



## MASSACHUSETTS MEDICAL SOCIETY

*Every physician matters, each patient counts.*

### **Survey of Physicians' Utilization of Home Health Services June 2009**

#### **Introduction**

By the year 2030 the number of adults age 65 and older in the United States will effectively double.<sup>1</sup> There are several health care policy issues associated with the rapid growth of the older population. First, this population is far more likely to suffer from at least one chronic condition and thus they will rely heavily on health care services. Second, the needs of this new generation of older adults will differ from those of previous generation because of both a longer life expectancy and geographically dispersed families who can not be counted on as primary caregivers.<sup>2</sup>

As a result of changing demographics, the need for physicians who can care for the aging population continues to grow as does the need for quality ancillary services, including home health care (HHC). According to the Centers for Medicare and Medicaid Services (CMS), HHC is defined as a service prescribed by a physician and provided by a variety of health care professionals:

Home health care provides skilled nursing care, physical and occupational therapy, speech-language therapy, and medical social services in the comfort of home. Home health professionals may teach [the patient], or [their] caregivers, how to care for wounds and manage medication. The goal is to help [the patient] reach and keep [their] best physical, mental and social well-being.<sup>3</sup>

The federal Medicare program regards home health care services as essential component in preventing avoidable and costly readmissions to hospitals. Home health care is also expected to have a prominent role in a new transitional pilot program from the CMS known as the *Care Transitions Project*. This program aims to reduce costs of care by promoting the "seamless transitions from the hospital to home, skilled nursing care, or home health care" through a community-wide approach.<sup>4</sup>

Despite the importance of HHC services for patients needing post-acute care and longer term chronic care supports, there is a dearth of research on physicians' utilization of, and satisfaction with, HHC services.<sup>5</sup> In an effort to learn more about how physicians' use HHC services, the Massachusetts Medical Society (MMS), the statewide professional association representing over 22,000 physicians and medical students, collaborated with the Home Care Alliance of Massachusetts, a non-profit trade association serving 150 home health and home care agencies across the state, to conduct an exploratory study in this under-examined area.

This exploratory study consisted of a random sample of physicians practicing in specialties where HHC services are often necessary to meet patients' clinical needs. The objectives of the study were to survey physicians' on their use of HHC services to measure physician satisfaction with HHC services, and to document physicians' perceptions of the benefits and disadvantages of HHC service utilization and its impact on patient care. Given the shortage of primary care physicians and their prominent role in caring for elderly patients and patients with

chronic disease<sup>2</sup>, further statistical analysis was conducted to determine if primary care physicians differ from other specialties on these measures.

### Methods

The MMS conducted a statewide survey of practicing physicians in 12 specialty areas from October to November 2008. The random sample contained 3,000 physicians drawn from the current Board of Registration in Medicine database with full and active Massachusetts licenses, a Massachusetts business address and one of the following primary specialties:

Cardiology	Geriatrics	Orthopedic Surgery
Family Medicine/General Practice	Internal Medicine	Physical Medicine & Rehabilitation
Gastroenterology	Neurology	Pulmonary Disease
General Surgery	Neurosurgery	
	Oncology	

All members of the sample received a 10 minute questionnaire by mail that they were asked to complete and return within 2-3 weeks. Members of the sample who did not respond within the allotted time received a second copy of the questionnaire and were again asked to return it within 2-3 weeks. A total of 248 physicians completed the survey, resulting in an overall response rate of 8.3%. A breakdown of respondents by specialty area is presented in Table 1 below.

**Table 1: Respondent Specialties**

Primary Specialty	Respondents		Overall Sample	
	N	%	N	%
Cardiology	9	4.0	160	5.3
Family medicine/General practice	41	15.7	399	13.3
Gastroenterology	2	.8	66	2.2
General surgery	27	10.5	201	6.7
Geriatrics	6	2.0	50	1.7
Internal medicine	112	41.9	1,482	49.4
Neurology	7	2.8	179	6.0
Neurosurgery	0	0.0	24	0.8
Oncology	5	2.0	51	1.7
Orthopedic surgery	16	6.0	166	5.5
Physical Medicine and Rehabilitation	11	4.8	100	3.3
Pulmonary Disease	12	8.1	122	4.1
TOTAL	248	100.0	3,000	100.0

Respondents were 66% male and 34% female. More than half (64%) of the respondents were primary care physicians and seventeen percent of respondents were surgeons.

Table 1 provides a detailed breakdown of the specialties of the overall random sample. The specialties of the respondents differed slightly from the overall sample. A lower percentage of cardiologists, gastroenterologists, internal medicine physicians and neurologists responded to the survey than were represented in the overall sample. Conversely, more family medicine physicians, general surgeons, physical medicine/rehabilitation and pulmonary physicians responded than were represented in the overall sample.

