



Updating the Unmet Need Score

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Jennifer Joseph, PhD, MSEd
Bureau of Primary Health Care (BPHC)
Cassandra Okechukwu, ScD, MSN, MPH, and Rakhee Palekar, MD, MPH, DABFM
MITRE

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Vision: Healthy Communities, Healthy People



Purpose

Provide an update and receive stakeholder feedback on proposed changes to the Unmet Need Score





Outline

- Overview of the initial Unmet Need Score (UNS) UNS 1.0
- Development of the updated UNS UNS 2.0
 - Development Focus Areas
 - Proposed Changes
 - Next Steps





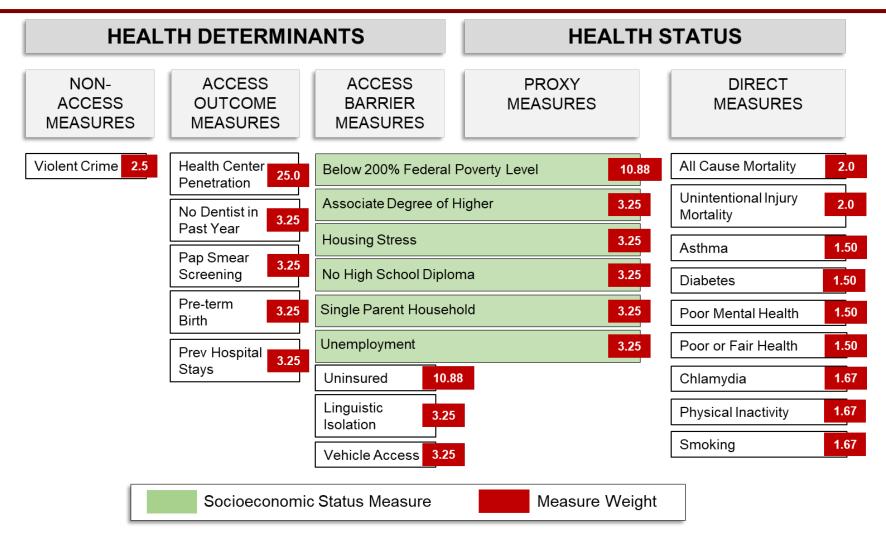
Unmet Need Score Overview

Description	Calculation	Use	Benefit
Service Area Needs Assessment Methodology (SANAM) generates an UNS which quantifies need in geographically defined service areas	 Based on key measures of health determinants and health status relevant to the Health Center Program Calculated for individual ZIP Codes which are aggregated to score larger service areas 	 Used to quantify need in 2019 New Access Point (NAP) funding applications Complements the narrative that applicants use to describe unmet need in service area 	 Transparent methodology using data from reputable public sources Automated calculation to reduce applicant burden





UNS 1.0 Measures and Weights







Summary Assessment of UNS in 2019 NAP

- Provided a transparent and uniform methodology to quantify need
- Significantly reduced applicant burden
- Similar application cohorts from 2015 and 2017 NAP in terms of:
 - Service area need
 - Percentages of rural and special population applicants
 - Service area overlap
- Number of applications and proposed sites were slightly higher than in 2015 and 2017
- NAP awardees
 - Proposed service areas with greater Unmet Need Scores compared to 2015 and 2017
 - Even mix of urban and rural awardees

Note that the UNS was one of many components that may have affected the application cohort and awardees.



Summary of Feedback from Stakeholders

Focus Area	Feedback from Stakeholders
Substance use disorder	Include measure to directly assess mental health and substance use, especially given the opioid epidemic
Nutrition	Add a measure to capture the effects of nutrition on health and the issues around accessing healthy foods
Pediatric health	Add a measure focused on the pediatric population, which is not well-captured in UNS 1.0 (e.g., all seven direct measures of morbidity and health behaviors are focused on adults)
Immigrant populations	Increase the weight of <i>Linguistic Isolation</i> and/or add <i>Foreign-Born Noncitizen</i> to reflect access challenges for immigrants
Census tract UNS	Develop scores below the ZIP Code level, at the census tract level, to capture pockets of unmet need within a ZIP Code



Feedback obtained from UNS 1.0 webinars, Service Area Considerations Request For Information, and meetings with individual stakeholders from May 2018 to the present.



