Education & Training Curriculum on Multiple Chronic Conditions (MCC)

Strategies & tools to support health professionals caring for people living with MCC.

Module 3

Knowledge for Practice in Complex Care for Persons Living with Multiple Chronic Conditions

Full citations for this presentation appear in the notes section of the slides.
Slide 1 Speaker Notes

This is the third module of the HHS Education & Training Curriculum on Multiple Chronic Conditions (MCC)—a six-module curriculum designed for academic faculty, educators and trainers to inform healthcare professionals caring for persons living with multiple chronic conditions. Based on the MCC Education and Training Framework ([http://www.hhs.gov/ash/initiatives/mcc/education-and-training/index.html](http://www.hhs.gov/ash/initiatives/mcc/education-and-training/index.html)), these modules provide knowledge and tools health professionals can use as they improve quality of care of persons living with MCC.

Terminology used throughout this presentation:

- Multiple chronic conditions (MCC) is defined many ways in the literature and in practice. For the purposes of this presentation, MCC is defined as a person with two or more concurrent chronic conditions. Other similar terms used are complex patient, multimorbidity and comorbidity for this population.

- “Persons living with multiple chronic conditions” (PLWMCC) is used instead of “patient” to place greater emphasis on the individual being at the center of care.

Each module has a PowerPoint® slide presentation that can be saved, modified, and used in your presentations with health professionals at any stage of education (undergraduate, graduate or continuing education). The notes in the presentation will help guide your talking points during the presentations.

Visit [http://www.hhs.gov/ash/initiatives/mcc/education-and-training/index.html](http://www.hhs.gov/ash/initiatives/mcc/education-and-training/index.html) to download this and other modules—and to access helpful tools and resources.

Suggested citation:

Learning Objectives for this module

After completing this module, you will know how to:

- Apply Knowledge for Practice in Complex Care strategies for persons living with multiple chronic conditions (PLWMCC)

- Communicate the benefits of KNOW for PLWMCC
This module, “Knowledge for Practice in Complex Care for PLWMCC” of the MCC curriculum provides:

1. An overview of knowledge for complex care as an effective mechanism for healthcare professionals to help people manage their multiple chronic conditions, and;

2. Practical strategies and resources for integrating knowledge for complex care into practice.
Overview of Contents in this module

- The basis for knowledge for practice in complex care
- Complex care evidence-based practices and treatment considerations
- Incorporating strategies that facilitate complex care treatments and supports
Slide 3 Speaker Notes

This module is divided into three sections that address the multifaceted factors that impact knowledge for complex care when caring for persons living with multiple chronic conditions. Tools and links to resources that further support integration of knowledge for complex care into your existing work are also discussed.
SECTION 1

The Basis for Knowledge for Practice in Complex Care
Slide 4 Speaker Notes

This section defines knowledge for practice in complex care (KNOW), identifies key KNOW competencies to care for PLWMCC and discuss the significance of KNOW for PLWMCC.
Definition:

The application of established and evolving biopsychosocial, clinical and epidemiological sciences to the care of persons living with multiple chronic conditions (PLWMCC).
Knowledge for practice in complex care is defined as the application of established and evolving biopsychosocial, clinical and epidemiological sciences to the care of persons living with multiple chronic conditions (PLWMCC).

Reference:

KNOW Competencies

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

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

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 towards care.
Here are five competencies for Knowledge for Practice in Complex Care (KNOW) for PLWMCC. The underpinning concepts that support these competencies will be discussed in greater detail in this presentation.

The competencies are

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

5. Integrate care of PLWMCC, as appropriate, with the services and supports provided to special populations, including persons with disabilities, behavioral health, cognitive disorders, and other populations with unique needs.
Slide 7 Speaker Notes

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.
KNOW in Complex Care

PLWMCC are the largest, fastest growing and most costly patient population.

PLWMCC often experience:

- Poor quality of life
- Physical disability
- High healthcare use
- Multiple medication use, and
- Increased risk for adverse drug events and mortality
- Impaired family functioning
Knowledge for Practice in Complex Care (KNOW) is necessary when caring for people living with multiple chronic conditions (PLWMCC). PLWMCC are the largest, fastest growing, and most costly patient population. Evidence for managing MCC is largely based on clinical trials of single conditions. PLWMCC often experience poor quality of life, physical disability, high health care use, multiple medications, increased risk for adverse drug events and mortality, and impaired family functioning, e.g., financial problems or family members having to stop working. Understanding how to provide care for this population is a crucial aspect of healthcare. New research methods, such as comparative effectiveness research and new foci, such as developing guidelines for PLWMCC, patient engagement, and literacy are adding to the knowledge base.

