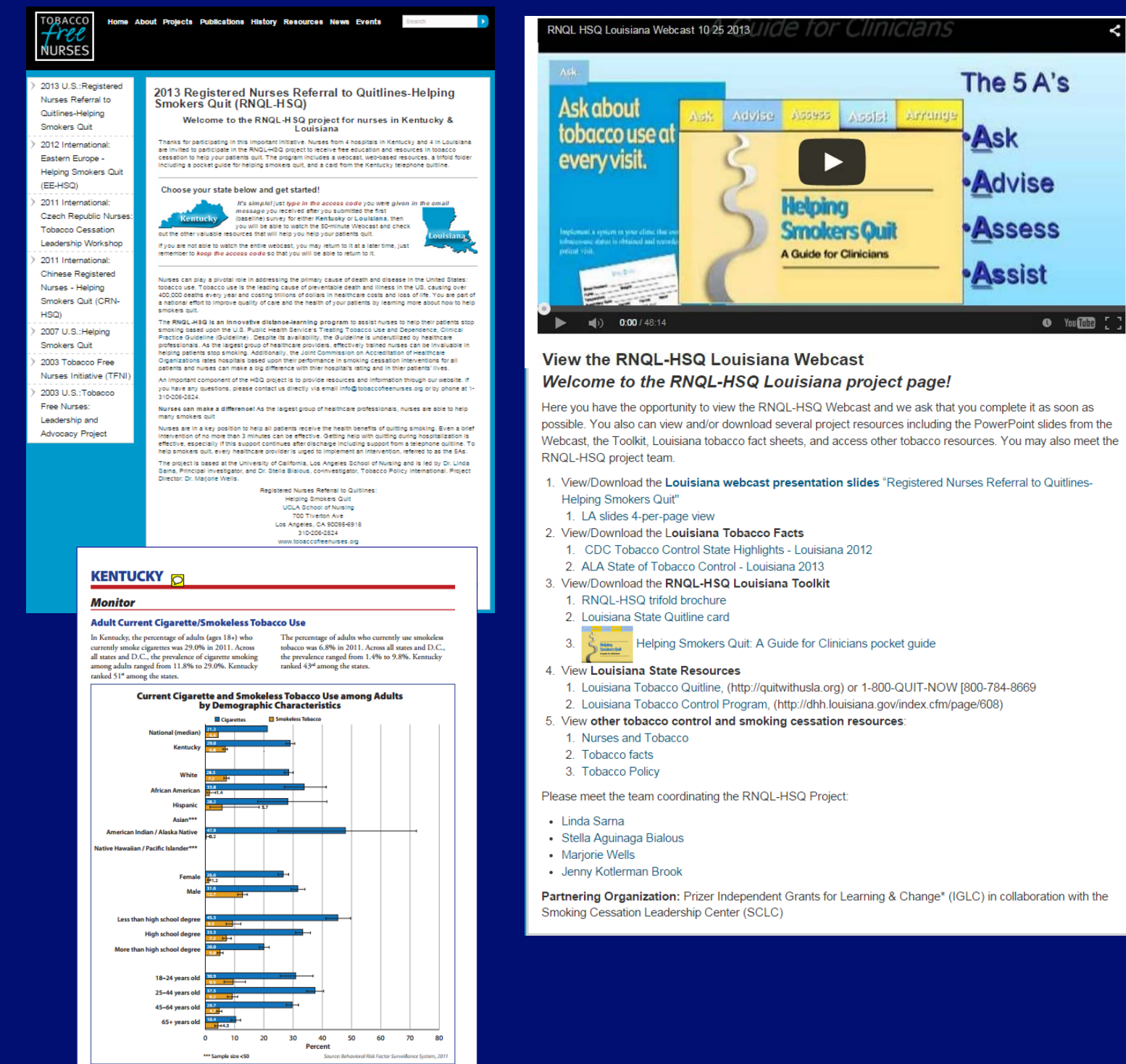
Intervention

Toolkit



Nurses from each hospital received the RNQL-HSQ Toolkit comprised of a trifold brochure, a state quitline card, and the 'Helping Smokers Quit: A Guide for Clinicians' pocket guide.

