REVIEWS

The Key Principles and Characteristics of an Effective Hospital Medicine Group: An Assessment Guide for Hospitals and Hospitalists

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BACKGROUND: Despite the growth of hospital medicine, few guidelines exist to guide effective management of hospital medicine groups (HMGs).

METHODS: The Society of Hospital Medicine Board of Directors appointed a workgroup consisting of individuals who have experience with a wide array of HMG models. The workgroup developed an initial draft of characteristics, which then went through a multistep process of review and redrafting. In addition, the workgroup went through a 2-step Delphi process to consolidate characteristics and/or eliminate characteristics that were redundant or unnecessary. Over an 18-month period, a broad group of stakeholders in hospital medicine and the

broader healthcare industry provided comments and feedback.

RESULTS: The final framework consists of 47 key characteristics of an effective HMG organized under 10 principles.

CONCLUSIONS: These principles and characteristics provide a framework for HMGs seeking to conduct self-assessments, outlining a pathway for improvement and better defining the central role of hospitalists in coordinating team-based, patient-centered care in the acute-care setting. They are designed to be aspirational, helping to raise the bar for the specialty of hospital medicine. *Journal of Hospital Medicine* 2014;9:123–128. © 2014 Society of Hospital Medicine

With the continuing growth of the specialty of hospital medicine, the capabilities and performance of hospital medicine groups (HMGs) varies significantly. There are few guidelines that HMGs can reference as tools to guide self-improvement. To address this deficiency, the Society of Hospital Medicine (SHM) Board of Directors authorized a process to identify the key principles and characteristics of an effective HMG.

METHODS

Topic Development and Validation Prework

In providing direction to this effort, the SHM board felt that the principles and characteristics should be directed at both hospitals and hospitalists, addressing the full range of managerial, organizational, clinical, and quality activities necessary to achieve effectiveness. Furthermore, the board defined effectiveness as consisting of 2 components. First, the HMG must assure that the patients managed by hospitalists receive high-quality care that is sensitive to their needs and preferences. Second, the HMG must understand that the cen-

tral role of the hospitalist is to coordinate patient care and foster interdisciplinary communication across the care continuum to provide optimal patient outcomes.

The SHM board appointed an HMG Characteristics Workgroup consisting of individuals who have experience with a wide array of HMG models and who could offer expert opinions on the subject. The HMG Characteristics Workgroup felt it important to review the work of other organizations that develop and administer criteria, standards, and/or requirements for healthcare organizations. Examples cited were the American College of Surgeons¹; The Joint Commission²; American Nurse Credentialing Center³; the National Committee for Quality Assurance⁴; the American Medical Group Association⁵; and the American Association of Critical-Care Nurses.⁶

In March 2012 and April 2012, SHM staff reviewed the websites and published materials of these organizations. For each program, information was captured on the qualifications of applicants, history of the program, timing of administering the program, the nature of recognition granted, and the program's keys to success. The summary of these findings was shared with the workgroup.

Background research and the broad scope of characteristics to be addressed led to the workgroup's decision to develop the principles and characteristics using a consensus process, emphasizing expert opinion supplemented by feedback from a broad group of stakeholders.

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Initial Draft

During April 2012 and May 2012, the HMG Characteristics Workgroup identified 3 domains for the key

characteristics: (1) program structure and operations, (2) clinical care delivery, and (3) organizational performance improvement. Over the course of several meetings, the HMG Characteristics Workgroup developed an initial draft of 83 characteristics, grouped into 29 subgroups within the 3 domains.

From June 2012 to November 2012, this initial draft was reviewed by a broad cross section of the hospital medicine community including members of SHM's committees, a group of academic hospitalists, focus groups in 2 communities (Philadelphia and Boston), and the leaders of several regional and national hospitalist management companies. Quantitative and qualitative feedback was obtained.

In November 2012, the SHM Board of Directors held its annual leadership meeting, attended by approximately 25 national hospitalist thought leaders and chairpersons of SHM committees. At this meeting, a series of exercises were conducted in which these leaders of the hospital medicine movement, including the SHM board members, were each assigned individual characteristics and asked to review and edit them for clarity and appropriateness.

