Healthcare Integration through an Ethical Lens

A white paper prepared by a subcommittee of the Board of the American College of Dentists

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ABSTRACT

Oral health and overall health are intimately connected, and many emerging public health threats have oral health implications. Collaborative care among healthcare professionals has been demonstrated to improve patient outcomes, and therefore improved healthcare integration is a key focus area of healthcare reform. Yet, the dental care delivery system remains divorced from the rest of the U.S. healthcare system. This paper examines the topic of healthcare integration through the exploration of six Core Values of the American College of Dentists and the ethical obligation to provide evidence-based care. Because integrated healthcare is associated with better patient outcomes than a more siloed approach, the dental profession must act to close the dental–medical divide. To best serve the oral health needs of the public, dentistry may need to be considered a specialty of medicine, and dental students should have the same solid foundation in the basic and clinical sciences as medical students. Educating dental and medical students together would increase the interaction between the professions, support collaborative practice models, and lead to a better understanding of the health issues that patients face. That increased integration would likely lead to better patient outcomes and a healthier population.

INTRODUCTION

Oral healthcare providers share responsibility for wellness and total patient health with their medical and allied health colleagues. As awareness grows of the important links between oral health and overall health, physicians, dentists, and allied health providers need to collaborate more closely to develop innovative ways reduce gaps in care and communication. More effective interprofessional collaboration will enable a framework for clinical health care providers, public health practitioners, and other professionals to work synergistically to improve health care and population health.

In 2016, the *Core Competencies for Interprofessional Collaborative Practice* were updated to reflect the need to train health care professionals to learn about, from, and with each other to enable effective collaboration and improve health outcomes.[1] Patients, families, and communities benefit when multiple health workers from different professional backgrounds work together. The Four Core Competencies outlined in that document include:

> **Competency 1.** Work with individuals of other professions to maintain a climate of mutual respect and shared values.
>
> **Competency 2.** Use the knowledge of one's own role and those of other professions to appropriately assess and address the health care needs of patients and to promote and advance the health of populations.
>
> **Competency 3.** Communicate with patients, families, communities, and professionals in health and other fields in a responsive and responsible manner that supports a team approach to the promotion and maintenance of health and the prevention and treatment of disease.
>
> **Competency 4.** Apply relationship-building values and the principles of team dynamics to perform effectively in different team roles to plan, deliver, and evaluate patient/population-

centered care and population health programs and policies that are safe, timely, efficient, effective, and equitable.

Interprofessional education of medical and dental students can help produce clinicians who work together for the benefit of their patients. While these core competencies are taught in all dental schools accredited by the Commission on Dental Accreditation (CODA) as well as medical schools and many other allied health professions schools, the translation of interprofessional education into practice lags. As noted by the American Medical Association in 2016, "Oral health affects a person's overall health, income, and quality of life. Yet, the dental care delivery system remains divorced from the rest of the health care system. The notion of dentistry as a field separate from medicine is a historical phenomenon that has been reinforced through legislation, education, and service delivery. This division places an undue burden of dental disease on the most vulnerable Americans who face barriers to accessing dental care."[2]

There are profound differences between dental care and medical care in how diseases are treated, how diseases progress with or without treatment, how billing and payer structures are generally managed, and how professionals view their chosen profession. It is well documented that oral health and overall health are intimately connected. According to the National Institute of Dental and Craniofacial Research's 2021 report, *Oral Health in America: Advances and Challenges*, many emerging public health threats have oral health implications.[3] The rising incidence of obesity and diabetes, the opioid epidemic, the rising incidence of mental health disease, and the COVID-19 pandemic, to name a few, all impact the population's oral health. Oral health in the United States also is negatively impacted by well-established and prevalent general health concerns such as tobacco use, human papillomavirus (HPV) infection, and HIV/AIDS.

The American College of Dentists (ACD), espousing to its mission to advance excellence, ethics, professionalism, and leadership in dentistry, presents this white paper to serve as an exploration of the ethical obligations to the promotion of healthcare integration for the benefit of the patients served.

MEDICINE AND DENTISTRY – THE HISTORICAL SEPARATION

Oral health care traditionally has been viewed as separate from primary health care. Regrettably, this separation has led many observers to consider dentistry as elective in nature, thereby widening the gap in access to oral health care. Dr. William Gies, founder of the Columbia University College of Dental Medicine, stated that "to best serve the oral health needs of the population, dentistry should be considered a specialty of medicine, and dental students should have the same solid foundation in the basic and clinical sciences as medical students." [4]

Society has become accustomed to and grown to accept references to "doctors and dentists" when speaking about medical and dental health care professionals. It is even safe to say that many dentists in the profession accept the terminology as commonplace and may even feel some sense of special recognition in the distinction. When referencing 'doctors' who deliver medical and dental care, the more accurate, descriptive, and appropriate terminology would be "physicians and dentists".