Making the Case for KNOW

Chronic Care
- Clinical guidelines for treatment
- Care from 1 or 2 health professionals
- Single health condition

Complex Care
- Serious health-related complications
- Insufficient/Lack of clinical guidelines for treatment
- Multiple health professionals
- 2 or more health conditions
In making the case for knowledge for Practice in Complex Care (KNOW), Chronic care (caring for a health condition on an ongoing basis) does not always mean complex care. Persons with complex care need often have functional limitations and need assistance on a daily basis. They may also rely on social services and be more likely to experience serious health-related complications. Current guidelines may offer an insufficient approach for caring for PLWMCC.

Like all people with chronic health conditions, PLWMCC generally use more health services and receive care from more and different health professionals than do people with one chronic condition. Furthermore, most of these patients with complex care needs also have functional limitations, which means they often need assistance from family members or paid personal care assistants to perform activities of daily living, such as toileting, eating, and getting dressed. They also frequently rely on social services such as accessible transportation or home-delivered meals provided by community organizations. Furthermore, given the complexity of their health problems, they are more likely to have chronic, progressive illnesses or experience life-threatening complications. It is important to consider how different conditions may manifest differently in men and women.

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SECTION 2

Complex Care Evidence-based Practices and Treatment Considerations
This section discusses complex care evidence-based practices and treatment considerations.
Emerging Evidence-Based Practices

Self-monitoring of medications may improve medication use, adherence, adverse events and clinical outcomes for PLWMCC.

Clinical decision making

Knowledge for Practice in Complex Care: Module 3
Treatments have beneficial and harmful effects across conditions and health outcomes. Self-monitoring of medication and interventions may improve medication use, adherence, adverse events and clinical outcomes\(^1\). It is helpful to determine the effect of treatments (both benefits and harms) on overall outcomes, not merely disease-specific outcomes, to inform clinical decision making\(^2\).

Health professionals should prioritize among treatment goals, including medication, to ensure PLWMCC can manage the regimen.

Interprofessional teams should consider interactions between and among treatments and conditions, including concordant conditions and discordant conditions. Concordant versus discordant conditions (i.e., conditions with similar versus different pathophysiologic risk profiles)\(^3\) are important factors to consider as interventions that align concordant comorbidities can improve the likelihood of effective treatment\(^4\).


Emerging Medical Treatments

Contextual considerations for developing treatment regimens:

- Health
- Disease
- Barriers and attitudes toward care
- Care seeking
- Adherence
- Comorbidities
- The index condition
New medical treatments for PLWMCC are being tested and published continually. Clinicians remain abreast of emerging medical treatments, medication therapy and polypharmacy for PLWMCC. When identifying appropriate treatment regimens for PLWMCC, it is helpful to take into account the following contextual considerations:

- Health;
- Disease;
- Care seeking;
- Barriers and attitudes toward care;
- Adherence;
- Comorbidities and;
- The index condition¹.

Medication Management

- The strongest predictor of medication non-adherence is the number of medications.

- Prioritize which medications are most likely to benefit and least likely to harm PLWMCC.

- Consider the regimen as a whole, including synergistic, potentiating, and antagonistic effects.

- Choose medications recommended for more than one condition with self-care activities.
Clinicians should assess current emerging medical treatments and current information regarding medication therapy and polypharmacy. The strongest predictor of medication non-adherence is the number of medications\(^1\). For PLWMCC who take multiple medications, healthcare teams should prioritize which medications are most likely to benefit and least likely to harm an individual with MCC, and consider the regimen as a whole, including synergistic, potentiating, and antagonistic effects. In order to prioritize, clinicians can utilize the concept of time to benefit in addition to other measures of medication effectiveness\(^2\).

Also recognize that multiple medications may affect cognition.


Emerging Medical Treatments

Changes in medication regimens can help PLWMCC by:

- Increasing convenience
- Reducing adverse effects
- Decreasing refill expense
Changes in medication regimens can help PLWMCC by:

- Increasing convenience;
- Reducing adverse effects;
- Decreasing refill expense.
Addressing Treatment Adherence

For Clinicians

- Assess the PLWMCC’s perception of treatment burden
- Discuss PLWMCC’s unique challenges that may cause non-adherence
- Normalize PLWMCC’s self-care routine
- Reinforce positive aspects of PLWMCC’s health
- Identify social supports for PLWMCC in their community
The combination of ongoing treatment regimens and its impact on PLWMCC’s functioning and well-being can lead to treatment burden. However, personal, social and healthcare factors can assist in lessening it. Clinicians may be able to ease treatment burden and increase adherence of PLWMCC by using the following management strategies:

- assessing the PWLMCC’s perception of treatment burden
- discussing the unique challenges they may experience as they adhere to prescribed treatments and care,
- reinforcing positive aspects of PWLMCC health,
- normalizing their self-care routine and
- identifying social supports in their community to help them cope.

