From Tertiary Care to Community Hospitals: Defining a Safe, Swift and Sustainable Repatriation Process for Vulnerable Patients

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Poster Category: Quality and Safety in Hospital Medicine

Disclosers / Conflicts of Interest: None for either author.

Introduction: The 3 Problems

Toronto East General Hospital is a community hospital located in the region of East York in Toronto, Ontario. It serves a diverse community of immigrants and senior citizens through its provision of a wide spectrum of primary care and specialist services. However, TEGH does not have vascular or neurosurgical services, acute invasive neurological thrombolytics and acute coronary angioplasty. TEGH, like many community hospitals, relies on partnership arrangements with local tertiary hospitals for these advanced therapeutic modalities. The successes of these programs are predicated on several factors not the least of which is the timely and safe repatriation of patients back to their community hospitals. However, this was becoming increasingly difficult to accomplish as growing patient complexity, worsening emergency room volumes and suboptimal patient discharge rates had conspired to tax the bed capacity at TEGH to its limits most days of the year. Put simply, often there were no beds to admit repatriated patients to in the agreed upon timeframes. Furthermore, a dedicated clinical resource to shepherd the process of repatriation of our patients did not exist. This made for unsafe and inefficient patient repatriations which threatened to undermine the success and health of these patients at a very vulnerable time in their care. Finally, there were no accepted practices recognized by any medical regulating body. Nor has the phenomenon of repatriation been

well studied in the literature. No one had determined specifics that would facilitate safe, swift and sustainable repatriations back to community hospitals from tertiary care centres. What defined success in repatriation?

Methodology:

To ensure safe repatriations we had to first determine our clinical limitations. We wanted to ensure that patients returning were stable and could be treated by the resources we had available. This was accomplished through one-on-one interviews with opinion leaders in each medical service at TEGH. For example, we asked: What clinical resources are not available that might compromise the safety and progress of transferred patients? We also asked about problems with past repatriations. A chart of problems and limitations was compiled and later formed inclusion and exclusion criteria. These details were incorporated into a screening questionnaire that was used to direct the process of repatriation (See Figure 1).

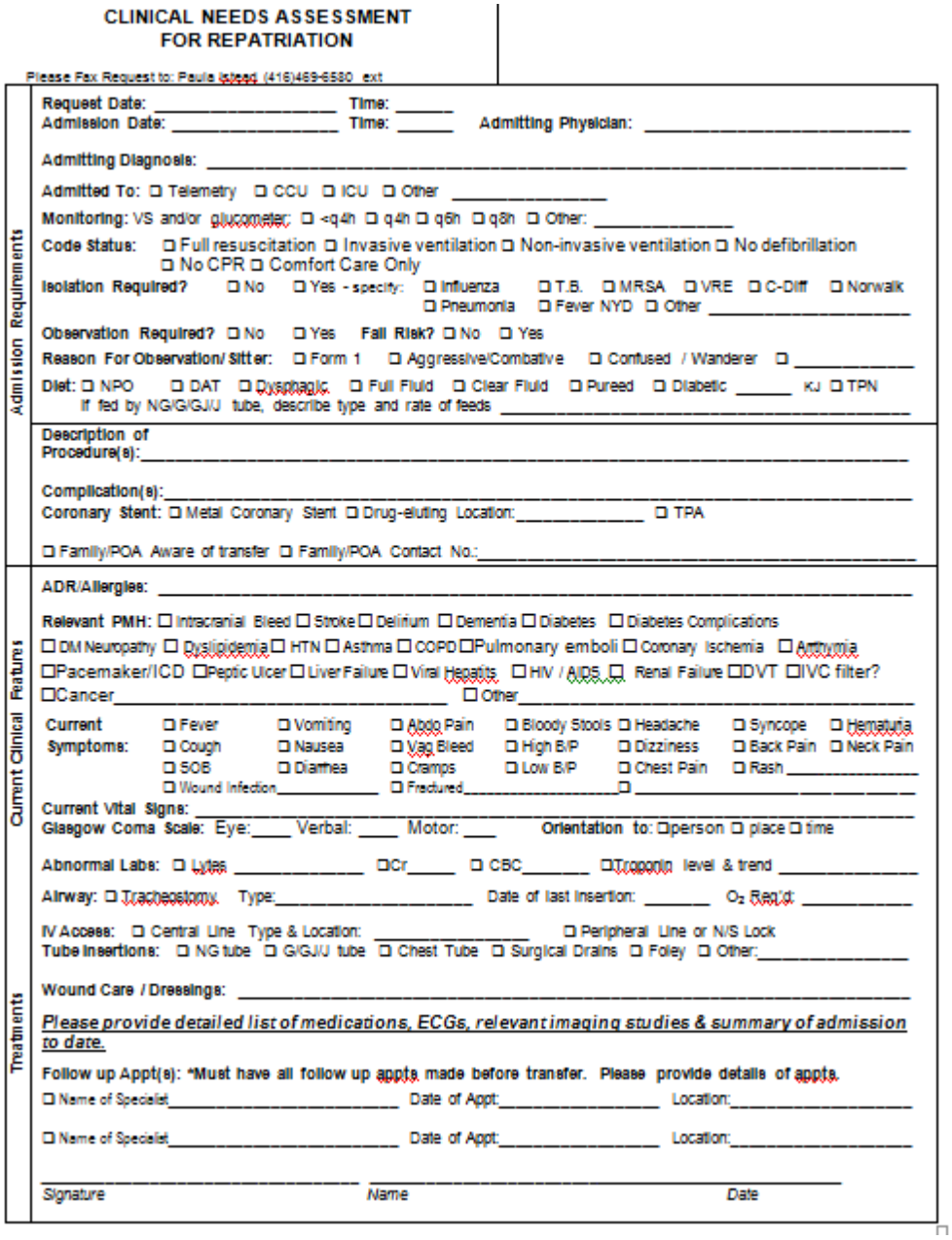
Additional changes strategies were employed. The hospitalist service was assigned the task of managing the majority of repatriated patients not requiring advanced monitoring or therapeutics like those found in an ICU or CCU setting. The Department of Medicine assigned a patient flow coordinator to the task of championing the logistics of these transfers. They acted as the liaison between organizations. They would also collect data regarding each patient repatriation that occurred over the course of a year from March 2009 to April 2010.

