

## Multicultural Oral Health Concerns

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### Synopsis

*Over the next few decades, global population trends are expected to significantly impact dentistry and healthcare systems worldwide. The growth of various racial and ethnic groups combined with increasing migration patterns is predicted to exacerbate oral health disparities across the globe. This highlights the pressing need for addressing inequalities in dental care within different communities as part of dentistry's essential agenda.*

*Oral health outcomes will be significantly affected by the increasing cultural diversity among nations due to varying attitudes and healthcare practices rooted in culture. To effectively cater to diverse patient groups, effective communication between providers and patients is essential while promoting better understanding of oral hygiene. Addressing the unique characteristics and challenges associated with multicultural patient treatment is crucial for providing equal access to quality dental care.*

**Keywords:** *Oral Health Disparities Cultural competence Access to care. Cultural diversity.*

### Introduction

Demographic changes will play a key role in shaping the future of oral health and dentistry throughout America, as famously stated by philosopher Auguste Comte: "Destiny is demography." The aging population trend has been well-documented within this field, known commonly as 'graying' America. Projections from data provided by the US Census Bureau estimate that Americans over age 65 are set to increase by 20% come 2030 with their group expected to double in size by 2045 altogether. Such significant demographic shifts suggest considerable implications for dental practice - especially since recent trends indicate that American states all appear increasingly homogeneous based on Florida's current population profile.

The dental industry tends to disregard the significant demographic change that is happening in America with regards to racial and ethnic minority groups who are rapidly growing. Recent US Census data revealed that over 30% of Americans identify as minorities, among whom Hispanics make up the biggest segment. It is predicted that by 2010, roughly 35% of the total population will belong to these groups; moreover, research shows this could increase to about 40% by year-end 2025. A contributing factor for these shifts has been increased immigration rates over several decades, resulting in foreign-born individuals making up more than an estimated 11 percent of the entire U.S. population - particularly in states such as California

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and New York which have large immigrant communities living alongside regular residents. Meanwhile, dentistry does not accord enough attention or effort toward this shift which can result in care disparities and needs-based service deficiencies for minority populations within dental services overall if neglected.

In the coming decades, the dental sector will face growing societal, political and economic pressures to cater to a more diverse population. It's crucial for us to recognize that within just a few generations of dentists' lifetimes and even among current students in this field, ethnic minorities are on track to outnumber non-Hispanic White Americans. To effectively tackle these challenges head-on, it is essential to address doctor-patient dynamics as well as patients' individual healthcare beliefs when providing multicultural care. Otherwise our profession may not be equipped for what lies ahead.

It is important to incorporate multicultural viewpoints into dental education and practice. Research in this area plays a vital role in identifying effective strategies for preparing dentists to serve diverse patient groups. Dental professionals can enhance their cultural proficiency by understanding patients' distinct health stances and showing empathy towards them, ultimately contributing significantly toward promoting impartial oral healthcare accessible to all people.

### **Health Disparities and the Multicultural Imperative**

Minority populations, such as African Americans, Hispanics, American Indians/Alaska Natives and other racial/ethnic groups have been extensively documented to experience health disparities. These communities disproportionately suffer from disease and disability which results in lower life expectancy rates, diminished economic opportunities as well as a reduced quality of life due to perceived injustices. Betancourt et al., discussed the negative impact stemming from inadequate diversity within healthcare leadership leading to an inability for current policies or procedural systems that can cater effectively towards diverse communities' needs. The shortcomings manifest through systemic difficulties encountered by minority demographics with incompatible clinic timings alongside work schedules resulting in prolonged waiting times for appointments coupled with burdensome bureaucracy processes representing major obstacles faced daily by these individuals.

The Institute of Medicine's "Unequal Treatment" report confirmed that disparities in healthcare exist even when access to care is equal. It highlighted cultural differences between minority and non-minority groups, which have impacts on health status and outcomes. Additionally, the AHRQ released its first U.S. National Healthcare Disparities Report that assessed national disparities across a range of areas including oral health, insurance coverage and access to healthcare services, as well as quality of care among different racial/ethnic/socioeconomic populations.

