Enabling Services at Community Health Centers - A Critical Component in Building Sustainable Health Care Homes

The Enabling Services Accountability Project: Demonstrating health centers’ added value through enabling services data collection and analysis

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I. Executive Summary

Federally Qualified Health Centers (FQHCs) in the United States and associated territories have delivered high-quality, community-tailored, affordable and comprehensive primary and preventive care to underserved communities experiencing the most acute health disparities for over 40 years. FQHCs are unique to America’s health care landscape because a community board composed of a patient majority governs them. Collectively FQHCs — community, migrant, homeless, and public housing health centers — are an integral part of the nation’s safety net, providing comprehensive primary health and supportive services, often including behavioral health, dental, health education, pharmacy, social services, translation, transportation, vision, and public health campaigns. Many of the supportive services can be defined as enabling services, “non-clinical services that aim to increase access to health care and improve health outcomes.” Research suggests that enabling services contribute to effective and efficient health care delivery, which results in improved health outcomes.

Enabling services are often jeopardized by political and financial pressures because they are non-reimbursable services, usually funded through disjointed and term-limited grants. Data collected to understand their scope and impact are inadequate without a nationally recognized definition and protocol. The limited national data on enabling services is available through the Uniform Data System (UDS) reported by health centers that receive grant funding through the Bureau of Primary Health Care. However, the UDS data set excludes many types of enabling services, and the limited amount of data collected on these services are not comprehensive enough to show the impact of enabling services. The few enabling services that are reported in the UDS include little information on the levels of utilization, the characteristics of enabling services users, and the amount of time dedicated to providing these supportive services. Recognizing the need for more comprehensive enabling services data, AAPCHO developed a standardized comprehensive enabling services utilization data collection protocol. Four health centers participating in the AAPCHO pilot study implemented the recommendations from this data collection protocol and adapted them to their health centers’ procedures and systems, including electronic health records, to track enabling services. Through this project, we have a better understanding of the integral role of enabling services at health centers based on the utilization of services and user characteristics.

Preliminary evidence suggests that enabling services improve the health status of medically underserved Asian American & Native Hawaiian and Other Pacific Islander (AA&NHOPI) communities. Enabling services prevent acute episodes and promote better chronic disease management. Patients are more likely to have well-controlled diabetes (HbA1c<7%) and meet well-child immunization standards. Specifically, health education is associated with improved HbA1c levels twelve months after receiving enabling services care. Broader studies looking at all FQHCs nationwide indicate that community health centers increase the scope of enabling services provision as their uninsured clientele grows.

Enabling services must be a key component of the patient-centered health care home because they represent gateways that increase access to care at FQHCs and address the relevant concerns of their local patient population. This is especially true for providers serving a low-income, medically underserved community. However, this is unlikely to happen until we establish a nationally recognized enabling services definition and implement a standardized enabling services data collection protocol. Uniform enabling services data will help us understand their role and impact in improving access to and quality of care.
II. Introduction and Background

Federally Qualified Health Centers (FQHCs) serve a disproportionately low-income, uninsured, limited English proficient, immigrant population. This population, many of whom are racial and ethnic minorities, experience higher rates of health disparities compared to the general population. An Institute of Medicine (IOM) commissioned report found that such disparities could be attributed to differences in risk factors for specific disease conditions, access to health care, and patient and provider attitudes.1 Our nation’s 1,200 FQHCs are leaders in the national effort to provide health care access to all and to reduce health disparities amongst such diverse and vulnerable populations. Nationally in 2008, health centers served 20 million patients, with 40% from racial or ethnic minority groups, 92% with incomes less than 200% of the federal poverty level, and 74% publicly insured or uninsured.2 By definition, FQHCs are located in medically underserved areas, receive grant funding under Section 330 of the Public Health Services Act, and have governing boards comprised of a patient majority. They provide comprehensive primary and preventive care regardless of a patient’s ability to pay and are a critical component of the nation’s safety net, especially for the growing numbers of uninsured. In this report, we focus on enabling services – non-clinical supportive services that facilitate care at these FQHCs and other community health centers – and their role within the patient-centered health care home.

Health center patients face many challenges to accessing care, with inability to pay (90%), cultural and language barriers (82%), and geographical access (79%) cited as the most common barriers.3 Chronic care management has become an increasingly critical service as more patients dealing with these barriers are reporting multiple health conditions. For example, a patient may not only be limited English proficient and have comorbidities, such as heart disease and diabetes, but also be uninsured with a history of mental illness. Health centers greatly reduce health disparities by providing quality, comprehensive care, including non-clinical enabling services that complement medical care.

