Brief Tobacco Cessation Intervention Pilot Project: Windham Community Memorial Hospital Emergency Department

Process Evaluation Report

(Connecticut Department of Public Health Contract #2011-0216)

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Executive Summary

In 2011, the Tobacco Use Prevention and Control Program of the Connecticut Department of Public Health (CT DPH) awarded a $163,000, two-year contract (February 2011-January 2013) to Windham Community Memorial Hospital (Windham Hospital) in Willimantic, Connecticut, to conduct brief tobacco cessation interventions with emergency department patients and accompanying family members. CT DPH contracted with Professional Data Analysts, Inc. (PDA) to conduct a process evaluation of the Windham Hospital pilot project.

Overall, this type of intervention has the potential to be an exceptional tool to provide tobacco users with cessation services and provide referrals to the Connecticut Quitline at a low cost compared to media campaigns. Several refinements to the current pilot would strengthen future efforts, such as acquiring a better understanding of how to increase fax referral consent and enrollment rates. Rolling out similar hospital, clinic, and medical practice-based brief interventions statewide would broaden the impact of this intervention.

Below please find a summary of unique characteristics of the pilot site, successes and challenges of the site, and lessons learned and recommendations for the site and CT DPH moving forward.

The Windham Hospital Emergency Department (ED) patient population tends to face issues related to poverty and many use the ED more than once.

- The majority of patients reside within Windham County (primarily rural) which is ranked either last or second to last in morbidity, mortality and health behaviors among Connecticut's eight counties.
- The Windham ED resides in the town of Willimantic where about 40% of the population is of Hispanic or Latino origin and 26% live below the poverty line.
- The majority of ED patients (60%) have some form of government-sponsored insurance and 8% are uninsured.
- Approximately 26% of ED patients are current tobacco users.
- In any given month, approximately 26% of patients have visited the ED two or more times within that month.

The Windham ED was very successful in meeting most CT DPH contract goals, except for referrals to the Connecticut Quitline.

- Exceeded their goal for the number of patients screened for tobacco use
- Exceed their brief intervention counseling goals for patients:
  - 100% of 11,742 tobacco users were provided with brief intervention
- Brief intervention occurred with some non-patients; however, the result of these efforts is unknown
- Did not meet their goal for referrals to the Connecticut Quitline (CTQL)—16% of all tobacco users (N=1,861) were referred to the CTQL; however:
  - the Windham ED has a high proportion of repeat visitors each month, somewhat limiting opportunities for new fax referrals;
  - 45% of all fax referrals received at the CTQL during the grant period were from the Windham ED; and,
  - fax referrals sent from the Windham ED resulted in a 29% quitline enrollment rate across the grant period, which is comparable to the enrollment rate across all CTQL fax referral sources.

The internal support at Windham Hospital was a key factor that contributed to the success we observed.

- The intervention had support from ED leadership and other champions.
- Key staff engaged in brief intervention design and implementation.
- Important electronic medical record (EMR) elements were upgraded.
- There were advancement incentives for nurse participation (i.e. clinical ladder).
- Staff and providers trained their peers and served as expert resources.

Windham Hospital encountered a variety of challenges in implementing their program.

- Initial fax referral logistical problems
- Delays in creation and dissemination of tobacco cessation materials
- Time needed to coordinate ED waiting room volunteers
- Large proportion of repeat visitors each month
- Lack of detailed tracking of non-patient brief intervention efforts
- Lack of feedback to nurses and providers about the result of their referral efforts
- Some unfamiliarity with up-front planning needed with grant process
- Client-reported problems with CTQL response time and call-backs

A few additional resources were leveraged to achieve grant goals

- Mostly relied on CT DPH grant funds
- Some in-kind provided by physicians
- Training on brief intervention protocols are now part of mandatory new employee orientation and are paid for from the ED's existing training budget

Several lessons were learned about implementing brief intervention in the ED setting

- Involve staff and clinicians that understand the typical workflow of the ED in development, piloting and implementation of the intervention.
- Budget more resources to create and brand educational materials and pamphlets.
- Leverage involvement of those with either personal or career-advancement interests and those in leadership positions.
- Have bedside nurses on staff during each shift that know the intervention protocols and can answer questions (e.g. about the quitline).
- Have peers train each other on brief intervention protocols and reinforce the importance of intervening with tobacco users.
- Education is key—staff and providers need to know what they need to do *and* why it is important.
- Consider what to do with repeat visitors--how to track them and what this might mean for fax referral rates.
- Have the EMR support a greater number of brief intervention steps.
- Look into why there is a drop-off between those consenting to a fax referral and the proportion of those that are fax referred.

Tobacco use screening and documentation will remain; however, uncertainty remains regarding the sustainability of other brief intervention elements.

- Minimally, all patients will continue to be screened for tobacco use at every visit and this information will continue to be documented in the EMR.
- ED staff had differing views about the extent to which the remaining brief intervention elements would be maintained (assessing willingness to quit (patients and non-patients), advising to quit, assess willingness to be referred to the CTQL, sending fax referrals to the CTQL).

Recommendations

Windham Hospital Emergency Department

- Continue to monitor rates of brief intervention and fax referral.
- Continue to screen and refer, minimally via print materials, if fax referrals are too cost prohibitive.
- Consider repeat visits by ED patients as additional opportunities to discuss tobacco use, which could move them closer to a quit attempt.
- Contract with the CTQL vendor to receive fax-back reports and reports on enrollments and outcomes.
- Consider reviewing data in the EMR to look for changes in patients' tobacco use status over time, in lieu of outcome data from the CTQL.
- Continue to train new hires on brief intervention protocols.
- If applicable, leverage the momentum of other initiatives, such as those pertaining to conditions that are impacted by tobacco use (e.g. diabetes, hypertension) to keep tobacco cessation a priority.
- Leverage the clinical ladder or other incentives to keep brief intervention a priority in the ED.
- Provide occasional re-training on brief intervention protocols to maintain momentum for implementing the intervention.
- Integrate brief intervention protocols into the EMR, make them simple to use, and train (and re-train) staff on the protocols and why intervening with tobacco users is important, even in the ED setting when tobacco cessation is not always the immediate concern.

CT DPH

Overall, PDA considers this pilot project to be extremely promising. With further refinements, it represents an effective strategy to provide cessation services to vulnerable populations in a cost effective manner. Refinements to the program include the following:

Repeat Visitors:

- In creating contract goals, not only should the rate of repeat visitors be considered but also fax referral consent rates; optimally, only those ready to quit in the next 30 days and consent to fax referral should have a fax referral to the CTQL.
- Consider having funded entities provide unduplicated counts in addition to overall counts of brief intervention elements provided in their monthly reporting to CT DPH, especially within health care settings that experience a lot of repeat visitors.

Intervention for non-patients:

- If future ED brief intervention efforts are to include non-patients, consider tracking this type of intervention more closely (e.g. type of intervention provided, whether a fax referral was sent to the CTQL).

