



**C-Change Cancer Core Competency Program  
Comprehensive State Wide Cancer Prevention & Early Detection  
Skin Cancer Training  
Audrain Medical Center**

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## **Abstract**

As part of a national effort to address shortages in the cancer workforce, Audrain Medical Center served as one of four grant-funded pilot sites to implement the C-Change Cancer Core Competency Initiative. Each pilot site utilized a rigorous set of competency standards, curriculum design tools, and evaluation methods to create their programs. The Audrain Program strengthened rural public health nurse's knowledge, skills, and attitudes on skin cancer screening and patient education. The program offered participants an expert-lead workshop on skin cancer, followed by a preceptor-guided clinical experience. As a result of the program, participant knowledge improved 39% and confidence in their skills to differentiate benign and malignant lesions improved. All four pilot sites experienced benefits beyond those derived by the participant including positive effects such as professional development, institutional visibility, and, community relations, which are discussed in the companion report.

## General Introduction & Overview

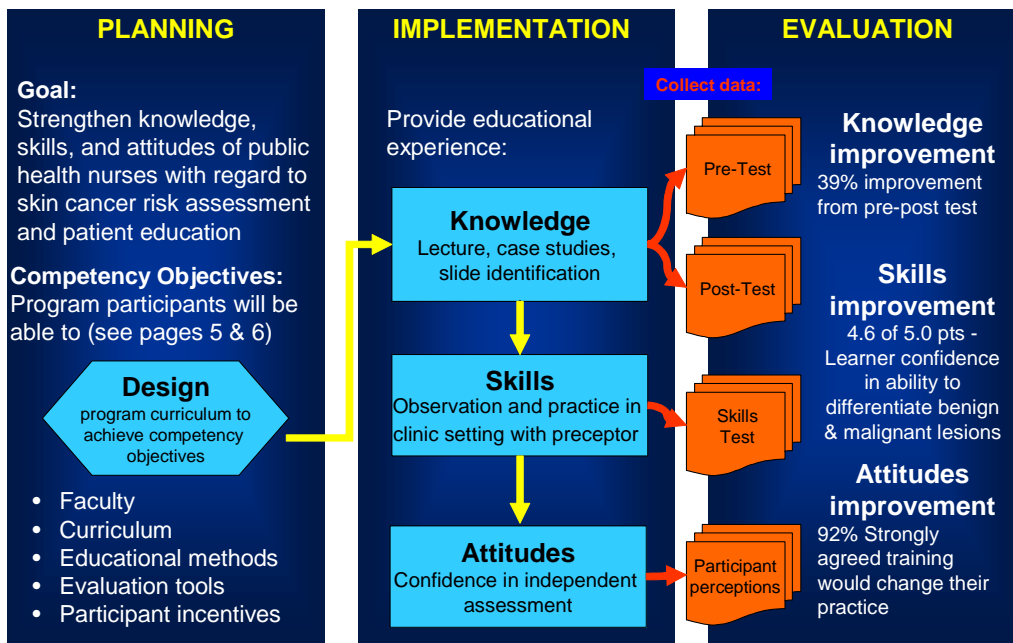
In February 2007, C-Change, a 501(c)(3) organization comprised of the top leaders from public, private, and non-profit organizations, embarked on a national validation project to address the Cancer Workforce crisis. Integral to providing cancer care across the continuum from prevention to survivorship is having a workforce that is quantitatively robust enough *and* qualitatively competent to address the needs of our communities locally, nationally, and globally.

In collaboration with a multidisciplinary expert panel, C-Change defined a set of core competencies in cancer care targeting the non-oncology workforce. To achieve the greatest possible uptake of the cancer core competencies in the health care, public health, and academic settings, C-Change released a Request for Proposals (RFP), soliciting proposals from organizations that supported educational offerings to Tier 2 professionals. Tier 2 professionals include licensed, registered, or certified members of health professions who have not specialized in cancer yet whose scope of practice includes face-to-face contact with patients and their families along the continuum of cancer care (Smith & Lichtveld, 2007).

The scientifically robust methodology deployed in the development of the competencies enabled pilot testing and validation in a fashion that assured the broadest utility across the non-oncology disciplines. The findings and lessons learned will inform the final set of competencies and will be shared with those who can take the next steps towards dissemination and implementation. In addition to the Audrain Medical Center, Mexico, MO, the three pilot sites that were selected included the University of Pittsburgh Medical Center, Pittsburgh, PA; the California University of Pennsylvania School of Social Work, California, PA; and the Marshall University School of Medicine, Huntington, WV.

Figure 1 illustrates the Cancer Core Competency Program Development Process, which includes three primary phases: Planning, Implementation, and Evaluation. In the Planning Phase, pilot sites defined program goals – to improve the competency of a target professional population on a specific cancer topic. With specific competency objectives in mind, they were able to identify the most appropriate array of educational interventions to achieve the desired knowledge and skills defined by the competency statements. Planning efforts also included the development of curriculum materials and evaluation tools to assess the impact of the educational intervention. The Implementation Phase entailed providing the educational experience for program participants and gathering evaluation data. During the Evaluation Phase, the data were analyzed to assess changes in knowledge, skills, attitudes, and ultimately, achievement of the competency goals.

