Organizational and Faculty Determinants Associated with Health Information Technology Adoption in DNP Programs: A Descriptive Study

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Introduction

Today’s dynamic health systems require nursing informatics/health IT knowledge and experience to enable a workforce capable of utilizing health care technologies to provide safer, more efficient, timely, patient-centered care.

In 2014, findings from an electronic survey (2011) with an 81.2% response rate from all 138 AACN accredited DNP program directors were published in the Journal of Professional Nursing including: a lack of informatics-certified and/or master’s prepared faculty; a perceived lack of faculty awareness of informatics curricular guidelines; and information related to diverse ways DNP programs have integrated informatics/health information technology content.

Study Purpose

A replicated/expanded follow-up survey is indicated to further explore:

➢ How informatics/health IT content and experience in DNP education are implemented;
➢ The availability of informatics-prepared faculty;
➢ Leadership/faculty awareness of the value of health IT required to address the multiple, emerging roles for DNP-prepared nurses.

Technology Informatics Guiding Educational Reform

➢ Allow informatics tools, principles, theories and practices to be used by nurses, other interdisciplinary providers and consumers.
➢ Interweave enabling technologies transparently into practice, education and research to improve outcomes, patient safety and reduce costs of healthcare.
➢ Better prepare the workforce to use technology and informatics for improvement of patient care.

American Association of Colleges of Nursing’s Essential IV for Doctorate of Nursing Curricular Content

Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care.

DNP Programs

➢ In November 2011, 138 DNP programs were identified nationally from the AACN website as accepting DNP students.
➢ 81.1% Valid Response Rate/112 Respondents

➢ In January-March 2020, 291 DNP programs were identified nationally from the AACN website as accepting DNP students.
➢ 3 educational institutions report no longer offering DNP programs=289 DNP programs surveyed.
➢ Preliminary results 35.3% Valid Response Rate/102 Respondents

DNP Education Impact

Post MSN or MS Baccalaureate to DNP Both

This 2020 study in progress is designed to capture:

➢ The changing DNP landscape and challenges;
➢ Types of DNP programs offered;
➢ Trends in leadership with nursing informatics focus;
➢ Changes in access to electronic health records for teaching purposes;
➢ Data related to use of mHealth wearables and Citizen Science.

Study Method

1. Organizing framework-Rogers’ Diffusion Theory.
2. Survey questions developed with input from TIGER leaders.
3. Content validity established by consulting three nursing informatics leaders.
4. Survey piloted using three academic leaders at three leading informatics-oriented educational institutions.
5. Nationally accredited DNP programs identified from AACN website.
6. Survey distributed electronically to all current DNP Program Directors, following up weekly with email reminders.
7. Survey distributed electronically to the Deans of nonresponding DNP program directors.
8. A nationally recognized TIGER leader contacts Deans of nonresponding DNP program directors by e-mail.

Key Preliminary Study Results

Key findings about faculty

Percentage of programs with nursing informatics certified faculty or faculty with master’s degrees or higher in nursing informatics:

Key findings about nursing informatics courses

Percentage of participants responding that their educational institutions offered specific nursing informatics courses:

Key findings about technology

Percentage of educational institutions which have access to an EMR/EHR/PHR to help students learn informatics and technology related content:

Key findings about technology and current trends

Percentage of educational institutions which have an EMR/EHR/PHR reporting that 50% or more of the faculty would be comfortable using the electronic record as a teaching tool.

Key Preliminary Study Implications

➢ To gain a higher number of informatics-prepared faculty, deans and DNP program directors could encourage informatics faculty to obtain further informatics education.
➢ To encourage the development of informatics coursework, accrediting bodies could encourage educational institutions to refer to the TIGER Collaborative Framework and guidelines to strengthen the informatics/IT component of their programs.
➢ Those educational institutions, which have nursing informatics certified or Master’s prepared faculty and have met Essential IV, could give advice to educational institutions which need assistance on the development of informatics/health information technology curricula.

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For Further Information

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