The insufficient availability of both preventive and restorative dental services is a key contributor to oral health inequalities. One obstacle that hinders people from seeking proper care is the absence of private dental insurance, which greatly affects access to treatment. Furthermore, despite its significance in improving accessibility to care, relying on dental coverage alone cannot fully address disparities in oral health. It's crucial for other factors such as effective communication between patients and dentists or cultural competence by healthcare providers must also be taken into account along with patient literacy when attempting solutions. A thorough understanding of these determinants can further improve

diversity-centered approaches towards promoting better access to quality oral healthcare facilities among all communities irrespective their backgrounds or status quo

Healthcare cultural competency involves comprehending the significant impact of social and cultural factors on a patient's health beliefs and practices. It entails acknowledging how these elements influence interactions in different healthcare sectors while creating solutions that cater to diverse patient groups for efficient service delivery. Minority patients often exhibit inconsistent behaviors towards treatment protocols, mainly due to conflicting cultures with their medical providers. Inexperience among clinicians regarding minority patients' interaction coupled with preconceived notions about minorities might aggravate discrepancies leading misunderstandings hence ineffective communication, resulting in non-adherence to treatments regimes by patients'.

Clinic visits may force providers to rely on stereotypes and rush judgments due to limited time and resources. This can result in overlooking a patient's cultural beliefs, ultimately damaging the provider-patient relationship. It is crucial to prioritize access to culturally competent healthcare professionals as there remains dissonance between patients' races/ethnicities versus those of their providers, with an unequal distribution of competency among them. Studies have demonstrated that minority patients report higher satisfaction when sharing racial or ethnic backgrounds with their healthcare professionals; hence representation matters - understanding one another's values play its part too!

The satisfaction of patients with care and their healthcare-seeking behaviors can be affected by perceived discrimination. Several studies conducted across different countries have shown the negative impact that perceived discrimination has on healthcare usage. Furthermore, patient race was proven to affect dentists' clinical decision-making, emphasizing awareness and reduction of biases in healthcare provision as a crucial need.

It is crucial to establish strong doctor-patient communication, especially when dealing with patients who do not speak English or have language barriers. Nonetheless, communication difficulties go beyond just linguistic variations as cultural intricacies within certain communities may also present hurdles. The Hispanic community constitutes a diverse population facing intricate healthcare needs requiring individualized approaches due to their complex culture and language challenges.

Health literacy and cultural competence are closely linked, encompassing an individual's ability to acquire, comprehend, and apply fundamental healthcare information necessary for informed decision-making. Optimal communication is dependent on patients' comprehension levels as well as their oral health knowledge in conjunction with the preferences, skills & expectations of medical professionals providing care. Acknowledging these interrelated components plays a key role in promoting equal access to exemplary oral healthcare services among varied populations.

### **Health Behaviors, Culture, and Oral Health**

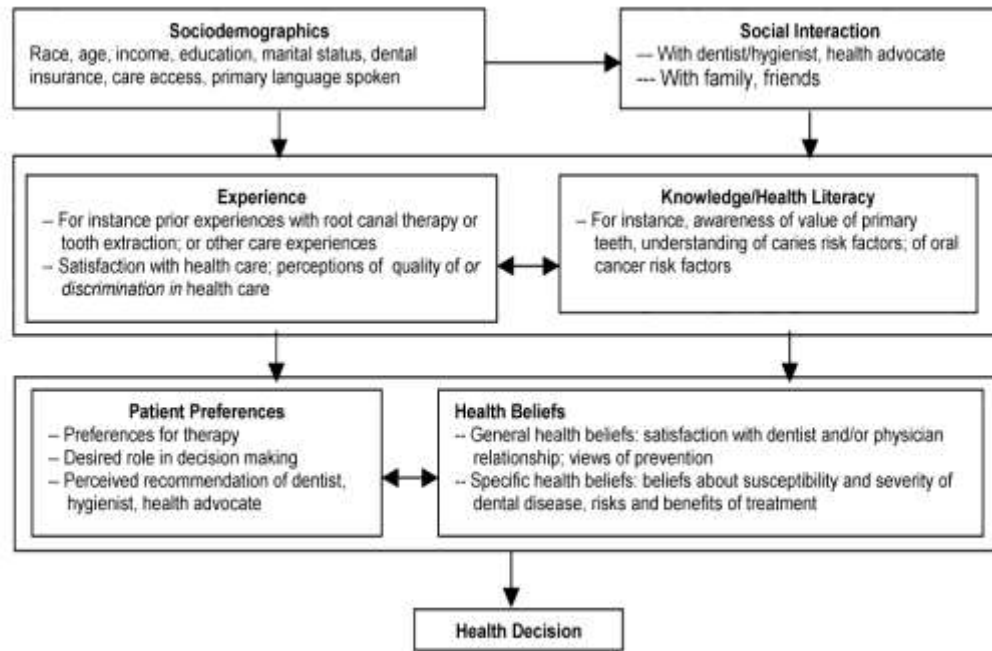
The WHO Constitution established an extensive explanation of health, which highlighted the significance of physical, mental, and social well-being in addition to disease prevention. This all-inclusive viewpoint requires healthcare practitioners to explore not only biomedical sciences but also socio-cultural factors that impact patients' receptiveness towards measures