## **Cancer Core Competency Program Development Process Audrain Medical Center – Mexico, MO**



**Figure 1: Audrain Medical Center Program Development Process**

### **Site Specific Background and Rationale**

Audrain Medical Center, a rural 131-bed community hospital, and the J.B. and Greeta B. Comprehensive Cancer Center host a Comprehensive Screening Program. This multi-organ cancer detection clinic has served asymptomatic women over age thirty-five and asymptomatic men over age fifty since 1985. The Screening Program is supervised by a medical director, includes day to day oversight by a family nurse practitioner, as well as exams carried out by nurse practitioners and specialty trained registered nurses. This multi-organ screening program focuses on breast, colon, skin, cervical, and prostate cancer detection. One-hour comprehensive screening exams for women include a detailed cancer risk assessment, head-to-toe physical exams (including an examination of the skin), clinical breast exam, mammogram, and a pelvic and Pap test. Exams of the abdomen, thyroid, peripheral lymph nodes, and rectum are also conducted. Screening for men includes examinations of the skin, abdomen, thyroid, external genitalia, digital rectal exam and the prostate, and PSA test. For all tobacco users, the screening includes an oral examination.

Extensive education is provided to participants regarding prevention modalities, current screening guidelines, and new research findings. Patients with detected abnormalities are referred to the patient's primary care physician for follow up. Patients are contacted by phone and primary care providers are contacted by letter four to six weeks after the initial exam to obtain the results of the referral visit.

The Screening Program boasts 21-year participation rates totaling 41,223 visits with a ratio of 1 male to 19 females. Participant return rates over the past year were 94%. Four hundred and two cancers have been detected since the inception of the program with 1 breast cancer for every 41 women participating; most of these cancers were identified at early stages. Over 2500 participants, with a 95% satisfaction rating, from 48 Missouri counties, as well as 21 other States are seen annually for cancer screening.

The Screening Program is well known regionally and has been featured in presentations at statewide cancer summits and international cancer conferences. The Screening Program leaders have received numerous requests from public health agencies to provide skin cancer screenings in various communities. In addition, hospitals within the region have expressed interest in replicating the Screening Program at their facility.

The C-Change grant, utilizing the core cancer competencies, assisted Audrain Medical Center's Cancer Screening Program to take a known need for health care provider cancer education and training from a thought to a clear vision. The need for skin cancer training in the public health sector was evidenced by the requests for skin cancer screening assistance from several public health agencies within the region prior to the development of the course. An evolving mission and a pathway for the implementation of a State Wide Comprehensive Cancer Education, Prevention, and Detection Training Site for health care providers was developed. The 9-month pilot program served as the catalyst for the development of phase one of this training program, including a skin cancer education, prevention, and early detection training workshop focused primarily on the public health provider workforce.

## **Methods**

A logic model (Appendix A) was developed for the Cancer Screening Program and provided a pathway for guiding the program development, implementation, and evaluation of the skin cancer workshop training. Initial planning efforts to realize the vision for a state or regional-level skin cancer training site included gathering support from hospital administration and organizations such as local and regional county health departments, the Missouri Cancer Consortium, and the American Cancer Society. An extensive review of current skin cancer and dermatology precancerous skin lesion literature was conducted. Resources and reference materials including the "Field Guide to Clinical Dermatology" textbook, skin cancer fact sheets from the National Cancer Institute and the American Cancer Society, were purchased for use in curriculum development and as participant program incentives.

A skin cancer prevention, education, and early detection training curriculum based on the core competencies was developed to be comprehensive and include a didactic portion and a "hands-on-training" opportunity at the Comprehensive Cancer Screening Services program. The Cancer Core Competencies (Domain 1: Continuum of care) utilized for this project included:

### **Competency Statements**

- Screening and Early Detection (General)
  - Perform an individualized cancer risk assessment based upon a comprehensive health history and current health status, including genetic risk factors.

Upon further review of program design, implementation and evaluation, it became apparent that the following competencies were included in the curriculum development but were not formally cited in the validation template or formally evaluated:

- Prevention and Behavior risks (General)
  - Refer individuals to resources for cancer prevention, screening, and management of precancerous conditions.
- Ultraviolet Rays

- Describe the risks associated with natural UVA and UVB rays.
  - Describe the risks associated with tanning beds.
  - Assess individual's degree of sun exposure.
  - Describe the characteristics of skin cancer lesions in order to identify patients for referral to dermatologist.
  - Counsel individuals on skin protection including the avoidance of sun exposure and use of sun protection.
  - Identify patients for referral to dermatologist.
- Screening and Early Detection (General)
    - Explain the possible finding from a screening test
    - Refer individuals for further assessment based upon screening test results.
    - Refer individuals to resources for cancer screening and risk assessment.
- Skin
    - Refer for full body examinations.

A validation template (Appendix B) was developed and proved helpful in keeping the curriculum development thorough, systematic, and closely tied to the core competencies. Adult learning theory principles were utilized for showing intent to change in students attending the course. Students were asked on pre and post-tests if they hosted a skin cancer-screening clinic or if they planned to host a clinic within the next six months.

