1. Overall Aim & Objectives:

The overall aim of this project is to assess the impact of an educational intervention for hospital-based nurses, consisting of a Webcast plus toolkit, to increase the consistency of tobacco dependence treatment (5As and referral to the Quitline) provided by nurses. Changes in interventions to hospitalized smokers in two states with smoking prevalence higher than the national median: Kentucky (KY) and Louisiana (LA) will be monitored, as self-reported by 800 nurses, over a six-month period.

A quasi-experimental design will include nurses from four hospitals (3 experimental and 1 control) in each state. The educational intervention will consist of a toolkit of nurse-tailored state-specific materials including: a trifold brochure on nurses and tobacco control with state-specific data, a pocket guide (*Helping Smokers Quit: A Guide for Clinicians*) of the 5As (i.e., ask, advise, assess, assist, arrange), state telephone quitline card; pre-recorded state-specific Webcast with emphasis on referral to a quitline, and Web-based resources. Nurses in the control hospitals will receive a minimal intervention of access of the hard copies of the materials (trifold, quitline card, and pocket guide) but not the state-specific Webcast or web-based resources.

Key objectives:

1. Double the consistency of nurses' self-reported referral of smokers to a quitline assessed by Web-based surveys to measure changes from baseline (pre-intervention) to 3- and 6-months after the educational program. Consistency is defined as nurses self-reporting "usually" or "always" referring to a quitline and delivering the 5As.
2. Significantly increase the frequency of nurses' provision of tobacco dependence treatment to hospitalized smokers (5As), by self-report using Web-based surveys to measure changes from baseline (pre-intervention) to 3- and 6-months after the educational program.
3. A **secondary objective** will be to assess state differences on the impact of the intervention by comparing the frequency of referral to the quitline and delivery of the 5As by nurses in each state (KY and LA).

Impact statement: If we educate 800 nurses from 8 hospitals (4 per state X 2 states) using this relatively low-cost intervention, we expect that we will be able to double the proportion of nurses who consistently (usually or always) refer hospitalized patients who smoke to the quitline. Using an estimate based on the states' smoking prevalence among adults (Table 1) and the number of admissions a year per hospital (Table 2), this intervention will have the initial potential to assist over 5,000 patients who smoke to make a quit attempt while hospitalized and stay quit after discharge over a one year time period. We have included nurses from the control group in this estimate as they will receive the full intervention 6-months after the start of the intervention. We also expect an increase in the number of nurses who will deliver the comprehensive 5As intervention, based on our previous study where significant increases at 6-months were noted for all of the 5As, except "Ask", in our experimental group.

This program has the potential to serve as a model for other states. The resulting materials created for this project have the potential to be disseminated to all nurses in both states (53,068 RNs in KY and 57,788 in LA) [1, 2].

2. Current Assessment of Need in Target Area:

Smoking prevalence in the two target states for this project, based on the latest available data, 25.6% in KY and 22.1% in LA [3] is high. Both states report below target utilization of the quitline: in LA only 0.6% of smokers called the state quitline in 2006-2007 (ranked as 48th in the country for quitline calls); in KY, 2.3% of smokers accessed the quitline (ranked 28th in the country), compared to the target of 8% of smokers recommended by the Centers for Disease Control and Prevention Best Practices for smoking cessation [4].

Table 1. Current Smoking among Adults in KY and LA by Demographic Characteristics

Prevalence by category	**KY**	**LA**
	% (95% CI)	% (95% CI)
Total (BRFSS 2009)*	25.6 (23.9-27.3)	22.1 (20.7-23.5)
Men	27.1 (24.1-30.0)	25.1 (22.7-27.4)
Women	24.2 (22.3-26.1)	19.3 (17.9-20.8)
Age **		
65+ years old	10.8	11.0
45-64 years old	25.0	20.4
25-44 years old	30.2	25.3
18-24 years old	31.7	19.7
Education**		
More than high school degree	18.1	17.1
High school degree	29.7	24.1
Less than high school degree	45.6	31.6
Ethnicity**		
Native Hawaiian / Pacific Islander	sample < 50	sample < 50
American Indian / Alaska Native	46.0	28.6
Asian	sample < 50	18.8
Hispanic	25.8	27.6
African American	29.6	20.9
White	26.4	21.4

* [3] ** [4]

Tobacco dependence treatment for hospitalized smokers is effective but the provision of such care is suboptimal. Few healthcare professionals offer smokers treatment and/or referral to telephone quitlines which provide support needed during quit attempts [5]. Evidence supports the efficacy of nurses in helping smokers quit [6] and the almost 3 million nurses in the US, if adequately prepared, could effectively expand the number of smokers who receive such support. Increasing referral of smokers to telephone quitlines [5,7] could be one way of

expanding nurses' support for quit efforts, and patients in a hospital setting may be more motivated to quit and follow-up with calls to the quitline [8].