EMR:

- Include funding for EMR changes in future contracts so hospitals or clinics can make changes to their EMRs to help facilitate ongoing implementation of brief intervention protocols.
- Encourage building brief intervention steps into the EMR to help facilitate the intervention and referral process.
- Consider funding a pilot ED-based project which integrates EMR changes that help facilitate brief intervention to see if a greater number of tobacco users receive brief intervention counseling and are referred to the CTQL. Ultimately, fax referrals from hospitals and clinics could become a lower-cost alternative to using expensive media campaigns to drive tobacco users to the CTQL.

Fax referral & outcome monitoring:

- Continue reviewing CTQL fax reports to observe the extent to which the Windham ED is continuing to utilize the CTQL fax referral system beyond the CT DPH funding period.
- Consider conducting an outcome evaluation of ED patients that enrolled in CTQL services. Provide outcome results to participating EDs and others referring to the CTQL so they can see the result of their efforts.

Planning for future funding efforts:

- Review the fax referral enrollment rates of similar ED-based programs to see if there are some exemplary cases of ED-based fax referral programs with higher enrollment rates (e.g. NAQC survey results) from which to draw promising practices.
- Consider convening staff from multiple EDs that have been referring to the CTQL to obtain feedback about how the interventions are going and to brainstorm ideas on how to improve fax referral consent and CTQL enrollment rates.

Background

Pilot Intervention

In 2011, the Tobacco Use Prevention and Control Program of the Connecticut Department of Public Health (CT DPH) awarded a $163,000, two-year contract (February 2011-January 2013) to Windham Community Memorial Hospital (Windham Hospital) in Willimantic, Connecticut, to conduct brief tobacco cessation interventions with emergency department patients and accompanying family members. Considered a pilot project by CT DPH, Windham Hospital was the sole grant recipient. As part of this pilot project, Windham Hospital was to develop and implement brief tobacco cessation services based on 2008 DHHS best-practice guidelines[1], train staff and clinicians to conduct the intervention, and provide tobacco users with referrals to the Connecticut Quitline (CTQL) via fax referral.

Evaluation

CT DPH contracted with Professional Data Analysts, Inc. (PDA) to conduct a process evaluation of the Windham Hospital pilot project in addition to PDA's other evaluations of CT DPH-funded tobacco cessation programs. The purpose of the evaluation was two-fold: 1) assess the extent to which Windham Hospital met selected contractual goals relating to the implementation of the brief intervention; and, 2) to help inform future funding from CT DPH regarding implementation of tobacco cessation interventions in hospital emergency departments (e.g. challenges, facilitators, lessons learned). The following evaluation questions were developed and were to be answered by PDA's process evaluation:

1. What are the unique characteristics of Windham Hospital?
2. To what extent was Windham Hospital able to achieve their contract goals and objectives during the grant period (related to staff training, screening, counseling, and quitline referral)?
3. What contributed to the successful implementation of the intervention?
4. What challenges were encountered when attempting to implement the intervention?
5. What resources, other than CT DPH funding, were instrumental in implementing the intervention?
6. What lessons were learned about how to implement brief intervention in the emergency department setting?

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[1] Insert ref to 2008 DHHS best-practice guidelines

7. How prepared is Windham Hospital to maintain the intervention after the CT DPH funding period?

Three main data sources—quarterly narrative reports, monthly data reports, key informant interviews, fax referral data, other documents--were used by PDA to obtain answers to these evaluation questions. Each data source is described in more detail below.

Quarterly Narrative Progress Reports

Windham Hospital provided CT DPH with a narrative progress report each quarter. These narrative reports included information about staff training, stakeholder meeting notes, summary fax referral data, and other successes or challenges faced in implementing the intervention. These reports were provided to PDA by the CT DPH grant manager overseeing the grant for the period of November 2011 through December 2012.

Monthly Data Reports

Windham Hospital provided CT DPH with monthly quantitative brief intervention data reports. These reports, in MS Excel format, provided the following data by month (starting in November 2011): number of patients screened for tobacco use in the emergency department and the primary language of the patient (English, Spanish, Other), number of tobacco users, number of tobacco users provided brief intervention counseling, and number of referrals faxed to the CTQL. The spreadsheet was updated by Windham Hospital staff each month and sent to the CT DPH grant manager overseeing the grant. The grant manager then provided PDA with the spreadsheet. Data from November 2011 through January 2013 were reviewed for this report.

Key Informant Interviews

An evaluator from PDA conducted telephone interviews with three key informants that worked to develop, monitor and/or implement the intervention. These interviews were conducted toward the end of the grant period, in November 2012. The purpose of these interviews was to obtain additional information and context with which to help answer evaluation questions 3-8. Additional details regarding questions that were asked of key informants are provided in the *Key Informant Interview Protocol* in the Appendix of this report.

Connecticut Quitline Fax Referral Data

Fax referral data was provided to PDA staff from the CTQL vendor, Alere Wellbeing, as part of PDA's evaluation of the CTQL. PDA staff reviewed and summarized data from two reports—the *Connecticut QuitLine Fax Referral Report* and *Connecticut Quitline Fax Referral—Service Requested at Registration* report. These reports were provided in PDF

format, which PDA staff then transferred to MS Excel for analysis. Data were available for November 2011 through December 2012.

Other Documents

PDA reviewed other documents such as meeting notes with the CT DPH grant manager and the Windham Hospital executed contract. These materials provided additional context and detail about Windham and their grant goals, objectives, reporting and deliverables.

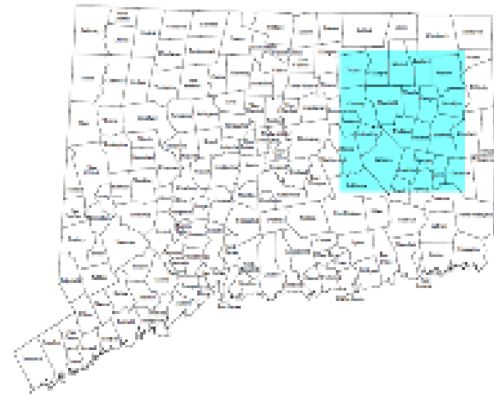
Limitations

This evaluation is of the Windham Hospital Emergency Department brief intervention program specifically and is designed to provide insights into if and how this program should be replicated in other clinical settings. It is important to note that the contextual factors of Windham Hospital play a large part in the programs' results. When attempting to apply these findings to other locations, care should be taken to carefully consider the extent to which contextual factors are the same or different, and how this might impact a similar program in a different location. Also, data from Windham may include duplicate patients, the extent to which is speculated to be 26%, but this was not adjusted for in Windham's data reports.

Results

What are the unique characteristics of Windham Hospital?