Enabling services provided by community health centers break down barriers to care while ensuring that each encounter is addressed in a culturally proficient manner. Defined as “non-clinical services that aim to increase access to health care, and to improve health outcomes,” enabling services are an integral part of the health center culture and is directly linked to the needs of the community served.4 According to data from the 2008 Bureau of Primary Health Care Uniform Data System (UDS) report, 994 health centers (92%) nationwide dedicate staff FTEs to enabling services, with 67% funding case managers, 62% funding outreach workers, 55% funding health educators, and 53% funding eligibility assistance staff.5 These values only indicate paid staff responsible for providing enabling services, but do not account for services delivered by other individuals tasked with a different responsibility. For instance, bilingual medical assistants would not be categorized as interpretation staff even if they provide in-language care during a clinical visit.6
A study from the 1990s found that despite being inadequately funded, health centers are more likely to expand the scope of enabling services rather than discontinue its provision when faced with growing numbers of uninsured patients. However, that study did not address the volume or utilization of these services. Similarly, a study out of North Carolina in 2009 found that more types and greater volume of enabling services are not necessarily related, and that different factors affect the rates of each measure. For example, managed care contracts increase both volume and types of enabling services, while more caseloads are associated with decreases in volume and types of enabling services. Although enabling services are expensive and difficult to sustain, health centers prioritize them as critical components of care delivery for their vulnerable patient populations.

As recently as 2008, AAPCHO health centers on average served twice the proportion of limited English proficient patients and dedicated twice as many FTEs into enabling services provision than the national average health center. One explanation could be that the health centers’ response to their community’s needs attracts more users; another would be that health centers recognize the importance of enabling services in improving the health outcomes of their most vulnerable populations. For instance, interpretation services increase timeliness of care for children in Medicaid managed care and increase limited English proficient patients’ satisfaction for physician and hospital visits. Health education improves general nutrition knowledge, diabetes health outcomes for minorities, and improves cardiovascular outcomes for high-risk minorities at health centers. Eligibility assistance and enrollment in public health insurance programs reduce patients’ financial anxieties; and transportation services facilitate access to care. Often many of these barriers are interrelated, which makes enabling services provision even more critical to the improvement of access to and quality of care, and the betterment of health outcomes.

Health centers act as a safety net and provide high quality, cost-effective primary and preventive care to vulnerable populations with complex conditions and needs. Descriptive analyses of the 2002 Community Health Center User Survey and the 2003 National Healthcare Disparities Report indicate that health center patients experience fewer racial/ethnic and socioeconomic disparities in access to care and quality of care, compared to non-health center patients nationally. Uninsured health center patients were more likely than comparable patients to report a primary care visit (82% vs 68%), to have a regular source of care (96% vs 60%), and to receive a mammogram in the past 2 years (69% vs 49%). Enabling services help establish health centers as comprehensive health care homes; these supportive services are becoming increasingly critical as more patients are diagnosed with chronic illnesses and/or have barriers to care such as limited English proficiency. Despite evidence of the positive impact of enabling services, health centers are inadequately reimbursed to provide them, obliging health centers to absorb the costs at the potential detriment of other services. Moreover, Medicaid prospective payment rates and federal health center grants have not kept pace with this paradigm shift in care provision. The current UDS guidelines fail to capture many types of enabling services and do not detail the provision and impact of enabling services at health centers, thereby inhibiting their adequate financing to improve primary care access and utilization among medically underserved patients.
III. Standardized Enabling Services Data Collection at Community Health Centers

The Association of Asian Pacific Community Health Organizations (AAPCHO) recognized that Asian American, Native Hawaiian, and other Pacific Islander (AA&NHOPI) patients at Federally Qualified Health Centers (FQHCs) have a high incidence of enabling services utilization. Although FQHCs are required to report enabling services data to the Bureau of Primary Health Care as part of the Uniform Data System (UDS), the forms inadequately capture the scope and impact of enabling services. As late as 2009, the UDS only captures the number of enabling services encounters and full-time equivalent staff for a few enabling services categories. Many enabling services remain unrecognized and thus under-supported.

