ACHA Benchmarking Committee Report:

2010 Survey on the Utilization of Student Health Services

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INTRODUCTION

Young adults need reliable sources of health care for both chronic health conditions such as asthma and mental health diseases as well as acute illnesses and injuries, yet this cohort has the highest rate of uninsured of any age group.1 While nearly half of the nation’s over 11 million young adults between the ages of 18-24 attend an institution of higher education (IHE) part or full-time and student health services (SHS) are present on many of the nations over 4,400 campuses, there is little national information available about the scope and utilization of services provided or administrative benchmarks such as provider productivity, funding, or staffing ratios within these practices.2,3 Published estimates of young adult healthcare utilization are based upon data from the National Ambulatory Medical Care Survey (NAMCS) and National Hospital Ambulatory Medical Care Survey (NHMCS) which do not include services provided at student health services.4 SHS are also not represented in common benchmarking data such as that available from the Medical Group Management Association (MGMA). Better information is needed to understand the contribution of SHS to young adult health care services as well as for campus health service planning and administration.

Beginning in 1995, the American College Health Association (ACHA) Benchmarking Committee has completed national surveys of SHS utilization and administrative benchmarks. In 2006 and then again in the spring of 2010, we completed a utilization survey to better understand the scope of services, utilization, and staffing of SHS nationally.

Though our survey was not primarily focused on mental health care provision, this component of the care of college students has come to the forefront of discussions about health and safety on many campuses. National trends in mental health needs on college campuses have gained significant attention in the last several years. The 2007 National College Health Assessment data reveals that 43.2% of 20,500 student respondents on 39 college campuses felt “so depressed that it was difficult to function” at least once in the 12 months prior to taking the survey.5 Data from the “Health Minds” study from the University of Michigan shows that 17% of respondents screened positive for depression at the time of the survey administrations in 2007 and 2009.6 While these statistics place college students at about the same risk of mental illness as their non-college attending age counterparts the need for mental health care on campuses is substantial and some data regarding mental health service will be included in this analysis.

SURVEY DESCRIPTION

The 2010 Survey on the Utilization of Health Services was developed and approved by the Benchmarking Committee of the ACHA. The survey was a revision of a similar survey completed in 2006. Participants were invited to participate via several methods. In February 2010, an invitation to
participate, which included a web URL address, was sent via blast email to ACHA Institutional and Individual Members, followed by general announcements to the college health field via the Student Health Service (SHS) Listserv, Clinical Medicine (CLINMED) Listserv, and College Health Promotion (HLTHPROM) Listserv. Although it is impossible to determine the actual number of institutions or individuals that received the invitation to participate due to the dynamic nature of listserv subscriptions, estimates indicate the total non-overlapping contacts to be approximately 1,100 institutions. A second reminder was sent to the ACHA e-mail list approximately one month later. The survey closed on April 30, 2010.

The survey contained 44 items many with multiple answers. The first 9-items asked identifying information and a series of standard questions about the IHE, known as the institutional profile, which is used on other ACHA surveys. The remaining questions covered student enrollment, scope of services provided, funding mechanisms, and utilization by provider type, staffing levels, and compensation structure. Participants were asked to complete the survey based on data from the 2008-2009 academic year. Data were analyzed in whole and then grouped into demographic sub-populations. The full survey is available as Appendix A.

**FINDINGS**

*Description of Respondents*

Of the institutions that received an invitation to complete the Utilization Survey, 172 IHEs, with a collective enrollment of 2,781,846 students, responded to at least a portion of the survey. Our respondents included 130 private institutions, 68 public institutions, and one institution did not report their status in this regard. Services offered at the SHS on most campuses were most often only provided for enrolled students. The percent of schools reporting provision of service to other constituents is as follows: student spouses/partners-17%, student dependents-6%, faculty/staff-23%, faculty/staff dependents-4%, and community members-5%. 83 institutions (48%) reported accreditation of their SHS by the Joint Commission, the Accreditation Association Ambulatory Health Care, or another agency.

Our survey included several questions about institutional size including enrollment numbers of undergraduates, graduate students, and “other” defined as part-time and certificate students. We did not inquire about the residential versus non-residential nature of our responding institutions. (The sample included only four community colleges as an example). Compared to the Carnegie Class distribution of primarily and highly residential institutions, our sample was overly representative of medium and large campuses (see Figure 1). The number of respondents reporting various sizes of enrollment of undergraduates and graduates is represented below (see Figure 2).
Figure 1: Within IHEs categorized as primarily and highly residential, the study sample overrepresented medium and large institutions compared to the national Carnegie sample. Very small equals fewer than 1,000 full-time fall enrollees, small equals fall full-time enrollment of 1,000-2,999, medium equals 3,000-9,999 enrollees and large equals at least 10,000 enrollees. National data derived from U.S. Department of Education, National Center for Education Statistics, 2005 and 2006 Integrated Postsecondary Education Data System (IPEDS), spring 2006 and spring 2007. Carnegie Foundation for the Advancement of Teaching, Carnegie Classifications Data File, February 11, 2010.

