The Oral Health Workforce & Access to Dental Care

Beth Mertz, PhD, MA

National Health Policy Forum
April 10, 2015
Objectives

1. Provide an overview of the current dental access and workforce landscape
2. Understand the delivery system context of dental workforce challenges
3. Discuss system reforms and workforce implications that hold potential to improve access to care
Separate & Different Systems of Care

Medical Care
- Comprehensive coverage
- Diverse workforce
- Multiple entry points
- Quality measures
- Evidence based practice
- Emergency services guaranteed

Dental Care
- Coverage limited
  - no Medicare, ACA & Medicaid required only pediatric
- Lack of workforce diversity
- System entry limited
- Utilization measures
- Few emergency service options
Access to Dental Care – US Population

Total Population 281 Million

Community Living 277 Million

Generally Healthy 253 Million

Not economically Disadvantaged 210 Million

Non-Remote 199 Million

Institutionalized 4 Million

Severe Medical Co-morbidities 25 Million

Economically Disadvantaged 43 Million

Remote 11 Million

Non-Remote 40 Million

Remote 3 Million

82 Million Americans (1 in 3 people)

Source: American Dental Association
## Seniors' Immediate Plans After Graduation by Race/Ethnicity, by Percentage of Total 2013 Respondents

Source: American Dental Education Association, Survey of Dental School Seniors, 2013 Graduating Class
Note: Percentages may not total 100% due to rounding.

<table>
<thead>
<tr>
<th>Immediate Plans</th>
<th>American Indian or Alaska Native</th>
<th>Asian</th>
<th>Black or African American</th>
<th>Hispanic or Latino</th>
<th>Native Hawaiian or Pacific Islander</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Private Practice Dentist</strong></td>
<td>26.3%</td>
<td>52.8%</td>
<td>36.0%</td>
<td>51.6%</td>
<td>68.4%</td>
<td>49.4%</td>
</tr>
<tr>
<td>Faculty / Staff Member at a Dental School</td>
<td>0.0%</td>
<td>0.7%</td>
<td>0.6%</td>
<td>0.0%</td>
<td>5.3%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Armed Forces</td>
<td>15.8%</td>
<td>2.4%</td>
<td>3.4%</td>
<td>3.2%</td>
<td>0.0%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Other Federal Service (i.e. VA)</td>
<td>0.0%</td>
<td>0.8%</td>
<td>2.8%</td>
<td>2.1%</td>
<td>0.0%</td>
<td>1.2%</td>
</tr>
<tr>
<td>State or Local Government Employee</td>
<td>5.3%</td>
<td>1.0%</td>
<td>2.8%</td>
<td>1.1%</td>
<td>0.0%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Public Health Commissioned Corp</td>
<td>15.8%</td>
<td>1.3%</td>
<td>4.5%</td>
<td>1.8%</td>
<td>0.0%</td>
<td>2.6%</td>
</tr>
<tr>
<td><strong>Dental Graduate Student / Resident / Intern</strong></td>
<td>36.8%</td>
<td>34.4%</td>
<td>43.8%</td>
<td>34.6%</td>
<td>21.1%</td>
<td>34.2%</td>
</tr>
<tr>
<td>Other Type of Student</td>
<td>0.0%</td>
<td>1.1%</td>
<td>0.0%</td>
<td>1.1%</td>
<td>0.0%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Other Position Related to Dentistry</td>
<td>0.0%</td>
<td>2.1%</td>
<td>2.2%</td>
<td>1.1%</td>
<td>0.0%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Unsure</td>
<td>0.0%</td>
<td>3.5%</td>
<td>3.9%</td>
<td>3.5%</td>
<td>5.3%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>
Trends in Dentist Capacity and Distribution: Count of DHPSAs

<table>
<thead>
<tr>
<th></th>
<th>Dental HPSAs:</th>
<th>Percent of need met</th>
<th>Practitioners needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>4878</td>
<td>40.79%</td>
<td>7208</td>
</tr>
</tbody>
</table>

Source: http://kff.org/other/state-indicator/dental-care-health-professional-shortage-areas-hpsas/#table
Minority Applicants to U.S. Dental Schools: 1990 to 2013

- **Asian**
  - 1990-91: 860
  - 2000-01: 1,821
  - 2010-11: 3,234
  - 2013-14: 2,916

- **Hispanic or Latino**
  - 1990-91: 351
  - 2000-01: 506
  - 2010-11: 859
  - 2013-14: 946

- **American Indian or Alaska Native**
  - 1990-91: 17
  - 2000-01: 39
  - 2010-11: 38
  - 2013-14: 36

- **Black or African American**
  - 1990-91: 316
  - 2000-01: 391
  - 2010-11: 694
  - 2013-14: 635

