The Business of Pediatric Hospital Medicine

Jack M. Percelay, MD, MPH, FAAP, MHM; and David G. Zipes, MD, FAAP, SFHM

Abstract

Pediatric hospital medicine (PHM) programs are mission driven, not margin driven. Very rarely do professional fee revenues exceed physician billing collections. In general, inpatient hospital care codes reimburse less than procedures, payer mix is poor, and pediatric inpatient care is inherently time-consuming. Using traditional accounting principles, almost all PHM programs will have a negative bottom line in the narrow sense of program costs and revenues generated. However, well-run PHM programs contribute positively to the bottom line of the system as a whole through the value-added services hospitalists provide and hospitalists’ ability to improve overall system efficiency and productivity. This article provides an overview of the business of hospital medicine with emphasis on the basics of designing and maintaining a program that attends carefully to physician staffing (the major cost component of a program) and physician charges (the major revenue component of the program). Outside of these traditional calculations, resource stewardship is discussed as a way to reduce hospital costs in a capitated or diagnosis-related group reimbursement model and further improve profit—or at least limit losses. Shortening length of stay creates bed capacity for a program already running at capacity. The article concludes with a discussion of how hospitalists add value to the system by making other providers and other parts of the hospital more efficient and productive. [Pediatr Ann. 2014; 43(7):279–284.]

Jack M. Percelay, MD, MPH, FAAP, MHM, is Adjunct Clinical Professor, Department of Physician Assistant Studies, Pace University College of Health Professions. David G. Zipes, MD, FAAP, SFHM, is Director, Pediatric Hospital Medicine Program, Peyton Manning Children’s Hospital.

Address correspondence to: Jack M. Percelay, MD, MPH, FAAP, MHM, Department of Physician Assistant Studies, College of Health Professions, 163 William Street, Room 517, New York, NY 10038; email: JPerceelayMD@gmail.com.

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N o well-informed administrator or physician expects a pediatric hospital medicine (PHM) program to generate a profit. PHM programs are mission driven, not margin driven. On the other hand, programs are not evaluated solely on the basis of clinical success and services provided. Programs must attend carefully to program-specific costs and revenues to justify the stipend most PHM programs require to make up for shortfalls in operating budgets. A broader discussion of overall hospital/system costs and revenues is required to demonstrate the full value of PHM programs.

COSTS
Physician/provider staffing, recruitment, and training are the major cost components for PHM programs. Overhead is generally low and includes such items as office space, office supplies, and telecommunication/internet expenses. Clinical supplies are provided by the hospital; all the hospitalist needs is a stethoscope, otoscope, and ophthalmoscope. Although not discussed in this article, appropriate clerical and administrative support is crucial to maximize physicians’ clinical productivity. Paperwork and telephone calls that can be completed by less expensive clerical staff support staff should be delegated. Malpractice coverage and billing costs make up the remainder of most budgets.

Staffing
In an effort to find the most efficient, effective, and safe model of care, PHM programs have tried a variety of staffing models. Hospitalists have needed to consider multiple factors, including, but not limited to, cost, loss of information from multiple handoffs, work-life balance, patient/family satisfaction, provider satisfaction, teaching of residents, and long-term career sustainability. Deciding between 24/7 in-house presence versus being on call from home is the overarching staffing issue. Once that decision is made, a plethora of models can be entertained, all with their pros and cons. Factors that influence the 24/7 in-house decision include finances, census, complexity of patients, in-house presence of residents or other physicians (primarily emergency department physicians and intensivists), teaching responsibilities, continuity issues, local “standards,” market competition, and physician and institutional preferences.

24/7 vs. On-Call Coverage
The major direct drawback of the 24/7 in-house model is cost. Depending on expected workload per hospitalist, this model requires approximately five full-time equivalent hospitalists to provide single coverage. 1 Being in house has the advantages of the constant presence of an attending physician who can interact with families, address urgent and emergent needs, admit and consult with new patients, and keep the patient’s care plan moving forward (and thus improve throughput and shorten length of stay). Additionally, revenue can be generated by seeing and billing for new patients prior to midnight. Teaching of residents, medical students, and other learners can occur throughout the night, but it remains controversial whether having hospitalists in house overnight improves or impedes resident education. 2 Although it makes intuitive sense that being in house 24/7 would improve care, safety, and outcomes due to the continual presence of an attending physician, no data are available to support this notion. Despite its downsides, 24/7 in-house staffing is becoming more common in children’s and university hospitals and larger community hospitals.

