## **EDITORIALS**

## The International Hospital Medicine Scene

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In the 15 years since Wachter and Goldman coined the term "hospitalists", the specialty of Hospital Medicine grew faster than any other in the history of American medicine.<sup>1</sup> The early drivers for growth were largely economic: There were significant reductions in resource use, with a 13% decrease in hospital costs and a 16% decrease in hospital lengths of stay (LOS).<sup>2</sup> Hospitalist clinician-educators increased the satisfaction of residents and medical students in academic settings.<sup>2</sup> Patient satisfaction and hospital mortality did not suffer.<sup>2</sup>

Recent growth of Hospital Medicine revolves around 3 drivers: 1) improving quality and safety of hospitalized patients—owing in large part to the Institute of Medicine's 2 compelling reports, "To Err Is Human" and "Crossing the Quality Chasm", 2) hospitalist and specialist (surgeon) comanagement; and 3) the effects of duty hours restrictions imposed by the Accreditation Council for Graduate Medical Education affecting United States (US) teaching hospitals. 5

In this issue of the Journal of Hospital Medicine, Shu and colleagues<sup>6</sup> report on the performance of a hospitalist program in Taiwan. To the best of our knowledge, this report from Asia is the first published report of a successful hospitalist model with measurable patient outcomes outside of North America. Specifically, over a year, the authors found that patients admitted by hospitalists had a shorter LOS and lower cost per case, with no difference in in-hospital mortality and 30-day readmission. These results were obtained despite the fact that the cohort of patients admitted to the hospitalist team was older, sicker, and had worse functional capacity. Additionally, the patients admitted to the hospitalist team, and who died during hospitalization, were more likely to have a do-not-resuscitate (DNR) order signed, when compared with those patients admitted to the general in-

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ternal medicine teaching service. Comparing LOS with North America may be problematic. As Shu and colleagues<sup>6</sup> point out, there are cultural and economic issues that affect the behavior of patients and physicians in Taiwan.

The healthcare system in Taiwan has similarities to the healthcare systems in the United Kingdom (UK) and the US. In 1995, Taiwan implemented a national health insurance system. The UK has had a National Health Service for many years that provides most services for free. The Taiwanese system requires modest copayments for services. The implementation of the national health insurance system in Taiwan increased healthcare access from 57% of the population to 98%.7 The increase in insurance across the population with modest copayments has made it possible for a larger percentage of the population to access the healthcare system.<sup>7</sup> According to the authors, this has resulted in increased hospital admissions (35% in the decade since the introduction of national health insurance), resulting in a shortage of Hospital Medicine physicians and hospital beds.<sup>7</sup> Compounding the stressors on this system is that the diagnosis related group (DRG) reimbursement model, similar to the American DRG reimbursement model, will soon take effect in Taiwan. As a result, our colleagues in Taiwan are experiencing issues commonly faced by mature hospitalist programs in the US: increased needs in efficiency to improve patient flow and decrease emergency room overcrowding and LOS; and concerns with safe discharges of high-risk patients while ensuring outpatient follow-up. This is a scenario with which US hospitalists are all too familiar.

The next step for Taiwan might be to implement a culturally specific patient education program regarding the discharge process. The first step would be a needs assessment survey of patients in Taiwan, inquiring about concerns regarding readiness for discharge. They might inquire about patient beliefs regarding understanding indications for inpatient hospitalization versus discharge to home, home with home services, or skilled nursing facilities. They might be able to drill down to the root cause of refusal to be discharged home. These data could help our colleagues in Taiwan create their own discharge program to drive down LOS closer to that of the US and other Western countries, in order to reap financial benefits and improve resource utilization.

What do we know about the growth of Hospital Medicine around the world? The Society of Hospital Medicine (SHM) reports international members from 26 countries around the world. In North America, SHM members are found in the US, Canada, and Bermuda. In Europe, SHM members are found in England, Ireland, Scotland, Spain, Belgium, Portugal, Italy, and Germany. In South America, SHM members are found in Brazil, Chile, Colombia, and Argentina. In Asia and the Middle East, SHM has members in Saudi Arabia, Israel, United Arab Emirates, Pakistan, Japan, China, the Philippines, and Singapore. In Oceania, SHM has members in Australia, and New Zealand. In Africa, 1 SHM member is from Nigeria (Society of Hospital Medicine Data, 2011). In fact, the International Hospitalists Section of SHM is 1 of only 2 sections that the Society recognizes.

