

# Teaching Nursing Home Collaborative

## 4M Competencies: Overview and Process of Analysis

### OVERVIEW

The University of Pittsburgh Evaluation team developed the “4M Competencies” as a guide for measuring student clinical experiences during the Teaching Nursing Home Collaborative (TNHC). Through a cross-analysis of the “Age-Friendly Health System: 4M Domains” and the *American Association of Colleges of Nursing (AACN) Core Competencies for Professional Nursing Education*, in addition to rigorous discussion of curriculum objectives with partnered Schools of Nursing (SON), the “4M Competencies” were drafted. SON instructors are expected to apply this student competency framework to carry out student faculty assessments that align with the eight student 4M competencies. Students can be evaluated based on meeting or exceeding the expectations for the competencies of the varying educational course levels present within TNHC.

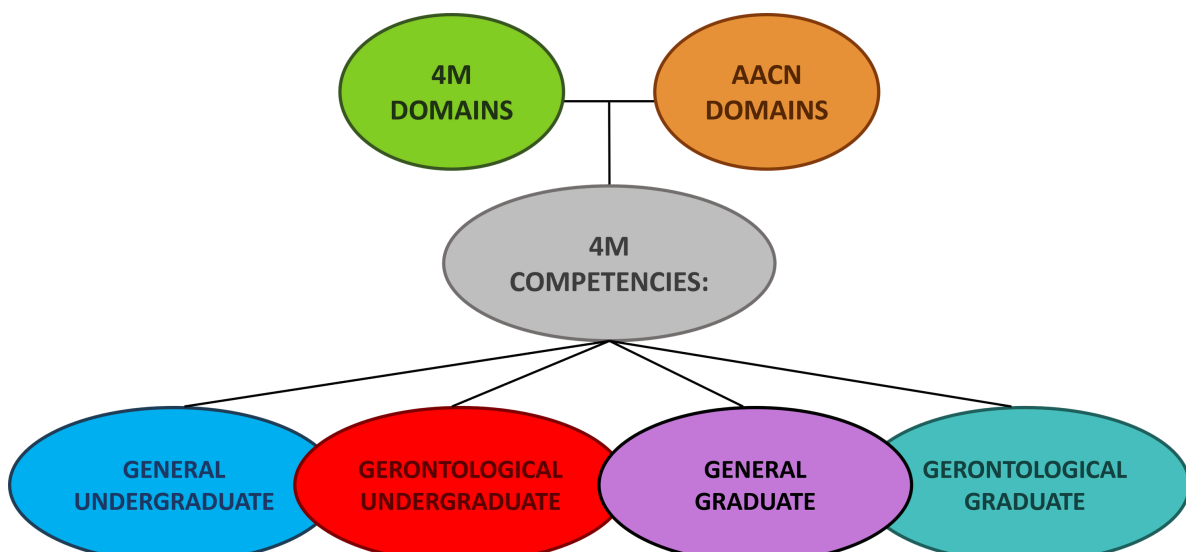
### INCLUDED IN THIS PAMPHLET

- Introduction to the original Evaluation team student faculty assessment measures, “**Age-Friendly Health Systems: 4M Domains**”, that were the basis for the **4M Competencies**.
- Overview of the **AACN Domains**
- Introduction to the **4M Competencies** as it aligns with the varying levels of coursework:
  - General Undergraduate
  - Gerontological Undergraduate
  - General Graduate
  - Gerontological Graduate

### PROCESS OF ANALYSIS: CONSTRUCTING “4M COMPETENCIES” THROUGH CROSS-ANALYSIS OF 4M AND AACN DOMAINS

The AACN domains were measured against the 4M Domains through a cross-analysis and evaluation of the AACN’s Domains/Subdomains and the original “Age-Friendly Health System: 4M Domains” previously developed by the University of Pittsburgh Evaluation team to measure student and faculty clinical experiences during the Revisiting the Teaching Nursing Home pilot initiative. Each AACN Domain/Subdomain’s major attributes (i.e. person-centered, quality and safety, etc.) and their desired outcome among nursing students (i.e. professional development, improved resident-nurse communication) were evaluated against the components of the 4M Domains (i.e. conduct medication review, develop evidence-based project). For example, sub-domain 1.2 ‘Apply theory and research-based knowledge from nursing... and other sciences’ closely relates to four 4M domains (Develop Evidence-Based Project, Conduct Interview and Physical Assessment, Collaborate with Resident and Team, Elicit Patient Values, and Health Promotion Education). Overall, the 4M domain ‘Interview Resident for Purpose of Evidence-Based Project’ overlapped with 15 different AACN domains/sub-domains; ‘Develop Evidence-Based Project’: 12; ‘Conduct Interview and Physical Assessment’: 14; ‘Collaborate with Resident and Team’: 28; ‘Collect Info and Identify What Matters’: 15; ‘Medication Review’: 16; ‘Elicit Patient Values Using What Matter’s’: 17; ‘Health Promotion and Education’: 27.