The call-from-home model is less expensive than its 24/7 in-house counterpart and has other advantages as well.

Schedule Models
Within either the 24/7 or call-from-home paradigm, three basic scheduling models are available: traditional, block, and shift work. Again, each has its pros and cons, and various factors influence the decision on what is best for any individual program. The traditional model has a provider working Monday through Friday, typically 8 a.m. to 5 p.m., and alternating weekends. This model provides good continuity of care and tends to work well within academic centers. The weekends can prove burdensome, and long stretches of shifts can contribute to fatigue and/or burnout.

The block schedule, very popular with adult hospitalists, typically works in 12-hour increments (eg, 7 a.m. to 7 p.m. or 7 p.m. to 7 a.m.) and for 5 to 7 days in a row followed by an equal amount of time off. This schedule is relatively easy to compose, provides for weekend coverage, has built in “vacation” time, and also has good continuity. Downsides include long stretches...
“off” when hospitalists are away from the hospital and not readily available to participate in administrative, educational, or quality improvement projects; a significant weekend and night burden; and the potential for fatigue and burnout.

Shift work is similar to how most emergency departments schedule their physicians, with lengths of shifts varying anywhere from 8 to 24 hours. This model offers increased flexibility, staff, and potentially better staff lifestyle, but the safety of 24-hour shifts is coming under increasing scrutiny. In general, scheduling for shift models is more complex and less predictable than either the traditional or block model. Continuity depends on the nature of scheduling. Many community hospitals have an average length of stay of approximately 2 days, making continuity less of a concern than in hospitals caring for more complex patients with longer lengths of stay.

To provide safe, timely, efficient care that does not create delays in throughput, the number of daytime staff on-site at any one time depends on average predicted volumes and the frequency of simultaneous, urgent events in different geographic parts of the hospital requiring multiple physicians. Seasonal variations are readily easily addressed in advance. Day-to-day variations are more problematic. Some programs have pre-determined backup in place, either from home (with a 1- to 2-hour response time), or in house with assigned administrative time that flexes into clinical time as needed.

**Workload and Compensation**

The data with respect to pediatric hospitalist workload and compensation are somewhat limited and come from local reports, Listserv discussions, trade journals, and personal observations of the authors, as well as more objective sources such as the Society of Hospital Medicine and Medical Group Management Association surveys. (Adult data are much more robust in this respect than pediatric data.) In the authors’ opinion, 2,000 hours per year, which includes nonclinical time, is a reasonable expectation for a full-time hospitalist. This averages 40 to 44 hours per week factoring in 4 weeks for personal time off and 1 week for continuing medical education (CME). Salaries will vary considerably based on local economic factors, staffing model selected, hospital type (university based versus community), additional responsibilities (eg, teaching, research, system improvement), use of physician extenders, presence or absence of house staff, and expectations for weekend/holiday/nighttime coverage. Paradoxically, urban areas with higher costs of living and typically higher acuity and census often pay less than their suburban and rural counterparts. This is largely supply-and-demand driven.

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Nights and weekends are the perennial bane of hospitalist staffing. Some practitioners prefer working nights based on their personal biorhythms or childcare needs, but few physicians want to work more than 1 weekend per month. Nocturnists and weekend moonlighters are potential solutions to these staffing needs. Increased compensation for weekend and night shifts is also helpful and may take the form of a higher hourly rate or an overall decreased total work-hour requirement. Programs should be careful not to build staffing models into the availability of one unique individual. If that person moves or takes a leave of absence, the remaining hospitalists need to be prepared to step in to equally share these less-attractive shifts.

