**Supplemental Table 1: SC CAN Quit Change Package Assessment Worksheet**

| ***Key Changes*** | **We have this in place** | **We have this partially in place and would like to improve it** | **We don’t have this in place and would like to test it** | **We don’t have this in place and are not interested in testing right now** | **Add notes here: e.g. who do you want to steal shamelessly from? Which change aligns with your process mapping** |
| --- | --- | --- | --- | --- | --- |
| **Decision Support** |
| Follow NCCN Guidelines on Smoking Cessation. |  |  |  |  |  |
| Make 2A+R and Follow Up a routine, directive recommendation (i.e. automatically refer patients to Quitline). |  |  |  |  |  |
| Integrate specialist expertise to assist patients in smoking cessation. |  |  |  |  |  |
| Provide culturally appropriate educational materials on the benefits of quitting smoking during treatment based on the NCCN Guidelines. |  |  |  |  |  |
| *What other reflections do you have?* |
| **Clinical Information System** |
| Build EHR Documentation in system for elements- tobacco status, advisement, referral, follow up and discussion/plan of care. |  |  |  |  |  |
| Create alerts in system for providers on tobacco status of patients.  |  |  |  |  |  |
| Regularly collect, monitor and report process and outcome measures within the work flow. |  |  |  |  |  |
| Document discussion with and plan of care for tobacco users. |  |  |  |  |  |
| Regularly collect and monitor process and outcome measures within the work flow. |  |  |  |  |  |
| *What other reflections do you have?* |
| **Delivery System Design** |
| Train all providers in 2A+R and Follow Up. (www.helppatientsquitsc.org) |  |  |  |  |  |
| Distribute tasks among team members who will be playing a role in assisting tobacco users to quit use. |  |  |  |  |  |
| Offer internal cessation services.  |  |  |  |  |  |
| Develop internal and external processes (i.e. TelASK) for regular follow up with tobacco users and document status. |  |  |  |  |  |
| *What other reflections do you have?* |
| **Health System** |
| Adopt a policy within the practice/standard of care to follow the NCCN Guidelines on Smoking Cessation. |  |  |  |  |  |
| Adopt and/or develop protocols for physicians and staff for providing smoking cessation therapies, both pharmacologic therapy and counseling. (AAFP Pharma Chart) |  |  |  |  |  |
| Practice leadership establishes and monitors goals for decreasing tobacco use rates among cancer patients. |  |  |  |  |  |
| Provide incentives based on quality of care. |  |  |  |  |  |
| *What other reflections do you have?* |
| **Community Resources** |
| Link patients to available community resources to assist them in tobacco cessation. |  |  |  |  |  |
| Form partnerships with organizations to support tobacco cessation. (DHEC, SC Tobacco Free Collaborative) |  |  |  |  |  |
| *What other reflections do you have?* |

**Supplemental Table 2: Plan, Do, Study, Act (PDSA) Worksheet**

|  |  |
| --- | --- |
| **Team Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **Change Being Tested** |
| **Cycle # Start Date: End Date:**  |
| **Objective of Cycle:** Test a ChangeImplement a Change | **Please Describe:** 1. What do we want to accomplish (aim)?
2. How will we know a change is an improvement (indicators)?
3. What ideas do we have that will result in improvement (change to test)?
 |
| **Questions we want to answer with this PDSA Cycle** | If we….Will it result in…… |
| **Prediction** |  |
| **Tasks/Tools needed to complete the cycle** |  |
| **Plan** | Plan for this test (who, what, when, where, how)Plan for collection of data (who, what, when, where, how) |
| **Do** | Was the test carried out as planned? What did you observe that wasn’t part of the plan?  |
| **Study**  | What did the data tell you?What surprised you? Data |
| **Act** AdoptAdapt Abandon | What changes are to be made in the process… (decisions made/actions to take)? |

**Supplemental Table 3: Overview of Baseline Survey Questions**

**SC CAN-QUIT Baseline Cancer Center Interview**

Potential team of respondents:QI coordinator, oncology service line manager, nurse manager, oncologist, health educator, IT manager, EHR architect (likely to be 4 or 5 people with these types of backgrounds)

**A: Perceptions about Tobacco Cessation for Cancer Patients.**

I’ll start by asking you just a couple of questions about tobacco cessation.