As a result of feedback at that meeting and subsequent discussion by the SHM board, the workgroup was asked to modify the characteristics in 3 ways. First, the list should be streamlined, reducing the number of characteristics. Second, the 3 domains should be eliminated, and a better organizing framework should be created. Third, additional context should be added to the list of characteristics.

Second Draft

During the period from November 2012 to December 2012, the HMG Characteristics Workgroup went through a 2-step Delphi process to consolidate characteristics and/or eliminate characteristics that were redundant or unnecessary. In the first step, members of the workgroup rated each characteristic from 1 to 3. A rating of 1 meant "not important; good quality, but not required for an effective HMG." A rating of 2 meant "important; most effective HMGs will meet requirement." A rating of 3 meant "highly important; mandatory for an effective HMG." In the second step, members of the workgroup received feedback on the scores for each characteristic and came to a consensus on which characteristics should be eliminated or merged with other characteristics.

As a result, the number of characteristics was reduced and consolidated from 83 to 47, and a new framing structure was defined, replacing the 3 domains with 10 organizing principles. Finally, a rationale for each characteristic was added, defending its inclusion in the list. In addition, consideration was given to including a section describing how an HMG could demonstrate that their organization met each characteristic. However, the workgroup and the board

decided that these demonstration requirements should be vetted before they were published.

From January 2013 to June 2013, the revised key principles and characteristics were reviewed by selected chairpersons of SHM committees and by 2 focus groups of HMG leaders. These reviews were conducted at the SHM Annual Meeting. Finally, in June 2013, the Committee on Clinical Leadership of the American Hospital Association reviewed and commented on the draft of the principles and characteristics.

In addition, based on feedback received from the reviewers, the wording of many of the characteristics went through revisions to assure precision and clarity. Before submission to the *Journal of Hospital Medicine*, a professional editor was engaged to assure that the format and language of the characteristics were clear and consistent.

Final Approval

The final draft of the 10 principles and 47 characteristics was approved for publication at a meeting of the SHM Board of Directors in September 2013 (Figure 1).

RESULTS

A recurring issue that the workgroup addressed was the applicability of the characteristics from 1 practice setting to another. Confounding factors include the HMG's employment/organizational model (eg, hospital employed, academic, multispecialty group, private practice, and management company), its population served (eg, adult vs pediatric, more than 1 hospital), and the type of hospital served (eg, academic vs community, the hospital has more than 1 HMG). The workgroup has made an effort to assure that all 47 characteristics can be applied to every type of HMG.

In developing the 10 principles, the workgroup attempted to construct a list of the basic ingredients needed to build and sustain an effective HMG. These 10 principles stand on their own, independent of the 47 key characteristics, and include issues such as effective leadership, clinician engagement, adequate resources, management infrastructure, key hospitalist roles and responsibilities, alignment with the hospital, and the recruitment and retention of qualified hospitalists.

A more detailed version of the "Key Principles and Characteristics of an Effective HMG" is available in the online version of this article (see Supporting Information, Appendix, in the online version of this article). The online Appendix includes the rationales for each of the characteristics, guidance on how to provide feedback to the SHM on the framework, and the SHM's plan for further development of the key principles and characteristics.

DISCUSSION

To address the variability in capabilities and performance of HMGs, these principles and characteristics are

FIG. 1. The 10 Key Principles and 47 Key Characteristics Of An Effective Hospital Medicine Group.



Principle 1: The HMG has effective leadership

- Characteristic 1.1: The HMG has one or more designated hospitalist practice leaders with appropriate dedicated administrative time.
- Characteristic 1.2: The HMG has an active leadership development plan that is supported with appropriate budget, time, and other resources.
- Characteristic 1.3: The HMG's hospitalist practice leader has an important role within the hospital and medical staff leadership.

