# Education & Training Curriculum on Multiple Chronic Conditions (MCC)

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

## Module 6

# Systems Based Practice

*Full citations for this presentation appear in the notes section of the slides.*

# Slide 1 Speaker Notes

This is the sixth 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),* 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 to download this and other modules—and to access helpful tools and resources.**

Suggested citation:

U.S. Department of Health and Human Services. Multiple Chronic Conditions Initiative. Education and Training Curriculum on Multiple Chronic Conditions. Washington, DC. June 2015.

# Learning objectives for this module



After completing this module, you will be able to:

- Recognize effective Systems Based Practice (SYST) tools and models for PLWMCC
- Synthesize SYST strategies and tools for persons living with multiple chronic conditions (PLWMCC) into current healthcare system.

# Slide 2 Speaker Notes

This module of the MCC curriculum, “Systems Based Practice” provides:

1. An overview of systems based practice as an effective mechanism for healthcare professionals to help people manage their multiple chronic conditions and
2. Strategies, models and tools pertinent to SYST that can be integrated into your healthcare system, wherever appropriate.

# Overview of contents in this module



- What makes systems based practice (SYST) necessary for persons living with multiple chronic conditions (PLWMCC)?
- Effective practices and models of SYST
- Incorporating SYST tools into healthcare systems for PLWMCC

# Slide 3 Speaker Notes

This module introduces systems based practice (SYST) as an effective mechanism for healthcare professionals to help people manage their multiple chronic conditions. The first section describes the importance of SYST to people living with multiple chronic conditions. In the second section, strategies and models relevant to SYST are explained. The last section identifies tools to help you integrate SYST into your practice. Links to useful resources that further support or enhance some of the tools, strategies or models are also included.

# Section 1

What makes systems based practice (SYST) necessary for persons living with multiple chronic conditions (PLWMCC)?

# Slide 4 Speaker Notes

This section defines Systems based practice (SYST), identifies key competencies to care for PLWMCC and the reasons why SYST is necessary for 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.

# Slide 5 Speaker Notes

The definition of Systems Based Practice is 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[1].

[1] Institute of Healthcare Improvement. (2014). In-Person Training Transforming the Primary Care Practice. Retrieved from http://www.ihi.org/education/InPersonTraining/TransformPrimaryCare/Pages/default.aspx

# SYST Competencies



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

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

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

# Slide 6 Speaker Notes

Here are seven competencies for Systems Based Practice needed to appropriately provide care for PLWMCC. The underpinning concepts that support these competencies will be discussed in greater detail in this presentation.

The competencies are:

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 Competencies (Continued)



| | |
|---|---|
| **4** | Use quality improvement strategies to improve standards of practice for managing MCCs. |
| **5** | Use information systems and technology to monitor health outcomes, enhance communication and safety of care provided to PLWMCC. |
| **6** | Use cost-effective strategies and resource stewardship to address MCC commonalities and disease-specific goals in caring for PLWMCC. |

# Slide 7 Speaker Notes

SYST 4. Use quality improvement strategies to improve standards of practice for managing MCCs.

SYST 5. Use information systems and technology to monitor health outcomes, enhance communication and safety of care provided to PLWMCC.

SYST 6. Use cost-effective strategies and resource stewardship to address MCC commonalities and disease-specific goals in caring for PLWMCC.

# SYST Competencies (Continued)



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

# Slide 8 Speaker Notes

SYST 7. Enhance the level of practice of the interprofessional team through risk stratification and optimizing scopes of practice of all team members.

# Reasons for using SYST with PLWMCC



*Understanding the health needs of a population at the aggregate level enables health systems to appropriately target interventions.*

- PLWMCC care is often fragmented, incomplete, inefficient, and ineffective.
- The US health system has traditionally been organized around single diseases.
- PLWMCC need a healthcare system that concurrently addresses all of their healthcare needs.

# Slide 9 Speaker Notes

The reasons why SYST is necessary when caring for people living with multiple chronic conditions (PLWMCC).

- PLWMCC care is often fragmented, incomplete, inefficient, and ineffective[1][2].
- The US health system has traditionally been organized around single diseases.
- PLWMCC need a healthcare system that concurrently addresses all of their healthcare needs.