Results:

Based on our interviews with our clinical leadership, it was possible to assess the clinical resource limitations we had regarding repatriated patients. We used this information to create a screening questionnaire to ensure we could match the patients' needs with TEGH resources (See Figure 1). It also served to bring details to light that might not otherwise been made available to the hospitalists accepting these patients. The combined efforts of this quality improvement initiative resulted in the

majority of patients being assessed, accepted and repatriated within 24h to 48h of the initial request.

See Figures 2,3 &4.



CLINICAL NEEDS ASSESSMENT FOR REPATRIATION

Please Fax Request to: Paula Ilstead (416)469-6580 ext

Admission Requirements

Request Date: _____ Time: _____
Admission Date: _____ Time: _____ Admitting Physician: _____

Admitting Diagnosis: _____

Admitted To: ☐ Telemetry ☐ CCU ☐ ICU ☐ Other _____

Monitoring: VS and/or glucometer: ☐ <q4h ☐ q4h ☐ q6h ☐ q8h ☐ Other: _____

Code Status: ☐ Full resuscitation ☐ Invasive ventilation ☐ Non-invasive ventilation ☐ No defibrillation ☐ No CPR ☐ Comfort Care Only

Isolation Required? ☐ No ☐ Yes - specify: ☐ Influenza ☐ T.B. ☐ MRSA ☐ VRE ☐ C-Diff ☐ Norwalk ☐ Pneumonia ☐ Fever NYD ☐ Other _____

Observation Required? ☐ No ☐ Yes Fall Risk? ☐ No ☐ Yes

Reason For Observation/ Sitter: ☐ Form 1 ☐ Aggressive/Combative ☐ Confused / Wanderer ☐ _____

Diet: ☐ NPO ☐ DAT ☐ Dysphagic ☐ Full Fluid ☐ Clear Fluid ☐ Pureed ☐ Diabetic _____ KJ ☐ TPN
If fed by NG/G/GJ/J tube, describe type and rate of feeds _____

