

# Care Coordination Education-to-Practice Scale-Up Implementation

# NSP II Implementation Grant Project (7/2020 – 06/2025)

Partnership:

University of Maryland School of Nursing
University of Maryland Medical Center (UMMC)
UMMC Midtown Campus

(Supported by the Maryland Nurse Support Program II)



### Content

- Team member introduction
- Project overview
  - Background
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  - A brief approach for each goal with outcome measures
- Current progress
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- Q&A



### **UMSON Project Team: Co-Directors**

- Nahm, Eun-Shim, PhD, RN, FAAN
   Professor, & Program Director, Nursing Informatics
- Mary Etta Mills, RN, ScD, FAAN
   Professor, Organizational Systems and Adult Health
- Greg Raymond, DNP, MBA, RN, NEA-BC
   Vice President of Nursing and PCS, Clinical Practice,
   Professional Development, Neuroscience, and
   Behavioral Health



## **Project Team**

#### Linda Costa PhD, RN, NEA-BC

Faculty Member and Associate Professor University of Maryland School of Nursing

### Linda Aveni Murray, DNP, CRNP-Ped

Faculty Member, Assistant Professor and Director for the RN-BSN Program University of Maryland School of Nursing

### Lynn Chen, PhD

Evaluator, Assistant Professor University of Maryland School of Nursing

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Clinical Data Scientist
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Dean and Professor Emeritus, Loyola University Chicago, School of Nursing

#### **Lori Harris**

Director of Registration and Clinical Placement

University of Maryland School of Nursing

#### Matt Rietschel, MA

Assistant Professor, Assistant Dean for Information and Learning Technology University of Maryland School of Nursing

### **Ginger Pritchett, BS**

Registration Coordinator
University of Maryland School of Nursing



# University of Maryland Medical System Nurse Leaders

#### Lisa Rowen, DNSc, RN, CENP, FAAN

Senior Vice President of Patient Care Services & Chief Nursing Officer University of Maryland Medical Center

### Nat'e Guyton, DM, RN, MSN, NE-BC

Vice President of Patient Care Services and Chief Nursing Officer University of Maryland Medical Center, Midtown Campus

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### Karen E. Doyle, DNP, MBA, RN, NEA-BC, FAAN

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Director of Nursing – ED, ICU/IMC, M/S, PASP
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Midtown Campus



### **UMNursing CCIC Project Team**



Infrastructure: Admissions, Registrar, Web/Comm., CE Dept

(\*CCIC: Care Coordination Implementation Collaborative)



# **Overview of the Project**



# **UMNursing CCIC Project: Background**

- This project was built upon our prior NSP II planning grant (07/2016-06/2019)
- This implementation project focused on the **NSP II Initiative 4,** "Build Collaborations between Education and Practice (that develop new models that promote a patient-centered continuum of care)."
- The project will implement an innovative collaboration model,
   UMNursing Care Coordination Implementation Collaborative
   (UMNursing CCIC), a joint effort between the UMMS hospitals and the UMSON.



## **Project Goals and Objectives**

### **Overreaching Project Goal**

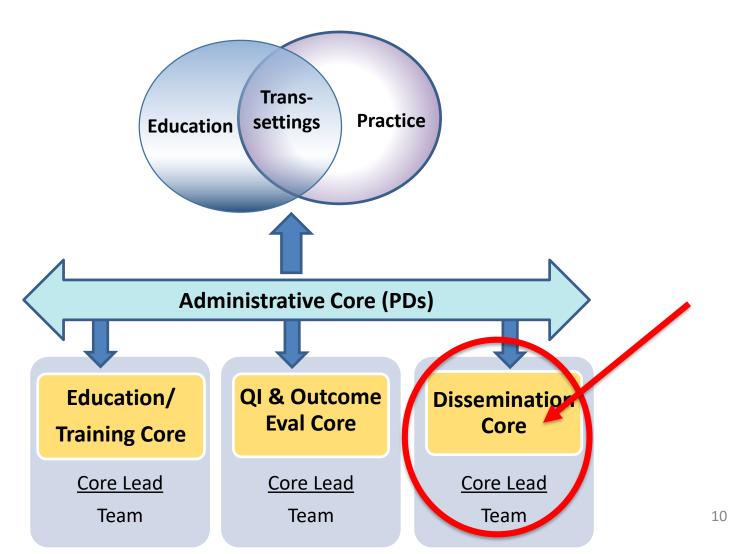
To promote care coordination and patient-centered care across Maryland hospitals while continuing to expand the CC focus area/courses in academia.