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[1] Reuben, D. B., & Tinetti, M. E. (2012). Goal-oriented patient care--an alternative health outcomes paradigm. N Engl J Med, 366(9), 777-779.
[2] Boult, C., & Wieland, G. D. (2010). Comprehensive primary care for older patients with multiple chronic conditions: "Nobody rushes you through". JAMA, 304(17), 1936-1943.

# Section 2

## Effective Practices and Care Models of SYST

# Slide 10 Speaker Notes

This section describes effective practices and care models of Systems Based Practice (SYST).

# Where's the evidence?



Evidence-based Practice for PLWMCC needs:

- ✓ Clinical trials that address MCC
- ✓ Clinical practice guidelines that address MCC
- ✓ Joint decision-making between health professionals and PLWMCC
- ✓ Shared communication between the numerous health professionals, including specialists.

# Slide 11 Speaker Notes

Healthcare professionals should provide care based on evidence-based practices. However, when caring for PLWMCC, there is a lack of evidence-based information available to guide them. Currently, clinicians and PLWMCC must utilize clinical practice guidelines for each specific chronic conditions with little cross referencing between guidelines. In addition, there are significant gaps in communication regarding PLWMCC's care management plans due to failure on the part of numerous care managers and care providers to communicate among themselves and provide feedback. For example, discussing shared or differing treatment priorities is important. PWLMCC's priorities or views must be sough, otherwise certain conditions may be inappropriate prioritized above others[1].

There is a need for:

- clinical trials that address MCC[2],
- incorporation of MCC into clinical practice guidelines,
- joint decision-making between health professionals and PLWMCC[1] and
- shared communication between the numerous health professionals[1], including specialists.

Ultimately, effective care is whole person-centered care[1].

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[1] Ryan, R. E., & Hill, S. J. (2014). Improving the experiences and health of people with multimorbidity: exploratory research with policymakers and information providers on comorbid arthritis. Aust J Prim Health, 20(2), 188-196.

[2] Trikalinos, T. A., Segal, J. B., & Boyd, C. M. (2014). Addressing multimorbidity in evidence integration and synthesis. *J Gen Intern Med, 29*(4), 661-669

# Population Management Essentials



| | |
|---|---|
| Community-oriented primary care | • Community involvement and engaging PLWMCC in the review of health-related news and information. |
| Social determinants of health | • Transportation, economic status, food deserts, housing, occupations, and health literacy. |
| Population health assessments | • Epidemiology of chronic conditions, safety assessments, and coordinated care for PLWMCC. |

# Slide 12 Speaker Notes

Population management involves monitoring "the health outcomes of a group of individuals, including the distribution of such outcomes within the group[1]" and intervening to improve outcomes. Although more information is needed to understand the impact of clusters of chronic conditions and incorporate this information into clinical management strategies, ongoing population-based management of PLWMCC provides insight into effective management[2].

**Population Management Essential Tools and Techniques :**

Understanding the health needs of a population at an aggregate level, enables health systems to more appropriately target interventions. Population management involves understanding[3]:

- Community-oriented primary care: Community involvement and engaging PLWMCC in the review of health-related news and information.
- Social determinants of health: Transportation, economic status, food deserts*, occupations, health literacy.
- Population health assessment: Epidemiology of chronic conditions, safety assessments, coordinated care for PLWMCC.

*A food desert is a geographic area where affordable and nutritious food is difficult to obtain, particularly for those without access to an automobile.

[1] Kindig, D., & Stoddart, G. (2003). What is population health? Am J Public Health, 93(3), 380-383.
[2] Vogeli, C., Shields, A. E., Lee, T. A., Gibson, T. B., Marder, W. D.,… & Blumenthal, D. (2007). Multiple chronic conditions: prevalence, health consequences, and implications for quality, care management, and costs. *J Gen Intern Med, 22 Suppl 3*, 391-395.
[3] Association for Prevention Teaching and Research. (2014). Clinical Prevention and Population Health Curriculum Framework. Washington D.C.

# Population Management Essentials (Continued)



**Coordination of health services**

- Coordination with the community, the public health system, community-based programs and across the healthcare system.

**Principles of a healthcare team practice**

- Roles and contributions of community and lay workers such as patient navigators and community health workers.

# Slide 13 Speaker Notes

**Population Management Essential Tools and Techniques continued…**

- Coordination of health services: Coordination with the community, the public health system, community-based programs and across the healthcare system.
- Principles of healthcare team practice: Roles and contributions of community and lay workers such as patient navigators and community health workers[1].