Our previous work suggests that nurses underutilize telephone quitlines, an effective resource for smoking cessation [5]. In our national survey of over 3,000 nurses in 35 Magnet-designated hospitals, defined as hospitals delivering the highest standard of nursing care by the American Nurses' Credential Center, only 10% of nurses consistently referred smokers to a quitline [9]. On our baseline assessment of nurses' cessation intervention practices in 3 states (California, Indiana and West Virginia), 16% of nurses consistently (usually or always) referred smokers to the quitline, with rates about 10% for nurses in the high smoking prevalence states of Indiana and West Virginia [10]. Results from our 6-months assessment of an educational intervention (consisting of a Webcast, toolkit and web-based resources, similar to this proposal), indicate that for nurses participating in the educational intervention, the provision of 5As and referral to a quitline were 74% higher, and nurses who viewed the Webcast were more than twice as likely to provide referral [11]. We also verified that nurses were more likely to refer to a quitline if they implemented all 5As.

3. Technical Approach, Intervention Design and Methods:

Using a quasi-experimental design, the experimental group (HSQ) will include 600 nurses (100 nurses per hospital, with 3 hospitals in each state) and the minimal intervention group (HSQ-MI) will include 200 nurses (100 per hospital, 1 hospital in each state).

This initiative is based on a previous successful program utilizing web-resources, including a Webcast, and a nurse- and state-specific toolkit to increase the number of nurses who consistently provide smoking cessation intervention (5As and referral to Quitline) to hospitalized smokers(7,8). Instead of a control condition, we will utilize a minimal intervention control which will include receipt of printed materials. In our previous study we observed an increase in nurses' delivery of tobacco dependence treatments, including referral to a quitline in California, Indiana, and West Virginia using written materials alone [7, 8]. Nurses who viewed the Webinar were twice as likely to report consistent referral of smokers to a quitline (OR 2.34, 95% CI 1.03, 4.23). Additionally, preliminary data at 12-months continue to show a significant increase in the proportion of nurses who consistently deliver a tobacco dependence intervention and refer smokers to a quitline (OR 1.54, CI 1.26, 1.89). In that study, we utilized live Webinars which were extremely time intensive and did not reach a high number of nurses in the intervention group. Using a prerecorded Webcast, 92% of a sample of approximately 2,000 nurses in Beijing and Hefei, China reported viewing the Webcast at the three-month follow-up survey (unpublished data). In China, similar to this proposal, nurses are being offered continuing education credits (CEUs) for viewing the webcast and completing the survey.

The 30-40 minute Webcast curriculum proposed for this study will be based on an abbreviated version of the *Rx for Change* tobacco cessation curriculum which has proven efficacy and was used as the basis of the Webinars in the prior study [7, 8]. The principal investigator of this proposal, Dr. Sarna, has a long standing collaborative relationship with Dr. Karen Hudmon, who developed the *Rx for Change* curricula. Dr. Hudmon approves, and wholeheartedly supports, adapting the curricula used in the prior study to meet the needs of nurses in KY and LA. We will shorten to program to 30-40 minutes for the Webcast format and ensure that we will be able to

meet the requirements for continuing education credits. Dr. Hudmon will review the adapted state-specific slides to make certain that they are consistent with the *Rx for Change* curriculum's goals and objectives. Content will include state-specific information about tobacco use, tobacco and health, principles of evidence-based tobacco interventions (5As and efficacy of telephone quitlines), state quitline information and tobacco control, and the effectiveness and importance of nursing involvement in tobacco dependence treatment. A state-specific script will be prepared and the narrative will be prerecorded and housed on the Tobacco Free Nurses website (www.tobaccofreenurses.org) through a link on each state project page.

The toolkit of printed materials will include a trifold brochure describing the role of nurses in tobacco dependence treatment, state-specific information and resources, the *Helping Smokers Quit: A Guide for Clinicians* pocket guide based on the *Guideline* [5] and a state-quitline card.

