#### CLINICAL PERSPECTIVE

# Length of Stay and Its Impact on Hospitals, Physicians and Patients: An Economic Perspective!

Saad Bin Jamil, MD. MBBS<sup>1</sup>, Iqra Patoli, MD, MBBS<sup>1</sup>

<sup>1</sup>Department of Internal Medicine. St Mary's Hospitalist, Waterbury, CT. USA

Corresponding author: Saad Bin Jamil, MD. MBBS, Department of Internal Medicine. St Mary's Hospitalist, 54 Tridell Drive, Unit 25, Plantsville, CT, USA, 06479, (saadbinjamil@hotmail.com)

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# **INTRODUCTION**

Patient's inpatient Length of stay (LOS) is a frequently used metric in hospital medicine. Decreased in LOS has been correlated with lower risk of opportunistic infections and medication side effects [1]. In addition, improved outcomes of treatment with lower mortality rates are also associated with decreased LOS [1]. Thomas et al also believe that it indicates efficiency of hospitals [2]. Geometric LOS (GMLOS) is the number of days assigned to each hospitalized patient based on the admitting diagnosis. This is determined by diagnosis related group (DRG) which is basically the grouping of patients with similar diagnosis together. Medicare and Medicaid adhere to these DRG's to determine reimbursement rates to hospitals for the treatment they provide to patients. However, not every patient's hospital course follows a standard course and may not be discharged with in GMLOS. The cost of these extra day's stay of the patient is paid by the hospital as per current healthcare reimbursement structure. Therefore, hospital administrations and physician's goal are to have decreased patient LOS while providing optimal healthcare.

# ADVANTAGES AND RISKS

From a physician's perspective, decreased LOS may result in bonuses, salary raises, lower patient census, and acknowledgments. Some physicians prefer to only treat necessary and time-sensitive illnesses in the hospital setting, whereas deferring other interventions to outpatient setting. This not only leads to a lower LOS, but also decreases the workload of physician significantly and prevent physician burn out. Due to significant economic impact, the goal of hospital administration is to ensure patients are discharged within their GMLOS. The eventual implementation and follow through of these processes are done by the physicians independent clinical on their assessment. Hospitals and physicians may economize through several ways to decrease LOS. "The economic way of thinking, when put to work, displays three aspects, one

focusing on actions, the second on interactions, and the third on consequences, whether those consequences are intended or unintended".[3] Decreased inpatient LOS however is not without challenges or potential risks with one of the biggest concerns being unsafe discharge. Economic theory is based on choices of individuals and the subsequent unintended consequences [3]. Increased mortality and adverse patient events can occur due to inadequate management done in the hospital to discharge patients early. A retrospective study done by Southern and Arnsten showed that "care by a physician with a tendency toward short LOS was associated with a significantly increased risk of death within 30 days" [4]. Poor patient outcome after discharge can lead to serious repercussion for a physician such as audit of management and even civil or criminal lawsuits. Furthermore, if a patient is readmitted with a time frame which is usually within thirty days of discharge, the hospital usually may not get reimbursed for the readmission irrespective of the cause of readmission. Providers for such patients may be penalized and may lose bonus or even their job. Patient satisfaction is another aspect which may get negatively impacted by decreased LOS. Patients may think that treatment was not adequate, or they are being rushed out of the hospital for monitory benefits. Unsatisfied patient may procure bad reviews or survey and chose alternative hospitals in future, causing monitory loss to hospital.

# PREFERRED APPROACH

Hospitalized patient's LOS impacts patients, hospital administration and physicians. While there are many advantages of decreased LOS, efforts to decrease LOS must never lead to compromised patient safety. A study done in Temple University, Pennsylvania for over a period of thirteen

years with the purpose to determine a relation between decreased LOS and increased readmission rate of patients. It reflected that decreased LOS did lead to an increased readmission rate, however the total number of days spent by a patient in hospital reduced despite readmission [5]. It comes down to the physician to decide when a patient can be safely discharged and what is in best interest of patient. Actions are chosen by people based on expected net advantages [3]. There are many advantages of decreased patient LOS both in terms of provision of care provided to patient and financials lacunas which a physician may amalgamate to determine if a patient is medically ready for discharge. However, a physicians must keep in mind potential ramifications of unsafe discharge which may include poor provision of health, patient readmission, medical license cancellation and litigation. Decreased LOS is beneficial both for the patients and hospitals, however patient safety must never be compromised.

# **CONCLUSION**

LOS is an important metric in the hospital medicine set up. Despite several measures taken both by hospital administration and physicians, the balance between optimal LOS and safe discharge is sometimes a difficult one to obtain. Due to significant economic impact of a low LOS, hospital administration and physicians are continuously trying to evolve in the US health care structure, where they can reap the economic benefits of meeting LOS metrics while ensuring safe discharge. It is a difficult balance to maintain, yet it is required in the best interest of the patient, the hospital, and the healthcare system.

#### Notes

**Potential conflicts of interest:** The author reports no conflicts of interest in this work.

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