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Hospitalist Update

Why Does Team-based Care Matter to Hospitalists?

Les Hall MD

If at any point in my hospitalist career you asked me if I am a member of a health care team, I would have answered unequivocally: "Yes." However, if you then asked me who else serves on that health care team and how we are collectively participating in teamwork, I might have to pause and think a while.

Within our own hospitalist program, several changes have begun to tangibly reflect a commitment to interprofessional and inter-disciplinary teamwork in recent years. Social workers and case managers now review pending discharges during the daily multidisciplinary rounds. Clinical pharmacists round with our inpatient teams, consulting on medication issues and identifying patient concerns with which they can assist. A recently added "morning huddle," between the physicians and nurses has been popular with both groups, ensuring that daily care goals are aligned early in the workday. Co-management of elderly patients with hip fractures, involving orthopedic surgeons and hospitalists, has become the new "norm" and both advanced practice nurses and physician assistants have been fully integrated into our care delivery process in a variety of settings.

We are not alone in promoting the value imparted by improving teamwork and communication among members of the health delivery team. Literature focusing on chronic disease management suggests that interprofessional teamwork improves outcomes and is valued by patients and providers [1,2]. Far less literature exists regarding the impact of teamwork in inpatient settings; however, we do know that breakdowns in communication among healthcare team members are the greatest contributors to the generation of serious adverse events in hospitals [3]. Common sense dictates that we need better strategies to improve communication and teamwork in the inpatient setting. The Joint Commission has built communication expectations (between providers and between providers and patients) into the National Patient Safety Goals [4] and the Institute of Healthcare Improvement is championing handoff tools and other means to improve communication between health care team members [5]. The Patient Protection and (continued)

(cont) Affordable Care Act of 2010 includes many incentives for health care organizations and providers to enhance team-based care.

In May, 2011, six health care professional organizations that make up the Interprofessional Education Collaborative issued a set of core competencies in interprofessional collaborative practice [6]. These establish a common platform of ethical understanding, knowledge of roles/responsibilities, communication practices and teamwork skills which should be shared by all health professionals. Even as this consensus on the importance of understanding and building upon teamwork skills emerges, many questions remain unanswered:

1. How do we include the patient and the family as true members of the care team in ways that add real value to the patient and lead to better outcomes?
2. Is teamwork essential to positive outcomes in all care settings (or only in select settings)?
3. How do we maintain professional identities (the positive differences between professions that allow each of us to make our unique contributions to patient care) as we try to meld into teams?
4. How does health professional education need to change to optimally prepare future caregivers for team-based healthcare? How important is interprofessional education?
5. How do we teach these skills to existing practitioners when they seem to be lacking?
6. How do we measure "teamness" in an individual or group? Do we know it when we see it or are there objective measurements of team-based skills?

So why does the team-based care emphasis matter to hospitalists? I believe that, in the years ahead, this issue will pose many opportunities for practice evolution, leadership within hospital systems and the creation of new knowledge. Hospitalists, who have in-depth knowledge of inpatient care delivery systems, are ideally positioned to partner with other health professionals to design, trial and refine new care delivery models in a variety of inpatient settings. Their engagement of other hospital leaders in this process can help to further solidify their roles as inpatient clinical leaders, the kind of leaders who gain respect and influence due to their expertise in collaboration rather than via the traditional power hierarchy of past health care systems. Lastly, as hospitalists use qualitative and quantitative techniques to measure the impact of these changes on patient and provider perceptions of care, patient safety events, cost of care and health outcomes, they will help to clarify the answers to the questions posed above. The immediate future should provide hospitalists many chances to partner with patients, other providers and health care leaders to develop more effective teams that improve patient care.

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(continued)

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http://www.ihi.org/knowledge/Pages/Tools/TCABHowToGuideOptimizingCommunicationTeamwork.aspx

6. Interprofessional Education Collaborative Expert Panel, Core Competencies for Interprofessional Collaborative Practice, 2011

http://www.aamc.org/download/186750/data/core_competencies.pdf

CASE OF THE MONTH

Bishnu Devkota MBBS, MHI, FRCS & Yashaswini Yeragunta MD

DELAYED PRESENTATION OF PRIMARY SPONTANEOUS PNEUMOTHORAX

ABSTRACT: Primary spontaneous pneumothorax occurs when there is an accumulation of air in the pleural space without a history of trauma or an underlying medical disorder. It is usually seen in young individuals with a history of tobacco use. The clinical presentation is most often acute with chest pain and/or dyspnea; however, some patients have a delayed presentation. We present a case of primary spontaneous pneumothorax with delayed presentation and discuss the management of this condition and issues related to the prevention of its recurrence. The role of the hospitalist in patient education is emphasized since counseling during hospitalization for an acute illness is the most effective means to discourage continued tobacco use.