In 2002, AAPCHO partnered with the New York Academy of Medicine and four community health centers to develop a uniform data collection protocol for enabling services, including a handbook, encounter form templates, and data file layout manuals. Adapting findings from a 2000 report by the Medical Group Management Association (MGMA) and National Association of Community Health Centers (NACHC), AAPCHO study partners agreed on nine enabling services categories with common definitions to facilitate data collection, simplify coding, and aggregate data for evaluation and research purposes. Enabling services vary slightly by site due to variances in their patient populations, but all participants report on case management assessment, case management treatment and facilitation, case management referral, health education, interpretation, eligibility assistance, outreach, transportation, and other enabling services (Figure 1). Additionally, only enabling services linked to a medical encounter and longer than 10 minutes are included in analyses.

An enabling services advisory committee composed of health center providers and management, academics, and community advocates was developed at the onset and continue to guide project implementation and objectives. The committee meets quarterly to discuss progress made, lessons learned, challenges encountered, and project expansion opportunities. With significant input from health center personnel, the committee unanimously developed a standard encounter form with minimum data elements. Health centers were given the flexibility to customize the form to their centers’ protocol and systems. Thus, even though some health centers collect additional categories or subcategories for internal purposes, the same broader data categories continue to be comparable across sites. During the pilot study period, all enabling services providers (e.g. community health workers, medical assistants, interpreters) at each participating site were trained on the data collection protocol; their work was validated for comprehensiveness, consistency, and accuracy, leading to changes in the template and workflow to improve the quality of data sets. Enabling service staff was asked to detail the enabling services provided and time allocated during each medical encounter. Over the last few years, health centers have improved their data collection systems and transitioned forms and templates onto electronic medical record (EMR) systems.

With the advent of electronic medical records, we took the opportunity to modify templates for enabling services data collection to include more details and to be more efficient. It allowed multiple users to input data, and alleviated the potential issue of misplaced paper records and redundant data entry. However, electronic template development was slow and adaptation to the new system came with a steep learning curve. One of our health center participants noted delays in developing electronic templates and redundant documentation of data collection as a result of limited resources to facilitate transition to electronic records. At this point, three of the four health centers have successfully implemented enabling service data collection in their EMR systems.
AAPCHO and partnering health centers successfully implemented enabling services data collection protocols within a span of three months to a year based on health center staff and systems availability. Health center partners have since positioned themselves as mentors, sharing their experiences and templates with new health centers interested in enabling services data collection. Particularly notable, one health center was able to use their data to negotiate a better reimbursement rate for the provision of enabling services from their Medicaid managed care payer. Additionally, analysis of collected data find that enabling services users, despite being minority and publicly insured or un-insured, have better diabetes outcomes and childhood immunizations when compared to other health center patients.

Currently, AAPCHO’s enabling services project is ready to expand and implement at new sites. In addition to the four pilot sites, we have implemented our enabling services data collection protocol at three other sites in California and Hawaii. Along with refining our training curriculum and templates, AAPCHO provided refresher sessions to current staff. We further identified best practices in data collection from our pilot study health centers, in order to replicate and implement such practices at

<table>
<thead>
<tr>
<th>Name</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Management Assessment</td>
<td>Non-medical assessment that includes the use of an acceptable instrument measuring socio-economic, wellness, or other non-medical health status.</td>
</tr>
<tr>
<td>Case Management Treatment</td>
<td>An encounter with a center-registered patient or the patient’s family member in which the patient’s treatment plan is developed or facilitated by a case manager. The plan must incorporate the referral to services of multiple providers or health care disciplines.</td>
</tr>
<tr>
<td>Case Management Referral</td>
<td>Facilitation of a health-related visit for a registered patient of the center to a health care or social service provider.</td>
</tr>
<tr>
<td>Eligibility Assistance/Financial Counseling</td>
<td>Counseling of a patient with financial limitations that results in a submission of a completed application to a sliding fee scale or health insurance program including Medicaid, Medicare, or pharmaceutical benefits program, or development of a payment plan.</td>
</tr>
<tr>
<td>Health Education/Supportive Counseling</td>
<td>Provision of health education or supportive counseling in which wellness, preventive disease management or other improved health outcomes are attempted through behavior change methodology.</td>
</tr>
<tr>
<td>Interpretation</td>
<td>The provision of interpreter services by a third party (other than the primary care giver) intended to reduce barriers for a limited English proficient patient or a patient with documented limitations in writing or speaking skills that are sufficient to affect the outcome of a medical visit or procedure.</td>
</tr>
<tr>
<td>Outreach</td>
<td>Patient services that result in the acceptance of a new patient into a provider’s panel who was formerly without a primary care provider at the health center.</td>
</tr>
<tr>
<td>Transportation</td>
<td>Providing direct assistance to a patient by an employee or contractor of a health center to provide transportation for registered patients to receive necessary medical care.</td>
</tr>
<tr>
<td>Other</td>
<td>All other services that reduce access barriers to health care for a registered patient and that do not fall into the above eight categories and are provided by an employee or contractor at the health center.</td>
</tr>
</tbody>
</table>

