

Comments on HRSA/BHW Request for Information – Health Professional Shortage Area Scoring Criteria

Overview

The Health Resources and Services Administration (HRSA), through its Bureau of Health Workforce (BHW), released a Request for Information (RFI) regarding Health Professional Shortage Area (HPSA) Scoring Criteria. This RFI seeks broad stakeholder feedback regarding current HPSA scoring criteria and possible future approaches. The aim is to improve the current HPSA scoring methodology and develop a system that equitably, impartially, and transparently scores HPSAs to reflect relative need.

The National Organization of State Offices of Rural Health (NOSORH) was established in 1995 to assist State Offices of Rural Health (SORHs) in their efforts to improve access to, and the quality of, health care for over 60 million rural Americans. All 50 states have a SORH, and each SORH assists their state's rural communities in building effective health care delivery systems. NOSORH has prepared this set of comments in response to BHW's HPSA scoring RFI. The comments reflect NOSORH's interest in improving the current HPSA scoring methodology so that it better reflects the needs of the nation's rural and frontier areas.

NOSORH understands that HPSA scores are used primarily in determining relative priority for the assignment of National Health Service Corps (NHSC) personnel. It is separate from the *Determination of Degree of Shortage*, a methodology for ascertaining relative need of HPSAs that is established by rules in 42 CFR Ch. I Pt. 5, App. A. NOSORH believes that, while the *Determination of the Degree of Shortage* methodology is a fairly balanced means of establishing the relative need of HPSAs, the current HPSA scoring methodology inaccurately reflects the relative needs of many rural and frontier HPSAs. These comments identify several issues, which NOSORH believes are the cause of these distortions. The comments also include detailed recommendations for addressing these issues.

In preparing these comments, NOSORH conducted a comprehensive analysis of HPSA scoring for Primary Medical Care HPSAs. More importantly, NOSORH conducted a survey of, and a listening session with, its member SORHs, exploring their perspectives on the questions raised in the RFI. NOSORH believes that these SORH perspectives provide important real world understanding of the impact of HPSA scoring on rural HPSAs throughout the nation. These comments summarize the results of the data analysis and of SORH input.

NOSORH's comments are organized into the following sections:

- **HPSA Scoring Data Analysis,**
- **Issues Identified by SORHs, and**
- **NOSORH Recommendations for HPSA-Scoring Changes.**

NOSORH is encouraged by the wide-ranging questions raised in the RFI. NOSORH believes that HRSA/BHW is to be commended on this effort to reassess the efficacy of the HPSA scoring process. NOSORH trusts that its comments will contribute meaningfully to this reassessment. NOSORH stands ready to share the results of its analysis and to assist HRSA/BHW in further exploration of this topic.

HPSA Scoring Data Analysis

NOSORH conducted a comprehensive review of current Primary Medical Care HPSAs. This review included all HPSA types – geographic, population and facility. Facility HPSA analysis was limited to Federally Qualified Health Centers (FQHC), Rural Health Clinic (RHC) and Indian Health Service/Tribal (IHS-Tribal) facilities.

NOSORH's analysis examined the number and percentage of rural and urban HPSAs of each type. Rural and urban HPSA definitions were those used by BHW. For purposes of review, HPSAs identified as *partially rural* were considered as rural. NOSORH did not conduct similar analyses on Dental Health HPSAs or Mental Health HPSAs. NOSORH believes, however, that since all three HPSA disciplines share core scoring factors, the findings for Primary Medical Care HPSAs are indicative of the situation in these other designations.

NOSORH's analysis also assessed the range of HPSA scores for rural and urban Primary Medical Care HPSAs. It focused on the *number* and *percentage* of Primary Medical Care HPSAs which received a *score of 16 or higher* – the effective cutoff point for potential assignment of NHSC personnel. The analysis looked at overall patterns in NHSC-eligible HPSA scores and rural/urban disparities in scoring.

