

2019

Integrated Care: Meeting America's 21st Century Healthcare Training Needs



**Advisory Committee on Training in Primary Care
Medicine and Dentistry**

**Integrated Care: Meeting America's 21st Century
Healthcare Training Needs**

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



The views expressed in this report are solely those of the Advisory Committee on Training in Primary Care Medicine and Dentistry and do not represent the perspectives of the Health Resources and Services Administration nor the United States Government.

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Authority

The Advisory Committee on Training in Primary Care Medicine and Dentistry (ACTPCMD) is a federal advisory committee under the auspices of the Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services (HHS). HRSA is the primary federal agency for improving access to healthcare by strengthening the healthcare workforce, building healthy communities, and achieving health equity. ACTPCMD is authorized by sections 222 and 749 of the Public Health Service (PHS) Act (42 U.S.C. §§ 271a, 749), as amended by section 5303 of the Patient Protection and Affordable Care Act (ACA).

ACTPCMD provides advice and recommendations on policy and program development to the Secretary of the U.S. Department of Health and Human Services (Secretary) and is responsible for submitting an annual report to the Secretary and to Congress concerning the activities under sections 747 and 748 of the PHS Act, as amended. Reports are submitted to the Committee on Health, Education, Labor, and Pensions of the Senate and the Committee on Energy and Commerce of the House of Representatives. In addition, ACTPCMD develops, publishes, and implements performance measures and longitudinal evaluations, as well as recommends appropriations levels for programs under Part C of Title VII of the PHS Act, as amended.

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Each year, ACTPCMD selects a topic concerning a major issue within the healthcare delivery system that is relevant to the mission of the Bureau of Health Workforce, Public Health Service Act, Title VII, Part C, Sections 747 and 748 training in Primary Care Medicine and Dentistry programs. After ACTPCMD analyzes the selected topic, it submits an annual report with recommendations regarding policy and program development to the Secretary and ranking members of the Senate Committee on Health, Education, Labor, and Pensions and the House of Representatives Committee on Energy and Commerce. ACTPCMD examined integrated care and how to meet America's 21st century training healthcare needs.

This report is the culmination of the efforts of many individuals who provided their expertise to ACTPCMD during several formal meetings on this topic, along with several other discussions. As noted throughout this report, leading authorities informed ACTPCMD members, provided their expertise, and responded to a broad array of issues concerning integrated care. The members of ACTPCMD 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. Kennita R. Carter, Designated Federal Official, DMD; Dr. Candice Chen, Past Director, DMD; Mr. Raymond J. Bingham, Technical Writer, DMD; Ms. Samantha Das, DMD; and Dr. Jennifer Holtzman. ACTPCMD appreciates the hard work and dedication of these individuals in producing this report.

Sincerely,

Vicki Chan-Padgett, PAC, MPAS
Past Chair, ACTPCMD

Executive Summary

The healthcare needs of Americans are complex and ever-changing. The current training of healthcare professionals in the United States centers on the assessment and treatment of acute, life-threatening illnesses and injuries, while paying less attention to training on broader, more day-to-day health issues such as promoting individual and population well-being and chronic disease management in primary care, oral health, mental and behavioral health, and the social determinants of health that affect everyone. While the United States has higher per capita healthcare expenditures compared to other high resource countries, the life expectancy of U.S. citizens has started to decline. The shortening of life expectancy can be attributed to declines in physical health, especially when co-occurring with conditions that impact oral and mental health.

The traditional healthcare training environment splits the care of the mouth from care of the rest of the body, and even separates the body from the mind. While students of medicine, nursing, dentistry, or behavioral health may attend the same academic campus and rotate through the same wards and clinics, they rarely if ever train or work together.

The practice environment is no different. Physical, oral, and behavioral healthcare systems operate independently and have separate payment streams, often leading to poorer quality of care, unnecessary suffering, and increased costs. Due to multiple barriers the interprofessional education and practice environment currently lags significantly behind the curve, compared to clinical practice, to prepare a healthcare workforce to meet widespread health conditions that occur across the lifespan.

After reviewing the importance of educating health professionals together in an interprofessional healthcare delivery system that integrates care from multiple disciplines, the Advisory Committee on Training in Primary Care Medicine and Dentistry offers four recommendations to promote interprofessional education and the integration of care.