Summary. The Windham Hospital Emergency Department serves 19 Eastern Connecticut towns. Most patients reside within Windham County, which is primarily rural, and has been ranked last or second to last among Connecticut's eight counties in terms of morbidity, mortality and health behaviors. The town of Willimantic, where Windham Hospital is located, has a large Hispanic/Latino population and around a quarter of residents live below the poverty line. The Windham Emergency Department serves a large proportion of those with government-sponsored insurance, 26% are tobacco users, and around 26% of patients visit the Windham Emergency Department at least two times a month. Overall, they serve a unique, high-need population.



Windham Hospital is a non-profit acute care facility, located in Willimantic, Connecticut. Windham Hospital provides inpatient, outpatient and emergency services for 19 Eastern Connecticut towns[2]. The Emergency Department (ED) at Windham Hospital operates 24 hours per day, 365 days per year, and provides treatment for approximately 34,000 patients annually. The majority of patients seen in the Windham ED have some form of government-sponsored insurance (60%), 32% have private insurance, and 8% are uninsured. The Windham Hospital campus has been smoke-free since November 2008.

The majority of towns serviced by Windham Hospital and the Windham Hospital ED reside within Windham County. Windham County is primarily rural. Approximately 12% of residents live below the poverty level (compared to 10.1% for the State of Connecticut (CT)) and the median income is $56,564 (compared to $64,321 for CT)[3]. In the city of Willimantic, where the Windham ED is located, about 40% of the population is of Hispanic or Latino origin (compared to 13% for CT) and 26% of Willimantic residents live below the poverty level (compared to 9.5% for CT)[4].

[2] Includes the towns of: Tolland, Willington, Ashford, Eastford, Coventry, Mansfield, Chaplin, Hampton, Brooklyn, Andover, Columbia, Windham, Scotland, Canterbury, Hebron, Lebanon, Franklin, Sprague, and Colchester.

[3] http://www.census.gov/did/www/saipe/data/statecounty/data/2010.html

[4] http://quickfacts.census.gov/qfd/states/09/0985810.html

According to 2010 County Health Ranking data[5] Windham County ranked seven out of eight counties in CT with respect to morbidity, last for mortality and health behaviors (e.g. smoking, obesity, physical inactivity). The smoking rate in Windham County is 20% (versus 16% for CT) and the obesity rate is 30% (vs. 23% for CT).

Recent surveys conducted with Windham Hospital in-patients find that 22% of inpatients are current smokers and of those that quit smoking, 6% had been smoke-free for less than a year[6]. Additionally, according to recent Windham Hospital ED patient data reports, approximately 26% of Windham ED patients are current tobacco users[7].

To what extent was Windham Hospital able to achieve their goals and objectives during the grant period (related to staff training, screening, counseling, and quitline referral)?

Summary. The Windham Hospital ED met their goals and objectives pertaining to tobacco use screening and provision of brief intervention. They trained all staff and providers on a new, best-practice-based brief intervention protocol and the importance of helping patients connect to tobacco dependence treatment services. They continue to train new staff on the brief intervention protocol as part of new employee orientation. Windham did not, however, reach their goal for the proportion of tobacco users provided with a fax referral to the Connecticut Quitline. The proportion of tobacco users consenting to fax referral gradually decreased over time. This may have been due in part to an EMR upgrade that interfered with momentum to conduct all aspects of the intervention, or the number of repeat patients the ED treats each month, or some other reason. Additional research is necessary to fully understand the relatively low level of referrals and drop in referrals over time (when compared to the proportion of tobacco using patients), which has important implications for funding similar programs in the future. CT DPH should consider stating goals and objectives in terms of unique people and that take into consideration the unique contexts, such as typical fax referral consent rates and rates of repeat visitors, within each grantee organization.

Windham Hospital was contracted to provide a brief tobacco cessation intervention within its ED. The intervention was to include screening of all patients, patient's family members and visitors for tobacco use, providing brief intervention counseling based on best-practice guidelines[8], and provide tobacco users with referrals to the Connecticut

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[5] http://www.countyhealthrankings.org/app/connecticut/2012/windham/county/1/overall

[6] Windham Hospital grant application.

[7] Windham Hospital monthly data reports to CT DPH.

[8] Fiore MC, Jaen CR, Baker TB, 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. May 2008. Available at: http://www.ahrq.gov/path/tobacco.htm

Quitline. Additionally, a Smoking Cessation Task Force was to be formed within the ED to provide oversight to the intervention.

Before Windham received funding from CT DPH, as part of the grant writing process, key staff from the Windham ED met to assess how to insert tobacco screening, brief intervention and referral components into the ED's workflow as well as to assess the potential training needs of ED staff relevant to implementation of the intervention. They submitted their plans for the intervention and staff training to CT DPH as part of their grant proposal.

In December 2010, CT DPH notified Windham Hospital that they would be awarded a two-year grant contract (February 2011-January 2013). The up-front planning Windham staff had conducted as part of the proposal-writing process allowed them to put their plans into place soon after their contract with CT DPH was fully executed.

In order to monitor and provide oversight to the intervention, a Smoking Cessation Task Force was formed that would meet quarterly. The Task Force included two current ED nurses, a clinical informatics specialist/project manager (also a former ED nurse), and an administrative assistant (also a former ED nurse). The medical director of the ED was also kept informed of plans and served as a clinician champion for the project.

Staff and Clinician Training

In October 2011, ED clinicians and staff were trained on the goals of the intervention, tobacco use and cessation facts, brief intervention protocol, the CT Quitline, and how to document the intervention in the electronic medical records system. They were also provided with a "Tobacco Cessation Algorithm"[9] to use as a quick reference tool. Two staff nurses trained a total of 24 nurses, 11 patient care technicians and an administrative assistant and the ED's medical director trained 11 physicians and 5 physician assistants.

Standard minimal brief intervention for tobacco users:

- **Ask** about willingness to make a quit attempt
- **Advise** to quit using tobacco and discuss harms of tobacco use
- **Assess** willingness / interest in talking to someone at the CT Quitline and provide CT Quitline information

Key Intervention Components

The brief tobacco cessation intervention started on November 1st, 2011. From this point forward all

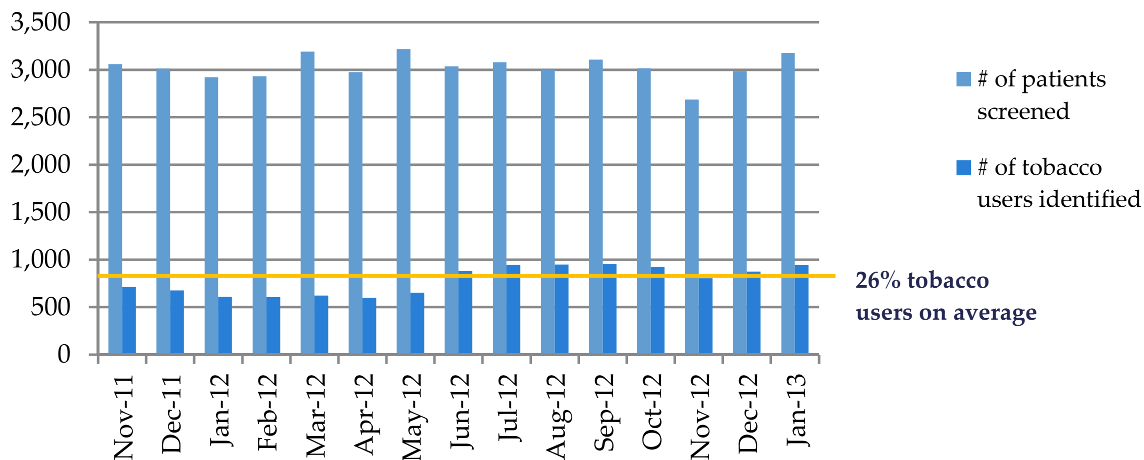
[9] Training slides, protocol and algorithm were previously provided to CT DPH.

patients, accompanying family members, and visitors were to be screened for tobacco use. Those screened and found to be current tobacco users were then to be advised to quit, asked about their willingness to quit, provided with information about the Connecticut Quitline (CTQL) and asked whether it was okay to have their information faxed to the CTQL to receive additional cessation counseling/assistance.