The NOSORH data analysis indicated the following findings:

- The ***largest number of designated rural Primary Medical Care HPSAs are Population HPSAs*** [1,117], followed by RHC HPSAs [1,113] and Geographic HPSAs [1,083]. There are only 461 rural Primary Medical Care FQHC HPSAs – fewer than half of the 999 non-rural HPSAs of this type.
- The ***largest number of NHSC-qualifying rural Primary Medical Care HPSAs*** with a score of at least 16 are ***RHC HPSAs*** [544], followed by Population HPSAs [518], Geographic HPSAs [324] and FQHC HPSAs [304].
- ***44.2% of rural Primary Medical Care Population HPSAs received a score of 16 or above.*** This is lower than the 49.9% of non-rural Primary Medical Care Population HPSAs.
- ***65.9% of rural Primary Medical Care FQHC HPSAs received a score of 16 or above.*** This is far lower than the 80.7% of non-rural Primary Medical Care FQHC HPSAs.
- ***Only 48.9% of rural Primary Medical Care RHC HPSAs received a score of 16 or above.***

- **29.9% of rural Primary Medical Care Geographic HPSAs received a score of 16 or above.** This is slightly higher than the 27.6% of non-rural Primary Medical Care Geographic HPSAs.

There are several implications of these findings.

- The **current HPSA scoring methods for Geographic Primary Medical Care HPSAs result in very few NHSC-qualifying scores of 16 and above.** This is true for both rural or non-rural HPSAs. This low percentage of NHSC-qualifying scores is surprising. It suggests that, for purposes of making an area eligible for NHSC assignments, other HPSA types should be pursued.
- **Fewer than half of rural Primary Medical Care Population HPSAs received NHSC-qualifying scores.** Population HPSAs are the largest category of rural Primary Medical Care HPSAs. The relatively low percentage of NHSC-qualifying HPSAs in this category is a potential problem.
- When compared with non-rural Primary Medical Care FQHC HPSAs, there is a **relatively low percentage of NHSC-qualifying rural Primary Medical Care FQHC HPSAs.** This suggests that there may be bias against rural FQHC HPSAs in the HPSA-scoring methodology.
- **Fewer than half of all rural Primary Medical Care RHC HPSAs received NHSC-qualifying HPSA scores.** This compares with over 80% of non-rural Primary Medical Care FQHC HPSAs. This finding suggests that there may be bias in the HPSA-scoring methodology in favor of FQHC facilities.

Issues Identified by SORHs

NOSORH conducted a listening session with member SORHs to assess individual state experiences with HPSA scoring for rural HPSAs. Prior to the session, state-specific listings of rural Primary Medical Care HPSAs were disseminated to all SORHs. These listings provided separate listings of rural geographic, population and facility HPSAs, ranked by HPSA score. The listings provided SORHs participating in the listening session with an evidence base for comments.

Subsequent to the listening session, NOSORH conducted a survey of all member SORHs on the questions of rural HPSA-scoring. This permitted input from SORHs unable to participate in the listening session. The issues suggested in NOSORH's data analysis were largely confirmed by SORHs in the group listening session and subsequent survey. These issues are described in greater detail below:

- **Issue - It is difficult for both geographic and low-income population HPSAs in rural areas to achieve NHSC-qualifying scores.**

SORHs from all regions of the country commented on this problem. Difficulties in getting NHSC-qualifying scores were experienced for all HPSA disciplines – Primary Medical Care, Dental Health and Mental Health. Several SORHs commented that rural HPSAs had an easier time becoming NHSC-qualified in the period prior to the use of HPSA scoring. They suggested that it would be worthwhile for the NHSC to do an eligible HPSA set-aside for designated

rural/frontier areas. This would be similar to the guaranteed minimum percent of rural awards in FQHC competitive funding competitions.

- **Issue – RHC facility HPSAs receive HPSA-scores significantly lower than FQHC facility HPSAs – scores which do not accurately reflect their needs.**

SORHs from all regions of the country also commented on this problem. One state indicated that, despite having multiple RHC HPSAs, only one such facility in the entire state was NHSC-qualified. SORHs suggested that there were provisions in the HPSA-scoring formula exclusive to FQHCs, which led to them to have higher, preferential scoring.