[1] Association for Prevention Teaching and Research. (2014). Clinical Prevention and Population Health Curriculum Framework. Washington D.C.

# Redesigned Care Systems



Examples of primary care redesigned systems & initiatives:

- Chronic Care Model
- Patient Centered Medical Home
- Accountable Care Organizations
- Transitions in Care Management Teams
- No Wrong Door system

# Slide 14 Speaker Notes

The Chronic Care Model[1] and Patient Centered Medical Home[2] among other models, encourage the use of the expertise of all members of the care team, including PLWMCC and their families, and focus on aspects of system-oriented care such as provision of timely and accessible services, quality, and safety.

Examples of system redesign initiatives include:

- Accountable Care Organizations - The formation of Accountable Care Organizations (ACOs) is one of the more recent healthcare system redesign models. Medicaid ACOs [a new approach for managing healthcare for the "dual eligible" (i.e., those on Medicare and Medicaid)], Medicare Shared Savings Programs, and other models are managed risk programs that serve as catalysts for practice redesign. Managed risk, incentive changes and bundled payments contribute to practice redesign in the current and changing healthcare environment.
- Transitions in Care Management Teams (TCM) that work out of hospitals and are in contact with home care and other community-based agencies to help with post-hospital needs[3].
- The No Wrong Door (NWD) System[4] supports state efforts to streamline access to long-term services and support (LTSS) options for older adults and individuals with disabilities. The NWD system is a collaborative effort between the Aging and Disability Resource Centers, Administration for Community Living, Centers for Medicare and Medicaid Services and the Veterans Health Administration. PLWMCC can benefit from these community based resources offered through the NWD program.

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[1] Glasgow, R. E., Orleans, C. T., & Wagner, E. H. (2001). Does the chronic care model serve also as a template for improving prevention? Milbank Q, 79(4), 579-612, iv-v.

[2] Agency for Healthcare Research and Quality (AHRQ). Patient Centered Medical Home Resource Center. (2014). Retrieved from http://www.pcmh.ahrq.gov/page/defining-pcmh.

[3] Administration for Community Living (ACL). Aging & Disability Resource Centers Program/No Wrong Door System. (2014).Retrieved from http://www.acl.gov/Programs/CDAP/OIP/ADRC/Index.aspx.

# Redesigned Care Systems (Continued)



## Key components of primary care redesigned systems:

- Adopting team-based care strategies
- Addressing needs of PLWMCC
- Incorporating preventive services & self-management support
- Empowering staff to implement improvement changes
- Developing leadership for ongoing change & quality improvement

# Slide 15 Speaker Notes

Key components of primary care redesigned health systems:

- Adopting team-based care strategies
- Addressing needs of PLWMCC
- Incorporating preventive services & self-management support
- Empowering staff to implement improvement changes
- Facilitating communication among the interprofessional care team and across settings
- Developing leadership for ongoing change & quality improvement

# SYST supporting PLWMCC



**Systems based practice can support the care of PLWMCC:**

# Slide 16 Speaker Notes

Here are three areas systems based practice can support the care of PLWMCC.

- Communication among the interprofessional care teams and across settings
- Coordinated Care Delivery
- Interprofessional teams

# Strengthening Communication



*Communication facilitates care transitions, medication management and PLWMCC education.*

While communication methods are dependent on settings and systems, some examples include:

- Electronic health records
- Traditional email
- Telephone calls
- Faxes
- In-person meetings
- Universal transfer forms
- Digital media applications
- Paper-based charting
- Video teleconferencing
- Telemedicine/telehealth
- Interprofessional meetings/huddles

# Slide 17 Speaker Notes

Communication facilitates care transitions, medication management and PLWMCC education[1][2]. While communication methods are dependent on settings and systems, ongoing communication and feedback and/or follow-up discussions must occur among the interprofessional care team members and with health providers in other settings. Strong communication processes are critical to ensure that fragmented care is prevented for PLWMCC.

Examples of communication methods include:

- Electronic health records (EHR);
- Traditional email systems;
- Telephone calls;
- Faxes;
- In-person meetings;
- Universal transfer forms;
- Digital media applications;
- Paper-based charting;
- Video teleconferencing;
- Telemedicine/telehealth or;
- Interprofessional meetings/huddles.

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[1] Boult, C., & Wieland, G. D. (2010). Comprehensive primary care for older patients with multiple chronic conditions: "Nobody rushes you through". *JAMA, 304*(17), 1936-1943.