promoting better health outcomes. Patients' unique preferences and behavioral risks are interwoven intricately with their socio-demographic upbringing and cultural background thus shaping their oral health beliefs as well as risk-taking tendencies; ultimately determining overall wellness success or failure for each individual patient.

In dentistry, theoretical frameworks and conceptual models from psychology and social science have been employed to better comprehend oral health outcomes and create successful interventions. One such example is Barker's utilization of the Health Belief Model (HBM) for analyzing adherence with preventive dental behaviors. According to HBM, an individual must hold a perception of susceptibility towards disease, acknowledge its severity, and recognize the advantages associated with implementing preventative measures in order to comply with recommended guidance. Significant correlations were identified by Barker between beliefs regarding susceptibility as well as benefits related specifically to complying with advice on preventing dental issues.

Unless cultural sensitivity is integrated into educational interventions, modifying oral health risk behaviors may not be possible. In a study analyzing data from the International Collaborative Study of Oral Health Outcomes II (ICS) USA, Nakazono et al. discovered that age and race-ethnicity play significant roles in determining perceived benefits of preventive practices with White adults more likely to see their efficacy. Kiyak et al.'s research also shows that non-White seniors and immigrant elders have lower confidence levels when it comes to controlling their oral health as well as less concern about maintaining healthy teeth compared to other groups studied.

The Health Decision Model has proven to be a valuable tool in our research for understanding the intricate relationship between various factors that affect oral health. This model takes into account multiple influences on health decisions, such as prior experiences, individual preferences and knowledge, social interactions and beliefs about healthcare. By employing this framework, targeted efforts can be developed towards promoting better dental outcomes among diverse cultural populations. Studies have shown that patient involvement in treatment decision-making results in superior overall wellbeing; hence emphasizing the significance of engaging patients throughout healthcare decision processes.



Factor	Description
Individual preferences	The patient's desired role in decision making, the patient's own assessments of risks and benefits of a particular decision, along with the dentist's recommendations for treatment
Experience	The patient's involvement in decision making, previous experiences with dental care (including perceptions of discrimination in receiving such care), and perceptions of the quality of care as well as satisfaction with it and trust in the dental profession.
Knowledge	Including the dimension of health literacy- includes the awareness of the value of oral health, and the accuracy of the patient's understanding of the prevention.
Social interactions	Interactions that might influence health decisions include those with the dentist and dental office or clinic staff, and with friends and family members.
Sociodemographic variables	Variables such as race, age, income, education, marital status, and health insurance coverage and access to dental care.

Figure 1 The Health Decision Model [Adapted from Eraker, et al. (22)]

Eraker et al. explained that the factors affecting health decisions are not predetermined to have a causal sequence. These include domains such as health beliefs, patient preferences, experience and knowledge with dynamic interactions also being influenced by social

interaction and sociodemographic aspects. Cultural factors like race/ethnicity or nationality exert various effects on these domains making it impractical for Health Decision Models to dictate their causality relationships. Instead, they serve an organizing framework when developing interventions & oral education materials emphasizing culturally sensitive solutions aligned with diverse cultural values in mind.

Although the Health Decision Model is useful, it may not be completely effective in multicultural communities if a standardized approach is used. Instead, interventions and materials should be tailored to address specific cultural nuances and individual needs of different groups. So while we use the Health Decision Model as a basis for our work, implementing customized solutions that cater to diverse populations may require us to employ strategies outlined by the Chronic Care Model.

The relevance of the Chronic Care Model in implementing and assessing interventions within multicultural settings stems from its emphasis on patient-centered care, collaboration between healthcare providers and patients, as well as integration of community resources. This model prioritizes proactive planning for both acute needs and long-term management/prevention strategies. Its effectiveness lies in how it can cater to diverse preferences/needs unique to different cultures while simultaneously promoting lasting improvements towards oral health outcomes.