The didactic portion of the skin cancer course included:

- Brief overview of the host site Cancer Screening Program
- Anatomy and physiology of normal skin
- Normal aging process
- American Cancer Society Skin Cancer Facts and Figures
- Dermatology terminology
- Precancerous lesions
- Non-melanoma and melanoma
- Differential diagnosis for these lesions
- How to conduct skin exams
- How to develop skin cancer screening clinic in their communities
- Appropriate referral process
- Prevention modalities of skin cancer
- Skin cancer vaccinations and new research.

Course presentation and delivery methods included Power Point presentations, slides of skin lesions, handouts, and brochures. Participants reviewed reference materials including examples of anatomic skin cancer models and pathology models. Multiple reference materials were utilized for the curriculum development.

Participants built upon their didactic lessons on the first day with a second day-long practical field experience. Under the direction of a cancer-screening mentor, participants observed and conducted skin cancer screenings. The hands-on portion of the course (day 2) allowed the student to work side by side with a host site cancer screening mentor, during an eight hour clinic, observing and helping to conduct skin cancer screenings. The hands-on portion (day 2) was scheduled at the convenience of each student in the month following day 1 of the skin cancer education, prevention and early detection course. Evaluation methods (Appendix C)

were implemented on the first and second day of the course to assess the impact of the course on participant knowledge, skills, and attitudes. Participants were given a pre-test and post-test during the didactic portion of the course (day one). Participants were also given a course evaluation and a competency checklist (day two).

Marketing for this workshop was limited to state public health agencies. Members of the Missouri State Cancer Consortium received marketing information via emails and hardcopy. Announcements were sent to all Missouri public health agencies through a newsletter bulletin. In addition, all public health administrators in Missouri received notification regarding the course. The target participation goal for the first course was 30 students (not including approximately 7-10 students from the host site).

Incentives were used as a means to promote participation throughout for the duration of the course and were given to students at the completion of the course. Incentives for attending the workshop included a skin cancer handbook and patient education booklet, American Cancer Society skin cancer brochures, National Cancer Institute skin cancer education materials. Tools for setting up a skin cancer-screening clinic as well as sample consent and documentation forms were included. Students also received Continuing Education Units both days of the workshop. The C-Change Cancer Core Competencies were included in the workshop materials.

## **Results**

Instructional hours accumulated for this project were 188 hours. This number is calculated by multiplying the number of hours of participation in the program by the number of people taught. The total number of instructional hours not only indicates the investment made in the program but also the potential impact of the program. The total number of instructional hours for this program indicates that while a smaller number of people participated the curriculum provided tremendous depth in the subject matter.

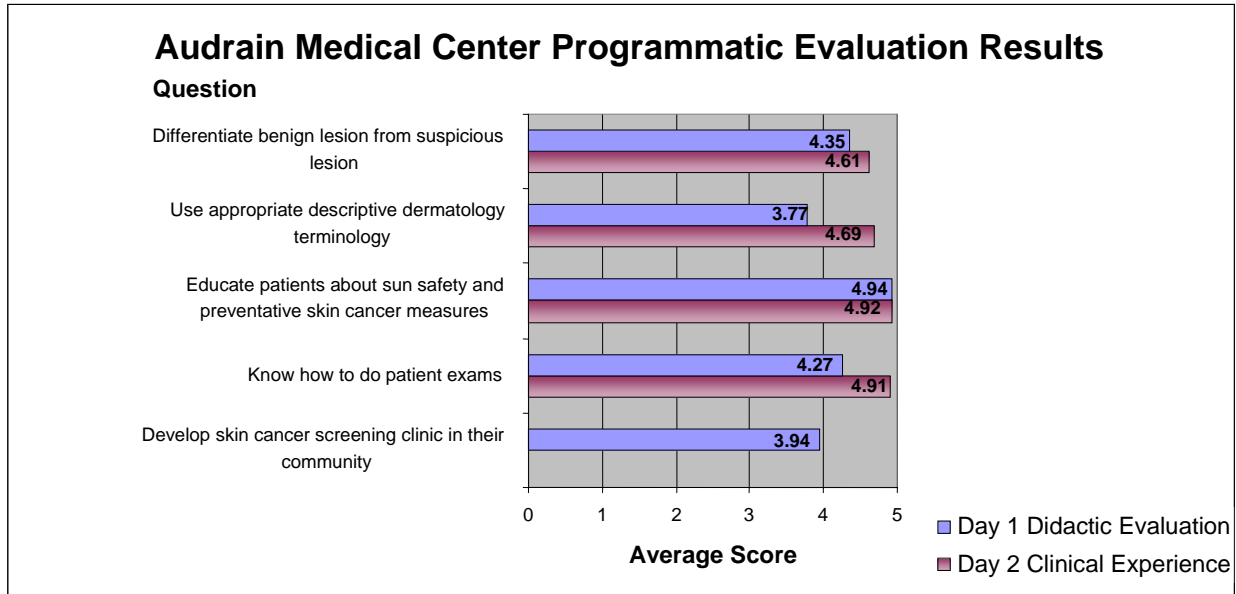
Twenty-three students registered for the 2-day skin cancer workshop (including 5 staff members of the J.B. and Greeta B. Comprehensive Cancer Center). Nineteen students attended the course. Thirteen of the nineteen students (not including staff) returned for the second “hands on” day. The one student who did not return currently performs skin cancer screenings at the Cancer Screening Program at Ellis Fischel Hospital.

