

**Advisory Committee on
Interdisciplinary,
Community-Based Linkages
(ACICBL)**

**Rethinking Complex Care: Preparing
the Healthcare Workforce to Foster
Person-Centered Care**

**14th Annual Report to the
Secretary of Health and Human
Services and the U.S. Congress**



**Advisory Committee on Interdisciplinary,
Community-Based Linkages (ACICBL)**

**Rethinking Complex Care: Preparing the Healthcare
Workforce to Foster Person-Centered Care**

**Fourteenth Annual Report
to the
Secretary of the United States
Department of Health and Human Services
and the
Congress of the United States
June 2015**



The views expressed in this report are solely those of the Advisory Committee on Interdisciplinary, Community-Based Linkages, and do not represent the perspectives of the Health Resources and Services Administration nor the United States Government.

Rethinking Complex Care: Preparing the Healthcare Workforce to Foster Person-Centered Care

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Advisory Committee on Interdisciplinary, Community-Based Linkages (ACICBL)

Mission

The Advisory Committee on Interdisciplinary, Community-Based Linkages (ACICBL) provides advice and recommendations to the Secretary of Health and Human Services (Secretary) concerning policy, program development, and other matters of significance related to interdisciplinary, community-based training grant programs authorized under sections 750-759, Title VII, Part D of the Public Health Service (PHS) Act, as amended by the Affordable Care Act. The following sections/programs are included under this Part:

- 750 – General Provisions
- 751 – Area Health Education Centers
- 752 – Continuing Education Support for Health Professionals Serving in Underserved Communities
- 753 – Education and Training Related to Geriatrics
- 754 – Quentin N. Burdick Program for Rural Interdisciplinary Training
- 755 – Allied Health and Other Disciplines
- 756 – Mental and Behavioral Health Education and Training Grants
- 757 – Advisory Committee on Interdisciplinary, Community-Based Linkages
- 759 – Program for Education and Training in Pain Care

The ACICBL prepares an annual report describing its activities conducted during the fiscal year, including findings and recommendations made to enhance these Title VII programs. This annual report is submitted to the Secretary of Health and Human Services and ranking members of the Senate Committee on Health, Education, Labor, and Pensions and the House of Representatives Committee on Energy and Commerce.

Report Development Process

The ACICBL's annual report includes findings and recommendations focusing on a select topic that encompasses a particular aspect of interprofessional education and training for healthcare providers covered in Title VII, Part D, sections 750-759 of the PHS Act. This annual report is prepared by the ACICBL after conducting an independent search of published literature on the topic, hearing testimony from experts in various areas relevant to the topic, engaging in dialogue with each other, and utilizing individual expertise and experiences in this area.

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Acknowledgements

The Advisory Committee on Interdisciplinary, Community-Based Linkages (ACICBL) provides advice and recommendations on policy and program development to the Secretary of Health and Human Services (Secretary) concerning the activities under Title VII, Part D of the Public Health Service (PHS) Act as authorized by section 757 (42 U.S.C. 294f), and as amended by the Affordable Care Act, Public Law 111-148. The ACICBL is governed by provisions of the Federal Advisory Committee Act (FACA) of 1972, (5 U.S.C. Appendix 2), which sets forth standards for the formation and use of advisory committees.

Each year, the ACICBL selects a topic concerning a major issue within the healthcare delivery system that is relevant to the mission of the Bureau of Health Workforce (BHW) Title VII, Part D, Interdisciplinary Community-Based Linkages programs. After the ACICBL analyzes the selected topic, it develops and sends recommendations to the Secretary concerning policy and program development. In 2014, the ACICBL examined *Rethinking Complex Care: Preparing the Healthcare Workforce to Foster Person-Centered Care*.

This report is the culmination of the efforts of many individuals who provided their expertise to the ACICBL during three required formal meetings: the first as a scheduled conference call on July, 3 2014; the second held in Rockville, Maryland on September 10-11, 2014; and the third as a scheduled conference call on December 10, 2014. As noted throughout the report, experts informed the ACICBL; provided their expertise; and responded to a broad array of issues concerning shared-decision making, multiple chronic conditions, person-centered care, and interprofessional teams. The members of the ACICBL express appreciation to all presenters for their time and expertise.

Finally, this report has benefited from the capable assistance of federal staff from the Health Resources and Services Administration, Bureau of Health Workforce, Division of Medicine and Dentistry (DMD): Dr. Joan Weiss, Designated Federal Official and Senior Advisor, DMD; Dr. Candice Center, Director, DMD; Dr. Nina Tumosa, Public Health Analyst, DMD; Dr. Tamara Zurakowski, Public Health Analyst, DMD; and Ms. Crystal Straughn, Technical Writer, DMD. The ACICBL appreciates the hard work and dedication of these individuals in producing this report.

Sincerely,

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Rethinking Complex Care: Preparing the Healthcare Workforce to Foster Person-Centered Care

Executive Summary

The Advisory Committee on Interdisciplinary, Community-Based Linkages (ACICBL) provides advice and recommendations on policy and program development to the Secretary of Health and Human Services (Secretary) concerning activities under Title VII, Part D of the Public Health Service Act as authorized by section 757 (42 U.S.C. 294f) as amended by the Affordable Care Act (ACA), Public Law 111-148. Programs under this Part are legislatively mandated to meet national goals for interdisciplinary, community-based linkages¹.

Individuals that require complex care consume more than 75 percent of U.S. healthcare spending and more than 90 percent of Medicare spending (Bayliss, et al., 2014). Many of these patients have multiple chronic conditions, require frequent hospitalizations, and have limitations on their ability to perform basic daily functions due to physical, mental, and psychosocial challenges (Bodenheimer & Berry-Millett, 2009). The healthcare paradigm must shift to focus on the needs of these patients. Traditionally, the healthcare system provides care that focuses on the patient's conditions and not the desires and goals of the individuals and their families. Person-centered care empowers the patient to be at the center of his or her care. Healthcare professionals must communicate with the patient, respect the patient's values and feelings, and encourage them to make informed decisions about their health.

