

Association of Clinicians for the Underserved

National Summary:

Recruitment and Retention Data



June 2016

Table of Contents

- I. Executive Summary..... 1
- II. Methods and Overview..... 2
- III. Findings 4
 - A. Descriptive Measure Summary..... 4
 - B. Recruitment 5
 - 1. Health Center Level Recruitment Measures..... 5
 - 2. Service Area Level Recruitment Measures 7
 - C. Retention 9
 - 1. Health Center Level Retention Measures 9
 - 2. Service Area Level Retention Measures 12

Disclaimer: This publication is 100% supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under U30CS26934, Training and Technical Assistance National Cooperative Agreements for total award amount of \$444,989.00. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

I. Executive Summary

The Solutions, Training, and Assistance for Recruitment and Retention (STAR²) Center was developed under a HRSA Training and Technical Assistance National Cooperative Agreement in 2014, to provide resources, training, and technical assistance to Health Center Program Grantees and FQHC Look-Alikes (Health Centers) around clinician recruitment and retention. One of the first activities of the newly formed STAR² Center was to collect and analyze a diverse range of indicators thought to be indicative of recruitment and retention issues, and their underlying causes, at both the organizational and service area levels. These measures were compiled into a one-page ‘profile’ for each organization as a means of prioritizing need and identifying issues that may be contributing to recruitment and/or retention difficulties. In this report, those measures are examined at the national level to create profiles of sub-groups of health centers based on different crosscutting attributes such as grant type, rural/urban location, organizational size, and corporate structure. In addition to a small set of purely descriptive measures, the bulk of the data elements were assigned a ‘flagging point’, indicating that the value for an organization was notably different from the norm for that measure and in a direction that may be indicative of recruitment and/or retention issues. It is important to note that a “flag” is not necessarily an indicator that something negative or bad is happening. Rather it is suggestive of a possible impact on recruitment and/or retention. By examining differential flagging rates between the sub-groups it is possible to identify the broad patterns that exist within the data and highlight areas of particular need among the health center community.

Results

- Small health centers (those under 10,000 users) consistently exhibited the highest relative flagging rates across both the recruitment and retention domains, both within the organization and related to the communities they serve. These organizations often have the least flexibility in terms of staffing, finances, and resources, as well as having fewer service sites per organization.
- Health centers in rural areas and Migrant Health Center (MHCs) grantees exhibited more flags on recruitment measures compared to urban centers and non-MHCs. It should be noted that many of the recruitment measures in the grantee level and service area level profiles are focused on flagging high levels of National Health Service Corps (NHSC) participation and vacancy listings, as well as related Health Professionals Shortage Area (HPSA) scores. While this can be a problem in the long term if vacancies don’t turn into placements and placements don’t turn into retained staff after the obligation period, use of the NHSC in the short term can also be viewed as a strength for an organization experiencing staffing issues. As such, high flagging rates in this area should not be viewed purely as negative indicators. Conversely, low reliance on the NHSC in the face of indicators of need could be viewed as a missed

opportunity. This may be the case for Public Health Centers, which generally showed high flagging in other areas.

- Public Health Centers had nearly double flagging frequency on retention measures compared to private non-profit organizations.
- Health Care for the Homeless (HCH) grantees had the greatest average flagging rates in the retention metrics based on grant types.
- Urban health centers showed slightly higher average flagging for retention issues – exhibiting more issues with staffing fragmentation, high panel and productivity, lower support ratios, lower pay, and more crime and illicit drug use in the community.

II. Methods and Overview

In May 2015, the STAR² Center produced and distributed Health Center Recruitment & Retention Profile reports to all Health Center Program grantees and Look-Alike organizations nationally. The profiles calculated a diverse range of measures thought to be of potential relevance for recruitment (27 measures) or for retention (23 measures) of health care providers. Within each of these two main categories, the measures were further separated into those descriptive of the organization itself and those that describe the organization's service area – defined as the Census Zip Code Tabulation Areas (ZCTAs) in which 75%+ of the health centers reside. The Recruitment and Retention measures were evaluated against a 'flagging threshold' to highlight those measures that may be particular points of interest for that organization. The thresholds were generally set to flag 10% of organizations nationally, identifying those for which the measure was most out of the norm at the end(s) of the scale that would seem to be more related to recruitment and retention issues. For example, looking at provider pay those at the low end are highlighted as low pay is the issue impacting provider recruitment and retention. Exceptions were made where less than 10% of grantees exhibited a particular trait or where a 'natural' flagging point existed for the measure, such as all health centers with 100% of their population covered by a current HPSA, which flagged 16% of organizations. Also, not every measure was applicable to every grantee (dentist productivity for an organization without dentists for example). A 'User Guide' was distributed with the profiles that indicated the flagging point for each measure, as well as the data source and meaning. The guide also showed the distribution of results at the 10th, 25th, 50th, 75th, and 90th percentiles among all applicable grantees.

While the profiles were developed as a tool for health centers to evaluate their data through a recruitment and retention lens, and to highlight potential areas to focus on, the data can also be

examined collectively to determine how different sub-groups of health center organizations compared to others, and to develop a national profile of the program with respect to these elements. Prior to conducting the analysis, certain groups of health centers that had received profile reports were omitted as “base exclusions” because their particular situation is notably different for the purposes of many of these measures, and their inclusion might skew results. These included health centers reporting no FTE staff (such as Migrant voucher programs), no patients (new, non-operational), and grantees in the US Territories and Puerto Rico where demographics are notably different and some data is not available. The following sub-groups of grantees were then selected for this analysis:

Grouping	Sub-Group	Count
National	Total Health Centers	1302
	Total (after base exclusions)	1260
Grant Type	Community Health Center (CHC) only (not multiply funded)	764
	Homeless (HCH) including singly and multiply funded	243
	Migrant/Seasonal (MHC) including singly and multiply funded	157
	Public Housing (PH) including singly and multiply funded	74
Rurality (as classified by BPHC)	Urban	683
	Rural	577
Size	Large (10,000+ patients)	594
	Small (less than 10,000 patients)	666
Corporate Structure*	Corporate Entity, Federal Tax Exempt (Private non-profit)	1041
	U.S. Government Entity (Public Health Centers)	85

* Not available for Look-Alikes

The analysis consisted of calculating the flagging rates for each of the measures within each sub-group of health centers, as well as the percent of that sub-group for whom each measure was applicable. For the purposes of this report the flagging rates reported are adjusted to reflect the applicable portion of the sub-group for each measure. This assures that the results are accurately descriptive of the relevant sub-group and less prone to the effect of different rates of applicability. However, it also means that the number of organizations may not be the same for a given flagging percentage. In addition to calculating the flagging rates for individual measures, the average flagging rates for each domain (Recruitment x Retention, Grantee x Service Area) are also calculated. While the measures are often distinctly different, they are intended to collectively describe and identify challenges for each area, making examination of averages a useful exercise. Note that some measures in the initial profiles have been dropped from this summary as they were determined to be of low relevance and potentially distorting to this analysis.

The results of the analyses, showing the relative flagging rates by sub-group are shown in Appendix A. The summary of descriptive measures is also reported. Note that the descriptive measure summaries are actual rates for those statistics, while the other results show the percentage being flagged as a potential point of interest based on the established threshold. The list is color coded to highlight the sub-group in the category with the highest values, and calculations are provided to show the degree of difference between the measure for the highest and lowest values. Appendix B shows the valid (applicable) percentage for each measure as well as the actual flag counts by measure for each sub-group.

III. Findings

A. Descriptive Measure Summary

Prior to examining the results of the analysis of the recruitment and retention measures based on the flagging rates, it is important to consider the makeup of the health center sub-groups under examination. After making the ‘base exclusions’, which eliminated 42 organizations representing just over 420,000 patients, the analysis was focused on 1,260 health centers nationally, representing 9,326 service delivery sites and just over 19 million patients.