### **Specific project goals include:**

- 1. Establish a UMNursing CCIC infrastructure
- 2. Provide students and practicing nurses with actionable knowledge/skillsets in CC
- 3. Facilitate QI projects in the areas of CC and patient-centered care
- 4. Assess the impact of the project on selected patient outcomes (e.g., patient experience with care, 30-day readmission, discharge planning), as well as nursing practice and education outcomes.



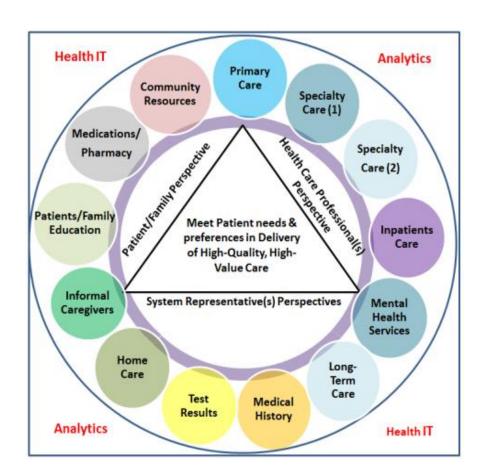
# **UMNursing CCIC Model**

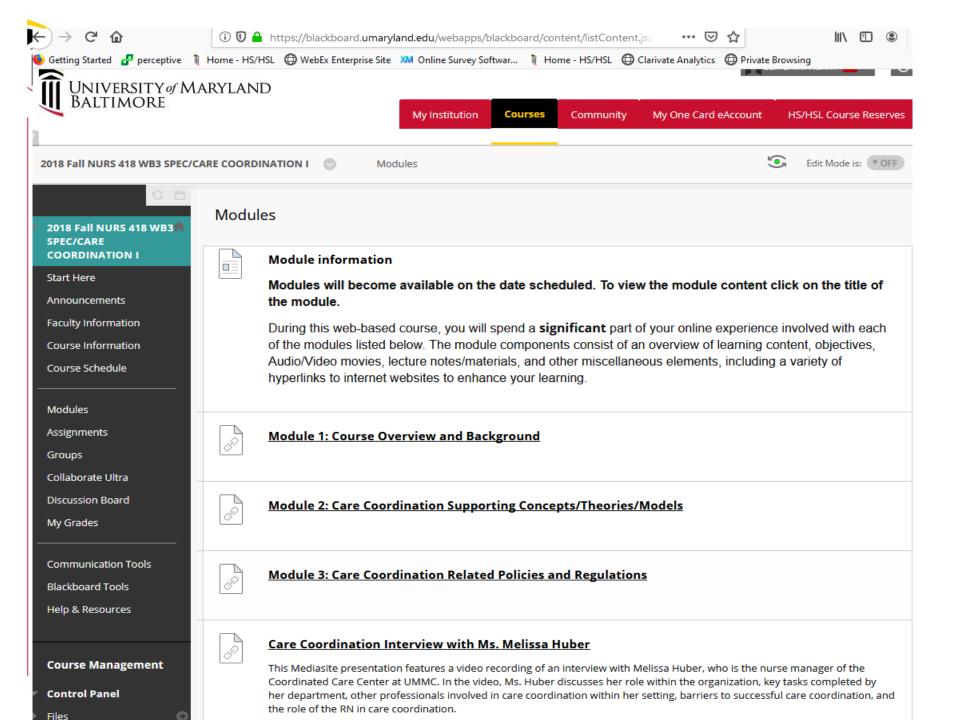


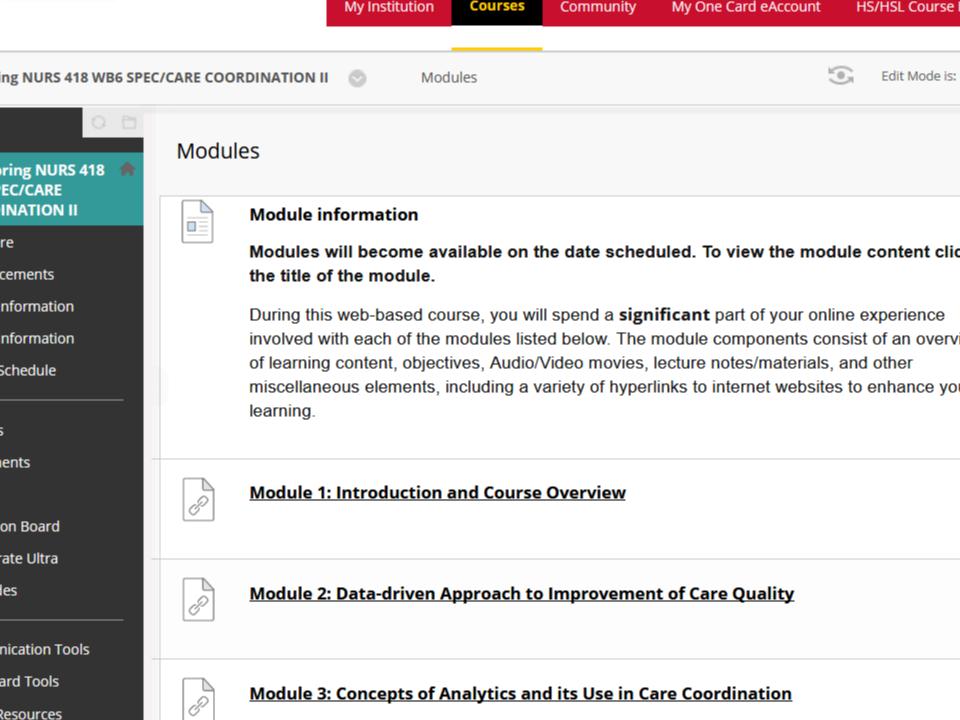


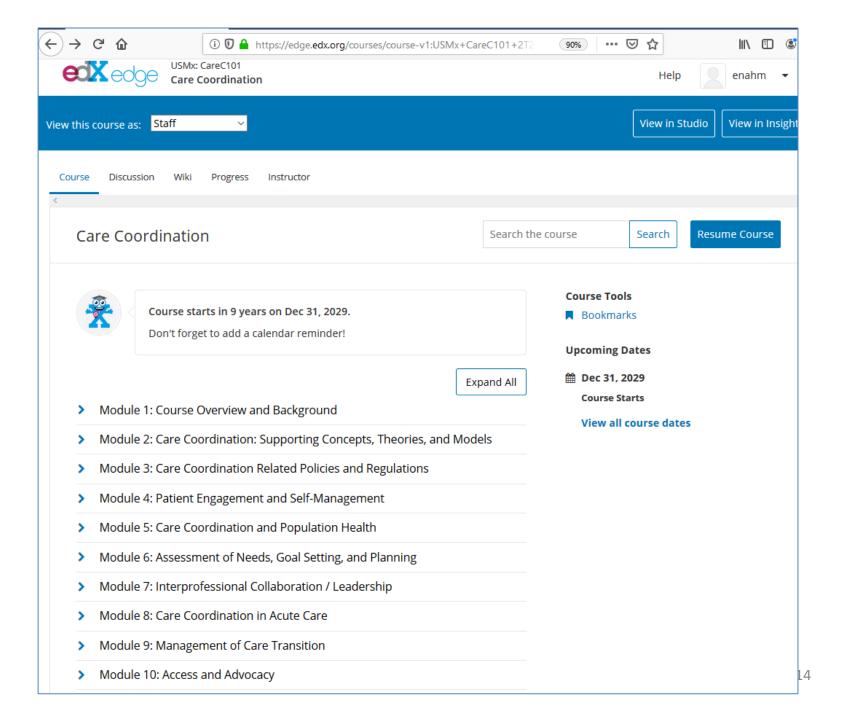
### **Care Coordination: Operational Definition**

CC is the deliberate organization of patient care activities between ≥2 participants (including the patient) involved in a patient's care to facilitate the appropriate delivery of healthcare services. Organizing care involves the marshalling of personnel and other resources needed to carry out all required patient care activities and is often managed by the exchange of information among participants responsible for different aspects of care. (AHRQ)











# Significance of the Project



# Significance of the Project

- Focuses on CC capacity building in both nursing education and practice settings with the ultimate goal of improving patient outcomes.
- Responds to the MHEC recommendations for NSP II future funding and fits well with the "Total Cost of Care Model."
- CC is becoming an essential component for nursing education
  - Must build educational content and practicum opportunities in nursing colleges.