[2] O'Malley, A. S., Tynan, A., Cohen, G. R., Kemper, N., & Davis, M. M. (2009). Coordination of care by primary care practices: strategies, lessons and implications. *Res Brief*(12), 1-16.

# Coordinated Care: Difficulties for PLWMCC



PLWMCC are vulnerable to the adverse consequences of transitions of care including:

- ✓ Duplicate testing
- ✓ Lack of medication reconciliation
- ✓ Failure to address mental and behavioral health & psychosocial needs
- ✓ Failure to transfer essential information

# Slide 18 Speaker Notes

PLWMCC must balance multiple clinicians/providers, medications, and behavioral changes. PLWMCC are vulnerable to the adverse consequences of transitions of care such as:

- Duplicate testing;
- Lack of medication reconciliation;
- Failure to address mental and behavioral health, psychosocial needs; and[1];
- Failure to transfer essential information – health literacy and language.

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[1] Rich, E., Lipson, D., Libersky, J., & Parchman, M. Coordinating Care for Adults With Complex Care Needs in the Patient-Centered Medical Home: Challenges and Solutions. White Paper (Prepared by Mathematica Policy Research under Contract No. HHSA290200900019I/HHSA29032005T). AHRQ Publication No. 12-0010-EF. Rockville, MD: Agency for Healthcare Research and Quality. January 2012.

# Improving Coordinated Care



Clinicians can provide better care by:

- ✓ Connecting PLWMCC with community-based resources
- ✓ Establishing effective communication processes
- ✓ Working through an interprofessional team
- ✓ Developing individualized care plans
- ✓ Using patient navigators and community health workers to facilitate coordinated care delivery services

# Slide 19 Speaker Notes

Clinicians who care for PLWMCC face many challenges, competing demands and difficulties in applying practice guidelines[1]. Care coordination across multiple clinicians/providers and settings is a critical component of care for PLWMCC. Determining which member of the healthcare team (physician, nurse, social worker or community health worker) is the appropriate healthcare provider for PLWMCC can streamline care.

Clinicians can provide better care by:

- Connecting to community-based resources;
- Establishing effective communication processes[2][3].
- Working through an interprofessional team
- Developing individualized care plans; and
- Using patient navigators and community health workers to facilitate coordinated care delivery services.

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[1] Soubhi, H., Bayliss, E. A., Fortin, M., Hudon, C., van den Akker, M.,… & Fleiszer, D. (2010). Learning and caring in communities of practice: using relationships and collective learning to improve primary care for patients with multimorbidity. Ann Fam Med, 8(2), 170-177.

[2] Vanderwielen, L. M., Vanderbilt, A. A., Dumke, E. K., Do, E. K., Isringhausen, K. T.,… & Bradner, M. (2014). Improving public health through student-led interprofessional extracurricular education and collaboration: a conceptual framework. J Multidiscip Healthc, 7, 105-110.

[3] Lewis, V. A., Larson, B. K., McClurg, A. B., Boswell, R. G., & Fisher, E. S. (2012). The promise and peril of accountable care for vulnerable populations: a framework for overcoming obstacles. Health Aff (Millwood), 31(8), 1777-1785.

# Interprofessional Teams



Interprofessional Care Teams:

- Clarify roles and responsibilities
- Work collaboratively with internal team members and external health providers
- Create conflict resolution processes
- Facilitate care plans for PLWMCC
- Connect PLWMCC with community-based resources

# Slide 20 Speaker Notes

Interprofessional teams

- Clarify roles and responsibilities;
- Work collaboratively with internal team members and external health providers;
- Create conflict resolution processes;
- Facilitate care plans for PLWMCC[1]; and,
- Connect PLWMCC with community-based resources.

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.

Interprofessional care teams can facilitate care plans for PLWMCC that are:

- Comprehensive
- Include PLWMCC and family/caregiver goals
- Elaborates goals, strategies, and processes for optimizing care and health;
- Is accessible to all team members and;
- Is regularly reviewed and revised as goals change and health milestones are met[2].

It is important that PLWMCC be connected to resources in their community in order to receive services that the clinical healthcare setting may not provide, either for reasons of time or expertise. When interprofessional teams have sustainable relationships with community-based resources, PLWMCC can be provided a full range of available services in their communities. If other members on the team cannot perform this

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[1] Agency for Healthcare Research and Quality (AHRQ). Clinical-Community Linkages. Retrieved from http://www.ahrq.gov/professionals/prevention-chronic-care/improve/community/.