Services Provided

According to Windham ED monthly data reports, during the first month implementing the intervention, the Windham ED saw around 3,000 patients, of which 711 were identified as being tobacco users. All 711 were provided with brief intervention counseling and a total of 236 fax referrals were sent to the CT Quitline during this first month of implementation. Windham also provided brief intervention services to tobacco users that accompanied patients in the ED. This resulted in a total of 26 non-patients being counseled and provided with CTQL information, if interested in quitting. Throughout the grant period, the Windham ED continued to see approximately 3,000 patients per month, 100% of whom were screened for tobacco use. As can be seen in Figure 1 below, the number of patients that were identified as tobacco users month between November 2011 and January 2013, fluctuated (min. 597, max. 949).

Figure 1. Number patients screened and number of tobacco users identified per month



As indicated in Figure 1 above, the proportion of patients identified as tobacco users across the grant period was about 26%. The proportion identified as tobacco users, however, fluctuated over the grant period from a low of 19.5% to a high of 30.8%, and

was generally higher than statewide tobacco use estimates for Connecticut (17.1%)[10]. Beginning in June 2012, there was a marked increase in tobacco use prevalence among Windham ED patients which may have been related to an EMR change that was implemented during that time which made asking about and documenting tobacco use mandatory (e.g. a "hard stop" in the EMR) at every visit, for every patient.

According to Windham's records, all tobacco using patients were provided with brief intervention, which included the attending physician advising them to quit, discussing the health risks of tobacco use, asking about their willingness to make a quit attempt, and asking whether they were interested in having their information faxed to the CTQL. All tobacco users were provided with information about the CTQL. Those consenting to have their information faxed CTQL completed a fax referral form which was then faxed to the CTQL upon final consent by an administrative assistant in the Windham ED. In some instances, patients that originally expressed interest in having their information sent to the CTQL changed their minds, so their information was not faxed. Some clients were also provided with a CTQL fax referral form to take home and complete and CTQL information and forms were also available in the ED waiting room. A secure box was placed in the waiting room for completed fax referral forms. The number of patients and/or family members that called the CTQL as a result of being given a CTQL fax referral form or CTQL information is unknown.

Table 1 below provides additional detail as to the monthly number of patients provided with a CTQL information and reporting interest in quitline services, the actual number of referrals faxed to the CTQL and the proportion of faxes sent from those consenting to fax referral. There is some drop off between those reporting interest and those consenting to a fax referral, for reasons described above; however, overall, the majority (84%) of those reporting interest had their information faxed to the CTQL.

Table 1. Number of clients reporting interest in CTQL services, number and proportion of CTQL referrals faxed from the Windham ED

	# CT QL referrals, those reporting interest	# CT QL referrals faxed, those consenting	% referrals faxed, consenting	% of all tobacco users w/fax referral
November 2011	249	236	94.8%	33.2%
December 2011	207	195	94.2%	28.9%
January 2012	186	158	84.9%	26.0%
February 2012	165	142	86.1%	23.5%

[10] 2011 BRFSS estimates, current smokers

March 2012	146	119	81.5%	19.1%
April 2012	127	103	81.1%	17.3%
May 2012	114	92	80.7%	14.1%
June 2012	92	56	60.9%	6.4%
July 2012	42	35	83.3%	3.7%
August 2012	36	34	94.4%	3.6%
September 2012	66	51	77.3%	5.3%
October 2012	100	81	81.0%	8.8%
November 2012	94	94	100.0%	11.7%
December 2012	116	58	50.0%	6.6%
January 2013	121	106	87.6%	11.3%
	1,861	1,560	83.8%	13.3%

Table 1 also shows that the proportion of tobacco users interested in quitting and having a fax referral sent generally decreased over time. This may be related to an observation made by Windham ED staff that they often see the same patients in the ED and, while staff and clinicians still ask about tobacco use, willingness to quit and consent to fax refer, patients have either stopped consenting to quitline help and/or they have already taken part in quitline services and are currently ineligible or do not wish to receive any more services from the CT Quitline. It cannot be deciphered from Windham ED data whether the 26 non-patients counseled were provided with a fax referral to the CTQL.

In summary, the Windham Hospital ED saw 45,397 patients between November 2011 and January 2013, all of whom were screened for tobacco use. Of those screened, 11,742 (26%) were identified as tobacco users. All tobacco users were provided with brief intervention, including being provided with information (minimally) about the CT Quitline. A total of 1,861 tobacco users (16% of tobacco users identified) reported interest in quitting and were given information about the CTQL. Fax referrals were sent to the CTQL for about 84% of those that consented (N=1,560, representing13% of tobacco users identified). A handful of non-patients were counseled; however, their fax referral status is unknown.

While the number of patients screened and tobacco users provided with brief intervention was high, the number consenting to a CTQL referral is much lower than anticipated. Table 2 below provides a summary of specific contract goals related to this intervention as well as the extent to which the Windham ED met these goals.

Table 2. Windham Hospital ED Tobacco Cessation Program Goals[1]

Intervention Component	Contract Goal	Actual	Contract Goal	Actual
Tobacco use screening	A minimum of **36,000** patients will be screened for tobacco use	**45,397**[2]	**70%** of emergency department patients, patients' family and visitors will be screened.	**100%**
Brief intervention counseling	**10,800** program participants will receive brief intervention counseling	**11,742**[3]	**80%** of screened clients that use tobacco will receive brief intervention counseling	**100%**
Connecticut Quitline referrals	Participants (that use tobacco) will be referred to the quitline	**1,861** tobacco users interested in quitting[4]	**90%** of screened clients that use tobacco will be referred to the quitline	**16%**[5] were referred; 13% had a fax referral sent

[1] Extracted from executed Windham Hospital contract #2011-0216.
[2] Data is from November 2011(when fax referral started) through January 2013 (end of the contract period). Data includes duplicate people, as approx. Approximately 26% of patients the ED sees each month visit two or more times within that month. In order to estimate an unduplicated count of patients screened, PDA applied this proportion to the number of people screened for tobacco use. This calculation yielded a crude measurement of 33,594 unique patients: (less than the 36,000 goal). Please note that the problem of repeat visitors may be worse amongst tobacco users, as they may be suffering from more chronic ailments that lead them to seek treatment in the ED.
[3] Also, PDA applied 26% (the proportion of patients who visit the ED two or more times per month) to the number receiving brief intervention counseling, yielding a number less than the 10,800 goal (n=8,689). Again, please note that the problem of repeat visitors may be worse amongst tobacco users, as they may be suffering from more chronic ailments that lead them to seek treatment in the ED.
[4] All tobacco users expressing interest in quitting were referred to the quitline.
[5] This represents tobacco users *reporting interest* in receiving quitline services, as only those reporting interest were provided with a referral, per best practice-based protocol.