Hospitalists are organizing themselves abroad as well. In Canada, the Canadian Society of Hospital Medicine was founded in 2001 and has had 8 national conferences to date. There are roughly 1,000 Canadian hospitalists (Wilton D, personal communication, 2011). Whereas most US hospitalists are internists or pediatricians, in Canada, most hospitalists are family physicians. In the US, hospitalists are more likely to perform the following services: consultation, intensive care unit patient care, rapid response team service, surgical comanagement, and evening on-site coverage. Canadian hospitalists are more likely to provide pediatric care and psychiatry inpatient comanagement. 9

In the UK, the professional organization of physicians most similar to US hospitalists, "acute physicians," is called SAM (The Society for Acute Medicine). It was founded in 2000.10 In the UK, general practitioners (GPs) never care for inpatients; at the time, GPs referred all admissions to organ-specific specialists (eg, cardiologists). Acute medicine was created due to the realization that medical inpatients were too complex to have specialists managing them. Training programs were set up circa 2003 to create this specialty and address this need. Acute physicians staff geographically localized acute medicine units near emergency departments. These patients stay 1 to 3 days in an effort to concentrate services and resources to these patients, to prevent longer stays once fully admitted (Smith R, personal communication, April 23, 2011). Acute medicine units in the UK, Ireland, and Australia have led to positive benefits on patient outcomes. A review article by Scott and colleagues revealed reductions in LOS, inpatient mortality, and emergency department LOS, without increased 30-day readmission rates. They found increased staff and patient satisfaction, and more medical patients discharged directly to home from acute medical units. 11 The development of acute medicine in Australia and New Zealand began around 2005 and derives from the geographic localization of the UK model. Whereas the UK model has a focus on the first 72 hours of hospitalization, the model in Australia and New

Zealand is more similar to the US model of following patients through their entire admission. <sup>12</sup> Unlike the UK, Australia does not have dedicated acute medicine training programs.

PASHA, the Pan-American Society of Hospitalists, is a loose affiliation of hospitalists largely in South America, linking with their North American colleagues. PASHA grew out of SOBRAMH, Sociedade Brasileira de Medicina Hospitalar—the first Hospital Medicine Society in South America, tracing its roots to 2004. To date, PASHA has had 1 international conference, but there have been 2 national conferences each in Brazil and Chile, and 1 in Colombia. The concept and advantages of Hospital Medicine have been presented at a conference in Panama. Argentina has its first Hospital Medicine Congress scheduled for September 2011, in concert with PASHA.

Two Hospital Medicine programs abroad deserve special mention. Both started in 2005 and have instituted the full hospitalist package, including multiple evidencebased order sets at both sites (eg, deep vein thrombosis [DVT] prophylaxis and hyperglycemia management). At the Pontificia Universidad Católica in Santiago, Chile, they have been awarded national grants to study hyperglycemia in hospitalized patients, and they have sent their faculty to the US for additional training in patient safety, quality improvement, leadership, and medical informatics. They have succeeded in decreasing LOS and improved the exam grades of their learners. Their faculty has published in national journals and is now beginning to submit their work for publication in US-based journals (Rojas L, personal communication, April 22, 2011). The Clínica Universidad de Navarra (CUN) in Pamplona, Spain is a Joint Commission certified facility with a full electronic medical record. Hospitalists there are looking at ways in which hospitalist-staffed intermediate care units can benefit patient outcomes. Additionally, they have comanagement arrangements with nearly all surgical subspecialties. The "Management of the Hospitalized Patient" symposium was organized by CUN hospitalists in 2007—the first Hospital Medicine Congress, to our knowledge, in continental Europe. At any one time, 30% of all residents in all specialties rotate with CUN hospitalists (Lucena F, personal communication, April 22, 2011).

The specialty of Hospital Medicine is truly global. Our colleagues around the world employing the hospitalist model of care are now producing outcomes similar to the published models in North America and to the acute medicine models in Europe and Australia. According to the Society of Hospital Medicine, there are over 30,000 hospitalists in the US. There could be well over 50,000 hospitalists around the world. In 5 years, the world may have 100,000 hospitalists. The same drivers are fueling the growth of Hospital Medicine around the world. The evidence is building that the hospitalist model of care has financial and quality benefits that transcend borders. We

forecast that the hospitalist model of care will become an increasingly larger part of the solution around the world to fix these international healthcare systems.

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