[2] Harris, M. F., Dennis, S., & Pillay, M. (2013). Multimorbidity: negotiating priorities and making progress. *Aust Fam Physician, 42*(12), 850-854.

responsibility, community outreach liaisons could be hired to help PLWMCC connect with useful resources in the community. These liaisons can help foster community engagement in the collaborative process[1].

Sustaining a partnership with community based organizations is an ongoing process that involves the following elements: leadership, effective collaboration, understanding the community, demonstrating program results, strategic funding, staff involvement and integration, and program responsivity[2]. However, cultivating strong community partnerships that provide supports and services like self-management assist PLWMCC manage their illnesses and can improve their medical, emotional and social pressures[3].

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[1] Woolf, S. H., Dekker, M. M., Byrne, F. R., & Miller, W. D. (2011). Citizen-centered health promotion: building collaborations to facilitate healthy living. *Am J Prev Med, 40*(1 Suppl 1), S38-47.

[2] Mancini, J. A., Marek, L. I. (2004). Sustaining Community-Based Programs for Families: Conceptualization and Measurement *Family Relations, 53*(4), 339-347.

[3] Ory, M. G., Ahn, S., Jiang, L., Smith, M. L., Ritter,… & Lorig, K. (2013). Successes of a national study of the Chronic Disease Self-Management Program: meeting the triple aim of health care reform. *Med Care, 51*(11), 992-998.

# Section 3

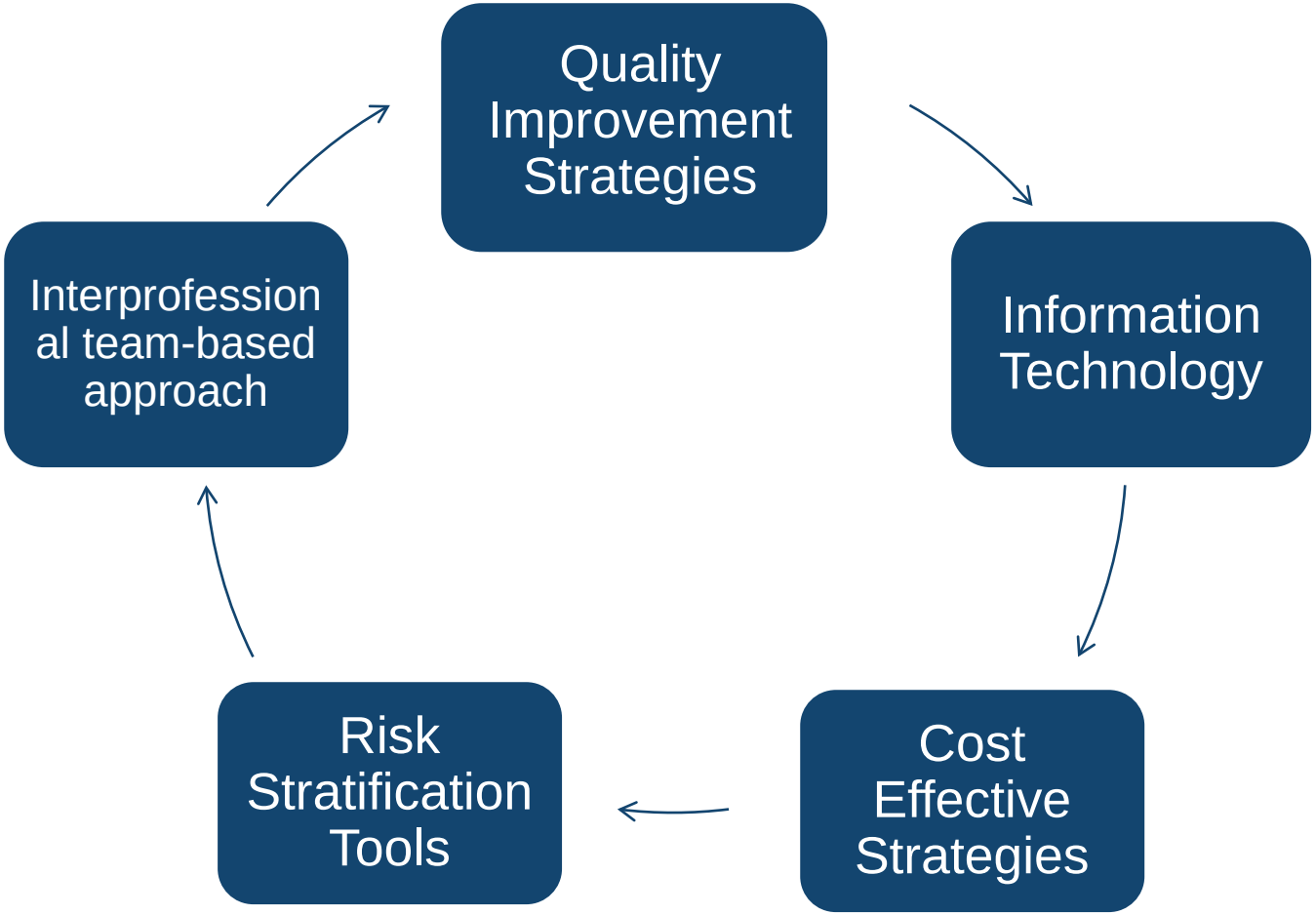
## Incorporating SYST Tools into Healthcare Systems for PLWMCC

