

# Referral Processing System in Neurosurgical Outpatient Clinic Management Peter Gruen MD; Eisha Christian MD University of Southern California



### Introduction

Between 2009 and 2010, LAC/USC received 43,000 requests for outpatient referrals from outside clinics and hospitals. Neurosurgery received over 1200 requests for outpatient services between 2009 and 2010. The clinic sees 80 patients per week and patient wait times for a clinic appointment can exceed 6 months. In addition, patients often wait hours at clinic to be seen. In an attempt to reduce wait times, a clinic referral system was used to prescreen referrals. In this study, the demographics of outpatient referrals at LAC/USC were reviewed in order to characterize the outpatient population in hope to improve quality of care within the outpatient system.

#### Methods

The study included all new referrals of patients throught Los Angeles County's Referral Processing System between September 2010 and January 2011. One neurosurgical attending surgeon reviewed all records. Data was collected on: 1)Reason for referral 2)Symptoms and exam 3)Available imaging 4) Findings on Imaging 5) Referral acceptance or denial 6) Reason for denial.





#### Results

600 patient referrals were reviewed. Only 140 patients (23.3%) had appropriate neurosurgical indications for referral. 254 out of 600 (42.3%) patients were referred for lower back pain. 30 out of the 254 lower back pain patients were approved as appropriate referrals with the remaining being denied for two primary reasons: 1.lack of any neurologic exam, and 2. lack of a correlating lesion on MRI that would warrant a surgical referral.

The second most common referral was for neck pain: 76 out of 600(12.7%) patients. Only 8 out of 26 were appropriate surgical referrals.

Additional referrals during this time frame included: brain tumors (40), sellar masses (22), spinal tumors (13), outside hospital surgical followups (14), spinal fractures (15), and aneurysms (15).

## Conclusions

A referral processing system can identify patients who are inappropriately referred. It also can provide a basis for feedback and guidelines for primary care providers, thereby reducing inappropriate patient referrals and improving efficiency in a resource-limited setting.



## **Learning Objectives**

Describe the most common reasons patients are inappropriately referred to neurosurgery clinic.

Explain how screening referral requests can result in increased clinic efficiency and patient satisfaction.

#### References

Referral Processing System, Department of Health Services, Los Angeles County.