Figure 2: The distribution of undergraduate and graduate enrollment among the 172 survey respondents is described in the above graph.
Location

66 of the respondent institutions were from urban areas with location population greater than 100,000 and 28 from urban areas with location population less than 100,000. A suburban location was reported by 36 of the institutions and 41 of the institutions reported located in a rural area. This is a relevant variable as location may have a significant impact on access to services outside of the SHS. The geographic distribution of the sample institutions was similar overall to the distribution reported by the Department of Education of overall institutions, as well as the overall membership of the American College Health Association (see Figure 3).

Figure 3: The geographic location distribution, by ACHA affiliate classification, was comparable between the sample and the most recent Department of Education report. A comparison to the total ACHA membership is also depicted. There were no international institutions that responded to our survey. Southwest (AR, LA, NM, OK), South (AL, FL, GA, MS, NC, SC, TN), North Central (IA, MN, ND, SD, WI), Central (KS, MO, NE), Rocky Mountain (CO, MT, WY), Mid-American (IL, IN, KY, MI), Ohio, Mid-Atlantic (DC, DE, MD, NJ, PA, VA, WV), New York, New England (CT, MA, ME, NH, RI, VT), Pacific (AK, AZ, CA, HI, ID, NV, OR, UT, WA) Carnegie Foundation for the Advancement of Teaching, Carnegie Classifications Data File, February 11, 2010
Nature, availability and scope of services

Scope of services provided is an important determinant of utilization. We assessed the scope of reporting and available services at each of the respondent schools (see Figure 4).

![Programs Reporting to SHS](image)

**Figure 4**: Services reporting to SHS of the 172 survey respondents. Medical services were most common followed by health promotion.

The range of medical services provided by SHS varied and was not found to be dependent upon location, IHE size, or number of eligible students (see Figure 5).

![Scope of Medical Services](image)

**Figure 5**: Percentage of respondents who reported offering selected medical services.
Our results support a trend toward the provision of more outpatient versus inpatient service, 160 of our respondents did not have an active infirmary (94% of those who responded to this question), and toward a broad range of outpatient services. This is comparable to the 2006 utilization administration survey on which 93% of respondents did not have an infirmary. Interestingly, only 44 of those institutions without an infirmary reported providing after-hours on-call services. Our survey did not inquire about the nature of arrangements for after-hours care within each institution. For all institutions that responded, 32% reported providing after hours on-call medical service (52 of 162 respondents).

We queried our respondents regarding the number of open months of their health service. Nine of the 170 who responded to this question reported being open for 9 months out of the year. All of these institutions reported less than 5,000 undergraduate/graduate enrollment. 9 to 11 open months were reported by 37 institutions and 124 reported being open year-round. 94% of institutions with 10,000-15,000 students and 96% of institutions with >15,000 students were open all 12 months of the year.

Hours of operation ranged from 8 to 168 per week during the academic year. The most common number of academic year hours was 40 with an average of 49 and a median of 44. Five institutions reported being open 24 hours, 7 days a week during the school year. Summer hours were substantially fewer and ranged from 6 to 72 for those health centers remaining open in the summer. The most common number of summer hours was 40 with an average of 38.

Mental health/counseling services were provided by a number of our respondents. As noted in Figure 4 above, 33% of the SHS respondents included a counseling center as a reporting department. Of the 129 respondents which reported that a separate counseling service existed on campus that was not represented in the response to the survey, i.e. a separate entity from the SHS, 38 (30%) also provided counseling services within the SHS. These responses suggest that there may be substantial duplication of services in the mental health arena on some campuses. We did not inquire about systems of communication between the varied mental health services on campus, a detail that is very relevant to coordination of care and patient safety. Of the schools providing mental health care through SHS, after hour’s coverage for this care was available at 38% of institutions.

**Funding and Insurance**

Respondents were asked to provide information about the funding of the health service. 57% of respondents indicated that they received funding from a designated health fee. Public institutions were much more likely to have a designated health fee, 75% of public school respondents, compared to private institutions, and 29% of private school respondents. While most respondents reported revenue from billing, this was a relatively small part of total budget for most institutions. 50% of institutions reported
receiving less 10% of their budget from billed revenue, while only 16% received more than 50% from billed revenue. Institutions most frequently reported billing patients directly, 78%, followed by the campus student health insurance plan, 41%, and 3rd party insurance providers, 24%.

A health insurance requirement of some form was much more common at private institutions compared to public institutions, 65% to 35%. Compared to 2005-2006, the percentage of respondents from public campuses with a health insurance requirement had increased from 20%. This may reflect various national trends including the adoption of health insurance requirements and formation of student health insurance consortium arrangements by state university systems. Among public institutions, the most common funding combination was a designated health fee but no insurance requirement, while for private institutions a health insurance requirement without a designated fee was most common (see Figure 6). While overall the percentage of eligible students enrolled in a campus Student Health Insurance Plan was most frequently less than 10%, enrollment was on average 31% on campuses with some form of a health insurance requirement and 8% on campuses when there was no such requirement.