Addressing Substance Use and Mental Health

- Included Poor Mental Health in UNS 1.0
- Proposal to add: Estimated Drug Poisoning Mortality to UNS 2.0
 - Estimated number of drug poisoning deaths per 100,000 population
 - Newly-available county-level data that is derived from CDC modeling
- Proposal to remove: Unintentional Injury Mortality from UNS 2.0
 - Although Unintentional Injury Mortality includes drug poisonings, other major drivers include motor vehicle accidents and unintentional falls, which are less relevant to services provided by health centers





Capturing Effects of Nutrition and Access to Healthy Foods

- Proposal to replace: *Physical Inactivity* with *Adult Obesity* in UNS 2.0
 - Adult Obesity is the percent of adults that are obese and is reported in UDS Mapper
 - Adult Obesity is more geographically specific (ZIP Code vs county) and associated with additional future adverse health outcomes as compared to physical inactivity
- Proposal to add: Limited Access to Healthy Foods to UNS 2.0
 - Limited Access to Healthy Foods is the percent of population that is low-income and does not live close to a grocery store (reported by the United States Department of Agriculture)
 - Lack of access to healthy foods makes communities vulnerable to adverse health outcomes
 - Captures aspect of the physical environment not directly assessed by UNS 1.0 measures





Incorporating Pediatric Health

- Despite good rationale to do so, unable to find viable measure with good quality data to add as measure of pediatric health to UNS 2.0
 - Evaluated measures of pediatric health for UNS 1.0 and 2.0 from CDC, National Survey of Children's Health, National Health Interview Survey, and Brandeis University
 - Measures evaluated focused on vaccinations, obesity, asthma, oral health, access to care, and other prominent pediatric health indicators
- HRSA will continue to explore the availability of a viable and appropriate pediatric measure in future updates to the UNS





Addressing Access Challenges Faced by Immigrants

- Proposal to add: Foreign-Born Concentration Index and Nonwhite Concentration Index to UNS 2.0
 - Similar to immigrants, many U.S.-born groups face access barriers
- Concentration index measures leverage the Index of Concentration at the Extremes methodology which quantifies the extent to which people in a ZIP Code are concentrated at top (privileged) vs. bottom (deprived) ends of a specified social distribution
 - Uses data from American Community Survey
 - Considers concentration of population based on demographic makeup, but also includes income in calculating area-based need
 - Concentration index is preferred over the residential segregation index, which is only valid at the county level
 - Developed by Harvard Health Disparities Geocoding Project





Foreign-Born Concentration Index and Nonwhite Concentration Index

Concentration Index =
$$\frac{(P-D)}{T}$$

- Foreign-born Concentration Index
 - Privileged (P): U.S.-born with income above the 80th percentile
 - Deprived (D): Foreign-born with income below the 20th percentile
 - Foreign-born includes everyone born outside the U.S. and territories, regardless of legal status
- Nonwhite Concentration Index
 - Privileged (P): Non-Hispanic white with income above the 80th percentile
 - Deprived (D): Nonwhite with income below the 20th percentile
 - Nonwhite includes nonwhite and Hispanic individuals
- Concentration index scores range from -1 to +1





Census Tract UNS

- Computed UNS values for all census tracts and compared to scores based on ZIP Codes
- Among recent applicants' proposed service areas, ZIP Code and census tract scores tended to be similar
- The census tract UNS rarely indicated substantially higher need than the related ZIP Code UNS proposed by recent applicants
- No immediate plans to utilize census tract UNS because health center service areas are delineated using ZIP Codes





Telemedicine and Broadband Access Background

- COVID-19 fueled a rapid transition to telemedicine for patients, providers, and payers;
 telemedicine likely to remain
- Barriers to accessing services provided via telemedicine might limit some populations' ability to access health care
- Telemedicine accessibility barriers
 - Digital literacy
 - ✓ Limited sources of data and none with adequate geographic specificity
 - ✓ Factors that predict literacy include age, education, unemployment, race / ethnicity, and foreign-born status, most of which are included in the UNS
 - Broadband / technology access
 - ✓ Multiple sources of data and some with geographic specificity
 - ✓ Broadband access has also been proposed as an important social determinant of health





