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Examination of Health Conditions of Enabling Service Users

Enabling Services Accountability Project

Association of Asian Pacific Community Health Organizations
New York Academy of Medicine

INTRODUCTION

Enabling services (ES), nonclinical services that facilitate access to care, are believed to improve health outcomes for underserved minority patients. They also help to prevent acute episodes and promote better management of chronic diseases. Moreover, culturally and linguistically appropriate enabling services are integral components of health care that reduce barriers to care and health disparities for AAPIs and other vulnerable populations. However, there is no solid evidence to support this claim, as there is a current lack of data on enabling services. In addition, these services are not reimbursed or adequately funded by payors; the lack of data is a crucial barrier to securing financial support for these essential services at Community Health Centers (CHCs).

This collaborative study between the Association of Asian Pacific Community Health Organizations (AAPCHO) and the New York Academy of Medicine, addresses this information gap and takes a closer look at CHC patients who utilize enabling services. The CHCs in this study are Bureau of Primary Health Care federally qualified health centers (FQHC) located in Hawaii, New York, and Washington. Each AAPCHO CHC serves predominantly Asian Americans, Native Hawaiians, and Pacific Islanders. Patient diagnoses were categorized into ambulatory care sensitive conditions (ACSCs). Nine different enabling service categories were included in the analysis to better examine the differences in patient health conditions by enabling service use. (See Methods section)

Overall, this study provided an overview of the health conditions of enabling service users as well as an examination of patients with comorbidities, or simultaneous conditions. This study provides an essential foundation for future enabling service studies that examine health outcomes for specific conditions. By examining enabling services and their measurable effects on health, we can begin to develop funding and reimbursement strategies to pay for these essential and currently non-reimbursed services at CHCs nationwide.

METHOD

Sample

♦ **Setting:** Three federally qualified health centers located in Chinatown New York City, NY, Seattle, WA, and Waianae, HI

♦ **Sample:**

Enabling Service Users (N=2656): Patients who used at least one enabling service and had a primary care visit in June 2004.

Non-Enabling Service Users (N=2190): Patients who had a primary care visit in June 2004. Patients were excluded if they used enabling services during varying health center data collection periods between May 2003-June 2004.

Measures

- ♦ **Demographic:** Gender, Age, Ethnicity, Insurance
- ♦ **Enabling services categories:** case management assessment, treatment, and referral; eligibility assistance; health education or supportive counseling; interpretation; outreach; and transportation services. Please contact AAPCHO for definitions and data collection protocol.
- ♦ **Primary diagnosis** of all primary care visits from 6/1/02-6/30/04

Analysis

- ♦ **Diagnoses** were coded as Ambulatory Care Sensitive Conditions (ACSCs) (Falik et al, 2001; Billings, et al. 1993). ACSCs are medical conditions for which timely effective outpatient care can prevent hospitalization or ER visits.
- ♦ **Chi square and t-test analyses** were used to examine differences between enabling service Users and Non-Users.

**Table 1:
Patient Demographics of ES Users and Non-Users**

	ES User		Non-ES User		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Total	2,656	100	2,190	100	4,846	100
Gender*						
Female	1,809	68	1,255	57	3,064	63
Male	847	32	935	43	1,782	37
Ethnicity*						
Chinese	1,150	43	779	36	1,929	40
Filipino	165	6	231	11	396	8
Korean	107	4	38	2	145	3
Vietnamese	307	12	307	14	614	13
Other Asian ^a	137	5	120	5	257	5
Native Hawaiian	469	18	318	15	787	16
Samoan	66	3	40	2	107	2
Other Pacific Islander	29	1	37	2	66	1
Total AAPI	2430	92	1870	86	4300	88
White	132	5	138	6	270	6
Other Race/Ethnicity ^b	92	3	180	8	272	6
Insurance Carrier*						
Medicaid	1,004	38	976	45	1,980	41
Medicare	337	13	251	11	588	12
Other Public	505	19	272	12	777	16
Private	285	11	358	16	643	13
Self-Pay	525	20	326	15	851	18
Other Carrier	0	0	6	0.3	6	0.1
Age*						
Younger than 1	72	3	137	6	209	4
1-4	154	6	195	9	349	7
5-14	174	7	298	14	472	10
15-24	390	15	240	11	630	13
25-44	687	26	488	22	1,175	24
45-64	687	26	501	23	1,188	25
Older than 64	492	19	331	15	823	17

*p < .05

^aIncludes Japanese and Asian Indian

^bIncludes American Indian/Alaska Native, African -American, Hispanic/Latino, Mixed -AAPI, and Mixed Other

RESULTS

Analyses indicated that ES Users and Non-Users significantly differed in gender, ethnicity, insurance, and age (p<.05). See Table 1. ES Users were more likely to be female, AAPI, uninsured, and older (mean=40 vs. 34 years). ES Users had a higher incidence of chronic conditions

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Table 2: Chronic & Acute Ambulatory Conditions of ES Users and Non-Users