Sixty-two percent of responding physicians described their employment status as “employed” while the remaining 38% reported their status as “self-employed”. Of those who were employed, 49% were employed by a hospital, 42% by a medical group, and 9% described their employment status as “Other”. Most of the respondents described their practice as a single specialty practice (66%).

**Methods**

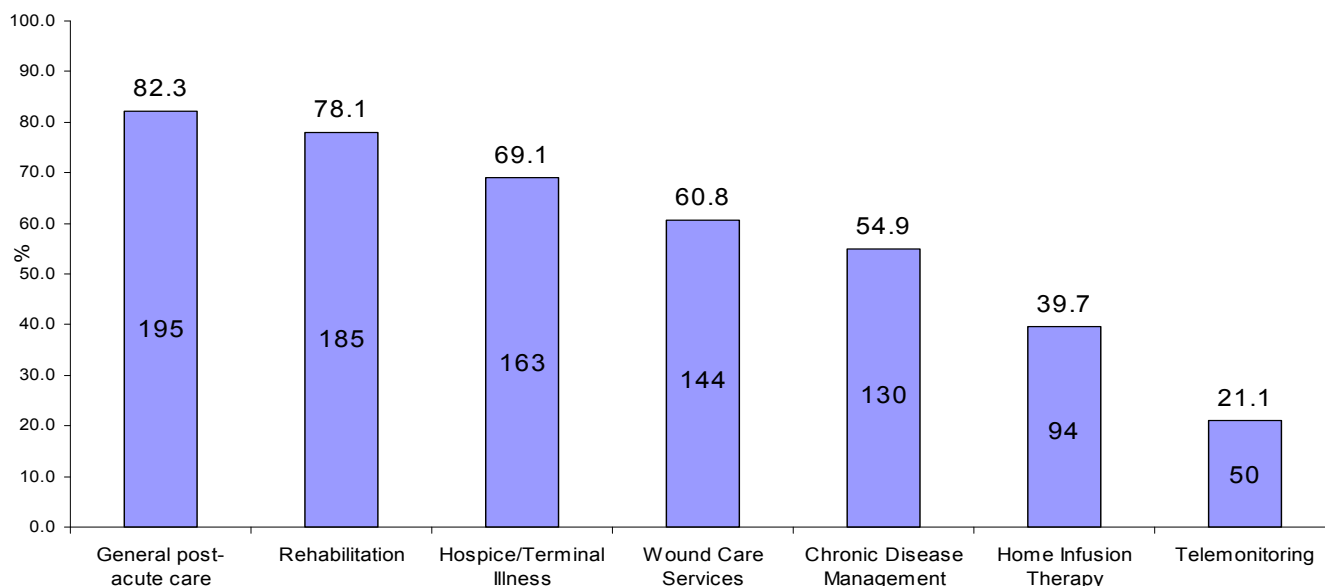
Bivariate analysis was conducted using chi-square analysis (crosstabs) and t-tests to measure differences in measures between primary care physicians and respondents from other specialties. The independent variable was a dichotomous (primary care/specialist) variable indicating whether a physician was a primary care physician (geriatrics, internal medicine, or family medicine) or practicing in another specialty. The dependent variables included types of HHC services utilized, communication measures, and perceived advantages and disadvantages of using HHC services.

**Results**

Most of the physicians responding to this survey (96%) had at least some knowledge and awareness of the availability of HHC services and 95 percent of responding physicians had used HHC services.

Chart 1 provides a breakdown of the types of HHC services physicians reported using in the past 12 months. Most had used HHC services for post-acute (82%) and rehabilitation (78%) patient care. About two-thirds had used HHC services for hospice care or a terminal illness while more than half had used HHC services for wound care and chronic disease management. Approximately one-third used HHC services for home infusion care while one in five used HHC services for telemonitoring of patients’ vital signs.