Interprofessional teams provide the best care for patients with complex care needs. A team of healthcare professionals that involve the patient and their families, caregivers, or care partners in their health decisions will lower hospitalization rates and increase the patients' confidence in their medical team and care. This confidence leads to greater adherence to their health plans and improved health outcomes. Important indicators of safety, patient care, and the environment of care, such as complications, error rates, length of hospital stay, conflict among caregivers, staff turnover, and mortality rates, have all been shown to decrease in collaborative care environments (Green & Johnson, 2015). Healthcare education must provide more diverse high quality clinical opportunities for students to work interprofessionally to care for patients with multiple chronic conditions at all levels of their training. A single profession is not prepared to devote the appropriate time and expertise to care for a patient with complex care needs.

Healthcare professionals can incorporate the tools of care management and shared decision-making to care for patients. Care management and person-centered care can decrease healthcare costs and improve outcomes. Care management assists patients and their support systems in managing medical conditions and related psychosocial problems more effectively, with the aim of improving patients' health status and reducing the need for medical services. "The goals of care management are to improve patients' functional health status, enhance coordination of care, eliminate duplication of services, and reduce the need for expensive medical services (Bodenheimer & Berry-Millett, 2009, p. 4)."

¹In recent years, the term "interprofessional" has become widely used because it is more inclusive of all healthcare professionals.

Shared decision-making includes one or more healthcare professionals discussing the advantages and disadvantages of treatment options and possible alternatives with the patient in order for them to make an informed mutual decision about the patient's care. The patient shares his or her preferences regarding the harms, benefits, and potential outcomes. In addition, through an interactive process of reflection and discussion, the healthcare professional(s) and patient reach a mutual decision about the treatment plan (Alston et al., 2014).

Patients with complex care needs face many challenges in managing their care and health. Health professions educators can prepare healthcare professionals to provide team-based person-centered care to these patients to improve health outcomes, lower healthcare costs, and empower patients and the families or caregivers within their support systems to be involved in their care.

Recommendations

The Advisory Committee on Interdisciplinary, Community-Based Linkages (ACICBL), at its meetings in July 2014, September 2014, and December 2014, examined how person-centered care can transform healthcare delivery for patients with complex care needs. The ACICBL subsequently developed the following six recommendations for health professions educators, funders, and policymakers:

Recommendation 1: The ACICBL recommends that HRSA's Title VII, Part D education and training programs prepare students, faculty, practitioners, and direct services workers to involve patients and care partners in shared decision-making for person-centered goals of care and treatment.

Recommendation 2: The ACICBL recommends that reimbursement models be reformed to include payment incentives for interprofessional education and collaborative care that address the holistic, complex care needs of patients, families, and caregivers, rather than focusing on reimbursement for a single disease.

Recommendation 3: The ACICBL recommends that HRSA's Title VII, Part D funding opportunity announcements include the development of culturally competent interprofessional clinical education and training sites that address the complex medical, psychosocial, and health literacy needs of vulnerable populations.

Recommendation 4: The ACICBL recommends that health professions schools integrate content about complex care and team-based collaborative practice into their curricula by utilizing the HHS Education and Training Curriculum on Multiple Chronic Conditions. Educational resources on multiple chronic conditions as well as the curriculum can be found at <http://www.hhs.gov/ash/initiatives/mcc/education-and-training/index.html>.

Recommendation 5: The ACICBL recommends that health professions accrediting bodies include language in their accreditation standards that will require health professions programs and schools to integrate content on the interprofessional team approach to complex medical and psychosocial care needs of patients and their families into the basic curriculum.

Recommendation 6: The ACICBL recommends licensing bodies include questions in their examinations that measure entering health professionals' understanding of the complex medical and psychosocial care needs of patients and their families and their ability to integrate this knowledge into practice as members of an interprofessional team.

Rethinking Complex Care: Preparing the Healthcare Workforce to Foster Person-Centered Care

Background

Healthcare costs in the United States are rising at an alarming rate. In 2010, costs exceeded \$2.7 trillion and accounted for 17.9 percent of the gross domestic product. Estimates indicate healthcare will account for 20 percent of the gross domestic product by 2020 (Iuga & McGuire, 2014). A high percentage of healthcare costs are associated with treatment for people with complex healthcare needs. “Most patients in this high-cost group are Medicare beneficiaries with multiple chronic conditions, frequent hospitalizations, and limitations on their ability to perform basic daily functions due to physical, mental, and psychosocial challenges (Bodenheimer & Berry-Millett, 2009, p. 1).” Many individuals that require complex care have multiple chronic conditions. Chronic conditions are conditions that last a year or more and require ongoing medical attention and/or limit activities of daily living. They include physical conditions such as arthritis, diabetes, cancer, and human immunodeficiency virus. Also included are mental and cognitive disorders, such as depression, substance addiction, and dementia (U.S. Department of Health and Human Services, 2010).

Case Example 1: Mrs. X is an 82 year old widow who lives in a 1 bedroom apartment in a low-income high rise building. She has been diagnosed with schizophrenia, chronic obstructive pulmonary disease, aortic stenosis, and congestive heart failure. She smokes one pack of cigarettes daily. She is independent in telephone use and financial management, but dependent in cooking, cleaning, shopping, and travels by wheelchair van. She needs assistance in bathing and dressing, but is independent in toilet use, eating, and medication management. She is wheelchair dependent for mobility because of shortness of breath. In 2013, she was hospitalized four times and was seen in the Emergency Department two additional times. She was able to attend one visit with her Primary Care Physician during that time period (M. Forciea, personal communication, June 7, 2015).