Grant funding status: The CHC category focused on singly funded organizations (those with only 330(e) funding). The ‘special populations’ grant categories were defined as organizations with MHC (330(g)), HCH (330(h)), or PH (330(i)) grants, but not exclusive of other Section 330 funding categories. In fact, the great majority of sites in these categories have other Section 330 funding streams – with CHC funding being the most prevalent (73% for HCH grantees, 85% for PH grantees, and 94% for MHC grantees). This obviously has the potential of muting the effect of the special population focus, but grantee numbers would not support single funding analysis and notable differences were still observed. The “special population focus” measure, which looks at whether these groups represent over half of a health center’s patients, shows that nearly 27% of organizations in the HCH classification meet that threshold, while only 10.8% of MHC and 8.1% of PH programs have a special population majority.

Rural/Urban status: 46% of health centers in the analysis are classified as rural – representing about one third of patients nationally. It is worth noting that only 64% of MHC-funded programs are considered rural. Rural status is often associated with small organizations but the data shows that these are two separate metrics – though with some degree of correlation. Just over half (56%) of small health centers were classified as rural – slightly above the rate nationally, while over one third (35%) of large health centers were classified as rural.

Use of Electronic Health Records (EHRs): 96% of health centers are using these systems, and that was relatively consistent across most sub-groups, though Public Health Centers lagged somewhat.

Recognition as a Patient Centered Medical Home (PCMH): The national base group showed that 56% of all grantees had achieved recognition, however, there was greater variability across the sub-groups examined. Interestingly, the singly funded CHC grantees showed the lowest level of PCMH recognition compared to grantees with HCH, MHC, and PH grants. There is a notable difference in PCMH participation by organizational size, with 45% of small health centers participating, compared to 69.4% for large health centers. Public Health Centers had the lowest level of participation at 38.8%.

B. Recruitment

The Recruitment measures are focused on attributes that are thought to be related to the ability of the Health Center, or the community, to attract new providers. Some are indicators of ongoing difficulties in recruiting staff, while others may be indicators of underlying causes for those difficulties.

1. Health Center Level Recruitment Measures

Health Center level measures of recruitment focus on those attributes of the organization that may indicate that the organization is experiencing difficulty in attracting providers, as well as attributes that may limit the pool of potential providers or which could represent a competitive disadvantage for prospective providers considering joining the organization.

NHSC PARTICIPATION

Looking first at indicators of organizational recruitment issues, many of the data elements in this section focus on the degree to which NHSC providers are either present as part of the current staff, or the organization has vacancies listed. Both types of measures are examined compared to the percentage of current staff represented by NHSC placements or vacancies. These measures are flagged on the 'high' end of the scale, based on the concept that vacancies represent current need and that, for placements, the obligation period is a short-term solution after which it is hoped that providers will remain but no longer be counted in the NHSC ranks. It should be noted, however, that low participation in the NHSC for organizations with ongoing recruitment needs and scores amenable to placement may also be viewed as a potential problem indicator.

NHSC vacancies: MHC programs stand out for the portion of staff represented by vacancies across all staff categories (physicians, dentists, NP/PA/CNMs, and psychologist/social workers). The percent flagging for this group was approximately 40-60% greater than the comparable base list of all health centers. For physicians and dentists, singly-funded CHC health centers had the second highest flagging rates, but these were much closer to the base average. Rural health centers also showed higher vacancy flagging rates than urban organizations for the medical and dental staffing categories, and were effectively tied in terms of mental health staff. Interestingly, the difference between large and small health centers was considerably smaller across the vacancy measures – generally separated

by only about 3% or less in the actual flagging rates, but the large centers exhibited the higher rates in all staffing categories. In terms of corporate structure, private non-profit Health Centers showed considerably higher flagging rates for NHSC vacancy listings compared to Public Centers.

NHSC placements: The pattern for placements was notably different from the pattern for vacancies in several ways. For physicians, there was considerably less difference based on grant status, rurality, and corporate status. The greatest degree of difference was based on size, with 12% of larger organizations flagging compared to 8% for small organizations. Dentists and mental health providers also showed relatively small differences in flagging rates for NHSC placement percent. The most notable exception was by corporate structure, where the Public Health Centers had a flagging rate nearly double that of non-profits – the only category in which the Government Entities had a higher flagging rate across all vacancy and placement NHSC categories.

HPSA Scores: Differences in NHSC participation may be partially due to different levels of access to the program based on HPSA scores. All of these entities receive ‘automatic’ HPSA scores at the facility level, and scoring is done through a formula that relies on Uniform Data System (UDS) and Primary Care Service Area (PCSA) level data. The flagging was done at the ≥ 18 score, which is higher than the cutoff of 14 used in recent years for some placement categories. The differences were not large, but MHC, rural, small, and private non-profit entities were more likely to have HPSA scores at or above 18.

LANGUAGE AND CULTURE

Organizations in which a large portion of patients are best served in a language other than English have additional recruitment burdens as providers must either speak the language or be comfortable working with interpreter services. Predictably MHC grantees had the highest flagging rate on this measure, though Public Housing was not far behind. It is notable that the flagging rate for all urban programs overall was even higher than among the MHC grantees – about 50% higher than the flagging rate for health centers nationally.

There were several indicators of conditions that might dissuade potential candidates considering a particular health center or make it less competitive including management stability, financial health, and relative pay scale. The first of these was examined by looking for the rare condition where senior management positions are filled by contracted staff. The numbers for this were too low to draw conclusions but the situation was more common among Public Health Center organizations.

FINANCES AND PAY RATES

Financial health: This factor was examined by pooling 4 years of UDS financial data and examining net surplus/deficits (acknowledging different accounting bases for revenue vs expenses). Nearly fifteen percent (14.6%) of small health centers demonstrated deficits greater than 11% compared to

4.9% for large centers (and 10% for the national base). Interestingly, deficit flags were also more common among urban health centers compared to rural organizations (11.9% vs 7.8%).

Pay rates: Health Center pay profiles were compared to the Medical Group Management Association's (MGMA) median pay for the same mix of medical staff FTEs. It should be noted that this comparison is not adjusted for local cost of living or market rates. As a result, one might expect that rural health centers might be highlighted for lower median pay more frequently, however the urban organizations had a slightly higher flagging rate. Small health centers were twice as likely as large ones to be flagged on the low pay rate measure (10.4% vs 5.2%).

2. Service Area Level Recruitment Measures

The characteristics of the service area of the organization can also have a significant effect on the recruitment prospects. The indicators of this focus largely on questions of professional isolation and support, as well as the mix of other providers in the community. Also, indicators of community-level provider shortages is an important indicator of the health center's role in the overall access picture for the area and the degree to which the organization might be expected to fill gaps in provider availability.

PROVIDER AVAILABILITY

Ratio of population to providers: Looking first at indicators of community level accessibility, the most basic measures focus on the ratio of population to providers. Separate measures were calculated for the ratio of primary care physicians to the population, and for all primary care providers to the population. This latter measure includes nurse practitioners, physician assistants, and midwives. As one might expect, the service areas of rural health centers were nearly twice as likely to have low physician to population ratios compared to urban health centers. Looking at the total provider picture, however, that difference in flagging rates is almost entirely erased, suggesting that the non-physician providers are making up for the gap in physician availability in these communities.

A similar, though less pronounced, pattern was also observed for the communities served by small health centers, where physician availability was lower. A mix of physician and non-physician providers is considered ideal. The measure of the percent of care provided by non-physicians flags on both ends of the scale; those with few non-physicians and those where they represent a large portion (majority) of the care. Here again, the rural and small centers exhibit flagging rates nearly double their counterparts, suggesting that while non-physicians make up for the gap in physician availability, there may be an over-reliance on this type of provider. It should be noted that MHCs had the highest flagging rate across all provider availability measures, and the lowest rate for % of care by non-physicians, potentially indicating an under-reliance on this class of provider for that grant type.

