Health Professional Shortage Areas and Scoring
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Bureau of Health Workforce (BHW)
Health Resources and Services Administration (HRSA)
Today’s Discussion Topics

1. Programs that use shortage designations
2. Types of Health Professional Shortage Area (HPSA) designations
3. HPSA designation criteria
4. HPSA scoring
5. Shortage designation modernization
## Shortage Designations

**Not just the NHSC and CHC Program Anymore**

<table>
<thead>
<tr>
<th>Shortage Designation Option</th>
<th>National Health Service Corps (NHSC)</th>
<th>NURSE Corps</th>
<th>Health Center Program</th>
<th>CMS Medicare Incentive Payment</th>
<th>CMS Rural Health Clinic Program</th>
<th>J-1 Visa Waiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geographic HPSA</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Population HPSA</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Facility HPSA</td>
<td>X</td>
<td>X</td>
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</tr>
<tr>
<td><strong>Dental Care</strong></td>
<td></td>
<td></td>
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<tr>
<td>Geographic HPSA</td>
<td>X</td>
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<tr>
<td>Population HPSA</td>
<td>X</td>
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<tr>
<td>Facility HPSA</td>
<td>X</td>
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<tr>
<td><strong>Mental Health</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Geographic HPSA</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Population HPSA</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Facility HPSA</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>Exceptional MUP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Medically Underserved Area</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Medically Underserved Population</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Governor’s Certified Shortage Area</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Types of HPSAs

A shortage of:

- Primary Care
- Mental Health
- Dental Health

in a:

- Geographic Area
- Population Group
- Facility
While the general components of designation analysis are similar across designation types, the specific eligibility criteria vary depending on designation type...

Geographic Area  Population  Facility
In order to achieve a designation, the area under consideration must:

1. Be a **rational area** for the delivery of services;
2. Have a **certain ratio of population to providers** serving the area that has been determined to qualify as a shortage; and
3. Demonstrate that health professionals in contiguous areas are **excessively distant, over-utilized, or inaccessible** to the population under consideration.
Rational Service Area (RSA)

A state-identified geographic area within which most area residents could or do seek and obtain most of their health care services

RSAs can be:
1) A whole county
2) Multiple counties
3) Sub-counties
4) Statewide Rational Service Areas (SRSA)
5) Catchment areas (for mental health only)

Rules of RSA Determination:
1) RSAs cannot overlap existing designations
2) RSAs cannot be smaller than a census tract
3) Exceed travel time between population centers
4) RSAs cannot carve out interior portions
## Ratio of Population to Providers
### Which Providers Count?

<table>
<thead>
<tr>
<th>Primary Care</th>
<th>Mental Health</th>
<th>Dental Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes Doctors of Medicine (MD) and Doctors of Osteopathy (DO) who provide services in the following specialties:</td>
<td>Includes:</td>
<td>Includes:</td>
</tr>
<tr>
<td>▪ Family Practice</td>
<td>▪ Psychiatrists</td>
<td>▪ Dentists</td>
</tr>
<tr>
<td>▪ Internal Medicine</td>
<td>▪ Clinical Psychologists</td>
<td>▪ Dental Auxiliaries</td>
</tr>
<tr>
<td>▪ Obstetrics and Gynecology</td>
<td>▪ Clinical Social Workers</td>
<td></td>
</tr>
<tr>
<td>▪ Pediatrics</td>
<td>▪ Psychiatric Nurse Specialists</td>
<td>Dental auxiliaries are defined as any non-dentist staff employed by the dentist to assist in the operation of the practice.</td>
</tr>
<tr>
<td></td>
<td>▪ Marriage &amp; Family Therapists</td>
<td></td>
</tr>
</tbody>
</table>

Note: Providers solely engaged in administration, research or training are excluded.
Each HPSA category has a unique **ratio of population to providers**, which has been identified as the point at which it can be designated as having a shortage of health professionals.