Figure 1: Enabling Services Definitions

AAPCHO and partnering health centers successfully implemented enabling services data collection protocols within a span of three months to a year based on health center staff and systems availability. Health center partners have since positioned themselves as mentors, sharing their experiences and templates with new health centers interested in enabling services data collection. Particularly notable, one health center was able to use their data to negotiate a better reimbursement rate for the provision of enabling services from their Medicaid managed care payer. Additionally, analysis of collected data find that enabling services users, despite being minority and publicly insured or un-insured, have better diabetes outcomes and childhood immunizations when compared to other health center patients.

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the new sites. For example, one health center served a very diverse clientele and excelled at interpretation services, while another health center perfected data capture in their social services department. Despite our best efforts to obtain comprehensive data from each health center, many enabling services rendered remain unknown due to limitations in staffing and definitions. Services less than ten minutes in duration, services not associated with a medical encounter or with a registered patient, and services offered at community outreach events are not recorded. As the first national effort to standardize the enabling service documentation process, this project has generated much interest and raised awareness from both community health centers and other stakeholders. We have received numerous inquiries regarding AAPCHO’s enabling service definitions and data collection model. The Enabling Service Data Collection Implementation Packet and other project publications have been widely disseminated during conferences and are also available on AAPCHO’s website.

IV. Enabling Services Utilization at Community Health Centers

Federally Qualified Health Centers (FQHCs) strive to provide comprehensive coverage for all medically underserved individuals in their jurisdiction. Enabling services help draw in additional patients. Despite their important role in reducing barriers to quality care for the most vulnerable, enabling services are generally not reimbursed nor continuously funded. This is especially troubling for health centers with limited resources and a burgeoning uninsured population. Funding and reimbursement streams have not kept up with the cost of patient care, including enabling services. Primary funding for enabling services comes from BPHC Section 330 grants, Medicaid reimbursements, and other grant funding. A proportion of Medicaid prospective payment system rates include enabling services costs; however, these payments are subject to policy changes and budgetary pressures, which may lead to a fluctuation in the amount of reimbursement a provider receives for these services from year to year. Historically, reimbursement rates are not often sufficient to account for, let alone enhance enabling services as is. Three-quarters of health center patients nationally are uninsured or enrolled in Medicaid, the most reliable payer across all third-party payers covering 83% of health centers’ Medicaid costs. However, a 2005 report from the Government Accountability Office found that the Medicaid Prospective Payment System rates in at least one-third of all states did not account for all Medicaid-covered services, and that many states did not have a method in place for adjusting rates based on changes in scopes of service or inflation.

State budget shortfalls and the economic recession increase the health centers’ financial burden as they struggle to sustain high-quality care for the rising numbers of uninsured and underinsured patients. With the increased demand for enabling services, health centers need to secure a steady funding stream to sustain and enhance these services. The $500 million that the American Recovery and Reinvestment Act of 2009 invested in health centers over the span of two years is
especially critical for building enabling services and strengthening the health center model. However, that infusion merely fills the gap left by losses in third-party payments and cuts in state grants. This finding was especially striking because AAPCHO health centers spent on average 2.5 times as many dollars on enabling services than the national average. However, across the board, nominal dollars invested in enabling services are on the rise with increases of 39% for AAPCHO health centers and 61% for the national health center average. Without adequate and consistent funding, health centers are unable to support, expand, and sustain their enabling services.

Findings from AAPCHO’s pilot study further illustrate the benefits of enabling services data collection and how that improves health care delivery. One health center found that data collection results helped them allocate their staff and resources better to meet the community’s needs. Another center found that sharing quantified enabling services data with staff empowered and validated their important work as well as promoted data collection acceptability. And perhaps most importantly, a health center was able to negotiate better Medicaid managed care payer rates.

