

EBCCP Case Studies for Teaching

Instructor's Guide

Evaluation of Research for Implementation

EBCCP Evidence-Based Cancer
Control Programs

Teaching Case Study Instructor's Guide: Research Methodology

Overview

The Evidence-Based Cancer Control Programs (EBCCP) website is a searchable database sponsored by the National Cancer Institute (NCI) that aims to increase knowledge and utilization of cancer control programs in community and clinical settings. The EBCCP website was created and is maintained by the Implementation Science team in the Office of the Director at NCI's Division of Cancer Control and Population Sciences. The EBCCP website exemplifies the mission of the team: to develop and apply the implementation science knowledge base to improve the impact of cancer control and population science on the health and health care of the population, and foster rapid integration of research, practice, and policy.

The website currently features more than 200 cancer-related programs in the following areas: breast cancer screening, cervical cancer screening, colorectal cancer screening, diet/nutrition, HPV vaccination, informed decision-making, obesity, physical activity, prostate cancer screening, public health genomics, sun safety, survivorship/supportive care, and tobacco control. Additional topical areas and new programs are being added regularly.

Purpose and Competencies Addressed

The purpose of this teaching case study is to provide students with an opportunity to apply their research methodology and evaluation skills. This assignment requires students to closely examine 16 research integrity criteria: (1) theory/hypothesis-driven measure selection, (2) reliability, (3) validity, (4) intervention fidelity, (5) nature of comparison condition, (6) comparison fidelity, (7) assurances to participants, (8) participant expectations, (9) standardized data collection, (10) data collector bias, (11) selection bias, (12) attrition, (13) missing data, (14) analysis meets data assumptions, (15) hypothesis-driven selection of analytic methods, and (16) anomalous findings.

Upon completion of this case study, students will have applied strategies for examining a program theory and 15 other research methodology areas within a health-related evidence-based intervention.

The following competencies from the Council on Education for Public Health's accreditation criteria are addressed with this assignment:

- **D1.6:** Explain the critical importance of evidence in advancing public health knowledge.
- **D2.4:** Interpret results of data analysis for public health research, policy, or practice.
- **D2.11:** Select methods to evaluate public health programs.
- **D2.12:** Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence.
- **D3.1:** Explain qualitative, quantitative, mixed methods, and policy analysis research and evaluation methods to address health issues at multiple levels (individual, group, organization, community, and population).
- **D3.6:** Integrate knowledge, approaches, methods, values, and potential contributions from multiple professions and systems in addressing public health problems.
- **D3.16:** Integrate scientific information, legal and regulatory approaches, ethical frameworks, and varied stakeholder interests in policy development and analysis.

The Assignment

1. Students will read the Nutrition Pathfinders program summary on the EBCCP website.
2. Students will locate the program publication available on the program summary (the open-access article is available at PubMed Central).
 - a. Larsen AL, Robertson T, Dunton G. RE-AIM analysis of a randomized school-based nutrition intervention among fourth-grade classrooms in California. *Transl Behav Med.* 2015;5(3):315–326. doi:[10.1007/s13142-015-0311-6](https://doi.org/10.1007/s13142-015-0311-6)
3. Students will read the publication.
4. Students will complete the Program Review Packet and Reflection Questions, following the embedded instructions.
5. Students should debrief the assignment and their responses to the reflection questions as a group with their instructor.

Using the Case Study in Your Class

This case study can be adapted to meet the needs and levels of different courses and classes.

- Use the provided slide deck with suggested talking points about evidence use in public health to set up the case for your class.
- Use this case study in person or in online asynchronous or synchronous courses.
- Have students complete the worksheet independently or in small groups.
- Have students complete the worksheet outside of class, or have them do the required reading in advance and complete the worksheet during class time.
- Use the Nutrition Pathfinders program, or allow students to select a program in a population and topical area of their interest.
- Have students complete all 16 review criteria, or focus on specific criteria you have covered in class.
- Use the case study as a graded assignment, or use it as a learning application activity only.
- If students would like a more complicated challenge, have them complete the RE-AIM scoring instrument.

Support

If you have questions, email Jasmine Douglas, Ph.D., at jasmine.douglas@icfnext.com, or Aubrey Villalobos, Dr.PH., M.P.H., M.Ed., health scientist at NCI, at aubrey.villalobos@nih.gov.