

Challenges of Obtaining Maximum Education Benefit in a Resident Clinic

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Introduction

Regular outpatient experience is an ACGME required element of resident training. We sought to better understand the challenges and benefits of such an experience through a dedicated "Resident Clinic."

Methods

We reviewed 200 Consecutive Resident Clinic outpatient charts for patient demographics and clinical backgrounds. All patients were completely de-identified. We compared clinic make-up and patient characteristics with resident perceptions via resident surveys and interviews. We also reviewed 100 consecutive faculty neurosurgeon charts and 100 consecutive advanced care practitioner charts from General Neurosurgical Clinics for comparison.

Learning Objectives

To better understand the challenges and benefits of the resident outpatient experience.

To understand better the demographics of general neurosurgery outpatient clinic.

Results

CC-VTC Neurosurgery Resident clinic is held every Tuesday morning with all residents participating other than the PGY1. Residents see from 10-18 patients over a 4 hour period depending on their experience and "add-ons." One of four rotating faculty surgeons supervises the clinic. One RN, one scheduler, and two medical assistants support the clinic. Appointment scheduling, phone nursing, front desk activities are shared entities with the department. Patients assigned to clinic are generally undesignated and follow up of hospital admissions.

Patient characteristics for the resident clinic: Avg patient age: 50-60, 57% male, 14% without any insurance, average BMI 36.9, # with spinal diagnosis 45%, avg # co-morbidities 6-10, avg. # of medications 6-10, # on narcotics prior to visit 69%, # actively smoking 58%, # with psychiatric diagnoses 49%.

Resident Perception of their clinic patient characteristics: Avg patient age: 50-60, 30% male, 40% without any insurance, average BMI 35.0, # with spinal diagnosis 70%, avg # co-morbidities 6-10, avg. # of medications 3-6, # on narcotics prior to visit 33%, # actively smoking 47%, # with psychiatric diagnoses 60%.

Faculty General Neurosurgery Clinics patient characteristics: Avg patient age: 45-55, 54% male, 14% without any insurance, average BMI 31.5, # with spinal diagnosis 73%, avg # co-morbidities 6-10, avg. # of medications 6-10, # on narcotics prior to visit 69%, # actively smoking 58%, # with psychiatric diagnoses 49%.

Advanced Care Practitioner General Neurosurgical Clinic patient characteristics: Avg patient age: 50-60, 40% male, 20% without any insurance, average BMI 28.8, # with spinal diagnosis 90%, avg # co-morbidities 3-6, avg. # of medications 6-10, # on narcotics prior to visit 50%, # actively smoking 50%, # with psychiatric diagnoses 40%.

Conclusions

Patient assignment to resident clinic is desired to be educational. Residents indeed see a diverse spread of neurosurgical diagnoses. Although their perception is that they see a majority spine their spine numbers are small compared to general clinics. Resident clinic patients tend to be a bit sicker, heavier, and on more medications and narcotics than in other clinics although they have the least patients with psychiatric co-morbidities (perhaps a function of less spinal patients). There is little evidence for egregious dumping but the acuity of the patients is a concern.

Flow studies suggest that logjams are likely due to limited access to the single faculty surgeon and the clinic support (shared amongst 5-6 residents). Patient movement is actually rather benign and documentation and handoffs are relatively efficient due to a ubiquitous and effective emr system. There are many lost opportunities for patient education throughout the patient's continuum of care.

Overall patient health is very poor and suggests a consideration of primary care, nutritionist, smoking cessation, and psychiatric support and/or liaisons for the clinic.

Patient satisfaction is of principle concern. Patient flow through the clinic is relatively efficient but patient perception of resident skill and capabilities requires a concentrated effort. "Pre-loading" with education about and introduction to the resident team prior to the visit and in the waiting areas may be of significant benefit. Swift and efficient faculty involvement is also recommended (through addition of another faculty surgeon?). Financially this would capture more reimbursement but might not be cost-efficient if taken out of a procedural activity.

Most striking was the significant medical and psychological needs unrelated to neurosurgical issues of clinic patients (frankly in all three general clinics). This suggested a need for greater general medicine and psychological/addiction, as well as nutritionist and smoking cessation support for optimal outpatient care. Despite challenges of the clinic residents felt the experience was excellent and vital for future professional performance.