In order to corroborate Windham ED's fax referral numbers as well as to observe the short-term result of Windham's efforts, PDA reviewed monthly fax referral reports from the CTQL vendor for the period of November 2011 through December 2012. During this time period, the CTQL received a total of 1,340 fax referral forms from the Windham Hospital ED. According to Windham's records, a total of 1,560 fax referrals were sent to the CTQL. The apparent difference in these numbers could be related to

the fact that Windham sees a lot of repeat patients and may have sent in a fax referral form for the same person more than once. Also, it could be related to the legibility of the fax referral forms, the timing of when the CTQL processes fax referrals (delays), or some other reason. Windham ED staff noted that, at least initially, several forms were returned to Windham due to illegibility or missing information.

In terms of Windham's contribution to fax referrals at the CTQL, 45% of all fax referrals received at the CTQL between November 2011 and December 2012, were from the Windham ED. The fax referrals from the Windham ED resulted in 391 quitline service enrollments (either 1-call[11] or multi-call[12]). Just over half of these enrollments (n=206) were for the 1-call service and just under half were for the multi-call program (n=185). Averaging enrollments across the 13-month period, there were about 15 1-call enrollments per month (range: 4-40) and an average of 13 multi-call enrollments per month (range: 4-33). Considering those that received the 1-call or multi-call service, Windham's fax referral efforts resulted in a 29% quitline enrollment rate across the 13-month period (monthly range: 19%-37%). Windham ED's fax referrals, therefore, constituted a small, but consistent contribution to CTQL enrollments each month.

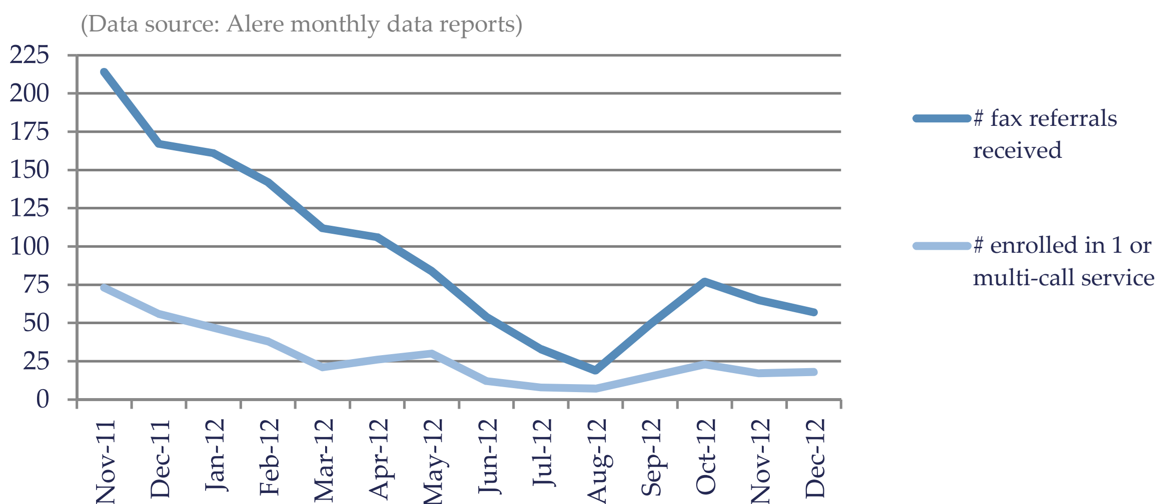
A recent review by PDA staff of published literature on fax referral enrollment rates identified a wide range of enrollment rates (21%-53%). Additionally, the 2010 NAQC Annual Survey of Quitlines[13] reports that among U.S. quitlines responding to the survey (n=40 quitlines), 41% of fax referrals result in a completed registration. In fiscal year 2011 (July 2011-June 2012), the estimated fax referral enrollment rate at the CT Quitline was around 33% across all fax referral sources. The overall fax referral enrollment rate for the Windham Hospital ED, therefore, is comparable to the CT Quitline at 29%. However, it is somewhat lower than the North American average at 41%. This could be due to the specific population of ED patients at Windham Hospital. Figure 2 provides an overview of fax referrals received and quitline service enrollments from the start of the Windham ED fax referral service (November 2011) through December 2012 (last data available).

[11] All clients referred to the quitline are eligible to receive the 1-call service and can have access to the online program (i.e. web coach).

[12] For those that are ready to quit within the next 30 days or who are already actively quitting (i.e. "in action") are eligible for the multi-call (up to 5 calls) service and are eligible to receive free NRT.

[13] North American Quitline Consortium. 2011. Results from the 2010 NAQC Annual Survey of Quitlines. Available at http://www.naquitline.org/?page=survey2010

Figure 2. Windham Hospital Emergency Department monthly quitline fax referrals received & quitline service enrollments



As can be observed in Figure 2, the number of fax referrals received and service enrollments were the highest during the first six months after fax referral was initiated at the Windham ED. There was a drop in fax referrals received and enrollments between June and August 2012. It should be noted that an EMR upgrade, which included brief intervention and referral components, occurred around June 2012, which may have had an impact on the number of fax referrals sent from the Windham ED. However, this could in part be to the seasonality associated with smoking cessation—namely that fewer people want to quit during the summer months. Starting in the Fall of 2012, fax referrals and enrollments again increased but did not reach the numbers observed during the first six months of the program.

Overall, about three-quarters of all fax referrals received and enrollments occurred between November 2011 and May 2012. While the number of fax referrals increased again during the last few months of the grant period, they never went back up to levels observed in the first six months of the intervention. As reported by staff at Windham Hospital, approximately 26% of ED patients visit the ED two or more times within a month. This may help explain the decrease in numbers of fax referrals received and subsequent enrollments from Windham, as they are seeing a lot of the same people repeatedly. There could have also been a loss of momentum to conduct the intervention, particularly around the time of the EMR upgrade, from which the ED was not able to fully recover. While the EMR upgrade made tobacco use screening mandatory, additional steps within the brief intervention protocol were not integrated into the EMR

as mandatory elements. Additionally, as mentioned by ED staff, it can be difficult to address tobacco use during an ED visit as taking care of the immediate reason for the ED visit may overshadow the need to provide and/or receive cessation assistance. More research is necessary to understand why there was such a drop in referrals over time, which may have important implications for funding similar programs in the future.