NHSC: The percent of community-level reliance on the NHSC in terms of vacancies and placements (including, but not limited to, any NHSC providers serving at the organization itself) is also an

indicator of provider shortage in the area. Here the patterns are similar but even more pronounced. Among the service areas of rural health centers, 19.5% flagged for a high portion of NHSC vacancies compared to the total current physician capacity in the community – a rate over 70% greater than the national base and four times the rate for the communities of urban health centers. This difference was much less pronounced for the service areas of small centers compared to those of large organizations. A similar pattern was observed for the percent of NHSC physician placements in the community as a portion of total physicians. MHC programs showed the greatest level of flags for service area physician vacancy compared to other grant types.

HPSA: The presence and coverage of a Health Professional Shortage Area (HPSA) designation is yet another indicator of provider availability issues. While not required for the health center to participate in the NHSC or J-1 visa waiver programs, due to the automatic HPSA status of such organizations, these designations can reflect the impact of provider access barriers not just for the total population, but for subsets such as the low income, who may face financial barriers, or linguistic groups facing language barriers. Rural and small organizations were much more likely to have 100% of their service area covered by either a geographic or population HPSA.

Professional support: Another driver of recruitment success is the degree of advanced care professional support available in the area, which can be reflected in the specialist ratio and in the distance to the nearest hospital. For the former measure, rural areas were notably more likely to be flagged as serving an area with a low specialist to population ratio with 20.4% of rural health centers flagging, compared to just 1.3% of urban centers. Small health centers were also more likely to stand out on this measure with a flagging rate of 14.5%, three times that of large centers. It is noteworthy that singly funded CHCs were also more likely than those with other grant types, to have been flagged for low specialist availability in their service area. Hospital availability was flagged for health centers without a hospital in, or within 5 miles of the edge of its service area. This measure followed a similar pattern to that for low specialist availability, though far fewer organizations were flagged nationally. Rural areas were the most likely to be flagged at 6.4% compared to just 0.3% for urban grantees. Likewise, small organizations and those with singly funded CHC programs also had higher flagging rates.

Dentists: The service area recruitment measures also examined the availability of dentists in the community and the degree to which the community relies on the NHSC for dental capacity. Results for the dental measures also closely followed the pattern observed for physicians, though the rural-urban disparity was more pronounced, with over 17% of rural health centers flagging for low dentist:population ratio compared to just 3.5% for urban areas. Small health centers also had a higher flagging rate, but by a much smaller margin (12.0% vs 7.8%). MHC grantees again showed the highest flagging rate among the different grant types at 14.6%. The flags for NHSC vacancy and placement percentages of providers in the community were also focused heavily on rural areas.

Flagging for high percent of NHSC among area dentists in rural areas (16.2%) was more than 5 times the rate in urban settings (2.9%).

LOCATION and ISOLATION

The remoteness of an area is also a significant issue for recruitment, and clearly many of the service area measures are focused around rural health centers. It is no surprise that notably low population density was seen almost exclusively in rural areas. This is true for small health centers as well. By grant type, singly funded CHC's had the highest rate of notably low population density, followed closely by MHC grantees, while few HCH and no PH grantees were in low density areas.

Language: The other community characteristic examined was percent of population with limited English proficiency. Here the opposite pattern was observed, with most of the flagging focused on urban settings and large health centers flagging at twice the rate of small organizations.

C. Retention

Once a health center in an underserved community attracts a needed provider, either directly or with the assistance of programs like the NHSC and J-1 visa waivers, the next challenge is keeping that provider in place over the long term. The Retention measures in the profiles are focused on attributes considered to be indicative of the ability of the Health Center to maintain a stable pool of providers. Some measures are indicators of the presence of difficulties with staff retention at a given organization, while others may be indicators of underlying causes for those difficulties – either within the health center or at the community level.

1. Health Center Level Retention Measures

STAFFING FACTORS

Continuity: The measures related to retention can first be examined to identify evidence of staff turnover and/or fragmentation. By comparing the year-end staff head count to the total FTE over the course of the year, one can look at the degree to which positions are potentially being filled by multiple individuals instead of more full time providers. This can be the case when attracting and retaining staff is an issue or, conversely, when staff have left before the end of the year, leaving more FTEs than individuals at year-end. The results show a relatively low level of variability on this measure across most sub-groups in both the physician and non-physician provider categories. The one exception is in the corporate structure groupings, where the flagging rate for Public Health Centers is more than double the rate seen for private non-profit health centers – representing more than one third of all health centers in this category. This suggests that Public Centers experience

greater turnover or perhaps are assigning different providers to fill clinic positions throughout the year.

Year-end staffing to FTE ratio measures were also calculated for Dentists and mental health providers including Psychiatrist/Psychologists and LCSWs separately. As with the medical providers, these measures showed relatively low variability across the sub-groupings, although HCH programs exhibited the highest rates as did urban programs. Public Health Centers also showed notably higher rates of fragmentation in the mental health categories.

Staff Tenure: While the previous measure looks at staffing structure over a 1-year period, a more direct measure of retention is the tenure of staff at the health center over multiple years. Data elements recently added to the UDS allow the calculation of average tenure months for providers by staffing category. While this measure is prone to the impacts of planned retirement for individual long term staff or staff hired due to recent growth, it does provide a window into the longevity of staff in their positions overall. Here there is considerably more variability in the results across sub-groups.

Organizational size appears to be the most prominent differentiating factor in this area, with small health centers flagging for low provider tenure far more frequently than larger organizations; nearly 3 times as high for physicians (15.7% vs 4.7%), and over 4 times as high for NP/PA/CNM providers (16.1% vs 3.9%). By comparison, the rural-urban difference on these measures was not large.

A *trend measure* was also included for physician tenure that highlights either rapidly dropping tenure or more moderately falling tenure in an organization where tenure was already low. Although over 15% of organizations were flagged for this condition, there was considerably less differentiation on this measure across all sub-groupings.

Senior Management: Looking at tenure for the CEO/CMO roles, there is generally little variation across the sub-groups, although the prevalence of flagging for Public Health Centers was more than double the rate for private non-profit organizations, suggesting less stability in senior management at these centers.

STRUCTURE OF WORK

The next set of measures focuses on the workload for which providers are responsible. Faced with lack of providers and high demand, some organizations place increasing burdens on the providers that are available – a situation that can lead to burn out and counter-productive results. This can be measured based on the size of the patient panel for which each provider FTE is responsible, and in the level of patient visit productivity they are generating.

Panel Size: Looking at the former measure, high panel size across physician and non-physician providers was flagged more frequently in MHC grantee organizations – approximately twice the rate for other grant types, though this may be model driven to some degree due to turnover in the individual patients in the target population throughout the year. Urban and large grantees were flagged at a slightly higher rate than their counterparts, but the difference was not great. Public Health Centers were twice as likely as private non-profit organizations to exhibit high panel size.

The trend in panel size was also included as a measure – flagging for organizations showing both a high and growing panel per provider. Again, there was not a great variation across type of health center (large/small, urban/rural). The one exception is that Public Health Centers had nearly triple the rate of flags compared to private non-profits for this measure (16.5% vs 6.3% respectively).

Productivity: Looking at the different, though related, measure of productivity for physicians, MHC grantees flagged at more than twice the rate of singly funded CHCs and HCH programs for high productivity, while most of the other sub-groupings were relatively close in flagging rates. A measure comparing productivity to MGMA median productivity for an equivalent mix of staff produced largely similar results with the exception of Public Health Centers, which flagged at nearly twice the rate of private non-profit entities. A trend measure, flagging organizations with both high and rising productivity, showed the highest rate for Public Housing entities, but was otherwise not highly differentiated among the sub-groups.

