## Title:

Health Information Technology (IT) to Promote Patient-Centered Care

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## **Session Title:**

Nurse-Managed Technology to Enhance Cancer Care Outcomes for Survivors With Breast Cancer or Head/Neck Cancer

Slot:

F 14: Friday, 28 July 2017: 2:30 PM-3:45 PM

**Scheduled Time:** 

2:50 PM

# **Keywords:**

Health Information Technology, Patient-centered care and Symptoms

### **References:**

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## **Abstract Summary:**

We will share our experience of building institutional infrastructure, feasibility, and sustainability of using health information technology (IT) to promote patient-centered care in post breast cancer symptom assessment in clinical practice.

# **Learning Activity:**

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
Understand the process of establish a health IT system in clinical practice.	The presentation will explain the steps of process of establishing a sustainable health IT system for patients to report patient-centered outcomes using TouchScreen to report lymphedema symptoms as an example.
Understand the process of evaluating the implementation of a health IT system in clinical practice.	The presentation will use TouchScreen for lymphedema symptoms as an example to illustrate the process of evaluating the effectiveness of Touchscreen symptom assessment from patients and providers' perspective.

#### **Abstract Text:**

## Purpose:

A growing body of evidence indicates the use of health information (IT) solutions are effective in implementing patient-centered care and can be instrumental to improving the safety, quality, and efficiency of patient-centered health care delivery. Many breast cancer survivors suffer from daily distressing symptoms related to lymphedema, a chronic illness induced by cancer treatment and currently no medical and surgical intervention can provide a cure. Lymphedema is an abnormal accumulation of lymph fluid in the ipsilateral body area or upper limb with more than 20 distressful symptoms. In spite of the growing body of evidence linking the experience of lymphedema symptoms to risk of lymphedema and poor quality of life, the experience of lymphedema symptoms is not often valued and not considered essential for assessment or inclusion in clinical practice, leading to an overall health disparity manifested as a lack of patient-centered care in clinical practice. The purpose of this presentation is to share our experience of using health IT to promote patient-centered care in lymphedema symptom assessment among breast cancer survivors, focusing on building institutional infrastructure, feasibility, and sustainability of using health IT in clinical practice.

### Methods:

The Evaluation Planning Incorporating Context (EPIC) model was used to guide this project. Methods used included: i) a literature review on the use of a tablet computer in the assessment of cancer symptoms; ii) a literature review related to detection and referral of lymphedema; iii) a literature review regarding satisfaction related to the use of a tablet computer; iv) observation of the state of the current process at an outpatient breast cancer practice; v) implementation of the evidence-based lymphedema symptom TouchScreen at the outpatient breast cancer practice; vi) survey assessment of patient and clinician satisfaction with the use of the TouchScreen.

#### Results:

By building a sustainable infrastructure we have successfully incorporated this patient-centered care into daily clinical practice. Using the TouchScreen to report lymphedema symptoms is safe, easy-to-use, and no risk of harm to patients. The use of the TouchScreen increased the number of timely referrals for

lymphedema treatment and patients' self-recognition of lymphedema symptoms. Overall, clinicians and patients reported being very satisfied with the use of the TouchScreen that improved clinicians' assessment of lymphedema symptoms and improved communication among health care providers and patients and patients' learning about lymphedema symptoms.

### Conclusion:

Using TouchScreen for patients to report lymphedema symptoms show benefit to patients in terms of earlier self-recognition of lymphedema symptoms, increased communication among clinicians and patients and increased timely referral to lymphedema specialist, all potentially leading to a reduction of lymphedema complications.