

# Adolescent Trauma - Between UKROC and A Hard Place in the Major Trauma Centre'

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#### Background

Major Trauma is a leading cause of death and disability in 16-18-year olds in the UK. Since the launch of Major Trauma Centres (MTCs) in



2012 in UK, survival rates on the whole have improved (McCullough et al 2014). With the increase in survival rate there is an associated increase in morbidity. Young people between 16 and 18 are at particular risk of major trauma (Holbrook 2007). However, they often fall between services. Not being able to access adult or child services appropriate to them. This aim of this project was to look at the injury patterns sustained by this patient group and the pathways of 16-18-year olds through one MTC.

## **Methods**

A retrospective case notes review was undertaken of all trauma patients aged between 16-18 admitted to one MTC between October 2012 and May 2018.

## **Results**

147 young people were identified. 67.3% were Male with a mean age of 17.1. Motor Vehicle Accidents were the most common cause of injury (59.2%). Assault was unique to Males (n=13) and Self Harm was predominately Female (n=5). 39% had a GCS at scene>13. The majority were admitted to an adult Intensive Care Unit (ICU) (63%) with 5.4% Paediatric ICU and 31.3% directly to a ward. Of those with an injury severity score>25 almost all were admitted to an adult ITU (n=39), Paediatric ITU (n=1). Admissions to Rapid Access to Rehab facilities all came through adult services (n=37) with no commissioned equivalent in those admitted to paediatrics. Mean length of stay was 18.1 days. 75.5% of patients were discharged home from the MTC.



#### Figure 1. Admission Destination by Injury Severity Score



## Figure 3. Admission to Rapid Access to Acute Rehabilitation by Admission Service

## Discussion

The majority of young people were admitted on to adult wards and were able to access commissioned services. However, such services do not provide for the specialist needs of young people, with no access to schooling or parent's accommodation. Those who were admitted to children's services missed out on commissioned rehab pathways and may therefore have different outcomes.

Figure 2. Mechanism of Injury by Gender

### Conclusion

Young people of transition age often fall between services. For the first time we illustrate injury patterns and the fragmented services seen in this venerable patient group.

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