Addressing Telemedicine and Broadband Access Barriers

- Proposal to add Broadband Access to UNS 2.0
 - Broadband Access is the percent of households that have a subscription to broadband and is reported by the American Community Survey
 - Likelihood for continued utilization/provision of primary care services via telemedicine
 - Similar to Vehicle Access and other access barriers





Proposed UNS 2.0 Weights

Prototype Weights and Measures (Italics Indicates Changes from UNS 1.0)

Non-Access	1.0 Weight	2.0 Weight
Violent Crime	2.5	1.5
Limited Access to Healthy Foods		1.5

Access Outcomes	1.0 Weight	2.0 Weight
Health Center Penetration	25.0	20.0
No Dentist in Past Year	3.25	3.0
Pap Smear Screening	3.25	3.0
Pre-term Birth	3.25	3.0
Preventable Hospital Stays	3.25	3.0

Access Barrier / Proxy	1.0 Weight	2.0 Weight
Below 200% Federal Poverty Level	10.875	10.0
Associate Degree or Higher	3.25	3.0
Housing Stress	3.25	3.0
No High School Diploma	3.25	3.0
Single Parent Household	3.25	3.0
Unemployment	3.25	3.0
Uninsured	10.875	10.0
Linguistic Isolation	3.25	3.0
Vehicle Access	3.25	3.0
Broadband Access	3.25	3.0
Foreign-Born Concentration Index	3.25	3.0
Nonwhite Concentration Index	3.25	3.0

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Direct Measures	1.0 Weight	2.0 Weight	
All Cause Mortality	2.0	2.0	
Drug Poisoning Mortality	2.0	2.0	
Asthma	1.5	1.5	
Diabetes	1.5	1.5	
Poor Mental Health	1.5	1.5	
Poor or Fair Health	1.5	1.5	
Chlamydia	1.67	1.67	
Obesity	1.67	1.67	
Smoking	1.67	1.67	

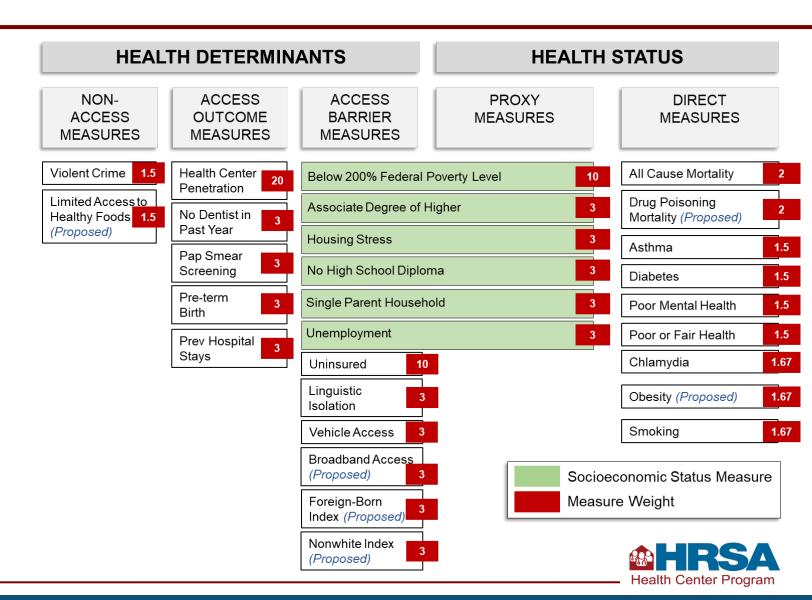


Note that Drug Poisoning Mortality replaces Unintentional Injury Mortality and Obesity replaces Physical Inactivity.



Summary of Proposed Updates

- Add Limited Access to Healthy Food
- Add Broadband Access
- Add Nonwhite
 Concentration Index and
 Foreign-Born
 Concentration Index
- Replace Unintentional Injury Mortality with Estimated Drug Poisoning Mortality
- Replace Physical Inactivity with Obesity





Next Steps

- Prepare for future uses of UNS
 - Finalize UNS measure selection and weights informed by stakeholders' feedback
 - Obtain latest available data for each measure
 - Recalculate UNS
 - Update UNS Resource Guide
- Explore alternatives to the Excel-based UNS Workbook to share the UNS values and underlying data with stakeholders





Thank You!

Strategic Initiatives Team

Bureau of Primary Health Care (BPHC)

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