Current Clinical Features

Description of Procedure(s): _____

Complication(s): _____

Coronary Stent: ☐ Metal Coronary Stent ☐ Drug-eluting Location: _____ ☐ TPA

☐ Family/POA Aware of transfer ☐ Family/POA Contact No.: _____

ADR/Allergies: _____

Relevant PMH: ☐ Intracranial Bleed ☐ Stroke ☐ Delirium ☐ Dementia ☐ Diabetes ☐ Diabetes Complications
☐ DM Neuropathy ☐ Dyslipidemia ☐ HTN ☐ Asthma ☐ COPD ☐ Pulmonary emboli ☐ Coronary Ischemia ☐ Arrhythmia
☐ Pacemaker/ICD ☐ Peptic Ulcer ☐ Liver Failure ☐ Viral Hepatits ☐ HIV / AIDS ☐ Renal Failure ☐ DVT ☐ IVC filter?
☐ Cancer _____ ☐ Other _____

Current Symptoms: ☐ Fever ☐ Vomiting ☐ Abdo Pain ☐ Bloody Stools ☐ Headache ☐ Syncope ☐ Hematuria ☐ Cough ☐ Nausea ☐ Vag Bleed ☐ High B/P ☐ Dizziness ☐ Back Pain ☐ Neck Pain ☐ SOB ☐ Diarrhea ☐ Cramps ☐ Low B/P ☐ Chest Pain ☐ Rash _____ ☐ Wound Infection _____ ☐ Fractured _____ ☐ _____

Current Vital Signs: _____

Glasgow Coma Scale: Eye:____ Verbal: ____ Motor: ___ Orientation to: ☐person ☐ place ☐ time

Treatments

Abnormal Labs: ☐ Lytes _____ ☐Cr_____ ☐ CBC_____ ☐Troponin level & trend _____

Airway: ☐ Tracheostomy Type:_____ Date of last insertion: _____ O_2 Req'd: _____

IV Access: ☐ Central Line Type & Location: _____ ☐ Peripheral Line or N/S Lock
Tube Insertions: ☐ NG tube ☐ G/GJ/J tube ☐ Chest Tube ☐ Surgical Drains ☐ Foley ☐ Other: _____

Wound Care / Dressings: _____

Please provide detailed list of medications, ECGs, relevant imaging studies & summary of admission to date.

Follow up Appt(s): *Must have all follow up appts made before transfer. Please provide details of appts.