# Slide 21 Speaker Notes

This section “incorporating SYST tools into healthcare systems for PLWMCC” provides effective mechanism for healthcare professionals to help people manage their multiple chronic conditions.

# Applying SYST into Health Systems





# Slide 22 Speaker Notes

Systems based practice can be integrated into existing health systems by:

1. Adopting a team based care approach
2. Developing care plans that are responsive to the preferences and priorities of PLWMCC
3. Improving communication at all levels across settings
4. Incorporating quality improvement strategies
5. Using Information technology
6. Integrating cost effective strategies

The first two areas (team based care and communication) were just discussed in the previous section, so let's take a closer examination of the last four areas.

# Quality Improvement Strategies



Examples of quality improvement strategies that health systems use to implement changes and track the results include:

- LEAN Principles
- Plan, Do, Study, ACT (PDSA) Cycle
- IHI Model for Improvement (IHI-QI)
- Six Sigma

# Slide 23 Speaker Notes

There are several proven quality improvement strategies that health systems use to implement changes and track the results.

*Lean Principles* [1] is a management strategy that is applicable to all organizations because it pertains to improving processes. Leaders evaluate processes by accurately specifying the value desired by the user; identify each step in the process (or "Value stream") and eliminate non-value added steps[2].

*The PDSA cycle*[3] is a continuous quality improvement tool, useful for testing changes that occur on a small scale in a real world setting. The PDSA cycle is a rapid cycle quality improvement strategy that examines structures and processes.

*The IHI model for improvement* is an algorithm for achieving an aim at any scale. The IHI Model for Improvement is a curriculum for understanding how to set goals, track progress, and implement change[2].

*Six Sigma* is a disciplined, data-driven approach and methodology for improving product and process quality[4].

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[1] *Going Lean in Health Care*. IHI Innovation Series white paper. Cambridge, M. I. f. H. I.

[2] Scoville R, L. K. (2014). Comparing Lean and Quality Improvement. IHI White Paper. Cambridge, Massachusetts: Institute for Healthcare Improvement (Available at ihi.org).

[3] Langley, G. L., Moen, R., Nolan, K.M., Nolan, T.W., Norman, C.L., & Provost, L.P. . (2009). *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance* (2nd ed.). San Francisco: Jossey-Bass Publishers.

[4] Schroeder, R. G., Linderman, K., Liedtke, C., Choo, A.S. (2008). Six Sigma: Definition and underlying theory. *Journal of Operations Management, 26*, 536-554.

# Information Technology



## Health Information Technology (HIT)

- Plays a large role in systems based practice and is any type of electronic health record (EHR) system.

## Meaningful Use

- Is certified electronic health record (EHR) technology.

## Patient Portals

- Provide PLWMCC access to educational material, personal laboratory tests, schedule appointments and contact their healthcare provider.

## Health Information Exchanges (HIEs)

- Integrate multiple EHR systems that are not interoperable.

# Slide 24 Speaker Notes

Health Information Technology (HIT) is an ever evolving and expanding field and plays a large role in systems-based practice. Between 2001 and 2013, office-based physicians using any type of electronic health record (EHR) system, rose from 18 to 78%[1]. Health Information Technology (HIT) is any type of electronic health record (EHR) system and has been found to improve shared decision making, coordination of care and after-visit summaries[2] .