**Chart 1: What types of HHC services have your patients utilized in the past 12 months?**

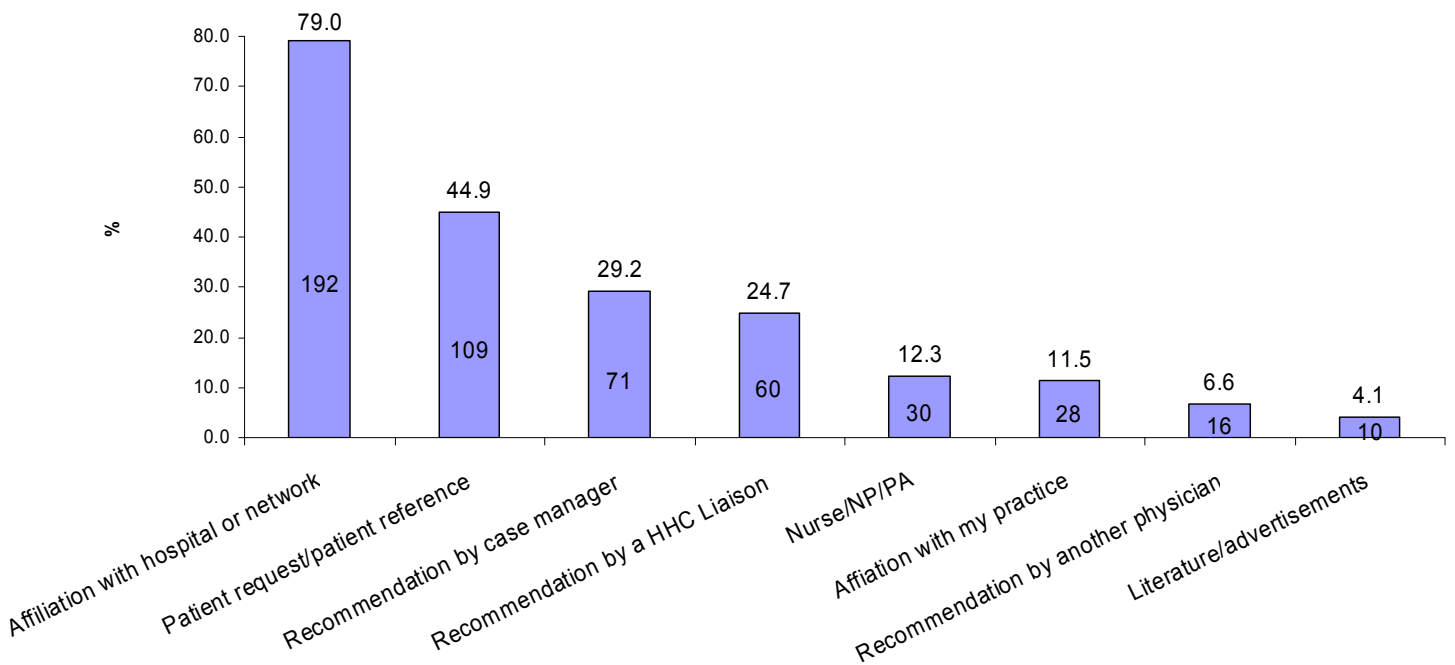


*Physician selection of HHC service agencies*

Physicians were asked how they selected HHC service agencies and what types of information they relied on when making HHC agency referrals to their patients. Results from these questions are displayed in Chart 2 and Chart 3 below.

Chart 2 shows that the majority of physicians (79%) selected an HHC agency based on its affiliation with the physicians' hospital or network while 45% relied on patient requests and patient references in choosing an HHC agency. About one in four physicians relied on the recommendation of a case manager (29%) or HHC liaison (25%) in selecting an HHC agency.

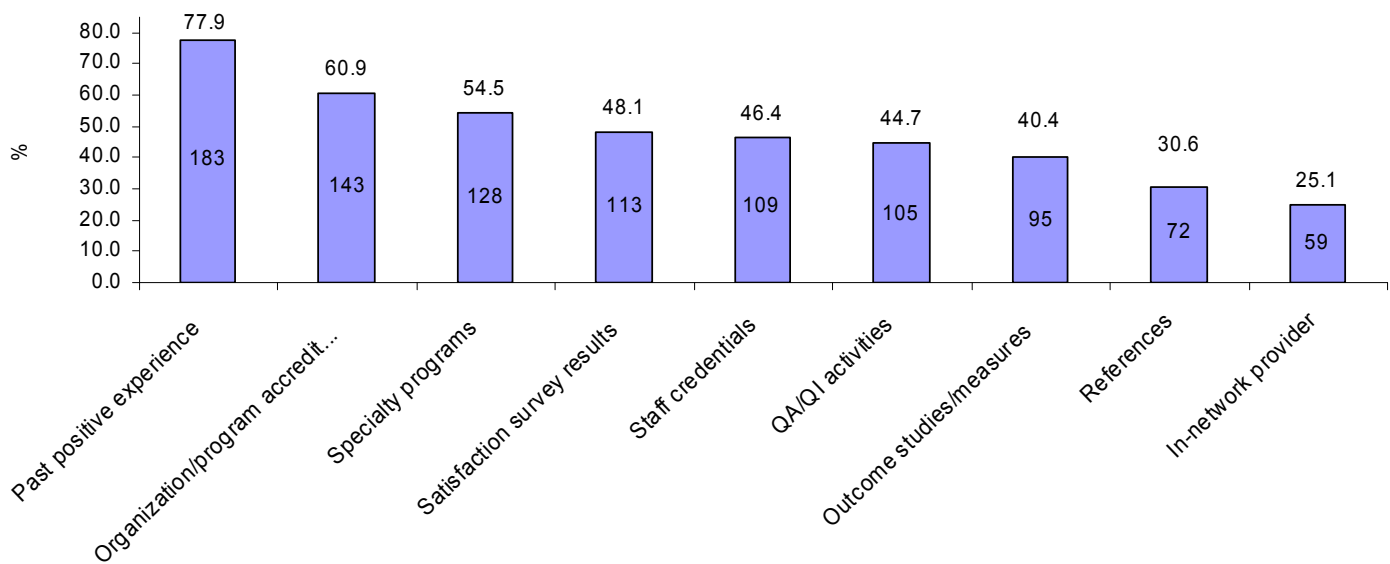
**Chart 2: How do you select the HHC agencies used in your practice?**