Care management and person-centered care can decrease healthcare costs and provide better care for individuals with complex care needs. “Care management is a set of activities designed to assist patients and their support systems in managing medical conditions and related psychosocial problems more effectively, with the aim of improving patients’ health status and reducing the need for medical services. The goals of care management are to improve patients’ functional health status, enhance coordination of care, eliminate duplication of services, and reduce the need for expensive medical services” (Bodenheimer & Berry-Millett, 2009, p. 4). The key components of care management are identifying patients most likely to benefit; assessing the risks and needs of each patient; developing a care plan with the patient/family; teaching the patient/family about the diseases and their management, including medication management; coaching the patient/family how to respond to worsening symptoms in order to avoid the need for hospital admissions; tracking how the patient is doing over time and; revising the care plan as needed (Bodenheimer & Berry-Millett, 2009, p. 5).

The components of care management align with person-centered care. Traditionally, healthcare has not focused on the actual priorities and goals of individuals and their families. Over the past decade, efforts have been made to shift the healthcare paradigm from one that identifies persons as passive recipients of care to one that empowers persons to participate actively in their own care (National Quality Forum, 2014). “Person-centered care demands that the ways in which individuals are cared for should always be under their control” (Barnsteiner, Disch, & Walton, 2014, p. 22). Overall, person-centered care is respecting the person behind the illness. It addresses an individual’s needs, goals, preferences, cultural traditions, family situations, and values.

Person-centered care requires an interprofessional team to effectively care for patients with complex care needs. “The healthcare we want to provide for the people we serve—safe, high-quality, accessible, person-centered—must be a team effort,” said Association of American Medical Colleges Executive Vice President Carol A. Aschenbrener, M.D. “No single health profession can achieve this goal alone” (Mann, 2011). The current U.S. healthcare system is not adequately prepared to care for individuals and populations with complex care needs. Traditionally physicians are trained to treat and manage a single disease. Healthcare professionals must acquire skills to move away from a single disease focus and incorporate the patient and the family into effective care partnerships. Rehabilitation, support, and education groups cannot provide what is needed for patients with complex care needs based on single-disease guidelines (American Geriatrics Society, 2012).

Case Example 1, continued.

Mrs. X enrolled in an interprofessional home-based primary care program in early 2014. Team members visited every 6-8 weeks during which they treated illnesses and helped her develop her goals of care. During 2014 she received 6 home care visits and required no Emergency Department or inpatient care. Her functional status improved slightly during this period (M. Forcica, personal communication, June 7, 2015).

Students and healthcare professionals must be trained to provide interprofessional person-centered care for complex patients. “Interprofessional collaboration leads to improved efficiency, improved skills mix, greater levels of responsiveness, more holistic services, innovation, creativity, better outcomes, and a more user-centered practice” (Green & Johnson, 2015, p.2). In addition, studies have shown that interprofessional team environments improve access to care, coordination of services, chronic disease outcomes, and safety. Important indicators of safety, patient care, and the care environment, such as complications and error rates, length of hospital stay, conflict among caregivers, staff turnover, and mortality rates, have all been shown to decrease in collaborative care environments (Green & Johnson, 2015).

This report will illustrate the challenges complex care patients face and how person-centered care can improve outcomes. In addition, it will discuss how healthcare professionals and students can be trained at all levels to aid patients and their families, caregivers, and care partners in managing their health. It should be the goal of the healthcare system to produce a diverse healthcare workforce capable of providing interprofessional person-centered care to patients with complex conditions.

Complex Care

Approximately 133 million Americans, representing more than 40 percent of the total population of this country, have complex health needs (U.S. Department of Health and Human Services, 2010). By 2020, that number is projected to increase to an estimated 157 million, with 81 million having multiple chronic conditions (National Health Council, 2014). These conditions consume more than 75 percent of U.S. healthcare spending; and more than 90 percent of the Medicare spending on older adults is devoted to persons with complex health needs (Bayliss, et al., 2014).

Complex patients are more than patients with multiple chronic conditions. “The complex patient is an individual who requires complicated medical management, mental health support, and a family systems approach (Sieben-Hein, & Steinmiller, 2005, p.389).” In 2011, Dr. Richard Grant conducted a study with 40 primary care physicians asking them what makes a patient complex. The study found that medical decision-making, coordinating care, mental health or substance abuse issues, health related behaviors, and social economic circumstances all contribute to the complexity of the patient (Massachusetts General Hospital, 2011, para. 3).

Grant concluded that the definition of a complex patient was not only dependent on their number of illnesses but also on the social and environmental circumstances patients face. “Simply counting the number of co-morbid conditions does not really capture whether a patient is complex. All primary care physicians can point to patients with very complicated medical histories who are relatively straightforward to manage, whereas other patients can be a real challenge despite relatively few medical diagnoses. Their results emphasize the importance of social and behavioral contexts that can create important barriers to delivering high-quality primary care (Massachusetts General Hospital, 2011, para. 2). It is important to define patient complexity because it affects how care is organized, how physicians, healthcare professionals, and systems are compensated, and how resources are distributed (Massachusetts General Hospital, 2011, para. 1).

Current and future healthcare professionals must be trained to support complex care patients in managing their illnesses, creating treatment plans with other healthcare professionals and the patient in an interprofessional setting, and focusing on the needs and issues unique to each patient. The following is an example of a person seen by students and faculty who provided free wellness services via a mobile unit in a low income community in North Carolina.

Case Example 2. A 60 year old uninsured man stopped by the mobile unit to get his eyes checked. For several days, he noted a blurring of his vision. On physical assessment, he was 50 pounds overweight, had borderline hypertension and had an elevated blood glucose level. His Hemoglobin A1(c) level was 7.1. He knew that he needed to lose a “few pounds” and that his blood pressure ran a little high, but was shocked to learn that he had diabetes. The interprofessional team of nursing, clinical laboratory science, and healthcare management students and their faculty members were able to provide this assessment and refer the client to a local free clinic (P. Valentine, personal communication, March 8, 2015).

