

eClinicalWorks CASE STUDY



THE DIMOCK CENTER

A MODEL FOR THE DELIVERY OF
COMPREHENSIVE DENTAL, HEALTH, AND
HUMAN SERVICES IN AN URBAN COMMUNITY

improving healthcare together

The Dimock Center

Uplifting Community Through Better Dental Health

The Challenge

A community health center with more than 150 years of service to residents of Boston sought a healthcare IT partner to help deliver high-quality and affordable dental care to its patients.

The Solution

The Dimock Center implemented the eClinicalWorks Electronic Dental Record (EDR), replacing their paper records with a comprehensive solution for appointment booking, exams, periocharting, and Patient Engagement.

The Results

Following implementation of the eClinicalWorks EDR, the Dimock Center saw improved workflows and much greater efficiency. Dental and medical records are integrated throughout the health center. Dimock was able to serve approximately 8% more dental patients because of improved efficiency.

A Long History of Serving Boston

July 1862 was a busy time in American history. President Lincoln signed legislation authorizing a transcontinental railroad. The Bureau of Internal Revenue was born. Union troops repelled a Confederate assault at the Battle of Malvern Hill. And in the city of Boston, healthcare took a major step forward, with the founding of the New England Hospital for Women and Children, the ancestor of the Dimock Community Health Center.

More than a century-and-a-half later, our nation boasts a modern transportation network and is stronger and wealthier in many ways. But the work of community health centers such as Dimock remains as vital as ever, and serves to remind political leaders and the public that even in the midst of plenty there are individuals, families, and communities whose means do not always cover their needs.

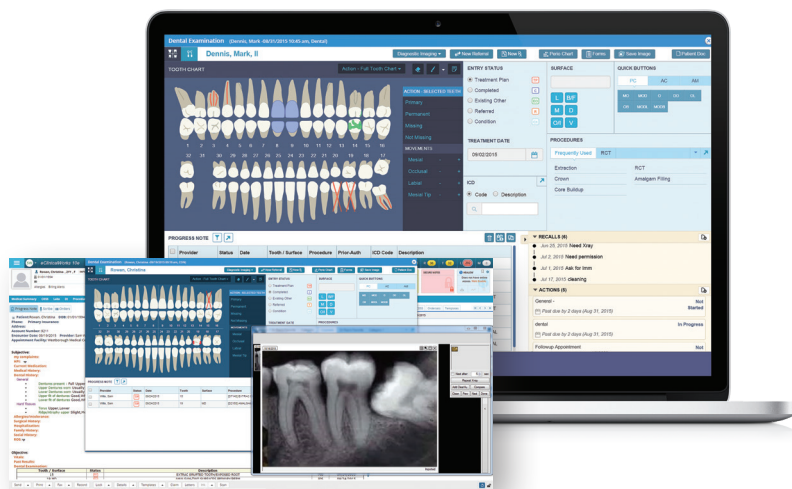
Changing With the Times

Dimock, founded by women for women, has broadened its mission over the decades to serve men, women, and children, with primary and specialty care of all kinds, including vision and dental care.

Since 1969, it has been known as the Dimock Community Health Center, and continues to serve Roxbury and surrounding communities, including some of Greater Boston's most underserved neighborhoods.

In 2016, the Dimock Center handled more than 76,000 medical visits, serving some 17,000 unique patients.¹ Dental services are a key part of Dimock's work, with 12 of the center's 88 medical providers involved in the dental clinic, handling approximately 300 patient encounters weekly.

¹ <https://www.dimock.org/about/who-are-we/>



The eClinicalWorks Electronic Dental Record handles all documentation and periocharting, along with referrals, orders, medications, imaging, and much more.

“Our mission at Dimock is to heal and uplift families, individuals and our community, with the goal of providing the utmost quality care to all of those who enter our doors,” said Dr. Lagina D. Bickham, the center’s clinical dental director.

The Vital Role of Dental Care

There has long been a divide in American healthcare between medical and dental services, which are usually treated separately — from education and training to providing and paying for services.

As a result, many individuals and families who obtain basic health insurance may find they lack adequate — or any — dental insurance.

But good health depends upon caring for the entire body. There is now increasing recognition that the traditional split between medical and dental care has had serious health consequences.

