

The Role of Dental Workforce Estimation and Geography in Understanding Access to Dental Care for Medicaid Children

Some Early Lessons from the New York State Department of Health Children's Oral Healthcare Access Atlas Project

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Overview

How we count the dental workforce changes the Medicaid access picture

- Simple enumeration hides differences in specialty and workforce participation

Geography matters at both the micro and macro level

- The county workforce characteristics of local providers define the capacity that is available for Medicaid patients who do not have access to safety net providers.
- In sub-county areas there can be real differences seen in access

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New York State Department of Health Children's Oral Healthcare Access Atlas Project

The atlas is a comprehensive mapping and statistics project that covers all NY counties and 19 NY metropolitan areas

The goal is to equip NYS county health departments with the tools to target local problems in dental care access

- Geographically correct maps that depict the locations of dental providers and concentrations of disadvantaged children within a county
- Statistical tabulations of the corresponding county dental workforce and population demographics

The ADA is under contract to NY state to provide dental workforce data and expertise in dental workforce and dentist geography

Funding for the work is through a grant to NY state managed by Health Research Inc.

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Limitations in Determining Workforce

License Data Presents Problems

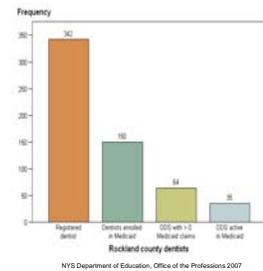
Location is the primary mailing address on record

Licensee need not be in clinical practice

Licensee can be full or part time dentist

Some dentists have licenses in multiple states

Rockland County, NY Registered Dentists



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Dental Specialty Impacts Medicaid Access by Changing Capacity

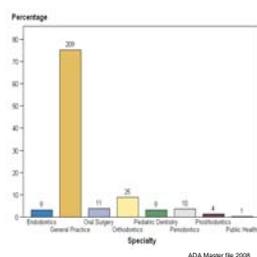
Specialties Contribute Unequally to Access

General practice and pediatric dentists can deliver the most Medicaid care

- Deliver the high volume services
- See the highest frequency of patients

Other specialists are limited in what they can provide by their clinical specialization

Rockland County, NY Dentists by Specialty



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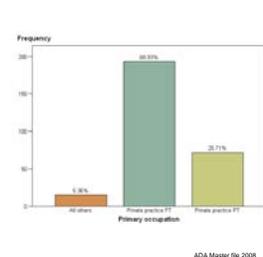
Workforce Participation Impacts Medicaid Access

Part-time Dentists Meet Less Demand

The local dental workforce need to be expressed as FTEs

- Provides a better measure of existing capacity
- Provides a better opportunity to spot where capacity can be increased
- Provides a statistical adjustment to supply

Primary Occupation of Rockland County Dentists



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Rethinking the Dental Workforce in Rockland County, NY

There are 278 dentists in Rockland County, not the 342 registered dentists

- Twenty-three percent less
 - Difference lives in the county, but practices elsewhere
- 218 are in prime Medicaid utilization areas of general practice or pediatric dentistry
- Sixty-nine percent are FT
 - Twenty-six percent are PT

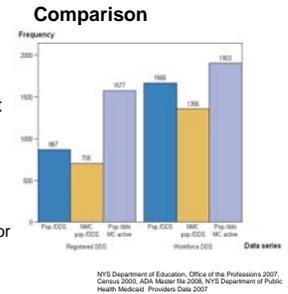
Population per Dentist Rates: Registered Dentists versus Workforce Dentists

Observations

All the rates are higher between the two series

The active Medicaid dentist rate is much less so in the workforce series

- There might be Medicaid specialists present
- Do not know the FT/PT rate for Medicaid active dentists
- Calculations need to include these to improve accuracy



Geography is Another Dimension of Access

Are the Medicaid providers located near the Medicaid patients

- A reasonable physical distance
- A reasonable experiential distance
 - Is the dentist in the "neighborhood" of the patient's caregiver
 - Perceptual rather than spacial