This is an example of how healthcare education should include curricula and experiences in complex care and interprofessional practice. Unfortunately, the U.S. healthcare system often fails to provide interprofessional, coordinated, high-quality chronic care. Most health professional students are educated with students in their own disciplines, yet upon graduation, they are expected to be knowledgeable of the roles of other team members in different professions caring for the same patient. In addition, much of today's healthcare workforce is inadequately trained to provide complex chronic care since they are often trained in settings that focus on a single disease process (Boult, Counsell, Leipzig, & Berenson, 2010).

Interprofessional education and practice can eliminate single-disease focused education of the healthcare workforce. Working in teams relieves the burden of the patient and the single healthcare professional attempting to manage multiple conditions. It is important for trainees and current healthcare professionals to train in interprofessional teams in varied settings to prepare for practice. When patients with multiple chronic conditions see a number of specialists, the opportunity for confusion and errors escalates. This can result in fragmented care. If care is coordinated and interprofessional, "then medical and social service providers bring their respective expertise to bear on each individual's health problems in the most effective and coordinated manner" (U.S. Department of Health and Human Services, n.d., para. 5).

For example, "there is a growing shortage of specialists in geriatrics, the discipline most focused on providing and teaching complex chronic care" (Boult, Counsell, Leipzig, & Berenson, 2010, p. 811). Quality geriatric chronic care is provided by interprofessional teams that address diseases and medical, social, and mental health issues that affect many patients and their families. Approximately 77 percent of medical schools do not require students to take a course in geriatrics (Boult, Counsell, Leipzig, & Berenson, 2010). Internal medicine and family medicine residents receive little training in caring for patients with complex conditions. In addition, many internists report being undertrained in chronic care. As a result, few young physicians are prepared to screen for, recognize, or manage complex conditions (Boult, Counsell, Leipzig, & Berenson, 2010). "Reforms are needed in the education of specialty physicians, nurses, physician assistants, social workers, psychologists, rehabilitation therapists, pharmacists, and other allied health professionals who provide care for patients with complex needs" (Boult, Counsell, Leipzig, & Berenson, 2010, p.814).

Current and future healthcare professionals must learn to work interprofessionally to develop a management approach that will consider the challenges unique to each individual, including interactions among conditions and treatments and the patient's preferences, goals, and prognosis (American Geriatrics Society, 2012). An interprofessional team approach to complex care can improve health outcomes. "Patient self-efficacy is increased by shared input and knowledge from peers and the healthcare team. Team members work together to enhance their knowledge and skills for a comprehensive and patient-centered approach" (Yu, et. al, 2014).

Interprofessional complex care management is further enhanced by person-centered care. Person-centered care includes the family and patient in the interprofessional team. Evidence-based, person-centered clinical guidelines assist healthcare professionals in providing high quality care to individuals with complex health needs (U.S. Department of Health and Human Services, 2010).

Person-Centered Care

Person-centered care supports patients with complex needs in making informed decisions about their health. “Person-centered care sees people receiving care as equal partners in planning, developing and assessing care to make sure it is most appropriate for their needs. It involves putting clients/residents and their families at the heart of all decisions” (Bender, 2013, p.7). “Person-centeredness is the experience (to the extent the informed individual desires) of transparency, individualization, recognition, respect, dignity, and choice in all matters, without exception, related to one’s person, circumstances, and relationships in healthcare” (Adams & Grieder, 2013 p. 4-5). “Person-centered care and its near synonyms such as patient-, client-, family-, and relationship-centered care can refer to an approach that guides the whole practice of medicine or healthcare and/or to an aspect of healthcare quality” (Entwistle, & Watt, 2013, p.29). Current and future healthcare professionals must be trained to include the person as a member of the interprofessional team in all settings providing care for individuals with complex care needs. It is crucial to develop a treatment plan with the patient, patient’s family, care partners, and a team of specialists to improve outcomes. The key components of person-centered care are respect, communication, power/empowerment, care transitions, continuity of care, and patient participation (Bender, 2013, p.9).

Case Example 3. Mrs. Y, a 92 year old widow moved from a rural community to an urban area to live with her son and daughter-in-law because of gradual functional decline. She was dependent on help for shopping, cooking, cleaning, and managing her medications because of severe arthritis and congestive heart failure. She required help for bathing and dressing; she ambulated with a walker, and was continent. She enjoyed the company and support of her family, but after a hospitalization for heart failure, told her primary care nurse practitioner that she did not wish to be hospitalized again. The primary care team convened a family meeting that was attended by all of her children and their spouses. The patient explained that her comfort and dignity were her most important goals. She would accept treatments that could be provided at home but did not wish to be rehospitalized. She lived another 6 months without medical complications, but on the development of pneumonia, was referred to a home hospice program and died comfortably at home surrounded by her family (M. Forcica, personal communication, June 7, 2015).

It is vital for healthcare professionals to partner with patients and families in order to achieve the triple aim of better experiences of care, better population health, and lower costs. The U.S. healthcare system provides care that focuses on the patient’s conditions and not the desires and goals of the individuals and their families. Person-centered care includes the family or caregivers, because they are an important source of support for individuals with complex health needs. More than half of adults with diabetes or heart failure involve their family members or caregivers in their daily care. Half of all chronically ill patients bring their family members/caregivers to appointments where they provide crucial information to enhance patient and healthcare professional communication. Patients that include family members in their health planning and care have better self-management, better control of chronic illnesses, lower hospitalization rates, and greater satisfaction and confidence in their medical care (Rosland, et al., 2013). “Meaningfully engaging patients and families at every level leads to improvements in patient safety and quality of care, better patient experiences and satisfaction, increased health

professional satisfaction and retention, better health outcomes, and lower healthcare costs” (Carman, et al., 2014, p.3).