As evidenced in Figure 1, pre-test scores showed a lack of knowledge on skin cancer. Post-test scores indicated improvement in knowledge at the conclusion of the didactic day with significant percentage increases in the ability to identify lesions. The mean pre-test score was 73% and the mean post-test score was 90%. There was a 39% improvement between the pre and post-test scores.

**Table 1: Audrain Medical Center Pre/Post Test Data**

Audrain Medical Center Pre/Post Data Multiple Choice Questions n=19		Pre-Test # correct of 19	Post- Test # correct of 19	Absolute Change	Percent Change %
1	Lesion Identification	9	19	10	111%
2	Lesion Identification	5	18	13	260%
3	Lesion Identification	14	19	5	36%
4	Lesion Identification	10	18	8	80%
5	Lesion Identification	11	18	7	64%
6	Basal Cell cancers are generally found on the head, neck and sun exposed areas (True/False)	16	17	1	6%
7	The ABCDE's of skin cancer stand for:	19	19	0	0%
8	Actinic kerotosis is a precancerous condition which is often seen in older adults with fair skin and can lead to basal cell cancer.	4	5	1	25%
9	A farmer tells you that he had a toenail which has been blackened for a few months. He can not remember the injury to his foot, but he might have injured it on the farm. Should you refer this as a possible case of melanoma?	15	19	4	27%
10	Skin cancer can only occur in sun exposed skin.	19	19	0	0%
11	Which of the following statements is false?	12	12	0	0%
12	What tools are required for a complete skin exam?	19	19	0	0%
13	Have you ever hosted a skin cancer screening clinic?	19	19	0	0%
14	Do you plan to host/participate in a skin cancer screening clinic in your community in the next 6-9 months?	19	19	0	0%
15	Documentation of skin lesions should include size, color, location and duration of the lesion.	19	19	0	0%
16	A papule is described as:	13	15	2	15%
	Average:	13.94	17.13	3.19	
	Average Percent Correct:	73%	90%		38.99%

Figure 2 illustrates changes in day one and day two programmatic evaluations. Both evaluations used a Likert scale with ranges between 1 and 5 (1 ranking not well met and 5 being met very well). Eighteen day one didactic evaluations and thirteen day two clinical evaluations were received. Participants indicated a dramatic increase between day 1 and the culmination of the clinical rotation in their ability to conduct skin cancer screenings.



**Figure 2: Audrain Medical Center Programmatic Evaluation Data**

Comments for the didactic portion of the course included:

- “Excellent speaker with great knowledge of the subject. She allowed plenty of time for questions, answers and input.”
- “Excellent presentation and quality of information given. The presentation was well organized and included great photos of lesions.”

Thirteen students returned for the day two clinical experience. Five students were existing staff who currently work at the cancer screening clinic, one of whom is a new hire. Participating employees from AMC commented that the didactic day reinforced knowledge about skin cancer screening. Staff members did not complete a day-two evaluation and served as preceptors during the second day. Students were asked to rate their ability to differentiate benign from suspicious lesions.

Comments for experiential second day included:

- “By far the best class I have had since working in public health. Knowledge useful for my career and personally. I would be interested in future training here.”
- “It was helpful to participate in the skin assessment. This, together with the workshop was very informative.”
- “The time spent with patients was great. The atmosphere for patients is so relaxed. This was a great learning experience. I feel more comfortable with skin assessments.”
- “I enjoyed both days; it was an excellent training and confidence builder.”

The presenter was evaluated on the knowledge of subject, organization and clarity of content, effectiveness of teaching methods, audiovisual aids helpful in the learning process, handouts useful, and adequate time allowed. All students ranked presenter in the 5 and 4 ranges with 15 students and above ranking the 5 criteria for all objectives. One student gave a 3 on the usefulness of handouts.

The clinical rotation day evaluations were ranked with Likert scale rating of 1 to 5 with 1 being not met and 5 being met very well. Thirteen students returned for the hands on day. Of note, 5 students were existing staff who currently work at the cancer screening clinic, one of whom is a new hire. All employees from AMC commented that attending the didactic portion of the course both expanded their understanding of cancer screening and reinforced their knowledge. These 5 students did not complete a day two evaluation and did not participate as a student for day two, but rather served as preceptors.

