



Enabling Nursing Learning Using Multiple Technologies

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BACKGROUND

- Following the implementation of an inpatient Palliative Care team, it was identified that inpatient Registered Professional Nurses (RPNs) required pain management education to optimize team participation
- Increasing pain management knowledge amongst nurses was done to improve care for every patient who suffers from pain, most notably for patients receiving care from the Palliative Care (PC) team
- Nursing Professional Development practitioners struggle to implement cost effective methods of education and demonstrate measurable learning

PURPOSE:

The purpose of this presentation is to demonstrate our evaluation of electronic learning using modules provided by the Center to Advance Palliative Care, as an effective means of increasing knowledge of Pain Management in an inpatient nurse population

The purpose of creating this e-learning opportunity was threefold:

To provide staff with education to improve patients' pain assessment and aid implementation of pain management strategies, so as to improve patients' perceptions of care

- Identify the importance of safe and effective management of pain
- Identify the elements of a comprehensive pain assessment
- Recognize that specific pain types and patterns to guide safe and effective treatment

To improve nurses' participation with the Palliative Care team

To demonstrate nursing learning, using electronic education methods

E-learning initiatives, which are learner centered, utilize Constructivist and 21st century learning principles to provide a cost-effective opportunity to meet education goals for pain management (Kong and Song, 2013, p. 209). Professional nurses require education that is

- relevant to their practice
- easily, asynchronously and flexibly obtained
- consistent with adult learner theory (Curtis, 2016, p. 29)