What contributed to the successful implementation of the intervention?

> *Summary.* Windham ED key informants identified several factors that helped facilitate implementation of the intervention. These include having support from key leaders, involving staff with the right skills and experience, engaging staff and clinicians early in the process, making key electronic medical record changes, and having experts available on staff.

Key factors that facilitated the successful implementation of the intervention are described in detail below.

Leadership support and champions. Having the ED's Medical Director on board from the beginning as well as two nurse champions was important to the implementation of the intervention. These champions helped garner buy-in from their peers to implement the new brief intervention protocols. They remained involved throughout the grant period.

Engaging key staff and clinicians in the design and implementation process. Staff with key expertise, experience and influence were involved from the design phase through implementation. As stated above, the director of the ED and two ED nurses were involved from the design phase onward. A former Windham ED nurse and current clinical information specialist at Windham was involved from the design phase. She was knowledgeable of the workflow in the ED and was able to implement the EMR changes pertaining to tobacco use screening and referral. Nurse managers also allowed time and resources for training ED nurses on the new protocols.

Making key electronic medical record upgrades. The Windham ED updated their EMR (May/June 2012) the timing of which coincided with the changes that the project team planned to implement for the intervention. The project team was able to develop order sets and implement hard stops (e.g., staff can't get past certain screens to get discharge orders without addressing certain questions) in the EMR that have helped facilitate implementation of the intervention. This was in part related to Windham Hospital's efforts to meet the Center for Medicare and Medicaid Service's (CMS) Electronic Health

Record (EHR) Incentive Program criteria[14] for in-patient services, which includes screening for and documenting tobacco use status for every patient, at every visit. One key informant described, "It is sometimes necessary to make questions such as tobacco use status a mandatory or hard stop, particularly when asking a question that is not always a priority [in the ED]."

Advancement incentives for staff. Two of the ED nurse champions working to implement the brief intervention are both involved with the RN "clinical ladder" advancement program at Windham Hospital. This program incentivizes bedside nurses to take part in initiatives such as the Windham ED brief tobacco intervention to help advance their careers. This may have provided the impetus for these nurses to become and remain involved in the brief intervention.

Having experts on site to train and serve as an information resource. The nurse champions trained other nurses on the brief intervention protocol and served as on-site resources for staff with questions about the protocol. Similarly, the medical director trained other medical providers on the brief intervention protocol and served as a resource for providers. One key informant noted that they always had at least one person on staff, during each work shift that could serve as this resource.

What challenges were encountered when attempting to implement the intervention?

Summary. Windham ED key informants also noted several challenges to implementing the intervention. These challenges revolved around problems with fax referral numbers, delays in finalizing Connecticut Quitline materials, unforeseen need to coordinate volunteers, problems with reporting and documentation of brief intervention components, potential delays in Connecticut Quitline response to fax referrals, and, lastly, but potentially most significant, a high rate of repeat visits by patients.

Key challenges to the intervention are described in detail below.

Fax referral logistics. A rerouting of fax referrals to a different fax number caused temporary problems sending fax referrals, but this problem was remedied within the first few months of implementing the fax referral system. Additionally, some fax referral forms were returned to Windham due to illegibility. In response to this issue, ED nurses and patient care technicians have been tasked with checking fax referral forms for completeness and legibility at the time the forms are collected.

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[14] Hospitals that meet the CMS criteria are eligible for additional monetary reimbursements. http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful_Use.html

Delays in creating and displaying quitline materials. Sometime during the grant period, Windham Hospital was acquired by another health system (Hartford HealthCare) which required specific branding of educational / CTQL materials. Project staff had to work with the marketing department to format and brand cessation materials. CT DPH also needed time to approve the materials. This led to more time and resources being allocated to these materials than was originally allotted for in their CT DPH budget. Additionally, there were some internal delays in putting up brochure / pamphlet racks and a private drop box (for quitline fax referral forms) in the ED waiting area.

Coordinating volunteers. Project staff did not foresee needing to work with the volunteer coordinator at the hospital to obtain approval for the volunteers to talk to visitors (patients and non-patients) about the quitline program and to hand out quitline information.

Implementing the new protocol with fidelity has its limitations. Namely, as reported by Windham staff, they have been so thorough with implementing the intervention (screening, brief intervention, referral), that they are beginning to have fewer people to refer to the quitline. They report seeing many repeat patients (26% of patients each month visit the ED two or more times) that have either already been referred to the quitline, have received quitline services already or who have declined quitline participation. They believe this is a key reason that their referral numbers have gone down.

Extent of brief intervention efforts geared toward non-patients is not fully understood. According to Windham ED records, only a small number of non-patients were provided with brief intervention and it is unknown whether non-patients ended up enrolling in CTQL services. However, more detailed tracking of brief intervention elements provided to this group would be needed to make a more accurate assessment of these efforts.

ED staff and providers need feedback on their efforts to keep them motivated. Windham staff and providers have stated that they would like to have information on the success rates of those they have referred to the quitline to know that their brief intervention and referral efforts are paying off. More specifically, they would like to know how many clients have successfully quit after enrolling in the CTQL and, minimally, how many of the fax referrals resulted in quitline enrollments. The information would help them provide needed feedback to ED staff and providers that have implemented these efforts and would help retain their buy-in for continuing to conduct the intervention, beyond tobacco use screening.

Working on grant-funded projects was new to some staff. One key informant mentioned that she had never worked on a grant-funded project where they needed to come up with the projected costs of certain parts of the intervention in advance. This caused them to go over budget on a few items.

Quitline response time and call-backs. Although not officially quantified, nurses have reported that some clients shared that they had not been contacted by the CTQL after a fax referral was sent by the Windham ED and some said it took three or more days after their ED visit for the CTQL to contact them.

What resources, other than CT DPH funding, were instrumental in implementing the intervention?

Windham ED staff did not report any other substantial forms of support used to conduct the brief intervention, other than the CT DPH grant. However, one staff person mentioned that some ED physicians were providing some in-kind support to the intervention. Additionally, on-going training of newly hired staff, which includes training on brief intervention protocols, is now being paid for via ED new employee orientation funds.

What lessons were learned about how to implement brief intervention in the emergency department setting?

> *Summary*. The lessons learned within this project mirror the success described on page 19 above. In addition, based on observation of the pilot project, PDA has identified several lessons learned. Lessons learned include the importance of taking into consideration the high proportion of repeat visitors (such as how to track them and handle them within the fax referral process) and having the electronic medical record support a greater number of brief intervention steps. Additionally, it may be necessary to investigate reasons behind the large drop-off in fax referrals in order to improve future fax referral rates.