Compensation structures and their transparency differ among PHM programs. Pediatric hospitalists do not have the national marketplace that adult programs have; this leads to wide local variation. Most programs are primarily salary based, but incentive compensation for both the program and the individual hospitalist is becoming increasingly common. This typically takes the form of productivity, quality, and citizenship targets. Most programs reward seniority with incremental increases in salary (or decreases in less-desirable shifts), but some programs treat all hospitalists equally. Generally, these considerations will not be unique to the PHM program but will reflect the overall philosophy and policies of the institution. New hires should fully understand their expected workload and compensation. Generally, this is best done by asking how many clinical hours, nights, and weekends a full-time hospitalist works in a given year. Weekly and monthly estimates are variable and have the potential to create bitterness if one party or the other feels he or she was misled in the initial negotiations.
REVENUE

Most pediatric hospitalists are employed directly by the hospital or by an affiliated medical group that has a shared interest in the success of the hospital and larger health care system, in the case of accountable care organizations. Thus, the simplest financial models for PHM programs must consider both physician and hospital revenue. More complex models discussed in the “Hospitalists’ Overall Contribution to Value” section below address overall system financial performance.

Professional Charges

Physician revenue is determined by professional charges, as generated by current procedural terminology (CPT) codes. All hospitalists, not just the group leader, should be knowledgeable about these codes so their notes sufficiently document the level of care for which they are entitled to bill. A structured compliance program that includes quarterly internal audits, compares coding among group members, and annually reviews CPT updates is helpful. In the authors’ experience, the biggest improvements in billing are made by reducing variability in the group with attention to those who undercode (and potentially underdocument).

Pediatric hospitalists most commonly use evaluation and management (E&M) codes. Procedure codes are somewhat less common and typically reimburse very poorly for the amount of time expended. Charges associated with codes should be updated annually.

Ultimately, reimbursement is based on revenues received, not charges generated or prediscounted costs. Work relative value unit (RVU) productivity is the most commonly used metric to evaluate physician productivity. For pediatric hospitalists, this adjusts for variability in overhead and payer mix but still fails to address issues such as the increased amount of time required for pediatric care.

Internal Codes

Internal “sham” codes—unofficial codes created by the group that are not submitted to payers but are tracked internally within the billing software programs—may be used by a PHM group to monitor its workload. These are crucial data when the PHM group negotiates its contract. A PHM group that has only anecdotal data about the unreimbursed services it provides is unlikely to get recognition for this work. Useful sham codes may be as simple as:

- 00001: Additional 15 minutes unreimbursed counseling time with parents (counseling time that contributes to an upgraded code should be captured in the CPT code itself).
- 00002: Additional 15 minutes procedural time above expected norm (assume expected norm of 15 minutes for most procedures, perhaps 30 minutes for a lumbar puncture). This code could also be used for unsuccessful procedures. Many hospitalists are understandably reluctant to submit a bill for an unsuccessful procedure, as it is unlikely to be well received by parents.

Groups could use similar codes (educational or administrative value units) to track other nonbillable activities that provide value to the hospital as a whole but do not involve direct patient care.

Multiple Visits, Consultation, and Observation Codes

Unlike office-based providers who typically see a patient only once per day and can only bill for the services they provide on morning rounds—even if they manage the patient by phone throughout the day—an on-site hospitalist can generally be expected to see a patient at least twice per day. If each brief follow-up visit is documented, including a brief physical examination and medical decision making, the initial E&M code should be incrementally increased based on the sum of services provided in the 24-hour calendar day by all members of the PHM group. When appropriate, prolonged service codes may be used. Although these services may not be reimbursed, this does provide the program a way to track its overall work RVU productivity and justify both its staffing needs and compensation. It should be noted that these entries and follow-up visits are only billable by the attending physician (or NP/PA). Repeat visits by residents are not billable.

Use of consultation and observation codes vary regionally, institutionally, and by payer. In the authors’ experience, many hospital/program administrators choose to follow Medicare guidelines for uniformity within the entire institution to facilitate compliance and operations, or simply because this is the standard followed by most private payers.

In terms of observation care, hospital and physician billing needs to be consistent, otherwise both bills will be rejected and require appeal. Typically, the larger hospital bill will trump the smaller physician bill, in which case the PHM group should not fight the payer. Rather, the PHM group should track the yearly impact of this “financial hit” and negotiate with the employer to be “made whole” as part of the PHM group’s annual stipend to support the continued provision of un- or non-reimbursed services.