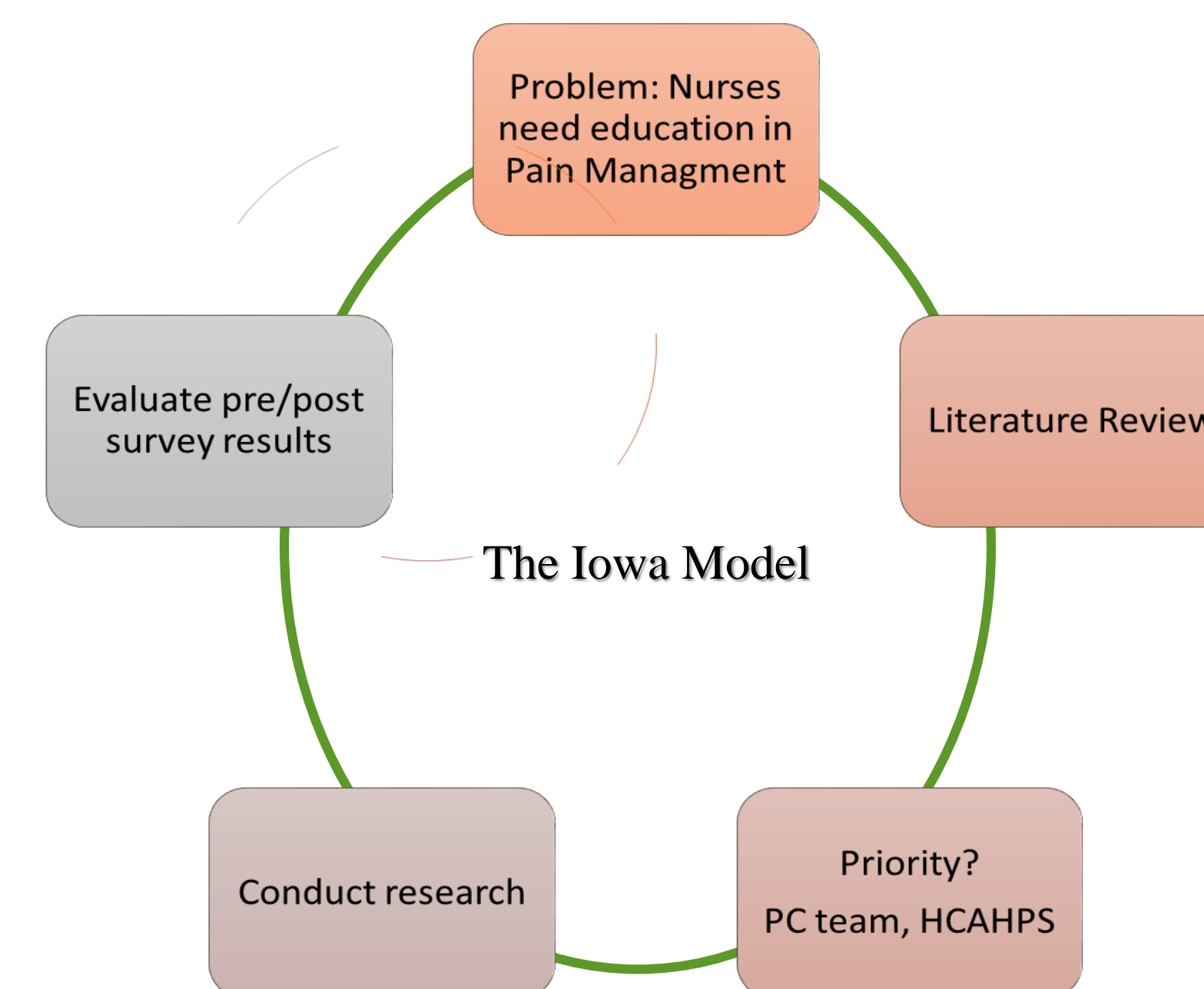
MATERIALS AND METHODS

Identification of Stakeholders

- Organizational leadership
- Unit based leadership
- Clinical Practice Council-Hospital wide nursing led council

Collaboration with Interdisciplinary Team

- Medical Librarian-identification of evaluation tool
- Incorporating Technology-Lectora®, LMS
- Statistical Analysis



Guided by electronically created scaffolding within our Learning Management System, staff were assigned the education modules and asked to perform the pre and post education survey

Pain Management education modules available from the Center to Advance Palliative Care (CAPC):

- Course 1: Comprehensive Pain Assessment
- Course 2: Matching the Drug Class to the Pain
- Course 6: Prescribing an Opioid

Pain Management education was assigned with the option to participate in a pre and post assessment, Ferrell and McCaffery's (2014) Knowledge and Attitudes Survey Regarding Pain, following Institutional Review Board approval.

Email-Outlook	Learning Management System	SurveyMonkey®	Center to Advance Palliative Care
<ul style="list-style-type: none"> Notify staff of assigned education modules-link to Healthstream Request staff participation in research Repeated reminders sent weekly for 8 weeks 	<ul style="list-style-type: none"> PowerPoint includes link to online learning modules-Center to Advance Palliative Care PowerPoint includes request and link to online survey tool-SurveyMonkey® 	<ul style="list-style-type: none"> Reproduced Ferrell and McCaffery's (2014) Knowledge and Attitudes Survey Regarding Pain 1st-"Do you wish to participate"...A "no" answer reconnects back to LMS Anonymous 	<ul style="list-style-type: none"> 14 modules of online Pain Management education available, 3 assigned Education time paid when completion certificates produced for CEUs

Electronic Resources.

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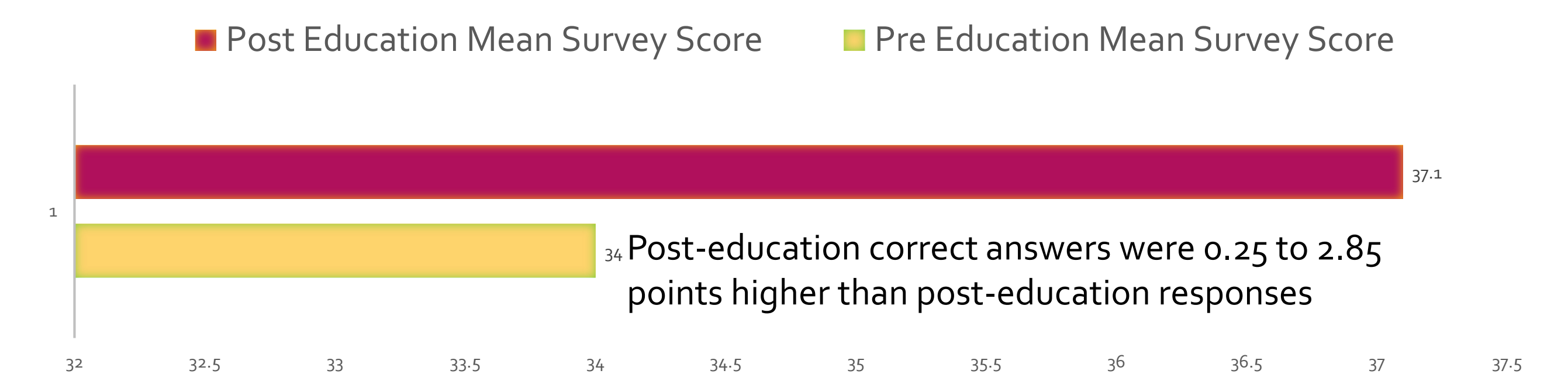
RESULTS

Assigned: A convenience sample of N=145 inpatient Registered Professional Nurses working on three Medical/Surgical and one Surgical unit. Research participation was requested of the same sample.

