Multiple Chronic Conditions: A Framework for Education and Training

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Introduction

Persons living with multiple chronic conditions (PLWMCC) experience many challenges managing their health on a day-to-day basis, and must rely on a healthcare system that is not designed to adequately assess and meet their complex care needs.[1,2] Complex care refers to health needs that are usually coupled with psychosocial problems, which ultimately result in higher service utilization and costs.[3-5] PLWMCC usually require holistic healthcare that is not disease-specific, but instead addresses multiple health problems. However, current healthcare and research approaches focus on single diseases[6], and are often fragmented in relation to the complexity of care that is necessary for PLWMCC. As a result, PLWMCC must balance care delivered by multiple providers, including numerous medications, often in the absence of coordination of care within and across settings.[7-9] The issue of complexity may be compounded further in the presence of psychosocial needs that may require referral to long term services and supports. These challenges are difficult for PLWMCC across the life span.[9,11,12] The population of PLWMCC is projected to grow substantially over the next decade[9], adding to the pressures on the healthcare system to deliver high quality of care, at optimal cost, while improving the health[10] of this complex population.

To help address these challenges, in 2010 the U.S. Department of Health and Human Services (HHS) released the *Strategic Framework on Multiple Chronic Conditions.*[12] The *Strategic Framework* contains goals, objectives, and action strategies that collectively serve as a roadmap for improving the health of PLWMCC.[14,15] One of the framework's major goals is to equip healthcare professionals with information, tools, and enhanced education and training they need to better care for the growing population of PLWMCC[16]. While the patient-centered medical home and team-based care models offer new strategies to improve care for PLWMCC,[1, 17], a recent environmental scan performed by HHS revealed a paucity of evidence-based curricula to train the workforce on addressing the unique needs of this population. To help meet this essential workforce need, the HHS Office of the Assistant Secretary for Health and the Health Resources and Services Administration have developed a new "MCC Education and Training Framework" for use in designing, developing, and delivering curricula for healthcare professionals.[1]

The MCC Education and Training Framework identifies six domains of care with associated competencies needed to provide high quality care for PLWMCC. While not unique to PLWMCC, the domains are critical in the provision of care for persons with complex health problems. The domains include the abilities to: 1) Embrace person-and family-centered approaches to care;[18] 2) Promote self-management support; 3) Acquire and use knowledge for practice in complex care for PLWMCC; 4) Foster interprofessional collaboration and team-based care; 5) Provide care across settings through coordinated care delivery; and 6) Participate in systems based practice.[19,20] The domains and related competencies can be incorporated into new and existing curricula for teaching and training the healthcare professions workforce.

[*1] In providing care for individuals with MCC, healthcare workers should be aware of the United States' Supreme Court's *Olmstead* decision which states that public entities are required to provide community-based services to persons with disabilities when (a) such services are appropriate; (b) the affected persons do not oppose community-based treatment; and (c) community-based services can be reasonably accommodated, taking into account the resources available to the entity and the needs of others who are receiving disability services from the entity.[35] As individuals with MCC are at particular risk of institutionalization, the healthcare workforce should focus on caring for individuals with MCC from a community inclusion and integration perspective.

What is the Purpose of the MCC Education and Training Framework?

The purpose of the Multiple Chronic Conditions Education and Training Framework is to provide a structure for organizing the content of MCC-oriented education and training materials. Domains give rise to specific competencies to guide the management and treatment of the complex care needs of PLWMCC. Learning objectives can be developed for use according to the educational level (undergraduate, graduate, and continuing education). The framework's ultimate goal is to promote increased quality of care for PLWMCC through essential knowledge, skills, and attitudes among the spectrum of healthcare providers who care for and support PLWMCC. Expected outcomes include improved training of the interprofessional healthcare workforce to enable provision of high quality, comprehensive, evidence-based, person-centered, and culturally competent care for PLWMCC and their families and caregivers.

Who is the Target Audience for the MCC Education and Training Framework?

