Editor's Note

Restricted Weekend Services Result in Delays in Discharges from Hospital

Key words: delays, discharges

A problem exists in the United States concerning uneven discharges from the hospital depending on the day of the week. A study published in the British journal *Heart*¹ prompted me to write this editorial.

The authors report details of restricted weekend service inappropriately delaying discharge after acute myocardial infarction (AMI). Although the study involved patients in the U. K., some of the observations may apply to the U. S. A. as well.

The study focused on AMI, but variations in length of stay related to decreased weekend services may apply to other diseases as well. The British investigators studied 2,541 consecutive patients with AMI admitted to coronary care units of three local district hospitals in the U. K. over a 12-year period.

The investigators concluded from their observations that for patients with AMI, discharge decisions were influenced appropriately by clinical indicators of risk but inappropriately by the day of the week. In this observational study, admission rates by day of the week were fairly constant, but discharge rates were significantly higher on Fridays and lower over the weekends. Patients admitted on a Sunday or Monday had a "shorter length of stay than patients admitted on any other weekday and those admitted on Friday a longer stay." For patients admitted with AMI on Saturdays, Sundays, or Mondays, the greater number of discharges "occurred on the first Friday. For patients admitted on a Thursday or Friday the proportion discharged was highest on the second Friday." For patients admitted on Tuesday or Wednesday, the proportion discharged "was greatest on the following Tuesday (days 7 and 6, respectively)."

Thus, the day of the week had an important influence on duration of stay. Patients were preferentially discharged on a Friday if the length of stay was more than 72 hours. Patients admitted on a Sunday or Monday were usually discharged the following Friday, but patients admitted from Tuesday to Saturday were usually not discharged on the weekend, and the median duration of stay was 6–8 days compared with 5 or 4 days.

The authors conclude that inefficiencies due to restricted weekend service extend beyond direct effects on discharge decisions: "Stress testing and cardiac catheterization may also contribute by delaying essential but elective work-up. Expediting the clinical assessment of these patients, either immediately on resumption of routine services or by making certain services available 7 days a week, would address the issue."

I was impressed with this study. In most hospitals, several services are available 24 hours a day, 7 days a week. These include the availability of doctors, nurses, routine x-ray, computerized tomography, electrocardiography, routine laboratory studies, and probably many other services. However, in most hospitals many services are available only from 8 A.M. to 5 P.M., five days a week. These include special laboratory studies, routine echocardiography, routine cardiac catheterization, elective surgery, electroencephalography, physician assistants and Advanced Registered Nurse Practitioners services, routine magnetic resonance imaging, outpatient clinic visits, stress testing, social work services, rehabilitation services, and discharge planners. I am sure there are many other services I have not covered here; the point is that patients present themselves with their illnesses to hospitals, 7 days a week, 24 hours a day, and many hospitals services are not available to these very same patients, 7 days a week, 24 hours a day. Thus, in some instances, hospitalizations are unnecessarily prolonged and the cost of hospitalization increases because of the inefficiencies resulting from a 5-day "hospital" week rather than a 7-day work week. This is particularly true for the patients admitted or transferred to hospital late Friday afternoon.

Our hospital administrators provided me with the number of patients discharged from our cardiology teaching service and internal medical service, and their days of discharge, during 2001.

On our medical cardiology teaching service, the following are the percentages of discharges by day of the week: Monday: 13.2%, Tuesday: 20%, Wednesday: 19.95%, Thursday: 19%, Friday: 24.1%, Saturday: 14.8%, and Sunday: 0.8%.

Overall discharges on the internal medicine service during the same period were as follows: Monday: 11.5%, Tuesday: 14%, Wednesday: 15.6%, Thursday: 15.1%, Friday: 25.3%, Saturday: 10.9%, and Sunday: 6.6%.

I think the message is clear. Patients have illnesses and are admitted to hospital 7 days a week, 24 hours a day. However, because of limited services at most hospitals in the U. K., and I suspect in the U. S. A. as well, hospitalizations are unnecessarily prolonged because of lack of routine services on Saturdays and Sundays. This must increase the cost of medical care.

What is the solution to this problem? The obvious answer is to provide the same service on the weekend as we do Monday through Friday. Whether we can afford to do this is another question. In my opinion we cannot afford to *not* do it!

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Reference

1. Varnava AM, Sedgwick JEC, Deaner A, Ranjadayalan K, Timmis AD: Restricted weekend service inappropriately delays discharge after acute myocardial infarction. *Heart* 2002;87:216–219