The modern dental profession came into existence in 1840. That was when the dental college in Baltimore opened because the medical community at the College of Medicine at the University of Maryland in Baltimore dismissed efforts to add dental instruction to its curriculum, noting that the "subject of dentistry was of little consequence".[5] At that time, dentistry primarily focused on extracting decayed teeth and restoring dental cavities with a variety of 'filling' materials.

Dentists today use a wide variety of technologies to prevent, diagnosis, and treat oral disease. Computer-aided design and manufacturing, cone-beam computed tomography, dental implants, and oral laser technologies are vastly reshaping the profession of dentistry. Additionally, the link between oral health and overall health is more widely accepted in both the medical and dental professions. The profession of dentistry and the larger healthcare system would likely be quite different today if the College of Medicine at Maryland had been receptive to adding dentistry to its curriculum as a specialty of medicine in 1840.

Just as the medical and dental education systems are currently divided, so are the payment systems. In the United States, private medical and dental insurance both are largely provided as employment benefits, but each serves different functions. Medical insurance was designed primarily to provide coverage for large, unpredictable expenses. In contrast, dental insurance was intended to fund routine and predictable preventive and restorative care. Consequently, protection from large medical care costs is considered a necessity and dental services are considered a benefit. [2]

The historical existence of two separate insurance systems, one for medical and another for dental, serves to reinforce the challenges of a truly integrated healthcare system. The recognition of healthcare access and quality as a key social determinant of health serves as a driving force to unite dentistry and medicine and that "continued separation of these two fields disproportionately burdens vulnerable populations of patients". [2]

One such example to better integrate primary and oral healthcare involves an initiative at the Harvard School of Dental Medicine. That school's efforts are focused on improving health and lower medical care costs, and "seek(s) to transform how dentistry is taught, practiced, financed, and evaluated so it becomes seamlessly integrated with the comprehensive health and social services...". [6] Harvard's Oral

Physician Program and its combined DMD/MD program integrate oral healthcare and primary care to train "a new type of physician focused equally on oral health and primary care".[6]

The medical and dental education systems will play an integral role in the future of a truly integrated healthcare system. It is possible to envision a dental "specialty" emerging within medicine similar to other medical specialties (e.g. internal medicine, pediatrics, family medicine, or psychiatry) or surgical specialties (e.g. general surgery, neurosurgery, obstetrics, gynecology, or otolaryngology). There could be subspecialties of dentistry (e.g. oral and maxillofacial surgery, endodontics, prosthodontics, or periodontics), just as there are medical and surgical subspecialties. Models for the delivery of comprehensive health care in the 21st century recognize that dentistry is an integral part of healthcare but struggle with how to incorporate or combine the two disciplines to benefit the patient.

THE ACD AND ETHICAL CONSIDERATIONS

The ACD is the oldest major honorary professional organization for dentists. Its members exemplify excellence through outstanding leadership and exceptional contributions to dentistry and society.[7] In response to serious problems facing the dental profession, the College was founded on August 20, 1920, to elevate the standards of dentistry, encourage graduate study, and grant Fellowship to those who have done meritorious work. The College is nonprofit and apolitical and has long been regarded as the "conscience" of dentistry.

The mission of the College is to advance excellence, ethics, professionalism, and leadership in dentistry. The following principles and objectives have been adopted in the furtherance of accomplishing the mission:

1. To promote within the dental profession the highest ethical standards, stimulate interprofessional relationships, and urge upon the professional person recognition of one's responsibility to participate in the affairs of society as a citizen of the community;
2. To take an active role in the support of dental education and research;
3. To encourage qualified persons to enter the profession of dentistry;
4. To encourage graduate education and improve continuing educational efforts by dentists and auxiliaries;
5. To encourage the free exchange of ideas and experiences in the interest of the patient;
6. To foster the extension and improvement of measures for the prevention and control of oral disorders;
7. To confer Fellowship in the College on individuals in recognition of meritorious achievement and their potential for contributions in dental science, art, education, literature, human relations, and other areas that contribute to human welfare and to give encouragement to them to further the objectives of the College.