- N=145 RPNs assigned to complete the education modules
- n = 99/145 (68%) completed the survey prior to attempting the education modules
- n = 34/145 (23%) completed the survey post module completion
- Comparing mean survey scores of these two groups, the pre-education correct answers were 2.85 to 0.25 points lower than post-education responses (t test: Correct-Test)
- Pre/post education mean survey scores demonstrate a statistically significant (p=0.019, 95% confidence interval-RStudio statistical software) increase in survey scores following completion of the education modules.

145 RPNs completed the assigned education modules

COMPARISON OF PRE AND POST EDUCATION MEAN SURVEY SCORES

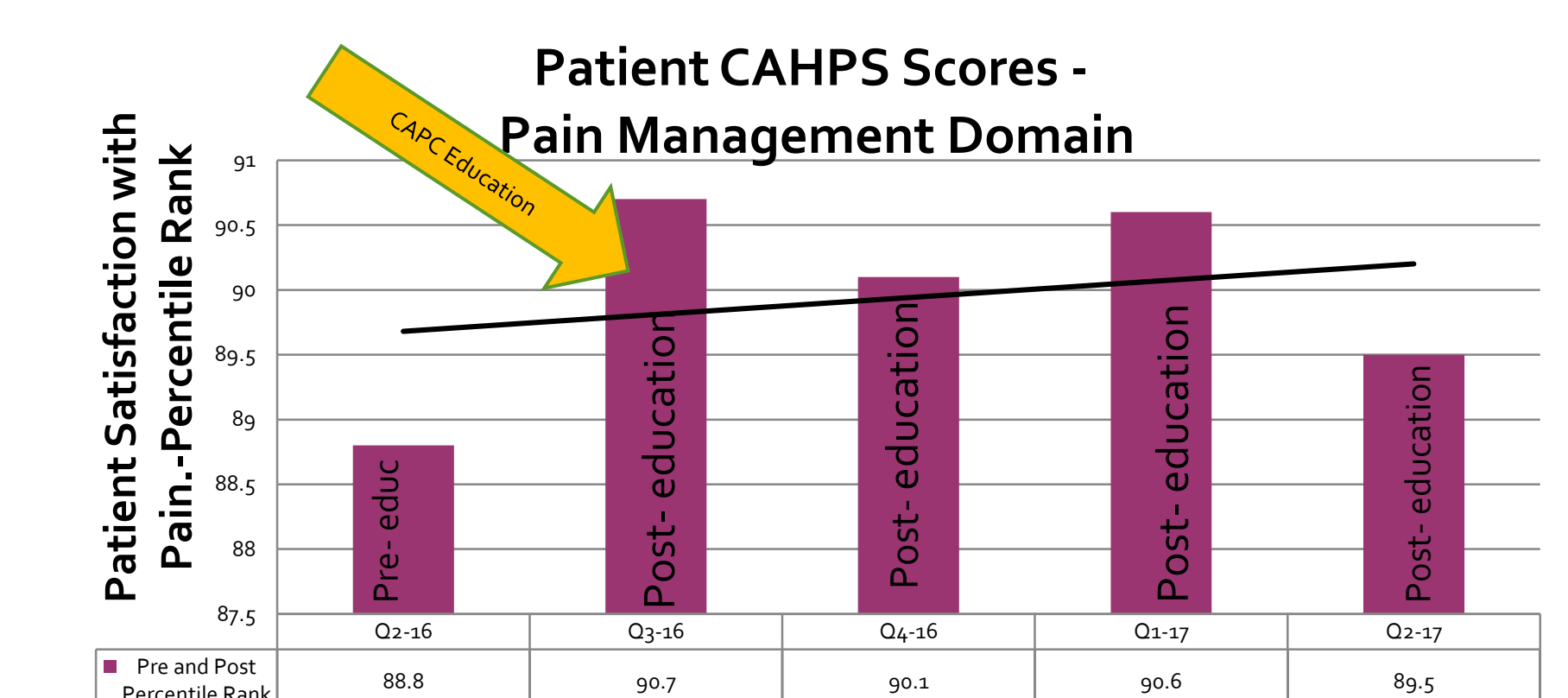


CONCLUSIONS

The pre and post education survey results suggest that learning outcomes were positively influenced among staff who completed the pre and post education surveys.

Further completion of CAPC education modules in Pain Management could be expected to demonstrate increased learning

While not a direct correlation, Inpatient CAHPS scores related to pain have sustained improvement post education.



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