Audiences for the MCC Education and Training Framework include faculty across the educational continuum in academia, professional organizations, accreditation and certification organizations, and individuals from the healthcare workforce whose responsibilities include optimizing care for PLWMCC. The Framework addresses the education and training needs of interprofessional teams and healthcare professionals from disciplines such as medicine, dentistry, nursing, pharmacy, social work, occupational and physical therapy, psychology, psychiatry, direct services, and public health. Central to the Framework and the interprofessional teams are PLWMCC, and their caregivers and family members.

How to Use the MCC Education and Training Framework

Domains of MCC Training and Care

The MCC Education and Training Framework is composed of six key domains [21] that, in aggregate, constitute the critical learning areas needed for care of PLWMCC. The domains were derived from an examination of the literature, interviews with MCC and education experts from academia and health professional organizations, and consultation with a Technical Expert Workgroup (See Attachments A & B for lists of consulting experts).

Competencies for MCC Training and Care

Competencies[21] are the observable abilities of a healthcare provider. They are empirical indicators of the knowledge, skills, and attitudes required to provide complex care to PLWMCC.[22] The competencies may be modified for specific learner needs. Methods for measuring these competencies should be determined by the educator.

The graphic below illustrates the six domains of care in relation to PLWMCC and the levels of health professional education and training for improving care of the PLWMCC. Central to the Framework are PLWMCC, and their caregivers and family members. The inner ring consists of three domains: person- and family-centered care; self-management support; and knowledge for practice in complex care. The next ring includes the domains of coordinated care delivery and interprofessional collaboration. The next ring includes

the final domain, systems based practice. The outermost ring contains the levels of healthcare education and demonstrates the continuous nature of healthcare workforce education and training.

UNDERGRADUATE EDUCATION
CONTINUING EDUCATION
GRADUATE EDUCATION
SYSTEMS BASED PRACTICE
COORDINATED CARE DELIVERY
INTERPROFESSIONAL COLLABORATION
Person-and Family-Centered Care
Self-Management Support
Knowledge for Practice in Complex Care for PLWMCC
Person Living w/ MCC

Person-and Family-Centered Care (PERS)

Definition: Healthcare that involves persons living with MCC (PLWMCC) and their families in every decision, and that empowers them to be partners in their own care.[23]

Competencies Specific to Multiple Chronic Conditions Care

PERS 1. Participate with PLWMCC and their families and caregivers in identifying and prioritizing their preferences when developing a care plan.[24]

PERS 2. Include life context and social and cultural determinants of health when negotiating goals and plans of care with PLWMCC.

PERS 3. Assist PLWMCC in reaching their identified lifestyle, management and treatment goals.

PERS 4. Provide care that is responsive to the preferences, needs and values of PLWMCC.

PERS 5. Provide care that is focused on the desired outcome(s) of PLWMCC.

PERS 6. Assist PLWMCC, as needed, with coordination of financial resources to optimize quality of care.

Self-Management Support (SMS)

Definition: The systematic provision of education and supportive interventions to increase skills and confidence of persons living with MCC (PLWMCC) in managing their health problems, including regular assessment of progress and problems, and problem-solving support.[25,26]

Competencies Specific to Multiple Chronic Conditions Care[27,28]

SMS 1. Support PLWMCC, their families and caregivers, in setting goals, developing action plans, and continuously re-evaluating and revising them as needed.

SMS 2. Assist PLWMCC in identifying and evaluating information for appropriateness to inform their plans of care.

SMS 3. Assist PLWMCC to link to appropriate community-based resources to support healthy behaviors and learn self-management techniques.

SMS 4. Use skill building and problem-solving strategies to support PLWMCC, their families and caregivers in managing MCC by adopting and maintaining health self-management behaviors, and in overcoming barriers to quality of life preferences.

SMS 5. Discuss with PLWMCC and their families and caregivers how emotional responses to illness and mental health disorders may affect their ability to manage MCC.

SMS 6. Incorporate evidence-based behavior management strategies, such as peer leadership and coaching, to encourage and support PLWMCC engagement in managing MCC.