<table>
<thead>
<tr>
<th></th>
<th>Primary Care</th>
<th>Mental Health</th>
<th>Dental Health</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Geographic</strong></td>
<td>3,500:1</td>
<td>6,000:1 &amp; 20,000:1 CMH and Psychiatrists</td>
<td>5,000:1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>9,000:1 CMH only</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>30,000:1 Psy only</td>
<td></td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td>3,000:1</td>
<td>4,500:1 &amp; 15,000:1 CMH and Psychiatrists</td>
<td>4,000:1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6,000:1 CMH only</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>20,000:1 Psy only</td>
<td></td>
</tr>
<tr>
<td><strong>Facility</strong></td>
<td>1,000:1</td>
<td>2,000:1</td>
<td>1,500:1</td>
</tr>
<tr>
<td><strong>Min Pop 500</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Min Inmate Pop 250</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Min Pop 1,000</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Population of the area must meet at least one of several criteria demonstrating higher than normal need.

- At least 20% population at or below 100% FPL
- More than 100 births/year per 1,000 women ages 15-44
- More than 20 infant deaths per 1,000 live births
- Have insufficient capacity

- At least 20% of the population has income at or below 100% FPL
- More than 50% of the population has no fluoridated water
- Have insufficient capacity

- At least 20% of the population at or below 100% FPL
- The youth ratio exceeds 0.6
- The elderly ratio exceeds 0.25
- A high prevalence of alcoholism
- A high degree of substance abuse
Review of Contiguous Area (CA) Resources

When determining whether an area’s “neighbors” are accessible for health care services, HRSA asks:

- Are the providers excessively distant?
- Are the providers over-utilized?
- Are the CA providers inaccessible?
- Is there a demographic disparity?
- Does the CA have economic barriers?
Facility HPSA Designations

Federal and State Correctional Institutions
- Be medium or maximum security
- Have at least 250 inmates
- Meet internees/year to provider ratio thresholds:

<table>
<thead>
<tr>
<th>Primary Care</th>
<th>Dental Health</th>
<th>Mental Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000:1</td>
<td>1,500:1</td>
<td>2,000:1</td>
</tr>
</tbody>
</table>

State and County Mental Hospitals
- Have an average daily inpatient census of at least 100
- The number of workload units per psychiatrist FTE exceeds 300

Public or Non-Profit Medical Facilities
- Provide primary care, dental, or mental health services to a similarly designated geographic or population HPSA
- Have insufficient capacity to meet the needs of that area or population group
Automatically Designated HPSAs

Using the statute and regulations, HRSA has deemed the following facility types as eligible for automatic HPSAs:

- ✓ Health Centers (funded under Sec. 330)
- ✓ Health Center Look-Alikes
- ✓ Tribally-Run Clinics
- ✓ Urban Indian Organizations
- ✓ Dual-Funded Tribal Health Centers
- ✓ Federally-Run Indian Health Service Clinics
- ✓ Rural Health Clinics
## Auto HPSAs compared to other HPSAs:
Similar but not the same

<table>
<thead>
<tr>
<th>Other HPSAs</th>
<th>Automatic Facility HPSAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Designation &amp; scoring done online</td>
<td>• Designation &amp; scoring currently done manually</td>
</tr>
<tr>
<td>• Criteria used to first designate as HPSA</td>
<td>• <strong>No designation</strong> process necessary</td>
</tr>
<tr>
<td>• Criteria used to determine HPSA score</td>
<td>• Same criteria used to determine HPSA score as other HPSAs</td>
</tr>
<tr>
<td>• Scores range from 0-25 (26 for dental)</td>
<td>• Same scoring range used</td>
</tr>
<tr>
<td>• Designations are required to be reviewed and updated as necessary</td>
<td>• Designations are <strong>not required</strong> to be reviewed; updates must be requested by facility</td>
</tr>
<tr>
<td>annually</td>
<td>• Score of “0” more frequent and means low shortage or no data was provided by the facility</td>
</tr>
</tbody>
</table>
How are HPSA Scores Used?

1. Priority in Awards
2. Award Levels
3. Scholar Placement

1. Funding Preference
2. Scholar Placement
HPSA scores are based on a variety of factors and range from 0 to 25 in the case of Primary Care and Mental Health, and 0 to 26 in the case of Dental Health.