- **Issue – IHS and Tribal facility HPSAs do not receive scores which accurately reflect their needs.**

Multiple SORHs mentioned this problem. The problem existed for all HPSA disciplines. SORHs suggested several possible factors in the HPSA-scoring mechanism that could be the cause of this disparity. SORHs indicated that the NHSC was aware of this problem and had created a separate NHSC carve-out for IHS sites. Several SORHs suggested that this might also be done for rural/frontier HPSAs.

- **Issue – Small rural population, remote rural, and frontier HPSAs do not receive scores which accurately reflect their needs.**

Multiple SORHs commented on this issue. The problem extended to all HPSA disciplines. Several possible factors in the HPSA scoring mechanism were flagged. The primary problem was believed to be the scoring scale used in identifying a population-to-provider partial score. This scoring scale was believed to be biased against small population HPSAs, many of which were frontier or remote rural HPSAs. Several SORHs suggested the need for special scoring consideration for small population HPSAs.

- **Issue – Health indicators currently used in HPSA-scoring are inadequate measures of HPSA health status.**

Multiple SORHs critiqued the use of the Infant Health Index as a scoring factor for Primary Medical Care HPSAs, and the use of alcohol and substance abuse prevalence rates as scoring factors for Mental Health HPSAs. SORHs commented that there are many alternative measures that would more comprehensively reflect the health disparities of HPSAs. Several alternative measures were discussed, including Years of Potential Life Lost, Chronic Disease Rates, and Social Determinants of Health.

- **Issue – Shortage Designation Management System (SDMS) data are insufficient in many areas and states have differential abilities to correct and supplement the dataset.**

Many SORHs highlighted the limitations of the SDMS dataset. SORHs commented that a significant number of the provider listings were out of date, including

providers long moved from their listed practice locations. SORHs also commented on the inadequacy of the SDMS indications of provider Medicaid participation and sliding fee scale use, data essential in the designation and scoring of Low-Income Population HPSAs.

States – both PCOs and SORHs – must expend significant effort to collect data to update the SDMS dataset. This is necessary to assure that HPSAs of all types and disciplines can be designated and scored accurately. Unfortunately, not all SORHs and PCOs have adequate capacity for these activities. Smaller SORHs expressed frustration with their lack of staffing and other needed resources for this important activity. SORHs commented that larger states with funding from other sources have more capacity for this work and have an advantage in assuring that their HPSAs have accurate, higher HPSA scores.

NOSORH Recommendations for HPSA-Scoring Changes

Recommendations - Overview

NOSORH believes that HRSA modifications to the HPSA scoring mechanism are required for this mechanism to more accurately reflect the severity of need within rural and frontier areas. NOSORH feels that modifications should be made to HPSA scoring for Primary Medical Care, Mental Health and Dental Health HPSAs. In addition, NOSORH believes that modifications should be made to scoring for Geographic, Population and auto-scored Facility HPSAs.

NOSORH's recommendations fall into **three categories**:

- **Changes in HPSA-Scoring Measures**: identifying modifications to the factors used in HPSA-scoring,
- **Changes in Scoring Scales and Factor Weighting**: identifying modifications to the point scale used for individual factors and the scoring weights given to individual factors.
- **Changes in the HPSA-Scoring Process**: identifying modifications to the system used in producing the factors used in HPSA-scoring

The modifications recommended by NOSORH are summarized in this section of RFI comments.

Recommendations – Changes in HPSA-Scoring Measures

- **Recommendation – Add a specific scoring factor for HPSA rurality:** *NOSORH recommends that BHW add an additional factor to the HPSA scoring process reflecting the rurality of a HPSA's location.* This addition will

assure that the special access problems associated with rural locations are considered in identifying relative need of a HPSA.

NOSORH recommends that this factor be added to **all HPSA disciplines** – Primary Medical Care HPSAs, Mental Health HPSAs and Dental Health HPSAs. NOSORH also recommends that this factor be added to all HPSA designation types – including Geographic, Population and auto-scored Facility HPSAs.