### THE DEVELOPMENT OF THE 4M COMPETENCIES:



# AACN CORE DOMAINS FOR PROFESSIONAL NURSING EDUCATION



## What are the AACN Core Domains for Professional Nursing Education?

The American Association of Colleges of Nursing (AACN) Core Competencies for Professional Nursing Education outlines 10 nursing domains professional nursing students are expected to develop over the course of their education. Included within each domain are expected student competencies which capture necessary nursing practices and faculty student assessment parameters. Upon collaboration with the participating Schools of Nursing (SON), the University of Pittsburgh TNHC Evaluation team conducted a cross-analysis of the 10 AACN Domains and the “Age-Friendly Health Systems: 4M Domains”, resulting in what are now the current evaluative measures for TNHC faculty student assessments, the “4M Competencies”. The following is an overview of the AACN Domains that provides reference for current TNHC faculty student assessment measures.

## AACN CORE DOMAINS

Domain	General Definition
<b>1: Knowledge for Nursing Practice</b>	Integration, translation, and application of established and evolving disciplinary nursing knowledge and ways of knowing, as well as knowledge from other disciplines, including a foundation in liberal arts and natural and social sciences. This distinguishes the practice of professional nursing and forms the basis for clinical judgment and innovation in nursing practice.
<b>2: Person-Centered Care</b>	Person-centered care focuses on the individual within multiple complicated contexts, including family and/or important others. Person-centered care is holistic, individualized, just, respectful, compassionate, coordinated, evidence-based, and developmentally appropriate. Person-centered care builds on a scientific body of knowledge that guides nursing practice regardless of specialty or functional area.
<b>3: Population Health</b>	Population health spans the healthcare delivery continuum from public health prevention to disease management of populations and describes collaborative activities with both traditional and non-traditional partnerships from affected communities, public health, industry, academia, health care, local government entities, and others for the improvement of equitable population health outcomes.
<b>4: Scholarship for Nursing Discipline</b>	The generation, synthesis, translation, application, and dissemination of nursing knowledge to improve health and transform health care.
<b>5: Quality and Safety</b>	Employment of established and emerging principles of safety and improvement science. Quality and safety, as core values of nursing practice, enhance quality and minimize risk of harm to patients and providers through both system effectiveness and individual performance.
<b>6: Interprofessional Partnerships</b>	Intentional collaboration across professions and with care team members, patients, families, communities, and other stakeholders to optimize care, enhance the healthcare experience, and strengthen outcomes.
<b>7: Systems-Based Practice</b>	Responding to and leading within complex systems of health care. Nurses effectively and proactively coordinate resources to provide safe, quality, equitable care to diverse populations.
<b>8: Informatics and Healthcare Technologies</b>	Information and communication technologies and informatics processes are used to provide care, gather data, form information to drive decision making, and support professionals as they expand knowledge and wisdom for practice. Informatics processes and technologies are used to manage and improve the delivery of safe, high-quality, and efficient healthcare services in accordance with best practice and professional and regulatory standards.
<b>9: Professionalism</b>	Formation and cultivation of a sustainable professional nursing identity, accountability, perspective, collaborative disposition, and comportment that reflects nursing’s characteristics and values.
<b>10: Personal, Professional, and Leadership Development</b>	Participation in activities and self-reflection that foster personal health, resilience, and well-being, lifelong learning, and support the acquisition of nursing expertise and assertion of leadership.

# AGE-FRIENDLY HEALTH SYSTEMS:

## 4M DOMAINS



### What are the Age Friendly Health Systems: 4M Domains?

Derived from the Institute of Healthcare Development *Guide to Using the 4Ms in the Care of Older Adults*, the “Age-Friendly Health System: 4M Domains” allowed TNHC instructors the opportunity to assess nursing students during the Revisiting the Teaching Nursing Home pilot initiative in the context of the Age-Friendly Health System: 4Ms. Upon further collaboration between the University of Pittsburgh Evaluation team and participating Schools of Nursing (SON), the student competency measures were revised through a cross-examination of the 4M Domains and the *American Association of Colleges of Nursing Core (AACN) Competencies for Professional Nursing Education*. Below is an overview of the original “Age-Friendly Health System: 4M Domains” developed by the Evaluation team.