PLWMCC have many reasons why they do not take their medications consistently as prescribed (i.e. cost, transportation, side effects). The best thing you can do is to ask the person why. Each individual may have differing reasons for non-adherence. Working with the PLMCC, the healthcare team is better able to find a viable solution that works best for the PLWMCC.

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Treatment Management Strategies

Solution-focused

• Pillbox/medication scheduler
• Self-care routines
• Using technology and other tools for reminders (i.e. online portals)

Emotion-focused

• Maintaining a positive attitude
• Focusing on other life priorities and goals
• Applying spirituality and faith
PLWMCC can decrease treatment burden by using solution focused and emotion-focused strategies.

Solution-focused strategies, like the pillbox/medication scheduler, self-care routines, and online reminders, are action-oriented strategies that empower PLWMCC.

PLWMCC cope with their illnesses better when they are able to maintain a positive attitude, focus on other life priorities and goals, and practice their faith or spirituality.\(^1\)

Incorporating Strategies that Facilitate Complex Care Treatments and Supports
This section “Incorporating strategies that facilitate complex care treatments and supports” discusses how PLWMCC and clinicians prioritize the care plans, identifies the contextual factors that impact care plans, highlights strategies that facilitate complex care treatments and supports and addresses special populations living with MCC.
Setting Priorities for Care

80% The percentage of time PLWMCC and clinicians fail to agree on care priorities.

- PLWMCC are likely to prioritize conditions with noticeable symptoms over asymptomatic conditions.
- Clinicians tend to develop care priorities biased toward medical-related factors, such as symptoms, severity and prognosis.
PLWMCC and clinicians fail to agree on care priorities (diagnoses, diagnostic evaluation, and treatment plans) 80% of the time. PLWMCC are more likely to prioritize conditions with noticeable symptoms than asymptomatic conditions such as high blood pressure. Whereas, clinicians tend to develop care priorities biased towards medical-related factors, such as symptoms, severity and prognosis.

Disagreement between PLWMCC and clinicians on priorities for care can lead to worse health outcomes and loss to follow-up. As an alternative, addressing particular risk factors or functional difficulties of PLWMCC may be more effective than focusing on improving outcomes. However focusing on what the PLWMCC wants to accomplish is the most important priority for his/her care.

How do PLWMCC set care and treatment priorities?

Influencing Factors

- Degree of worry about symptoms
- Functional decline and self-care demands
- Time needed to manage a condition
- Financial demands of care and assistance needed
Factors that influence how PLWMCC set priorities for care and treatment.

PLWMCC are likely to prioritize conditions with noticeable symptoms over asymptomatic conditions such as high blood pressure¹².

Clinicians may develop care priorities biased towards the medical aspects such as symptoms, severity and prognosis³.

Four broad domains that influence how PLWMCC set priorities for care and treatment⁴:

- The degree of worry about symptoms;
- Functional decline and self-care demands;
- The amount of time needed to manage a condition;
- The financial demands of care, and the assistance or help needed.

Clinicians should chose medications recommended for more than one condition and combined self-care activities whenever possible.

Contextual Implications on Care

Factors that Impact Care:

- Living conditions
- Level of social support
- Loneliness
- Financial constraints
A variety of social circumstances, i.e., their living conditions, level of support, mental state and financial constraints can impact PLWMCC’s health, ability to seek and/or follow through with their care, and ability to perform their activities of daily living. Healthcare teams should elicit and consider PLWMCC’s social participation, functional autonomy, coping strategies, and health care seeking behavior. Also, health literacy is challenged when complex regimens are put in place. Healthcare teams should also actively monitor PLWMCC for signs and symptoms of psychological problems, mental disorders, cognitive dysfunction and substance abuse.

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Strategies that Facilitate Complex Care

1. Shared Decision Making

2. Self-Management Support

3. Care Plans for PLWMCC
Shared decision making, self-management support and care plans are strategies that help PLWMCC manage complex care regiments\(^1\).

Strategies that Facilitate Complex Care #1

Shared Decision Making

- Offers essential tools to help PLWMCC understand their options

- The five-step process for shared decision making
  Step 1: Seek the PLWMCC’s participation
  Step 2: Help the PLWMCC explore and compare treatment options.
  Step 3: Assess PLWMCC’s values and preferences
  Step 4: Reach a decision with the PLWMCC
  Step 5: Evaluate PLWMCC’s decision
PLWMCC play an essential role in decision making. Shared decision making offers effective tools to help them understand options\(^1\).

The SHARE approach to shared decision making is a five-step process that includes exploring and comparing the benefits, harms, and risks of each option through meaningful dialogue about what matters most to the patient\(^2\).