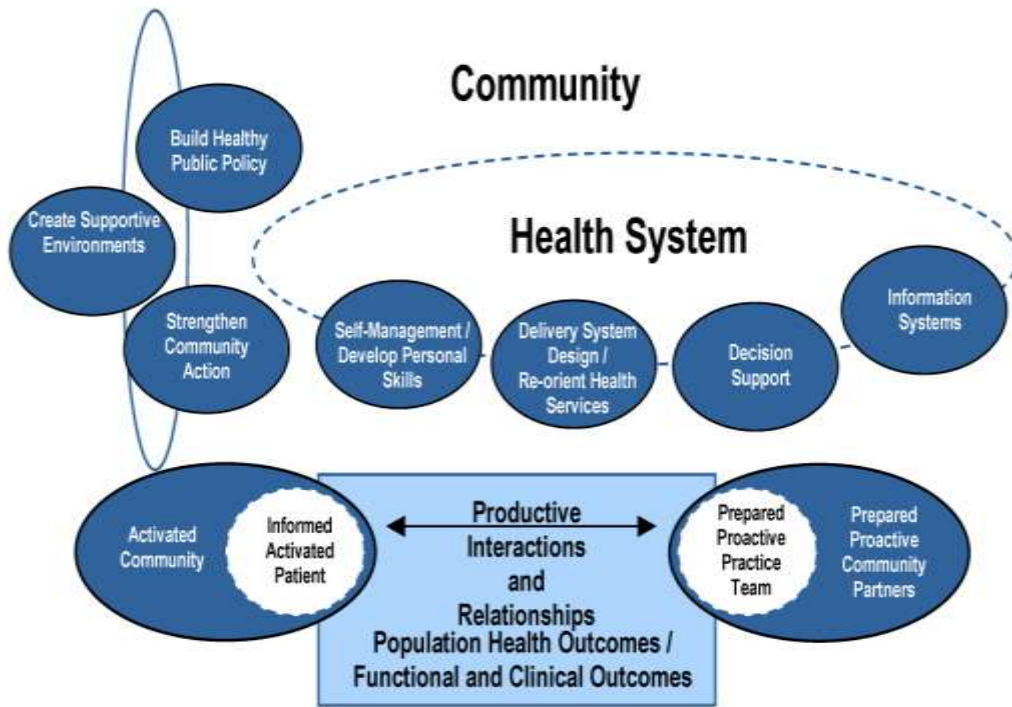
### **The Chronic Care Model, Multicultural Factors and Oral Health Promotion**

Our approach to tackling inequalities in oral health is influenced by the Chronic Care Model (CCM), which recognizes that conditions such as caries and periodontal diseases are both chronic and preventable. As illustrated in Figure 2, this model serves as a guiding framework for our work, with an emphasis on evidence-based care at a population level that prioritizes patient needs. The CCM emphasizes productive interactions between patients and healthcare providers since these form the foundation of successful treatment outcomes. This principle underpins effective healthcare delivery within the context of oral health disparities.

Figure 2 illustrates the six fundamental elements of CCM, which offers a flexible framework that enables customization of improvement strategies to suit local contexts and multicultural settings.

1. Policies and resources available within the community
2. Organizational structure of the healthcare system
3. Support for managing oneself
4. Designing an effective delivery system
5. Support for making decisions
6. Clinical information systems

The CCM framework utilizes several essential components to promote effective communication between knowledgeable patients and prepared healthcare providers, leading to improved patient outcomes. These integral elements include leveraging community resources, optimizing healthcare systems for delivery, providing self-management support tools, offering decision-making assistance, and utilizing clinical information systems. This innovative approach prioritizes the needs of individual patients by encouraging active participation in their oral health management while facilitating constructive collaborations with healthcare professionals. By integrating these vital factors within its model design, the CCM shows great potential in reducing disparities among diverse patient populations while improving overall oral health results..