Quantitative enabling services data collected by each of the four health centers in AAPCHO’s pilot study is analyzed individually and as an aggregate. In our methods, we defined each enabling service provided as an encounter, such that a patient who receives multiple services could be counted as several enabling services encounters during one clinic visit. In the most recent calendar year 2009, participating health centers provided on average 37,379 enabling services encounters, to a total of 30,673 patients for an average of 4.9 encounters per user (Figure 2). Data from CHC1 and CHC3 represent only a fraction of the enabling services provided because data collection has not been implemented across all departments and sites.

Health centers offer a diverse array of services that represent the needs of their communities. For example, one CHC is a health center located in a geographically remote area approximately one hour from the nearest city by automobile, thus transportation services account for a significant number of enabling services encounters. Patients at two CHCs speak a myriad of languages, thereby elevating the importance of interpretation services. Enabling services users at one CHC are mainly limited English proficient pregnant women, thus case management assessment and eligibility assistance provided by bilingual staff facilitate access to otherwise untapped resources (Figure 3). Despite the differences in enabling services specialization by our pilot study health centers, their findings support the need to develop a national data registry of enabling services.

<table>
<thead>
<tr>
<th></th>
<th># of Patients</th>
<th># of Services</th>
<th>Average Age</th>
<th>% Female</th>
<th>% AA&amp;NHOPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHC 1</td>
<td>5,623</td>
<td>27,384</td>
<td>32</td>
<td>68%</td>
<td>96%</td>
</tr>
<tr>
<td>CHC 2</td>
<td>10,213</td>
<td>31,471</td>
<td>42</td>
<td>61%</td>
<td>96%</td>
</tr>
<tr>
<td>CHC 3</td>
<td>8,050</td>
<td>61,167</td>
<td>39</td>
<td>59%</td>
<td>82%</td>
</tr>
<tr>
<td>CHC 4</td>
<td>6,787</td>
<td>29,494</td>
<td>30</td>
<td>60%</td>
<td>78%</td>
</tr>
</tbody>
</table>

Figure 2: Overview of Pilot Study Community Health Centers, 2009
An analysis of characteristics of enabling services users found them comparable to the overall patient population, with a female majority and mostly publicly insured or uninsured. While study sites varied in geographical location and size, all four health centers served predominantly Asian Americans, Native Hawaiians, and other Pacific Islanders (AA&NHOPIs). The average age of enabling services users varied from 30 to 42, as did the specific services used. The breadth of enabling services providers ranged from social workers and medical assistants to case managers and eligibility assistance workers. The average time devoted to each enabling service encounter differed by health center and ranged between 12 minutes and 23 minutes in 2009. From 2005 to 2009, the four health centers individually averaged over 27,000 enabling services encounters per year. Given the significant amount of time dedicated to enabling services provision, it is critical for health centers to secure sufficient funds and resources to continue offering this critical component of care that their patients require.

Figure 3: Types of Enabling Services Provided by Health Centers, 2009
V. The Impact of Enabling Services on Health Outcomes

While other studies assess the provision of enabling services at community health centers (CHC), we are unaware of any that utilize a comprehensive data collection mechanism or assess the impact of services on quality of care. AAPCHO has carried out studies to assess the impact of enabling services on specific conditions and care. Evidence from these studies suggest that enabling services are a critical component of the Federally Qualified Health Center (FQHC) model of affordable, comprehensive, high quality care delivery.

Characteristics of Enabling Services Users

This study examined unduplicated individual patient data and total patient encounter data to characterize differences in health conditions and demographics between enabling service users and non-users. Data was collected at three FQHCs in New York, Washington, and Hawaii for patients who had a primary care visit in June 2004. Patients were categorized as non-users if they did not use enabling services between May 2003 and June 2004; patients were considered enabling services users if they used at least one enabling service during this time period.

Statistical analyses suggest that enabling services users are more likely to be female, older, uninsured and AA&NHPI than non-users (Figure 4). For both groups, the most common chronic and acute conditions were diabetes and ear, nose, and throat infections, respectively. The proportion of total patient encounters by enabling services users and non-users with chronic and acute conditions was not significantly different, with the largest variance in genitourinary disorders (7% vs. 4%) and respiratory disorders (12% vs. 15%).