NOSORH feels that this factor can reflect a variable range of rurality. Measures such as the Rural-Urban Commuting Area (RUCA) Codes establish multiple levels of rural isolation from nearest urban centers. Alternative rural measures are available for counties and Census tracts, and can easily be added into HPSA score calculations.

NOSORH recognizes that there are some geographic and population HPSAs which are currently considered to be **Partially Rural** – i.e., covering rational service areas with both rural and urban components. **NOSORH recommends that these composite areas be assigned a rurality factor equivalent to the most rural component of the rational service area.**

NOSORH understands that the current HPSA scoring method assigns a single score to all clinic locations of an organization's auto-scored FQHC HPSA. In a large, multi-clinic organization, this could mean that a single score is assigned to multiple urban and rural locations. **NOSORH recommends that, for purposes of HPSA scoring, the appropriate rurality factor be assigned to each individual clinical location.** While this scoring approach will be slightly more complex, NOSORH believes that it will more accurately reflect the relative need at specific rural locations.

- **Recommendation – Revise health status/disparities measures used:**
NOSORH recommends that BHW revise the HPSA-scoring process factors used in the measurement of population health status and health disparities. Currently, the HPSA-scoring process includes very limited measures of a population's health status:
 - **Primary Medical Care HPSAs** use an Infant Health Index based upon low birth weight or infant mortality. This is a very narrow measure of a population's health and is limited to a specific health aspect of a small percentage of a HPSA's population. There are multiple alternative factors that could be used to measure overall population health.
 - **Mental Health HPSAs** use measures of substance abuse and alcohol abuse prevalence. While these factors are important, they do not reflect the overall mental health of a total population. Supplemental measures are available which could be used to create a broader picture of the overall mental health of a HPSA's population.
 - **Dental Health HPSAs** include an indication of water supply fluoridation, and do not include any direct measure of a population's dental health.

Several data sources provide measures which could be used to give a picture of a HPSA population's dental health status.

NOSORH recommends that a planning group be convened to identify and select appropriate health status/health disparities factors to be used to HPSA-scoring for all three HPSA disciplines.

Candidate measures for Primary Medical Care HPSA scoring could include:

- Life expectancy from birth,
- Years of Potential Life Lost,
- Disability rates, and
- Mortality rates from all causes of death – including either age-adjusted rates or standardized mortality ratios.

Candidate measures for Mental Health HPSA scoring could include:

- Mortality rates from diseases of despair, and
- Measures of mental health status reported in the Behavioral Risk Factor Surveillance System and the Youth Risk Behavior Survey.

Candidate measures for Dental Health HPSA scoring could include dental health measures from the Behavioral Risk Factor Surveillance System.

The aim of this effort is to identify measures which more accurately reflect the special health disparities of rural populations, typically older populations with higher rates of chronic illness and disability.

- **Recommendation - Revise distance/travel time factor:**
NOSORH recommends that BHW revise the HPSA scoring process factor used in the measurement of distance/travel time. Member SORHs provided input indicating that the current measure used in the HPSA scoring process does not adequately differentiate between areas at different distances from the next source of care. SORHs indicated that many HPSAs receive the maximum points in HPSA scoring, making the current measure less than useful in identifying areas with priority access problems.

NOSORH recommends that a planning group be convened to identify and select an appropriate redefinition of the distance/travel time factor to be used in HPSA scoring for all three HPSA disciplines.

This assessment should examine the special access barriers facing rural areas with no adequate public transportation. It should review access to care for residents in these areas considering the availability to households of private vehicles, as measured by the Census. The aim is to establish a more appropriate

HPSA scoring scale which will provide greater differentiation between HPSAs on this factor.

The review by this planning group should also extend to the definition of 'nearest accessible source of care', particularly for Low-Income Population HPSAs. For these HPSAs, the nearest accessible source of care is a primary care provider with available capacity that accepts Medicaid and has a sliding fee scale or other arrangement for providing care to the medically indigent. SORHs indicated that determining provider capacity and provider arrangements for Medicaid and indigent patients requires substantial effort by PCOs and SORHs. It puts smaller PCOs and SORHS, typically those in rural states, at a disadvantage. This results in fewer Low-Income Population HPSAs receiving higher scores on this factor.