Both the Webcast and toolkit will incorporate existing state-resources in order to promote these resources without duplicating efforts. For example, for LA we will add information about the fax-referral to the quitline and the links to obtain the forms and additional details about this procedure, thus reinforcing the program already being tested in that state. Ensuring that we build upon existing resources will facilitate sustainability of the project beyond the funding period, as it will make the educational resources more easily incorporated by the state's and hospitals' tobacco control program and initiatives. We will work closely with our consultants (described below) to make sure that the educational program has the latest resources and is appropriate to the population of nurses in the state.

The intervention group (HSQ) will receive the toolkit and access to the project Webcast and Web-based materials after the baseline survey. The Minimal Intervention group (HSQ-MI) will receive toolkits after the baseline survey. They will receive access to the Webcast and Web-based materials after the 6-month survey. Both groups, involving approximately 800 nurses, will have received the full intervention by the end of the study.

Selection and recruitment of hospitals: Hospitals meeting inclusion criteria in each state were identified using data from the U.S. News Best Hospitals 2012-13 [12] and in discussion with the consultants from each state (see letters of support). Inclusion criteria included hospitals with: 1) at least 100 beds in order to have an adequate number of nurses from which to obtain our sample, 2) an identified relationship with one of our consultants, and 3) comprehensive acute care facilities. Exclusion criteria included 1) being part of a system where smoking cessation interventions are being implemented system wide, such as a hospital in the Veteran's Administration or Kaiser systems, 2) pediatric or specialty hospitals (e.g. psychiatric, rehabilitation, etc.).

In KY there were 53 hospitals that met these criteria and in LA there were 68 hospitals that met these criteria. In discussion with the state consultants we developed an initial list of 8 hospitals (4 per state) as proposed sites for this project that cover a diverse geographic area in each state, thus accounting for possible in-state variances in smoking rates (Table 2). We opted for a convenience sample of hospitals, and randomization only of study arm (HSQ or HSQ-MI) based on our previous experience [10], where randomization of all eligible hospitals in the state was extremely time-consuming, with up to 4 - 8 weeks spent to recruit each hospital (initial invitation and follow up calls and e-mails). Additionally, some hospitals in the prior study that

originally agreed to participate, dropped out of the study without completing the baseline or all surveys. We expect that a convenience sample of hospitals will facilitate the hospital's engagement and retention.

After the funding decision, and once we confirm the hospitals' agreement to participate in the project, we will use a random number generator to randomly assign three hospitals in each state to the HSQ arm and one to the HSQ-MI arm. With the support of the state consultants we will identify, and collaborate, with at least one nurse champion at each hospital to facilitate implementation of the program using frequent electronic communication and periodic telephone support. If we are unable to recruit the hospitals listed on Table 2 we will, in consultation with our advisors, invite other hospitals to participate from the list of eligible hospitals until we meet the goal of 4 hospitals per state.

Table 2: Proposed sites for the project in KY (13) and LA (14)

State	# Beds	Hospitals	City	# Admissions /year	RNs Full time/ Part time	LPNs Full time/ Part time
KY	344	Central Baptist Hospital	Lexington	18,213	476/212	24/8
KY	265	Lourdes Hospital	Paducah	11,993	No data	No data
KY	254	Lake Cumberland Reg. Hospital	Somerset	11,778	281/32	65/2
KY	143	Ephraim McDowell Reg. Med Ctr.	Danville	8,553	237/63	20/8
LA	1045	Our Lady of the Lake Reg. Med Ctr.	Baton Rouge	35,907	914/433	122/56
LA	463	CHRISTUS Schumpert Med Ctr.	Shreveport	15,417	437/25	36/6
LA	331	St. Francis Med Ctr.	Monroe	16,407	417/122	72/18
LA	306	Lake Charles Memorial Hospital	Lake Charles	10,861	231/47	65/5

Recruitment of nurses: 400 nurses per state will be recruited through announcements from the Chief Nursing Officer, in collaboration with the nurse champion, in each hospital. Inclusion criteria for nurses include:1) working at one of the 8 selected hospitals in KY or LA; 2) caring for adult (< 18 years of age) patients on inpatient units, 3) a registered nurse (RN), and 4) willing to share their email address for future communications related to web-based survey link and reminders. Our key focus will be on RNs, since the proportion of LPNs in each of the proposed hospitals is very small, and their professional role may not include expectations that they will provide tobacco dependence treatment. However, as LPNs may be exposed to the program anyway (viewing materials, etc.), we will not exclude them from the survey, but account for this in the data analysis when assessing professional information (see section on evaluation design). We are focusing on nurses' care for adult patients due to the lack of evidence-based treatment guidelines for youth smokers.