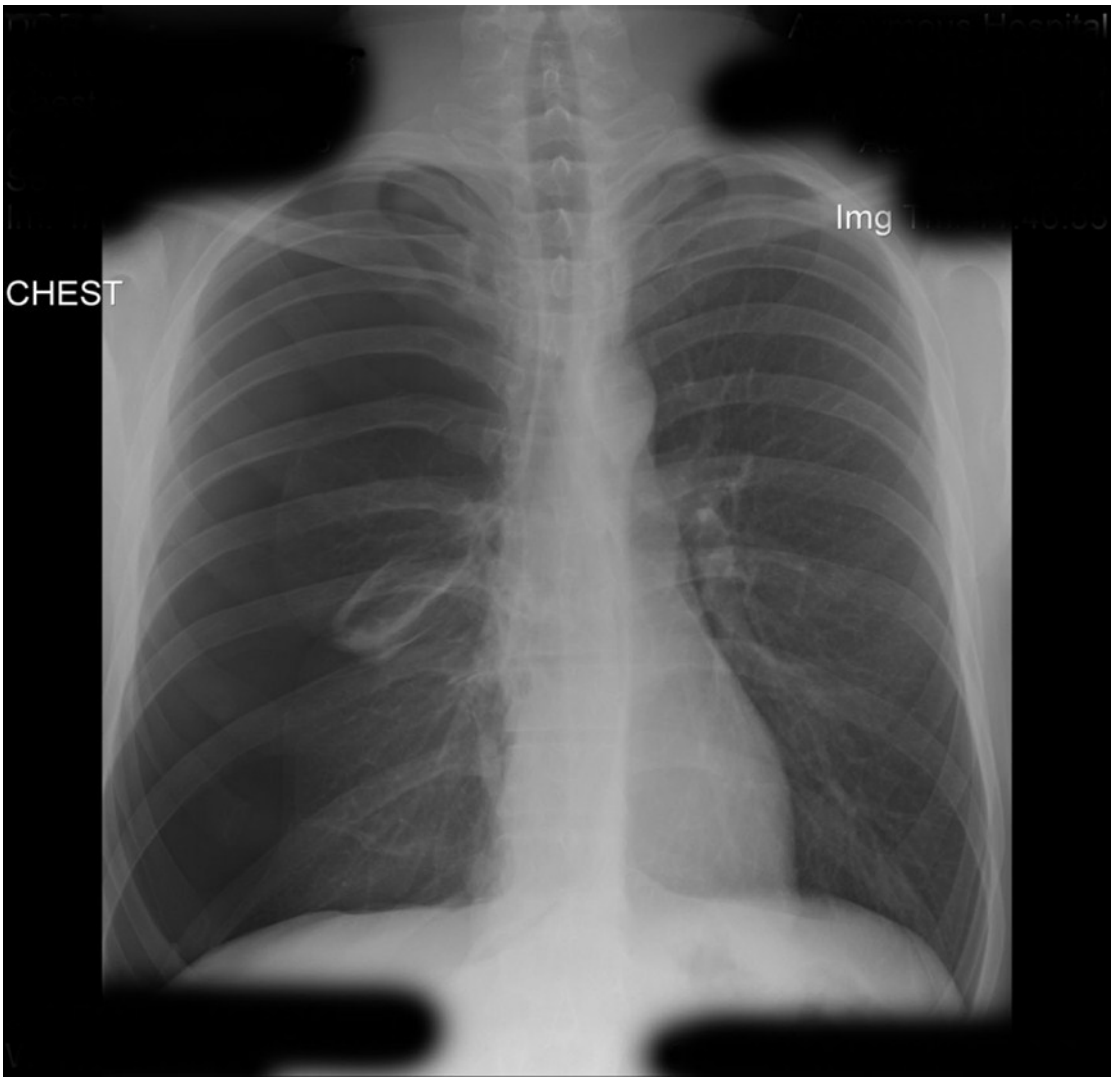
CASE REPORT: A 35 year old Caucasian male presented with a three week history of shortness of breath; the onset was sudden, while working in his yard, and was accompanied by sharp, right-sided chest pain. While the pain subsided, the dyspnea gradually worsened and he sought medical attention. His medical history included depression, neonatal endocarditis and tobacco use for 20 years. Medications included lamictal, Paxil and Ambien. Exam was remarkable for a displaced PMI in the left 7th intercostal space at the anterior axillary line; the trachea was displaced to the left, percussion revealed hyperresonance over the right lung and decreased breath sounds were heard on the right side. A CXR revealed a large pneumothorax (see image on next page).