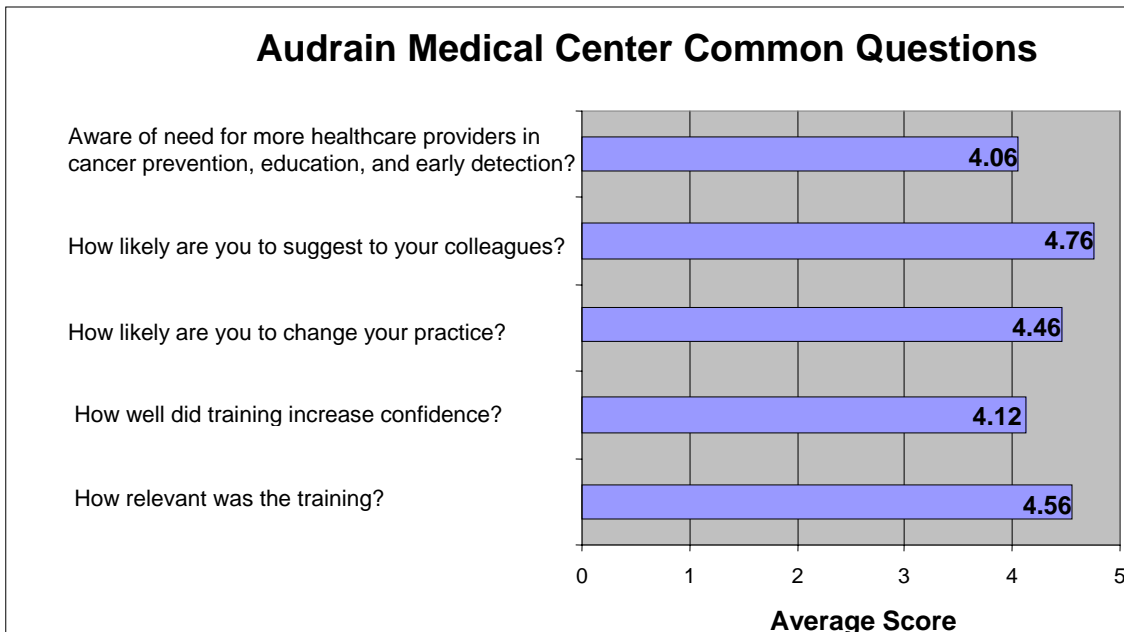
The practicum advisor was evaluated with all 13 students rating the advisor a 5 on the following criteria: knowledge of subject, communicated expectations prior to beginning of examination, effectiveness of communication to participant, and adequate time allowed.

The Skin Cancer Screening Program workshop has made an impact upon healthcare providers who received the training and community members who received skin cancer screenings. Since the conclusion of the course, one student has made plans to host a community skin cancer screening event. Early in the planning process of this event, seventeen community members were signed up for a skin cancer screening. The effects of the skin cancer workshop on the participants are still being felt as they apply their newly honed skills with individual patients in their respective communities as well as their efforts to develop larger scale skin care events and/or programs. Dialogue with many participants is ongoing.

Each pilot site utilized five questions that were common across pilot sites. These questions were developed by the C-Change team; pilot sites tailored the questions to reflect site specific training content and were listed at the end of each post-test. The questions allowed for aggregated assessment across sites of the relevance of the training, increases in learner confidence to provide cancer care, learner intentions to change practice, learner intentions to suggest the training to colleagues, and level of learner knowledge of the shortages in the cancer workforce. Learner attitudes and intentions are antecedents of behavior, therefore, these measures served as predictive indicators of longer term outcomes, such as changes in practice. Respondents were asked to rank each of the domains using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Figure 3 displays results from the common questions. Results from the common question data indicated that participants felt that the training was highly relevant to their practice with an increased willingness to suggest the training to their colleagues.

Program participants reported satisfaction with the learning environment. Students also expressed a high level of satisfaction with regard to the performance of the instructor in the areas of clarity of content, clarity of content, effectiveness of teaching methods, usefulness of materials, and overall management of the workshop.



**Figure 3: Audrain Medical Center Common Question Data**

### Discussion and Recommendations

Pre-test scores indicated a lack of knowledge of cancer screening issues. The two-day teaching method including the didactic portion and “hands on” clinical experience was well received. The ability to absorb the course content material obtained during the didactic day was reinforced by the opportunity to apply the knowledge and observe preceptors during the second day. This teaching method mirrors important principles in adult learning theory that promote retention and integration of knowledge and skills into practice.

The pilot site experience was very helpful to Audrain Medical Center. It served as a catalyst for the development of a vision for a statewide training site for Cancer Education, Training and Early Detection for health care providers. The structure provided by the logic model, validation template, evaluation tools, and core competencies will facilitate future grant application endeavors. They have also provided a template to use as a model for other future training programs.

Several unintended benefits arose for the lead primary investigator (PI) during the course of the pilot project. Learning how to develop a logic model was a challenging professional development experience and will be useful skill to utilize with future projects. The rigor of these tools added to the credibility of the lead PI in the curriculum development process and delivery of the workshop.

Currently, plans are in place to hold the skin cancer workshop annually. Additional healthcare providers will be invited to participate by utilizing an existing database of all previous conference participants including physicians, nurses, and allied health professionals who have attended CME/CEU events. Plans for developing a training program for other cancer sites or risk factors depending upon available funding of breast cancer education, prevention, and early detection is the next priority topic for an additional training program. Sustainability of the skin cancer

workshop is feasible if participants are charged a course fee, a common practice for earning CEU credit.

