

Trauma Team Redesign

Carla Edwards, Margaret Murphy and Julie Seggie

Background

A multidisciplinary team, consisting of doctors, nurses, clerical, ambulance and allied health staff from Westmead Emergency Department (ED) and Trauma Services came together to discuss opportunities to improve the trauma patient journey within the Emergency Department. This initiative was born from growing disharmony between professions and services involved in the resuscitation and treatment of trauma patients. Anecdotal perceptions of trauma management included complaints of overcrowding in the trauma area, ineffective communication due to noise levels and disjointed teamwork.

The initiative aimed to identify factors that contributed to these problems and to focus on processes that would contribute to the smooth delivery of patient centred quality care in the resuscitation environment.

Method

NSW Health "Redesign" methodology was applied to identify the 'as is' state using a multidisciplinary collaborative approach to develop and examine detailed process maps of the trauma patient journey and the staff roles within the trauma team.

Information collected through the process mapping, staff, patient and family interviews was consolidated and five predominant themes were prioritised in a solution design workshop, where the trauma team structure and framework were redesigned.



'As is' Trauma Patient Journey : Issues Identified

Outcomes

The process delineated many features of the trauma team which were either redundant, non value adding or affecting the cohesion and function of the trauma team. Recurrent issues relating to trauma team interaction, effectiveness and synergy and the impact of these issues on patient safety, experience and outcomes were identified. The highest priority area for solution development was the trauma team structure and teamwork.

To address the issues related to trauma team structure and teamwork the roles of the team were reviewed, redesigned and clinical goals established and clarified for each team member. The roles of the team became goal focused rather than task directed and there was now a multidisciplinary orientation to the trauma team.

A contextualised simulated multi-specialty trauma team training course was developed to implement and test the structure. The simulation training course specifically addressed the structure of the team as well as the coordination of processes required to deliver trauma management. Photographs of the Westmead resuscitation bay were used to reconfigure the simulation centre to act as a realistic environmental representation. The simulation scenarios were adopted to address the findings of the project such as trauma team leadership, role delineation within the team, communication and role of debriefing. Participant evaluation of the course strongly agreed that interdisciplinary team training was useful.

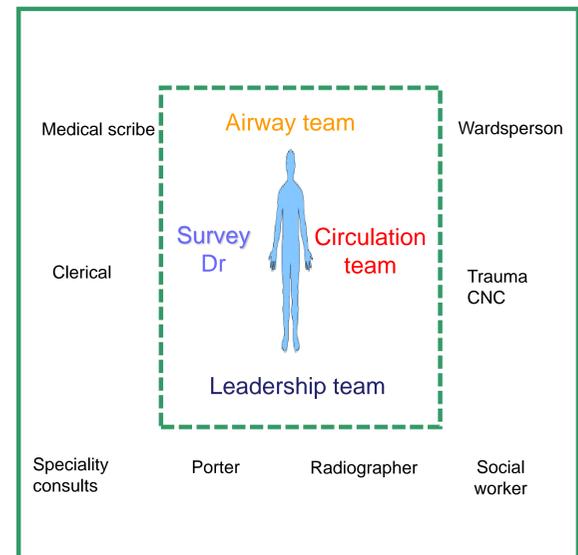
As a result of the training, improvements in trauma team performance have been realised. The team is now 'high performing' with a focus on quality. There is evidence of sustainable change in practice despite the many challenges faced by the ED. Solution development and planning for sustainable change has led to innovation in trauma team training with Westmead Hospital being the first to engage in interdisciplinary trauma team training.

Conclusion

The Trauma Redesign process highlighted areas of need and improvement opportunities. As a result, trauma team roles, function and structure have been redesigned and a contextualised simulated training course developed. There is evidence that the various services involved in trauma management now interact and communicate better as a result of the redesign and the team training development.

Staff involvement and engagement, detailed diagnostics, collaboration between multi-professional stakeholders and ED executive leadership have been pivotal to the success of the project.

Trauma Team Structure



Evidence of Sustainable Change



Trauma Simulation



Redesign Reality

Next Steps

- Ensure the trauma team continue to act in the 'redesigned way' despite the pull of tradition through governance, education and orientation.
- Identify opportunities to improve communication with patients and their families
- Formalise the redesign findings in the Trauma Policy & Procedures Manual

Acknowledgement

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