### Primary Care
0-25

- Population-to-Provider Ratio Point Value
- Double Weighted
- % of Population at 100% Federal Poverty Level Point Value
- Infant Health Index Point Value (Based on IMR or LBW Rate)
- Travel Time to Nearest Source of Care Point Value
- HPSA Score (out of 25)

### Dental Health
0-26

- Population-to-Provider Ratio Point Value
- Double Weighted
- % of Population at 100% Federal Poverty Level Point Value
- Water Fluoridation Status Point Value
- Travel Time to Nearest Source of Care Point Value
- HPSA Score (out of 26)

### Mental Health
0-25

- Population-to-Provider Ratio Point Value
- % of Population at 100% Federal Poverty Level Point Value
- Alcohol Abuse Prevalence Point Value
- Substance Abuse Prevalence Point Value
- Elderly Ratio Point Value
- Youth Ratio Point Value
- Travel Time to Nearest Source of Care Point Value
- HPSA Score (out of 25)
# HPSA Scoring Calculations

<table>
<thead>
<tr>
<th>Factor</th>
<th>Primary Care</th>
<th></th>
<th>Dental Health</th>
<th></th>
<th>Mental Health</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Max Pts Awarded</td>
<td>Multiplier</td>
<td>Total Points Possible</td>
<td>Max Pts Awarded</td>
<td>Multiplier</td>
<td>Total Points Possible</td>
</tr>
<tr>
<td>Population : Provider Ratio</td>
<td>5</td>
<td>x 2</td>
<td>= 10</td>
<td>5</td>
<td>x 2</td>
<td>= 10</td>
</tr>
<tr>
<td>% of Population below FPL</td>
<td>5</td>
<td>x 1</td>
<td>= 5</td>
<td>5</td>
<td>x 2</td>
<td>= 10</td>
</tr>
<tr>
<td>Travel distance/time to NSC</td>
<td>5</td>
<td>x 1</td>
<td>= 5</td>
<td>5</td>
<td>x 1</td>
<td>= 5</td>
</tr>
<tr>
<td>Ratio of children under 18 to adults 18-64</td>
<td>5</td>
<td>x 1</td>
<td>= 5</td>
<td>1</td>
<td>x 1</td>
<td>= 1</td>
</tr>
<tr>
<td>Ratio of adults 65 and older to adults 18-64</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Substance prevalence</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol abuse prevalence</td>
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<td></td>
</tr>
<tr>
<td><strong>Max Score:</strong></td>
<td></td>
<td></td>
<td>= 25</td>
<td></td>
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</tr>
</tbody>
</table>
HPSA Scoring Criteria Example

Primary Care

0-25

Population-to-Provider Ratio Point Value Double Weighted

% of Population at 100% Federal Poverty Level Point Value

Infant Health Index Point Value (Based on IMR or LBW Rate)

Travel Time to Nearest Source of Care Point Value

HPSA Score (out of 25)

Primary Care Ratio

Core Primary Care Ratio

Ratio Value

10,000 : 1 ≤ Ratio

No Physicians and 2,500 ≤ Population

5

5,000 : 1 ≤ Ratio < 10,000 : 1

No Physicians and 2,000 ≤ Population

4

4,000 : 1 ≤ Ratio < 5,000 : 1

No Physicians and 1,500 ≤ Population

3

3,500 : 1 ≤ Ratio < 4,000 : 1

No Physicians and 1,000 ≤ Population

2

3,000 : 1 ≤ Ratio < 3,500 : 1

No Physicians and 500 ≤ Population

1

IMR = 8.25

LBW = 8.3%

100 percent of Poverty Rate

Poverty Value

50% ≤ Poverty

5

40% ≤ Poverty < 50%

4

30% ≤ Poverty < 40%

3

20% ≤ Poverty < 30%

2

15% ≤ Poverty < 20%

1

Time (in minutes) or Distance (in miles)

Travel Value

60 ≤ Time or 50 ≤ Distance

5

50 ≤ Time < 60 or 40 ≤ Distance < 50

4

40 ≤ Time < 50 or 30 ≤ Distance < 40

3

30 ≤ Time < 40 or 20 ≤ Distance < 30

2

20 ≤ Time < 30 or 10 ≤ Distance < 20

1

Travel Distance = 7 miles

Travel Time = 62 minutes

= 7,249 : 1

= 60%
**HPSA Scoring Criteria Example**

**Primary Care**

0-25

- **Population-to-Provider Ratio Point Value**
  - Double Weighted
- **% of Population at 100% Federal Poverty Level Point Value**
- **Infant Health Index Point Value**
  - (Based on IMR or LBW Rate)
- **Travel Time to Nearest Source of Care Point Value**