Further analyses of the relationship between specific enabling services measures and diagnoses outcomes yielded interesting results. Patients diagnosed with acute conditions, such as pneumonia or dehydration, were more likely to use eligibility assistance services than those with chronic conditions (22% vs. 17%). Diabetes patients used interpretation services more than financial counseling, case management, and health education (10% vs. 4-6%) while patients with asthma used more case management and health education than financial counseling and interpretation services (5% vs. 2-3%). The results of this study suggest that patients with acute conditions are more likely to be uninsured and may delay seeking services and coverage. It is also possible that patients with acute conditions require more eligibility services than patients with chronic conditions, because an acute condition often brings a patient into the clinic for the first time.

Although health centers used a standard protocol for data collection, enabling services

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Odds Ratio</th>
<th>95% Confidence Interval**</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age**</td>
<td>1.006</td>
<td>(1.002, 1.008)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Gender</td>
<td>Female</td>
<td>1.77</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Insurance</td>
<td>Private (referent)</td>
<td>1.00</td>
<td>(1.24, 1.69)</td>
</tr>
<tr>
<td></td>
<td>Public</td>
<td>1.45</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-Pay</td>
<td>3.25</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>White (referent)</td>
<td>1.00</td>
<td>(1.47, 2.50)</td>
</tr>
<tr>
<td></td>
<td>Asian American</td>
<td>0.92</td>
<td>(0.23, 0.46)</td>
</tr>
<tr>
<td></td>
<td>Native Hawaiian &amp; Other Pacific Islander</td>
<td>1.92</td>
<td>(0.01, 0.12)</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>0.33</td>
<td></td>
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<tr>
<td>Patient Condition</td>
<td>Acute</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Chronic</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Routine</td>
<td>0.99</td>
<td></td>
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</tbody>
</table>

* Generalized estimating equation logistic regression model with enabling service use as the dependent variable, and age, gender, insurance, ethnicity, and patient condition as independent variables, controlling for project site.
** Odds ratio for comparison of given category to referent is statistically significant when confidence interval does not include 1.
*** Multivariable model with age as a categorical variable yielded similar results. Age categories include (in years): <1, 1-4, 5-14, 25-44, 45-64, >64.
**** The data for this analysis are patient diagnosis data from three of the four sites, due to the limited data available from the fourth site.

Figure 4: Patient Characteristics Independently Associated with Enabling Services* ****

(Insert Table and Figure here)
provision varied across sites to better meet the needs of their respective patient communities. Services fewer than 10 minutes were not captured, thus some patients in the non-user group could have used a number of enabling services if each were less than 10 minutes. Overall, this study supports the notion that enabling services contribute to preventing acute episodes and promote better management of chronic diseases. Further, it provides a foundation for future studies that examine specific enabling services and their impact on health outcomes for specific conditions.

Impact of Enabling Services on Diabetes and Childhood Immunizations

This collaborative effort between AAPCHO and four Federally Qualified Health Centers (FQHCs) serving predominantly AA&NHOPIs assesses the impact of enabling service utilization on specific health outcomes. With 2007 data collected using the standardized pilot protocol and definitions, this study examined the relationship between eight enabling services measures – case management assessment, case management treatment, referral, financial counseling/eligibility assistance, health education/supportive counseling, interpretation, outreach services, transportation – and two performance measures – adult diabetes and childhood immunization. Further, it exposed key demographic differences between enabling services users and non-users at FQHCs.

As seen in Figure 5, Patients using enabling services were more likely to have controlled diabetes with HbA1c (a key measure of diabetes) levels below 7% than non-users (53% vs. 42%). Similarly, as seen in Figure 6 enabling services users were more likely to meet well-child immunization measures than non-users (81% vs. 64%). Data from this study indicate that patients who are publicly insured or have no insurance and who are AA&NHOPI were more likely to use enabling services, compared to patients with private insurance who are not AA&NHOPI. However, enabling services provided by each health center varied, ranging from case management to financial counseling to interpretation services, depending on the needs of their community.

Despite differences in sample sizes of enabling services users and non-users, results suggest that enabling services contribute to reductions in diabetes and childhood immunization health disparities and improvements to health outcomes. Therefore, the value of enabling services needs to be recognized and adequately reimbursed to support and sustain the high quality of care delivery at FQHCs.
Evaluation of Culturally Appropriate Community Health Education on Diabetes Outcomes

Using archival data and working with one health center in Hawaii, this study examined the impact of culturally proficient health education utilization on HbA1c (a key measure of diabetes) for underserved populations. Adult diabetes patients (age 18 and older) with three or more primary care visits annually between January 1, 2002 and December 31, 2005 were categorized into two groups: the active group consisting of patients with two or more health education visits annually, and the nonactive comparison group consisting of those patients with less than two health education visits annually during the study period.