The same principle applies to hospitalist co-management and consultation for primary care pediatricians (PCPs), pediatric subspecialists, and surgeons. Nationally, there is wide-ranging variation in local practice across payers. Most surgeons receive a global fee that includes preoperative and postoperative management. Many payers are willing to reimburse a pediatric hospitalist for medical services that include postoperative pain management (International Classification of Dis-
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HOSPITALISTS’ DIRECT IMPACT ON HOSPITAL FINANCES

Hospitalists support the hospital’s financial performance in several ways. First, hospitalists help maintain an active pediatric inpatient service and therefore increase revenues by increasing the volume of hospital services. Hospitalists, through their in-house presence and dedication to inpatient care, can provide a higher quality of care than off-site, office-based PCPs for whom inpatient care is not a primary focus. Hospitalists support the services provided by surgeons and subspecialists, making these physicians more likely to refer patients to the given hospital. With appropriate backup, hospitalists can provide cost-effective, after-hours coverage in a variety of settings, including the neonatal and pediatric intensive care units, further enhancing the scope of pediatric services at a given hospital. This drives pediatric admissions (indirectly, through maternal influences on a family’s hospital of choice). High-quality pediatric services may create brand loyalty that drives nonpediatric referrals as well; hence, the frequency with which infants and children are featured on hospital advertisements.

Second, hospitalists can directly impact the bottom line by decreasing hospital costs for a given admission. This is particularly true in the adult arena where Medicare reimburses a lump sum based on given disease and severity (diagnosis-related group), regardless of length of stay or resource consumption. Historically, hospitalists save approximately 10% of hospital costs on a typical admission compared to nonhospitalist providers. These cost savings quickly add up and are the basis by which adult programs are commonly able to negotiate a stipend to “make the hospital medicine program whole” in the face of what would otherwise be insufficient professional fee collections. In contrast, Medicaid reimbursement is still per diem in some states. In this setting, the financial incentive may be just the opposite. Instead of saving money (i.e., costs) by discharging a patient who is ready to go home that evening, a hospital may make more money by keeping the patient in house and collecting another day’s reimbursement, particularly when resource consumption (marginal cost) is low.

HOSPITALISTS’ OVERALL CONTRIBUTION TO VALUE

The previous discussion of professional billings, hospital revenue, and hospital costs represents not only the most easily calculated aspects of the business of PHM but also the most simplistic and limited view of the value of hospitalists. Hospitalists’ true value is best measured by their influence on the entire system. From a patient and family standpoint, hospitalists add value by providing high-quality care while “choosing wisely” in terms of appropriate, evidence-based testing and...
treatment. From the PCP’s perspective, hospitalists allow the PCPs to avoid the inefficiency of the commute and remain in the office where they are more productive economically. Subspecialists and surgeons still need to come to the hospital to see their patients, but by making use of hospitalists, less time is spent on the pediatric ward and more time can be spent in the operating room, procedure suite, or office. This not only generates more income for the physicians, it also benefits the system by improving market share and decreasing wait times for subspecialty appointments.

Within the hospital, hospitalists’ efforts to improve throughput can increase emergency department bed capacity by accelerating the admission process. Similarly, hospitalists can help increase pediatric intensive care unit bed capacity by accepting patients on the pediatric ward or intermediate care unit as soon as they are appropriate for transfer. On the pediatric ward, for a unit operating at capacity, a 10% decrease in average length of stay effectively translates into a 10% increase in bed-day capacity over the course of 1 year.

This value discussion raises crucial issues to physicians and administrators alike. For the hospitalists, it points out the need for the hospitalist to provide service to many constituents/customers. For nonhospitalist physicians, it identifies ways in which PCPs, subspecialists, and surgeons can expect to benefit from a highly functioning PHM program. For administrators, looking at overall value of the hospitalist program makes the business case for a PHM program much more effectively than does simple accounting of professional fees generated versus physician salaries.

CONCLUSION

This article has provided an introduction to business concerns in the practice of PHM. Additional resources are available to pediatric hospitalists wishing to learn more. Materials from the Society of Hospital Medicine (http://www.hospitalmedicine.org) and the American Academy of Pediatrics Section on Hospital Medicine (http://www.aap.org/en-us/about-the-aap/Committees-Councils-Sections/Section-on-Hospital-Medicine/Pages/Section-on-Hospital-Medicine.aspx) may be particularly valuable. For nonhospitalist readers, this discussion should provide a basic framework by which they can judge their local program to make sure it operates efficiently with appropriate alignment of incentives and attention to financial viability.

REFERENCES