<table>
<thead>
<tr>
<th>HPSA Criteria</th>
<th>Values</th>
<th>Primary Care Final Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population-to-Provider Ratio</td>
<td>7,249 : 1</td>
<td>(4x2) = 8</td>
</tr>
<tr>
<td>100 percent of Poverty Rate</td>
<td>60%</td>
<td>(5x1) = 5</td>
</tr>
<tr>
<td>Infant Mortality Rate</td>
<td>8.25</td>
<td>(0)</td>
</tr>
<tr>
<td>Low Birth Weight Rate</td>
<td>8.3%</td>
<td>(1x1) = 1</td>
</tr>
<tr>
<td>Time (in minutes)</td>
<td>62 minutes</td>
<td>(5x1) = 5</td>
</tr>
<tr>
<td>Distance (in miles)</td>
<td>7 miles</td>
<td>(0)</td>
</tr>
</tbody>
</table>

**IMR is excluded because you take the higher of the two scores between IMR and LBW**

**Distance is excluded because you take the higher of the two scores Travel Time and Travel Distance**

**HPSA Score (out of 25)**

19
Shortage Designation Project

Bridging people, processes, and data

- Regular Updates
- Designation Updates of Scores via Standard Data
- Use of Predefined Rational Service Areas
- Standard Data Sets
- Auditable & Traceable
- Projections Based on Standard Data
- Impact Analysis & Trending
- Defined Roles & Responsibilities
- New Business Process & Functions
- Single, Automated System for all Processing & Scoring
### Shortage Designation Project | Today & the Future

<table>
<thead>
<tr>
<th>Today</th>
<th>The Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every new designation uses the same standardized data.</td>
<td>Every migrated designation uses the same standardized data with the HPSA update and continue to source standardized data.</td>
</tr>
<tr>
<td>Application and review steps are fully automated and have eliminated manual processing.</td>
<td>Release additional functionality to streamline and automate.</td>
</tr>
<tr>
<td>Business rules and system validations are reflective of regulation and policy and applied to every designation.</td>
<td>Continue requirements definition with State and HRSA involvement for additional functionality.</td>
</tr>
<tr>
<td>Policy definition well aligned with authorizing statutes and regulations.</td>
<td>Ongoing clarification of regulations in order to define policy and requirements.</td>
</tr>
<tr>
<td>Paper has been eliminated, excluding supporting documentation.</td>
<td>A fully automated, transparent shortage designation business process that leverages standardized, national data for timely and accurate designations.</td>
</tr>
</tbody>
</table>
Shortage Designation Management System (SDMS) …

... is an **application tool** used to manage designations

... uses **standard data sets** to calculate designations

... is written based on **regulations**
• **Standardized data are sourced from:**
  - The Centers for Medicare and Medicaid Services (CMS) for provider data
  - The Centers for Disease Control and Prevention (CDC) for infant health data
  - The Census Bureau for population data
  - The Environment Systems Research Institute (ESRI) for travel and spatial mapping data
Stakeholder Engagement

Feedback Mechanisms for State Input:

- State PCO/PCA/HRSA Steering Committee
- State PCO/HRSA Technical Working Group
- State PCO/HRSA Policy Working Group
- PCO monthly conference calls
- Dedicated shortage designation email box
- Individual State PCO interaction with HRSA Project Officers

Additional Support Resources:

- Individual State PCO technical assistance
- SDMS demos and hypercare sessions
- User guides, policy and procedures manuals
- Monthly National SDMS snapshots
- Monthly State-specific snapshots
- Webinars and trainings
**Project Timeline—Key Milestones***

**October 2016**
- PCOs finish updating current providers
- HRSA begins impact analysis

**January 2017**
- Initial impact analysis provided to stakeholders

**May 2017**
- PCOs finish updating new providers

**June 2017**
- Second impact analysis provided to stakeholders

**July 2017**
- Update of all designations

*PCOs can submit, review, revise, or withdraw designations at any time.*
Questions
Connect With Us

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Workforce Connections newsletter: www.hrsa.gov/subscribe
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twitter.com/NHSCorps

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facebook.com/nationalhealthservicecorps
facebook.com/HRSANURSECorps