As demographic and professional variables may influence the delivery of tobacco dependence treatment, we will examine the characteristics of RNs in KY and LA, in comparison to the

general US RN population. RNs in both states are primarily white, female with little ethnic diversity. Characteristics of these RNs can be found in Table 3.

Table 3. Demographics of the RN population: comparisons between US (15), Louisiana (2) and Kentucky (1)

	US RN population	Louisiana	Kentucky
Total #RNs/ #employed in nursing	3,063,162/ 2,596,599	57,788/ 37,157	53,068/ 38,109
Gender: Female	93.4%	89%	92.7%
Ethnicity			
White, non-Hispanic (NH)	83.2%	80%	94.7%
Hispanics, Latino any race	3.6%	1%	0.5%
Asian/Native Hawaiian/Pacific Islander (NH)	5.8%	1%	1.2%
Black/African-American, (NH)	5.4%	14%	29.2%
Am Indian/Alaska native, (NH)	0.3%	0.4%	0.2%
2 or more races, (NH)	1.7%	0.4%	0.5%
Educational Preparation of RNs			
Diploma	13.9%	9%	4.3%
ADN	36.1%	41%	51%
BSN or higher	50%	49%	44.5%
Employed full-time/ Part-time	63.2%/ 21.5%	79.4%/ 20.6%	72.8%/ 15.1%

After the baseline survey, by directly communicating with nurse participants, rather than through the Chief Nursing Officer as in our previous project, we expect to increase the response rate at the 3- and 6-month follow-up surveys in both study arms. Additionally, offering CEUs will serve as an incentive and should minimize attrition.

Sample size estimate: We calculated our sample size of 800 nurses based upon the proportion who improved in referral to the quitline at 6-months for our prior study [11], using 56% improvement in the experimental and 43% improvement in the control group. Using these proportions, with 600 nurses in the experimental group and 200 in the minimal intervention control group, anticipating 15% attrition and 10% unusable data, we have a power of 80% to detect statistically significant differences in performance at the 0.05 alpha level.

The proposed 2-year project will build capacity among nurses to help smokers quit in two high-need states and test the efficacy of distance learning educational methods in increasing referral to quitlines and improving delivery of the 5As as compared to performance by nurses who receive written materials only.

4. Evaluation Design:

Nurses' self-reported consistency of intervention will be determined using a validated web-based 30-item survey *Nurses Intervention in Tobacco Cessation* questionnaire [8]. The survey will assess, at baseline and at 3- and 6-months post-educational intervention, changes in the frequency and consistency of referral to the quitline and delivery of the 5As ("always",

"usually", "sometimes", "rarely", "never"). Consistency is defined by nurses stating that they "always" or "usually" refer smokers to a quitline or deliver each of the 5As.

Additional survey items include information about the nurses' demographics characteristics, smoking status, and professional characteristics (e.g. years of practice and professional level), and type of clinical setting (e.g. gynecology). The web-based survey takes 10-15 minutes to complete. The 3- and 6-month follow-up surveys will include additional items about satisfaction with the program, viewing of the Webcast and use of the written and web-based materials. Nurses in both the HSQ and HSQ-MI will be invited to participate in all three surveys.

We have perfected strategies to link web-based surveys with unique identifiers so that we can monitor changes over time.

Protocol: Prior to study initiation, we will obtain approval from the institutional review board at the principal investigator's institution and at each of the 8 hospitals or, if not available, a waiver of approval will be obtained from the hospitals. This is a procedure that we utilized in our prior study when we obtained approval from over 30 hospital IRBs in 3 different states. An invitation to participate in the project will be sent by the investigators to the Chief Nursing Officers (CNOs) at each of the eight hospitals. Up to three repeat emails/phone calls will be made. If there is no response, another hospital meeting the inclusion criteria will be selected from the list we developed, and in consultation with the each state consultant. Once the CNO has agreed, the project director will arrange for a telephone interview to obtain information about the hospital (i.e. confirm the number of nurse employees) and other factors that might the outcomes (e.g. presence of smoke free campus policies, availability of onsite smoking cessation treatment). Hospitals that participate in the project will receive an incentive to defray the costs of involvement in the study.