	ES User		Non-ES User		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Chronic Conditions						
Asthma	127	2	144	3	271	2
Epileptic Convulsions	17	0.3	12	0.2	29	0.3
Cellulitis	160	3	95	2	255	2
Diabetes	324	5	209	4	533	5
Heart Failure	71	1	26	1	97	1
Hypertension	108	2	109	2	217	2
Iron Deficiency	12	0.2	11	0.2	23	0.2
Pulmonary Disease	174	3	135	3	309	3
Total	993	17	741	15	1734	16
Acute Conditions						
Bacterial Pneumonia	3	0.1	2	0.04	5	0.05
Dehydration	5	0.1	2	0.04	7	0.1
ENT	667	11	693	14	1,360	12
Gastroenteritis	36	1	81	2	117	1
Hypoglycemia	7	0.1	1	0.02	8	0.1
Kidn/Urinary Infection	163	3	89	2	252	2
Pelvic Inflammatory Disease	3	0.1	2	0.04	5	0.05
Failure to Thrive	14	0.2	22	0.4	36	0.3
Pulm Tb	3	0.1	1	0.02	4	0.04
Other Tb	1	0.02	0	0	1	0.01
Immunization	0	0	3	0.1	3	0.03
Total	902	15	896	18	1798	16
Reproduction & Dev	917	15	720	14	1,637	15
Routine Care	874	15	773	15	1,647	15
Other	2,307	38	1,956	38	4,263	38
Total	5,993	100	5,086	100	11,079	100

whereas Non-Users had a higher incidence of acute conditions. For both ES Users and Non-Users, the most common chronic and acute conditions were Diabetes and Ear, Nose, & Throat (ENT) Infections, respectively. See Table 2. The most common diagnosis was ENT for both ES Users (11%) and Non-Users (14%). The average number of ACSCs per user was 1.5. Upon further analysis (see Table 3), we found that ES users had a higher percentage of visits for genitourinary disorders, conditions in the urinary or genital organs such as prostate disease, (7 vs. 4%) and a lower percentage of visits for respiratory disorders (12 vs. 15%). For more information, see Table 3 below.

Analysis by Enabling Services

Analysis of financial counseling, case management combined with health education, and interpretation use also yielded interesting results. Patients with diabetes used more interpretation (10% vs. 4-6%) while asthma patients used more case management and health education (5% vs. 2-3%). Patients with chronic conditions were less likely to use financial counseling (17%) than patients with acute conditions (22%). Patients diagnosed with chronic compared to acute conditions may be less likely to require financial counseling due to their comprehensive and planned medical care.

CONCLUSIONS / IMPLICATIONS

- ◆ This study provided preliminary evidence that ES Users, compared to Non-Users, are more likely to be from a minority background, uninsured, older in age, and have a greater need for enabling services. Patients with genitourinary disorders may also be more likely to require enabling services.
- ◆ Enabling services provided at CHCs are likely to prevent acute episodes and promote better management of chronic diseases. Health outcomes for specific diseases, such as diabetes, the most common chronic condition observed in this study, will be analyzed in future studies.
- ◆ Enabling services data can be used to examine how enabling services at CHCs improve quality of care and reduce health disparities. These services can be further studied and tailored to specific AAPI populations and health conditions. The research can also demonstrate the impact of these services on health, and be used as a tool to advocate for reimbursement of these services.

Table 3: ICD-9 Diagnoses of ES Users and Non-Users

	ES Users		ES Non-Users		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Infectious Diseases	550	4	519	5	1,069	4
Neoplasms	73	1	43	0.4	116	0.5
Metabolic and Immune Disorders	974	7	689	6	1,663	7
Blood Diseases	93	1	81	1	174	1
Mental Disorders	320	2	202	2	522	2
Neurological Disorders	501	4	517	5	1,018	4
Circulatory Disorders	912	7	707	7	1,619	7
Respiratory Disorders	1,559	12	1,587	15	3,146	13
Digestive Disorders	493	4	437	4	930	4
Genitourinary Disorders	891	7	480	4	1,371	6
Complications Of Pregnancy	375	3	64	1	439	2
Skin/Subcutaneous Diseases	695	5	603	6	1,298	5
Musculoskeletal Diseases	1,046	8	764	7	1,810	8
Congenital Anomalies	17	0.1	16	0.1	33	0.1
Perinatal Conditions	35	0.3	43	0.4	78	0.3
Ill-Defined Conditions	1,551	12	1,405	13	2,956	12
Injury And Poisoning	406	3	384	4	790	3
Factors Influencing Health Status and Access	2,841	21	2,199	20	5,040	21
Total	13,332	100	10,740	100	24,072	100

LIMITATIONS

- ◆ Although the health centers used a standard protocol for data collection, they used different methods to provide enabling services. Enabling services data thus reflects those services captured through each center's protocols. For example, one health center implemented the project in one department, while other health centers achieved varying organizational levels of implementation.
- ◆ Services less than 10 minutes are not captured. Thus, some patients in the non-user group may have used a number of enabling services that were each less than 10 minutes.