# Significance of the Project

- UMNursing CCIC addresses MHEC's recommendations for NSP II future Funding.
  - Increase the number of BSN prepared nurses
  - Deliver continuing education in CC to practicing nursing
  - Develop faculty members expertise in CC/population health areas.
- MHEC urges nurse leaders at the hospitals and nursing programs to work together to increase clinical sites, especially by creating non-traditional practicum opportunities.



# Project Goals, Objectives and Timeline

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	Preparation (hire staff, staff or pment of procedure mauals, et		7/1/20	9/30/20																			
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	Form UMNursing CCIC Core To SON and UMMS hospitals).	eams (Reps from	7/1/20	12/31/20																			
2 D	Develop UMNursing CCIC polic	ies/procedures, inclu	7/1/20	12/31/20																			
	Announce and advertise UMNui pus and UMMS hospitals.	sing CCIC to UMB	7/1/20	12/31/20																			
	. Provide students and practowledge/skillsets	ticing nurses with	1/1/21	6/30/25				<b>—</b>	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \														
1. A	Academia		1/1/21	6/30/25																			
	Review/update CC courses with h expert videos & cases)	ospital partners (add	1/1/21	6/30/21																			
ea/c	Expand the implementation of the courses to community college stu admission track, as well UMSON a	dents who are in the	1/1/21	6/30/21																			
	Develop faculty members' expertish (workshops, online modules, etc		7/1/21	6/27/25																			
	Develop preceptors and practicum opulation health areas.	opportunities in	1/4/21	6/30/25																			
2 l	UMMS Hospitals		1/1/21	6/30/25																			
	Further refine edX CC/HIT module SON ILT staff	s with expert nurses	1/1/21	6/30/21																			
	Educate staff nurses on CC/populearning modules, workshops, etc.	ation health through	7/2/21	6/30/25																			
2.3	Develop preceptors in CC/populat	ion health areas	7/2/21	6/30/25																			
	. Improve care coordination t-centered care practice in N		1/1/22	6/30/25						1	<b> </b>												
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2. E	Engage nursing students in those (icum opportunities.	QI projects through	1/1/22	6/30/25							_												
	. Assess the impact of the pr	oject on patient	12/1/20	6/30/25						<u> </u>		<u> </u>											
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### **5-Year Implementation Timeline**

# Goal 1. Establish an infrastructure for the UMNursing Care Coordination Implementation Collaborative

#	Goals and Objectives	Start Date	Finish Date
1.1	Form UMNursing CCIC Core Teams (Reps from UMSON and UMMS hospitals).	7/2020	12/2020
1.2	Develop UMNursing CCIC policies/procedures, including standing meetings.	7/2020	12/2020
1.3	Develop detailed plans for course /module revision Establish a draft DB structure and data capture tools	8/2020	Continue
1.4	Announce and advertise UMNursing CCIC to UMB campus and UMMS hospitals.		12/2020

# Goal 2: Provide students and practicing nurses with actionable knowledge and skillsets in CC

#	Goals and Objectives	Start	Finish
2.1	Academia (UMSON)		
	<b>2.1.1</b> . Review/update CC courses with hospital partners	1/2021	6/2021
	<b>2.1.2.</b> Expand the implementation of the CC/HIT focus area/courses to community college students who are in the dual admission track, as well as UMSON students	1/2021	6/2025
	<b>2.1.3.</b> Develop preceptors and practicum opportunities in CC/population health areas	7/2021	6/2025
	<b>2.1.4.</b> Develop preceptors and practicum opportunities in CC/population health areas.	1/2021	6/2025
2.2	UMMS Hospitals		
	<b>2.2.1.</b> Further refine edX CC/HIT modules with expert nurses and SON ILT staff	1/2021	6/2021
	<ul> <li>2.2.2. Educate staff nurses on CC/population health through self-learning modules, workshops, etc.</li> <li>A focused education approach for nurses who care for 3 selected patient cohorts</li> </ul>	7/2021	6/2025
	2.2.3. Develop preceptors in CC/population health areas	7/2021	6/2025