Support Staff: The degree of clinical support available can also be a significant driver of provider satisfaction and retention, as well as impacting the practical level of productivity that a provider can effectively manage. Both medical and dental support ratios were examined. For medical support, the most notable differences were observed for small organizations, which were nearly 3.5 times as likely to be flagged for lower support staff to provider ratios compared to larger centers. Public Health Centers had even higher flagging rates, though the difference with their private non-profit corporate counterparts was not as large (16.5% vs 7.6%). Dental support was approximately 3 times as likely to flag for small health centers compared to large ones, and Public Health Centers were twice as likely to flag. Administrative (non-clinical) support ratio flagging was also 3 times as likely for small organizations compared to large ones and Public Health Centers, where one out of five were flagged. HCH programs also stood out on low administrative support (14.8%) - nearly 60% above the national base. The latter may be model driven, yet may still impact provider retention.

Quality: The quality of clinical care being delivered can also be an important factor in the decision of providers to continue practicing at a particular organization. The clinical quality measures included in the profile focus on the outcome-based clinical control of diabetes, as measured by Hemoglobin A1c levels, and control of diagnosed hypertension. By grant type, the singly funded CHC grantees had the lowest level of flagging for poor control for Diabetes, while the HCH programs had the highest, though the PH grantees were also high. There was little differentiation by grant type for hypertension control and neither clinical measure showed a noteworthy difference by rural-urban

status. The size of the organization appeared to make a somewhat greater difference, with small centers flagging at a higher rate for both measures and more than twice the flagging rate for hypertension control. Public Health Centers also had higher flag rates for the clinical measures – particularly for diabetes control where 16.5% were flagged – nearly double the rate for private non-profit organizations.

2. Service Area Level Retention Measures

The profile reports included three measures pertaining to characteristics of an organization's service area that are thought to potentially impact retention of health care providers.

Crime: The violent crime rate is an indicator used in the County Health Rankings, and is considered to be indicative of communities where personal safety may be in question, as well as presenting a difficult context in which to work towards improving the health of the population. This measure flagged primarily for the service areas of urban health centers, at a rate of 15.4% compared to just 3.4% for rural organizations. There was little difference in the flagging rates for large and small centers.

Substance Abuse: Drug abuse in the community is also considered to be a negative factor for provider retention based on issues of drug seeking behavior among patients as well as the complications that come with treating this population. The profiles looked at both non-medical use of prescription pain relievers, as well as illicit drug dependence. Flagging for the first of these measures was observed notably more in rural service areas, where 14% were flagged; nearly twice the rate in urban areas. Again, there was not a large difference in the flagging rates based on the size of the health centers. For illicit drug use there was not a large difference in the flagging rates either between rural and urban or large and small health centers. The service areas of Public Health Centers showed some of the highest flagging rates for both prescription and illicit drug use.

Conclusions and Next Steps

The information provided in this national profile summary is meant to highlight the relative and differential effect, among different types of organizations, of the many factors that can impact a Health Center's efforts to recruit and retain staff. The measures focus both on Health Center organizational characteristics, as well as characteristics of their service areas. Differences by funding category, rurality, size, and corporate structure were observed across many domains, highlighting the fact that the issues underlying recruitment and retention struggles are not uniform and vary greatly based on community and organizational profile. While the findings do not identify causal relationships between the measures and Health Center recruitment and retention experiences, they are potentially useful tools for Health Centers to begin to identify strategies to increase getting and keeping staff.

The STAR2 Center will use the information in this report to further understand the training and technical assistance needs of Health Centers. In the coming year, STAR2 will refine the metrics included in these profiles based on feedback and analyses available since they were initially produced, and further analyze Health Center characteristics in order to tailor support to the Health Centers as they continue to strive to serve their communities.

APPENDIX A

TABLES OF RESULTS

Recruitment and Retention National Measure Analysis

		Descriptive Measures										
Health Center Groupings	Number of Health Centers	Number of Sites	Medical Users	Funding CHC	Funding HCH	Funding MHC	Funding PH	Special Pop Focus	Rural %	EHR Installed/In-Use?	PCMH Recognition?	Any Grant Conditions?
All Health Centers (after Base Exclusions)	1260	9,326	19,102,782	86%	19%	12%	6%	6.3%	46%	95.9%	56.5%	16.0%
CHC Only	764	4,366	9,708,107	100%	0%	0%	0%	0%	54%	97%	58%	17%
HCH Any	243	3,179	4,941,641	73%	100%	14%	16%	27%	16%	97%	66%	21%
MHC Any	157	1,832	3,973,628	94%	21%	100%	7%	11%	64%	97%	72%	17%
PH Any	74	1,036	2,013,710	85%	54%	15%	100%	8%	9%	100%	73%	18%
	Spread	N/A										
	Spread%Max											
	Max % of National											
Urban	683	5,598	12,634,130	81%	30%	8%	10%	9%	0%	95%	56%	16%
Rural	577	3,728	6,468,652	92%	7%	18%	1%	3%	100%	97%	57%	15%
	Spread	N/A										
	Spread%Max											
	Max % of National											
Large - 10k plus patients	594	6,626	15,875,505	94%	23%	20%	8%	3%	35%	97%	69%	14%
Small - under 10k patients	666	2,700	3,227,277	79%	16%	6%	4%	9%	56%	95%	45%	18%
	Spread	N/A										
	Spread%Max											
	Max % of National											
Private, Non Profit Organizations	1041	8,158	16,673,150	95%	20%	13%	6%	5%	47%	97%	63%	18%
Public Health Centers	85	678	1,034,777	74%	39%	15%	6%	26%	35%	91%	39%	16%
	Spread	N/A										
	Spread%Max											
	Max % of National											

Recruitment and Retention National Measure Analysis

Recruitment Grantee Level Measures													
Health Center Groupings	Number of Health Centers	NHSC MD,DO Vacancy/ Current MD Staff	NHSC Dentist Vacancy/ Current Staff FTE	NHSC Psych,LCSW Vacancy/ Current Staff FTE	NHSC NP,PA,CNM Vacancy / Current Staff	NHSC MD,DO Placement / Current MD Staff	NHSC Dentist Placement / Current Staff FTE	NHSC NP,PA,CNM Placement / Current Staff	Grantee Medical HPSA Score	Language Focus (% Best Served nonEnglish)	Any non-staff for senior admin positions (CEO,CMO)	4 Year Avg Profit/Loss (as % Expenses)	Ratio of Avg. Pay per Med FTE to MGMA mix
All Health Centers (after Base Exclusions)	1260	10.3%	10.2%	6.4%	7.4%	9.9%	10.2%	10.3%	16.8%	7.8%	0.5%	10.0%	7.9%
CHC Only	764	11.3%	10.4%	5.6%	8.2%	9.9%	11.8%	11.1%	16.0%	7.2%	0.1%	5.4%	8.0%
HCH Any	243	10.0%	9.0%	9.1%	6.6%	11.3%	9.0%	9.5%	19.6%	4.1%	0.8%	6.2%	7.0%
MHC Any	157	14.5%	15.9%	10.7%	10.2%	11.2%	7.2%	12.1%	20.0%	10.8%	1.9%	2.5%	5.7%
PH Any	74	8.2%	6.8%	7.4%	8.3%	11.0%	3.4%	4.2%	15.1%	9.5%	0.0%	2.7%	9.5%
	<i>Spread</i>	6.3%	9.2%	5.0%	3.6%	1.4%	8.4%	7.9%	4.9%	6.7%	1.9%	3.6%	3.7%
	<i>Spread%Max</i>	43.2%	57.5%	47.2%	34.9%	12.4%	71.3%	65.6%	24.7%	62.0%	100.0%	58.7%	39.4%
	<i>Max % of National</i>	141.1%	156.7%	166.3%	137.7%	114.2%	116.2%	117.5%	118.7%	138.4%	401.3%	61.7%	119.2%
Urban	683	6.8%	6.9%	6.4%	7.0%	10.4%	8.5%	8.7%	15.1%	11.6%	0.0%	11.9%	8.8%
Rural	577	14.5%	14.2%	6.4%	7.9%	9.2%	12.3%	12.2%	18.9%	3.3%	1.0%	7.8%	6.9%
	<i>Spread</i>	7.8%	7.3%	0.0%	0.8%	1.3%	3.8%	3.6%	3.9%	8.3%	1.0%	4.1%	1.9%
	<i>Spread%Max</i>	53.6%	51.2%	0.5%	10.7%	12.2%	31.0%	29.1%	20.5%	71.4%	100.0%	34.2%	21.1%
	<i>Max % of National</i>	141.8%	139.8%	100.2%	106.1%	105.8%	120.8%	118.6%	112.4%	148.3%	218.4%	118.6%	110.7%
Large - 10k plus patients	594	9.8%	11.3%	8.0%	8.9%	12.0%	9.3%	9.9%	15.1%	9.3%	0.2%	4.9%	5.2%
Small - under 10k patients	666	10.7%	8.8%	4.5%	6.0%	7.9%	11.2%	10.6%	18.4%	6.5%	0.8%	14.6%	10.4%
	<i>Spread</i>	0.9%	2.4%	3.5%	2.9%	4.1%	1.9%	0.7%	3.3%	2.8%	0.6%	9.7%	5.1%
	<i>Spread%Max</i>	8.6%	21.6%	43.5%	32.9%	34.0%	16.9%	6.3%	17.8%	30.0%	77.6%	66.5%	49.6%
	<i>Max % of National</i>	104.3%	110.7%	124.2%	120.8%	121.5%	110.3%	103.1%	109.3%	118.8%	157.7%	145.6%	130.5%
Private, Non Profit Organizations	1041	11.4%	11.1%	7.0%	8.1%	10.6%	10.0%	11.0%	17.8%	7.3%	0.3%	5.0%	7.7%
Public Health Centers	85	7.2%	3.2%	1.8%	4.8%	9.6%	19.4%	7.2%	12.3%	4.7%	2.4%	7.1%	10.6%
	<i>Spread</i>	4.2%	7.9%	5.2%	3.3%	1.0%	9.3%	3.8%	5.5%	2.6%	2.1%	2.1%	2.9%
	<i>Spread%Max</i>	36.6%	71.0%	74.5%	40.8%	9.3%	48.3%	34.6%	30.8%	35.7%	87.8%	29.2%	27.4%
	<i>Max % of National</i>	111.2%	109.4%	108.9%	110.0%	107.8%	190.3%	107.3%	105.9%	93.5%	494.1%	70.6%	133.4%