Research is supportive of person-centered care. “Communication between physician and patient, asking the patient if they understand expectations and feelings, and showing support and empathy, can make a positive difference to patient health outcomes” (National Ageing Research Institute, 2006, p.21). Person-centered care interventions were found to lead to improvements in 8 out of 11 studies (73 percent). A review of 43 trials assessed the effects of interventions targeting healthcare professionals to promote person-centered care in clinical consultations. It showed that training interventions clarified patients’ concerns and beliefs; communicated treatment options; improved levels of empathy; and improved patients’ perception of healthcare professionals’ attentiveness to them and their concerns (De Silva, 2014). Mental health clients were reportedly more satisfied with patient-focused case management interventions. Palliative care research also showed improved pain management when working in partnership with clients. In addition, person-centered care has been shown to improve patient and caregiver satisfaction, and adherence to intervention recommendations (National Ageing Research Institute, 2006). The Institute of Medicine calls for organizations providing behavioral health treatment and services to have policies in place that address person-centered care and decision-making in treatment, self-management, and health planning (Adams & Grieder, 2013). Providing person-centered care means that assessments, recovery plans, services and supports, and quality of life outcomes are all tailored to the patient’s preferences and vulnerabilities (Adams & Grieder, 2013).

Shared Decision-Making

Shared decision-making is an essential component of person-centered care. Many patients feel they do not have the information needed to manage their care and make effective treatment decisions (Barry& Edgman-Levitan, 2012). In shared decision-making (SDM), all parties are involved in sharing information and making decisions about care. “SDM is a collaborative process that allows patients and their providers to make healthcare decisions together, taking into account the best scientific evidence available, as well as the patient’s values and preferences” (Informed Medical Decisions Foundation, n.d.). Shared decision-making includes one or more healthcare professionals sharing, with the patient, information about relevant testing or treatment options, including the severity and probability of potential harms and benefits, and alternatives of these options, given the specific nature of the patient’s situation. The patient explores and shares with the healthcare professional(s) his or her preferences regarding these harms, benefits, and potential outcomes. In addition, through an interactive process of reflection and discussion, the healthcare professional(s) and patient reach a mutual decision about the subsequent treatment or testing plan (Alston et al., 2014).

In shared decision-making, it is important to engage the patient and family to reach informed decisions about care. Healthcare professionals facilitate SDM by encouraging patients to express their needs and by providing decision aids that give patients and their families’ an understanding of treatment options and possible outcomes (Barry & Edgman-Levitan, 2012). Decision aids, which can be delivered online, on paper, or on video, are tools intended to provide detailed, balanced, evidence-based information about competing treatment options (Alston et al., 2014). In order for SDM to be successful the patient and healthcare professional must communicate with one another. Patients must be informed in the beginning of their roles in decision-making

and be provided the tools needed to make decisions. Health professionals must be trained to be effective coaches and partners in decision-making. They must also realize that they are not the only decision-maker and authority of what is “best” for the patient (Barry& Edgman-Levitan, 2012).

Person-Centered Education

Implementing person-centered care is challenging because many healthcare professionals lack knowledge and education in this area. Current training is rarely interprofessional and focuses on medical reasons for a patient’s condition. It may not consider social and environmental issues that may contribute to patient healthcare problems. Patients should be invited into the classroom to share their stories, starting in the earliest days of the health profession student’s education, and continuing throughout the entire curriculum. Interprofessional education must be introduced early and often throughout medical school and continue throughout residency. The involvement of the interprofessional team in quality improvement projects and as leaders in promoting communication and quality care through collaborative practices that also include patients/families/caregivers is critical. Policy makers must also work to integrate patient participation skills into the curriculum of health professions schools to prepare them for practice. In addition, the role of the patient in shared-decision making and developing their health plan needs to be communicated to the public so that patients are aware of their rights and the type of care they should expect from their healthcare provider (Donaldson, Rasmussen, Jørgensen, & Leyshon, 2014).

Training

The Affordable Care Act (ACA) provides the U.S. Department of Health and Human Services (HHS) with new opportunities to address chronic condition prevention and complex care management. On September 10, 2014 Dr. Anand Parekh, Deputy Assistant Secretary for Health, HHS presented the HHS Strategic Framework and the Department’s activities on multiple chronic conditions to the ACICBL. The ACA allows the development and testing of new approaches to coordinated care and management, patient-centered benefits, and quality measures. States will now have the option of providing “health homes” for Medicaid enrollees with chronic conditions. The new Center for Medicare & Medicaid Innovation will create opportunities to examine new approaches to care coordination and health improvement. The ACA also mandated two initiatives to prevent chronic conditions: the National Strategy for Quality Improvement in Health Care, which will include priorities to improve healthcare delivery; and the National Prevention and Health Promotion Strategy, which aims to bring prevention and wellness to national policy by reducing the occurrence and burden of multiple chronic conditions (U.S. Department of Health and Human Services, 2010). The Department’s vision is to focus on the individual with multiple chronic conditions through strengthening the healthcare and public health systems; self-care management; providing healthcare professionals with tools, information, and other interventions; and supporting research on individuals with multiple chronic conditions. This vision can be achieved through the framework’s four overarching goals:

1. Foster healthcare and public health system changes to improve the health of individuals with multiple chronic conditions.

2. Maximize the use of proven self-care management and other services by individuals with multiple chronic conditions.
3. Provide better tools and information to healthcare, public health, and social services workers who deliver care to individuals with multiple chronic conditions.
4. Facilitate research to fill knowledge gaps about, and interventions and systems to benefit, individuals with multiple chronic conditions (U.S. Department of Health and Human Services, 2010).

