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whitepaper

2010 conference

Oral Health in Healthcare Reform

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:: excerpt ::

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Introduction

“We can’t continue to provide more expensive medical and dental care. We have to be able to provide less expensive and more effective dental care. Really that’s about delivery system reform; it’s not about payment or insurance reform.”

–Dr. Michael Helgeson

This year’s landmark healthcare reform signals positive change, but it also spotlights glaring weaknesses in our nation’s healthcare system. Millions of Americans have no access to affordable quality dental care, and the dental profession lacks the workforce, training, and technology to effectively support the rapid growth in high-risk populations such as children, aging adults, and people with diabetes. So what happens next?

For the past four years, Institute for Oral Health (IOH) has focused on raising awareness about oral health concerns for these key populations, exploring progressive solutions to help advance dental care access, treatment, and delivery. In 2010, IOH addressed the theme of **“Oral Health in Healthcare Reform,”** with an in-depth look at what’s needed in healthcare reform and everyday dental practice to better support underserved populations. Additionally, we explored strategies for integration between dental and medical through collaborative practice models and information technology advancements that help drive evidence-based standards and treatment protocols to support more successful outcomes in both oral health and overall patient health.

The October 2010 Institute for Oral Health Conference in Scottsdale, Arizona provided many valuable insights and promising solutions to advance oral health. With nationally recognized leaders in healthcare reform and top authorities in clinical practice, dental education, health benefits and health record technologies, this year’s event highlighted a number of critical considerations, such as:

- **Expanding the role of dentistry** – From the economic challenges of supporting the expansion of Medicaid programs to provide care for 32 million more people, to the exciting new provisions that will promote prevention and early caries detection in millions of children, the Affordable Care Act provides many opportunities for dentistry to play a bigger role in the healthcare system.
- **Addressing workforce challenges** – As reform introduces new levels of need in the dental workforce, our system continues to battle with a lack of providers well trained to meet the unique needs of underserved populations such as aging adults and people with disabilities. In particular, with the wave of “boomers” reaching retirement age, our nation is facing an urgent need for more geriatric dentists. On a positive note, the reform bill includes provisions for numerous educational grants that could support better training for new and existing dental providers on special needs care.
- **Increasing effectiveness with collaborative care models** – The overwhelming consensus on healthcare reform is that both medical and dental will need to develop ways to deliver quality care at a lower cost. Several progressive delivery models were highlighted that focus on team-based care that brings together medical, dental and other caregivers with community partners to make access easier, reduce costs, increase efficiencies, and improve health outcomes for people who need care the most.
- **Advancing quality using electronic health records** – While electronic medical records have been in place for decades, emerging technology advancements are creating a place for dental to support

better integration with medicine. These tools provide opportunities for the critical data collection that drives quality measurements, performance analysis, and the development of evidence-based best practices.

- **Improving health outcomes for diabetics** – As increasing evidence supports the connection between periodontal disease and diabetes, dentists need to actively participate in helping diabetic patients control and manage both diseases. Calls to action include proactive risk assessments and dental provider education on diabetes, as well as close collaboration with physicians to partner on strategic treatment plans and early detection.

Looking Ahead to 2011

Oral Health and Prevention: Rebranding the Profession

October 27 & 28, 2011

Chicago, Illinois ~ Sofitel Hotel Water Tower

In 2011, the Institute for Oral Health will focus on prevention. We will collaborate with experts in focus groups and participate in national events to learn the latest in preventive strategies for improving health. 2011 will be an exciting year – stay tuned and please join us in Chicago!



About the Institute for Oral Health

The Institute for Oral Health is dedicated to improving oral health in America by bridging the gap between research and everyday dental practice. Serving as a central resource for education and collaboration, IOH brings together nationally recognized experts to focus on important themes of concern in oral health care today, and works to promote innovation and adoption of progressive treatment guidelines, dental plans, and delivery methods.