1. What are your thoughts about providing tobacco cessation services to cancer patients?
* For which patients do you think tobacco cessation services may be less appropriate? (probes: What about for those who are very old or who have a poor prognosis?)
* When do you think is the best time to offer tobacco cessation services to cancer patients? (probes: Is it at diagnosis, start of treatment, end of treatment? When might patients be most and least receptive?)

**B: Cancer Center Patient Population**

These next few questions are about the characteristics of your patient population.

1. What is the catchment area for patients at your cancer center?
2. At what point in the cancer diagnosis are patients receiving care from your center? (prompts: Are patients arriving at your center already diagnosed with cancer? How often would you say your center carries out the first diagnosis of cancer? How does this vary by cancer type?)
3. What mix of urban, suburban and rural patients do you see?

**C: Overview of Tobacco Cessation Program**

The next series of questions is about existing tobacco cessation services at your cancer center and any ideas you may have for strengthening these services.

1. Do you use any kind of formal tobacco cessation program at your cancer center?
* If yes, what program do you use?
* How does the program work?
1. Based on the NCCN guidelines, comprehensive tobacco cessation services would include assessment and evaluation of tobacco use, along with a tobacco cessation treatment plan that includes counseling, medication support and follow-up support for all cancer patients. How far along do you think your cancer center is in developing these services?
2. Is tobacco use being systematically assessed and evaluated among patients at your cancer center?
* Who assesses patients for tobacco use?
	+ If not assessed: Who do you think should assess tobacco use?
* When are patients assessed for tobacco use?
	+ If not assessed: When do you think patients should be assessed for tobacco use?
* What questions are asked about tobacco use?
* How is information about tobacco use recorded? (prompts: In what system are they recorded?)
	+ If not recorded: How could this information be recorded?
* Who engages patients in a discussion about tobacco cessation?
	+ If no one does this: Who do you think should engage patients in this discussion?
* How does advice about tobacco cessation differ for different kinds of patients? (prompts: Are there any patient populations who you would not recommend quitting smoking?)
* How does assessment and evaluation for tobacco use vary across the cancer center?
1. How are patients at your cancer center assisted in quitting smoking?
* Who provides tobacco cessation services for patients at your cancer center?
	+ If not provided: Who do you think should deliver these services?
* How are patients at your cancer center counseled about smoking cessation?
	+ If not provided: Who do you think should provide counseling for smoking cessation?
* How are patients provided with medication support to help with quitting smoking?
	+ If not provided: How do you think medication support could be provided?
* How are patients provided with smoking cessation follow-up support after they leave the cancer center?
	+ If not provided: How do you think follow up support could be provided?
* How does the process of assisting patients to quit smoking vary across the cancer center?
1. What resources are available within your cancer center or hospital system to help patients to quit smoking?
* How commonly are patients referred to use these resources?
* How useful are these resources?
1. What resources are available outside of your cancer center or hospital system to help patients to quit smoking?
* How commonly are patients referred to use these resources?
* How useful are these resources?

**D: Barriers and Potential Strategies for Comprehensive Tobacco Cessation Services**

These next few questions are about any barriers you have encountered in implementing tobacco cessation services. We’d also like to ask your ideas for how a successful tobacco cessation program might work best.

1. What have been the biggest barriers to delivering comprehensive tobacco cessation services for patients at your cancer center?

List each barrier: 1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

For each of these barriers: How do you think barrier 1 (then 2 and 3) could be overcome?

1. What do you think would be an optimal plan for providing patients with comprehensive tobacco cessation services (i.e. ask, assess, advise, assist and arrange follow up support)?

**E. Information Technology to Support Tobacco Cessation**

These next questions ask about your information technology and how IT strategies could be used to support implementation of tobacco cessation services.

1. What types of information technology systems are used in your cancer center? (probes: for billing, for appointments, for clinical documentation, etc.)
* How well does information integrate across these systems?
* Do you currently have any questions embedded in your electronic medical record to ask about use? (probes: How commonly are these questions filled out on patients?)
* Are you currently about to send out reminders to patients or providers about needed preventive care (such as tobacco cessation)? How does this work?
* Who do you go to when you want to make changes in the system to support behavioral interventions such as tobacco cessation services?
* What is the process like to have these types of changes made in the IT system?

**F. Quality Improvement Infrastructure to Support Tobacco Cessation**

These last few questions ask about quality improvement at your cancer center.