Educate Future Health Professionals Together

Integrated care involves a team of primary care, dental, and behavioral health practitioners working together using a systematic, cost-effective approach to patient care. In a previous report, ACTPCMD noted that systems with integrated primary and behavioral health care have demonstrated improved health outcomes, along with better patient and provider satisfaction. Oral health can impact function and quality of life, thus the integration of oral care with other health services can further improve outcomes and reduce costs. Recent health professional graduates and practicing clinicians alike feel unprepared on their own to meet the evolving needs of an aging and increasingly diverse patient population. Thus, there is an urgency to accelerate efforts to train health professionals in providing care as part of an integrated care team.

Recommendation 1: Integrate primary care, oral health, and behavioral health training through experiential learning to prepare students, trainees, faculty, and practitioners as teams in the interprofessional delivery of health care.

Accelerate the Integration of Primary, Oral, and Behavioral Health Education

The process of integrating the education of future health professions in physical, oral and mental health must be multi-faceted and multi-layered. An integrated care framework was developed by the Substance Abuse and Mental Health Services Administration (SAMHSA), in partnership with HRSA. Designed to promote the development of bi-directional integrated primary and behavioral healthcare services, the SAMHSA-HRSA Center for Integrated Health Solutions provides one model of integrated care delivery. The public sector has also moved in this direction, as noted by the formation of the Interprofessional Education Collaborative (IPEC), committed to advancing interprofessional learning experiences and promoting team-based care.

Curricular elements in health professions education should build core competencies in integrated care through the use of real-life cases. As trainees learn and experience integrated care practices, many will grow into roles as change agents for clinical practice across professions and settings, working to overcome the many barriers to interprofessional collaboration within educational tracks, training sites, accreditation requirements, and healthcare payment systems.

***Recommendation 2:** Increase support to accelerate creation of an environment where education and training of the future primary, oral, and behavioral healthcare workforce is integrated.*

Community-based Learning

Evidence shows that many clinicians, especially doctors, practice close to where they receive their clinical training. Thus, promoting training in community settings promises to increase the number of healthcare professionals practicing community-based care. However, transforming to an integrated care model requires collaboration between professionals from a range of disciplines that historically have not worked closely together or who are accustomed to working under a professional hierarchy. Integrated care can be incorporated into curriculum development for trainees, faculty, and staff from primary physical, oral, and mental health care.

***Recommendation 3:** Implement integrated education and training of the future healthcare workforce to occur particularly in community-based settings.*

Federal Repository of Best Education and Training Practices

Multiple federal initiatives aim to facilitate practice transformation toward integrated care, with the goal of reducing the costs and increasing the quality and value of care. However, there are unique challenges within the training, practice, and reimbursement infrastructure of each profession. For instance, there are separate funding streams for primary care and mental health services, while funding for oral health services through Medicaid and other sources often varies according to the age of the patient, adding yet another layer of complexity.

Strategies for developing more equitable funding streams need to be studied to identify best practices for quality, ease of implementation, and sustainability. Federal investments could go toward developing this research and disseminating the results to facilitate education and training in integrated care, and improve the quality of care.

Recommendation 4: *Develop a repository of best practices for educating and training an integrated primary, oral, and behavioral healthcare workforce (i.e. students, trainees, and faculty) in collaboration with HRSA, the Department of Veterans Affairs (VA), the Substance Abuse and Mental Health Services Administration (SAMHSA), and other federal agencies. Include recommended methods and standards of measuring short-term and longitudinal outcomes, and an evaluation of payment models.*

Current healthcare needs in the US: Physical, mental, and oral health integration

The healthcare needs of Americans have changed. The U.S. health professional training system excels at preparing healthcare professionals to address acute, life-threatening conditions, but struggles to address chronic conditions and the social determinants that influence health.

“People with mental and substance abuse disorders may die decades earlier than the average person.”

(SAMHSA-HRSA Center for Integrated Health Solutions, n.d.)

Millions of Americans live with chronic medical issues (physical, mental, and dental) and many go undiagnosed or are undertreated. Moreover, the U.S. life expectancy has started to decline despite the highest per capita healthcare expenditure compared to other high resource countries (Squires, 2015). The increase in premature death can be attributed to physical illness, especially when comorbid with severe mental illness (De Hert et al., 2011). In fact, people with severe mental illness have been found

to be less likely to receive standard levels of care for most of their physical illness.