The toolkits will be shipped to each hospital for distribution to nurses. The number of toolkits is based on the number of nursing staff. We expect that approximate 350 packets will be sent to any one hospital, based on our previous experience. We recognize that some nurses not enrolled in the study will receive the toolkits. These were positively received in our previous study and were one aspect of changing the culture of nursing practice with an increased emphasis on offering tobacco dependence treatment. Nurses in hospitals designated as HSQ hospitals (intervention condition) will receive a request to participate in the project via the CNO by email or other method currently available to communicate with nursing staff. Nurses who are interested and willing to participate will access a weblink to complete the baseline survey. After completion of the baseline survey, nurses will receive the password in a follow-up email and be able to access a password protected project-specific Web page with a variety of resources, including the Webcast. Additionally, they will receive the toolkit of printed materials. As part of the baseline survey, nurses will be required to provide their email address so that we can send them follow-up links and reminders about the 3- and 6-month surveys. We will monitor traffic to the Webcast in addition to asking about viewership as part of the follow-up surveys.

Nurses in the two hospitals in the HSQ-MI arm will be invited to participate in the same manner as nurses in the HSQ group. However, after the baseline survey, they will receive only the toolkit of printed materials. Nurses in the HSQ-MI will also be asked to provide their e-mail so

they can receive reminders and links to the 3- and 6-months survey. At the completion of the 6 months survey, they will have access to the web-based resources, including the Webcast. They will be informed of this access via e-mail.

The option to obtain CEUs through our university will be available for all nurses who complete the six-month survey regardless of group assignment. Only nurses who view the Webcast and complete the six-month survey, in both groups, will have this option. Availability of CEUs should serve as an incentive to minimize attrition for both the HSQ and HSQ-MI groups. A certificate will be sent via e-mail to each participant who wishes to sign-up for this opportunity. We will complete the required documentation for approval of CEUs in California. As this is optional, and to separate this process from the research protocol, we will arrange for a process where this request will go directly to our Associate Dean for Academic Affairs so that she can store the data. We are planning to have a weblink for approval and certificate completion.

Data analysis

The primary unit of analysis is nurses in KY and LA. Data from the web survey will be downloaded to a secure computer for data management. All analyses will be done using SAS 9.2. Descriptive statistics will be used to characterize study variables and nurses' personal and professional demographics. Chi-square and t tests will be used to determine differences in demographic and professional characteristics of nurses in the HSQ and HSQ-MI groups.

Nurses' responses to referral to the quitline and delivery of the 5As will be coded on a 5-point scale, such that a score of 0 corresponds to "never" whereas a score of 4 responds to "always".

The improvement over time in these interventions will be analyzed using Mixed-effects Multinomial Logistic Regression for Ordinal Data with Hospital as a random effect. These models will be used to compare differences in improvement between those in the HSQ and those in the control group.

A combined score will be calculated as the total response to the 5As and referral to a quitline. After assessing this score and possibly transforming the data to preserve normality assumption, a Mixed-effects linear regression will be used to analyze possible overall improvement in this combined score.

To determine the differences between HSQ and control in the consistent referral to a quitline based on the consistent use of the 5As, we will use Mixed-effects Multinomial Logistic Regression for Binomial Data. Consistent use of 5As and referral is defined as anyone who "usually" or "always" uses these interventions. All interventions will be dichotomized into those who use them consistently and those who do not. This model will include consistent use of 5As as independent variables.

An additional analysis will be performed to compare the changes between HSQ and HSQ-MI between the states. This analysis will be done as an extension to each of the above outlined regressions by estimating the predictor within each model for each individual state and finding the difference between these predictors.