A June 2015 report by Qualis Health and other stakeholders in the state of Washington² — and supported by other organizations nationwide, including the Massachusetts League of Community Health Centers — presents compelling data for closing the medical/ dental divide.

Among its findings:

- One quarter of adults ages 20-64 have untreated dental caries.
- In 2010, only 20% of Medicaid-enrolled children under age three received regular dental care.
- Lack of regular dental care costs Americans hundreds of millions of dollars annually in restorative dental work.
- Oral health problems cause working adults to lose 164 million hours of work each year.
- Oral disease, including periodontal disease, contributes to increased risk of diabetes, infections, heart disease, and many other ailments.

2 <https://dphhs.mt.gov/Portals/85/publichealth/documents/OralHealth/White-Paper-Oral-Health-Primary-Care.pdf>

“The oral healthcare delivery system, as it is currently configured,” the study declared, “fails to reach the populations with the highest burden of oral disease, resulting in significant and pervasive oral health disparities for low-income, minority, rural, and other underserved populations.”

What Overall Health Conditions May be Linked to Oral Health?

Like many areas of the body, your mouth is teeming with bacteria — most of them harmless. Normally the body’s natural defenses and good oral health care, such as daily brushing and flossing, can keep these bacteria under control. However, without proper oral hygiene, bacteria can reach levels that might lead to oral infections, such as tooth decay and gum disease.

Studies also suggest that oral bacteria and the inflammation associated with periodontitis — a severe form of gum disease — might play a role in some diseases.

Your oral health might contribute and be linked to various diseases and conditions:

ENDOCARDITIS



Endocarditis is an infection of the inner lining of your heart (endocardium). Endocarditis typically occurs when bacteria or other germs from another part of your body, such as your mouth, spread through your bloodstream and attach to damaged areas in your heart.

CARDIOVASCULAR DISEASE



Some research suggests that heart disease, clogged arteries, and stroke might be linked to the inflammation and infections that oral bacteria can cause.

DIABETES



Diabetes reduces the body’s resistance to infection — putting the gums at risk. Gum disease appears to be more frequent and severe among people who have diabetes. Research shows that people who have gum disease have a harder time controlling their blood sugar levels, and that regular periodontal care can improve diabetes control.

SOURCE: MAYO CLINIC; <http://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/dental/art-20047475>

“ The patients absolutely love the fact that we are technologically advanced. They notice it, they comment often on how we are now using digital x-rays and have an Electronic Dental Record. They see the computer right before them, and they compliment us on our achievements, and they feel quite comfortable being here at Dimock, knowing that we are keeping up with the latest technology. ”

— Dr. Lagina D. Bickham, clinical dental director

An Integrated Approach to Health

The realities outlined above are well-known to the providers at the Dimock Center, who are facing them — and making a difference — every day.

Johanna Carroll, senior EHR analyst at the Dimock Center, is responsible for optimizing the system and improving workflows.

“We have had the dental module for about a year now, which has been great because it’s integrated with eClinicalWorks and has worked well,” Carroll said. “The patient comes in and we get to see the dental information, any health issues going on with that patient. It’s all integrated into one chart and helps improve patient safety by making sure that all providers have each patient’s current medical history.”

Easier Documentation

The difference between now and the time before the arrival of electronic records is clear.

“Before the eClinicalWorks dental module, it was much more difficult for me as dental director to ensure that we had proper documentation in our charts,” Dr. Bickham said. “As the saying goes, if it’s not documented, it’s not done. So having eClinicalWorks, and having software that allows us to document with such things as smart notes and templates allows for much more accuracy and efficiency.”

One of the key improvements the Dimock Center dentists have used is the periocharting tool, which allows providers to assess gum health, a key indicator of overall health.

“We often need periocharting in order to send pretreatment estimates or authorizations to various insurance companies, and also for in-house purposes so we can monitor the patient’s periodontal conditions,” Dr. Bickham said. “When we were on paper, we had to have someone record for us, using a paper and a pencil, and try to keep track going back and forth from their mouth to the paper. This is a lot more efficient!”

Polishing Workflows, Pleasing Patients

Dr. Bickham, who has been a dentist for 24 years, said her patients have noticed the difference that the EDR has made, with noticeably faster check-in and processing times.