### Goal 3. Facilitate QI projects in areas of CC and patient-centered care

#	Goals and Objectives	Start	Finish
3.1	Working with nurse leaders, identify QI opportunities in CC & patient-centered care.	1/2022	6/2025
3.2	<b>Engage nursing students</b> in those QI projects through practicum opportunities.	1/2022	6/2025

# Goal 4. Assess the impact of the project on patient outcomes as well as nursing practice and education

<ul> <li>Examine the impact of the project on</li> <li>Education (SON): Starting from 12/2020, per semester and/or yearly</li> </ul>	12/2020	06/2025
<ul> <li>Practice (UMMS): Patients and nursing practice outcomes</li> <li>Baseline: 06/2021 / Follow-up data: 07/2022; 07/2023; 07/2024; 06/2025</li> </ul>	01/2022	06/2025



# **Project Approach**



### Goal 1. Establish a CCIC Infrastructure

- Form UMNursing CCIC Core Teams
- Develop UMNursing CCIC policies and procedures, including standing meeting schedules.
- Develop detailed plans for course /module revision Establish a draft DB structure and data capture tools
- Announce and advertise UMNursing CCIC to UMB campus and UMMS hospitals.



### **UMNursing CCIC Cores and Selected Functions**

Core / Leads	Major Functions
Administration (SON/UMMS) Nahm, Mills / Raymond	<ul> <li>Develops and execute strategic planning</li> <li>Serves as an authoritative body and makes higher-level decisions</li> <li>Communicates with UMMC/UMSON nurse leaders</li> <li>Reviews project progresses and adjust project plans as needed</li> </ul>
Education/Training Nahm & Costa / Raymond	<ul> <li>Lead efforts for course revision/updates</li> <li>Coordinate all education-/training-related activities</li> </ul>
QI & Outcome Evaluation: Nahm & Chen / Seidl	<ul> <li>Develop/maintain RedCap databases, online surveys, and data tracking tools</li> <li>Collect and analyze data /Assist in dissemination efforts</li> </ul>
Dissemination Nahm & Mills / Cafeo	<ul> <li>Lead and facilitate dissemination efforts, including presentations, manuscripts, and required reports.</li> </ul>



### Goal 2: Specific Approaches: Academia

- 1) Review and update CC courses.
  - ✓ Education/Training Core will review and update the current CC courses while incorporating more case-based examples and expert videos.
- 2) Expand implementation of the CC/HIT focus area & courses.
  - ✓ Working with the dual admission coordinators, actively advertise the CC/HIT focus area and courses to the community college students.
- 3) Develop faculty members' expertise in CC and population health areas.
  - ✓ UMNursing CCIC will offer in-depth joint workshops on CC and population health to SON faculty members and selected UMMS nurses
- 4) Develop preceptors and practicum opportunities in CC and population health areas.



### **Goal 2: Specific Approaches: UMMS Hospitals**

### 1) Further refine edX CC modules.

✓ An expert UMMS clinician team will review/update the current edX CC modules. ILT staff will deploy the modules to the production environment.

### 2) Educate staff nurses on CC/population health.

Nurse education will be carried out using a phased approach.

- ✓ 07/2021-12/2021: 1st half of the CHF and COPD units
- $\checkmark$  01/2022-06/2022: 2<sup>nd</sup> half of the CHF and COPD units
- ✓ 07/2022-12/2022: Stroke units

### 3) Develop preceptors in CC and population health areas.

(further training, e.g., preceptor orientation sessions with CEUs)



# Goal 2: Specific Approaches: UMMS Hospitals

### (Tangible Benefits to Nurses)

- Gain up-to-date knowledge and skillset needed to deliver high quality care
- Earn CEUs that can be used toward their clinical ladder portfolio (Professional Advancement Model)
- Acquire knowledge needed to take a CC (or case management) certification examination
- Have more career opportunities in CC and population health areas



# Goal 3. Facilitate QI Projects in CC and Patient-Centered Areas

- Facilitate unit-based QI projects in the selected care areas.
- Engage nursing students in QI projects.
  - ✓ QI projects are well-suited for DNP practicum and scholarly projects
  - ✓ Practicum opportunities for the QI projects will be communicated with SON practicum coordinators, faculty, and students.