Recruitment and Retention National Measure Analysis

Recruitment Service Area Level Measures															
Health Center Groupings	Number of Health Centers	Primary Care MD/DOs per 100k Pop	Adjusted & Allocated PC MD/DO per 100k Po	All PC Providers per 100k Pop (wgt'd by prod)	% of pop covered by a PC HPSA	% Non-MD providers (wgt by productivity)	NHSC Vacancy % of Current MD,DO providers	NHSC Placement % of MD,DO providers	Specialist MD/DOs per 100k Pop	Hospital Distance (from SA Boundary)	Dentists per 100k Pop	NHSC Vacancy % of Area PC Dentists	NHSC Placement % of Area PC Dentists	Population Density (pop/ sq.mile)	% Limited English Proficiency
All Health Centers (after Base Exclusions)	1260	10.2%	10.1%	10.0%	16.2%	8.2%	11.4%	9.1%	10.1%	3.1%	10.0%	12.1%	9.0%	10.1%	9.0%
CHC Only	764	10.6%	10.4%	10.0%	17.7%	10.2%	12.0%	9.9%	13.8%	4.5%	12.0%	12.0%	10.3%	13.6%	7.6%
HCH Any	243	4.9%	2.9%	4.5%	8.6%	3.7%	6.2%	4.5%	1.2%	0.0%	3.3%	9.1%	4.5%	1.6%	6.6%
MHC Any	157	12.3%	17.8%	12.2%	23.6%	2.6%	18.7%	11.6%	8.3%	1.9%	14.6%	16.7%	14.7%	10.8%	10.8%
PH Any	74	5.4%	4.1%	6.8%	9.5%	6.8%	9.5%	4.1%	0.0%	0.0%	2.7%	9.6%	2.7%	0.0%	6.8%
	<i>Spread</i>	7.3%	14.9%	7.7%	14.9%	7.7%	12.5%	7.6%	13.8%	4.5%	11.9%	7.6%	12.0%	13.6%	4.2%
	<i>Spread%Max</i>	59.7%	83.8%	62.8%	63.3%	75.0%	67.0%	65.1%	100.0%	100.0%	81.3%	45.5%	81.4%	100.0%	39.2%
	<i>Max % of National</i>	120.6%	177.4%	122.4%	145.4%	124.8%	164.5%	127.4%	137.6%	143.9%	146.8%	137.7%	164.3%	135.1%	120.6%
Urban	683	7.5%	7.5%	9.8%	8.2%	5.4%	4.7%	4.5%	1.3%	0.3%	3.5%	7.8%	2.9%	0.3%	15.0%
Rural	577	13.4%	13.1%	10.1%	25.6%	11.5%	19.5%	14.7%	20.4%	6.4%	17.6%	17.2%	16.2%	21.7%	1.9%
	<i>Spread</i>	6.0%	5.6%	0.3%	17.4%	6.1%	14.8%	10.1%	19.1%	6.1%	14.1%	9.4%	13.2%	21.4%	13.0%
	<i>Spread%Max</i>	44.4%	42.5%	2.8%	68.0%	52.8%	76.0%	69.1%	93.5%	95.4%	79.9%	54.7%	81.8%	98.6%	87.3%
	<i>Max % of National</i>	132.3%	129.9%	101.5%	158.3%	140.2%	171.8%	161.3%	202.7%	207.0%	176.4%	142.3%	180.2%	214.8%	166.6%
Large - 10k plus patients	594	7.8%	9.1%	9.4%	13.0%	4.4%	10.6%	7.9%	4.9%	1.2%	7.8%	11.3%	7.9%	3.7%	12.1%
Small - under 10k patients	666	12.4%	10.9%	10.4%	19.1%	11.6%	12.1%	10.2%	14.7%	4.8%	12.0%	12.8%	9.9%	15.8%	6.2%
	<i>Spread</i>	4.6%	1.8%	1.0%	6.1%	7.2%	1.4%	2.3%	9.8%	3.6%	4.2%	1.5%	2.0%	12.1%	6.0%
	<i>Spread%Max</i>	37.3%	16.3%	9.3%	31.9%	62.2%	11.9%	22.3%	66.6%	75.4%	35.0%	11.6%	19.9%	76.5%	49.3%
	<i>Max % of National</i>	121.7%	108.3%	104.6%	117.7%	141.6%	106.0%	111.9%	145.9%	155.1%	119.8%	105.8%	110.4%	156.3%	135.3%
Private, Non Profit Organizations	1041	9.9%	9.7%	9.7%	15.8%	7.5%	12.1%	9.4%	10.3%	3.0%	10.5%	12.9%	9.7%	10.5%	8.2%
Public Health Centers	85	9.6%	10.7%	5.9%	21.2%	10.6%	10.8%	8.4%	11.9%	2.4%	9.5%	6.0%	7.1%	8.2%	3.5%
	<i>Spread</i>	0.3%	1.1%	3.8%	5.4%	3.1%	1.2%	1.0%	1.6%	0.6%	1.0%	6.9%	2.6%	2.2%	4.6%
	<i>Spread%Max</i>	2.8%	9.8%	39.5%	25.5%	29.1%	10.0%	10.5%	13.2%	21.1%	9.6%	53.9%	26.4%	21.4%	56.8%
	<i>Max % of National</i>	97.6%	106.5%	97.7%	130.7%	129.1%	106.0%	103.4%	118.4%	96.2%	105.6%	106.6%	108.1%	103.9%	91.1%

Recruitment and Retention National Measure Analysis

Retention Grantee Level Measures (Page 1)