The findings in Chart 3 demonstrate that 78% of physicians report past positive experience with an HHC agency increases their confidence in referring their patients to an agency. More than half rely on organization/program accreditation (61%) and specialty programs (55%) when referring patients for HHC services.

While most of the physicians surveyed selected HHC agencies based on their affiliation with the hospital or network in which the physicians was practicing, only 25% of physicians noted that the in-network providers status of an HHC agencies increased physicians' confidence in referring patients to an agency.

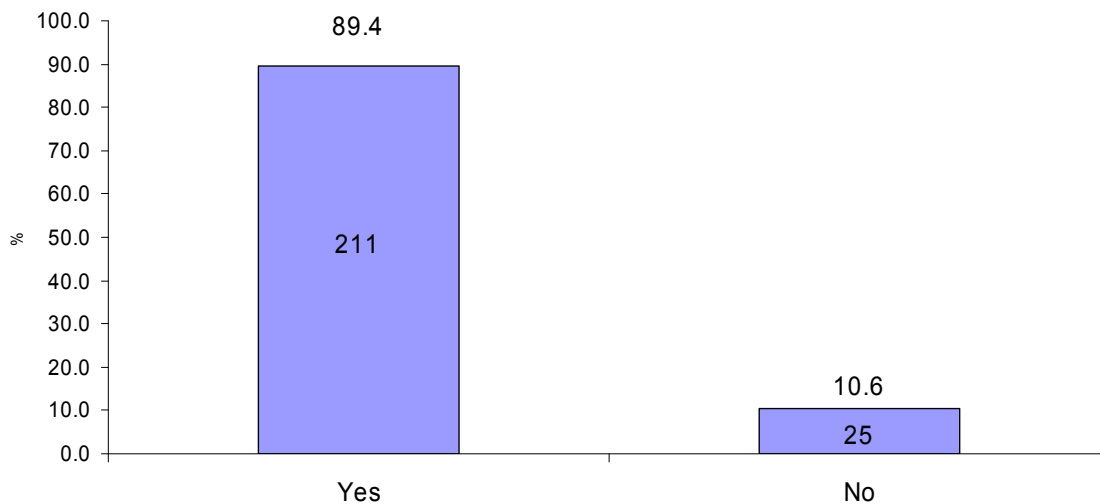
**Chart 3: What types of information about an HHC agency increases your confidence when referring patients to them?**



### Findings on quality and cost

**Hospitalizations.** Several surveys questions were included on the association between hospitalizations and HHC services. Eighty-nine percent of responding physicians believe that HHC services can reduce inpatient admissions without compromising quality or patient outcomes. Sixty-three percent of physicians reported that one of the main advantages of using HHC services in their practice is that these services can lead to reductions in emergency department visits. Yet, more than half (52.6%) of responding physicians reported that they have had to prolong a patient's hospital stay due to a lack of access to HHC services.