Concluding Thoughts:

If each of Kentucky's 53,000 nurses were to assist 4 smokers per year, we could reach over 210,000 smokers in the state (over 25% of all smokers); if each of Louisiana's 57,000 nurses were to assist 4 smokers per year we could reach over 228,000 smokers in the state (over 33% of all smokers). Thus, this project which will expand our existing smoking cessation educational initiatives aimed at nurses in the U.S. and worldwide, has the potential to reach almost 440,000 smokers in these two states. Because of the large numbers of nurses, targeting these healthcare providers has the potential to accelerate changes in practice such that all hospitalized smokers will receive evidence-based treatment. Similar to our previous projects, the web-based materials will be available for viewing for other nurses in the state after the conclusion of this study. Establishing the efficacy of a state-specific Webcast in changing practice also will contribute to the expanding knowledge about the impact of distance education. We have a strong track record of disseminating our findings through professional publications, presentations, on the Tobacco Free Nurses Website, and as well as links to other communication listservs such as Global Bridges. We plan to use similar methods to disseminate findings from this project.

References

1. Kentucky Board of Nursing Annual Report 2010-2011. Retrieved from http://www.kbn.ky.gov/NR/rdonlyres/13DB5890-E0B1-4538-86EB-F638B5D9C32D/0/annrpt1011.pdf

2. Louisiana State Board of Nursing 2011 Annual Report http://www.lsbn.state.la.us/Portals/1/Documents/AnnualReport/AnnualReport2011.pdf

3. Centers for Disease Control and Prevention (CDC). State-Specific Prevalence of Cigarette Smoking and Smokeless Tobacco Use Among Adults --- United States, 2009. *MMWR.* November 5, 2010 / 59(43);1400-1406. Retrieved from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5943a2.htm

4. CDC. *Tobacco Control State Highlights, 2010*. Atlanta: U.S. Dept. of Health and Human Services, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2010. Retrieved from http://www.cdc.gov/tobacco/data_statistics/state_data/state_highlights/2010/pdfs/highlights2010.pdf

5. Fiore, M.C., Jaen, C.R., Baker, T.B., et al. *Treating tobacco use and dependence: 2008 update. Clinical Practice Guideline.* Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. Retrieved from http://www.ahrq.gov/Clinic/notesmoke.htm

6. Rice, V.H., & Stead, L.F. Nursing interventions for smoking cessation. *Cochrane Database of Systematic Reviews*. 2008. 1, CD001188. DOI: 10.1002/14651858.CD001188.pub3

7. Zhu, S.H., Anderson, C.M. Johnson, C.E. Tedeschi, G. & Roeseler, A. A centralized telephone service for tobacco cessation: The California experience. 2000. *Tobacco Control*. 9(Supppl. 2), 1148-1155. doi:10.1136/tc.9.suppl_2.ii48

8. Rigotti, N.A., Munafo, M.R., & Stead, L.F. Smoking cessation interventions for hospitalized smokers: a systematic review. 2008. *Archives of Internal Medicine*. 168, 1950-1960. doi:10.1001/archinte.168.18.1950

9. Sarna, L., Bialous, S.A., Wells, M., Kotlerman, J., Wewers, M.E., & Froelicher, E. Frequency of nurses' smoking cessation interventions: Report from a national survey. 2009. *Journal of Clinical Nursing*. 18:2066-2077. DOI: 10.1111/j.1365-2702.2009.02796.

10. Sarna, L., Bialous, S., Ong, M., Wells, M., & Kotlerman, J. Nurses' treatment of tobacco dependence in hospitalized smokers in three states. *Research in Nursing & Health*. 2012, 35: 250-264. DOI: 10.1002/nur.21476

11. Sarna, L. Bialous, S., Ong, M.K., Wells, M., & Kotlerman, J. Increasing nursing referral to telephone quitlines for smoking cessation using a web-based program. *Nursing Research*, (in press).

12. U.S. News Best Hospitals 2012-2013. Retrieved from http://health.usnews.com/best-hospitals/rankings

13. Kentucky hospitals. 2012. Retrieved from http://health.usnews.com/best-hospitals/search?hospital_name=Hospital+name&specialty_id=All&city=Kentucky&distance=25

14. Louisiana hospitals. 2012. Retrieved from http://health.usnews.com/best-hospitals/search?hospital_name=Hospital+name&specialty_id=All&city=Louisiana&distance=25

15. U.S. Dept. of Health and Human Services, Health Resources and Services Admin. The Registered Nurse Population: Initial Findings from the 2008 National Sample Survey of Registered Nurses. 2010. Retrieved from http://bhpr.hrsa.gov/healthworkforce/rnsurveys/rnsurveyinitial2008.pdf