## 4M DOMAINS AND COMPETENCIES

4M Domain	Overlapping AACN Domains	4M Competency Definition
Interview a Resident	2-4, 6-8, 10	Conduct a professional interview with the patient/resident to develop an evidence-based project focusing on the Age Friendly Health Care 4Ms Framework (what matters, medication, mobility, and mentation).
Develop Evidence-Based Project	1-2, 4, 6-8, 10	Develop an evidence-based project focusing on the 4Ms.
Conduct Interview and Physical Assessment	1-2, 4, 6-10	Using the Clinical Judgement Model, conduct an interview and physical assessment to determine functional and cognitive level of older adults while focusing on their medication, mentation, and mobility as an opportunity for an educational intervention.
Collaborate with Resident and Team	1-10	Collaborate with the resident and interdisciplinary team (including family as indicated) to address identified issues related to medication, mentation, and mobility, incorporating what matters.
Collect Info and Identify What Matters	2-4, 6-10	Gather essential and accurate information about patients and their conditions while identifying What Matters to the patient/resident.
Medication Review	1-2, 4-6, 8-10	Conduct a thorough Medication review to promote awareness of inappropriate medication use in the older adult.
Elicit Patient Values	1-4, 6-7, 9-10	Elicit patient values, preferences and expressed needs by focusing on What Matters to the patient/resident when planning care
Health Promotion Education	1-10	Provide health promotion education to patients and families aimed at the 4Ms to prevent health problems focusing on medication, mentation, or maintaining function, i.e., mobility.

# 4M COMPETENCIES: GENERAL UNDERGRADUATE



## What are the 4M Competencies?

The University of Pittsburgh Evaluation team, in partnership with Schools of Nursing (SON), developed a student competency assessment framework reflective of the educational domains of the “Age-Friendly Health Systems: 4Ms” and the American Association of Colleges of Nursing (AACN). Included in this framework are definitions of the eight expected student competencies for the varying educational course levels present within TNHC. Each student competency was tailored through careful synthesis of the “Age-Friendly Health System: 4M Domains” and the AACN *Core Competencies for Professional Nursing Education*, as well as through rigorous discussion and cross-analysis of curriculum objectives with partnered SON faculty. The result is a comprehensive tool for TNHC instructors to conduct faculty student assessments in the context of the 4M domains. Below are the tailored definitions of the expected student competencies for **general graduate** students participating in the initiative.

## HOW TO USE

The “4M Competencies” are used in conjunction with School of Nursing course curriculum. Ensure that nursing students’ education aligns with the objectives of TNHC and the Age-Friendly Health System by considering these measures while conducting post-rotational faculty student assessments. Students can be evaluated based on meeting or exceeding the expectations for each competency below.

## 4M DOMAINS & COMPETENCIES

4M Domain	Overlapping AACN Domains	General Undergraduate Competency*
Interview a Resident	2-4, 6-8, 10	Conduct a professional interview with older adults.
Develop Evidence-Based Project	1-2, 4, 6-8, 10	Review the literature on interventions related to the 4Ms.
Conduct Interview and Physical Assessment	1-2, 4, 6-10	Demonstrate the role of cognitive and physical function with regard to planning daily care for nursing home residents.
Collaborate with Resident and Team	1-10	Identify interdisciplinary team members and their roles regarding geriatric care. Recognize the disparities in preventative care that exist among older adults lacking access to health care, social support, and health insurance coverage.
Collect Info and Identify What Matters	2-4, 6-10	Identify resident goals and What Matters to resident. Recognize the disparities in preventative care that exist among older adults lacking access to health care, social support, and health insurance coverage.
Medication Review	1-2, 4-6, 8-10	Identify a comprehensive list of medications, supplements, and potential side effects by utilizing toolkit/ Beers criteria.
Elicit Patient Values	1-4, 6-7, 9-10	Complete What Matters form with the resident or family. Use valid and reliable assessment tools to guide nursing practice for older adults.
Health Promotion Education	1-10	Demonstrate health promotion practices for older adults. Utilize 4M toolkit and comprehensive geriatric assessment tools to identify the functional and cognitive abilities of older adults.

\*Competencies are not applicable to every course and were developed from national curriculum standards for professional nursing education.

# 4M COMPETENCIES:

## GERO UNDERGRADUATE



### What are the 4M Competencies?

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### HOW TO USE

The “4M Competencies” are used in conjunction with School of Nursing course curriculum. Ensure that nursing students’ education aligns with the objectives of TNHC and the Age-Friendly Health System by considering these measures while conducting post-rotational faculty student assessments. Students can be evaluated based on meeting or exceeding the expectations for each competency below.