The ACD aspires to consistently heighten awareness of ethical and professional responsibility, promote ethical conduct and professionalism in dentistry, advance dialogue on ethical issues, and stimulate reflection on common ethical problems in dental practice. Interprofessional collaborative practice is foundational to ACD principle number one. Therefore, this paper examines the topic of Healthcare Integration through an ethical lens. In particular, it explores healthcare integration in the context of six of ACD's core values of ethical behavior: Autonomy, Beneficence, Compassion, Justice, Professionalism, and Veracity.[8]

Autonomy

The integration of dental care within a healthcare system that provides patients with knowledge of their overall health status is directly connected to the American College of Dentists' ethical principle of autonomy. The principle of autonomy is grounded in the conviction that patients have the fundamental right to determine what should be done with their own bodies but holds that dentists must inform patients of contemporary standards of oral health care. Research has long documented the association between oral health and overall health, such as the synergistic benefits between improvement in periodontal disease and improvements in diabetes. As this evidence has amassed, the management of interrelated conditions should be considered a contemporary standard of health care. Providing integrated collaborative health care enhances patients' knowledge and enables them to make more informed health decisions. Providing information regarding the oral cavity without considering implications for their overall health may be insufficient to enable informed patient decision making. The current siloed approach to healthcare delivery may provide an excellent platform for oral health care providers to deliver preventive, restorative, urgent, and elective care, but too often focuses solely on the mouth, without providing the patient with full information as they make treatment care decisions. A collaborative team approach to patient care would provide the patient with integrated care plans and improve their ability to make autonomous decisions regarding their health.

Informed consent is one of the key elements of patient autonomy. Approximately 108 million Americans who visit a physician in a given year do not visit a dentist.[9] Consequently, nearly one in three Americans may not receive information about how their oral health is impacting their overall health and vice versa. This is especially critical for some specific systemic disorders such as diabetes, cardiovascular disease, and pneumonia. [10] An integrated medical-dental health care environment also provides for an improved communication between providers, which facilitates improving the information that patients receive.[11,12] This has been on vivid display for many decades in cleft palate clinics across the country, where a team of providers sees a patient together, determines the care plan for patient, and informs

the patient together about what will occur. In a recent publication, Atchison et al. noted that preventive oral health services improve the ability to communicate the importance of oral health with other health care providers.[13] If dentistry can improve that awareness among other health care providers, the importance of oral health might be better communicated to the large number of Americans who do not receive regular dental care. From an ethical perspective, it is imperative to transform the health care environment into a more integrated and collaborative system to better allow patients to make well informed health care decisions.

Beneficence

The ethical principle of Beneficence ("do good") is found in nearly all professional codes of ethics. For example, the American Dental Association Code of Professional Conduct states, "The dentist has a duty to promote the patient's welfare". The principle of Beneficence expresses the concept that professionals have a duty to act for the benefit of others. Under this principle, the dentist's primary obligation is service to the patient and the public-at-large. The most important aspect of this obligation is the competent and timely delivery of dental care…".[14] Similarly, the American College of Dentists Code of Ethics states, "Beneficence, often cited as a fundamental principle of ethics, is the obligation to benefit others or to seek their good. While balancing harms and benefits, the dentist seeks to minimize harms and maximize benefits for the patient".[8]

One example of the relation between Beneficence and integration of medicine with dentistry is related to the potential for increased linkage to appropriate health care. Inadequate access to dental care frequently manifests itself as visits to hospital emergency departments or urgent care facilities, or individuals simply go without any care.[15] Patients in pain who turn to emergency departments for relief may receive analgesics — often opioids — and antibiotics, but not definitive dental treatment. Some hospital systems have instituted changes to ensure that patients with dental conditions are linked with

dental treatment, which results in better patient care and more appropriate use of healthcare resources. Greater integration of medicine and dentistry holds the promising of doing good for the patient while doing well for the healthcare system.

Three pertinent examples of doing good for patients by integrating medical and dental include:

1. In Wisconsin, there is a pilot program to incorporate dental hygienists in primary care medical offices to treat children and pregnant women. This program has resulted in patients being seen by a dental provider that would otherwise not have been seen.
2. In the Pacific Northwest, Permanente Dental, affiliated with Kaiser Health, has been a leader in Medical-Dental Integration since the mid-1980s. This integration of care model has progressed from simple referral with an "advice slip" to integration of dentists, physicians, nurses, and physician assistants in twenty outpatient treatment centers. Kaiser Health integrated its electronic health record system (EPIC) in 2016. Permanente dentists and nurses embedded in the dental settings serve as extenders of primary care. This integration of care has resulted in the early detection of various cancers, identification of patients in need of screening or treatment of other diseases, and delivery of vaccinations.
3. The Ohio Department of Health has instituted the Smiles for Life curriculum[16] for registered nurses to apply fluoride varnish for patients at high risk for caries and provide oral health education.

