Oral Health Measurement in CHCs

Preliminary Findings, May 2020

The Arizona Alliance for Community Health Centers (AACHC), through funding from the DentaQuest Partnership for Oral Health Advancement's *Driving Transformation in the Oral Health Safety Net* Initiative, completed an environmental scan among our Health Centers to determine existing infrastructure for oral health measurement. This report highlights preliminary findings of our research and outlines next steps.

Background

Eighteen of 23 Arizona Health Centers have a dental program. In 2018, over 100,000 individuals received oral health care at Arizona Health Centers, including emergency, preventive, restorative and rehabilitative services. Dental care remains a significant need among our nation's most vulnerable populations, and Health Centers across the state are helping to meet that need by providing comprehensive, affordable dental care to uninsured and underinsured individuals. Oral health is linked to numerous systemic conditions, including heart disease, diabetes, rheumatoid arthritis, bacterial pneumonia, HIV/AIDS and pregnancy (Babu & Gomes, 2011; Jeffcoat et al., 2014; Chapple & Hamburger, 2000). Unfortunately, there is very little data to demonstrate the value of oral health services in improving the overall health of patients and in reducing healthcare costs, particularly among those with chronic diseases. AACHC conducted an environmental scan using information from the 2018 Uniform Data System (UDS) reports and data within Azara DRVS (a population health tool utilized by 13 of our member Health Centers). We also distributed a measurement capacity assessment survey among Health Center dental leadership. Although the COVID-19 pandemic presented some barriers to our research phase due to shifting priorities, we have some preliminary findings we believe will guide our work going forward. Our ultimate goal is to establish a framework for measuring oral health and its impact on overall health in order to help our organization and members more effectively demonstrate the value of oral health services.

Step 1.

Analysis of UDS Data

All Health Center program grantees and Look-Alikes are required to report on their performance using the measures defined in the Uniform Data System (UDS). Unfortunately, UDS encompasses very few oral health measures. There are, however, opportunities to take a closer look based on what is captured by UDS related to Health Center dental programs.

What dental information is captured by UDS?

1. Utilization measures (Table 5)
    - Number of visits and patients by provider type
2. Workforce measures (Tables 5 & 5A)
    - FTE data (dentists, hygienists, dental therapists and other dental personnel)
    - % FTE compared to total health center FTE
    - FTE tenure/retention
3. Scope of service (Table 6A)
    - Number of visits and patients that received different oral health services by category based on CDT codes (Emergency Services, Oral Exams, Prophylaxis, Sealants, Fluoride treatment, Restorative Services, Oral surgery (extractions and other surgical procedures), Rehabilitative services (Endo, Perio, Prostho, Ortho))
4. Dental Sealants for Children 6-9 (Table 6B)
5. Cost (Table 8A)
6. Use of Telehealth for Oral Health Services (Table ODE)

What does this information tell us about Arizona Health Centers?

- Dental care comprises about 1/6 of the services provided, while dental staff account for 6% of total Health Center FTE
- Dental programs are growing at a higher rate than medical – dental has grown by 17% since 2016 compared to 9% in medical
- Nearly 40% of the services being provided by Health Center dental programs are preventive, and their sealant measure performance is higher than the national average
- The use of telehealth for oral health services is not being documented in UDS even though asynchronous teledentistry may be in use
- Cost per visit is higher in dental than medical, but cost per patient is lower

Source: Health Resources and Services Administration. 2018 Arizona Health Center Data. Rockville, MD. Accessed from: https://bphc.hrsa.gov/uds/datacenter.aspx?year=2018&state=AZ.

What else could UDS capture that would be meaningful?

- Number of patients that receive both medical AND dental services, allowing us to measure the value of integrated care
- Additional oral health quality measures, such as percent of patients diagnosed with dental caries and/or caries at recall, allowing us to include oral health in the chronic disease conversation

Step 2.

Research Azara

Thirteen of our 23 Health Centers utilize Azara DRVS, a data reporting and analytics platform. Azara has been a helpful tool for AACHC's quality improvement projects. However, more investigation was needed to determine the already existing possibilities for utilizing the tool for tracking oral health data.

What does Azara DRVS offer for dental?

1. The ability to track clinical quality measures (CQMs), including CMS, HEDIS, GPRA and UDS (13 oral health measures in Arizona's system currently; the 7 GPRA measures are only utilized by health centers affiliated with Indian Health Services)
2. A Dental Scorecard report based on the CQMs
3. A UDS Pediatric dashboard, which includes the UDS sealant measure
4. Dental caries as a risk category in the Patient Risk Stratification dashboard

What tools and capabilities exist in Azara DRVS that aren't being used for dental but could be?

1. **Customized Mapping of Additional Measures** – There are limited nationally-recognized quality measures for dental, but as oral health measurement continues to advance, there is an opportunity to use Azara DRVS to track that information. The mapping process is fairly straightforward if a Health Center bills for dental services out of its EHR, but the mapping process becomes more complicated if billing occurs in the EDR.

2. **Referring Management Dashboard** – Azara DRVS has a referral management dashboard that tracks open, completed and cancelled referrals. Tracking referrals from primary care to dental (and vice versa) would be a useful tool. Although you can filter referrals by type, there are 75+ options for a dental referral. We would have to work with our Health Centers to standardize a way of tracking dental referrals to make this dashboard effective.