☐ Name of Specialist _____ Date of Appt: _____ Location: _____

☐ Name of Specialist _____ Date of Appt: _____ Location: _____

_____ _____

Signature *Name* *Date*

Figure 1: The Clinical Needs Assessment Standardized Form For Repatriation

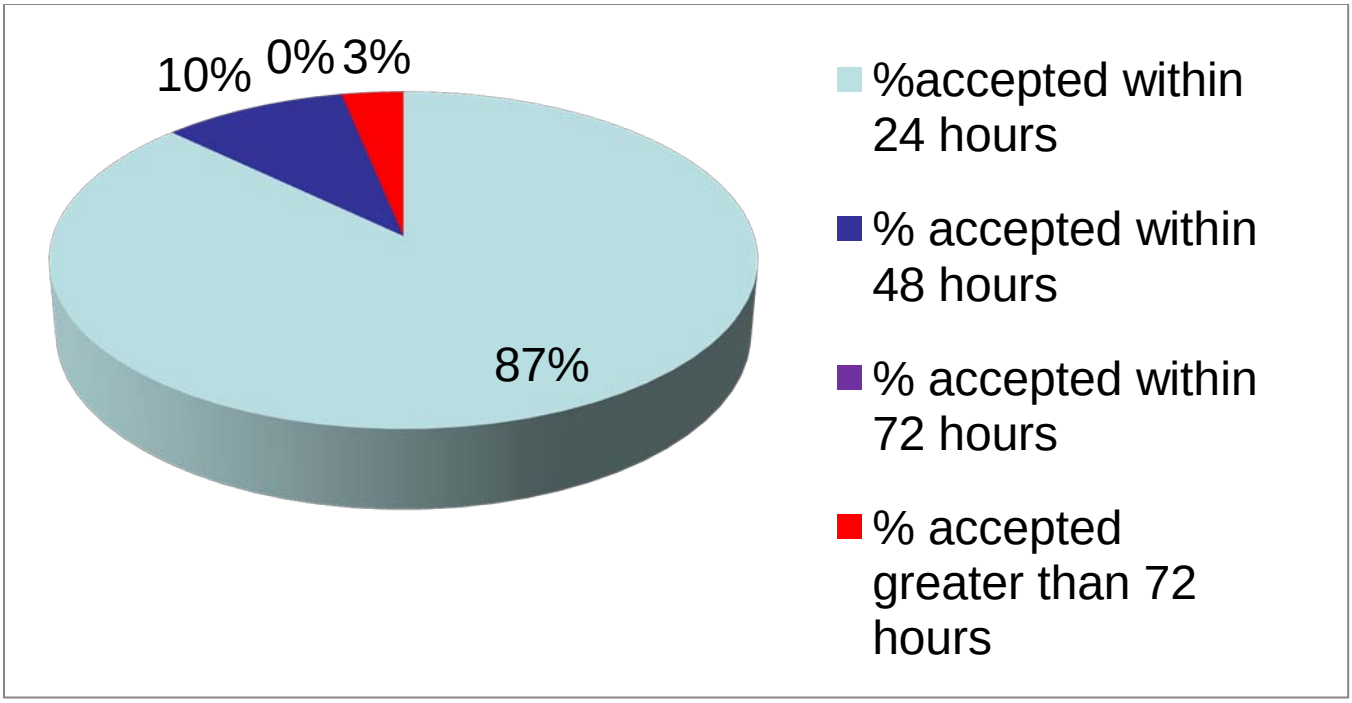


Figure 2: Demonstrates that the majority of patients were assessed and accepted for transfer within 24h of a request for repatriation.

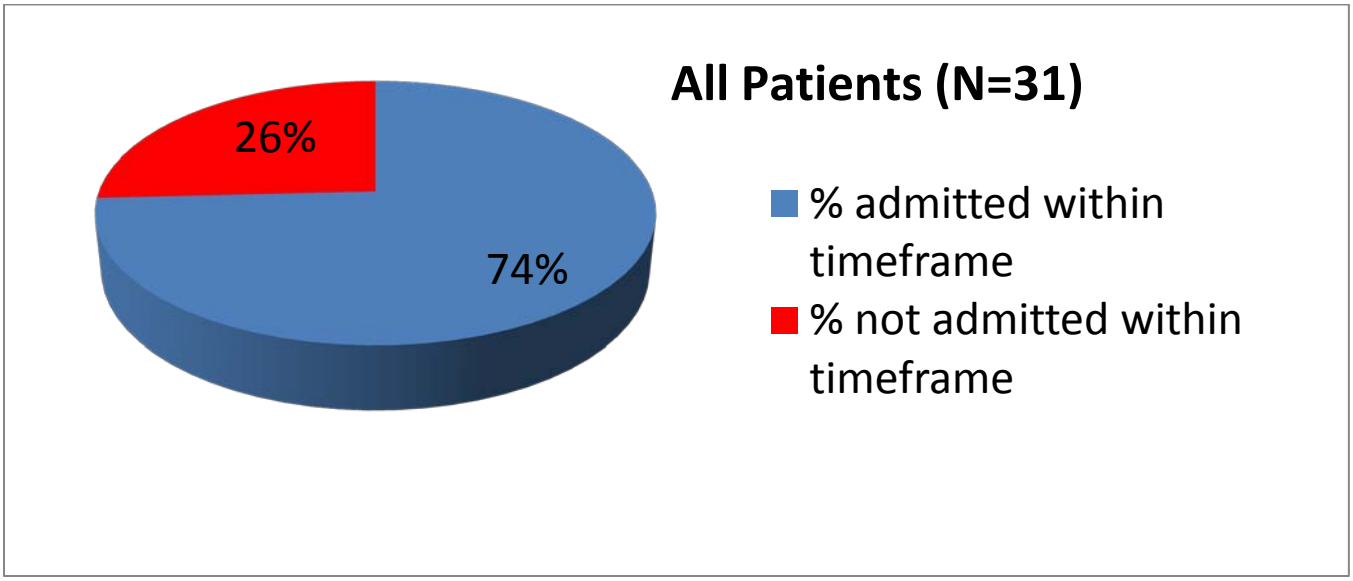


Figure 3: Shows that the majority of repatriated patients were admitted to TEGH within the time that it was estimated it would take. These results improved when removing patients requiring isolation.

