Get Your Hands on This: Developing Hospital Educational Programs Using Tablet Technology

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## Faculty Disclosure

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<td>Conflicts of Interest</td>
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Objectives

• Understand the background related to the need for mobile education in nursing professional development.
• Analyze the steps in developing and implementing a mobile technology program for nursing education in an academic medical center setting.
• Analyze and inspect the steps necessary for program development of a mobile tablet education program in a nursing professional development department.
• Dissect and examine avenues for cost savings through implementation of mobile hospital-based learning for nurses.
• Model program types developed for mobile tablet application for nurses in a hospital setting.
University of Chicago Medicine (UCM)

- The University of Chicago Medical Center
  - Center for Care and Discovery
  - Bernard Mitchell Hospital
  - Comer Children's Hospital
  - Duchossois Center for Advanced Medicine
- University of Chicago Pritzker School of Medicine
- Biological Sciences Division
  - Knapp Center for Biomedical Discovery
  - Gordon Center for Integrated Sciences
University of Chicago Medicine
Nursing Professional Development Department

• **Leadership:** Director, Manager of Nursing Education, Manager of Nursing Research

• **Clinical Nurse Specialists:** adult med-surg, pediatrics, women’s care, NICU and perioperative services

• **Clinical Nurse Educators:** pediatrics, emergency medicine, NICU, adult ICU, adult med-surg, women’s care, ambulatory, procedural, perioperative services

• **Multimedia Coordinator**
The addition of a new healthcare facility, the Center for Care and Discovery, brought the need to deploy mobile training across the medical center’s multiple facilities.
Our Journey to Mobile Tablet Education
Because the truth is...... Everyone is using tablets!
The need to increase mobile learning and to bring nursing education to the bedside, led the NPD department at a university medical center to invest in tablets and implement this technology into daily educational activities.
Introduction

Discuss the need for mobile technology in nursing professional development to bring education to the bedside
Needs for Mobile Education in Hospitals

- Difficult to release nurses from bedside care to attend education
- Cost of educational hours and printed materials
- Increasing needs for education related to:
  - Technology
  - New implementations/roll-outs
  - Orientation

Steps for Implementation

Step One: Build a business case to present to senior leadership

- Decreased Time Away from Bedside Care
- Decreased costs of classroom education and printed materials
- Quicker deployment of new knowledge, processes etc.
Steps for Implementation

Step Two: Purchase tablets and necessary accessories
Steps for Implementation

Things to consider:
Protective covers and screens
Charging devices
Projection connections
Steps for Implementation

Step Three: Develop internal/departmental support for maintenance and set-up of tablet technology
Steps for Implementation

Step Four: Determine learning needs/gaps where tablets could be used to enhance learning or mobile education
Program Development

Design a system for application selection, review and download

Build tablet technology into class curriculum, in-service planning and annual competency sessions

Educate all members of the Nursing Professional Development department on basic tablet technology usage
Program Development

• Design a system for application selection, review and download
  – What applications are appropriate and applicable to hospital-based learning for nurses?
  – Who will review and download the applications on all tablets to keep them consistent?
  – How will applications be updated and reviewed annually?
Program Development

• Educate all members of the Nursing Professional Development Department on basic tablet technology usage and skills
  – Tablet Technology Educational Series
    • Tablet 101
    • Tablet 102
    • Tablet 103
Tablet Education Series for NPD Staff:

- **Tablet 101 Training**
  - Teaches the basics of working with a tablet
    ‣ On/off functions
    ‣ Opening and closing applications
    ‣ Charging, battery and Wi-Fi use
    ‣ Mute/audible sound
    ‣ Video functionality
Tablet Education Series for NPD Staff:

• **Tablet 102 Training**
  – Teaches the applications currently available for use as well as sources for future educational applications
  – This training includes having staff access web applications (clinical desktop) through the tablet
Tablet Education Series for NPD Staff:

• **Tablet 103 Training**
  
  – Teaches all current NPD uses of the tablet and discussion of future tablet technology educational initiatives
  
  – Reviews current and past projects associated with the tablets for nursing education (i.e. video shoots, loading pdfs for competencies, creating eBooks, etc)
Program Development

• Build tablet technology into class curriculum, in-service planning and annual competency sessions

• Examples:
  – Bedside education for nurses
  – EKG hands-on applications for training
  – Video training for annual competencies
  – Polling, voting or hands-on interactivity in classroom learning
Educational In-Services

Place flyers, newsletters and educational hand-outs on the tablet for small group bedside inservicing with nursing staff.
Video Production
Interactive Learning and Testing
Cost Savings

• Decreased printing costs (almost $5,000 savings) over one year
• Decreased in-classroom or off-unit time for learning
• Enhanced nurse satisfaction of learning activities where tablets were used
Demonstration of mobile tablet education programs

- Demonstration of mobile tablet education programs
- Hands-on EKG training
- Competency validation
- Video recordings for educational needs
- Mobile in-servicing on nursing units
Results

• Continuing education activities that utilized iPad technology garnered higher satisfaction from nurses than those that used other training modalities in the first year.
• Early evaluation showed decreased printing costs of educational materials and decreased costs of in-person classroom education for staff.
Selected References


Acknowledgments

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Senior Leadership

- Debra Albert, Chief Nursing Officer
- Tracy Pieterzyk, Administrative Director

THE UNIVERSITY OF CHICAGO MEDICINE
Thank you!

Questions?

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