Benefits of Electronic Dental Records

EDRs have the capabilities to provide the oral health professional with the capacity for paperless charting for their patients, to include details such as any procedures, diagnoses, clinical notes, x-rays, periodontal charting, soft tissue findings, and restorations and active dental diseases. EDRs are customized to deal with the unique characteristics of treating patients’ teeth. Dentistry involves many lab and imaging tests, so EDRs receive and analyze the large amounts of data generated for each patient. Specifically, integration with x-ray imaging equipment helps improve workflow through automatic uploading of images directly to a patient’s file.

1.

Major benefits of EDRs are convenience, information sharing, and time savings. EDRs can be integrated with web-based registration and digital X-rays, allowing dentists to have instant access to patients’ complete information from anywhere with a secure internet connection. The time saved allows dentists to see more patients without compromising quality of care.

2.

New patients appreciate the ability to register from home at their leisure so that the dentist’s office knows their insurance information as soon as they walk in the door. This helps tremendously when determining treatment and payment options.

3.

With a fully digitized EDR system, dentists are able to show patients their x-rays and other information on screen, allowing for a more interactive appointment and a more robust dialogue about care. Case acceptance improves because the dentist is able to build trust when patients understand the procedure and why it is necessary.

SOURCES: Clinfowiki; http://clinfowiki.org/wiki/index.php/EMR_Benefits:_EDR, Dentistry IQ; <http://www.dentistryiq.com/articles/2010/03/electronic-dental.html>
Benefits of Electronic Dental Records: A case study by Stephen Thorne

“It organizes our chart in such a way that it’s very easy to find information that we need,” she said. “We can categorize, we can streamline, we can use Smart Notes and templates. The treatment plan referrals are things that we would normally have to resort to many pieces of paper to achieve. Now we have it laid out in a systematic format, and it makes it very easy to use.”

Many patients during the last year have told staff how pleased they are with the improvements.

“The patients absolutely love the fact that we are technologically advanced,” Dr. Bickham said. “They notice it, they comment often on how we are now using digital x-rays and have an Electronic Dental Record. They see the computer right before them, and they compliment us on our achievements, and they feel quite comfortable being here at Dimock, knowing that we are keeping up with the latest technology.”

Five Major Improvements

Fast, effective periocharting is an essential part of quality dental services, helping with early detection of oral disease and potential systemic infections.

Putting precise numbers on the improvements brought about by the eClinicalWorks EDR is difficult, but Carroll and Dr. Bickham identify five major areas where improvements have been notable:

- Improved communication among all providers
- Proper and comprehensive documentation, including easy periodontal charting
- Documentation of social history, allergies, and medical histories in user-friendly formats
- Referrals to other providers within the Dimock Center, as well as to outside health centers and providers
- Using telephone encounters to allow for easier communication

“Everything from gathering that information from the patient, recording it in a timely fashion, and then moving on to accomplish our goal, which is the actual dental procedure,” Dr. Bickham said.

At the most practical level of serving more patients, Carroll estimates the switch to electronic records — fueled by the five major improvements outlined above — has enabled providers to increase the patient load by at least 8%. That means hundreds of additional

patients each year, with savings of money, time, and pain and suffering that are incalculable.

Their Place in the Community

In ways large and small, the Dimock Center's ability to successfully implement the eClinicalWorks EDR is a reflection of the role they have played in the community since 1862, and expect to continue for many years to come.

Beyond the clinical improvements within the dental clinic itself, Dr. Bickham sees two broader advantages. One is the close integration between the medical and dental sides of the Dimock Center's work.

"That was one of the prime reasons we chose the eClinicalWorks dental module," she said. "It's easy to achieve communication with others within the health center, as well as outside the doors of the health center with other neighboring hospitals, and we find it much more efficient to be streamlined and integrated in one software program. We looked at various other products, and nothing seemed to compare. It made perfect sense to go with what was already being used at the health center with high reviews."

Finally, the Dimock Center is actively engaged with residency programs at the various dental schools in Boston, accommodating externships

with Harvard University, Tufts University, Boston University, Mount Ida College in Newton, and the Forsyth School of Dental Hygiene, part of the Massachusetts College of Pharmacy and Health Sciences.

Dr. Bickham understands that the dentists and dental hygienists of tomorrow need the best possible experience, one informed by the best in communication, technology, and caring.

"Having all of those students come to us," she said, "it's of extreme importance that we are all unified in a way that we can document properly. The way it should be done. The way it's done here at Dimock. And in the way we can all understand." ■

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