Join the Conversation

IOH encourages everyone to get involved and share their insights and feedback about important oral health topics and healthcare reform:

IOH Web: IOHWA.ORG



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The Role of Dental Electronic Health Records in Improving Performance

Healthcare reform hinges on dental providers having easy access to a patient's medical, social, and administrative information. With a comprehensive picture, providers can deliver appropriate interventions that improve care and decrease costs. As a lead for the development of VA's integrated dental electronic health record system, Dr. Terry O'Toole shared his experience in how information technology can successfully improve organizational and individual performance to help improve population health.

What is an Electronic Health Record (EHR)?

To frame his discussion, Dr. O'Toole introduced that EHRs typically fall into three categories that support providers, patients, and the performance data that bridges the two. The real power comes from bringing these systems together. The three categories include:

- **Provider-facing** – These systems enable providers to track patient care on a daily basis. At the VA, their tools include the Computerized Patient Record System (CPRS) and the dental specific adjunct application, Dental Record Manager Plus (DRM Plus). Together they provide numerous functions for managing patient data as well as clinical decision support, such as reminders for care invention as providers are treating their patients.
- **Patient facing** – We are seeing an increasing call for web-based portals where patients can access information related to their own care. My HealthEVet, the VA's patient portal now serves over a million users and offers tools for managing health and refilling medications online. In addition, the portal has now integrated secure messaging for confidential online communications between providers and patients.
- **Analytics system** – In the case of the VA, the Dental Reporting and Analytics System allows clinicians, dental managers, and executive leadership to review performance information for over 200 sites nationally where dental care is provided. Be it from a national level to a provider-specific level, this system affords valuable insights into how to improve performance and better allocate resources.

"It's important to integrate the data reporting system into a larger information portal because if it is not readily available and ubiquitous, the data doesn't get looked at."

– Dr. Terry O'Toole

What EHRs Mean for Healthcare Reform

One of the promising initiatives related to reform is the Health Information Technology for Economic and Clinical Health (HITECH) Act, which hopes to improve care delivery through advanced technologies. Extensive information on the use of EHRs to improve healthcare can be found on the website of the Office of the National Coordinator for Health Information Technology. (Visit healthit.hhs.gov)

A key consideration for certified EHRs is that of "meaningful use" to validate and promote their adoption. This process will be closely tied to performance measures, a primary lever for making the business case for EHRs. Additionally, a few examples of meaningful use include:

- **“E-prescribing”** - As providers enter orders for labs and medications online into intelligent systems, the likelihood of pharmacy errors or delays arising from confusion over hand-written prescriptions are reduced.
- **Online information sharing** - The more effectively we can exchange patient data, the more likely we will be to reduce costs of repeated tests and duplicated procedures, all leading to better, more coordinated care for patients.
- **Centralized quality measures** – Certified EHRs enable us to aggregate quality metrics to examine population health trends as well as improve organizational performance to reduce costs, increase efficiencies, and support better patient outcomes.

Technology-related reform provisions really come down to four primary issues:

- **Adoption** – We face a considerable challenge in getting providers to adopt EHRs, largely due to the significant costs associated with implementing them. The reform bill does provide for incentive payments for adopting EHRs, which may help drive progress across organizations that support Medicare and Medicaid patients.
- **Certification** – A lynchpin issue for the incentive payments is that EHRs must be “certified” to ensure they meet specific criteria about what they should do. However, currently there are no certified electronic dental records and requirements for dental certification are still under debate. If oral health care providers are using a certified medical electronic record, they may be eligible for the incentive payments. Certification might include criteria such as whether the system can generate real time notifications on drug-to-drug interactions; maintain a current problem list; and the ability to receive and display electronic laboratory test results.
- **Interoperability** – This aspect looks at how we can make systems “talk to each other” to allow for the sharing of information. At a fundamental level, EHRs must create and store standardized data, often for both patient care and business purposes, across various venues of care. The National Health Information Network has implemented standards that allow disparate systems to connect for the purpose of secure data exchange on a national level. Indeed some of the resistance to adoption is that many providers have their own ways of doing things and want to keep it that way; but Dr. O’Toole noted that *“interoperability doesn’t mean we will have to do everything the same.”* Reducing variations in care results in improved efficiency, accuracy, and productivity, and is good for business and patients. Integrated tools can enable features such as one-click access for patients to download a current, complete medical record for their own reference or to bring to a provider visit.
- **Performance** – Creating quality metrics for dentistry is a growing issue and a critical factor in driving policy changes. A key in promoting EHRs is demonstrating how they can be used to properly measure and improve performance –in patient outcomes, provider behaviors, and cost-effective productivity. At the end of the day, that’s the value proposition. Efforts are underway to expand the clinical measures influencing the Medicaid EHR incentive program to include metrics for dental care and oral health, long-term care, pediatrics, and more. Performance metrics will become increasingly important as our healthcare system evolves toward performance-driven payment models.