Adoption of basic EHR systems along with participation in activities such as Meaningful Use is increasing. Meaningful use is certified EHR technology[3].

Patient Portals provide PLWMCC access to educational material, personal laboratory tests, schedule appointments and contact their healthcare provider. They are associated with improved health outcomes[4].

Health Information Exchanges (HIEs) are a mechanism to integrate multiple electronic health record systems that are not interoperable to help the full range healthcare providers access critical PLWMCC information. HIEs help share/access PLWMCCs' information across multiple providers and systems[5]. HIEs reduce redundancies in the healthcare process and will lead to better outcomes for PLWMCC.

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[1] Hsiao C-J, H. E. Use and characteristics of electronic health record systems among office-based physician practices: United States, 2001–2013. NCHS data brief, no 143. Hyattsville, MD: National Center for Health Statistics. 2014.

[2] Pavlik, V., Brown, A. E., Nash, S., & Gossey, J. T. (2014). Association of patient recall, satisfaction, and adherence to content of an electronic health record (EHR)-generated after visit summary: a randomized clinical trial. *J Am Board Fam Med, 27*(2), 209-218.

[3] HealthIT.gov. Meaningful Use Definition and Objectives. (2015). Retrieved from http://www.healthit.gov/providers-professionals/meaningful-use-definition-objectives.

[4] Lau, M., Campbell, H., Tang, T., Thompson, D. J., & Elliott, T. (2014). Impact of patient use of an online patient portal on diabetes outcomes. *Can J Diabetes, 38*(1), 17-21. 26. Yoder, D. (2011). *Health Information Exchange. Information and Communication Technologies in Healthcare*. Boca Raton, FL: Taylor & Francis Group, LLC.

[5] Yoder, D. (2011). *Health Information Exchange. Information and Communication Technologies in Healthcare*. Boca Raton, FL: Taylor & Francis Group, LLC.

# Information Technology (Continued)



## HIT + EHR with Meaningful Use =

Shared decision making

Coordination of care

Clinical outcomes

Population health outcomes

Transparency and efficiency

Research data on health systems

# Slide 25 Speaker Notes

Health Information Technology (HIT) can improve shared decision making, coordination of care and after- visit summaries[1] . Adopting EHR systems that participate in Meaningful Use can improve quality, safety, efficiency, reduce health disparities, engage PLWMCC and family, improve care coordination and population and public health, and maintain privacy and security of PLWMCCs' health information[2]. Meaningful use compliance will lead to better clinical outcomes, improved population health outcomes, increased transparency and efficiency, empowered individuals and more robust research data on health systems[2].

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[1] Pavlik, V., Brown, A. E., Nash, S., & Gossey, J. T. (2014). Association of patient recall, satisfaction, and adherence to content of an electronic health record (EHR)-generated after visit summary: a randomized clinical trial. *J Am Board Fam Med, 27*(2), 209-218.

[2] HealthIT.gov. Meaningful Use Definition and Objectives. (2015). Retrieved from http://www.healthit.gov/providers-professionals/meaningful-use-definition-objectives.

# Cost Effective Strategies



- CMS's chronic care management service applies patient cost-sharing and helps avoid the need for more costly face-to-face services in the future by proactively managing PLWMCC's health, rather than only treating disease and illness.

- The composition of the primary care team should be optimized to deliver care that is cost effective.

# Slide 26 Speaker Notes

Coordination of care for PLWMCC is often lost in a fee for service system[1]. However, the Centers for Medicare and Medicaid Services (CMS) has a new policy on reimbursement for Chronic Care Management (CCM) which has significant implications for practice redesign in terms of structure and process. It will help individuals with complex care needs access a full range of providers. CMS also requires the use of certified EHR technology to satisfy the CCM scope of service elements[2]. CMS's chronic care management service (CCM) applies patient cost-sharing and helps avoid the need for more costly face-to-face services in the future by proactively managing PLWMCC's health, rather than only treating disease and illness[2].

The composition of the primary care team should be optimized to deliver care that is cost effective.

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[1] Guthrie, B., Payne, K., Alderson, P., McMurdo, M. E., & Mercer, S. W. (2012). Adapting clinical guidelines to take account of multimorbidity. *BMJ, 345*, e6341.
[2] *Centers for Medicare & Medicaid Services (CMS). Chronic Care Management Services.* (2015). Retrieved from http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/ChronicCareManagement.pdf.