This framework aids HHS in addressing the needs and health of individuals with multiple chronic conditions, and in developing initiatives to support strategies. The framework also recognizes the need to train healthcare professionals to care for patients with multiple chronic conditions. Healthcare, public health, and social services professionals need training programs that prepare them for practice. Many healthcare professional trainees have reported feeling that they are not confident with key chronic care competencies. “Addressing these gaps, will ensure that current and future healthcare professionals are proficient in caring for individuals with multiple chronic conditions and communicating with family caregivers.” (U.S. Department of Health and Human Services, 2010, p. 10). The framework provides the following strategies:

- Identify or develop information relevant to the general care of individuals with multiple chronic conditions for use in health and social service professional training programs.
- Disseminate information relevant to the general care of individuals with multiple chronic conditions to all HHS-funded or supported health and social service professional training programs for inclusion in required curricula, as appropriate.
- Ensure that healthcare, public health, and social services professionals receive training on monitoring the health and wellbeing of family caregivers for individuals with multiple chronic conditions.

Develop and foster training within both traditional and nontraditional professional settings (e.g., medicine, nursing, social work, psychology/counseling, clinical pharmacy, chaplaincy, vocational rehabilitation, community health workers) that emphasizes increased competency in palliative and patient-centered approaches (U.S. Department of Health and Human Services, 2010).

Interprofessional team training is necessary to provide optimal care for patients with complex care needs. The New York Academy of Medicine and the Josiah Macy Jr. Foundation recommend that “pre-clinical experiences should be developed to prepare students from multiple disciplines for more effective interprofessional clinical training” (New York Academy of Medicine, 2013, p.6). Students should be prepared for interprofessional practice by understanding the theory and history of interprofessional team practice; understanding the preparation and skills of other health professionals, perhaps including shadowing them; and observing team practice in different settings.

Students should also have opportunities for role playing and/or simulation in preparation for experience in the clinical setting. They should be given significant roles that lead to interprofessional experiences with all members of a team. Students also need exposure to different care coordination models and a variety of payment systems that support care

coordination. This will require that schools and agencies develop opportunities for experiences with individuals and families that continue across settings and changes in health status (New York Academy of Medicine, 2013).

Integrating patient- and family-centered concepts and teaching strategies into the curricula and learning environments of health professions education is essential to bringing change in healthcare. Healthcare professionals benefit from understanding patient and family perspectives. The following strategies support patient- and family-centered change in the education of healthcare professionals:

1. Envision the education of health professionals as intrinsically patient- and family-centered, and develop and support efforts to realize this vision.
2. Integrate patient- and family-centered competencies into all course work and clinical experiences, from the basic sciences and early clinical didactic aspects of education to internships and residencies.
3. Ensure active patient and family involvement in the education of future healthcare professionals.
4. Ensure that clinical learning environments create opportunities for students and trainees to acquire skills and observe patient- and family-centered care in practice.
5. Involve patient and family as faculty members in the education, orientation, and continuing education programs for healthcare professionals and administrators.
6. Provide training to patient and family faculty members on approaches to effective teaching of healthcare personnel and support them in their teaching roles.
7. Evaluate student experiences of patients and families as teachers and disseminate data on effectiveness.
8. Support and encourage educators in implementing the incorporation of patient- and family-centered information and skills into health professional education (Johnson, et. al., 2008, p. 49).

Costs and Reimbursement

Healthcare professionals caring for individuals with complex care needs face multiple challenges including complex clinical management decisions, inadequate evidence, and time restraints and reimbursement structures that hamper the delivery of efficient quality care (American Geriatrics Society, 2012). Patients with multiple chronic conditions often arrive at the clinical setting with several medical issues and prescription medications. Some of the conditions may be dominant and highly symptomatic, and the healthcare professional has insufficient time to address complex health issues presented by patients. For example, if a patient has diabetes mellitus and peripheral vascular disease, optimal care may require separate treatment plans from different healthcare professionals. Care coordination, team-based care, and communication are essential to the successful treatment of the patient. Practical guidelines and tools must be developed to support healthcare professionals in caring for patients with complex care needs (Zulman, et al., 2014).

The current reimbursement structure focuses on a single disease. The structure must change to incorporate care for individuals with complex care needs resulting from multiple diseases or conditions. All members of the healthcare team need proper compensation to allow the time needed with patients and their families. “The current structure rewards acute, episodic, and

specialist care for 'quantity' of patients seen, rather than 'quality' of care delivered, but care organized around single diseases may be inadequate because single-disease guidelines, rehabilitation, support, and education groups cannot meet the needs of complex, heterogeneous patients" (American Geriatrics Society, 2012). It is important to develop payment reform and incentives for care coordination. Encouraging use of care models through financial incentives would support healthcare professionals who need additional time to address the care complexities for this population (Parekh, Goodman, Gordon, Koh, and The HHS Interagency Workgroup on Multiple Chronic Conditions, 2011).

"Medicare has begun reimbursing physicians, nurse practitioners, and physician assistants for non-face-to-face care coordination for patients with two or more chronic conditions associated with significant risk of exacerbation, decompensation, functional decline, or death" (Aronson, Bautista, & Covinsky, 2014, p. 797). This is a significant shift from paying healthcare professionals for in-person interactions with patients. This new policy is an important step toward recognizing and rewarding cost-effective, evidence-based approaches to care for patients with complex care needs (Aronson, Bautista, & Covinsky, 2014).

Effective Models of Healthcare

The following healthcare models demonstrate how communities, teams, and patient and health professions faculty come together to provide person-centered interprofessional team care training for future healthcare professionals.

Chronic Disease Self-Management and Patient as Teacher

This person-centered model allows students to learn about chronic disease from the patient's perspective and explore their roles in supporting patient self-management through the active involvement of patients as teachers. Learners are mentored by an individual or family, are taught by parents of children with disabilities, or learn from users of mental health services. "These examples demonstrate the increasing recognition that patients and community members have important experiences that can enrich medical education at all levels, from basic education through residency and continuing professional development" (Towle & Godolphin, 2011, p. 1350).