Key informant interviews revealed some lessons learned, many of which are similar to those mentioned above under, "What contributed to the successful implementation of the intervention?" Due to the overlap, they will be described more succinctly below:

- Involve staff and clinicians that understand the typical workflow of the ED in the development, piloting and implementation of new workflows and EMR elements.
- Budget more resources to create and brand educational materials and pamphlets.
- Get people involved that want to be involved—due to personal or career-advancement interests.
- Have bedside nurses on staff each shift that know the intervention protocols and can answer questions (e.g. about the quitline). Nurses, in particular, should know the specifics of how the quitline operates.
- Find champions that are invested in successful implementation.
- Peer training is important. For example, have nurses train nurses and providers train providers on brief intervention and implementing the new protocol.
- Education is key—staff and providers need to know what they need to do *and* why it is important.

Based on PDA's observation of the Windham Hospital pilot intervention, we have identified some additional lessons learned:

- Consider what to do with repeat visitors--how to track them and what this might mean for fax referral rates.
- Have the EMR support a greater number of brief intervention steps.
- Conduct additional investigation into reasons for the drop-off between those identified as tobacco users and those consenting to a fax referral as well as the drop-off between the proportion consenting to fax referral and actual fax referrals sent to the CTQL.

In sum, this type of intervention has the potential to be an exceptional tool to provide tobacco users with cessation services and provide referrals to the CTQL at a low cost compared to media campaigns. If CT DPH can obtain a better understanding of how to increase fax referral consent and enrollment rates and can roll out similar hospital, clinic, and medical practice brief interventions statewide, the cost of getting tobacco users to the CTQL could decrease significantly.

How prepared is Windham Hospital to maintain the intervention after the CT DPH funding period?

> It is clear that screening for tobacco use amongst patients and documentation of tobacco use status will continue into the future due to the mandatory stops in the EMR. As to the other elements of the brief intervention, it is unclear the extent they will continue to be implemented beyond the funding period. ED staff report that discussions need to occur amongst department leadership to allocate ED funds for costs of CTQL information (e.g. brochures, fax referral forms) and fax referrals.

When Windham staff were asked whether the brief intervention would continue to be implemented after the CT DPH funding period, responses were mixed. They all agreed that, minimally, patients would continue to be screened for tobacco use at every visit. A couple of staff felt that the intervention had become a routine part of the ED workflow and would, therefore, continue. However, there were differing views as to the extent that physicians would continue their intervention pieces. While one staff person said that the physicians were very dedicated to tobacco cessation and would continue their efforts, another staff person was unsure if the physicians would continue their efforts unless they were provided with information from the CTQL as to the result of their efforts (i.e. enrollments; tobacco cessation outcome data). One staff person thought that perhaps the intervention would continue to be monitored and upheld by the two nurse champions as part of their efforts to maintain their status on the "clinical ladder." ED staff have indicated that training on the brief intervention protocols is now part of mandatory new employee orientation. At the time interviews were conducted (November 2012) plans were not yet in place for how the intervention would continue to be monitored after the funding period.

Conclusions

The Windham Hospital ED serves a unique patient population with a high rate of repeat visits and a rate of tobacco use that is higher than that for the state as a whole (26% vs. 17%). Windham met its goals for tobacco use screening and brief intervention. However, despite the fact that they were one of the largest fax referrers in the state, they did not meet their fax referral goal. While staff and providers advised tobacco users to quit and assessed their willingness to quit and be referred to the CTQL, ultimately, they fax referred 13% of their tobacco using patients (and an unknown number of non-patients) to the CTQL. Fax referrals were the highest during the first six months after

the fax referral system was put in place and declined over time. This may have been due to the high rate of repeat visits by patients, a slow-down in implementation of the intervention surrounding an EMR upgrade, or some other factors; however, more research is needed to fully understand the issue. Windham's fax referrals resulted in a 29% fax referral enrollment rate, comparable to other fax referrers in the state, but lower than the 41% observed in other states.

The Windham ED was able to engage key staff, ED nurses and physicians in the design and implementation of the tobacco cessation brief intervention protocol. The ED has now institutionalized tobacco use screening and documentation of all ED visitors, at every visit, in alignment with best-practice guidelines. They also were able to compile and review data reports monthly to monitor implementation of the intervention and discussed implementation of the intervention during quarterly Smoking Cessation Task Force meetings. However, it is unclear the extent to which the remaining brief intervention elements (advising tobacco users to quit (patients and non-patients), assessing their willingness to quit and be referred to the CTQL, and providing referrals (verbally, with materials, or via fax referral) will be maintained beyond the funding period. Additional follow up with ED staff and providers, review of ED brief intervention data, and review of CTQL fax referral data may be necessary to make a final judgment as to the sustainability of the intervention.

Overall, PDA views this as an excellent pilot project and recommends DPH continue to think about how to roll out similar projects. With further refinements, such as integrating more brief intervention components into the EMR, this type of intervention has the potential to become a sustainable referral source for the CTQL at a relatively low cost, particularly when compared to statewide media campaigns. Refining and funding such initiatives in the future could become a cost-effective use of limited tobacco control resources.

Recommendations

The following are recommended actions for the Windham ED as well as for CT DPH to consider regarding future funding initiatives.

Windham Hospital Emergency Department

- Continue to monitor rates of brief intervention and fax referral. Perhaps reviewing the demographic or clinical profiles of tobacco users that do and do

not consent to CTQL referral can help shed light on how to improve fax referral consent and subsequent CTQL enrollment rates.

- Continue to screen for tobacco use and refer those interested to the CTQL, minimally via print materials, if fax referrals are too cost prohibitive.
- Consider repeat visits by ED patients as additional opportunities to discuss tobacco use, which could move them closer to a quit attempt.
- Contract with the CTQL vendor to receive fax-back reports and reports on enrollments and outcomes (i.e. quit rates 7-months post CTQL enrollment).
- Consider reviewing data in the EMR to look for changes in patients' tobacco use status over time, in lieu of outcome data from the CTQL.
- Continue to train new hires on brief intervention protocols and why it's important to help patients quit using tobacco.
- If applicable, leverage the momentum of other initiatives, such as those pertaining to conditions that are impacted by tobacco use (e.g. diabetes, hypertension) to keep tobacco cessation a priority. This may be highly applicable to the ED setting as it has been found that frequent users of the ED often end up in the ED due to inadequate receipt of care for chronic conditions[15], which may be worsened by tobacco use.
- Leverage the clinical ladder or other incentives to keep brief intervention a priority amongst leaders and staff in the ED.
- Provide occasional re-training on brief intervention protocols to maintain momentum for implementing the intervention. Consider using venues such as all-staff meetings for re-training and showing staff referral, enrollment and rates of tobacco cessation (if available). Reiterate why intervening with tobacco users is important, even in the ED setting when tobacco cessation is not always the immediate concern.
- Integrate as many of the brief intervention protocol elements into the EMR as possible, making the EMR elements simple to use. Review brief intervention and fax referral data periodically to see if re-training may be needed.