Better treatment would result from knowing the whole patient's medical-dental condition, thus benefitting the patient. This can be done by better educating dentists to look at the whole patient and training physicians in oral conditions. This is being done in some places in the United States and Canada. For example, the Mayo Clinic has supportive oral health collaborations between dentists and physicians in treating head and neck cancers, craniofacial syndromes, and growth dysplasias. Yet, despite

enhanced integration, the medical-dental divide remains for many patients with known comorbidities, such as those with diabetes, cardiovascular disease, rheumatologic conditions, and preterm labor.[17-19]

Educating dental and medical students together would increase the interaction between the professions and lead to a better understanding of dental issues that patients face. That increased understanding would likely lead to better patient outcomes. There is a movement toward interprofessional education within colleges of medicine and dentistry, but with 155 medical schools and 70 dental schools in the United States, it would be a monumental task to fully integrate their curricula. Some schools combine basic science education in the first year of the predoctoral medical and dental curricula. In some dental schools, interprofessional education involves just two days in a four-year predoctoral dental curriculum and often does not even include medical students. Clearly, much more needs to be done to more fully develop interprofessional education in health care.[20]

Dental and medical electronic health record systems are notorious for not communicating with each other. Marshfield Clinic Health System has tackled this problem by having record interoperability in their integrated Medical-Dental practice. As one example of using informatics interoperability to improve patient outcomes, Marshfield used this system to identify medical patients with diabetes that needed to see a dentist and dental patients with diabetes to be referred for medical care.[21]

There are many barriers to medical-dental integration, including the educational system, payment systems, and resistance of providers and institutions. However, better interprofessional integration would advance the ethical principle of beneficence.

Compassion

Compassion requires caring and the ability to identify with the patient's overall well-being. Relieving pain and suffering is a common attribute of dental practice. Acts of kindness and a sympathetic ear for the patient are all qualities of a caring, compassionate dentist.

The American College of Dentist Core Values and Aspirational Code of Ethics states that one standard of behavior for Fellows in the College is their ability to be a compassionate dentist and care for the patient's overall well-being. During the past few decades, predoctoral dental curricula have evolved to incorporate topics such as critical thinking, motivational interviewing, cultural competence, social determinates of health, and working with translators.[22-25] These curricular innovations have been critically important in helping dentists to understand that caring for their patients requires a broader patient-centered skillset, and not simply focusing on clinical procedures. Integrated health care provides an opportunity for dentists and other healthcare providers to have a less myopic view when developing care plans and to move toward whole-person care and patients' overall well-being.

With a large number of Americans who access the health system through a dentist only or physician only each year, the ability to care for patients' overall well-being cannot fully be achieved in a siloed health care system.[9]

Justice

The ACD core ethical value of Justice is centered on the concept of *fairness*. The American Dental Association (ADA) Principles of Ethics and Code of Professional Conduct also includes Justice as one of its five fundamental ethical principles.[14] As described by the ADA, "This principle expresses the concept that professionals have a duty to be fair in their dealings with patients, colleagues and society. Under this principle, the dentist's primary obligations include dealing with people justly and delivering dental care without prejudice. In its broadest sense, this principle expresses the concept that the dental profession should actively seek allies throughout society on specific activities that will help improve

access to care for all." The underlying rationale for collaborative integration of dentistry and medicine is directly responsive to the ethical principle of Justice.

The oral-facial complex is an integral component of the human body, so it should not be surprising that conditions that arise in the oral cavity and surrounding tissues affect other organ systems and overall quality of life. Those inter-relationships have been well documented for decades.[26-29] But oral diseases and conditions are not uniformly distributed in the US population, and they disproportionately affect people living in low-income households, certain racial and ethnic minority groups, older adults, and other marginalized members of society. Integration of dental and medical care can improve patient experiences and outcomes through better screening, referrals, and coordination of care, while decreasing overall healthcare costs through increased prevention and early intervention. Those segments of the population at greatest risk for oral disease would likely benefit the most from medical-dental integration. Indeed, a number of case studies documented that integration of dental and medical care increased access to and coordination of patient care.