The Coleman Model

The Coleman Care Transitions Intervention (CTI) is a four week program designed for patients with complex care needs to learn self-management skills to ensure their needs are met during the transition from hospital to home (Coleman, Smith, Frank, Min, Parry, & Kramer, 2004). This is a low-cost, low intensity intervention comprised of a home visit and three phone calls. Patients who received this program were significantly less likely to be readmitted and more likely to achieve self-identified personal goals around symptom management and functional recovery (The Care Transitions Program, n.d.). During the program, patients receive a transition coach (nurse, social worker, or community worker) that will help patients with medical management, personal health record keeping, knowledge of "Red Flags" (health indicators that suggest a condition is worsening and how to respond); and follow-up care with primary care providers and specialists (California HealthCare Foundation, 2008).

Dartmouth Health Connect Care Model

The Dartmouth Health Connect's mission is to "bring humanity back to healthcare." The person-centered care model includes: primary care capitation, interprofessional team care, daily huddles and bi-weekly work rounds, and patient-reported information and guidance. The following design allows Dartmouth to support care to match the patient's changing needs:

- **Fixed payment:** Dartmouth does not take any fee-for-service payments. They are paid a fixed, risk adjusted primary care capitation payment from the employer (Dartmouth College), with no patient copayments. This allows the patient to receive as much care as they need (including frequent office and phone visits and a coach that attends specialists' visits with the patient) without the financial burden.
- **Interprofessional Team Care:** The patient receives a personal physician and health coach. The health coach provides lifestyle guidance, care coordination for chronic illness management, and whole-person support. The center also has a licensed clinical social worker on-site.
- **Daily huddles and mental health and population health work rounds:** Staff meets for 40 minutes every morning to discuss patients and treatment needs. The practice also has regular, bi-weekly behavioral health staff training and case review time built into their work calendar. Staff participates in regular skill-building exercises on motivational interviewing, shared decision-making, and patient empowerment. They have similar dedicated population health time set aside for management of patients with complex health needs.
- **Patient-reported information and guidance:** The Center sends a brief patient experience survey to all patients, immediately after every visit. The staff reviews all patient responses that same week in a team huddle to improve service. The practice also seeks patient-reported data via periodic health assessment surveys, such as, risk factors, physical function, and mental health. In addition, the practice has an active patient advisory group that meets over dinner once per quarter (Nelson & Lazar, 2015).

Mount Sinai School of Medicine

"The American Association of Medical Colleges (AAMC) and thought leaders in medical education have strongly argued that medical schools should incorporate longitudinal patient encounters into their curricula" (Josiah Macy Jr. Foundation, 2013b). Medical students rarely have the opportunity to learn about and care for patients with complex needs. "Students are usually unable to observe the history of chronic diseases, to see patients as they transition from one clinical site to another, to appreciate the patient perspective of being chronically ill, or to experience firsthand the evolving patient-doctor relationship. In order to address these issues, a committee of clinical educators has developed and implemented longitudinal clinical experiences at Mount Sinai University School of Medicine" (Josiah Macy Jr. Foundation, 2013b). The Interclerkship Ambulatory Care Track focuses on teaching medical students about chronic illness, advocacy, and the issues of individuals with complex care needs. In addition, the clerkship helps transition medical students in their last two years into the role of leader and teacher as they care for patients with limited access to healthcare (Josiah Macy Jr. Foundation, 2013b).

Naylor Model

The Naylor Transitional Care Model is a patient-centered intervention provided to older adult patients at high risk for poor post-discharge outcomes (Bradway, et al., 2012). It is designed to improve quality of life, patient satisfaction, and reduce hospital readmissions and cost for elderly patients. Patients receive care from an advanced practice nurse or transition nurse manager who works in conjunction with physicians (Bradway, et al., 2012). Transition care includes eight weeks of discharge planning and home follow-up. The program includes a hospital visit and home visits; comprehensive assessment in the hospital; defining priority needs and services; and ongoing advocacy, education, and communication to ensure a plan of care. Transition nurses are available seven days a week to monitor and manage symptoms and prepare the patient for discharge; provide the patient with healthcare information, training, and education regarding his or her health condition; and assist patient with medication management (Bradway, et al., 2012).

Stanford University Chronic Disease Self-Management Program (CDSMP)

Through a partnership with the U.S. Administration for Community Living, the National Council on Aging promotes chronic disease self-management through community-based workshops. These workshops are led by two facilitators over a six week period, and are based on the model developed by Lorig and associates (Lorig, et al, 1999). During the program, approximately 10-15 participants' focus on building the skills needed to manage their conditions by sharing experiences and providing mutual support. The program helps individuals with complex care needs such as diabetes, arthritis, and hypertension, develop the skills and coping strategies they need to manage their symptoms. It includes action planning, interactive learning, behavior modeling, problem-solving, decision-making, and social support for change. CDSMP:

- Helps people with diverse medical diagnoses such as diabetes, arthritis, and hypertension develop the skills and coping strategies they need to manage their symptoms.
- Employs action planning, interactive learning, behavior modeling, problem-solving, decision-making, and social support for change.
- Is offered in two venues—online and through in-person, community-based settings such as senior centers, churches, community health clinics, and libraries.
- Is available in Spanish for the chronic disease and diabetes self-management programs, and the Stanford-developed CDSMP trainer manual is available in over 19 different languages (National Council on Aging, 2014).

CDSMP reduces emergency room costs by \$714 a year and has a potential savings of \$6.6 billion by reaching 10 percent of Americans with complex care needs (National Council on Aging, 2014).