Element	Description
Community resources and policies	Programs and policies that support improvements in health care, including partnerships that identify, create, and support needed services;
Health system organization of care	Promotes safe, high-quality care through leadership support for quality improvement, and effective coordination of care
Self-management support	Emphasizes patients' responsibility in managing their health through such strategies as setting goals, resolving problems, and devising action plans
Effective delivery system design	facilitates patient visits and may include specialist expertise or case management
Decision support	Enhances provider adherence to evidence-based guidelines, which are incorporated in daily clinical practice
Clinical information systems	Provide patient data which can be used to plan an individual patient's care, identify relevant subpopulations for care, and monitor the

	performance of health care providers or systems
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Figure 2 The Chronic Care Model [after Wagner et al. (23); Barr et al. (24)]



Although the Chronic Care Model (CCM) was originally created to strengthen chronic disease management, it and similar models have also been suggested for use in preventing diseases. There are common features between prevention and chronic care such as behavioral counseling or preventive examinations making them suitable for dual application. Additionally, methods like patient-centered care play an essential role both in managing long-term illness and enacting preventative measures because they promote positive health behaviors resulting in better outcomes. Through promoting engagement with patients while adopting proactive healthcare delivery strategies, combined with holistic approaches towards amplifying wellness practices – The CCM framework has demonstrated its ability to significantly back up initiatives focused on prevention alongside those centered around caring & treating of chronic conditions which signifies these versatile frameworks' potential that can effectively address various Healthcare needs leading toward all-around comprehensive Health welfare improvements being attainable through their implementation.

### **Implementing Solutions in a Multicultural Context**

Significant hurdles often confront underserved populations when trying to obtain preventive and restorative dental care. However, community-based interventions spearheaded by peer health advocates or promotoras can greatly minimize these barriers to healthcare access. Among them are CHWs who act as important liaisons between consumers and providers in promoting good health among groups that have traditionally had less than adequate coverage.

Encompassing oral health promotion in the role of CHWs proves to be extremely valuable when tackling diverse requirements within underserved communities. The efficiency and cost-effectiveness displayed by CHW programs have extended healthcare access and services to minority groups with restricted care options such as migrant farm workers, mothers accompanied by infants, African American populations along with Hispanic/Latino communities.

Tailored to meet the needs of Latino populations, the promotor model has demonstrated effectiveness in curbing chronic disease risk factors by means of education initiatives, dietary interventions and heightened screening rates. The independent operation of individual promotors along with support from partnering Community-Based Organizations advocates for its success. A testament to this is the "Salud para su Corazon" program that employed the promotor approach aptly to foster heart health practices and lower cardiovascular ailment risks among Latinos nationwide; a feat accomplished via augmented understanding pertaining healthy choices and positive behavior adaptation.

Research indicates that promotors can notably increase adherence to preventative exams and screenings, particularly among certain groups such as uninsured women residing along the Mexico-U.S. border. Nonetheless, persistent endeavors are necessary for lasting enhancements since terminating interventions could bring about reduced effectiveness in due course.

The importance of diversity in the healthcare profession is becoming increasingly vital for effectively addressing diverse health needs. Studies show that improved access to and quality of healthcare for all Americans can be linked to greater racial and ethnic diversity among healthcare professionals. Even when financial barriers are eliminated, cultural factors may still contribute to disparities in oral health outcomes within dentistry alongside medicine as well. Reducing these inequalities depends on considering various aspects at multiple levels: system, patient, and provider beyond mere availability of care services alone. To achieve this goal successfully requires continued efforts designed towards improving both workforce's much-needed diversity while simultaneously bridging gaps concerning cultural awareness aimed at

reducing discrepancies related to minority or non-minority populations alike regarding their dental treatment options' accessibility/quality level outcome equivalency potentialities over time too!

### **Patient-centered care and cultural competence**

It is essential not only to rely on culturally and linguistically competent community members for promoting oral health but also for dental professionals themselves to acquire proficiency in delivering such care. This includes improving the communities' oral health literacy through cultural competency training. The Institute of Medicine has defined patient-centered care as being respectful, responsive to individual needs and preferences, and guided by patients' values when making clinical decisions. Thus it's clear that this type of approach must be delivered in a culturally competent manner for maximum effectiveness with active participation from patients at every level - including decision-making regarding treatment options, advising/guidance provided by providers towards achieving positive outcomes tailored specifically around each person's unique situation accordingly.

Achieving desired outcomes and successful treatment rests significantly on the effectiveness of communication between patients and providers. Satisfactory results are often associated with clear communication leading to increased compliance, greater patient happiness, and better prognosis. Constructive dialogues involve several key elements such as building a good rapport while discussing concerns openly; gathering pertinent information by considering the viewpoints of both parties; sharing crucial feedback that aims at aligning solutions in agreement over challenges encountered while ensuring conclusion is reached. Communication barriers related to linguistic differences can be overcome when trained interpreters are involved making it easier even for Limited English Proficient (LEP) patients thus influencing positively their views towards quality care perceived provided.

