Technology Focused DNP/NP Projects as Practice Implementation Tools Laurel Shepherd, PhD, PNP

Slide 2

Overview of Program Objectives

- Provide students with projects that will aid them in implementing technology into practice
- Assist students in understanding practice barriers to the implementation of technology and strategies for overcoming them.

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Slide 3

Program Addresses Barriers to Adoption of Technology

- In order for technology to be utilized to its fullest potential, practices must be willing to adopt it
- All too often, practices resist the implementation of technology. This may be due to lack of understanding, fear of change, no time, or confusion

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Champions for Telehealth Ensure Successful Implementation

- Practices that successfully implement technology usually have a member of the team that is willing to champion the initiative
- In order to create champions, DNP/NP students were assigned projects in technology implementation

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Slide 5

Students Asked to Prepare Technology Project

- Choose one of the modalities presented in the technology workshop (electronic health records, social media, telemedicine, or clinical decision support)
- Assess the need and select a specific technology appropriate to their practice setting

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Slide 6

Projects Based on Specific Guidelines

- Develop a step-by-step plan for implementing the chosen technology
- Assess and identify barriers related to cost, knowledge, and resources
- Develop specific strategies to overcome barriers

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Projects Focused on One of Four Areas

- Telehealth
- Electronic Health Records
- Clinical Decision Support
- Social Media
- Many practices began adopting new healthcare technologies
- Some students conducted technology focused DNP Capstone Projects

Slide 8



Slide 9

Project Focused on Determining if Telehealth Stroke Education is as Effective as In-Person Education

- Involved quasi-experimental, non equivalent pretest-posttest control group design
- Conducted in Big Stone Gap, Virginia
- Utilized videoconference for TeleHealth session via University of Virginia

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Outcomes Suggest TeleHealth Stroke Education Comparable to In-person Education

- Suggests feasibility and effectiveness of TeleHealth stroke education for the rural elderly
- Offers model for expanded role of TeleHealth in patient education

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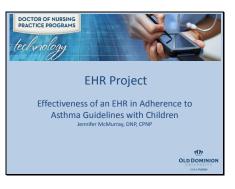
Slide 11

Results will be Presented at the American Telemedicine Association

- "Telehealth Stroke Prevention Education in Elderly Appalachian Virginians"
- May 2011
- Investigators/Presenters:
 - Patty Schweickert, MSN, FNP, DNP Candidate
 - Carolyn M. Rutledge, PhD, FNP

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Slide 12



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Project Focused on Determining if an Asthma Template Improved Management in Children

- Involved retrospective review of chart prior to implementation of template and again after implementation of template
- Adherence to Asthma Guidelines and Patient Health Status Improved as a Result of Template

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Slide 14

Results Presented at the NAPNAP Annual Conference

- "Effectiveness of an EHR in Adherence to Asthma Guidelines with Children"
- April 2010
- Investigators/Presenters:
 - Jennifer McMurray, DNP, CPNP
 - Laurel Shepherd, PhD, PNP

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Slide 15



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Slide 16	Project Focused on Web-based Patient Education Program for Weight Loss		
	Involved quasi-experimental, non equivalent pretest-posttest control group design		
	Conducted in Family Practice Setting		
	Intervention Training on the selection and use of computer technology to teach obese patients about making healthy nutritional choices through webbased support E-mailed reinforcement and encouragement on utilizing the webbased weight loss program accompanied (t)		
	OLD DOMINION ON YEAR TY ISTANGON		
Slide 17	Two Research Questions were		
	Investigated		
	Will there be a pre-and post -difference in weight loss behaviors, subjective health, weight loss, and comfort in using web-based support in 2. What is the difference in weight loss behaviors, subjective health, weight loss, and comfort in using web		
	participants that receive the individuals that receive the nutritional web-focused web-focused nutritional intervention program? intervention and those that do not receive the intervention?		
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Significant Improvement in the Intervention Group

- The intervention group had significant weight loss while the comparison group did not change
- Intervention group was significantly more comfortable with using the computer after completing the program than the comparison group

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Results Presented at VCNP Annual Conference

- "The Impact of a Web-Focused Nutritional Intervention on Weight Loss and Dietary Behaviors in Primary Care"
- March 2010
- Investigators/Presenters:
 - Krystyna Caratachnea, DNP, CFNP
 - Carolyn Rutledge, PhD, FNP

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Slide 20



Slide 21

Project Focused on Providing Support for Parents of Homebound Children through eCommunication

- Involved pretest-posttest survey design using a convenience sample of parents of children associated with a pediatric home health agency located in a metropolitan city
- Intervention
 - Twelve week structured communication between an advanced practice nurse (APN) and parental caregivers
 - Weekly e-mail blasts of educational or parenting information selected for the special needs and interests of a parent with a medically fragile technologically dependent child
 - Supplemented by individual parent e-mails

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Slide 22 Pre and Post-intervention Differences in Selfreported Well Being and Satisfaction Not Significant Pre and post-intervention differences were not significant Self reported well-being (PedsQL™ Family Impact Module) (p=.227) Satisfaction scores (PedsQL™ Healthcare Satisfaction Module) (p=.528) Yet, parents voluntarily provided qualitative comments such as: - "It is nice to feel that someone cares" - "I sent the information to a friend" Twelve of nineteen requested the communication program OLD DOMINION Slide 23 **Results Presented at National** Association of CNS Annual Meeting • "Electronic Communication in Pediatric Home Health: Impact on Parental Well-Being and Satisfaction" • March 2011 • Investigators/Presenters: -Tina Haney, MSN, CNS, DNP Candidate (()) OLD DOMINI -Kimberly Adams Tufts, DNP, FAAN Slide 24 **Program Outcomes** Educational programs focusing on healthcare technology can be affective in increasing the use of healthcare technologies in practice • Students are able to take a leadership role in implementing and evaluating the use of technology in healthcare Students demonstrated the effectiveness of the four

modalities in impacting healthcare outcomes