

Medical and Dental Integration

A Need for Improved Electronic Health Records

The benefits of integrating oral health care and overall health care are well documented.^{1,2} Integrated health care refers to merging administrative, technical, operational, and clinical aspects of care across health disciplines to improve care coordination and patient health outcomes.³ To date, the focus of these efforts have been on interprofessional training of providers,⁴ integrated models of care,⁵ use of Health Information Exchange (HIE),⁶ and management of disease through care coordination.⁷

Federally Qualified Health Centers (FQHCs) provide essential health care services to underserved communities through affordable, person-centered care delivery, and have been innovators and early adopters of medical-dental integration efforts.⁸ Various models of integration have been tested by FQHCs, and as these programs and initiatives have matured, limited data sharing across electronic health record (EHR) systems have been identified as a consistent barrier.^{9,10}

EHRs are intended to be real-time records of an individual's interactions with health care providers and systems. They have evolved to include many types of data and tools, including electronic medical records (EMRs) and electronic dental records (EDRs).¹¹ In an ideal health care delivery system, data about patients' care, regardless of the tool (EMR or EDR) or practice structure, would be accessible via an integrated, centralized health record system.^{12,13}

Despite innovation in the care delivery system, the exchange of electronic patient data between dental and medical providers to facilitate collaboration remains inadequate.¹⁴ Often dental and medical care teams have separate health records for mutual patients as well as software (EMR vs. EDR) systems that cannot interact with one another. Lack of information surrounding a patient's current oral and systemic health conditions and health history, and lack of ability to share this information or store it in a mutually accessible manner, hinder integrated and coordinated care as well as improvements in patient outcomes, quality of care, and cost of care.

Between May and September 2022, CareQuest Institute for Oral Health® conducted a survey to assess FQHC medical and dental providers' perspectives on their ability to access and contribute to mutual patient dental and medical records across disciplines within the same health care system. Results from this survey highlighted significant barriers to collaboration and data exchange, including challenges with health information technology features to support interprofessional care and center operations that limit providers' access to information. Key findings from this survey reveal challenges with obtaining accurate health and prescription information from patients, obstacles to accessing integrated health records, and the need for a more integrated health records system.

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Patients are not always able to recall accurate information about their medical, dental, or prescription histories.



On average, **37%** of new patients are asked to bring physical copies of their medical records. Of the patients asked to bring them, **34%** of patients do so.



40% of all providers think their patients are not at all likely, or only slightly likely, to recall the medications they are prescribed elsewhere.



94% of providers say they request information about the health care services their patients receive from other health care organizations.



About **85%** of dental providers report that patient records, when sent by secure email or fax to other providers, are not received by other health care organizations at least some of the time.

Challenges faced by medical and dental providers vary, even within colocated facilities.^B



85% of dental providers at facilities colocated with medical providers can access their patients' medical information, but about a third (**31%**) require special permissions in the EHR to view those records.



In contrast, **63%** of medical providers at facilities colocated with dental providers can access their patients' dental records, while **11%** need special permissions in the EHR to view those records.



About **25%** of dental providers at colocated facilities who can view information about patient medical services say it is at least moderately difficult to do so within the EHR. In contrast, only about **5%** of medical providers viewing information from dental providers report the same level of difficulty.



Fewer than half (42%) of dental providers at colocated facilities report that they can **use their health center's EHR system to enter information into patients' medical health records.**



The vast majority (88%) of medical and dental providers at colocated facilities **cannot revise their mutual patients' treatment plans.**



Twice as many medical providers (60%) as dental providers (33%) are able to **identify medications prescribed to patients by providers at other health care organizations** using their EHR system.



85% of medical providers can refer to outside health care providers through their EHR system, compared with **50%** of dental providers.

Medical and dental providers expressed interest in improved sharing of medical and dental records.

When asked, "If you could change one thing about how patients' health information is stored and shared, what would that be?" providers commonly mentioned wanting to have a single EHR system that could be used for medical and dental patient record management. One provider remarked, "It would be nice to be able to see all information in one health care record that serves the medical and dental providers' needs and can be shared with outside specialists and vice versa."



All dental providers (100%) say they would like the **ability to view their patients' medical information**, and most medical providers **(75%)** say they would like to view their patients' dental information.



A fully integrated medical, dental, and behavioral health EHR is critical to providing optimal care.”
— Survey participant

If the health care system is to achieve person-centered care that includes co-management of oral and systemic health, medical and dental EHR integration is clearly necessary. Separate dental and medical patient records and record systems that don't interact hinder accurate information storage, access, and sharing, and ultimately impede collaborative care. While the current environment, including barriers to medical-dental interoperability, is understood, more research is needed to explore patients' experiences with policy and practice solutions to facilitate medical-dental integration through electronic information sharing.

Methods

The study was designed by CareQuest Institute for Oral Health, and in 2021, Illuminology conducted a series of in-depth interviews with dental and medical providers to generate concepts for inclusion in the questionnaire. Together, CareQuest Institute and Illuminology created a survey based on interviews and prior knowledge. CareQuest Institute then invited medical and dental providers from 1,346 FQHCs to participate in the survey through an initial letter and follow-up emails. Survey data were collected from May 25 through September 12, 2022. Survey results were collected and analyzed by Illuminology.

^A One hundred and three providers completed the survey, including 70 dental providers, 23 medical providers, and 10 providers with both medical and dental credentials.

^B For questions related to use of EDR/EDH systems in colocated facilities, data were excluded from respondents who did not identify which EDR system was used in their practice (n=3) or who reported their practice used more than one EDR system (n=6). The final sample size for these questions consisted of 94 respondents from facilities with colocated medical and dental facilities.

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