The patient was admitted to the hospital and a chest tube was inserted in the right 5th intercostal space; this tube was connected to a water seal drainage system. A followup fim revealed resolution of the pneumothorax and the patient was discharged to home after counseling for smoking cessation. Another CXR, obtained in the Pulmonary Clinic two weeks later, was also normal, with no recurrence of the pneumothorax.

DISCUSSION: Pneumothorax is classified as spontaneous, traumatic or iatrogenic. Spontaneous pneumothorax may be primary (no underlying lung disease) or secondary (related to underlying lung disease).

Primary spontaneous pneumothorax (PSP) has an estimated incidence between 7.4 and 18 cases per 100,000 men and between 1.2 and 6 cases per 100,000 women. It typically occurs in tall, thin males between the ages of 10 and 30 and rarely occurs over the age of 40 [1,2]. Cigarette smoking increases the risk of PSP in men by a factor up to 20, in a dose-dependent manner [2]. Wakai reports that smoking increases the risk by a factor of 22 in men and 8 in women [3]. A study in Sweden showed that cigarette smoking increased the risk by a factor of 22 in men and 9 in women and demonstrated a striking, statistically significant ($p<0.001$) dose-dependent relationship between tobacco use and the occurrence of PSP [4]. This study also reported that persons with a life-long history of heavy tobacco use have a 12% incidence of PSP vs an incidence of 1/1000 among those who have never smoked. In non-smokers, one should inquire about a family history of PSP; this is seen with Birt-Hogg-Dube syndrome, (cont)

Rise



(cont) a rare autosomal dominant condition characterized by benign tumors of the hair follicle, renal cancer, pulmonary cysts and spontaneous pneumothorax [5].

Most episodes of PSP occur while the patient is at rest. Virtually all patients have ipsilateral pleuritic chest pain and/or acute dyspnea. Chest pain may be minimal or severe and is often described as sharp at the time of onset, becoming a steady ache as time passes. Symptoms may resolve within 24 hours, even if the pneumothorax has not resolved. In our patient, his initial chest pain resolved but dyspnea persisted, prompting his presentation to the Urgent Care Center; tobacco use was presumed to be responsible for his spontaneous pneumothorax.

Management of PSP continues to challenge physicians; recent guidelines recommend care pathways but also highlight the areas in need of additional study [6]. Treatment of primary and secondary spontaneous pneumothorax has been heterogeneous in the United States [7] and depends on the clinical status of the patient. Observation of patients with a small pneumothorax is appropriate but only if it is a PSP [8]. Pleural air drainage may be performed with simple aspiration or chest tube placement {9,10}; there is no difference between these procedures with regard to immediate success rate, early failure rate, duration of hospitalization, one year success rate and the need for pleurodesis at one year. Of course, simple aspiration reduces the need for hospitalization when compared to chest tube placement [11]. While death from spontaneous pneumothorax is rare, (continued)

(continued) rates of recurrence are high, with one study in the U.S. finding that recurrence occurred in 35% of male patients. For this reason, the prevention of recurrence is very important, including air leak management and possible surgical intervention [6]. Continued tobacco use increases the risk of pneumothorax recurrence and a recent study by Ganesalingam et al. revealed that 3 or more abnormalities on a CXR (pleural thickening, blebs or bullae, pleural irregularities and pleural adhesions) increased the risk of recurrence by a factor of 12.6 [12]. However, a study by Ouanes-Besbes et al. found that, while dysmorphic lesions (blebs and bullae) may be common in patients with spontaneous pneumothorax, they are not associated with an increased risk of recurrence [9].