Principle 2: The HMG has engaged hospitalists

- Characteristic 2.1: The HMG conducts regularly scheduled meetings to address key issues for the practice, and the hospitalists actively participate in such meetings.
- Characteristic 2.2: The HMG's hospitalists receive regular, meaningful feedback about their individual performances and contributions to the HMG and the hospital/health system.
- Characteristic 2.3: The HMG's vision, mission, and values are clearly articulated and understood by all members of the HMG team.
- Characteristic 2.4: Hospitalists in the HMG know the performance status of both the group and the hospital.

Principle 3: The HMG has adequate resources

- Characteristic 3.1: The HMG has defined its needs for non-clinician administrative management and clerical support and is adequately staffed to meet these needs
- Characteristic 3.2: All HMG team members (including physicians, nurse practitioners, physician assistants, and ancillary staff) have clearly defined, meaningful roles.
- Characteristic 3.3: The HMG has followed an objective approach to determine its staffing needs.

Principle 4: The HMG has an effective planning and management infrastructure

- Characteristic 4.1: The HMG prepares an annual budget with adequate financial and administrative oversight.
- Characteristic 4.2: The HMG generates periodic reports that characterize its performance for review by HMG members and other stakeholders.
- Characteristic 4.3: The HMG has a current set of written policies and procedures that are readily accessible by all members of the HMG team.
- Characteristic 4.4: The HMG has a documentation and coding compliance plan.
- Characteristic 4.5: The HMG is supported by appropriate practice management information technology, clinical information technology, and data analytics.
- Characteristic 4.6: The HMG has a strategic or business plan that is reviewed and updated at least every three years.

Principle 5: The HMG is aligned with the hospital and/or health system

- Characteristic 5.1: The HMG develops annual goals that align with the goals of the hospital(s) it serves and the goals of the hospitalists' employer (if different).
- Characteristic 5.2: The HMG's compensation model aligns hospitalist incentives with the goals of the hospital and the goals of the hospitalists' employer (if different).
- Characteristic 5.3: The HMG collaborates with hospital patient relations and/or risk management staff to implement practices that reduce errors and improve the patient's perception of the hospital.
- Characteristic 5.4: The HMG periodically solicits satisfaction feedback from key stakeholder groups, which is shared with all hospitalists and used to develop and implement improvement plans.

Principle 6: The HMG supports care coordination across care settings

- Characteristic 6.1: The HMG has systems in place to ensure effective and reliable communication with the patient's primary care provider and/or other providers(s) involved in the patient's care in the non-acute-care setting.
- Characteristic 6.2: The HMG contributes in meaningful ways to the hospital's efforts to improve care transitions.

FIG. 1. (Continued).

Principle 7: The HMG plays a leadership role in addressing key clinical issues in the hospital and/or health system: teaching, quality, safety, efficiency, and the patient/ family experience

- Characteristic 7.1: The HMG's hospitalists are committed to teaching other members of the clinical team.
- Characteristic 7.2: The HMG actively seeks to maximize effectiveness of care by consistently implementing evidence-based practices and reducing unwarranted variation in care.
- Characteristic 7.3: The HMG's hospitalists champion and model behaviors intended to promote patient safety.
- Characteristic 7.4: The HMG contributes in meaningful ways to hospital efficiency by optimizing length of stay and improving patient flow.
- Characteristic 7.5: The HMG contributes in meaningful ways to improving the patient and family experience.
- Characteristic 7.6: The HMG contributes in meaningful ways to optimizing clinical resource utilization and cost per stay.
- Characteristic 7.7: The HMG's hospitalists demonstrate a commitment to continuous quality improvement (CQI) and actively participate in initiatives directed at measurably improving quality and patient safety.

Principle 8: The HMG takes a thoughtful and rational approach to its scope of clinical activities

- Characteristic 8.1: The HMG has a well-defined plan for evolving the scope of hospitalist clinical activities to meet the changing needs of
- Characteristic 8.2: The respective roles of hospitalists and physicians in other specialties in treating patients, including patients that are co-managed, are clearly defined with a mechanism to resolve issues with regard to scope and responsibilities.
- Characteristic 8.3: The HMG uses appropriate references to define the clinical responsibilities of hospitalists.