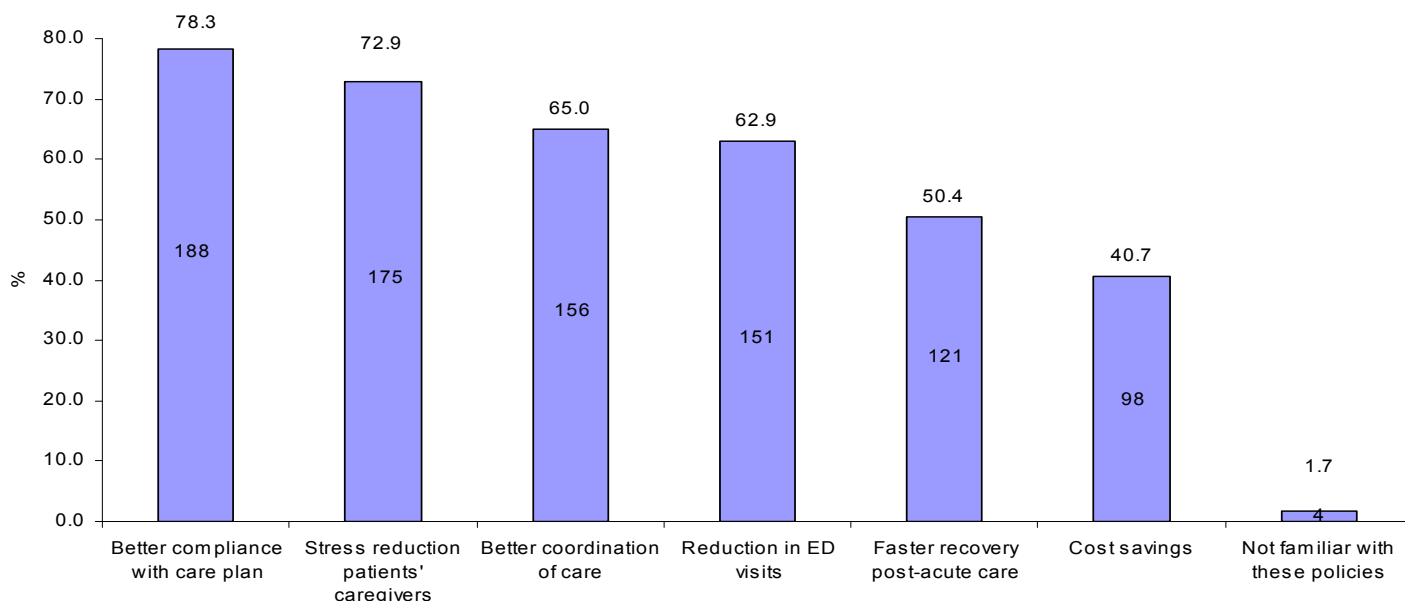
**Chart 4: Do you think HHC can reduce inpatient admissions without compromising quality or patient outcomes?**



**Patient Care.** Findings from this survey documented physicians' perceptions of how HHC services assist physicians in caring for patients. The majority (97%) of responding physicians reported that HHC services help them to better manage their patients' care at home. Forty-one percent of physicians reported that HHC services provide overall cost savings.

Physicians noted several other benefits to patient care associated with the use of HHC services outlined in Chart 5 below. These include: 1) better patient compliance with care plans (78%); 2) better coordination of care (65%) and; 3) faster recovery in post-acute care (50%). When asked about the barriers to using HHC services, only 18% of responding physicians said that quality of care was a barrier to their use of HHC services while one-third said coordination of care was a barrier. Many physicians noted that HHC services can also reduce caregiver stress (73%).

**Chart 5: In your opinion, what are the main *advantages* to using home health care services in your practice?**



### Telemonitoring

As previously noted, one in five physician respondents had used HHC telemonitoring services. Most of the physicians surveyed believe that the remote monitoring of vital signs and telemedicine services available through HHC agencies are beneficial to them in caring for their patients. Seventy-eight percent believe these services can improve the quality of patient care while more than half (67%) believe that they can reduce patient cost

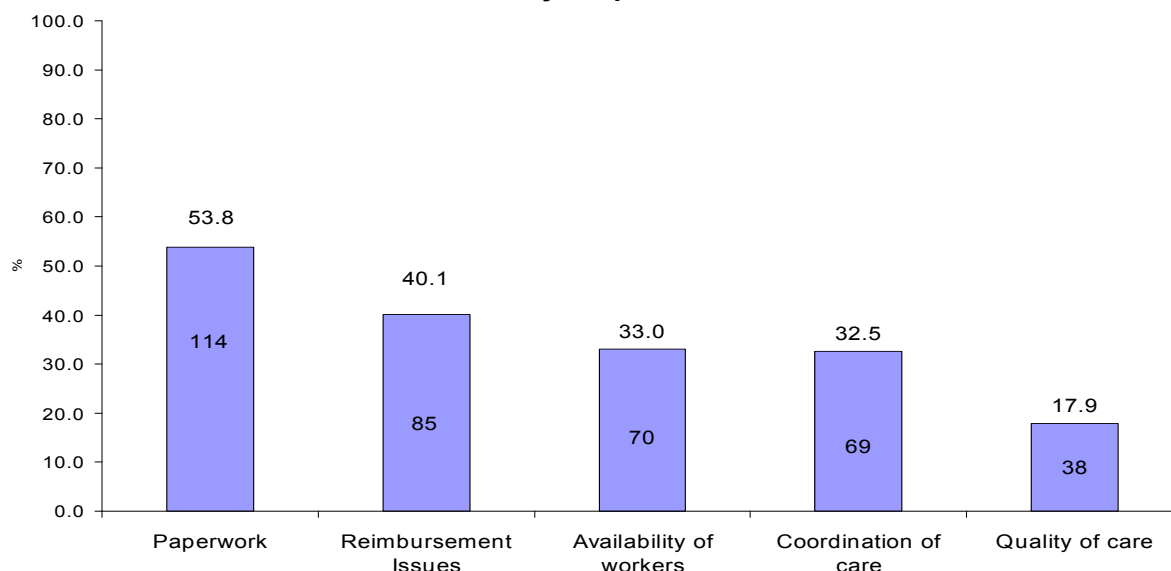
### *Findings on barriers to utilization*