# Risk Stratification at the Systems Level



Enhancing care through risk stratification ensures that people with higher levels of severity of illness receive more directed care.

- Ensures that PLWMCC obtain optimal levels of care and are treated by the most appropriate members of a care team.
- Addresses needs through appropriate staffing or by building targeted partnerships

# Slide 27 Speaker Notes

Identifying persons at risk for illness or who may benefit most from intervention is an important part of a well-functioning system. Risk stratification:

- ensures that PLWMCC obtain optimal levels of care and are treated by the most appropriate members of a care team.
- can be used to address PLWMCCC's needs through appropriate staffing or by building targeted partnerships[1]. Being able to "risk stratify" or estimate the degree of a need can help providers anticipate the possible amount of time and resource a PLWMCC will require.

Enhancing care through risk stratification ensures that people with higher levels of severity of illness receive more directed care.

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[1] Camden Coalition of Healthcare Providers. Thinking About Risk Stratification. (2015). Retrieved from http://www.camdenhealth.org/cross-site-learning/resources/data/thinking-about-risk-stratification/.

# Risk Stratification for PLWMCC



Risk Stratification:

- Identifies and organizes PLWMCC for management
- Aids in determining appropriate healthcare services
- Facilitates medical management and practitioner decision making
- Helps to insure optimal quality of life for PLWMCC

# Slide 28 Speaker Notes

Risk Stratification uses practice demographics, medical conditions, care patterns, and resource utilization data to identify PLWCC most in need of medical care.

Risk Stratification:

- Identifies and organizes PLWMCC for management
- Aids in determining appropriate healthcare services
- Facilitates medical management and practitioner decision making
- Helps to insure optimal quality of life for PLWMCC

<u>Reference:</u>

Ensslin, B. & Barth, S. (2014). Risk stratification to inform care management for Medicare-Medicaid enrollees: State strategies. Center for Health Care Strategies, Inc.

# Risk Stratification Tools



## Hierarchical Condition Categories (HCC)

- Contains 70 condition categories selected from ICD codes and includes expected health expenditures.

## Adjusted Clinical Groups (ACG)

- Uses both inpatient and outpatient diagnoses to classify each patient into one of 93 ACG categories. It is commonly used to predict hospital utilization.

# Slide 29 Speaker Notes

Hierarchical Condition Categories and Adjusted Clinical Groups are the first two risk stratification tools that can be used for PLWMCC.

*Hierarchical Condition Categories (HCCs)* contains 70 condition categories selected from ICD codes and includes expected health expenditures.

*Adjusted Clinical Groups (ACGs)*-uses both inpatient and outpatient diagnoses to classify each patient into one of 93 ACG categories. It is commonly used to predict hospital utilization.

Reference:

Just, E. (2014). Understanding Risk Stratification, Comorbidities, and the Future of Healthcare. In Health Catalyst (Ed.).

# Risk Stratification Tools (Continued)



## Elder Risk Assessment (ERA)

- For adults over 60, uses age, gender, marital status, number of hospital days over the prior two years, and selected comorbid medical illness to assign an index score to each patient.

## Chronic Comorbidity Count (CCC)

- Is the total sum of selected comorbid conditions grouped into six categories

# Slide 30 Speaker Notes

Elder Risk Assessment and Chronic Comorbidity Count are two other risk stratification tools that can be used for PLWMCC.

*Elder Risk Assessment (ERA),* for adults over 60, uses age, gender, marital status, number of hospital days over the prior two years, and selected comorbid medical illness to assign an index score to each patient.

*Chronic Comorbidity Count (CCC)* is the total sum of selected comorbid conditions grouped into six categories.

Reference:

Just, E. (2014). Understanding Risk Stratification, Comorbidities, and the Future of Healthcare. In Health Catalyst (Ed.).

# SYST Resources



- Comprehensive Primary Care for Complex Patients Modules
  http://www.guidedcare.org/module-intro.asp
- HHS MCC Education and Training Repository
  http://www.hhs.gov/ash/initiatives/mcc/educationalresources

# Slide 31 Speaker Notes

Here is a system based resource that may be used to further examine systems based practice:

The Comprehensive Primary Care for Complex Patients Modules provides physicians, practice administrators, and other practice leaders with competencies that facilitate effective physician practice within medical homes.

**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.**