Nursing Leadership & Management in Health Systems | 2016-2017 Assessment Report

1. Please give a brief overview of the assessment data you collected this year.

In 2016-2017, MSN Program Outcome 5 (Utilize informatics and health care technologies to enhance care and outcomes of nursing) was targeted for further assessment. In 2010, in the Institute of Medicine's landmark report, The Future of Nursing: Leading Change, Advancing Health, all nurses were called upon to play a fundamental role in health system change in the United States. One of the key messages was for nurses to have better data collection and information infrastructure to enable effective workplace planning and policy making, which are both key responsibilities of nurse leaders and managers. In 2016/2017, data from UW-Green Bay MSN students, faculty, the advising Community of Interest (COI), and curriculum were collected and analyzed to evaluate student achievement of programmatic outcome #5. Findings are summarized in this table:

2016/2017 ASSESSMENT DATA for MSN Program Outcome # 5		
MSN Program Outcome 5: *Utilize informatics and health care technologies to enhance care and outcomes of nursing*		
TYPE OF DATA	DETAILS	Evidence/Findings from Program Outcome # 5
STUDENT: Annual MSN student meeting data	Students participate annually in a teleconference call (offered two times, on different days to accommodate working nurses) with questions about Program Outcome #5.	**Annual MSN student meeting data:** April 2017 91.2% MSN students participated in the annual virtual teleconference meeting (N=34/37). The following reflects the responses to question posed about this program outcome: *Tell us any ways you have used informatics and health care technologies to enhance care and outcomes in nursing.* • Student responses were initially hesitant, and then evolved to be primarily technology/EHR-related, although there was some mention of informatics, as defined by the ANA/HIMMS. Students initially confused healthcare technology with informatics (information and communication technology to promote health). (NOTE: • Students stated through the MSN curriculum they gained confidence and experience with meeting technologies (i.e. - Blackboard Ultra & SKYPE); use of iPads for consent and patient satisfaction surveys, online survey tools, and the use of

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		electronic health record (EHR) implementation as informatics, which are technologies.
		 • Correct informatics examples of health system uses of informatics included:
		     o EHR data to evaluate quality of care, patient education, and quality improvement; data to evaluate nurses' understanding and correct use of EHR
		     o Understanding where data is coming from in health care systems
		     o Helpful to see how information gets into databases and how to pull it back out
		     o Wound program for tracking outcomes and healing percentages

STUDENT: Grad/Alumni Survey data	MSN student survey responses rating their satisfaction with achievement of each Program Outcome on a 5 point Likert scale (5=extensive and 1=none). The nursing program benchmark = 3.75.	**MSN Graduates (class of 2015, collected Fall 2015) and MSN One Year Alumni Survey data (class of 2015, collected Fall 2016)** NOTE: MSN students graduate every other Summer, in odd years (2015, 2017, etc. The MSN first graduating class was Summer 2015.) **Ratings of satisfaction with achievement of Program Outcome #5.** a. 2015 (first year of MSN graduates): Graduate response mean = 4.40 (SD=0.55)(N= 5/6) b. 2016 (one year alumni survey first year): Alumni response mean = 4.00 (SD=0.71) (N=5/6)
STUDENT: CCQ end of course evaluations for	Student CCQ comments (qualitative and quantitative) related to	*N760 Informatics in Health Systems* course student **qualitative** comments relating to outcome #5: • <u>FALL 2014 course:</u> o "We did have some techno issues with some of the software but good to practice with a variety of modalities."

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MSN Program Outcome 5: *Utilize informatics and health care technologies to enhance care and outcomes of nursing*