Although physicians noted many quality and cost benefits associated with the use of HHC services, several barriers and challenges were noted as well. These barriers included both administrative and reimbursement issues. Chart 6 outlines physicians' opinions on the main barriers to HHC service utilization.

Administrative issues. More than half of physicians (54%) who responded to this survey noted that administrative burdens in the form of paperwork are the main barrier to their use of HHC services. In addition, more than one-third of physicians noted that the usefulness of written materials provided by HHC agencies is fair or poor. The mean score for this measure is discussed in the following section on communication measures.

Reimbursement issues. Physicians noted that reimbursement issues were a barrier to HHC service utilization (40%). Yet, when asked if they submitted charges to Medicare for HHC plan oversight, most of the responding physicians (71%) reported that they do not submit these charges. When asked why they did not submit for these charges, 64% stated that they are unaware of this reimbursement.

**Chart 6: In your opinion, what are the main *barriers* to using home health care services in your practice?**



*Findings on communication between physicians and HHC service agencies*

Physicians were asked to rate their communication with HHC service agencies in the following areas: ease of contacting patient’s home health provider, ease of coordinating HHC services for patients, usefulness of the written information provided to them by HHC providers, commitment to continuity of care, and ease of monitoring patient’s progress as a result of HHC services. The survey questions were adapted from a questionnaire developed by Fairchild et al.<sup>5</sup> Responses to survey questions were scored using a 5-point Likert scale where 5 = “excellent”, 4 = “very good”, 3 = “good”, 2 = “fair”, and 1 = “poor”. Results are presented as mean scores in Table 2 below.

Overall physicians were satisfied with their communication with HHC service agencies. The mean score for ease of contacting the HHC agency was 3.36 and the ease of coordinating HHC services was 3.37. Mean scores for commitment to continuity of care and ease of monitoring patient’ progress were slightly lower but above 3.0. However, one measure of communication had a mean score lower than 3.0; usefulness of written information available from HHC service agencies. This score indicated that physicians were only moderately satisfied with written information with a mean score of 2.62.

**Table 2: Communication Questions**

	N	Minimum	Maximum	Mean	Std. Deviation
Q5a Ease of contacting your patient's HHC agency to discuss urgent patient care matter	245	0	5	3.36	1.304
Q5b Ease of coordinating HHC services for your patients	245	0	5	3.37	1.168
Q5c Usefulness of the written information provided to you from HHC agencies	245	0	5	2.62	1.302
Q5d Commitment to continuity of care (one agency assigned to your patient over time)	243	0	5	3.19	1.353
Q5e Ease of monitoring your patient's progress as a result of HHC services	243	0	5	3.04	1.266

*Bivariate analysis*

Table 3 below outlines the results of the bivariate analysis (crosstabs) conducted to determine if there were significant differences between survey answers provided by primary care physicians (i.e., physicians practicing in family medicine, general practice, internal medicine, and geriatrics) compared to the survey responses of physicians from other specialties ( $p < .05$ ). Mean scores for the communication variables outlined in Table 2 did not differ significantly between primary care physicians and specialists in the bivariate analysis. However, primary care physician answers differed from other specialties for several measures outlined in Table 3 below.

First, and perhaps not unexpectedly given the very specialized nature of the referral, primary care physicians were significantly more likely to use HHC services for hospice and terminal illness than physicians from the other specialties. Eighty-two percent of primary care physicians used HHC services for hospice services and terminal illnesses compared to 46% of specialists. Yet surprisingly, similar differences were found for chronic disease management. While sixty-four percent of primary care physicians used HHC services for chronic disease management, only 38% of specialists used these services

Second, specialists were significantly more likely to rely on patient requests and patient preference than primary care physicians when selecting HHC service agencies. More than half of specialists (54%) relied on patient requests and preference when selecting HHC agencies compared to 40% of primary care physicians.