In a study published by Cheng et al., in 2009 [13], there was a significant impact of smoking cessation on the recurrence of PSP, even if surgical intervention was necessary (22% vs 57% in those who continued to smoke p=.001 when there was no surgery, 8.9% vs 1.7%, p=.02 in the surgical patients). This same study found that tobacco use is associated with the development of extensive bronchiolitis, which has a significant impact on the recurrence rate of PSP. Therefore, it is important that the hospitalist take part in tobacco cessastion counseling; according to the findings of the Tobacco Use and Dependence Guideline Panel, published by the U.S. Department of Health and Human Services in 2008 [14], physician advice to quit smoking increases the success rate from 7.9% to 10.2% and the number and duration of counseling sessions correlated with the level of effectiveness. Whether such an approach can reduce the recurrence of PSP awaits further study.

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HOSPITAL MEDICINE VIRTUAL JOURNAL CLUB

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ACP 2011 MISSOURI CHAPTER SCIENTIFIC MEETING

September 15-18, 2011

Tan Tar A Resort, Osage Beach, Missouri

HOSPITALIST CONFERENCE LUNCH

Saturday, September 17, 12:15—2:15 PM

Importance of Health Literacy during hospitalization to improve health outcomes

Maniza Ehtesham MD, FACP

The complex role of hospitalists in care coordination and co-management: issues and potential solutions

Haseeb Ahmed DO, MHA

Serotonin Syndrome

Kyle Moylan MD, FACP

Questions regarding registration: contact Pat Mills, 573-636-5151, pmills@msma.org

FROM THE JOURNALS

CARLA DYER MD

In an era of increasing focus on the cost of health care and utilization of resources, the following article, and associated editorial, raise questions regarding the cost effectiveness of hospitalists, focusing on higher costs during the period after discharge in patients cared for by hospitalists rather than their primary care provider. Limited to a Medicare population with an identified primary care provider, the results may not be generalizable but highlight many of the challenges of providing cost effective care while also ensuring a smooth transition back to the outpatient setting.

Kuo, Yong-Fang and Goodwin, James

Association of Hospitalist Care with Medical Utilization after Discharge: Evidence of Cost Shift from a Cohort Study

Annals of Internal Medicine 2011; 155(3): 152-159

Chen, Lena and Saint, Sanjay

Moments in Time

Annals of Internal Medicine 2011; 155(3): 194-195

ID CORNER

WILLIAM SALZER MD

REDUCING DURATION OF ANTIBIOTIC THERAPY

To reduce the incidence of antibiotic resistance, it is important to both eliminate the inappropriate use of antibiotics and to reduce the duration of therapy when antibiotic treatment is indicated. The following article reviews evidence-based studies of the appropriate duration of therapy for certain infections and also reviews the use of biomarkers to determine the endpoint of antibiotic administration.

Hayashi, Y and DL Paterson

Strategies for the reduction in duration of antibiotic use in hospitalized patients

Clin Infect Dis 2011; 52:1232-1240

http://cid.oxfordjournals.org/content/52/10/1232.full.pdf+html

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MISSOURI HOSPITALIST CALENDAR

12th Annual St. Louis Critical Care Update, Drury Plaza, Chesterfield, September 10; information & registration via http://cme.wustl.edu **LOCAL**

2011 Missouri Chapter Scientific Meeting, American College of Physicians, September 15-18, Tan Tar A Resort, Osage Beach; **Hospitalist Conference Lunch** at 12:15 on Saturday, September 17; contact Patrick Mills 573-636-5151 or via email: pmills@msma.org (see page 6 for Conference details) **LOCAL**

7th Annual Health Ethics Conference: The Ethics of Effective Communication in Health Care, Center for Health Ethics, University of Missouri School of Medicine, Columbia, MO, October 6-8, 2001; information & registration call 573-882-4105 or visit the website: http://medicine.missouri.edu/cme **LOCAL**

Please direct all comments, ideas and newsletter contributions to the Editor:

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Please forward this newsletter to Hospitalists that you might know!