Evaluation of the implementation of the course has highlighted the opportunity to make several adjustments with regard to the Program Investigator (PI) and course materials and content in the future. While the PI was experienced in developing professional education programs, the time investment utilizing a more rigorous method was greater than expected. Additional salary allocation will need to be made for this expense when budgeting future program expenses. Request and approval in writing from the hospital administration to have relief time for the lead PI would be requested for at least 8 weeks of this pilot period. Based upon evaluation feedback, handouts will be printed in color format per students' request. Lastly, additional research and education in the melanoma vaccine would be included in the curriculum.

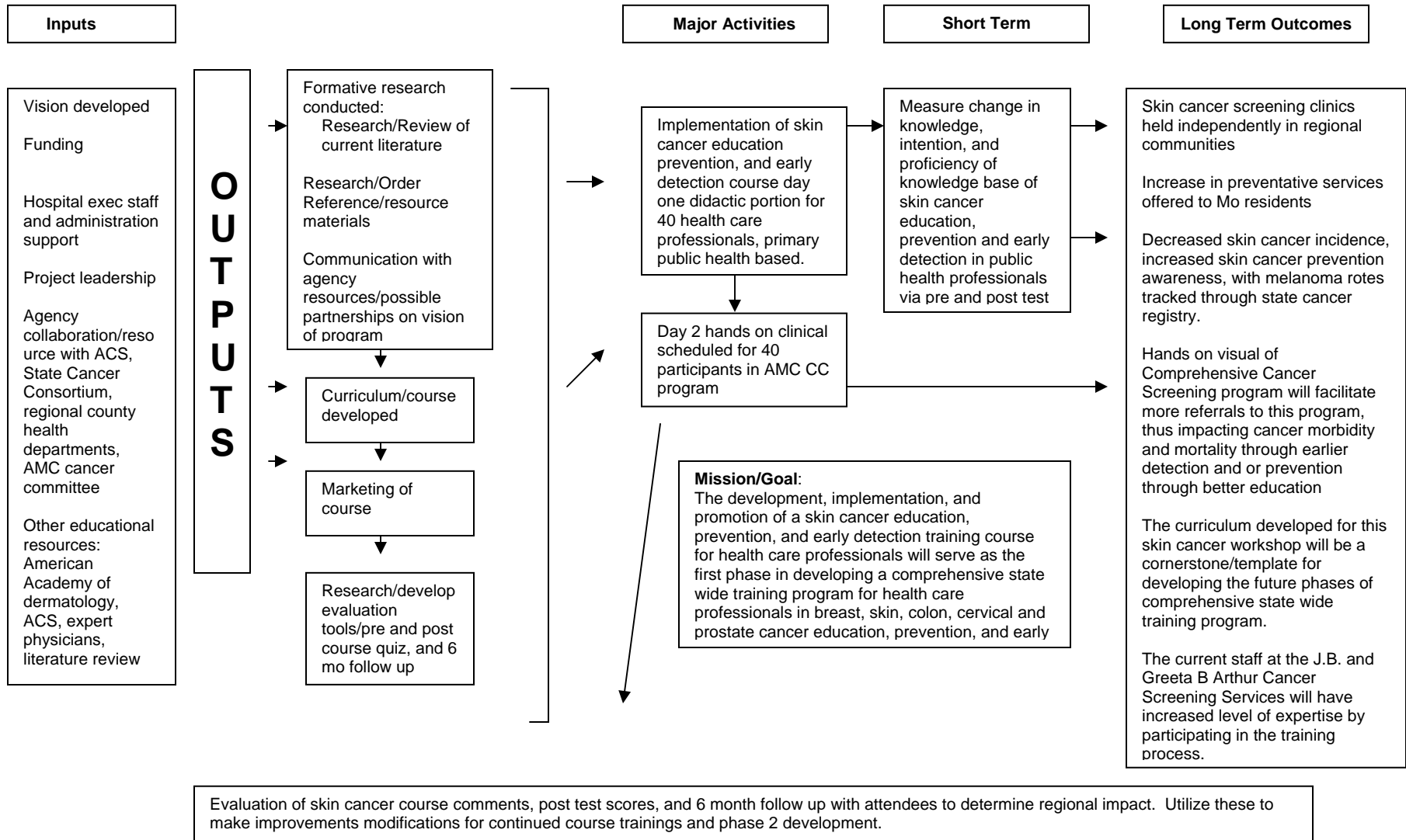
Plans for submitting additional abstracts as well as additional publication opportunities are underway. The Cancer Screening Program leaders also hope to write an article for publication in a professional journal in the next year. Audrain Medical Center is committed to sharing their experience through various dissemination efforts. Participation in the C-Change Cancer Core Competency Program has allowed the J.B. and Greeta B. Comprehensive Cancer Center to impact the cancer workforce throughout Missouri. The expertise of the project consultants and support of the C-Change staff has also been instrumental in the curriculum development process. These factors coupled with the dedication to serve the needs of the public will allow the Cancer Screening Program to continue to impact the educational process of the cancer workforce in Missouri.

Reference:

Smith A P, Lichtveld MY. A competency-based approach to expanding the cancer care workforce, *Nursing Economics*: 2007: 25(2); 110-118.