Health Center Groupings	Number of Health Centers	Year-end Staff Count per FTE - PC MD,DOs	Year-end Staff Count per FTE - PC NP,PA,CNM	Avg Tenure Months/ Staff Count - PC MD	Avg Tenure Months/ Staff Count - NP,PA,CNM	Trend: Tenure Months - PC MD,DOs	Year-end staff individuals per FTE - Dentists	Year-end Psychiatrist,Psychologist per FTE	Year-end LCSW per FTE	Months per Senior Admin staff (CEO/CMO)	Patient Panel per Med provider FTE	Trend: Med Provider Panel Size
All Health Centers (after Base Exclusions)	1260	20.6%	19.8%	10.4%	10.2%	15.1%	23.9%	28.1%	26.4%	10.3%	9.5%	7.5%
CHC Only	764	19.0%	19.5%	10.3%	9.5%	15.5%	20.7%	26.9%	23.7%	10.9%	7.9%	7.3%
HCH Any	243	23.9%	20.4%	8.5%	8.4%	12.3%	32.9%	35.3%	30.8%	9.1%	8.6%	5.1%
MHC Any	157	16.7%	18.7%	8.1%	10.3%	13.7%	22.5%	22.2%	25.8%	8.9%	16.6%	7.7%
PH Any	74	16.4%	17.1%	11.1%	12.7%	7.4%	33.3%	26.9%	23.1%	9.5%	8.1%	4.2%
	<i>Spread</i>	7.5%	3.3%	3.0%	4.3%	8.2%	12.6%	13.1%	7.7%	2.0%	8.7%	3.5%
	<i>Spread%Max</i>	31.2%	16.1%	27.0%	34.0%	52.6%	37.8%	37.0%	25.0%	18.3%	52.6%	45.1%
	<i>Max % of National</i>	115.8%	103.0%	107.3%	124.3%	102.7%	139.2%	125.7%	116.7%	105.9%	173.9%	102.1%
Urban	683	22.3%	21.6%	9.9%	9.7%	14.8%	24.3%	31.6%	30.5%	10.2%	10.1%	8.2%
Rural	577	18.3%	17.8%	10.9%	10.8%	15.5%	23.5%	20.7%	19.7%	10.5%	8.8%	6.8%
	<i>Spread</i>	4.1%	3.8%	0.9%	1.2%	0.7%	0.8%	11.0%	10.8%	0.3%	1.3%	1.4%
	<i>Spread%Max</i>	18.3%	17.5%	8.5%	10.9%	4.7%	3.2%	34.7%	35.5%	3.1%	12.5%	16.7%
	<i>Max % of National</i>	108.4%	108.8%	104.9%	106.3%	102.6%	101.4%	112.6%	115.6%	101.7%	106.1%	108.4%
Large - 10k plus patients	594	17.3%	18.6%	4.7%	3.9%	12.5%	22.4%	29.0%	28.2%	7.8%	10.6%	5.9%
Small - under 10k patients	666	24.4%	21.1%	15.7%	16.1%	17.7%	26.3%	25.9%	23.2%	12.6%	8.6%	9.0%
	<i>Spread</i>	7.1%	2.5%	10.9%	12.2%	5.3%	3.8%	3.1%	5.0%	4.9%	2.0%	3.1%
	<i>Spread%Max</i>	29.1%	11.9%	69.7%	75.8%	29.7%	14.6%	10.8%	17.8%	38.5%	19.3%	34.1%
	<i>Max % of National</i>	118.3%	106.3%	151.2%	157.5%	117.2%	109.7%	103.3%	106.8%	122.3%	111.4%	119.5%
Private, Non Profit Organizations	1041	18.7%	18.1%	9.0%	9.2%	14.3%	23.2%	27.8%	24.9%	9.2%	8.1%	6.3%
Public Health Centers	85	36.9%	38.0%	15.0%	11.3%	14.9%	29.5%	43.8%	42.9%	21.2%	18.8%	16.5%
	<i>Spread</i>	18.2%	19.8%	6.0%	2.0%	0.6%	6.3%	15.9%	18.0%	12.0%	10.8%	10.1%
	<i>Spread%Max</i>	49.3%	52.2%	40.1%	18.1%	4.1%	21.4%	36.4%	41.9%	56.7%	57.1%	61.7%
	<i>Max % of National</i>	179.1%	191.5%	144.9%	110.3%	98.3%	123.4%	155.9%	162.5%	205.4%	197.6%	218.3%

Recruitment and Retention National Measure Analysis

Retention Grantee Level Measures (Page 2)										
Health Center Groupings	Number of Health Centers	Visits per FTE - PC MDs	Ratio of visits per PC Team FTE to MGMA mix	Trend: Visits per PC MD FTE	% Non-physician providers (of Med provider FTE)	Primary Care Clinical Support Ratio	Dentist: Clinical Support Ratio	Admin Support Ratio - Medical	Clinical Quality - Diabetes (HbA1c<8%)	Clinical Quality - Hypertension (controlled)
All Health Centers (after Base Exclusions)	1260	9.6%	10.0%	6.8%	8.5%	9.6%	10.2%	9.4%	9.4%	10.0%
CHC Only	764	8.0%	7.7%	7.1%	9.2%	8.1%	10.3%	6.8%	8.0%	9.8%
HCH Any	243	6.6%	10.7%	5.6%	8.2%	11.5%	12.9%	14.8%	14.4%	9.9%
MHC Any	157	16.3%	17.8%	5.3%	3.2%	8.3%	5.1%	8.9%	10.2%	5.7%
PH Any	74	11.0%	6.8%	10.0%	5.5%	9.5%	11.7%	10.8%	13.5%	9.5%
	<i>Spread</i>	9.7%	11.1%	4.7%	6.0%	3.4%	7.8%	8.0%	6.4%	4.1%
	<i>Spread%Max</i>	59.4%	62.1%	47.0%	65.4%	29.6%	60.6%	54.1%	44.6%	42.0%
	<i>Max % of National</i>	170.5%	178.3%	146.3%	107.8%	120.0%	126.7%	158.2%	152.5%	98.8%
Urban	683	10.0%	10.1%	7.8%	6.5%	9.2%	8.4%	10.8%	10.5%	10.0%
Rural	577	9.1%	9.9%	5.8%	10.9%	10.1%	12.3%	7.6%	8.1%	10.1%
	<i>Spread</i>	0.9%	0.2%	2.0%	4.4%	0.8%	3.9%	3.2%	2.4%	0.1%
	<i>Spread%Max</i>	9.0%	2.2%	25.7%	40.5%	8.2%	31.4%	29.6%	22.7%	1.0%
	<i>Max % of National</i>	104.2%	101.0%	113.4%	128.0%	104.7%	121.0%	115.7%	111.6%	100.5%
Large - 10k plus patients	594	12.0%	12.6%	5.6%	3.5%	4.2%	5.4%	4.5%	7.7%	6.1%
Small - under 10k patients	666	7.4%	7.7%	8.0%	13.0%	14.4%	15.9%	13.7%	11.0%	13.5%
	<i>Spread</i>	4.6%	5.0%	2.4%	9.5%	10.2%	10.5%	9.1%	3.2%	7.5%
	<i>Spread%Max</i>	38.2%	39.4%	30.0%	72.9%	70.8%	66.1%	66.7%	29.3%	55.2%
	<i>Max % of National</i>	125.0%	126.3%	117.0%	152.7%	150.1%	156.8%	145.9%	116.1%	135.1%
Private, Non Profit Organizations	1041	8.8%	8.8%	6.4%	7.5%	7.6%	9.2%	7.4%	8.5%	9.1%
Public Health Centers	85	8.2%	17.6%	8.9%	14.3%	16.5%	19.4%	20.0%	16.5%	12.9%
	<i>Spread</i>	0.5%	8.8%	2.5%	6.8%	8.9%	10.2%	12.6%	7.9%	3.8%
	<i>Spread%Max</i>	6.0%	49.9%	27.7%	47.4%	53.9%	52.7%	63.0%	48.1%	29.5%
	<i>Max % of National</i>	91.5%	176.5%	129.6%	167.4%	171.5%	190.5%	213.6%	174.4%	129.4%