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“Getting in on the ground floor is critical -- through organized dentistry and other venues— to get the message heard that oral healthcare is an essential part of both overall healthcare reform and the medical records initiative in order to improve oral health.”

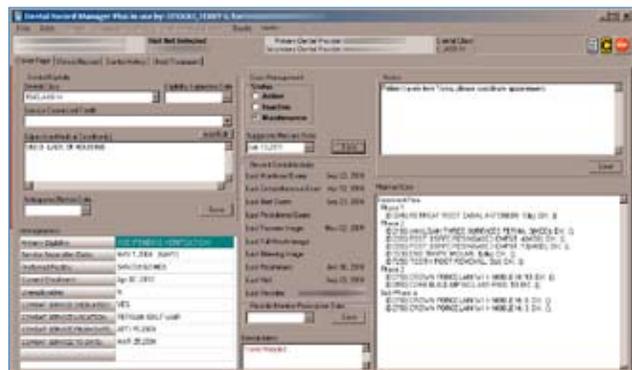
– Dr. Terry O’Toole

The Evolution of VA's Medical-Dental EHR

For more than 20 years, the VA has been advancing its medical EHR, seeing great success in integrating their facilities nationwide to improve medical care delivery for millions of veterans. In April 2010, the VA's sophisticated IT system was applauded in a study by the public health journal *Health Affairs*, which noted, *"benefits have exceeded the costs, proving that implementation of secure, efficient systems of electronic records is a good idea for our citizens... with savings of more than \$7 billion... in areas that improve quality, safety, and patient satisfaction."*

Over the past decade, Dr. O'Toole has been instrumental in advancing VA's development of a dental EHR, known as Dental Record Manager Plus (DRM), which is fully integrated with the medical EHR. DRM provides an effective way for oral health care providers to consistently track a patient's dental diagnostic information and treatment, while also accessing the patient's medical record for more informed decision making. Similarly, physicians can review dental records for consideration of how a patient's oral health may be impacting their systemic and mental health. Not only does the electronic system help improve the quality of patient care, it reduces the risk of duplicated tests, incorrect coding, and clerical errors or miscommunications resulting from hand-written charts and prescriptions.

For easier provider adoption, the dental EHR interface layout is similar to the medical EHR. DRM Plus delivers an at-a-glance view of key patient indicators such as dental eligibility, recent dental activity and care plans, medical conditions, and any relevant personal information. As not all veterans are eligible for VA dental care, it is important for providers to easily determine the scope of services they can provide for any specific patient.



Particularly important for driving improvements in oral health, the integration of medical and dental data offers a unique opportunity for medical and dental practitioners to participate together in the early detection of disease and promote preventive strategies that can help reduce healthcare costs and improve patient outcomes.

Particularly important for driving improvements in oral health, the integration of medical and dental data offers a unique opportunity for practitioners on both sides to participate in early detection of disease and promote preventive strategies that can help reduce healthcare costs and improve patient outcomes.

