Staffing the Hospital at Home Program: Roles, Staff Criteria and Training, and Team Communication

This guide describes the key roles in the Hospital at Home (HaH) program, as well as a variety of considerations related to deploying a workforce through hiring and/or utilization of vendors. The success of the HaH model ultimately rests with the people who oversee, deliver, and evaluate care. Successful HaH staff are nimble improvisers and problem solvers. By definition, the services and resources of a traditional hospital are not close at hand. Clinicians have a great deal of autonomy in decision-making, without the ability for hallway consultations. The work is also much less predictable than inpatient care. While intake provides some basic information, those admitting a HaH patient likely don't know a patient's home situation until they get there. Operating under these circumstances does not appeal to everyone, and it is critical to ensure that staff at all levels understand and embody the different skills and aptitudes required to build a high functioning home health team.

Roles and Responsibilities: Understanding the Core HaH Team

Leadership

A senior leadership team that is savvy in navigating institutional systems and building relationships with community partners is crucial for the success of HaH. At Mount Sinai, this team consists of the Project Director, a Clinical Director, and a Project Manager.

 $\circ~$ The Project Director provides the strategic vision for the project and broadly oversees the work of the leadership team.

 $\circ~$ The Clinical Director takes the lead in getting the clinical teams off the ground and oversees all clinical operations.

• The Project Manager is responsible for all administrative functions of HaH, including hiring, development and management of budgets, attainment of project goals, and all required reporting.

• The Clinical Nurse Manager supervises all nursing personnel and assigns visits to insure all patients' needs can be met with staffing available.

The leadership team is also assisted by a Coordinator who handles enrollment logistics, scheduling clinical team visits, and the timely ordering and delivery of equipment, supplies, drugs, labs, and X-rays.

Lead Clinicians: Physicians and Nurse Practitioners

In the Mount Sinai model of HaH, a nurse practitioner (NP) and physician share the responsibilities of the Lead Clinician, while in other Hospital at Home implementations, only physicians take the lead. The physician plays an important role in recruiting patients and, as a result, may spend much of his or her time in the Emergency Department. In this role, the

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physician will obtain consent and develop care plans and admission orders for appropriate medications, equipment, X-rays, and labs. Typically, the NP is the first provider to meet the patient when she or he returns home (either with a family member or by ambulance). The NP conducts a safety assessment and then alters the care plan as needed.

The NP works with patients and or family members to do what is necessary to adapt the home environment to the care required, ensure there is someone available to be with the patient as needed, and identify what other team members (e.g., occupational therapist, physical therapist, social worker) may be needed, and whether/how to coordinate specialist consultations. Following admission, the NP will collaborate with a HaH RN, and will visit the patient daily for reassessment, respond to emergent needs, and ultimately help prepare patients for program discharge and transition.

Within all HaH models, there needs to be a provider on call 24 hours a day. One approach, which was implemented at Mount Sinai, is to have the physician on call "after office hours", with the NPs on call from 9 a.m. to 5 p.m. At the end of the day, a "sign-out" is conducted which involves the social worker, the physical therapist, and the clinicians, and which enables the team to communicate provider issues from the day that need more attention.

Characteristics of Strong HaH Staff

Lead Provider

The Mount Sinai HaH program found that successful NPs or physicians in the HAH program often have a background in conducting house calls either in practice or during their training. They have enjoyed this work or found it to be stimulating (as opposed to daunting). HaH clinicians should also have experience managing complex medical care. Those with geriatrics or palliative medicine preparation are optimal as they are trained to treat older people who have a variety of co-morbidities.

Nurse

The HaH nurse, trained as an RN, provides the day-to-day care for patients. In NYC, nurses see four to six patients per day in 12-hour shifts, depending on travel time between patients' homes. After coming into the office to review their patients for the day, the HaH nurse carries supplies, including IVs as needed, essentially bringing the hospital to the home of each patient. The nurse records vitals, administers IVs, and checks medications—much as he or she would do in a hospital setting. If an emergent condition arises, the nurse will call the lead NP or physician and potentially do a video visit with the provider. After the visit, HaH nurses document in the same Electronic Medical Record (EMR) as the providers and communicate with the on-call provider, as indicated. Supplies are immediately restocked in their bags to insure all nursing care can be carried out efficiently the following day. Presently, the Mount Sinai model requires nurses to work 12-hour shifts (8 a.m. to 8 p.m.) in order to be available for evening infusions.

