Shared Decision-Making in Breast Cancer Screening: Goals Moving Beyond CECCR I and II

Elizabeth S. Burnside, M.D., MPH1,2; Helene McDowell, M.S.2; Dhavan Shah, Ph.D.3; Lori DuBenske, Ph.D.2; Fiona McTavish, M.S.2

Departments of 1. Radiology, 2. Industrial and Systems Engineering, and 3. Communication Sciences at the University of Wisconsin, Madison, WI

CECCR II: A COMPLETED PILOT

- We developed and tested online support tools for women in a space where they were sorely lacking: between the time of an abnormal screening mammogram and work-up or biopsy.
- We modified CHESS for use before the diagnosis of breast cancer (Early CHESS).
- We enrolled 130 women.

PILOT RESULTS

- Women had substantial difficulty answering the questions that referenced their physician, because they did not understand who their physician was for this process of care.
- Early CHESS women showed a significant decrease in anxiety at the time of biopsy (after talking to the breast care team) relative to the comparison group (p=0.0165).
- There was no significant difference in anxiety at the time of diagnostic work-up (prior to talking to the breast care team).
- Online decision support requires interaction with the care team to have an impact on anxiety.

PILOT GENERATES NEW INSTITUTIONAL FUNDING ($500,000), awarded January 1, 2013: Wisconsin Breast Cancer Screening Collaborative: Advancing Shared Decision-Making

AIMS

1. Establish B~CARE 1.0, a web accessible and EHR-embedded Clinical Decision Support Tool (CDST) that presents breast cancer risk factors and facilitates shared decision making for screening mammography based in Patient Focus Groups and Physician Interviews (See Aim 1 Results below.)
2. Develop B~CARE 2.0, a multivariate risk prediction model, and evaluate it on retrospective screening mammography data from UW with a focus on the outcomes of sensitivity, specificity, morbidity, mortality, and false positives.
3. Demonstrate the impact of B~CARE 2.0 for women considering the decision to undergo mammography with their primary care physicians, focusing on the outcomes of decision conflict, patient satisfaction, physician satisfaction, and duration of the clinical encounter.

MULTI-DISCIPLINARY TEAM

- Breast imaging
- Decision support research
- Breast surgical oncology
- Family medicine
- Population health
- Breast cancer policy
- Cancer communication
- Health psychology

WWW = Wisconsin Well Women's Program
WCC = Wisconsin Cancer Council
CCKM = Center for Clinical Knowledge Management

AIM 1 RESULTS

B~CARE 1.0 Interviews—Physicians:
- Are unsure about what to recommend and struggle with the conversation about screening
- Feel it is a time consuming process
- Feel guidelines are inconsistent and hard to understand
- Feel women should know their risk factors (family history, risk of harm, and absolute risk)
- Feel B~CARE would be valuable as part of pre-visit planning incorporated in EMR

B~CARE 1.0 Focus Groups—Women:
- Trust their doctors to tell them what to do
- Want to know in advance what to expect during the process AND after screening/results
- Want to understand benefits and risks (i.e., false positives)

Corresponding Author
Elizabeth S. Burnside, M.D., MPH
University of Wisconsin
Department of Radiology
E3312 CSC
Madison, WI 53792-3252
eburnside@uwhealth.org