Third, primary care physicians were significantly more likely to indicate that better coordination of care and faster recovery from post-acute care were the main advantages to using HHC services compared to physicians from other specialties. Seventy-two percent of primary care physicians believed that HHC services provide better coordination of care compared to 53% of specialists. More than half (56%) of primary care physicians indicated that HHC services lead to faster recovery from post-acute care compared to 41% of specialists.

Fourth, primary care physicians were significantly more likely to submit care plan oversight charges to Medicare than specialists. While more than one-third (35%) of primary care physicians had submitted care plan oversight charges to Medicare, only one in five (19%) of specialists had submitted this Medicare charge.

Lastly, primary care physicians were more likely in favor of changing policy in two areas. First, primary care physicians (54%) were more likely to favor allowing for a lowering of the 30-minute threshold per patient per month for care plan oversight than specialists (40%). Primary care physicians were also significantly more likely to agree that policy should be changed to allow nurse practitioners to sign home care orders under a physician's direction (39%) than specialists (26%).

Table 3: Bivariate Statistics

Variable	Primary Care		Specialty	
	N	%	N	%
Type of HHC services used in the past 12 month				
Hospice/Terminal Illness**	124	81.6	39	46.4
Chronic Disease Management**	98	64.1	32	38.1
How do you select HHC agencies?				
Patient request/patient preference*	63	40.1	46	53.5
Main advantages to using HHC services in your practice:				
Better coordination of care*	110	71.9	46	52.9
Faster recovery post-acute care*	85	55.6	36	41.4
Do you submit charges to Medicare for HHC plan oversight*				
Yes	51	34.7	16	19.3
Policy				
Lower 30-minute threshold per patient per month for care plan oversight billing*	82	53.6	31	39.7
Allow changes to regulations that allow nurse practitioners to sign home care orders under physician's direction*	60	39.2	20	25.6