CT DPH

Repeat Visitors:

- In creating contract goals, not only should the rate of repeat visitors be considered but also fax referral consent rates. Optimally, only those ready to

[15] Peppe, EM, Mays, JW & Chang, HC. (2007). *Issue Brief: Characteristics of Frequent Emergency Department Users*. Prepared by Actuarial Research Corporation for the Kaiser Family Foundation.

quit in the next 30 days and that consent to fax referral should have a fax referral sent to the CTQL.

- Consider having funded entities provide unduplicated counts in addition to overall counts of brief intervention elements provided in their monthly reporting to CT DPH, especially within health care settings that experience a high rate of repeat visitors.

Intervention for non-patients:

- If future ED brief intervention efforts are to include non-patients, consider tracking this type of intervention more closely (e.g. type of intervention provided, whether a fax referral was sent to the CTQL).

EMR:

- Include funding for EMR changes in future grant contracts to implement EMR changes and conduct staff and provider trainings around the changes made, so hospitals, clinics or other medical practices can integrate brief intervention protocol components into their EMRs. Making certain EMR fields mandatory (hard stops) will make elements more likely to be implemented and documented.
- Consider funding a pilot ED-based project which integrates EMR changes that help facilitate a greater number of brief intervention elements to see if more tobacco users receive brief intervention counseling and are referred to the CTQL. Ultimately, fax referrals from hospitals and clinics could become a lower-cost alternative to using expensive media campaigns to drive tobacco users to the CTQL.

Fax referral & outcome monitoring:

- Continue reviewing CTQL fax reports to observe the extent to which the Windham ED is continuing to utilize the CTQL fax referral system beyond the CT DPH funding period.
- Consider conducting an outcome evaluation of ED patients that enrolled in CTQL services as a second phase of the evaluation, measuring 7-day and 30-day point prevalence tobacco abstinence, 7 months post CTQL enrollment for all ED-based programs.
- Provide outcome results to participating EDs referring to the CTQL so they can see the longer-term result of their efforts. This may help keep EDs motivated to continue their brief intervention efforts.

Planning for future funding efforts:

- Review the fax referral enrollment rates of similar ED-based programs to see if there are some exemplary cases of ED-based fax referral programs with higher enrollment rates (e.g. NAQC survey results) from which to draw promising practices.
- Consider convening staff from multiple ED's that have been referring to the CTQL to obtain feedback about how the interventions are going and to brainstorm ideas on how to improve fax referral consent and CTQL enrollment rates.

Appendix

- Key Informant Interview Protocol

Key Informant Interview Protocol (November 2012)
Windham Hospital—ED-based Tobacco Cessation Intervention

Part A: Roles/Accomplishments/Funding Impact

I'd like to start by hearing about the role that you played in the CT-DPH-funded tobacco cessation systems change project.

1. I'd like to hear what role(s) have you have played within the tobacco systems change project?

2. I'd also like to hear about the Smoking Cessation Task Force.
    a. Who was/is involved?
    b. What is discussed?
    c. How often does it meet?
    d. Main purpose?

1. At the highest level, what would you say are the two or three most notable accomplishments or changes that resulted from your tobacco systems change efforts since receiving the CT DPH grant in 2011?

3. What has been the impact of this CT DPH funding on implementing the ED-based tobacco intervention?
    a. Without CT DPH funding where do you think you would be in your tobacco intervention efforts?

Part B: System-Specific Drill-Down

Training and Education

Next I'd like to ask specifically about training and education for staff and providers relating to the tobacco intervention that has been implemented over the past year.

1. Over the past year, what have you learned about what works best to train staff and providers to implement elements of the tobacco intervention?
    a. Very briefly...
        i. Type of information or materials that resonated best with each type of staff?[RNs, patient care techs, physicians, physicians assistants]
        ii. Formal vs. Informal? One-time vs. on-going?
        iii. Best venue (e.g. staff meetings, 1-on-1, brown bag)
    b. What plans are in place, if any, for on-going education of current or new staff and physicians?

Tobacco use assessment, treatment, referral, and follow-up

Next I'd like to ask about implementation of the new screening, brief intervention, and referral protocols.

1. Could you explain the tobacco intervention as it's been implemented under this grant?
    a. What does the intervention look like to a tobacco user that comes into the ED? [walk me through a typical experience starting with screening through brief intervention and referral]
2. Who is responsible for each part of the intervention [workflow, protocol]?
3. What have you learned about rolling out these new tobacco-related protocols?
    a. What challenges did you face, if any, in getting the new protocols implemented?

Reporting, performance feedback and QI

Now I'd like to talk about any quality improvement and reporting mechanisms that were rolled out during the grant period relating to tobacco intervention.

1. What type of monitoring or reporting mechanisms were put in place, to look at staff and provider performance on implementing the intervention? [New or existing?]
    a. Probe: What strategies did you use to ensure that the intervention was being implemented as planned?
    b. Facilitated by EMR (changes)? [order sets to facilitate and document, make referrals]
    c. Who uses or sees this data? For what purpose?
        i. What type of data or information resonates with staff and providers?
            1. What information helps spur them to act to make improvements? [in adherence to protocols]
2. Are there plans for on-going review of performance on the various elements of the intervention—after the CT DPH contract ends? [e.g. assess additional training needs; monitor performance of staff and providers]

Part C: Facilitators, Challenges, Lessons Learned, and Sustainability

Lastly, I'd like to hear more about what facilitated or hindered the implementation of these efforts.

1. What key factors do you think helped *facilitate* the implementation of this tobacco intervention? [timing, resources, external factors, support from key leadership; buy-in from key staff]

    a. How important was it to have support from key administrators or others in leadership roles?
        i. How do people in key leadership positions view these activities?

ii. Has the commitment to treating tobacco use dependence widened further across the ED?

b. Where there any key *external* factors, such as health care reform, health IT requirements, quality care measures, meaningful use, etc., that helped implementation of the intervention? [e.g. able to piggy back on other chronic disease initiatives that have tobacco use as part of quality care measures]

2. What were the key *challenges* to implementing this intervention? [Make list of stated challenges and follow-up on each]:

3. Knowing what you know now, is there anything that you would have done differently?

4. What advice would you give to other hospitals or ED's specifically, in implementing this type of tobacco intervention?

5. Overall, how sustainable is this tobacco intervention? [screening, brief intervention, referral, training, monitoring]
   a. What help will keep these efforts going?
   b. What might interfere with the continuation of these efforts?
   c. What other sources of funding, support or reimbursement have been leveraged OR are being pursued to continue screening, referral, and follow-up efforts?

4. To the extent you can speak to this: What is the overall vision for addressing tobacco use in Windham's ED patient population?

Part D: Closing and Next Steps

1. Is there anything else you'd like to share about any aspects of your systems change activities that we haven't yet discussed?

2. We would like to interview a few more people that have been involved with these efforts that might be able to provide different perspectives on how specific activities have been implemented [any gaps in info readily identifiable] as well as challenges, facilitators to change and lessons learned/advice. Who would you recommend?