Many chronic health conditions occur together across the areas of physical, mental, and oral health (see Figure 1). For example:

- Lack of dental care during pregnancy can have negative outcomes for mothers and their newborns (Hartnett, Haber, Krainovich-Miller, et al, 2016)
- People with gum disease have 2-3 times the risk of having a heart attack or stroke. (Harvard Heart Letter, 2018)
- Youth and adults struggling with depressive/anxiety disorders can develop chronic pain (McCloughen, Foster, Huws-Thomas, and Delgado, 2012)
- Poor oral health is associated with an increase in all-cause mortality (Adolph et al., 2017)

Traditional healthcare and the training environment separates the body from the mind and even splits the care of the mouth from the rest of the body (Atchison, Rozier, & Weintraub, 2018; Martin & Simon, 2017). These separate systems of clinical training creates missed opportunities to serve patients with holistic, quality health care. Historically, medical, physician assistant, social work and nursing students may all go to school on the same campus, rotate in the same clinics yet not learn together. Furthermore, dental students and dental hygienists may never train in the same clinical space as other healthcare students although at the same academic institution.

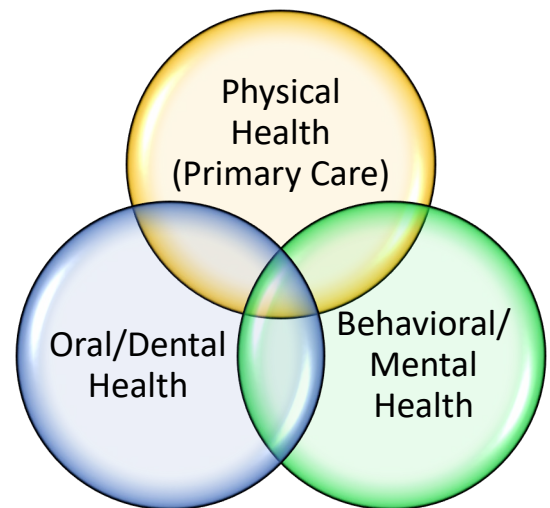


Figure 1. Patient-centered healthcare treatment necessitates integrated training in physical, dental, and behavioral health for interprofessional delivery of health care

The practice environment is no different. Physical, behavioral and oral healthcare systems most often operate independently, and have separate and disparate payment systems (Hummel, Phillips, Holt, & Hayes, 2015; Vreeland, 2007). This has led to unnecessary suffering, mortality, functional impairment, and increased costs (U.S.

“For the past 150 years or so years, the education, delivery, regulation and financing systems for dentistry and medicine have been largely separate”

(Bailit, 2017, p. 1126)

Department of Health and Human Services [HHS], 2006). Although efforts are underway, there is limited integration of medical and dental care in terms of education, delivery, regulation, and financing. As such, the clinical environment currently lags significantly behind the curve, in interprofessional practice and training, to prepare a healthcare workforce to meet these widespread chronic health conditions, which cross the lifespan (Savageau, Sullivan, Sawosik, Sullivan, & Silk, 2019). And as such, the challenges are magnified and even greater for the education and training environment.

Given the current state of affairs, this report will review the importance of educating health professionals in the interprofessional delivery of healthcare, investigate how to create a training environment conducive to achieving this objective, and identify current initiatives that add to best practices in developing a sustainable effort towards integrated care.

Why educate future health professionals together

***Rationale for recommendation 1 on Experiential Learning:** Integrate primary care, oral health, and behavioral health training through experiential learning to prepare students, trainees, faculty, and practitioners as teams in the interprofessional delivery of health care.*

Improved student preparation for integrated health care practice

Integrated care is defined as the care that a patient experiences from a team of primary care, dental, and behavioral health clinicians, working together with patients and families, using a systematic and cost-effective approach to provide patient-centered care for a defined population (Peek, 2013). Accelerating transformation to integrated care aligns with the World Health Organization’s approach to health (World Health Organization [WHO], 2000); in the context of primary care, behavioral health and oral health training programs, it means fully integrating healthcare professional training and services. That is, “putting the mouth back in the head” (Haber et al., 2015, p. 437) and connecting the mind to the body.