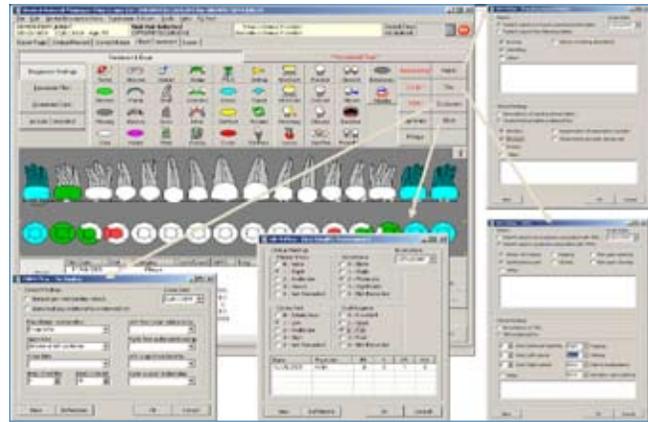
"Any provider using the system can see key details for both medical and dental conditions that may influence their approach to treatment. For example, a cardiothoracic surgeon can see their patient has as dental condition that might impact the surgery they intended to do and know to first consult the dentist. It has fundamentally changed the way people practice. There is great power in that."

The History of Dental Record Manager Plus

Dental Record Manager Plus (DRM) was specifically designed to be accessed only from within the main medical EHR. DRM was not intended to replace the medical record, but rather strengthen it with important dental-specific details to support oral health. It captures a wide range of dental specific information such as tooth-related diagnostic findings, dental treatment plans, and patient progress notes.

Since its inception in 2002, the DRM system has continued to evolve with more sophisticated capabilities, while refining the interface to be easy and intuitive for providers.

- **2002** – In its earliest stages, Dental Record Manager simply eliminated recordkeeping redundancies. Previously, medical and dental records were maintained in two distinct and disparate systems. Most importantly, DRM enabled dental progress notes to be integrated alongside similar medical information for a more comprehensive picture of what was happening with each patient.
- **2004** – As the tool evolved, the next release was named Dental Record Manager Plus, and included graphical dental charting capabilities and a more robust data collection system for enhanced reporting of dental-specific information.
- **2007 & 2008** - DRM Plus advanced to include workload allocation to balance staffing efforts; improved clinical decision support; cross-checking of procedure codes to avoid inconsistencies; more flexible, detailed reporting; and improved graphical representations to ensure accurate data tracking for safer patient care.
- **2009** – By 2009, DRM also included proactive reminder alerts to ensure appropriate interventions are done in a timely manner to support performance improvement. And, to deliver the most current information on a daily basis, the system now supports near real-time updates from databases networking VA facilities across the country.
- **2010-11**– The latest advancements include “intelligent exam templating” to help drive efficiencies and reduce variation in data capture for high-frequency procedures such as exams. Consistent recording of diagnostic details for each patient and procedure is critical for measuring and analyzing outcomes. For example, (as shown here) screens make it easy for providers to record information such as oral health risk assessment and standardized historical information as part of their normal workflow. This standardized information is more effective than simple textual notes as it enables providers to track a patient over time in a consistent manner.



Dr. O'Toole offered these highlights to assist those who are considering developing, purchasing, or using an EHR system to understand some key elements to be mindful of, particularly if they expect to use the EHR system and the data it collects to enhance performance through measurable metrics. Additionally, he pointed out that years of successful growth are attributable to getting the administrative, technical and clinical people all involved, side by side, in the development of an EHR.

Using Metrics to Improve Organizational Performance

Oral health is a critical component of a patient's overall health. As the number of dentally eligible patients and demand for dental services is increasing, VA Dentistry has enhanced their efforts to develop metrics that prove the value of oral healthcare and the need for budgetary investment in dental resources. To measure performance, they initiated three dental monitors:

- **Comprehensive Oral Evaluation for Eligible Veterans** required that any patient eligible for lifelong dental care through the VA was seen for an evaluation at least once every two years. The VA set a threshold of 75%, which has been successfully met but remains challenging as the demand for dental services is rising.
- **Care for the Medically Compelling Dental Patient** defines minimum requirements for necessary dental care in patients with extenuating medical conditions, ensuring these patients needs were accommodated at all dental sites. While not all sites have been able to meet their targets due to structural differences, the variation in access to care for this patient segment has decreased significantly.
- **Fluoride Treatment for Patients at High Risk for Dental Caries** to counter the caries risk brought on by xerostomia in many patients on multiple medications. This monitor helps ensure high risk patients get appropriate and timely fluoride interventions.