Overcoming cultural and language barriers alone may not be enough to facilitate health behavior change, particularly in cases where patients lack motivation. Motivational interventions like the patient-centered approach of Motivational Interviewing can be beneficial. This technique is tailored to individual readiness for behavioral changes and utilizes methods such as exploring outcome expectations, cognitive dissonance techniques, decisional balance analysis, and providing insight into how detrimental unhealthy behaviors are affecting their lives. It also employs more directive approaches such as enhancing skill-building efforts or increasing self-efficacy which work best with highly motivated patients. Motivational interviewing has been applied successfully across multiple settings including oral health promotion illustrating its adaptability towards fostering positive outcomes regarding a variety of harmful behaviors.

### **Cultural Competence, Service Learning, and Dental Education**

The education of culturally competent practitioners should ideally be started early in dental students' training and be an integral part of the curriculum over all years of dental school. Hewlett et al<sup>38</sup> assessed dental students' perceptions of the adequacy of the cultural competency training they received in dental school and found that 25% of graduating seniors felt time devoted to cultural competency was inadequate. Importantly, almost half of the students also reported that there was inadequate time devoted to other clinical disciplines (implant dentistry, orthodontics) and practice management. With this in mind, it was concluded that integrating cultural competence into the existing curriculum would be more effective than adding separate courses on cultural competence.<sup>39</sup> In addition, key components of such curricular integration should include education on the nature of health disparities and on the social responsibility of health professionals to provide care to the underserved.

Service learning is a method of learning that couples learning with service with an emphasis on the student's reflection of the experience and is especially valuable in addressing multicultural issues in dental education and dental care.<sup>39,40</sup> The gains are on many levels: the student can apply what has been learned in school to "real life" in treating patients. In addition, the setting may be such that the student is immersed in an underserved community and can experience the challenge of treating culturally diverse patient groups who may also have limited resources to afford dental care. The key component of service learning is the reflection requirement, whereby students are encouraged to reflect on the experience by either keeping a journal and/or doing a structured, supervised project.

In 2003, the Robert Wood Johnson Foundation launched a multimillion-dollar program, "Pipeline, Profession and Practice: Community-based Dental Education." To enhance system capacity, it has aimed to promote community-based dental education, educate culturally competent practitioners, expand access to care in underserved communities, and increase the numbers of underrepresented minority and disadvantaged students in dental schools.

A greater challenge involves the educational needs of current practitioners to provide care in a culturally competent manner and to address health disparities. One way to meet this need may be to design and offer "service learning" continuing education courses for participating in a community-based dental program. However, there appear to be few such opportunities for continuing education in cultural competency aimed at practicing dentists and hygienists, although there is a growing realization of the need and such a course was offered at the 2007 ADA Annual Session.

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### **Conclusions and Recommendations**

We have underscored the significance of multicultural factors in influencing oral health outcomes, emphasizing the pivotal role of cultural competence among oral health care providers as a critical intervention point. Trust in and comfort with one's dentist are crucial for effective utilization of care and adoption of preventive and positive health behaviors. Therefore, there is a compelling need in dentistry to enhance the cultural competence and communication skills of care providers to better serve diverse populations.

Moreover, addressing the needs of a diverse population and improving health outcomes requires consideration of several challenges. Dentistry may need to evolve in various areas, including changes in the composition of the oral health workforce and improvements in the structure and processes of care. For instance, exploring the benefits of "open access" or "advanced access" scheduling could promote culturally appropriate care in a logistically feasible manner.

We have also highlighted the effectiveness of community health workers (CHWs), such as promoters, in oral health promotion. There is growing interest in the involvement of primary care medical practitioners in oral health promotion as well. The roles of CHWs and other community-based health workers in oral health care should be more broadly considered as essential contributors to addressing multicultural factors and oral health disparities.

Creative solutions are needed to expand the dental team safely and effectively, enabling dentists to promote oral health and prevent and treat disease in diverse multicultural populations with oral health disparities. This may involve redefining the roles of various dental professionals and exploring interdisciplinary collaborations to optimize oral health outcomes.

Furthermore, enhancing the cultural diversity of the healthcare workforce, including oral healthcare providers, is increasingly recognized as vital for successfully addressing the health needs of our nation's increasingly diverse population. Embracing cultural diversity within the healthcare workforce will foster inclusivity, improve patient-provider interactions, and ultimately lead to better health outcomes for all.

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