HaH will only hire nurses with relevant clinical experience. They must possess strong assessment skills and clinical judgment, and know, for example, when to call in the NP or physician.

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Experience with infusion is a plus, but most likely will be taught and practiced during the orientation period. Experience in home care is helpful, particularly in responding to environmental and family/caregiver challenges that inevitably arise. RNs with Emergency Department experience often develop the temperament and skills needed to navigate the unpredictable HaH clinical setting. Like all HaH clinicians, successful HaH nurses welcome the greater levels of autonomy and independence that comes with providing care in the home.

Social Worker

The HaH social worker plays a critical connector role between the core clinical staff and the wide array of community-based services that patients often require. This can range from finding suitable long-term services and supports, ensuring the right fit of home aides with the family and patient, and addressing broader family dynamics that may complicate post-discharge care. Psycho-social issues are often central to the well-being of HaH patients, like many older patients with multiple chronic conditions, and the HaH social worker is uniquely trained to address these issues. At Mount Sinai, the social workers are Licensed Clinical Social Workers (LCSW), Licensed Master Social Workers (LMSW) or LMSW-eligible. The social workers are formally supervised by a senior LCSW once a week.

Physical Therapist

Licensed physical therapists evaluate patients and develop a plan of care that promotes movement, improves and restores mobility and muscle strength, reduces pain, restores function, and prevents disability. The physical therapist works with the patient, family members, and the HaH clinicians to ensure that goals of the plan of care are met and that patient outcomes are optimal. Although the level of their involvement varies on a patient by patient basis, physical therapists are key members of the HaH team.

Administrative Assistant

The HaH administrative assistant (AA) plays a vital role in helping the team work efficiently and stay productive. In addition to answering phones, processing paperwork, and scheduling visits, the administrative assistant conducts the first level of case-finding by electronically scanning the admissions of the ED and observation unit for potential eligible patients to refer to the recruitment provider. The AA will also verify place of residence and insurance coverage, map the locations of patient homes to best coordinate the home visit schedule, coordinate deliveries and pick-ups with vendors, as well as scheduling all post discharge visits to a primary care provider or specialist.

Team Coordination & Communication

HaH care, like all good geriatrics care, is team-based. Strong communication and coordination among the physicians, nurse practitioners, nurses, social workers, and other clinical and administrative team members is vital. In addition to day-to-day communications, HaH staff members have twice-a-month clinical team meetings to discuss cases as a group, build team capacity and monitor quality control.

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Day-to-day communication is focused on clinical updates related to patient care and emerging clinical issues. The clinical team has two daily huddles. Every morning at approximately 8:40 AM there is an interdisciplinary team huddle involving all HAH disciplines as well as the rotating medical students and fellows. The purpose of this huddle is to communicate any updates from overnight, discuss each patient's plan from a multidisciplinary perspective, and coordinate assignments for the day. A formal clinical handoff takes place every afternoon among HAH providers to discuss the plan of care of "active" patients as well as new admissions more in detail. Those patients who are in the 30-day post-acute episode are only discussed as needed during the afternoon handoff. The huddle is led by either the clinical nurse manager or the lead physician and lasts no longer than 20 minutes. Team members that are in the field can join the huddle/handoff meetings via secured conference line. A handoff summary and scheduling are entered into a HIPAA-compliant, Internet-based file-sharing system only until this information can be appropriately kept in the EMR. This allows for easy access when team members are away from the office.

Other communication is conducted by phone to the office-based NP who triages all calls. Experience has proven that once the volume of patients is sufficiently large, there will be a significant number of phone calls to the office each day. It is more efficient to have one office-based NP or provider to handle all calls rather than interrupting physicians or NPs who are making home visits or recruiting. Charting in the EMR is completed before the end of the day by each clinician and is another source of communication. Emails, texts, and voice mail messages are discouraged for many reasons, including unreliability, HIPAA compliance issues, and inadequate means of verification.