# Appendix A

## Audrain Medical Center J.B. and Greeta B. Comprehensive Cancer Center Comprehensive State Wide Cancer Prevention and Early Detection Training Logic Model



## Appendix B

Project Name:	Comprehensive 2 day advanced training for the health care professional in skin cancer education, prevention, and early detection with day 1 being didactic and day 2 hands on.
Competency:	Domain 1 B: Screening and Early Detection d: Perform an individualized skin cancer assessment based upon a comprehensive skin health history and current skin status including genetic risk factors.
Sub-competencies:	
Learner Characteristics:	Health care professionals primarily in the public health work arena
Learner Preparation:	All students will be RN level or higher and therefore will have a basic knowledge of skin anatomy and physiology as well as basic skin terminology prior to taking course; however this is not a requirement all levels of knowledge will be encouraged to attend.

Instructional Activities	Evaluation Strategies	Indicators	Notes to the Instructors
<p><b>Introduction:</b> Instructor will provide students with an over view of the vision for this course, objectives, and over view of the cancer screening program.</p> <p>Knowledgebase of skin cancer education, prevention and detection will be assessed of students.</p> <p>Intent to change assessed.</p>	<p>Pretest will be given to all students at beginning of course which will evaluate beginning knowledge as well as intent to changes as evidenced by asking the question if there are any plans to host a skin cancer education workshop or screening in their communities.</p>	<p>Students will verbally share their experience as it relates to skin cancer with the class.</p> <p>Raise of hands by students who plan to host skin cancer screening clinics in their communities.</p>	<p>The test given will be collected and held for comparison with the same post-test which will be given at the end of course.</p>
<p>Case Study: Example patient cases from our cancer screening clinic will be shared with students.</p> <p>Day 1 of course: Visual pictures of dermatology conditions will be utilized through out the entire didactic lecture to facilitate the recognition of abnormal from normal for the</p>	<p>Post test will be given at conclusion of course which will include several photo identification questions.</p> <p>Students will observe nurse examiner doing history and</p>	<p>Tests will be gone over in class with students so that any wrong answers may be corrected.</p> <p>Students will verbally express self confidence in future ability to do skin exams further evidenced by</p>	<p>The post test will be the same test as the pretest given at start of class.</p> <p>Normal from abnormal will be the focus for students, as well as prevention, education, and how to do skin exam clinics.</p> <p>Students will not be alone at any time with a patient, however they will have the opportunity to ask pertinent</p>

Instructional Activities	Evaluation Strategies	Indicators	Notes to the Instructors
<p>student.</p> <p>Day 2 of course will consist of observation and modeling in cancer screening program.</p>	<p>PE and will be coached on abnormal skin lesions which may be found. A check list will be utilized to evaluate competency.</p>	<p>asking nurse examiner questions and chiming in with history or noticing and pointing out any unusual skin findings.</p> <p>Successful completion, actual, verbal, or simulated of all areas on check list.</p>	<p>history questions, review collected history, and shadow nurse examiner as skin exam is conducted in a side by side manner.</p>
<p>Didactic Exercise: Students will listen to didactic lectures on</p> <ul style="list-style-type: none"> <li>• anatomy and physiology of skin</li> <li>• dermatology terminology primary secondary macular, popular, vesicle, nodule, tumor</li> <li>• documentation-size, location, duration, color, characteristics of lesions</li> <li>• benign lesions/common derm conditions erotosis, cherry hemangiomas, lipomas, dermatofibroma, skin tags, epidermal cyst</li> <li>• premalignant</li> <li>• malignant</li> <li>• treatments</li> <li>• risk factors</li> <li>• prevention</li> <li>• sun safety and alternative tanning techniques</li> <li>• how to perform skin exams</li> <li>• Template ideas for setting up their own clinic.</li> </ul>	<p>Post test evaluation.</p> <p>6 month follow up survey will be sent to the agency the student is working for to see if any skin screening clinics have been held or any educational workshops on skin cancer screening have been held.</p>	<p>Student will have a basic understanding of the didactic areas covered as evidenced by successful passing of post test as well as interaction throughout the class time.</p>	<p>Students will be given pocket guide textbook on dermatology conditions, laminated chart on ABCD'E of skin cancer, and skin physical exam example record, and CEU's. These incentives will be shown on first class day, but not given to students until second hands on day.</p> <p>Didactic lecture will be heavily visual with pictures of normal and abnormal skin lesions along with didactic descriptors of these benign vs. malignant conditions.</p>