- **Step 1:** Seek your patient's participation.
- **Step 2:** Help your patient explore and compare treatment options.
- **Step 3:** Assess your patient's values and preferences.
- **Step 4:** Reach a decision with your patient.
- **Step 5:** Evaluate your patient's decision.

To learn more about shared decision making techniques and tools, visit AHRQ's shared decision making review the following resource: [http://www.ahrq.gov/professionals/education/curriculum-tools/shareddecisionmaking/index.html](http://www.ahrq.gov/professionals/education/curriculum-tools/shareddecisionmaking/index.html)

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Self-Management Support

- Actively engages PLWMCC and their families in disease management.

- Includes coaching PLWMCC by proactively communicating what is important, enabling them to collaborate on goals and action plans and encouraging them to seek help.
Self-management support facilitates PLWMCC.

It actively engages PLWMCC and their families in disease management. Self-management includes coaching PLWMCC by proactively communicating what is important, enabling them to collaborate on goals and action plans and encouraging them to seek help.

Education delivered with self-management skills training, counseling, support, training or enhanced follow-up as part of pharmacist-delivered packages of care have positive effects on adherence, medicine use, clinical outcomes and knowledge\(^1\).

**To learn how to implement self-management in your practice, visit AHRQ’s self-management resources for health professionals:**

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Care Plans for PLWMCC

- Address the range of complex needs and conditions,
- Set goals and priorities,
- Anticipate problems,
- Support self-management, and
- Plan the process of care, including health service use.
Care plans for PLWMCC should address the range of complex needs and conditions, set goals and priorities, anticipate problems, support self-management and plan the process of care, including health service use. For PLWMCC who are children or have cognitive impairments (i.e., dementia or Alzheimer’s), their designated family member or POA (Power of Attorney) should be highly involved in their care plan. Not all PLWMCC in this group will have the ability to review, understand, provide input and agree to a care plan because of their conditions affecting their cognitive abilities.

Clinicians should

- revisit the care plan as PLWMCC’s goals and conditions change, including whether or not treatment should continue.
- reassess PLWMCC’s and clinician’s priorities frequently. Failure to reassess priorities or discontinue medication, and continued attention to inappropriate disease-specific quality metrics may increase the risk of adverse outcomes.

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Tips

✓ Remember, when developing care plans, to address the specific needs of PLWMCC who may have a disability and/or a behavioral or cognitive disorder.

✓ Work with the guardians of those PLWMCC with cognitive and behavioral disorders who cannot represent themselves.

✓ Recognize that PLMCC in socioeconomically disadvantaged populations may suffer more from multimorbidity because of related physical health conditions, unhealthy lifestyles, and metabolic effects of antipsychotic drug use.
Clinicians should integrate care with services and supports for special populations, including the disabled. Persons living with disabilities account for more than 12% of the US population, and the number is increasing, particularly in socioeconomically disadvantaged populations.

To facilitate integrated care services for special populations living with MCC, keep this in mind...

- PLWMCC who have special challenges, such as a disability and/or a behavioral and/or cognitive disorder have unique needs that should be identified and addressed in the care plan. Not all PLWMCC in this group will have the ability to review, understand, provide input and agree to a care plan because of their conditions affecting their cognitive abilities.
- Interprofessional teams should work with the designated family member or POA (Power of Attorney) of those PLWMCC with cognitive and behavioral disorders that cannot represent themselves in care planning.
- Individuals in socioeconomically disadvantaged populations may suffer more from multimorbidity because of intellectual disability, related physical health conditions, unhealthy lifestyle and metabolic effects of antipsychotic drug use.

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KNOW Resources

- Polypharmacy in Older Adults Teaching Module

- Alliance for Geriatric Education in Specialties
  http://www.pogoe.org/productid/21198

- Teaching Principles of Managing Chronic Illness Using a Longitudinal Standardized Patient Case
  www.mededportal.org/publication/7833

- HHS MCC Education and Training Repository
  http://www.hhs.gov/ash/initiatives/mcc/educationalresources
Here are a few resources relevant to concepts discussed in this module.

Polypharmacy in Older Adults Teaching Module gives definitions, demographics and risks associated with polypharmacy.

The Alliance for Geriatric Education in Specialties (AGES) training program is aimed at specialties/subspecialties that commonly care for large numbers of older adults, but none of which currently require geriatrics’ proficiency.

Teaching Principles of Managing Chronic Illness Using a Longitudinal Standardized Patient Case, the Jane Henderson case, is a standardized patient vignette to expose first- and second-year medical students to caring for a patient with several chronic illnesses and a complex psychosocial situation. Other health professions might find it a useful tool for group discussions as well.

To find more MCC related education and training resources for health professionals, visit the HHS MCC Education and Training Repository at [http://www.hhs.gov/ash/initiatives/mcc/educationalresources](http://www.hhs.gov/ash/initiatives/mcc/educationalresources).

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