TYPE OF DATA	DETAILS	Evidence/Findings from Program Outcome # 5
NURS 760 Informatics in Health Systems	Program Outcome # 5. The nursing unit has an accreditation benchmark of 7.0 or greater on CCQ overall scores.	o "The use of a scenario (ICU or disaster) throughout the course was a creative way to connect all of the informatics concepts. This was a good approach." o "it was an introduction to informatics. I felt that the class expectations were too high for this" • SPRING 2017 course: o "The content is very helpful for real life application in the healthcare world." o "it was an informatics course and there were some technology issues and the help with them was good. Also good to have issues as part of this type of course." *N760 Informatics in Health Systems course* student **quantitative** comments relating to outcome #5: • FALL 2014 course: Course difficulty received the lowest score of the eight items on the CCQ, with a mean of 7.83/10 (N=12). The Overall course mean = 9.08/10 (N=12). • SPRING 2017 course: Course difficulty received the lowest score of the eight items on the CCQ, with a mean of 6.75/10 (N=12). Overall course mean = 8.1/10 (N=12).
STUDENT: N760 MSN student assignment grades	Lesson 5 PowerPoint assignment in *N760 Informatics in Health Systems* related to Program Outcome #5	**Course assignments in NURS 760 Informatics in Health Systems related to Program Outcome 5.** Satisfactory completion of this assignment by MSN students demonstrated understanding of which Web 2.0 tools could be used in health systems, the rationale for selecting a particular Health Information Technology (HIT) tool, and creation of a comprehensive HIT plan for the health care setting. a. FALL 2014 course: Mean score of students for this assignment was 96% (96-100 = A) (N=24). b. SPRING 2017 course: Mean score of students for this assignment was 96% (96-100 = A) (N=27).
FACULTY: Nursing faculty subcommittee: Curriculum Development Committee	MSN courses are evaluated by CDC on a rotating schedule. The *N760 Informatics in Health Systems*	**Nursing course evaluation by Curriculum Development Committee (CDC).** This subcommittee of the Nursing Unit Faculty Organization (NUFO) reviewed the MSN curriculum for threading of informatics content throughout the curriculum. A review of course syllabi yielded the following information regarding course outcomes, assignment and/or content specific to nursing informatics, as defined by HIMMS and the ANA. The table indicated the MSN courses to which CDC felt informatics could be added: 737, **745.** 750, **755,** 770, 772. The faculty review of

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(CDC) annual evaluation	course was due for evaluation in 2016/2017, however informatics (Program Outcome #5) content across MSN curriculum was reviewed instead.	courses they taught completed in Spring 2017 indicated these courses covered informatics topics: 734, **745**, **755**, 760, 790. Discrepancies noted and to followed up on in 2017/2018 MSN faculty meetings.
		CDC recommendation: Given the review of syllabi and student comments, nursing informatics does not appear to be well threaded throughout the curriculum. Additionally, the faculty member who teaches the MSN *N760 Informatics in Health Systems* course has indicated in a recent meeting that it would be helpful if students were aware of informatics prior to taking that course. Therefore, it is recommended that the MSN faculty review ways in which nursing informatics could be better threaded through the curriculum to ensure graduates have a solid foundation in informatics, understanding it is more than technology, but rather an integration of nursing science, computer science, and information science to manage and communicate data, information, knowledge, and wisdom in practice.
COMMUNITY OF INTEREST (COI): PRACTICING NURSE LEADERS AND MANAGERS IN HEALTH SYSTEMS ANNUAL CONFERENCE CALL	At the annual COI/Nursing Advisory Meeting, held on 4/3/17, the nursing COI members' answers to an informatics (outcome #5) related question	What do nurse leaders use to enhance care, using informatics in health care technology? (N= 7 external COI members) ° Surveys via survey monkey; process of community health assessment thru grant office ° A number of proprietary systems; PH data by epidemiologists; i.e. Epidemiologist collaborations ° Informatics in ADN courses? Reading research reports. No epic training ° Outcome of program should include Informatics and Pt. care technology ° U of M health care informatics faculty resource – "What nursing faculty should know" (COI shared link) (noting the *N760 Informatics in Health System* course instructor and MSN Program Chair have informatics related certification and informatics scholar post-doc completion, respectively)

What was learned?

- MSN students could report uses of informatics in health care settings, although some confusion with use of health care technology and informatics was noted.

- MSN Graduate and Alumni survey responses surpassed the nursing unit benchmark of 3.75 for satisfaction of achievement of Program Outcome #5.

- Quantitative CCQ scores from MSN students in all sections of the *N760 Informatics in Health Systems* course offered in 2014 and 2017 (and its content related to Program Outcome #5) surpassed the nursing unit benchmark score of 7.0, despite students rating the course as "difficult".

- Qualitative CCQ comments from all sections of the *N760 Informatics in Health Systems* course offered in 2014 and 2017 were positive, although course expectations were high.

- An MSN student mean of 96% was earned in the *N760 Informatics in Health System* course assignment related to applying Web. 2.0 technological tools and rationale for their use in health system HIT plans.

- Faculty CDC review of Program Outcome #5 suggested that informatics content be threaded across the curriculum in more courses.

- Nurse leaders (COI) verified the types of informatics used in practice, which align with the MSN Program. One faculty resource for informatics professional development was shared.

2. How will you use what you've learned from the data that was collected?

- 2017/2018 MSN faculty meetings to address threading of informatics into more courses as suggested by CDC and to brainstorm ways to prepare MSN students with basic information about informatics before *N760 Informatics in Health System* course, offered in the second year of the curriculum

- Continue to monitor Program Outcome #5 in Graduate, Employer, and one and three year Alumni survey data; CCQs; and course assignments

- Offer MSN faculty informatics training resources in 2017/2018 offered by COI, noting the *N760 Informatics in Health System* course instructor and another faculty member already have post-doc informatics training