Implementation Considerations

In addition to finding the right people to staff HaH, there are a number of implementation issues that need careful attention. Adopting an evidence-based care model always requires flexibility and tweaks. Each health system or hospital has distinct clinical capabilities, different patient and payer mixes, and unique environmental challenges. With the ever-changing health care landscape, it is important to be aware of and responsive to evolving trends and the emergence of new models that focus on performance and value-based payments rather than volume-based payments.

Organizational Structure: Insourcing vs. Outsourcing

One of the biggest challenges (and learnings) in the implementation of HaH at Mount Sinai has been how to structure the cost of staffing. More specifically, is it more cost-effective and clinically effective to "insource" staff (that is, have salaried physicians, nurse practitioners, nurses, and social workers paid by the HaH program or hospital) or is it more beneficial to contract/outsource the staffing to an independent agency or agencies? Initially, the volume of the program may be slower, so it may make sense to contract with faculty and staff from other practices and agencies, providing they can be accessed immediately when a patient is identified.

One should also consider the limitations inherent to outsourced employees. For example, outsourced employees often cannot be granted access to the EMR in the same manner as staff

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employees. In addition, an outsourced FTE is not typically a single dedicated individual but a team from which an individual is assigned as needed. This approach precludes the outsourced individual from being part of the team and participating in huddles, meetings, in-services, etc.

Earlier implementation strategies of hospital at home in nonprofit and VA settings have hired staff from the beginning. At Mount Sinai, HaH started with a hybrid approach. The program hired physicians from Mount Sinai's Visiting Doctors house calls program and recruited NPs as new hires. The nurses were contracted through the Visiting Nurse Service of New York (VNSNY), NYC's largest home care agency. The decision to outsource nurses had three related rationales. First, since HaH was being developed as a model program through support from the Center for Medicare and Medicaid Innovation (CMMI), it was thought that contracting outside the hospital to a home care agency would make the program easier for others to replicate. Second, Mount Sinai already had a working relationship with VNSNY and the HaH implementers were comfortable with the agency's reputation and leadership. And finally, there was initial concern about the ability to recruit enough nurses with the right kind of home and community experience from within the Mount Sinai hospital system.

Initially, this decision was helpful because HaH's caseloads grew more slowly than expected. HaH did not have salaried nurses or "sunk" salary costs. VNSNY also took responsibility for staff training for HaH, which enabled HaH leadership to focus on other aspects of program development (e.g., fine-tuning the recruitment process and building out other parts of the HaH platform). As the program grew, ongoing coordination with a vendor became increasingly challenging and time-consuming, and the outsourced model grew less attractive. HaH then decided to staff nursing internally.

"Insource-or-outsource" decisions have to be made for other staff roles and functions as well. Mount Sinai's HaH X-ray and ultrasound techs have come from an external agency, while other Hospital at Home implementations have hired or sub-contracted from their hospital's radiology services. Mount Sinai HaH also decided to contract with external vendors to supply durable medical equipment (DME).

Hospitals or health systems implementing HaH will need to make staffing decisions based on the care needs of the patients they treat, their system's capacity, relationships with vendors, and the community or regional organizations available to extend their reach. The presence of unions in a hospital as well as state laws may also affect how Hospital at Home programs are structured.

Capacity and Training

Since it serves as an alternative to hospital-based care, HaH requires seven-day/week coverage. This means ensuring sufficient staffing to account for vacations, professional development days, or unplanned leave. At year three, HaH at Mount Sinai recruited from three emergency departments and admitted about eight to 10 patients per week. To cover this volume, the staff consisted of four providers daily and a minimum of two nurses with the ability to staff up through the use of contracted agencies or per diem staff. One of the early advantages of outsourcing the nurses to VNSNY was that HaH could take advantage of that organization's broader capacity to more easily pull in nurses as caseloads increased or schedules varied.

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Onboarding and training also require time and effort. A new hire to the health system will take more onboarding time, as will a provider less familiar with home visits. All HaH MDs have had significant inpatient experience and ambulatory experience including house calls during their residencies.

HaH physicians that come from the Mount Sinai Visiting Doctors program can generally be prepared within one week of shadowing to ensure training in recruitment, patient evaluation, and placing orders. Many hospital at home implementations build off an existing house calls program while others choose to create a program de novo. Having a readily available house calls service not only provides doctors to deliver home hospital services, but also a "place" to discharge patients who don't have an existing primary care provider.