Recruitment and Retention National Measure Analysis

	Number of Health Centers	Retention Service Area Level			Domain Averages			
		Violent crime rate per 100k Pop	% Pop with Non-Medical Use of Pain Relievers	% Pop with Illicit Drug Dependence/Abuse	Recruitment Health Center Level Average	Recruitment Service Area Level Average	Retention Health Center Level Average	Retention Service Area Level Average
All Health Centers (after Base Exclusions)	1260	10.0%	10.3%	10.2%	9.0%	9.9%	13.3%	10.2%
CHC Only	764	9.8%	9.4%	8.0%	8.8%	11.0%	12.3%	9.1%
HCH Any	243	14.0%	13.2%	14.8%	8.5%	4.4%	14.5%	14.0%
MHC Any	157	3.2%	16.6%	14.0%	10.2%	12.6%	12.6%	11.3%
PH Any	74	14.9%	5.4%	10.8%	7.2%	4.8%	12.9%	10.4%
	<i>Spread</i>	11.7%	11.2%	6.8%	3.1%	8.2%	2.2%	4.9%
	<i>Spread%Max</i>	78.4%	67.4%	46.0%	30.0%	65.0%	15.1%	35.1%
	<i>Max % of National</i>	148.6%	160.4%	145.7%	114.1%	127.7%	109.2%	137.7%
Urban	683	15.4%	7.2%	10.4%	8.5%	5.6%	13.8%	11.0%
Rural	577	3.4%	14.0%	9.9%	9.6%	15.0%	12.4%	9.1%
	<i>Spread</i>	12.0%	6.9%	0.5%	1.1%	9.3%	1.5%	1.9%
	<i>Spread%Max</i>	78.0%	48.8%	5.1%	11.1%	62.3%	10.6%	17.3%
	<i>Max % of National</i>	154.2%	136.0%	102.4%	106.6%	151.3%	104.2%	108.3%
Large - 10k plus patients	594	10.5%	9.6%	9.9%	8.7%	7.9%	11.1%	10.0%
Small - under 10k patients	666	9.6%	11.0%	10.4%	9.2%	11.6%	15.2%	10.3%
	<i>Spread</i>	0.9%	1.3%	0.4%	0.5%	3.7%	4.1%	0.3%
	<i>Spread%Max</i>	8.3%	12.3%	4.0%	5.9%	31.6%	27.0%	2.9%
	<i>Max % of National</i>	104.6%	106.2%	101.9%	102.5%	117.6%	114.9%	101.3%
Private, Non Profit Organizations	1041	9.6%	10.4%	9.4%	9.0%	9.9%	12.1%	9.8%
Public Health Centers	85	14.3%	16.5%	17.6%	7.5%	9.0%	21.1%	16.1%
	<i>Spread</i>	4.6%	6.1%	8.2%	1.4%	0.9%	9.0%	6.3%
	<i>Spread%Max</i>	32.5%	37.0%	46.6%	15.9%	9.5%	42.7%	39.1%
	<i>Max % of National</i>	142.9%	159.5%	173.6%	99.8%	100.6%	159.3%	158.7%

APPENDIX B

Valid Percent and Flag Counts

Recruitment and Retention National Measure Analysis

		Recruitment Grantee Level Measures												
Health Center Groupings	Number of Health Centers	NHSC MD,DO Vacancy/ Current MD Staff	NHSC Dentist Vacancy/ Current Staff FTE	NHSC Psych,LCSW Vacancy/ Current Staff FTE	NHSC NP,PA,CNM Vacancy / Current Staff	NHSC MD,DO Placement / Current MD Staff	NHSC Dentist Placement / Current Staff FTE	NHSC NP,PA,CNM Placement / Current Staff	Grantee Medical HPSA Score	Language Focus (% Best Served nonEnglish)	Any non-staff for senior admin positions (CEO,CMO)	4 Year Avg Profit/Loss (as % Expenses)	Ratio of Avg. Pay per Med FTE to MGMA mix	
		Valid Percent of Health Centers												
All Health Centers (after Base Exclusions)	1260	98.3%	74.1%	66.7%	98.7%	98.3%	74.1%	98.7%	97.5%	99.4%	100.0%	100.0%	100.0%	
CHC Only	764	98%	74%	65%	99%	98%	74%	99%	99%	100%	100%	100%	100%	
HCH Any	243	99%	82%	81%	99%	99%	82%	99%	99%	100%	100%	100%	100%	
MHC Any	157	97%	88%	66%	100%	97%	88%	100%	99%	100%	100%	100%	100%	
PH Any	74	99%	80%	73%	97%	99%	80%	97%	99%	100%	100%	100%	100%	
Urban	683	100%	76%	75%	98%	100%	76%	98%	97%	100%	100%	100%	100%	
Rural	577	97%	72%	57%	99%	97%	72%	99%	98%	99%	100%	100%	100%	
Large - 10k plus patients	594	100%	87%	78%	100%	100%	87%	100%	99%	100%	100%	100%	100%	
Small - under 10k patients	666	97%	63%	57%	98%	97%	63%	98%	96%	99%	100%	100%	100%	
Private, Non Profit Organizations	1041	99%	78%	69%	99%	99%	78%	99%	99%	100%	100%	100%	100%	
Public Health Centers	85	98%	73%	66%	98%	98%	73%	98%	95%	100%	100%	100%	100%	
		Direct Flag Count												
All Health Centers (after Base Exclusions)	1260	127	95	54	92	122	95	128	207	98	6	126	100	
CHC Only	764	85	59	28	62	74	67	84	121	55	1	41	61	
HCH Any	243	24	18	18	16	27	18	23	47	10	2	15	17	
MHC Any	157	22	22	11	16	17	10	19	31	17	3	4	9	
PH Any	74	6	4	4	6	8	2	3	11	7	0	2	7	
Urban	683	46	36	33	47	71	44	58	100	79	0	81	60	
Rural	577	81	59	21	45	51	51	70	107	19	6	45	40	
Large - 10k plus patients	594	58	58	37	53	71	48	59	89	55	1	29	31	
Small - under 10k patients	666	69	37	17	39	51	47	69	118	43	5	97	69	
Private, Non Profit Organizations	1041	117	90	50	84	109	81	114	184	76	3	52	80	
Public Health Centers	85	6	2	1	4	8	12	6	10	4	2	6	9	