\*p<.05, \*\*p <.001

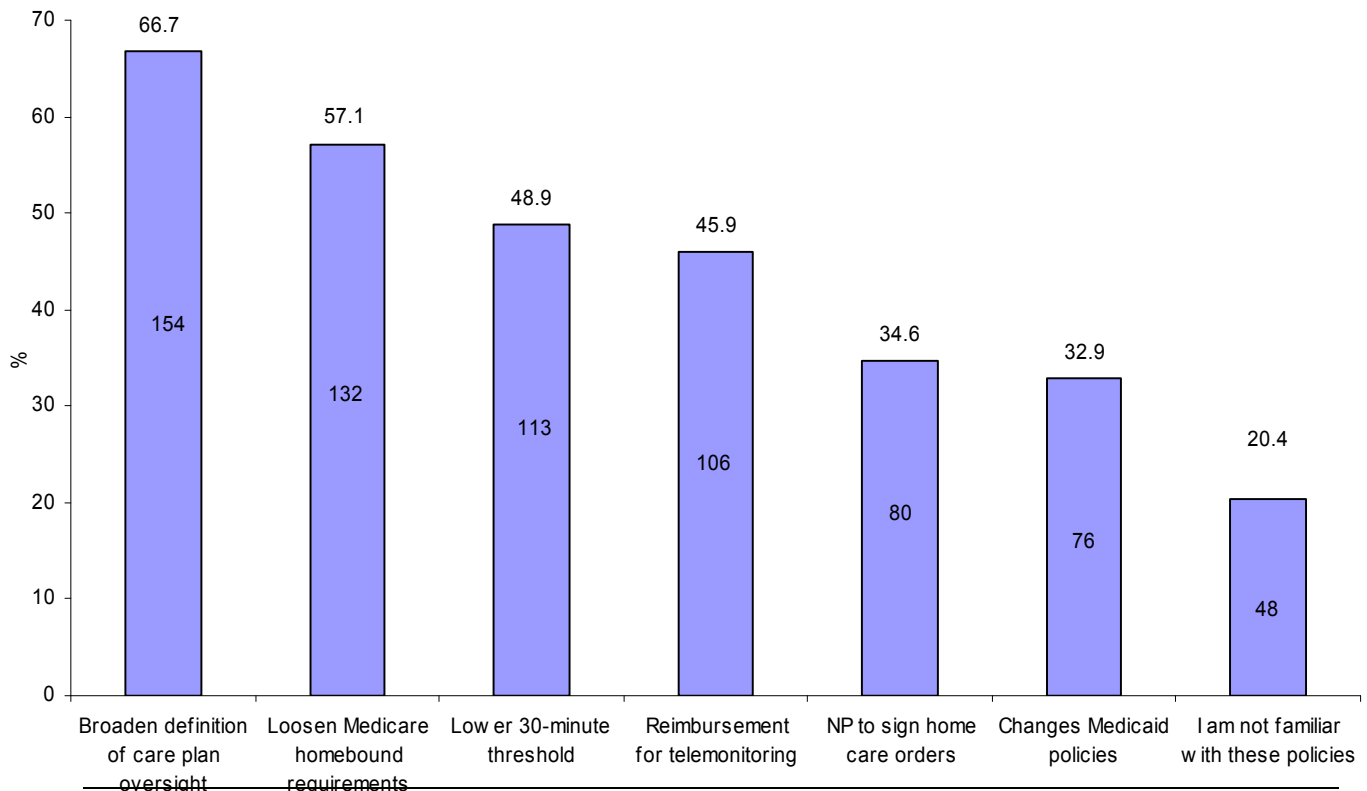
## Discussion

Hospitalization admissions and emergency department (ED) visits are costly. Findings from this survey suggest that physicians believe HHC services may reduce these costs as well as health care costs in general. Findings from this survey also suggest that physicians believe HHC services improve the quality of patient care by allowing physicians to better manage their patients' care at home. Specifically, physicians indicated that telemonitoring available from HHC agencies may improve patient care and noted that HHC services lead to better patient compliance with care plans, better coordination of care, and faster recovery post acute care.

In addition, several barriers to the use of HHC services by physicians were noted in this study. These include administrative and reimbursement issues. Many physicians responding to this survey noted that paperwork was a barrier to HHC service use and that written materials provided by HHC agencies are fair or poor. The majority of physicians responding to this survey also indicated that they are not utilizing and are not aware of the Medicare care plan oversight reimbursement. Therefore, educating physicians on reimbursable HHC services and providing them with less burdensome administrative processes may help improve access to HHC services for physicians and their patients. However, further research in these areas is needed to establish an association between these improvements and improved access to home health care.

The bivariate analysis indicated that primary care physicians and physicians practicing in other specialties may have varying opinions of HHC services. Also, primary care physicians may use HHC services differently and may rely on different referral sources than their specialist counterparts. Therefore, policymakers and researchers should be cognizant of the potential differences between specialists and primary care physicians in future analysis of HHC service utilization by physicians.

**Chart 7: Would you support the following policy changes related to HHC services?**



### *Limitations*

Given the small sample size of this study and the specialty differences for respondents compared to the overall sample of physicians, results may not be generalizable to the overall population of physicians likely to use HHC services. However, this exploratory study provides researchers and policymakers with a starting point for future policies and research in this area.

### **Conclusion**

The results of this survey indicate that there is an opportunity for collaboration between physicians and home care agencies that can lead to delivery system improvements regarding quality and cost-effective care. The survey findings also suggest that physicians need more information about care plan oversight services (via emails, webinars, newsletters or other media). There is also an opportunity to bring attention to the benefits of telehealth information sharing strategies (including remote monitoring), especially around best practices in physician/agency clinical communication. Finally, data on the percentage of physicians experiencing delays in accessing home health services indicate that this is an area that, at a minimum, requires close monitoring as it can impact both practice management and costs.

### **Acknowledgements**

We would like to thank Dr. David G. Fairchild for granting us permission to use several questions in this survey that were adapted from his study assessing communication and collaboration between primary care physicians and home care clinicians.<sup>5</sup>

---

<sup>1</sup> Institute of Medicine, April 2008. *Retooling for an aging America: Building the health care workforce*.

<sup>2</sup> Massachusetts Medical Society. 2008 Physician Workforce Study. October 2008. [www.amssmed.org/workforce](http://www.amssmed.org/workforce)

<sup>3</sup> Centers for Medicare and Medicaid. December 2003. Compare care: How to find home health care that's right for you. Accessed on April 21, 2009 from <http://www.medicare.gov/Publications/Pubs/pdf/11070.pdf>.

<sup>4</sup> Reichard, J. April 14, 2009. CMS pilot sweats the details of cutting hospital readmissions *The Commonwealth Fund*. Retrieved on June 1, 2009 from <http://www.commonwealthfund.org/Content/Newsletters/Washington-Health-Policy-in-Review/2009/Apr/April-20-2009/CMS-Pilot-Sweats-the-Details-of-Cutting-Hospital-Readmissions.aspx>.

<sup>5</sup> Fairchild DG, Hogan J, Smith R, Portnow M & Bates DW. 2002. Survey of primary care physicians and home care clinician *Journal of General Internal Medicine*, 17(4): 253-257.

For more information, contact the Massachusetts Medical Society Department of Health Policy and Health Systems at (781)434-7222. This report is available at [www.massmed.org/homesurvey09](http://www.massmed.org/homesurvey09)