A proxy is needed for Medicaid enrolled children

- Do not have their addresses
- Do not have them tabulated by census tract
- We cannot map them

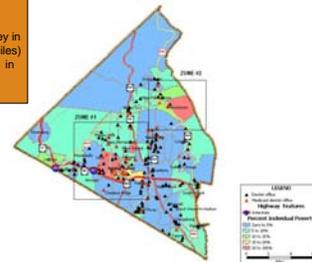
We can use the **number of families below poverty with children less than 18** for a proxy measure

- Permits us to plot a concentration of poor children many of whom are enrolled in Medicare
- Local conditions can vary from the actual Medicaid enrollment

Rockland County, NY Census Tracts and Dentist Offices by Percent Poverty

Two concentrations of poverty are found

- Zone #1 – Spring Valley in the SW center (5x7 miles)
- Zone #2 – Haverstraw in NE (4x5 miles)



Zone #1 - Census Tracts and Dentist Offices by Percent Poverty and Number of Families Below Poverty Level with Children Under 18



Findings for Zones #1 and #2

Zone #1

There are many poor children in the area (approx. 2,000-2,500)

There are 71 dentist offices

- Medicaid 31% (n=22)
- Non-Medicaid 69% (n=49)

Good News

- Most concentrations of poor children have one or more Medicaid dentists within one mile of them.
- Most Medicaid dentists are in Spring Valley itself along Routes 98 and 45

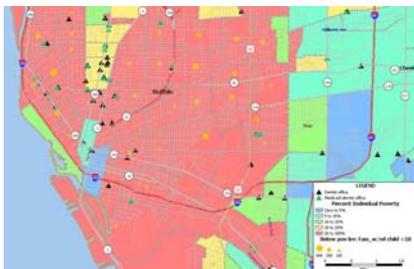
New Square in the NE is an exception

- About 500 children without a Medicaid dental provider near

Zone #2 did not have a large concentration of poor children

- Approximately 400 children
- Four Medicaid dentists in the area (1 mile)

SE Buffalo, NY Census Tracts and Dentist Offices by Percent Poverty and Number of Families Below Poverty Level with Children Under 18



NYS Department of Public Health Medicaid Providers Data 2007, Census 2000, and ADA Master file 2008

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What is Going on in Buffalo, NY?

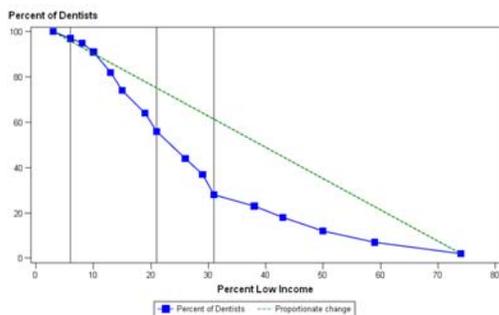
In the NE part of the city there is a very large area that is devoid of dentists

- The area is poor
- There are many young children
- There are few dentists Medicaid or Non-Medicaid

Part of a national urban phenomena

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Percent of Dentists Found in US Census Tracts with the Corresponding Percent of Low Income Population



ADA Master file 2007, US Census 2000

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What is the Curve Telling Us

Interpreting the Pareto curve

- Change is proportionate until percent poverty reached 10%
- Accelerates sharply between 10% and 30%
 - 30% is the 75th percentile
- Continues to decline, but much slower after 30%
 - Approaches zero after 70%

Possible drivers

- Solo providers will choose to locate where efficient demand is
- The location of minority dentists is no different than non-minority dentists
- Poor communities might not have suitable clinic space

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Summary

Ultimately, access to care is the sum of thousands of individual patient successes or failures to obtain care locally

To target local problems in dental care access local decision-makers need to be equipped with the tools to do so

- Geographically correct maps that depict the locations of dental providers and concentrations of disadvantaged children within a county
- Statistical tabulations of the corresponding county dental workforce and population demographics

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