Training for HaH NPs has taken longer not just to learn HaH processes and clinical responsibilities, but for orientation to hospital-wide policies and procedures for their discipline. In addition, NPs come to the program having been trained in specific areas and obtain their specialization in primary, acute, or specialty health care. An NP specializing in acute care will obviously be experienced in acute inpatient issues but may have never done home visits. Conversely, a primary care NP may not have encountered the clinical acute nature of patients. As a result, most NP hires require significant training.

HaH nurses were originally employed by the VNSNY as part of a special HaH team geared to responding effectively to patients with a level of acute needs rather than traditional home care patients. Today, HaH nurses are employed by Mount Sinai and receive hospital-wide RN orientation through nursing education as well as one month of HaH training prior to practicing independently. HaH RN training includes updating skills in IV, wound care, and medication reconciliation, as well as documentation and responsibilities associated with home care visits for HaH. This is accomplished through shadowing, one-on-one training in the office, and participation in clinical meetings and huddles.

PT's, similar to RNs, originally were employees of VNSNY however the incentives and model of PT in a home health episode of care is very different from the care provided in Hospital at Home. Once the volume was great enough the team was able to employ PTs. Their training primarily consisted of the HaH model of care and the outcomes expected. Given the requirement of possessing experience in both home and sub-acute rehabilitation settings, additional training was not required.

Administrative Assistants (AA) were trained by the project coordinator who was familiar with both hospital and Hospital at Home systems as a result of her functioning in this AA role in the very early development of the program. Training for newly hired AAs centered on EMR training, other electronic programs for scheduling, insurance verification, etc., as well as patient admission protocols, check lists and data collection methods.

Vendor and Consultant Agreements

Beyond the central issue of outsourcing/insourcing staff, most Hospital at Home programs have to create agreements with a variety of local vendors to provide a range of services and equipment.

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This may mean contracts with local durable medical equipment providers, pharmacies, phlebotomists, X-ray/ultrasound technicians, paramedics, and transportation services. How these agreements are made and with whom will no doubt vary by hospital/practice and community, but they require a comprehensive knowledge of the providers in the area and their respective capacities.

Your hospital, health system, or practice may already have relationships with many of these groups to provide services or equipment in the hospital. However, these organizations may not have the capacity to schedule services/deliveries within 24 or 48 hours. They may not be able to deliver IV or medical equipment on a daily or on demand basis to multiple locations. In NYC, HaH initially worked with an infusion pharmacy until it became clear that the vendor simply wasn't able to be responsive to the rolling and odd hour requests of a hospital at home program. HaH now acts as its own inpatient floor, necessitating ordering IV medications and supplies from the hospital pharmacy and central supply warehouse, and maintains its own secure refrigerated storage for these medications. Nonstandard medications are also ordered from the inpatient or outpatient pharmacy. Nurses can then access required supplies and medications prior to each day's assignments in a timely and efficient manner.

Similarly, some HaH vendors have been challenged to develop pricing for these unorthodox offerings. For example, an agency may know how to bill oxygen for patients who have chronic needs over six months, but they are not set up to bill for patients who need oxygen for a much shorter, acute period. The specifics, of course, will vary from partner to partner and service to service. Ultimately, new consultant and vendor agreements will take time and effort to develop and may look quite different than the traditional or existing arrangements.

In many ways, the HaH program creates a whole new integrated supply chain—a combination of its own home-grown sources, groups used to serving brick-and-mortar hospitals or rehabilitation facilities, and/or those with experience delivering sub-acute, home-based services and products. It is a complex and often changing patchwork of services which requires constant monitoring and refinement.



LESSON LEARNED

During the ramp-up phase, outsourcing nursing and physical therapy was optimum, but once the census supported a employed clinical staff, it allowed a higher level of efficiency, better communication and full control over patient care. Each health system needs to account for delays in hiring and on-boarding when considering bringing on new staff. At Mount Sinai, onboarding for providers can take more than six months and nursing can take three to four months to onboard. It is also important to consider lengthy orientation for a Hospitalization at Home position since it is unlikely new staff will come with the exact experience required.

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