Integration of dental care with medical care is consistent with the American Dental Association's view that the ethical principle of Justice should lead the dental profession to "actively seek allies throughout society on specific activities that will help improve access to care for all".[14] True healthcare integration will improve the oral health and overall health status of the population, may help to reduce the persistent inequities in health outcomes, and holds the promise of more cost-effective use of our health care dollars. All of the goals of medical-dental integration speak to ACD's concept of Justice as *fairness:* by increasing healthcare quality and access, we could increase the fairness in how disease is prevented, detected, and treated, while reducing the inequities in health outcomes.

Professionalism

Dentistry is considered a health care profession.[30] Generally, for a discipline to be viewed as a profession, there should be:

- a well-defined scope of practice aligned with the profession's purpose and goals
- clearly identified qualifications for education, experience and professional development
- a code of professional conduct that guides actions related to situations
- a certification that requires periodic review of currency and competence
- standards of practice that align with similar peer organizations[31]

The American College of Dentists' *Ethics Handbook for Dentists* lists *Professionalism* as one of the organization's core values.[8] ACD notes that self-governance is a hallmark of the dental profession, and that right requires the dental profession to work toward the collective best interest of society. With accumulating evidence that collaborative interprofessional health care is in the best interest of society, the ethical value of professionalism suggests an imperative to increase integration of dentistry with other areas of health care.

Veracity

The patient and the clinician are bound together by their desire to establish mutual treatment goals. Patients are expected to be honest about their medical history, treatment expectations, and other pertinent information. Clinicians, for their part, must be truthful about the diagnosis, treatment options, benefits, risks, and costs of each treatment option, treatment costs, and the longevity provided by the various treatment options. That information enables patients to use their autonomy to make decisions that are best for them. Most codes of ethics, including the ACD, ADA, and ADHA, recognize the obligation of veracity, which is based on respect for patients and autonomy. [32]

Lying to a patient violates the patient's autonomy and may jeopardize any future connections the patient may have with health care providers. Because relationships are built on trust, lying, even "white lies," easily erodes trust. The practice of withholding information from a patient because the dentist believes the knowledge may hurt the individual is referred to as benevolent deception, therapeutic privilege, or paternalism. *Veracity* is the opposite of the concept of paternalism, which assumes patients need to know only what their healthcare providers choose to reveal. This benevolent deception is in the tradition of the Hippocratic Oath, but it is not endorsed by most ethical rules and is justified only in exceptional cases. Deception in the dental context would be justified only under exceptional circumstances, for instance, when a patient's life or general health is at risk. Such privilege is by its nature subject to challenge and is taken very seriously by ethics committees. The interactive health care relationship between patient and clinician works best when both parties are honest and keep their promises. Therefore, dentists shall not represent the care being rendered to their patients in a false or misleading manner.[8,14,32] It is equally crucial to be honest while dealing with the public, colleagues, and oneself.

In the context of healthcare integration, if patients are unaware of the benefits of healthcare integration, they are unable to make informed decisions regarding their care, namely in choosing their health care provider when a choice is theirs to make. Informed consent is only possible if patients have been well informed of options, which then allows them to exercise autonomy with full knowledge. While the advantages of healthcare integration are evident, patients who are unaware are unable to fully participate in their care. It is therefore an ethical obligation of the profession to make known to the public on a societal level the benefits of healthcare integration.

CONCLUSION

Dentistry is at a fork in the road. The profession must face the questions of where it should go, where it could go, and how it would get there. One possible direction is to be a full member of healthcare and another direction is to more fully develop a retail concept based upon mechanical procedures.

Historically, dentistry transitioned from barber/dentist to a university-educated oral healthcare provider. There have been evolutionary ebbs and flows that included the first two years of education shared with medical students and divergence as medicine and dentistry evolved for different reasons and with different levels of governmental and societal influence.

The lens of education cannot be over emphasized. Academia may be directed by outside forces like governments and the market, but educational institutions may direct the future through initiatives, discourse, curriculum, and admission standards.

History, education, and ethics may steer the boat of dentistry, but much of the direction is influenced by the prevailing winds and tides of social and governmental expectations and needs. There is great influence from the diverse base of providers. The impact of money, citizenry, and government cannot be minimized.

This white paper addresses greater integration of dentistry in health care through the lens of core ethical values because ethics is the leveling harmony after other forces are balanced. Ethics provides a foundation for the discussion of healthcare integration and may be the guiding force. With ethics and logic, the connections are undeniable between the oral-facial complex and the whole body, between oral disease and diseases of other systems, and between oral health and overall quality of life. The American public is entitled to informed consent and when it is informed of the benefits of healthcare integration, it surely will support dentistry as a necessary part of the expectation for the minimum

standard of American health. When government and society learn what can be saved by investing in oral health, integration will be demanded.

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