3. **Patient Risk Stratification Dashboard** – There is a patient risk stratification dashboard in Azara DRVS allowing Health Centers to monitor risk category distribution and risk score thresholds by age. Although dental caries is listed as one of the risk criteria, it doesn't appear our Health Centers have any data mapped to it. Caries risk is often not tracked by programs, so training would be necessary to ensure consistent tracking of dental caries as a diagnosis.

4. **Cancer Screening Dashboard** – The cancer screening dashboard in Azara DRVS is another existing tool that could be leveraged for oral health. While oral cancer doesn't appear to be part of the dashboard currently, there is a potential it could be added.

5. **Patient Registries or Cohorts** – On the individual Health Center level, lists can be created that assess a specific group of patients based on certain criteria. A Health Center could, for example, create a list of their diabetic patients with A1c scores greater than 9, track how many of those patients have had a dental visit, then evaluate health outcomes among those patients compared to patients who did not receive dental care.

6. **Ability to Delineate by Service Line** – AACHC has the ability to look at information at a high level, such as the percentage of patients with diabetes, by service line (medical and dental), who have an A1c score greater than 9 or untested (see figure 1). The results indicate that on average, dental has fewer diabetic patients with uncontrolled diabetes than medical, which supports the idea that oral health services can positively impact outcomes among diabetic patients. However, we aren't able to determine how many of those dental patients are also being seen in primary care and vice versa. Therefore, we cannot make this conclusion with confidence. For this reason, the patient registry or cohort approach at the health center level may be more meaningful.

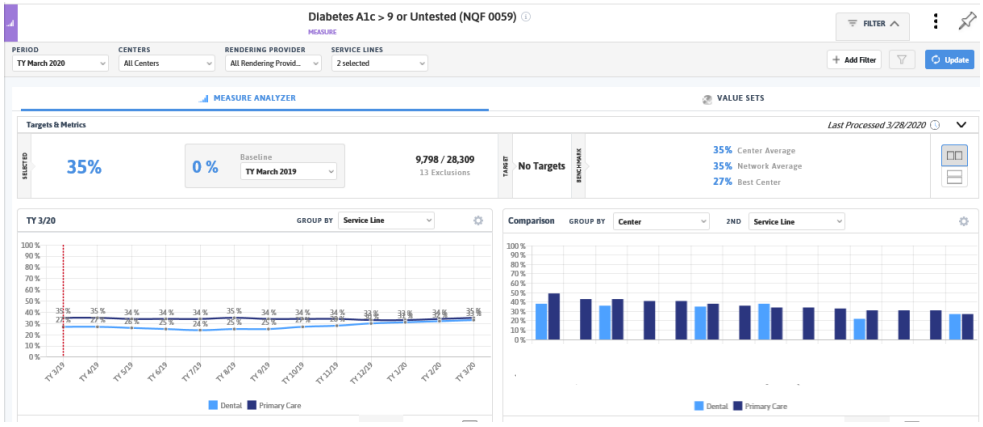

Figure 1

Step 3.

Survey our Members

The last component of our environmental scan involved surveying our members to understand what challenges they face related to oral health measurement. We developed an oral health measurement needs assessment in SurveyMonkey and distributed it to our dental peer networking committee consisting of Health Center dental directors and clinic managers.

Preliminary Needs Assessment Results

The COVID-19 pandemic impacted Arizona at approximately the same time we disseminated the oral health measurement needs assessment survey, which negatively impacted our response rate. We do, however, have some preliminary results based on the six responses received, along with information obtained from a previous survey.

1. Our members have a wide variety of electronic health and dental record systems. This becomes challenging at the PCA level as we have had to understand the intricacies of multiple systems to adequately support our members.
2. The majority of members report their EHR and EDR are completely or somewhat integrated, meaning the dental team can access medical records and vice versa, although it may be time consuming or challenging. We are finding, however, there is a lack of standardization across the membership and the definition of integrated patient care varies. Our Health Center Controlled Network (HCCN) also reported different levels of integration within the Network due to a lack of compatibility between EHR and EDR and lack of an integrated workflow. Therefore, some of these systems may not be as integrated as originally anticipated.
3. Some Health Centers bill dental services out of their EDR. This isn't an issue on its own, but as mentioned previously, can create challenges when trying to leverage a population health tool in order to maximize reporting functionalities.
4. Dental leaders are meeting with their IT staff monthly but would like to be more involved. There is an opportunity for AACHC to assist with this by bringing dental staff into conversations that are occurring between our team and the Health Centers related to activities associated with our HCCN grant.
5. Several dental leaders are able to run their own financial, operational and clinical quality reports while some rely on other departments within the Health Center.
6. The primary focus for tracking dental programs is utilization (visits, sealants, no-shows). There does, however, seem to be interest in expanding these efforts. Treatment plan completion rate was noted by several respondents as a measure of interest.
7. Although Health Centers are utilizing population health tools, patient portals and the state's health information exchange platform, dental is not included in those efforts.

Next Steps.

Where we go from here

Based on these findings, our next steps include:

1. Partnering with one Health Center to take a deep dive into its infrastructure, workflows and HIT systems associated with capturing and monitoring oral health data.
2. Partnering with our HCCN to have 1:1, targeted conversations with our members related to HIT for their dental programs.
3. Re-engage the dental peer networking committee to discuss lessons learned and establish consensus on measures that can be tracked going forward to tell the Health Center oral health story.

If you are interested in learning more about this project, contact Da-Nell Pedersen, Director of Clinical Programs: danellp@aachc.org.