**Aims, Objectives and Background** A significant mortality and morbidity rate has been observed in patients presenting with head injuries. Delays in assessment, imaging, time critical diagnosis and management has compromised patient safety and quality of care at Walsall Manor Hospital.

To roll out an effective HI pathway with the aim to ensure:

- > 90% of high risk HI patients are assessed within 15 minutes
- Greater efficiency within the process of obtaining CT (computed tomography) imaging
- Final decision making < 4 hours.

**Method and Design** Quality improvement methodology was employed in the form of process mapping to understand the current patient journey. SWOT (Strengths, weaknesses, opportunities and threats) analysis and driver diagrams were used to analyse the problem. Gantt chart was used to plan proposed timelines and PDSA (Plan-Do-Study-Act) cycles used to implement small changes with continued analysis. A new HI pathway was introduced which involved; a succinct thorough assessment, earlier identification of need for CT head, modifications to the requesting and transfer processes to imaging and review of the decision making processes.

**Results and Conclusion** Data retrieval and analysis post interventions showed a reduction in time to initial ED clinician assessment from 63 minutes to 29 minutes. Percentage of CT scans performed within the hour increased from 67% to 89%. Time to CT scans being performed improved from 82 minutes to 55 minutes. These changes in turn had a significant impact on the decision to admit/discharge time which reduced from an average of 9 hours and 5 minutes to 3 hours and 40 minutes.

The introduction of a HI pathway alongside other adjuvant interventions had a marked impact on the safety and quality of care, provided to head injury patients at Walsall Manor Hospital. These measures will be re-evaluated at 6–12 monthly intervals to ensure continued enhanced performance.