In our 11th report to Congress, ACTPCMD (2014) noted that systems that have integrated behavioral health and primary care have demonstrated improved health outcomes, patient self-management, and increased patient and provider satisfaction. The Committee described the long-term success of a truly integrated health system is where screening for depression, posttraumatic stress disorder, anxiety, substance use disorder and domestic violence is commonplace when behavioral medicine is incorporated into primary care. Oral disease can impact a patient’s general health and well-being through pain, diminished function, and reduced quality of life (HHS Oral Health Coordinating Committee, 2016). For example, among

Medicare beneficiaries, 70 percent of older adults who had trouble eating because of their teeth did not go to the dentist in the past year (Willink, Schoen, & Davis, 2018). Despite Medicaid coverage for children in every state, tooth decay is one of the most common chronic childhood diseases. Thus, the integration of oral care with behavioral health and primary care efforts can further enhance the patient experience by improving patient health outcomes and reducing cost.

Workforce preparedness

Recent health professional graduates and practicing clinicians alike feel unprepared to meet the evolving needs of an aging and increasingly diverse and complex patient population (Robert Wood Johnson Foundation, 2011). As such, there is an urgent need to accelerate efforts to strengthen the educational infrastructure to train health professions to provide integrated whole person care expanding beyond the biomedical model to incorporate the social determinants of

“Co-location [of health professionals of multiple disciplines] allows for mutual appreciation of the incentives, methods, and constraints across disciplines. Medical errors and drug interactions are reduced through entry into a single medical record”

(ACTPCMD, 2014, p. 17)

health and structural interventions to improve patient and community health (Byhoff, Freund, & Garg, 2018; Hansen & Metzl, 2017). The current training environment for future doctors, nurses and physician assistants is designed around an outdated healthcare system delivery system, which is reactive and focuses heavily on sick care in the hospital environment as opposed to being proactive. Moreover, dentists, dental hygienists and most behavioral health specialists train in separate settings.

Accelerating the integration of primary, oral and behavioral health education in community settings

Rationale for recommendation 2 on Accelerated Integration: Increase support to accelerate creation of an environment where education and training of the future primary, oral, and behavioral healthcare workforce is integrated.

The process of integrating the education of future health professions in physical, oral and mental health is multi-faceted and multi-layered. In 2013, the ACTPCMD committee recognized the need for integrated care and made recommendations for Title VII to promote collaborative interprofessional education and training between primary physicians and dentists. Over the past 10 years, the public sector has also moved in this direction to form an Interprofessional Education Collaborative (Interprofessional Education Collaborative [IPEC], 2019), comprising 21 health professional organizations committed to advancing interprofessional learning experiences and promoting team-based care. Specifically, the IPEC devises innovative initiatives to engage academia and the private sector towards professional enrichment and publish core competencies for interprofessional collaborative practice to guide curricula development across health professions schools in physical, mental, and oral healthcare (IPEC, 2017; 2019).

Essential Elements of Integrated Care

“Designed to promote the development of bi-directional integrated primary and behavioral healthcare services”, the SAMHSA-HRSA Center for Integrated Health Solutions is one model of how to think about integrated care delivery. This model identifies at least four essential elements to successfully implement integrated care delivery (Figure 2):



Figure 2. Key elements identified to implement integrated care delivery healthcare (Lardieri, Lasky, & Raney, 2014)

The integrated care framework, developed by SAMHSA in partnership with HRSA, illustrates the six levels of collaboration and integration a healthcare system can have, with the ultimate goal being a fully integrated system of care at level six (6) (see Figure 3). In 2014, a group of researchers developed the Integrated Practice Assessment Tool (IPAT) to determine the level of collaboration/integration that a given practice was. It is important to note that although this framework addresses integration of behavioral health and physical healthcare, it does not take into account considerations for the training environment or oral health integration.