E. Detailed Work Plan and Deliverables Schedule:

Activities (December 2012 to December 2014)	Year 1, 2013				Year 2, 2014			
Kentucky & Louisiana	1	2	3	4	1	2	3	4
UCLA IRB approval	X							
Recruit & Randomize: 8 hospitals, 4 KY & 4 LA	X	X	X					
Consult with E. Hahn regarding KY hospitals & with B. Bourgeois about LA hospitals contacts	X	X	X					
Prepare invitational materials about study for consideration by Chief Nursing Officers (CNOs) at each hospital	X	X	X					
Send up to three email requests to CNOs inviting participation; if no response, select another eligible hospital	X	X	X					
Randomize selected hospitals using a random number generator so that each state has 3 experimental & 1 control hospital	X	X	X					
Identify & contact Nurse Champions from each hospital.	X	X	X					
Finalize Study Materials								
Confirm web-based survey evaluation materials with hospital & state-specific identifiers.	X	X						
Conduct phone interviews with CNOs/nurse champion re. project procedures & to obtain details about hospital tobacco control policies, existing tobacco dependence treatment resources & training.	X	X	X					
Adapt project materials (slides; nurse & tobacco statistics) from previous study, available resources, & information from LA & KY.	X	X	X					
Send educational materials to state consultants for review & changes, as appropriate	X	X	X					
Finalize tool kit of printed materials	X	X	X					
Finalize adaptation of slides/state: review & approval by K. Hudmon	X	X	X					
IRB: Assist with KY & LA hospitals' IRB procedures		X	X	X				
Website								
Hire a **webmaster** to assist with web-based distance learning, building project micro-site, and ongoing site maintenance.	X	X	X	X	X	X	X	X
Prepare **TFN website** with a new, HSQ project microsite with project tabs for KY & LA specific materials		X	X	X				
Start production of **webcast** program & web materials: develop state-specific scripts, complete & upload recordings for KY & LA & test.		X	X	X				
Toolkits								
Send materials for tool kit for production; upload web-based materials on the project specific microsite		X	X					
Confirm procedures for continuing education credits at UCLA		X	X	X				
Send invitations to participate in the study to CNOs, nurse champions,	X	X	X					

Activities (December 2012 to December 2014)	Year 1, 2013				Year 2, 2014			
Kentucky & Louisiana	1	2	3	4	1	2	3	4
with link to baseline survey for nurses in all hospitals in KY & LA								
Launch **Baseline Survey in all 8 hospitals**			X	X				
Send weekly reminder announcements to participate in the study over a three week period			X	X				
Send weekly reminders to nurse champion with statistics about level of enrollment			X	X				
Close baseline survey 1 month after initiation				X	X			
Toolkit of educational materials ready for distribution via mail to each of the hospitals & shipped after Baseline survey closed		X	X	X				
Confirm receipt & distribution of materials at each hospital		X	X	X				
Webcast/Web microsite resources made available: 6 Exp. Group Hospitals in KY & LA			X	X				
Launch **3-month Survey in KY & LA**				X	X			
Send reminder emails to nurses participating in the study				X	X			
Send weekly reminders to nurse champion with statistics about level of enrollment				X	X			
Close 3-month survey in 1 month after initiation					X	X		
Launch **6-month survey**					X	X	X	
Send weekly reminders to nurse champion with statistics about level of enrollment					X	X	X	
Close 6-month survey in 1 month after initiation					X	X	X	
Minimal intervention hospitals receive access to Webcast & Web microsite resources after 6-month survey completion						X	X	
Contact Hospital CNO's & arrange for distribution of incentives upon 6-mo. Survey closure			X	X	X	X	X	
Arrange for CEU certificates to be sent to qualifying nurse participants					X	X	X	
Ongoing activities								
Monthly Support calls with Nurse Champions in each hospital	X	X	X	X	X	X	X	X
Ongoing communication with consultants E. Hahn (KY) & B. Bourgeois (LA) regarding hospitals and state tobacco control activities	X	X	X	X	X	X	X	X
Begin web tracking after webcast/web materials link distributed				X	X	X	X	X
Data analysis & manuscript preparation			X	X	X	X	X	X
Data analysis 3-month survey, calculate response rate				X	X	X	X	X
Data analysis 6-month survey, calculate response rate					X	X	X	X
Manuscript preparation					X	X	X	X

Note: 1= December - February 2= March-May; 3= June-August; 4= –September-November