- **Recommendation – Revise low-income population measurement:**
NOSORH recommends that BHW revise the HPSA scoring process factor used in the measurement of low-income population. NOSORH recommends that this factor be changed to include the low-income population below 200% of the Federal Poverty Level. This change should be applied to the scoring of all HPSA disciplines and all HPSA types. NOSORH believes that this will improve recognition of priority areas with significant financial barriers to access.

It should be noted that income alone is not a good measure of financial barriers to care – *health care coverage* is also a factor that should be considered. For example, an individual below the FPL with Medicaid coverage would have fewer barriers to care than an individual with the same income who is uninsured. ***NOSORH also recommends that the Low-Income HPSA-scoring factor be changed to consider the uninsured population below 200% of the FPL.*** These data are readily available at the county level from the Census Small Area Health Insurance Estimates (SAHIE) program.

- **Recommendation – Standardize Facility Scoring Methods:**
NOSORH recommends that BHW revise the HPSA scoring formula used to calculate Facility HPSA scores for FQHCs, RHCs and IHS-Tribal Facilities.

Currently, different HPSA-scoring methods are used for different facilities in ***service area definition, service area population calculation and calculation of the low-income population served.*** For definition of service areas, FQHCs are currently permitted to use their grant-defined service areas, while RHCs and IHS-Tribal Facilities must use a 30-40-minute travel polygon. Currently, for purposes of population-to-provider ratios, FQHCs can limit the population counted to the service area population below 200% of FPL while RHCs must use total population of the service area. Finally, the current HPSA-scoring formula for calculation of low-income population permits FQHCs to limit analysis to the low-income percentage of its patient population, while RHCs and IHS-Tribal Facilities must calculate based on service area total population percentages. NOSORH believes that these methodology differences give FQHCs a scoring advantage that is unfair to other facilities, many of which are in rural areas.

NOSORH also recommends that the HPSA scoring formula should use standardized approaches to service area definition, service population calculation and calculation of low-income population. This would eliminate the current bias created by the HPSA-scoring methodology.

Recommendations – Changes in Scoring Scales and Factor Weighting

- **Recommendation – Changes to Scoring Scales:**

NOSORH reviewed the HPSA-scoring scales used in the assignment of scores for each factor in all three HPSA-disciplines. The review identified a clear **bias against small rural and frontier HPSAs in the scoring scales used to assign points for the Population-to-Provider Ratio factor:**

- a ***Primary Medical Care HPSA without any provider*** must have a ***population of at least 2,500*** to get a maximum score on this factor;
- a ***Dental Health HPSA without any dentist*** must have a ***population of at least 3,000*** to get a maximum score on this factor;
- a ***High-Needs Mental Health HPSA without any provider*** must have a ***population of at least 12,000*** to get a maximum score on this factor; and
- a ***Non-High Needs Mental Health HPSA without any provider*** must have a ***population of at least 15,000*** to get a maximum score on this factor.

It is significant that, for each of the HPSA disciplines, designated HPSAs with smaller populations are ***increasingly penalized*** – receive lower scores – progressively with smaller total populations. For example, a High-Need Mental Health HPSA with no provider where the population is 12,000 will receive a maximum 7 points while another High-Need Mental Health HPSA with no provider where the population is 5,000 will receive only 3 points. The smaller population is the only reason for the lower score.

NOSORH recommends that BHW revise HPSA scoring scales to eliminate the bias against small rural and frontier HPSAs. These changes should affect all HPSA-disciplines and all HPSA types.

- **Recommendation – Changes to Factor Weighting:**

The current HPSA-scoring methodology assigns ***inconsistent weighting*** to score measures for different HPSA disciplines. For example, the combination of the *population-to-provider ratio* factor and the *population below 100% FPL* factor receives a maximum of 15 points for Primary Medical Care HPSA-scoring, 12 points for Mental Health HPSA-scoring, and 20 points for Dental Health HPSA-scoring. NOSORH believes that this wide range of weighting injects distortion into the assessment of priority needs.