![Health Fee and Insurance Requirement](image)

**Figure 6: Percentage of institutions indicating the presence of a designated health fee and/or a health insurance requirement shown by institutional control and for all respondents.**

**Staffing and Utilization**

While the total number of respondents for this survey was 172, far fewer than that number completed the various staffing, visit count, and utilization portions. Given the low number of responses, the reporting of results in this area are limited to primary care medical services. Again, given this limitation as well as the weighting of overall survey respondents toward larger institutions, the outcomes reported in this section should be considered reporting of the results that may not be readily generalizable to all IHEs.
**Utilization:** Recognizing great heterogeneity in utilization of health services, the total number of medical visits per eligible students was calculated for all respondents and by institutional control. Based on the 162 respondents providing information, the median number of visits per eligible student was found to be 1.2. Total medical visits per eligible student were higher at private versus public campuses and were lower than reported on the ACHA 2006 Utilization Survey (see Figure 7). Similarly the percentage of eligible students utilizing the health service in the reporting period was higher among private institutions, 49%, than for public institutions, 43%.

![Annual Medical Visits per Eligible Students](image)

**Figure 7:** Medical visits per eligible student overall and by institutional control. Total visits are compared to results from the 2006 ACHA Utilization Survey.

Visits per eligible student also varied to some degree based on the urban versus rural location of the respondent school (see Figure 8).

![Campus Location](image)

**Figure 8:** Visits per eligible student based on the location of respondent school (urban through rural).
Overall Staffing: Overall levels of non-provider staffing varied dramatically between respondents, in fact, too widely for the data to provide any useful guidance on ratios of students to staff.

Provider activity: There was a wide dispersion in the provider activity levels for primary care provider responses, and overall unreliable data for specialty providers (psychiatry, gynecology, etc). Provider activity levels (annual visits per provider type) often had standard deviations which were wider than the overall survey results, making conclusions very difficult to draw. We have represented visit numbers per provider type below without reference to standard deviation. This data should be interpreted with that reality in mind.

![Annual Visits per FTE](image)

**Figure 9:** Median, average, 25th and 75th percentile annual primary care visits per FTE by discipline. Respondents for MD visits were 122 schools, for PA visits 35 schools and for NP visits 134 schools.

Data was gathered on the average length of visits for primary care and mental health. The most common visit length for primary care was 15 minutes (78%), followed by 20 minutes (46%), 30 minutes (13%) and 10 minutes (7%). For annual exams, 72% of respondents reported allotting 30 minutes, 23% allot 45 minutes and 9% allot 60 minutes. Visit lengths for mental health providers are represented below (see Figures 10 and 11).
The data collected from this survey may be significantly limited by voluntary participation from a relatively low number of respondents (172). The survey respondents represent only those campuses that chose to participate and may reflect neither the overall ACHA membership nor a representative sample of all SHS. Within the dataset, there are an even lower number of respondents to individual questions since very few of the respondents filled out all the survey. Comparing institutions with complete responses in productivity areas reduced the respondents to just over 100, depending on what value was being examined. Less than 50% of respondents provided patient visit information for provider types other than primary care physicians and nurse practitioners. Information about mental health utilization was provided by only 30% of respondents. In many cases, the response rate was too low to allow meaningful analysis or reporting of the data, including productivity for non-primary care providers and information on relative value units as a measure of provider productivity. Differences between administrative time allowances for providers may also impact clinical productivity, but low response rates to this question made this analysis not feasible.

Survey respondents were not required to indicate when a service was not provided. For many items, some respondents entered zero while some respondents left items blank. Future iterations of the survey should require completion of all items as well as provide opportunities for follow-up with respondents to clarify and complete information.

Data reflected in this survey is over-representative of medium and large campuses. Completion of the survey requires a SHS to have readily accessible information about utilization and provider
productivity. Many SHS, particularly at smaller institutions, may not have an electronic health record and/or clinical information system able to readily collect and compile this information. This may be reflected in the over representation from large institutions among survey respondents.

Information was collected by each respondent based on their own internal processes. Lack of a standardized methodology to collect information may influence the quality and comparability of the information provided, however, no information is available to evaluate the effect of these differences.

Despite the limitations of this survey, though, it provides glimpses of vitally needed information on the utilization and scope of SHS and administrative benchmarks relevant to our unique healthcare setting. Information on funding patterns and service utilization measures are useful for planning purposes. The survey formulas provide some staffing information and provider visit productivity benchmarks for primary care services.

More comprehensive and complete data from representative SHS nationally would be an important advance in our field. It would help us to fully understand the role that SHS play in the healthcare delivery system for young adults. All published estimates of young adult healthcare utilization are based upon data from the National Ambulatory Medical Care Survey (NAMCS) and National Hospital Ambulatory Medical Care Survey (NHMCS) which do not include services provided at student health services (SHS). Annual visits from NAMCS are calculated to be 2.16 for insured young adults. Based on the finding of this survey; this number could be underestimating utilization among young adults attending an IHE by over 50%. Better administrative benchmarks would assist SHS administrators with optimal service planning, operation management, and financial oversight.
REFERENCES


2. Table 1. Annual Estimates of the Resident Population by Sex and Five-Year Age Groups for the United States: April 1, 2000 to July 1, 2009 (NC-EST2009-01)


[View the underlying survey.]