Diabetes health education was based on the Chronic Care Model, which adopts a multidisciplinary approach that includes disease management, medication management, insulin administration, and apparatus management (self-monitoring glucose for diabetes mellitus). Additionally, this enabling service is culturally appropriate and tailored to the population served by employing staff from the community. For the purposes of this study, health education services were defined as health education or provision of materials to an individual or family on disease management, or education and monitoring of chronic disease through a self-management plan.

Using archival electronic medical records, patients were randomly drawn from the eligible patient population into the two groups based on administrative and clinical data. The two groups were found to be demographically comparable with no significant differences by gender, age, ethnicity, poverty level, or insurance. As seen in Figure 7, both groups improved HbA1c levels during the study period ($F=133.5$, $p<0.00$). Results showed a significant difference in improvement between diabetes health education active and nonactive users at 12 months after baseline HbA1c values ($F=5.6$, $P<0.02$). These results suggest that health education improved diabetes outcomes for AA&NHOP patients and are thus essential to improving the quality of diabetes care. This study demonstrates the critical impact of health education on reducing HbA1c levels and the importance of sustaining funding for health education services at CHCs. While health education services provided were not specific to diabetes management and prevention, it is important to note the impact of the attention given to the continuity of care and case management, on the patients’ behavior and improved HbA1c levels. Enabling services,
such as culturally and linguistically appropriate health education services, are integral components of health center care for underserved populations and as shown in this study, reduce barriers to diabetes care and health disparities.

National Examination of Relationship Between Enabling Services and Health Outcomes

<table>
<thead>
<tr>
<th>Services</th>
<th>Case Management Encounters</th>
<th>Health Education Encounters</th>
<th>ES FTE</th>
<th>ES Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Childhood Immunization</td>
<td>-0.001</td>
<td>0.03</td>
<td>0.09*</td>
<td>0.11*</td>
</tr>
<tr>
<td>Pap Test Rate</td>
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<td>0.09*</td>
<td>0.15*</td>
<td>0.16*</td>
</tr>
<tr>
<td>Healthy Birthweight</td>
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<td>0.06</td>
<td>0.09*</td>
<td>0.09*</td>
</tr>
<tr>
<td>Controlled Blood Pressure</td>
<td>0.02</td>
<td>0.03</td>
<td>0.05</td>
<td>0.04</td>
</tr>
<tr>
<td>Hba1c Level</td>
<td>-0.06</td>
<td>-0.04</td>
<td>-0.05</td>
<td>-0.02</td>
</tr>
</tbody>
</table>

*p value <0.05

**Figure 8: Correlation between Enabling Services and Health Outcomes**

A total of 1,080 Federally Qualified Health Centers (FQHCs) reported data to the Uniform Data System (UDS) in 2008. Using this national data set, this study examined the correlation between the cost of providing enabling services and the health outcomes of FQHC patients. 2008 data from the UDS included staffing and general cost information on the following enabling services staff: case managers, patient/community education specialists, outreach workers, transportation and interpretation personnel, eligibility assistance workers, and other enabling services staff. In analyzing the 2008 UDS data, this study found that enabling services staffing and costs are positively correlated with national quality measures, including childhood immunizations, women’s Pap tests and infant birth weight. Data also showed that Health Education utilization is associated with higher Pap test rates (Figure 8). By comparing FQHCs that spent the most (top 10%) on enabling services with all FQHCs, similar results were obtained showing that FQHCs with the highest investment in enabling services had significantly better health outcomes (Figure 9). These results suggest that enabling services are a vital investment in preventive care. However, due to limited resources, FQHCs spent less than 8% of their total expenditures on enabling services in 2008. Without adequate funding, FQHCs are only able to provide enabling services to the most needy of patients. It is critical to recognize enabling services as a unique feature addressing the many needs of FQHC patients and that resources to support these services are critical to supporting improved health outcomes.