Principle 9: The HMG has implemented a practice model that is patient- and family-centered, team-based, and emphasizes effective communication and care coordination

- Characteristic 9.1: The HMG's hospitalists provide care that respects and responds to patient and family preferences, needs, and values.
- Characteristic 9.2: The HMG's hospitalists have access to and regularly use patient/family education resources.
- Characteristic 9.3: The HMG actively participates in interprofessional, team-based decision-making with members of the clinical
- Characteristic 9.4: The HMG has effective and efficient internal hand-off processes for both change of shift and change of responsible provider.
- Characteristic 9.5: When serving as attending physicians, the HMG's hospitalists (in coordination with other clinicians as appropriate) assure that a coordinated plan of care is implemented.

Principle 10: The HMG recruits and retains qualified clinicians

- Characteristic 10.1: Hospitalist compensation is market competitive.
- Characteristic 10.2: The HMG's hospitalists all have valid and comprehensive employment or independent contractor agreements.
- Characteristic 10.3: The HMG's hospitalists are actively engaged in sourcing and recruiting new group members.
- Characteristic 10.4: The HMG has a comprehensive orientation process for new clinicians.
- Characteristic 10.5: The HMG provides its hospitalists with resources for professional growth and enhancement, including access to continuing medical education (CME).
- Characteristic 10.6: The HMG measures, monitors, and fosters its hospitalists' job satisfaction, well being, and professional development.
- Characteristic 10.7: The medical staff has a clear mechanism to credential and privilege hospitalists, and the hospitalists hold unrestricted staff privileges in the applicable medical staff department.
- Characteristic 10.8: The HMG has a documented method for monitoring clinical competency and professionalism for all clinical staff and addressing deficiencies when identified.
- Characteristic 10.9: A significant proportion of full-time hospitalists in the HMG demonstrate a commitment to a career in hospital medicine.
- Characteristic 10.10: The HMG's full-time and regular part-time hospitalists are board certified or board eligible in an applicable medical specialty or subspecialty.
 - FIG. 1. The 10 Key Principles and 47 Key Characteristics Of An Effective Hospital Medicine Group.

designed to provide a framework for HMGs seeking to conduct self-assessments and develop pathways for improvement.

Although there may be HMG arrangements that do not directly involve the hospital and its executive

team, and therefore alternative approaches may make sense, for most HMGs hospitals are directly involved with the HMG as either an employer or a contractor. For that reason, the "Key Principles and Characteristics of an Effective HMG" is written for

2 audiences: the executive leadership of the hospital (most specifically the chief medical officer or a similar role) and the hospitalists in the HMG (most specifically the practice medical director). To address the key characteristics requires the active participation of both parties. For the hospital executives, the framework establishes expectations for the HMG. For the hospitalists, the framework provides guidance in the development of an improvement plan.

Hospital executives and hospitalists can use the key characteristics in a broad spectrum of ways. The easiest and least formalized approach would be to use the framework as the basis of an ongoing dialogue between the hospital leadership and the HMG. A more formal approach would be to use the framework to guide the planning and budgeting activities of the HMG. Finally, a hospital or health system can use the key principles and characteristics as a way to evaluate their affiliated HMG(s)—for example, "the HMG must address 80% of the 47 characteristics."

The "Key Principles and Characteristics of an Effective HMG" should be considered akin to the "Core Competencies in Hospital Medicine" previously published in the Journal of Hospital Medicine.⁷ However, instead of focusing on the competencies of individual physicians, this framework focuses on the characteristics of hospitalist groups. Just as a physician or other healthcare provider is not expected to demonstrate competency for every element in the core competencies document, an HMG does not need to have all 47 characteristics to be effective. Effective hospitalists may have skills other than those listed in the "Core Competencies in Hospital Medicine." Similarly, the 47 characteristics do not represent an exhaustive list of every desirable HMG attribute. In general, effective HMGs should possess most of the characteristics.