Knowledge for Practice in Complex Care for PLWMCC (KNOW)

Definition: The application of established and evolving biopsychosocial, clinical and epidemiological sciences to the care of persons living with MCC (PLWMCC).

Competencies Specific to Multiple Chronic Conditions Care

KNOW 1. Critically evaluate emerging evidence-based practices to improve healthcare for PLWMCC.

KNOW 2. Provide effective medication management for PLWMCC, as well as continuous monitoring, follow-up and reassessment.

KNOW 3. Provide care that includes clinical decision-making and assessment of the impact of barriers to contextual considerations on health, disease, care seeking, and attitudes toward care.

KNOW 4. Optimize care management by identifying treatment goals and management strategies that address more than one of the existing chronic conditions.

KNOW 5. Integrate care of PLWMCC, as appropriate, with the services and supports provided to special populations, including persons with disabilities, behavioral health challenges, cognitive disorders, and other populations with unique needs.

Interprofessional Collaboration (INTER)

Definition: The ability of healthcare and other professionals, as well as direct care workers, community health workers, persons living with MCC (PLWMCC), families and caregivers to work effectively within and between professions and with PLWMCC, families, caregivers and communities[29] to provide appropriate and effective healthcare.

Competencies Specific to Multiple Chronic Conditions Care[30]

INTER 1. Recognize that PLWMCC are central members of their own healthcare teams.

INTER 2. Negotiate roles and responsibilities with all team members that facilitate working within their full scopes of practice.

INTER 3. Collaborate with all team members in executing the care plan to meet the complex needs of PLWMCC.

INTER 4. Support culturally competent care for PLWMCC by the interprofessional team.
Engage community partners as key members of the interprofessional team.

INTER 5. Coordinate team-based synergistic interventions that address all person-centered goals.

Coordinated Care Delivery (COORD)

Definition: The facilitation of timely, appropriate delivery of healthcare services by organizing PLWMCC's care activities and sharing information among all members of the interprofessional care team involved in their care.[28,29]

Competencies Specific to Multiple Chronic Conditions Care

COORD 1. Coordinate the management of care, including pharmacological and behavioral interventions, and community resources for PLWMCCs across settings and providers.

COORD 2. Ensure communication and patient safety across transitions of care.

COORD 3. Integrate the acute needs into the plan of care for PLWMCC.[30]

COORD 4. Include preventive care and health promotion in the plan of care for PLWMCC.

COORD 5. Promote mental health services as essential components of the plan of care for PLWMCC. Facilitate effective healthcare delivery, with the consent of PLWMCC, by communicating information to all team members about the health of PLWMCC.

Systems Based Practice (SYST)

Definition: The provision of accessible, continuous, and coordinated person-centered care for persons living with multiple chronic conditions (PLWMCC) through a system that incorporates a team approach, health information technology, and shared decision making.[31]

Competencies Specific to Multiple Chronic Conditions Care[18]

SYST 1. Provide care that uses evidence-based practices that optimize interactions and demonstrate positive outcomes for PLWMCC.

SYST 2. Address fragmented healthcare, barriers and potential harms that may result from lack of population management and coordinated care services for PLWMCC.

SYST 3. Provide opportunities for engagement and community involvement at the practice and health system levels for PLWMCC.

SYST 4. Use quality improvement strategies to improve standards of practice for managing MCCs. Use information systems and technology to monitor health outcomes, enhance communication and safety of care provided to PLWMCC.

SYST 5. Use cost-effective strategies and resource stewardship to address MCC commonalities and disease-specific goals in caring for PLWMCC.

SYST 6. Enhance the level of practice of the interprofessional team through risk stratification and optimizing scopes of practice of all team members.

Attachment A

Technical Expert Workgroup Contributors to the "Multiple Chronic Conditions: A Framework for Education and Training"

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[*] Experts who have reviewed the framework and provided feedback

Attachment B

Expert Contributors to the "Multiple Chronic Conditions: A Framework for Education and Training"

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