Recruitment and Retention National Measure Analysis

		Recruitment Service Area Level Measures													
Health Center Groupings	Number of Health Centers	Primary Care MD/DOs per 100k Pop	Adjusted & Allocated PC MD/DO per 100k Po	All PC Providers per 100k Pop (wgt'd by prod)	% of pop covered by a PC HPSA	% Non-MD providers (wgt by productivity)	NHSC Vacancy % of Current MD,DO providers	NHSC Placement % of MD,DO providers	Specialist MD/DOs per 100k Pop	Hospital Distance (from SA Boundary)	Dentists per 100k Pop	NHSC Vacancy % of Area PC Dentists	NHSC Placement % of Area PC Dentists	Population Density (pop/ sq.mile)	% Limited English Proficiency
		Valid Percent of Health Centers													
All Health Centers (after Base Exclusions)	1260	98.4%	99.4%	99.7%	99.9%	99.7%	98.4%	98.4%	99.4%	99.9%	99.4%	99.0%	99.0%	99.9%	99.9%
CHC Only	764	98%	99%	100%	100%	100%	98%	98%	99%	100%	99%	99%	99%	100%	100%
HCH Any	243	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
MHC Any	157	99%	100%	99%	100%	99%	99%	99%	100%	100%	100%	99%	99%	100%	100%
PH Any	74	100%	99%	100%	100%	100%	100%	100%	99%	100%	99%	99%	99%	100%	100%
Urban	683	100%	99%	100%	100%	100%	100%	100%	99%	100%	99%	99%	99%	100%	100%
Rural	577	97%	99%	99%	100%	99%	97%	97%	99%	100%	99%	99%	99%	100%	100%
Large - 10k plus patients	594	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Small - under 10k patients	666	97%	99%	100%	100%	100%	97%	97%	99%	100%	99%	98%	98%	100%	100%
Private, Non Profit Organizations	1041	99%	99%	100%	100%	100%	99%	99%	99%	100%	99%	99%	99%	100%	100%
Public Health Centers	85	98%	99%	100%	100%	100%	98%	98%	99%	100%	99%	99%	99%	100%	100%
		Direct Flag Count													
All Health Centers (after Base Exclusions)	1260	126	126	125	204	103	141	113	126	39	125	151	112	127	113
CHC Only	764	79	79	76	135	78	90	74	105	34	91	91	78	104	58
HCH Any	243	12	7	11	21	9	15	11	3	0	8	22	11	4	16
MHC Any	157	19	28	19	37	4	29	18	13	3	23	26	23	17	17
PH Any	74	4	3	5	7	5	7	3	0	0	2	7	2	0	5
Urban	683	51	51	67	56	37	32	31	9	2	24	53	20	2	102
Rural	577	75	75	58	148	66	109	82	117	37	101	98	92	125	11
Large - 10k plus patients	594	46	54	56	77	26	63	47	29	7	46	67	47	22	72
Small - under 10k patients	666	80	72	69	127	77	78	66	97	32	79	84	65	105	41
Private, Non Profit Organizations	1041	102	100	101	164	78	124	97	107	31	109	133	100	109	85
Public Health Centers	85	8	9	5	18	9	9	7	10	2	8	5	6	7	3

Recruitment and Retention National Measure Analysis

Retention Grantee Level Measures (Page 1)													
Health Center Groupings	Number of Health Centers	Year-end Staff Count per FTE - PC MD,DOs	Year-end Staff Count per FTE - PC NP,PA,CNM	Avg Tenure Months/ Staff Count - PC MD	Avg Tenure Months/ Staff Count - NP,PA,CNM	Trend: Tenure Months - PC MD,DOs	Year-end staff individuals per FTE - Dentists	Year-end Psychiatrist,Psychologist per FTE	Year-end LCSW per FTE	Months per Senior Admin staff (CEO/CMO)	Patient Panel per Med provider FTE	Trend: Med Provider Panel Size	
		Valid Percent of Health Centers											
All Health Centers (after Base Exclusions)		1260	88.2%	93.7%	96.6%	97.3%	94.0%	63.7%	22.6%	39.1%	99.3%	100.0%	97.9%
CHC Only	764	88%	94%	97%	97%	95%	63%	19%	37%	99%	100%	99%	
HCH Any	243	91%	95%	97%	98%	94%	70%	35%	53%	99%	100%	97%	
MHC Any	157	92%	99%	94%	99%	93%	82%	29%	39%	100%	100%	99%	
PH Any	74	91%	95%	97%	96%	92%	73%	35%	53%	100%	100%	96%	
Urban	683	94%	93%	99%	97%	95%	66%	28%	45%	99%	100%	97%	
Rural	577	82%	94%	94%	98%	93%	60%	16%	33%	99%	100%	99%	
Large - 10k plus patients	594	99%	99%	99%	99%	99%	82%	34%	53%	100%	100%	99%	
Small - under 10k patients	666	78%	89%	94%	95%	90%	47%	13%	27%	99%	100%	97%	
Private, Non Profit Organizations	1041	90%	94%	97%	98%	96%	68%	24%	42%	99%	100%	99%	
Public Health Centers	85	76%	93%	94%	94%	87%	52%	19%	33%	100%	100%	93%	
		Direct Flag Count											
All Health Centers (after Base Exclusions)		1260	229	234	126	125	179	192	80	130	129	120	93
CHC Only	764	128	140	76	71	113	100	39	67	83	60	55	
HCH Any	243	53	47	20	20	28	56	30	40	22	21	12	
MHC Any	157	24	29	12	16	20	29	10	16	14	26	12	
PH Any	74	11	12	8	9	5	18	7	9	7	6	3	
Urban	683	143	137	67	64	96	110	61	93	69	69	54	
Rural	577	86	97	59	61	83	82	19	37	60	51	39	
Large - 10k plus patients	594	102	109	28	23	73	109	58	89	46	63	35	
Small - under 10k patients	666	127	125	98	102	106	83	22	41	83	57	58	
Private, Non Profit Organizations	1041	176	178	91	94	142	164	69	108	95	84	65	
Public Health Centers	85	24	30	12	9	11	13	7	12	18	16	13	

Recruitment and Retention National Measure Analysis

		Retention Grantee Level Measures (Page 2)										Retention Service Area Level			
Health Center Groupings	Number of Health Centers	Visits per FTE - PC MDs	Ratio of visits per PC Team FTE to MGMA mix	Trend: Visits per PC MD FTE	% Non-physician providers (of Med provider FTE)	Primary Care Clinical Support Ratio	Dentist: Clinical Support Ratio	Admin Support Ratio - Medical	Clinical Quality - Diabetes (HbA1c<8%)	Clinical Quality - Hypertension (controlled)	Violent crime rate per 100k Pop	% Pop with Non-Medical Use of Pain Relievers	% Pop with Illicit Drug Dependence/Abuse		
All Health Centers (after Base Exclusions)		1260	Valid Percent of Health Centers								Valid Percent of Health Centers				
		98.6%	100.0%	96.3%	99.5%	100.0%	75.0%	100.0%	100.0%	100.0%	98.4%	99.9%	99.9%		
CHC Only	764	99%	100%	97%	100%	100%	75%	100%	100%	100%	98%	100%	100%		
HCH Any	243	99%	100%	96%	100%	100%	83%	100%	100%	100%	100%	100%	100%		
MHC Any	157	97%	100%	96%	100%	100%	88%	100%	100%	100%	99%	100%	100%		
PH Any	74	99%	100%	95%	99%	100%	81%	100%	100%	100%	100%	100%	100%		
Urban	683	100%	100%	96%	99%	100%	76%	100%	100%	100%	100%	100%	100%		
Rural	577	97%	100%	96%	100%	100%	73%	100%	100%	100%	97%	100%	100%		
Large - 10k plus patients	594	100%	100%	99%	100%	100%	87%	100%	100%	100%	100%	100%	100%		
Small - under 10k patients	666	97%	100%	94%	99%	100%	64%	100%	100%	100%	97%	100%	100%		
Private, Non Profit Organizations	1041	99%	100%	97%	100%	100%	79%	100%	100%	100%	99%	100%	100%		
Public Health Centers	85	100%	100%	93%	99%	100%	73%	100%	100%	100%	99%	100%	100%		
All Health Centers (after Base Exclusions)		1260	Direct Flag Count										Direct Flag Count		
		119	126	83	107	121	96	118	119	126	124	130	128		
CHC Only	764	60	59	53	70	62	59	52	61	75	73	72	61		
HCH Any	243	16	26	13	20	28	26	36	35	24	34	32	36		
MHC Any	157	25	28	8	5	13	7	14	16	9	5	26	22		
PH Any	74	8	5	7	4	7	7	8	10	7	11	4	8		
Urban	683	68	69	51	44	63	44	74	72	68	105	49	71		
Rural	577	51	57	32	63	58	52	44	47	58	19	81	57		
Large - 10k plus patients	594	71	75	33	21	25	28	27	46	36	62	57	59		
Small - under 10k patients	666	48	51	50	86	96	68	91	73	90	62	73	69		
Private, Non Profit Organizations	1041	90	92	65	78	79	75	77	89	95	99	108	98		
Public Health Centers	85	7	15	7	12	14	12	17	14	11	12	14	15		