1. What kinds of quality improvement activities have been conducted at your cancer center?
* What clinical problems have you tried to address using quality improvement strategies?
* How successful have these strategies been?
* What quality improvement programs did you use to carry out this quality improvement work? (e.g. Lean Six Sigma; Total Quality Management; Plan, Do, Study, Act)

**G**. **Additional Individuals to Help Add to the Discussion**

1. Who are the people who can help add to our discussion? (probes: for IT, QI, Clinical process for tobacco cessation we should be working with?) Name, phone, email.

*That’s all the questions we have. Do you have any questions for us? Thank you so much for participating in this interview. We are really looking forward to working with you all on this grant!*

**Supplemental Table 4: SC CAN Quit Monthly Data Collection Form**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **#** | **Item** | **Month 1** | **Month 2** | **Month 3** | **...Month X** |
| **Cancer Center Data** |
| 1 | # of new patients recorded in the center |  |  |  |  |
| 2 | # of new patients screened for tobacco use in the center |  |  |  |  |
| 3 | of those screened, # of patients who are current tobacco users |  |  |  |  |
| 4 | of those screened, # of current tobacco users who have been advised to quit |  |  |  |  |
| 5 | # of current tobacco users who have been referred to evidence-based cessation resources |  |  |  |  |
| 6 | % tobacco users |  |  |  |  |
| 7 | % advised |  |  |  |  |
| 8 | % Referred |  |  |  |  |
| **Quitline Referral Data** |
| 9 | # of patients referred to Quitline |  |  |  |  |
| 10 | # pending |  |  |  |  |
| 11 | # declined services |  |  |  |  |
| 12 | # already enrolled |  |  |  |  |
| 13 | # not reached |  |  |  |  |
| 14 | # accepted services |  |  |  |  |
| 15 | % of patients not reached |  |  |  |  |
| 16 | % of patients accepted services |  |  |  |  |
| **TelASK Follow-up Data** |
| 17 | # of patients referred to TelASK during the month |  |  |  |  |
| 18 | # of call schedules during the month |  |  |  |  |
| 19 | # of call schedules in progress |  |  |  |  |
| 20 | # of call schedules completed but not reached |  |  |  |  |
| 21 | # of unreached due to exhausting all call attempts |  |  |  |  |
| 22 | # of unreached due to number not in service, moved, etc. |  |  |  |  |
| 23 | # of call schedules completed and reached |  |  |  |  |
| 24 | # reached who report speaking with a Quitline specialist |  |  |  |  |
| 25 | # reached who report receiving in-house cessation services |  |  |  |  |
| 26 | # reached who report using quit medications |  |  |  |  |
| 27 | # reached who report not smoking cigarettes, even a puff, in the last 7 days |  |  |  |  |
| 28 | # reached who requested additional support - referral back to SC Quitline |  |  |  |  |
| 29 | # reached who requested additional support - referral back to in-house service (if applicable) |  |  |  |  |
| 30 | % not reached |  |  |  |  |
| 31 | % reached |  |  |  |  |
| 32 | % spoke with Quitline (of those reached) |  |  |  |  |
| 33 | % using Quit Medications (of those reached) |  |  |  |  |
| 34 | % referred back to Quitline (of those reached) |  |  |  |  |
| 35 | % not smoking in last 7 days (of those reached) |  |  |  |  |

**Supplemental Table 5: SC CAN Quit Exit Interview Guide**

|  |
| --- |
| **SC CAN Quit Exit Interview Guide** |
| 1. What was your experience like participating in the SC CAN Quit Project?
2. We’d like to learn about the tobacco cessation programs developed at your cancer center. Tell me about how your current program works.
* How do you identify smokers?
* How do you advise patients to quit smoking?
* How do you enter patients in TelASK?
* How do you refer patients to the South Carolina Quitline?
* What kind of feedback do you get from the South Carolina Quitline about patients you have referred to them? What additional information might be helpful?
* For what patient population do you provide tobacco cessation services? (Prompts: opt-in vs. opt-out; new vs. all patients, etc.)
1. Tell me about how you first set up the program and how you made changes to the program over time.
2. What were the biggest challenges you encountered putting your program in place? How did you overcome these challenges?
3. What are your plans for continuing the program in the future?
4. Based on your experiences implementing your program, what changes would you make to improve it?
5. What was it like participating in the 3 learning collaborative sessions? What did you like best/least about the collaborative sessions?
6. Tell us about anything else that you’d like to share about your experience with the project?
 |