*Note: This chart does not include "Native Hawaiian or Pacific Islander," which was introduced as a category in 2010-11*

Source: American Dental Education Association, U.S. Dental School Applicants and Enrollees, 2013 Entering Class
Number and Type of Accredited Allied Dental Education Programs, 1970–2013

- Source: American Dental Association, Survey Center, Surveys of Allied Dental Education
Access to Dental Care

Approaches include:
1. Health education
2. Medicaid expansion, ACA pediatric mandate
3. Workforce redesign*
   - Capacity
   - Flexibility
   - Diversity

http://www.nhpf.org/library/details.cfm/2840
Endemic workforce problems

The Surgeon General’s 2000 Report expressed “concerns about a declining dentist-to population ratio, an inequitable distribution of oral health care providers, a low number of underrepresented minorities applying to dental school, the effects of the costs of dental education and graduation debt on decisions to pursue a career in dentistry, the type and location of practice upon graduation, current and expected shortages in personnel for dental school faculties and oral health research, and an evolving curriculum with an ever expanding knowledge base”

• In 2009 an IOM workshop reiterated these problems.
• In 2011, two IOM reports reiterated these problems.
• A 1980 IOM report identified these same problems!
Symptom or disease?

• The problem is with the system and its drivers
• In fact, the dental labor economy is working quite well!
  – This is what “free market” health care looks like
• The deficiencies in access are indicators of structural problems in the overall market structure
Changing health policy paradigms

Traditional

Access

Quality ↔ Cost

Health Reform

Experience of Care

Health of a Population

Per Capita Cost

IHI Triple Aim
Performance expectations for the 21st century health care system

- Safe
- Effective
- Patient Centered
- Timely
- Efficient
- Equitable

Is Dental Care Safe?

• Traditional safety measures
  – Accreditation
  – Standards
  – Licensure & Regulation
  – Occupational health

• Little quantifiable data on how safe the system actually is because
  – No Dx codes
  – No CER
  – No disease registries
  – No system accountability

Workforce implications

• How do we know if one provider is better/worse than another?
  – Task vs. outcomes
  – Individual vs. team
Is Dental Care Effective?

• Oral health outcomes?
• Professional care vs. home care?
• Evidence-based protocols?
• EHR and technology use
  – Diagnosis
  – Decision support
  – Metrics

Workforce implications
• Are we spending millions of dollars fighting scope of practice battles over tasks that have no reason to even be done?
• Retooling workforce to impact health outcomes is challenge of this century
Is Dental Care Patient-Centered?

• Shared decision making often revolves around cost rather than treatment effectiveness.
• Removal of teeth is often only option and comes with long term negative impacts on the “whole patient”
• Divorced from medical care decisions

**Workforce implications**

• Surgeons vs. health coaches?
  – Patients are unaware of the basic etiology of the diseases that are causing thousands of dollars of restorative work to be needed in their mouths
Is Dental Care Timely?

• If you can pay and you have a car, yes.
• Time is relative:
  – Prevention vs. restorations

Workforce implications
• More access points needed, and for earlier intervention
  – Rural / poor areas
  – In medical settings
  – In public health settings
  – In schools
  – In nursing homes, prisons, and other institutions
Is Dental Care Efficient?

- 60% overhead on a dental office which is open 10 of 24 hours a day for 4 of 7 days a week.
- Majority of dental offices are still one or two person small business with no meaningful EHR
- Larger group and corporate practice models are the growth areas of dentistry

Workforce implications
- Matching the work to the worker is a fundamental strategy for improving efficiency
- Limited capacity to retool the workforce in small disconnected settings
- Scope of practice restrictions further impede innovation
Is Dental Care Equitable?

• Absolutely, fundamentally, unequivocally, not

• Vast over- and under-use exists and disparities are clearly identified around every social indicator
  – Race
  – Income
  – Age
  – Disability
  – Rural location

Workforce implications

• Capacity
• Diversity
• Flexibility

• Strategic management of care delivery systems with full accountability for coverage, utilization and outcomes
What is keeping us from making these changes?

Evidence
- Need
- Disease
- Coverage

Politics
- Inertia
- Turf
- Power
- Identity
Conclusion

• Endemic problems with workforce capacity, flexibility and diversity are *structural* not *individual* problems
• Increasing complexity and integration of systems will drive future change and accountability of the workforce toward producing health outcomes
• Critical question is do we have the right inputs to develop, staff and deploy a dental team that can meet these challenges?
Beth Mertz, PhD, MA
Assistant Professor, School of Dentistry
Center for the Health Professions
University of California, San Francisco
3333 California Street, Suite 410
San Francisco, CA 94118
Phone: 415/502-7934
elizabeth.mertz@ucsf.edu