**Figure 9: Investment in Enabling Services is Associated with Better Health Outcomes**
VI. Conclusions and Recommendations

Historically community health centers have served as health care homes for scores of medically underserved individuals, with enabling services facilitating their care delivery. Many underserved patients must overcome multiple barriers to care including geography, language, culture, and finances. Enabling services are often the critical mechanism in which patients approach health centers and receive vital care. Despite their evidenced impact in such areas as preventing acute episodes and promoting better chronic care management, enabling services are often jeopardized by political and budgetary pressures. As a result of many years of work in standardizing enabling service documentation and studying the impact of enabling services on health care delivery, we developed the following recommendations:

1) Develop nationally recognized standards for collecting enabling services utilization data and implement this protocol at all federally qualified health centers.
Standardization of definitions and of a data collection protocol will ensure that all health centers have the tools available to demonstrate the value of enabling services. Replicating project implementation nationwide will yield directly comparable data, which will build critical mass to help federally qualified health centers justify enabling services provision to contribute to such issues as universal health coverage, maintaining prospective payment systems, and negotiating roles and responsibilities within managed care organizations. Further, the establishment of a nationally recognized standard is an essential step in quantifying the value of enabling services for health care delivery and outcomes.

2) Integrate enabling services as a critical component of the patient-centered health care home.
The patient-centered health care home, also known as patient-centered medical home, is a team-based primary health care delivery model with a systems-based focus to quality and safety improvements. In defining a health care home at community health centers, enabling services must be part of the equation. Enabling services help vulnerable patients maintain ongoing relationships with their primary care physician and have been shown to coordinate better care for the chronically ill. As health centers already subscribe to many areas of competency seen as necessary for health care homes—including community participation, training and economic development, and culturally appropriate practices—it is of the utmost importance to strengthen their enabling services provision and utilization to reduce avoidable costs and improve overall health. Supportive enabling services are a critical factor in building sustainable health care homes. Increased documentation offers an opportunity for more detailed analyses to maximize the usage of enabling services in reducing health disparities and improving care for underserved populations across our nation.

3) Ensure adequate and sustainable funding for enabling services provision at community health centers.
Term-limited funding and disjointed registries impede comprehensive data collection and reporting of enabling services. Additionally, health center budgets are increasingly strained as demand for care increases; reliance on enabling services grows as more individuals seek services such as eligibility assistance and interpretation to access care. It is of utmost importance for enabling services to be recognized and adequately reimbursed by all payers as part of the medical care patients receive at health centers.

However, galvanizing enabling services at health centers extends beyond obtaining a reasonable reimbursement for care; additional resources must be procured to strengthen and sustain
enabling services. Specifically, a robust health information technology infrastructure supports enabling services integration into an electronic health record system – the trend of medicine – and builds a foundation for future studies. Fortuitously, the four pilot study health centers in AAPCHO’s projects invested in two different electronic medical record systems, thereby developing templates and communications for enabling services across programs. Electronic records hold much promise for the advancement and recognition of the value of enabling services.

4) Build a business case for enabling services.
Preliminary evidence from AAPCHO’s research studies demonstrates that enabling services improve specific health outcomes and reduce acute episodes. However, most, if not all, health centers nationwide are operating near capacity in terms of patient load and staff responsibilities. And while AAPCHO’s enabling services project requires additional resources to implement and sustain the data collection effort, pilot centers were able to use obtained data to expand, improve, and better manage care delivery. Thus, in order for enabling services’ impact and scope to be fully maximized, assets need to be allocated to its implementation.

AAPCHO is partnering with the National Association of Community Health Centers to issue guidance on standards and a data collection protocol for enabling services. With this larger, comparable data set, enabling services’ impact will be more readily apparent. Additionally, costs and resource allocation needs can be better approximated, which will strengthen health centers’ ability to build a business case and obtain adequate funding for these critical services.

Community health center staff, patients, and researchers alike, agree that enabling services are necessary to improve the quality of care for vulnerable populations. Acting as an access point for many communities, enabling services empower patients to seek medical care and manage their health. Community health centers continue to be at the forefront of expanding innovative campaigns that improve quality of care for low-income, limited English proficient, and medically underserved populations. Accordingly, enabling services must be appropriately recognized and rewarded for their role in eliminating health disparities. Community health centers can help promote the enabling services campaign through uniform data collection of enabling services. This would allow health centers to collaboratively advocate for appropriate funding for provision of enabling services nationwide and thereby significantly improve the health of our nation’s medically underserved populations. To learn more about implementing standardized enabling services data collection, please visit: http://enablingservices.aapcho.org or contact:

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