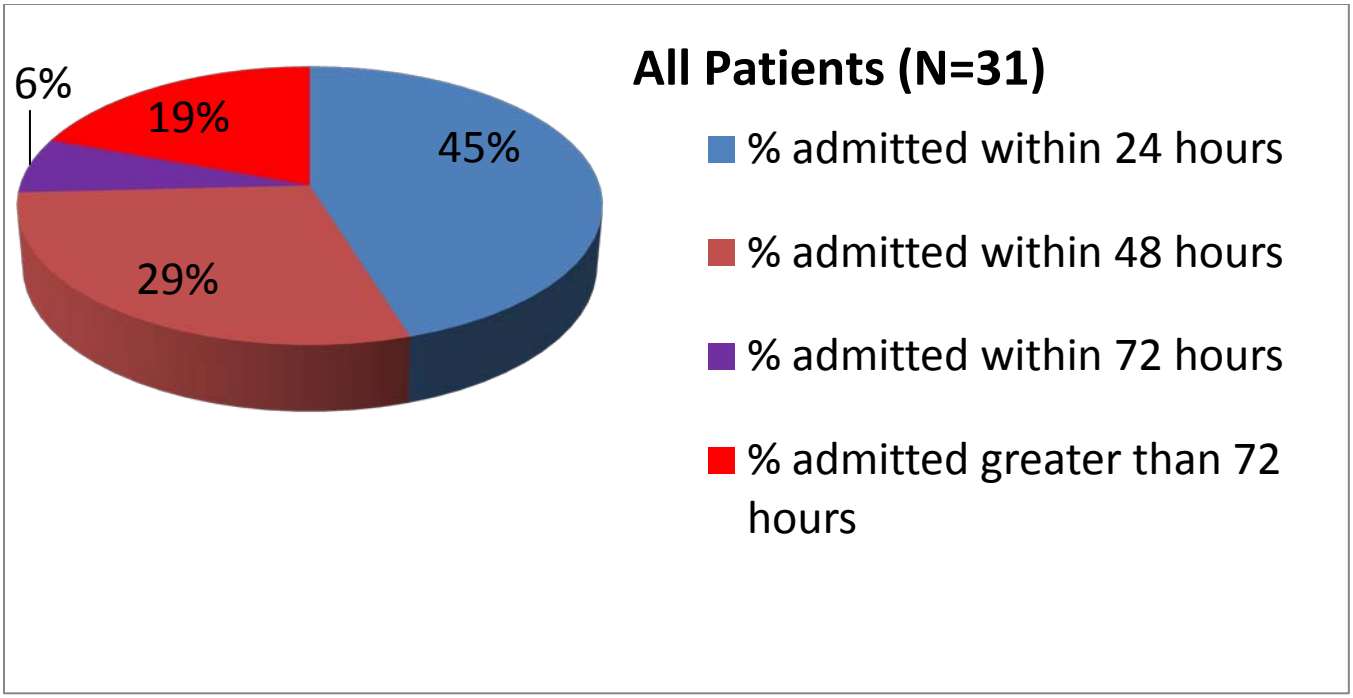


Figure 4: Shows that the majority of our patients return within 48h of a request for repatriation. Again, these numbers improve to well over 80% when factoring out patients requiring isolation.

Conclusions:

This quality improvement project demonstrated the value of a coordinated interdisciplinary approach to the repatriation of patients from tertiary care centres. By working together we were able to define inclusion and exclusion criteria that best matched TEGH resources to patients' needs. This improved the clinical information that flowed between organizations and ultimately aided in the timely repatriation of most patients within 48h. Defining a champion to shepherd this process and work in collaboration with the hospital service was instrumental. It is very likely that this is the reason why almost 90% of all acceptances for transfers occurred within 24h. We have shown it is possible to reasonably estimate the time it will take to repatriate patients based in part on the clinical characteristics gathered in the screening tool. We believe the combined efforts of defining our clinical limitations, creating & applying a screening tool and adding a process champion working in unison with the hospitalist service has resulted in safe, swift and sustainable repatriations at TEGH.