Dr. O'Toole highlighted various components that played a role in the development of the Fluoride monitor. The team needed to provide an evidence base to validate the intervention; provide estimated budgetary impact; provide communication tools to gain buy in from providers and inform executive leadership; and support for the ongoing reporting and educational activities to ensure a successful implementation of the initiative.

Raising Awareness and Delivering Results

To keep everyone informed on their progress and promote adoption of the dental monitors, Dr. O'Toole's group developed the Dental Reporting and Analytics System (DRAS), an important component of their overall medical-dental EHR platform. The DRAS integrates a data warehouse of dental care transactions from the past 10 years and provides business intelligence reporting, which helps measure performance and determine where to best direct efforts.

Some highlights of the data analytics system include:

- **Easy access to performance data** through a user-friendly SharePoint portal to promote the visibility of important data. Authorized users can view the dental monitors' progress, as well as trending data such as provider performance frequency screenings, clinical access wait times and more.
- **Dental Performance Scorecard** that allows dental directors to track how well their facility is performing compared to others in the VA health services network. The transparency of this data helps to motivate better performance, which translates to better patient care.
- **Visually compelling reports** help increase the impact of data through visual charts and graphs. As an example, Dr. O'Toole noted that dentists understand that a patient with comprehensive benefits will consume more resources, and likely cost more to manage, than a patient with limited benefits. Visualizations that illustrate usage vs. costs can be very powerful in convincing policymakers and budget controllers about the resources needed to provide oral healthcare.

Lessons Learned in Developing the Dental EHR

One of the most important parts of any major initiative is to track and evaluate what is learned along the way to shape future efforts and provide valuable insights to other organizations that have similar goals. Dr. O'Toole discussed a few key challenges his group encountered as they worked to develop and evolve both the dental EHR and their dental data analytics tools.

A few lessons learned include:

- **Ensure accurate diagnosis coding for procedures** – Although the medical-dental EHR required a diagnosis and procedure code for every patient encounter, the burden was on providers to code appropriately, which was new for dental providers who historically were not required to provide this level of detail. To improve the ease and accuracy of data entry for providers, the technology team implemented a context sensitive list of diagnosis codes for each of 800 or so dental CDT and medical CPT codes to allow providers to choose the appropriate diagnosis code related to any given procedure.
- **Recognize performance data is skewed by patients not seeking care** – While focused on provider performance, they grew to recognize that often low numbers on dental scorecards were not simply the fault of clinicians but that many patients were indifferent or lacked the knowledge to proactively seek regular dental care. Recognizing this reality helped drive efforts to promote oral health education and the personal patient benefits of preventive oral health care.

Looking Ahead to Advance EHR Technology

To continue driving improvements in organizational performance means driving improvements in the tools that makes it possible. As Dr. O’Toole’s team looks to the future, they are focused on ways to further validate their metrics and intervention recommendations to strengthen the business case for oral health improvements on both a policy and practice level.

Their team also plan to assess the impact organizational infrastructure has on patient and provider satisfaction, using the dental analytics systems to report what is working well and replicate the best practices. Additionally, plans to include an oral health risk assessment tool in the patient-facing portal (My HealtheVet) are underway to allow patients to provide information on their perceived oral health. Tools such as this support the VA’s goal to “put more healthcare information into the patient’s hands so they can make the best decisions and make it easier for providers to do what they need to do.”

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“To improve performance, you need to get buy-in from leadership and providers to confirm you are measuring the right things, but it’s also important to identify from providers what you don’t need to do anymore if it’s not adding value for patients.”
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– Dr. Terry O’Toole