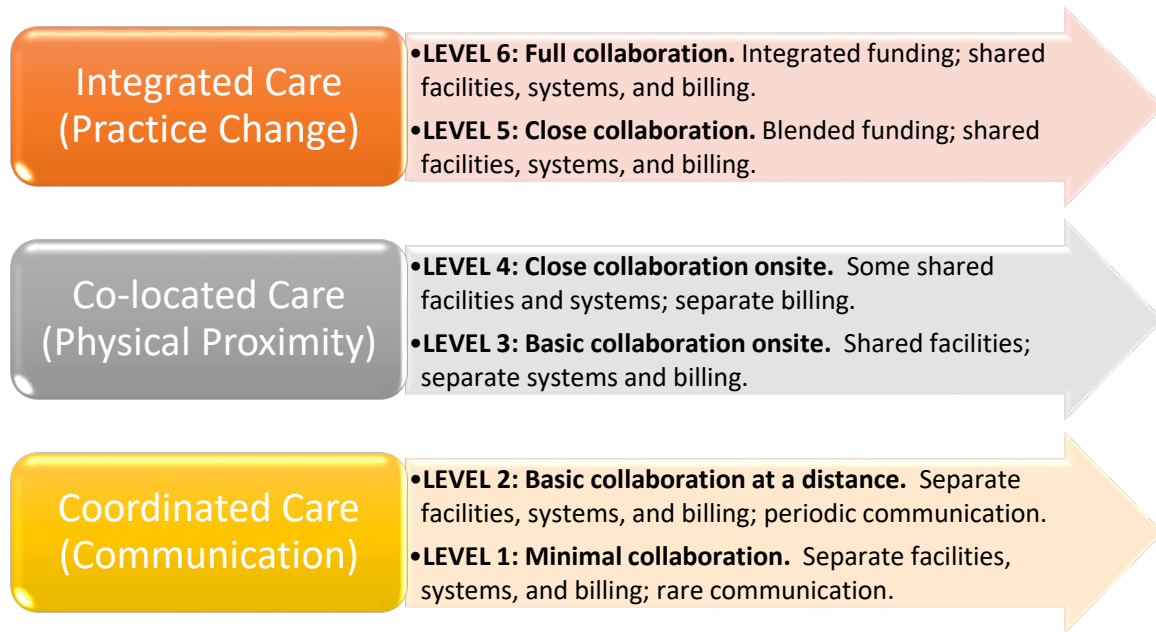


Figure 3. Proposed standard framework for levels of integrated healthcare. Adapted from a report by SAMHSA-HRSA Center for Integrated Health Solutions (Heath, Wise Romero, & Reynolds, 2013)

Learners should include interprofessional student groups, faculty and practitioners. Curricular elements should build on core competencies informed by national recognized entities (e.g. lessons learned from multiple efforts in interprofessional integrated curriculum development identify the importance of flexibility in didactic and clinical learning experiences (identify references). Curricular methods should engage and use real life cases. Service learning can strengthen clinical and interprofessional training, along with leadership and communication skills. (Pelletier, 2016; Stewart & Wubbena, 2014). As trainees learn and experience integrated care practices many likely will grow into roles as change agents for clinical practice across professions and settings.

Structural Barriers to Implementing Interprofessional Integrated Healthcare Education and Practice

Structural barriers to the implementation of interprofessional healthcare education (IPE) exists at multiple levels and as such are myriad and complex. Incorporating IPE into the health professional curriculum is resource intensive, complex and fraught with multiple barriers existing at several levels – federal policy (e.g. reimbursement), professional (e.g. accreditation organizations) and institutional (curriculum development, scheduling across learners) (Lawlis, Anson, & Greenfield, 2014).

Barriers to Implementing Integrated Healthcare Education and Practice - Gaps in the Reimbursement

Reimbursement for medical services provide in part, financial resources to help sustain the clinical training. It is recognized that for medical education and training that additional resources are needed and provided through Medicare graduate medical education funding.

However, this does not exist for other health professional trainees. For example, Medicare Part A does not pay for most dental care, dental procedures like fillings, cleanings, tooth extractions or dentures. Although graduate medical education (GME) supports hospital based general dentistry and pediatric dentistry programs as well as oral surgery residencies. Non-GME supported dental training programs often have substantive tuition fees (2018-19 Survey of Advanced Dental Education). Although every state offers Medicaid benefits for children, coverage for adults is quite inconsistent (Center for Health Care Strategies, 2019; Centers for Medicare and Medicaid Services [CMS]).

Barriers to Implementing Integrated Healthcare Education - Accreditation

Accreditation organizations do not differ from the historical silos that exist with payment and practice and have lagged behind in removing barriers to allowing different types of health professions students to learn together from different types of faculty. In other words, there are restrictions that specify that some learners must be taught by faculty members of their intended profession, especially in clinical settings and/or engaging in direct patient care. Furthermore, residents sometimes are not allowed to be trained/supervised by other professions.