# Goal 4.1: Assess the impact of the UMNursing CCIC Project Patient and Nursing Practice Outcomes

Outcomes	Measures	BL / FU	
Patient Outcomes			
<ul> <li>Patient's experience with CC</li> </ul>	3 CC items included in the HCHAPS survey	BL: Prior to education	
<ul> <li>30-day unplanned hospital readmission</li> </ul>	30-day unplanned hospital readmission rates (per ICD-10) tracked for selected CHF, COPD and stroke patients	FU: 12 months after training & yearly	
<ul> <li>Discharge instructions</li> </ul>	3 items from the discharge phone call survey	yearry	
Nurse practice outcomes			
Review of modules and workshop attendance	# and % of nurses who reviewed modules # of nurses who attended workshops	7/2022 and yearly	
Nurses' passing certification exams	A change in # and % of nurses with a certificate in case (or CC) management	BL: 06/2021 FU: 07/2022 & yearly	
Nurses' CC competency	A modified 10-item Nurses' CC Competency Scale	BL: Prior to education	
Nurses' job satisfaction	Revised2-item job satisfaction subscale of the NDNQI RN survey.	FU: After training	



# Goal 4.2: Assess the impact of the UMNursing CCIC Project: Education Outcomes

Outcomes	Measures	BL / FU
Student Outcomes		
# of students who completed the CC/HIT focus area # of community college students registered for CC courses # of students who registered the CC courses	# of students	Per semester & yearly
Longitudinal follow-up: Graduates with CC/HIT focus - serving as care coordinators and/or preceptors (#) - enrolled in advanced degree programs (#)	# of graduates	Online survey after one year graduation (yearly)
Faculty Outcomes  - Development of faculty expertise in CC/population health	Faculty members' module reviews and/or workshop attendance (#)	07/2022 & yearly
Practicum/Preceptor Outcomes  - New practicum opportunities in CC/population health	# of new sites # of preceptors	07/2022 & yearly



# **Progress**(As of October 10<sup>th</sup>, 2020)



# Goal 1. Establish UMNursing CCIC Infrastructure

- Project identity (logo) was developed.
- Four CCIC Core teams were formed and shared project folders created.
- Established the CCIC communication and meeting Structure
  - Administration Core Meeting: weekly
  - Core Working Group Meeting: weekly biweekly
  - All-Team Member Meeting: Monthly (Each team further developed its project plans)
- Development of UMNursing CCIC policies and procedures: ongoing



# Care Coordination Implementation Collaborative



# **CCIC Administration Core**



- Developed project identity (logo)
- Maintains ongoing communications with UMMC/UMSON nurse leaders and Serves as a higher-level decision-making authority
- Established four Cores (leaders and members)
- Established the alignment between the project and the UMMC nurses' professional advancement model (PAM)
- Established the CCIC communication and meeting Structure
- Monitors the progress of the Cores and provides necessary support



# **Education/Training Core**



- Developed specific plans to disseminate the CC/HIT focus track to community colleges.
- Streamlined/updated the content for CC1 and CC2 courses
  - in consultation with UMMC nurse experts and consultants
  - in consideration of the changes in current healthcare landscape and the HSCRC care model (Total Cost Care Model).
- Course update process
  - multiple meetings with the UMMC nurse stakeholders (nurses in different areas)
  - review of the curriculum content for CCTM and CM certification
  - Identification of additional content to be added to the courses
  - Development of new modules



# **Outcome Evaluation Core**



- The following items have been completed:
  - Conceptualization of the project DB structure
    - complex due to different types of data and phases
  - Determination of data collection tools and DB types (e.g., Qualtrics, RedCap)
  - Identification of source data for the secondary data (e.g., data from hospital administrative reports, SON registrar reports, etc.)
- The following items are in progress:
  - Staff training of RedCap DB and Qualtircs survey program
  - Development of RedCap DB and Qualtircs surveys
  - Testing data preparation using mockup files



### **Dissemination Core**



- Developed a plan for manuscripts in different phases.
- Manuscript under development: "Convergence of Education, Practice, and Research: Maryland Nursing Exemplar Model"
- Abstract under development: Will be submitted to a conference targeting in 2021.



# Next Step: Phase II