In applying the framework, the HMG should not simply attempt to evaluate each characteristic with a "yes" or "no" assessment. For HMGs responding "yes," there may be a wide range of performance—from meeting the bare minimum requirements to employing sophisticated, expansive measures to excel in the characteristic.

SHM encourages hospital leaders and HMG leaders to use these characteristics to perform an HMG self-assessment and to develop a plan. The plan could address implementation of selected characteristics that are not currently being addressed by the HMG or the development of additional behaviors, tools, resources, and capabilities that more fully incorporate those characteristics for which the HMG meets only minimum requirements. In addition, the plan could address the impact that a larger organization (eg, health system, hospital, or employer) may have on a given characteristic.

As outlined above, the process used to develop the "Key Principles and Characteristics of an Effective

HMG" was grounded in expert opinion and extensive review and feedback. HMGs that use the framework should recognize that others might have a different opinion. For example, characteristic 5.2 states, "The HMG's compensation model aligns hospitalist incentives with the goals of the hospital and the goals of the hospitalist's employer (if different)." There are likely to be experienced hospitalist leaders who believe that an effective HMG does not need to have an incentive compensation system. However, the consensus process employed to develop the key characteristics led to the conclusion that an effective HMG should have an incentive compensation system.

The publication of the "Key Principles and Characteristics of an Effective HMG" may lead to negaand/or unintended consequences. A assessment by an HMG using this framework could require a significant level of effort on behalf of the HMG, whereas implementing remedial efforts to address the characteristics could require an investment of time and money that could take away from other important issues facing the HMG. Many HMGs may be held accountable for addressing these characteristics without the necessary financial support from their hospital or medical group. Finally, the publication of the document could create a backlash from members of the hospitalist community who do not think that the SHM should be in the business of defining what characterizes an effective HMG, rather that this definition should be left to the marketplace.

Despite these concerns, the leadership of the SHM expects that the publication of the "Key Principles and Characteristics of an Effective HMG" will lead to overall improvement in the capabilities and performance of HMGs.

CONCLUSIONS

The "Key Principles and Characteristics of an Effective HMG" have been designed to be aspirational, helping to raise the bar for the specialty of hospital medicine. These principles and characteristics could provide a framework for HMGs seeking to conduct self-assessments, outlining a pathway for improvement, and better defining the central role of hospitalists in coordinating team-based, patient-centered care in the acute care setting.

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References

 American College of Surgeons. New verification site visit outcomes. Available at: http://www.facs.org/trauma/verifivisitoutcomes.html. Accessed September 3, 2013.

- 2. Hospital accreditation standards 2012. Oakbrook Terrace, IL: The Joint Commission; 2012. Available at: Amazon.com: http://www. amazon.com/Hospital-Accreditation-Standards-Joint-Commission/dp/ 1599404257
- The magnet model: components and sources of evidence. Silver Spring, MD: American Nurse Credentialing Center; 2011. Available at: Amazon.com: http://www.amazon.com/Magnet-Model-Components-Sources-Evidence/dp/1935213229.

 Patient Centered Medical Home Standards and Guidelines. National Committee for Quality Assurance. Available at: https://inetshop01.pub.ncqa.org/Publications/deptCate.asp?dept_id=2&cateID=300&
- sortOrder=796&mscssid=#300796. Accessed September 3, 2013.
- 2013. Applying for the AMGA Acclaim Award. American Medical Group Association. Available at: http://www. amga.org/AboutAMGA/Awards/Acclaim/app_acclaim.asp. Accessed September 5, 2013. American Association of Critical-Care Nurses. Beacon Award for Excellence handbook. http://www.aacn.org/wd/beaconapps/docs/beacon-handbook.pdf. Accessed September 5, 2013. Pistoria MJ, Amin AN, Dressler DD, McKean SCW, Budnitz TL. The core competencies in hospital medicine: a framework for curriculum development. *J Hosp Med*. 2006;1(suppl 1):2–95.