University of Alabama (UA) and Tuscaloosa Veteran Affairs (VA) Medical Center

Graduate students studying nursing, medicine, social work, and nutrition take UA's Interprofessional Rural Health course, which prepares them to work interprofessionally to improve patient care. They then participate in clinical rotations at the Tuscaloosa VA Medical Center and in rural communities, providing primary care and mental healthcare to veterans, their families and individuals with complex care needs. Students use telemedicine for interacting and collaborating with other students to develop an individualized plan of care for each patient. Faculty members and community partners also contribute to the program (Grider, 2015).

Summary

Healthy People 2020 acknowledges that an individual's health is influenced by social and economic factors, including availability of resources and supports, education, safety of our environment and workplaces, and social interactions and relationships (Healthy People 2020, 2015). The goal for populations is to drive the Triple Aim by improving the health of populations, improving the experience and outcomes of care for the patient, and reducing the per capita cost of care. Therefore, healthcare professionals must work collaboratively and in interprofessional teams to optimize health and empower patients to take responsibility for their own health and to manage their multiple chronic conditions (Institute for Health Improvement, 2015). The focus on involving individuals and families requires that they are better informed about their health and options available to them, are included as members of the healthcare team when plans of care are developed, and can work with someone to guide them through the maze of resources and services in the healthcare system (Berwick, Nolan & Whittington, 2008). To address the complex care needs of individuals, quality training of health professionals in an interprofessional setting that promotes prevention and recognizes person-centered care is imperative. Training programs should prepare students to serve populations with multiple chronic conditions through the curriculum and clinical experiences that promote interprofessional, team-based practice. There should be active patient and family involvement in the education of future healthcare professionals. In addition, a culturally competent, diverse health professions workforce is needed to address complex care needs and health literacy issues. Training must emphasize the importance of including patients and their families in care decisions. Shared decision-making and patient-provider communication are key components in aiding patients in understanding their illness and treatment options to improve outcomes. Healthcare professionals should continue their education on how to engage and empower patients in their care. Reimbursement models that provide support for experiential learning in a variety of training sites should be developed which allow time for demonstration of communication within interprofessional teams and between teams and patients and their families or caregivers.

The recommendations below have been developed with the goal of placing the patient and family caregiver at the center of the healthcare team to maximize patient engagement, improve satisfaction, and positively impact health outcomes.

Recommendations with Rationale

Recommendation 1: The ACICBL recommends that HRSA's Title VII education and training programs prepare students, faculty, practitioners, and direct services workers to involve patients and care partners in shared decision-making for person-centered goals of care and treatment.

Rationale: HRSA can make a significant contribution to health professions education by including language in Title VII, Part D funding opportunity announcements that requests incorporation of patient engagement and shared decision making, as appropriate. The wide range of learning opportunities made available to students as a result of this effort will help them acquire an understanding of the importance of engaging patients and their families in shared decision-making and their plans of care.

Recommendation 2: The ACICBL recommends that reimbursement models be reformed to include payment incentives for interprofessional education and collaborative care that address the holistic, complex care needs of patients, families, and caregivers, rather than focusing on reimbursement for a single disease.

Rationale: Current payment models reimburse a single healthcare provider for care given to a patient. Reimbursement is typically denied to other healthcare providers who may render care at the same encounter. Patients with multiple chronic conditions and complex care needs require care provided by an interprofessional team in a single visit. Demonstration projects of new payment models that include reimbursement for an interprofessional team should be considered to facilitate appropriate care for patients with complex needs.

Recommendation 3: The ACICBL recommends that HRSA's Title VII, Part D funding opportunity announcements include the development of culturally competent interprofessional clinical education and training sites that address the complex medical, psychosocial, and health literacy needs of vulnerable populations

Rationale: HRSA can make a significant contribution to advancing health professions education by including language in Title VII, Part D funding opportunity announcements that requests incorporation of complex care and multiple chronic conditions, as appropriate. The wide range of learning opportunities made available to students as a result of this effort will help them acquire an understanding of the importance of addressing the complex medical and psychosocial needs of vulnerable populations.

Recommendation 4: The ACICBL recommends that health professions schools integrate content about complex care and team-based collaborative practice into their curricula by utilizing the HHS Education and Training Curriculum on Multiple Chronic Conditions. Educational resources on multiple chronic conditions as well as the curriculum can be found at <http://www.hhs.gov/ash/initiatives/mcc/education-and-training/index.html>.

Rationale: Effective education of current and future health professionals will be critical to the provision of quality healthcare. Health professions educators will need to take a leadership role by developing or adapting complex care and multiple chronic conditions content for use in their

educational programs. A combination of didactic content along with case studies and practical application of the concepts of complex care and multiple chronic conditions will be helpful when teaching this material.

Recommendation 5: The ACICBL recommends that health professions accrediting bodies include language in their accreditation standards that will require health professions programs and schools to integrate content on the interprofessional team approach to complex medical and psychosocial care needs of patients and their families into the basic curriculum.

Rationale: Assuming that faculty and administrators are more likely to pay attention to what is inspected rather than what is expected, the accrediting bodies for health professions programs and schools will be critical to the successful integration of the interprofessional team approach to complex medical and psychosocial care needs of patients and their families into the curricula of health professions education programs. The leaders of the accrediting organizations can be significant contributors to changing the paradigm of health professions education by inspecting the quality of each program's complex care and multiple chronic conditions health educational content during the accreditation process.

Recommendation 6: The ACICBL recommends licensing bodies include questions in their examinations that measure entering health professionals' understanding of the complex medical and psychosocial care needs of patients and their families and their ability to integrate this knowledge into practice as members of an interprofessional team.

Rationale: Licensure examinations, just as accreditation standards, will be important for advancing the teaching of content on complex care and multiple chronic conditions. Those responsible for developing the questions for licensure examinations will play a significant role in increasing the prevalence of complex care and multiple chronic conditions content in pre-licensure educational settings by including complex care and multiple chronic conditions related questions in the licensure examinations.

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