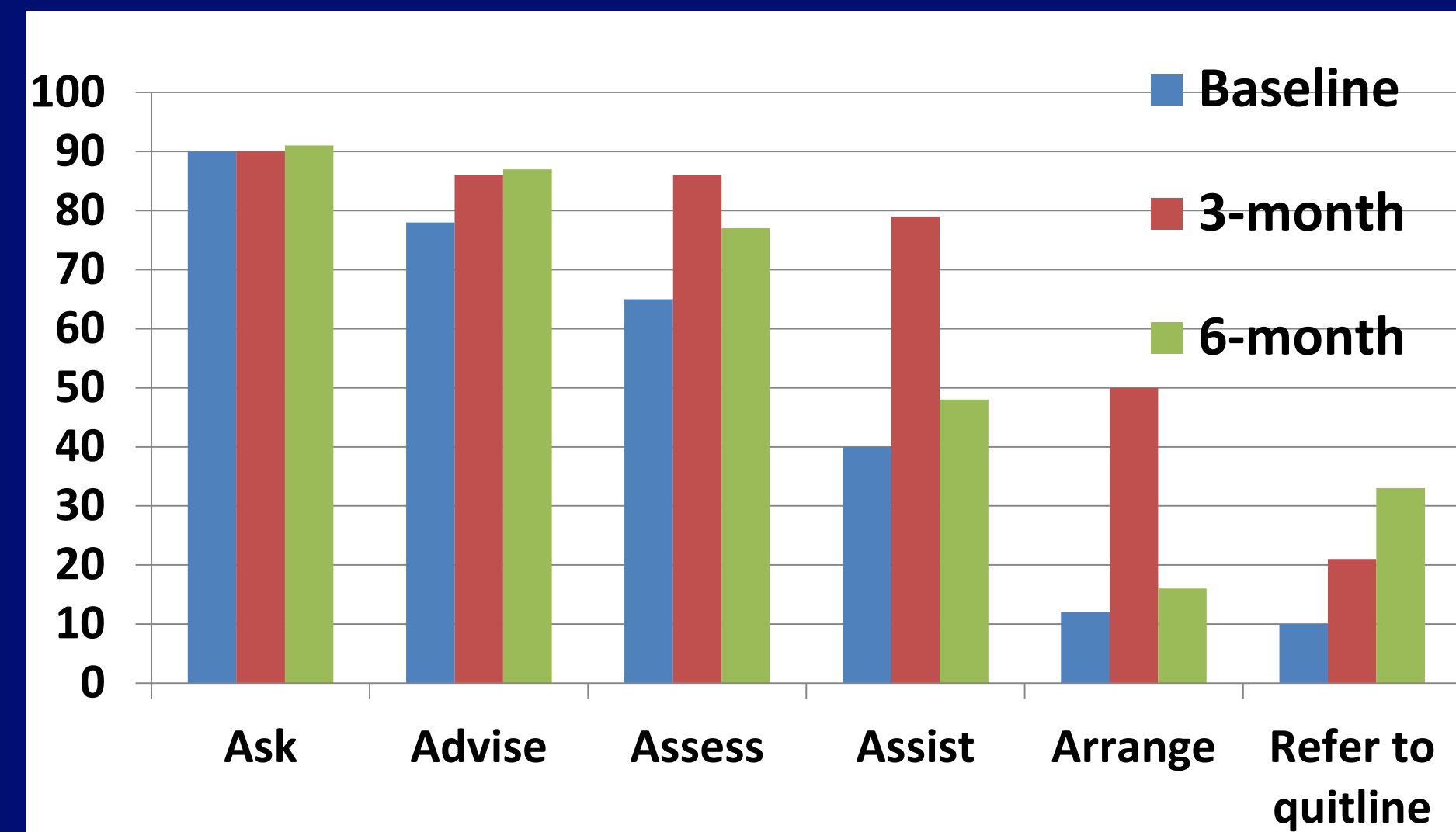
Webcast/Website (www.tobaccofreenurses.org):



A Web-based e-learning course that was focused on nurses and smoking cessation interventions, was developed for each state, including a state-specific, 50-minute webcast, webpages with links to critical state tobacco cessation resources, fact sheets, & downloadable program materials.

Results

Figure 1. Nurses who usually/always use the 5As with smokers over time



At 6-months, a significantly higher proportion of nurses advised patients to quit ($p=0.0006$), assessed patients' willingness to quit ($p=0.0002$), assisted patients with a quit plan ($p=0.004$) and referred patients to the quitline ($p<0.0001$).

Table 1. Paired improvement on use of the 5As to consistent treatment for nurses with Baseline & 6-month data

	Baseline (%)	6 mo (%)	# remained consistent	# became consistent	P-value McNemar
Ask	205 (89%)	210 (91%)	195 (93%)	15 (7%)	0.42
Advise	177 (77%)	202 (87%)	164 (81%)	38 (19%)	0.0006
Assess	146 (63%)	177 (77%)	128 (72%)	49 (28%)	0.0002
Assist	88 (38%)	112 (48%)	67 (60%)	45 (40%)	0.004
Arrange	28 (12%)	39 (17%)	13 (33%)	26 (67%)	0.12
Refer quitline	22 (10%)	77 (33%)	16 (21%)	61 (79%)	<0.0001

At 6-months, a significantly higher proportion of nurses counseled 3 or more patients a week about smoking cessation with a trend towards increasing their referral of patients for cessation resources.

Table 2. Paired improvement in tobacco cessation counseling and referral to consistent treatment for nurses with Baseline & 6-month data

	Baseline (%)	6 mo (%)	# remained consistent	# became consistent	P-value McNemar
Est. # patients counseled (>3/week)	41 (18%)	71 (31%)	20 (61%)	51 (39%)	0.0005
Est. # patients referred (>3/week)	12 (5%)	19 (8%)	0 (0%)	19 (100%)	0.28

Conclusions

This project demonstrates the feasibility of a a relatively low-cost distance-learning program in two high prevalence states in increasing nurses' smoking cessation interventions and referral to the quitline. Efforts to widely disseminate these resources to other nurses in these states could increase the number of hospitalized patients who receive support for quit attempts and are referred to the quitline for post discharge.

The UCLA Institutional Review Board approved this study. IRB approval or waivers of approval were obtained from each hospital.

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The authors report no conflict of interest