Closing the Assessment Gap: Standardising Neurovascular Documentation in Fracture Care — A Two-Cycle Quality Improvement Project

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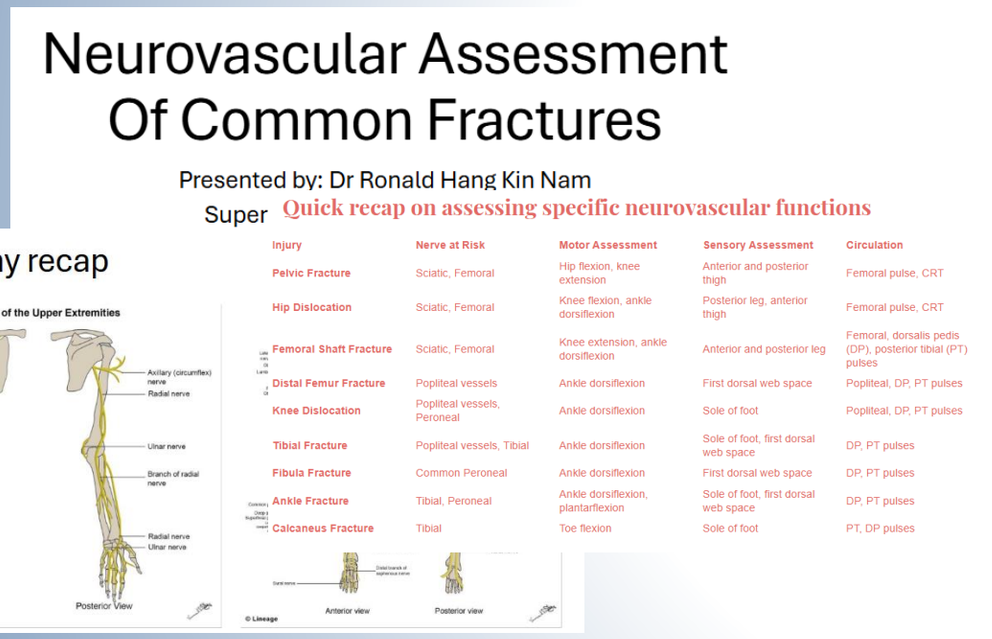
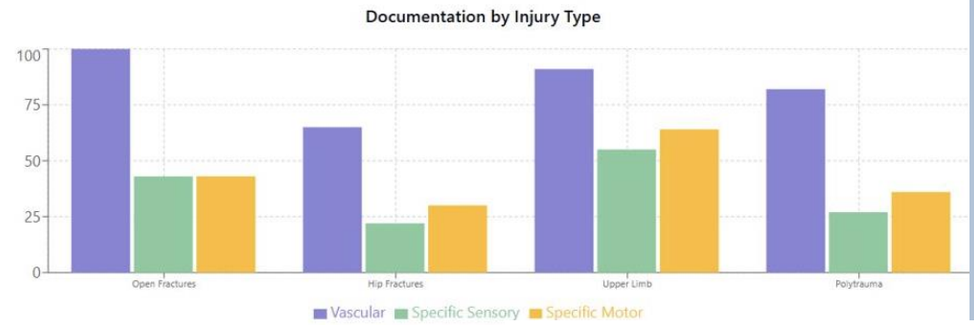
Aim and Objectives:

1) National guidance mandates prompt, documented neurovascular assessment, yet audits report frequent omissions
2) The project aimed to increase the proportion of admission clerking notes containing complete, specific neurovascular documentation by implementing targeted education and sustainable departmental measures.

Method:

Two audit cycles were undertaken within a prospective quality improvement framework. Between cycles we ran a foundation trainee workshop, produced a concise neurovascular handout (co-authored by a core trainee and registrar) incorporated into the departmental induction handbook and stored on the shared drive. Material is also presented in form of clinical teaching directly to resident doctors. Extracted data included age, injury region, assessor grade, gross neurovascular items (vascular status/pulses; gross sensory and motor) and specific testing (sensory mapped to named nerve territories; motor mapped to relevant muscle groups)





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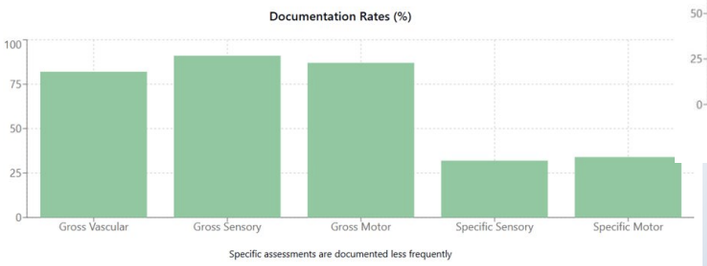

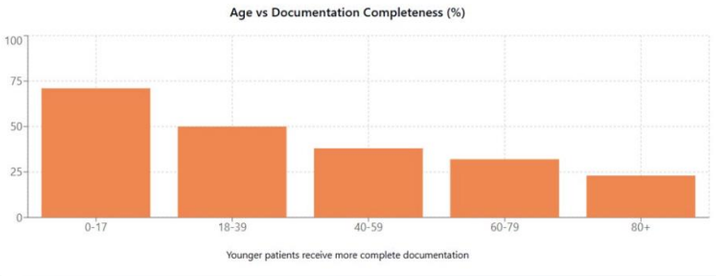

Result:

1. Baseline patients were elderly: 60% aged ≥60 years and 44% ≥80 years; 32% had hip/proximal femoral fractures.
2. At baseline gross neurovascular elements were commonly recorded but specific testing was poor (specific sensory 32% [≈23/71] specific motor 34% [≈24/71]).
3. Paediatric and upper-limb patients are more thoroughly assessed than other fractured patients
4. Post-intervention improvement was substantial: overall complete documentation rose to 48%. Aggregate specific sensory documentation increased to 55% and specific motor to 50%.

Conclusions:

A pronounced initial gap existed between frequent gross neurovascular recording and infrequent, specific sensory and motor testing. A low-cost intervention bundle was feasible and associated with substantial improvement.