NOSORH recommends that BHW revise the weighting of HPSA-scoring to standardize the weights given to measure components. Standard weights

should be assigned for the same components of all three HPSA disciplines and for all HPSA types.

NOSORH notes that there are five key measure components currently used in HPSA-scoring:

- **Service capacity limitations** – e.g. population to provider ratios,
- **Low-income access barriers** – e.g. percent of population below 100% FPL,
- **Distance/travel time to next accessible source of care,**
- **Health needs/health disparities** – e.g. the Infant Health Index, **and**
- **Size of populations with special needs** – e.g. percentage of elderly or child population.

NOSORH believes that these five measure components are an appropriate basis for HPSA-scoring and that with corrected measures, as discussed previously, they can form the framework for a balanced HPSA score. ***NOSORH recommends that a planning group be convened to create revised scoring formulae for all HPSA disciplines using standardized weighting for each measure component.*** This will eliminate the current inconsistencies.

Recommendations – Changes in the HPSA Scoring Process

NOSORH received input from member SORHs through surveys and online Listening Sessions. SORHs provided input regarding changes to the overall HPSA-scoring process that would lead to better assessment of the relative needs of rural/frontier HPSAs. These recommendations are summarized below.

- **Recommendation – Separate scoring process for small rural and frontier HPSAs:**

NOSORH recommends that BHW establish a separate HPSA-scoring process specifically for small rural and frontier HPSAs. SORHs across the nation expressed frustration with the inability of the current scoring process to give priority to HPSAs with small populations. For example, a remote community of 5,000 with one full time primary care provider can be unable to qualify for the placement of NHSC providers. The presence of even one provider in a small population HPSA can result in a population-to-provider ratio of a relatively low score.

This issue has been recognized as a problem for several decades. It is the basis of the Affordable Care Act statutory mandate for creation of a separate *Frontier HPSA*. It is possible that addition of a *rurality factor* to the HPSA-scoring formula could partially address this issue. Nevertheless, given the acuteness of the issue, NOSORH recommends the creation of a separate scoring process for small rural and frontier HPSAs.

- **Recommendation – Permit areas to be designated concurrently as Geographic and Population HPSAs:**

NOSORH recommends that BHW permit rational service areas to be designated, concurrently, as both Geographic and Population HPSAs. SORHs have discussed the conflicting needs for designation of rural service areas. SORHs indicated that, in general, Geographic HPSAs in rural areas have lower scores than do Population HPSAs. For purposes of securing NHSC support, a SORH would likely choose to designate an area as a Population HPSA. However, Geographic HPSA designation is required for rural physicians to be able to receive a Medicare HPSA bonus. SORHs working to designate an area as a HPSA must choose between maximizing the area's HPSA score and assuring that physicians get revenue enhancements.

Concurrent designation is not unusual. Under current procedures, an area can be designated as either a Geographic or Population HPSA, and within it, individual facilities can be designated concurrently. This permits individual facilities, such as FQHCs and RHCs, to be designated with HPSA scores, which are typically higher than that of the HPSAs in which they are contained. This recommendation would be an extension of this current practice.

- **Recommendation – Improve national provider data resources:** The current HPSA-scoring system is highly dependent upon the SDMS national data system for shortage area designations. SORHs provided extensive comment about the inadequacies of this data system and the need for SORHs and PCOs to correct and supplement the existing data. This additional effort is costly, and cannot be conducted adequately by smaller SORHs and PCOS – typically those in rural states.

NOSORH recommends that BHW recognize the limits of the SDMS national provider dataset and develop a more accurate national dataset for designation.

- **Recommendation – Improve State HPSA Assessment Capacity:** As described previously, SORHs and PCOs must supplement and correct data in the SDMS dataset. This will be a continuing need, even with improvements to the SDMS. ***NOSORH recommends that BHW increase investment in State capacity to assess HPSAs.*** This increased investment should be made in a manner which assures that smaller SORHs and PCOs have sufficient resources to conduct core assessment activities. Core activities include the ability to survey primary care providers to identify whether they accept Medicaid and have a sliding fee schedule.