Instructional Activities	Evaluation Strategies	Indicators	Notes to the Instructors
Melanoma video will be watched.			
Interactive Exercise: May possibly include ABCD bingo game.			
<p>Closure: Post exam given which will be same as the pretest.</p> <p>Review of answers.</p> <p>Sign up for second day on site hands on experience in cancer screening clinic and review required HIPPA paperwork.</p> <p>If time allows brief tour of the cancer center.</p>	<p>How many students sign up for the second day of course.</p>	<p>Raise of hand showing how many students performed much better on post test verses the pretest.</p> <p>Log will be kept of how many students actually show up for the second day of the course. Three students will be scheduled at a time to help with the insecurity factor of coming alone as well as to facilitate getting all students through in one month.</p>	<p>Skin cancer is a very tough learning curve as benign often looks suspicious and malignant often looks benign. Novice to Expert takes great deal of study and experience. Students will have an understanding that error on the side of caution is always recommended in favor of missing a potential serious skin disease. Long term goal of decreased mortality and morbidity will be impacted by increase in educational sessions offered in various communities and earlier detection rates.</p> <p>It is understood that not all students may chose to participate in day two of the course; however this will be encouraged as a very unique and special learning opportunity. Tour of the cancer center may stimulate further opportunities for change by stimulating ideas for cancer education in their own communities.</p>
Remedial Activities:	<p>Self study course from the American Academy of Dermatology, continuing education courses The Consultant and the Clinician journals have excellent derm case studies for review. Additional on site visit at AMC cancer screening program would also be an option.</p> <p>Reference site for dermatology terminology.</p> <p>ACS web site</p> <p>American Academy of Family Physician dermatology web site.</p>		
Enhancement Activities:	<p>American Academy of Dermatology professional continuing education modules/CD's which are available for purchase on the web site.</p> <p>Local community experts such as dermatologist may be willing to have student shadow for a day or serve as resource should regional community skin screenings be held.</p> <p>Resources such as: Color Atlas and Synopsis of Clinical Dermatology authors Fitzpatrick, Johnson, and Wolff.</p>		

## Appendix C

### Audrain Medical Center Day One Didactic Evaluation Method Skin Cancer Pre/Post Test

#### Questions 1-5 are slide identification

1. Identify the lesion:
  - a. basal cell cancer
  - b. squamous cell cancer
  - c. melanoma
  - d. actinic kerotosis
  - e. seborrheic kerotosis
  
2. Identify the lesion:
  - a. Basal cell cancer
  - b. Squamous cell cancer
  - c. Melanoma
  - d. Actinic kerotosis
  - e. Seborrheic kerotosis
  
3. Identify the lesion:
  - a. Basal cell cancer
  - b. Squamous cell cancer
  - c. Melanoma
  - d. Actinic kerotosis
  - e. Seborrheic kerotosis
  
4. Identify the lesion:
  - a. Basal cell cancer
  - b. Squamous cell cancer
  - c. Melanoma
  - d. Actinic kerotosis
  - e. Seborrheic kerotosis
  
5. Identify the lesion;
  - a. Basal cell cancer
  - b. Squamous cell cancer
  - c. Melanoma
  - d. Actinic kerotosis
  - e. Seborrheic kerotosis
  
6. Basal Cell cancers are generally found on the head, neck and sun exposed areas.  
True or False
  
7. The ABCDE's of skin cancer stand for:
  - a. Altitude, base, circumference, detection, and education
  - b. Area, body, calculation, dissection, and evaluation
  - c. Asymmetry, boarder, color, diameter, and elevation

8. Actinic keratosis is a precancerous condition which is often seen in older adults with fair skin and can lead to basal cell cancer.  
True or False
9. A farmer tells you that he had a toenail which has been blackened for a few months. He cannot remember the injury to his foot, but he might have injured it on the farm. Should you refer this as a possible case of melanoma?  
Yes or No
10. Skin cancer can only occur in sun exposed skin.  
True or False
11. Which of the following statements is false?  
d. The skin is the largest organ in the body  
e. The two layers of the skin are the inner dermis and outer epidermis  
f. A seborrheic keratosis is a harmless wart like growth that is usually black or brown in color.  
g. Squamous cell carcinoma of the skin is the most painful of all skin cancers.
12. What tools are required for a complete skin exam?  
a. A magnifier glass, a ruler, and a light  
b. A blue light, gloves, and hypodermic needle  
c. A woods light, a flash light, and a pen light
13. Have you ever hosted a skin cancer screening clinic?  
Yes/No
14. Do you plan to host/participate in a skin cancer screening clinic in your community in the next 6-9 months?  
Yes, No, Maybe
15. Documentation of skin lesions should include size, color, location and duration of the lesion.  
True or False
16. A papule is described as:  
a. A small pus filled lesion  
b. A solid raised lesion that is usually less than 1 cm in diameter  
c. A closed sac under the skin that contains fluid  
d. A raised lesion detectable by touch that is usually 1 cm or greater

**The following questions were used on the Post-test and asked participants to rate the characteristics of the training course.**

**Please select the number that best describes your answer with the number 1 being the lowest response through number 5 = the highest possible score.**

1. How relevant was the skin cancer workshop (based upon the competency: to perform an individualized skin cancer assessment based upon a comprehensive skin history and current skin status including genetic risk factors) to your current health care practice?

1    2    3    4    5    N/A

2. How well did the skin cancer workshop (based upon the competency: to perform an individualized skin cancer assessment based upon a comprehensive skin history and current skin status including genetic risk factors) increase your confidence to provide cancer care in your practice?

1    2    3    4    5    N/A

3. How likely are you to change your practice as a result of attending this training?

1    2    3    4    5    N/A

4. How likely are you to suggest to your colleagues that they take a training course based upon the C-Change competencies?

1    2    3    4    5    N/A

5. Prior to taking this course, how aware were you of the need for more health care providers to become involved in cancer prevention, education, and early detection.

1    2    3    4    5    N/A