### 4M DOMAINS & COMPETENCIES

4M Domain	Overlapping AACN Domains	Gero Undergraduate Competency*
Interview a Resident	2-4, 6-8, 10	Utilize valid and reliable assessment tools to conduct professional interviews with residents/ older adults while also considering typical age-related changes impacting communication.
Develop Evidence-Based Project	1-2, 4, 6-8, 10	Complete a case study for older adults with a specific mobility or mentation condition.
Conduct Interview and Physical Assessment	1-2, 4, 6-10	Conduct assessment of resident’s functional and cognitive abilities. Apply clinical reasoning and decision-making skills in prioritizing, coordinating, and meeting the multiple and complex nursing needs of elders and their families.
Collaborate with Resident and Team	1-10	Develop resident care plans that highlights 4Ms. Recognize the disparities in preventative care that exist among older adults lacking access to health care, social support, and health insurance coverage.
Collect Info and Identify What Matters	2-4, 6-10	Assist resident in identifying What Matters and developing them into actionable goals. Recognize the disparities in preventative care that exist among older adults lacking access to health care, social support, and health insurance coverage.
Medication Review	1-2, 4-6, 8-10	Utilize 4Ms toolkit/ Beers criteria to complete medication review. Identify age-related changes that affect medication clearance and potential drug interactions.
Elicit Patient Values	1-4, 6-7, 9-10	Complete What Matters form with resident/ family and identify resident’s values and preferences. Using valid and reliable assessment tools, build resident’s What Matters into nursing care plan.
Health Promotion Education	1-10	Identify good health promotion practices for older adults and participate in health promotion events. Utilize 4M toolkit and comprehensive geriatric assessment tools to identify the functional and cognitive abilities of older adults.

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# 4M COMPETENCIES:

## GENERAL GRADUATE



### What are the 4M Competencies?

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### HOW TO USE

The “4M Competencies” are used in conjunction with School of Nursing course curriculum. Ensure that nursing students’ education aligns with the objectives of TNHC and the Age-Friendly Health System by considering these measures while conducting post-rotational faculty student assessments. Students can be evaluated based on meeting or exceeding the expectations for each competency below.

### 4M DOMAINS & COMPETENCIES

4M Domain	Overlapping AACN Domains	General Graduate Competency*
Interview a Resident	2-4, 6-8, 10	Address social determinants of health and their potential influence on patient data, as well as recognize existing disparities in preventative care among older populations.
Develop Evidence-Based Project	1-2, 4, 6-8, 10	Develop, implement, and evaluate a N of 1 intervention for the 4Ms.
Conduct Interview and Physical Assessment	1-2, 4, 6-10	Utilize Comprehensive Geriatric Assessment (CGA) tools to identify the functional and cognitive abilities of older adults and implement plan of care based on prior resident assessments.
Collaborate with Resident and Team	1-10	Utilize the interdisciplinary team to implement care rooted in the 4Ms.
Collect Info and Identify What Matters	2-4, 6-10	Identify What Matters to older adults with varying cognitive and functional abilities to achieve personal goals.
Medication Review	1-2, 4-6, 8-10	Utilize 4Ms toolkit/ Beers criteria to complete medication review. Appropriately prescribe and de-prescribe medications consistent with general recommendations for geriatric prescribing.
Elicit Patient Values	1-4, 6-7, 9-10	Engage the interdisciplinary team in incorporating the resident’s What Matters into care plan.
Health Promotion Education	1-10	Tailor health promotion activities to best public health practices and functionality with consideration of medical conditions.

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# 4M COMPETENCIES:

## GERO GRADUATE



### What are the 4M Competencies?

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### 4M DOMAINS & COMPETENCIES

4M Domain	Overlapping AACN Domains	Gero Graduate Competency*
Interview a Resident	2-4, 6-8, 10	Consider social determinants of health and existing disparities when initiating plans of care for resident.
Develop Evidence-Based Project	1-2, 4, 6-8, 10	Develop, implement, and evaluate a N of 1 intervention for the 4Ms
Conduct Interview and Physical Assessment	1-2, 4, 6-10	Implement the plan of care based on the assessment obtained as the point person for the interdisciplinary team. Complete an environmental assessment. Complete a comprehensive assessment of mentation. Utilize Comprehensive Geriatric Assessment (CGA) tools to identify the functional and cognitive abilities of older adults.
Collaborate with Resident and Team	1-10	Collaborate with interdisciplinary team to implement the 4Ms care and re-evaluate that needs are being met.
Collect Info and Identify What Matters	2-4, 6-10	Identify What Matters to older adults with varying cognitive and functional abilities to achieve personal goals.
Medication Review	1-2, 4-6, 8-10	Utilize 4Ms toolkit/ Beers criteria to complete medication review. Appropriately prescribe and de-prescribe medications consistent with general recommendations for geriatric prescribing.
Elicit Patient Values	1-4, 6-7, 9-10	Evaluate the compatibility of resident’s values and preferences with best practices to make practice decisions.
Health Promotion Education	1-10	Prescribe health promotion activities to prevent decline in functionality in the context of multimorbidity.

\*Competencies are not applicable to every course and were developed from national curriculum standards for professional nursing education.

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**To learn more about the Pennsylvania Teaching Nursing Home**

**Collaborative:**

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