Barriers to Implementing Integrated Healthcare Education – Competing Priorities

Multiple barriers exist at the institutional level covering issues ranging from difficulty in scheduling, rigid curricula driven by accreditation requirements, differences in learner assessment, limited faculty development support, limited access to clinical training sites and competing priorities (Lawlis et al., 2014; Physician Assistant Education Association [PAEA], 2015). Regarding access to training sites, “50.7% of all physician assistant program directors reported they are very concerned about the adequacy of the number of clinical training sites and preceptors for their students” (PAEA, 2015). Of note, the academic calendars and training requirements, professional degree requirement timetables differ across professions (Headrick et al, 2012). For example, schools of medicine and nursing at the same institution generally start at different times of the year (academic year) and have class or rotation schedules that may be out of sync, making it difficult for learners from different professions to learn together at the same time. In addition, not all institutions have educational programs that have primary care, oral and behavioral health learners. And, those institutions that teach medical, dental, physician assistant, nursing, dental hygiene students, primary care residents and behavioral health students, must break down silos, build infrastructure and navigate and balance the disparity in reimbursement across clinical faculty that train these students (Lawlis et al., 2014, p 307; Olenick, Flowers, Muñecas, & Maltseva, 2019).

“50.7% of all physician assistant program directors reported they are very concerned about the adequacy of the number of clinical training sites and preceptors for their students”.

(Lawlis et al., 2014)

Community-Based Learning

Rationale for recommendation 3 on Community-Based Learning: Implement integrated education and training of the future healthcare workforce to occur particularly in community-based settings.

Evidence shows that clinicians practice close to where they receive their education and clinical training, especially doctors (Fagan, Finnegan, Bazemore, Gibbons, & Petterson, 2013). The drive toward interprofessional integrated education and care is underway but fraught with

- ✓ Transformation to PCMH (team based) care requires personal transformation of physicians
- ✓ Change fatigue is a serious concern even within capable and highly motivated practices
- ✓ Transformation to PCMH is a developmental process
- ✓ Transformation is a local process

multiple barriers (e.g. health professional culture, training content, logistics and partnerships). In addition to silos of training, there is the added challenge of the culture of professional hierarchy and the independent practitioner (Crabtree et al., 2011; Saba, Villela, Chen, Hammer, & Bodenheimer, 2012). Lessons

Figure 4. Lessons learned from the First National Demonstration Project on Practice Transformation to a PCMH (Nutting et al., 2009, p. 256-257)

learned and recommendations from the implementation of the patient centered medical home (PCMH) are outlined in Figure 4. The team members in the PCMH were those staff that already worked together. Transforming to an integrated care model means adding additional professionals that historically have not worked closely together adding another layer of complexity. These lessons are applicable when considering curriculum development for interprofessional trainees, faculty, and staff from mental, oral, and primary physical care.

Federal Repository of Best Education and Training Practices

Rationale for recommendation 4 on a Federal Repository of Best Practices: Develop a repository of best practices for educating and training an integrated primary, oral, and behavioral healthcare workforce (i.e. students, trainees, and faculty) in collaboration with HRSA, the Department of Veterans Affairs (VA), the Substance Abuse and Mental Health Services Administration (SAMHSA), and other federal agencies. Include recommended methods and standards of measuring short-term and longitudinal outcomes, and an evaluation of payment models.

There are multiple Federal initiatives aimed at facilitating practice transformation to integrated care, especially towards integration of primary care and behavioral health and to a limited extent integration of oral health (HHS). However, these websites focus on the practice environment and do not address strategies for teaching future health professionals.

Summary

The healthcare needs of Americans are changing, but healthcare training has been slow to respond. While the current training system focuses on preparing health professionals in the assessment and treatment of acute, life-threatening illnesses and injuries, it struggles to provide training that addresses broader health issues in primary and preventive care, chronic health conditions, oral health, and mental and behavioral health. In addition, traditional health education in the U.S. has separate and distinct paths for training in physical health, oral health, and mental health that rarely interact. Despite high per capita healthcare expenditures, the life expectancy of U.S. citizens has started to decline, calling into question the effectiveness of current models of health care training and practice (Muennig et al., 2018; Daniel, Bornstein & Kane, 2018).

Health conditions that effect personal function and well-being are rarely isolated to one part or system of the body. Studies have found increases in mortality related to poor oral health such as gum disease, as well as chronic mental health conditions such as stress and anxiety. The body itself is an integrated system. Thus, comprehensive health care often requires an integrated approach. Recognizing this need, there are already many private (i.e. IPEC) and federal (i.e. the SAMHSA-HRSA Center for Integrated Health Solutions) initiatives and models promoting interprofessional practice and integrated care.

This report from ACTPCMD helps bring to light the importance of educating health professionals from different disciplines in the interprofessional delivery of healthcare, creating training and practice environments conducive to interprofessional practice in community-based settings, and identifying initiatives and best practices in developing and sustaining these efforts.

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