

TRAUMA AND INJURY INTELLIGENCE GROUP (TIIG)

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TRAUMA AND INJURY INTELLIGENCE GROUP

TIIG established in 2001 by Centre for Public Health (now Public Health Institute).

Based on the "Cardiff model" but **enhanced system** - involves systematic data collection of emergency department (ED) injury attendances across NW of England. Also warehouses North West Ambulance Service (NWAS) data

Key aims:

- ✓ Monitoring of long-term trends
- ✓ Assist local partners (eg: local authority public health teams, licensing authorities, police)
- ✓ Inform prevention strategies and identify at risk groups



DATA COLLECTED BY TIIG

Injury ED attendance data received on a monthly basis. Data can be shared at a patient level (non identifiable). Data varies by ED but can include:

- Gender, age, ethnicity, geography of residence
- Attendance date/time, arrival mode, type of injury, source of referral, location, outcome
- Incident date/time, whether alcohol had been consumed in previous three hours

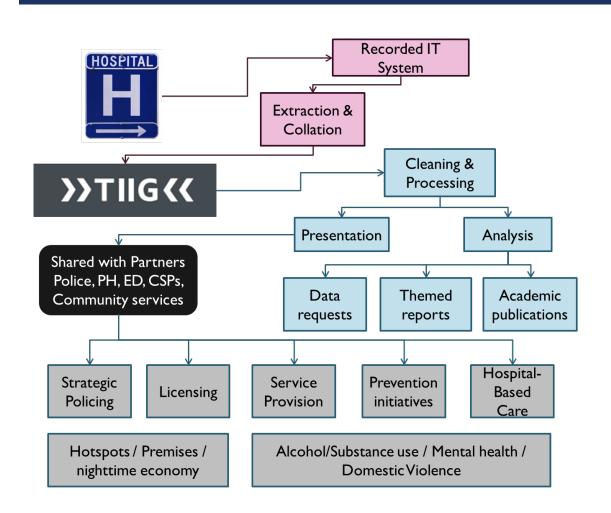
Specifically for assaults:

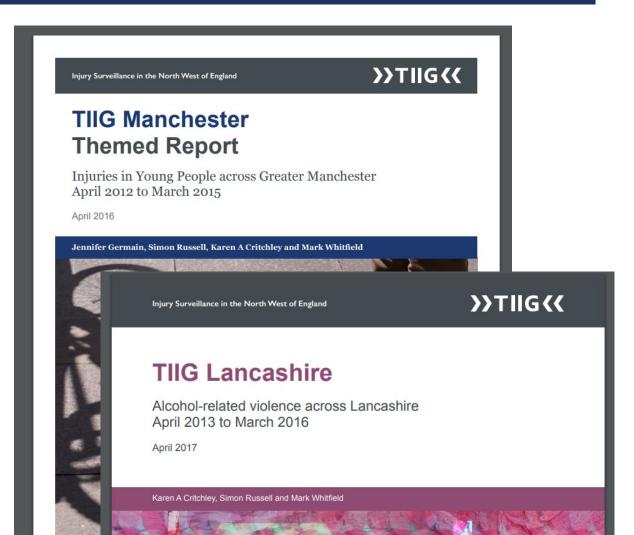
- detailed assault location
- number of attackers
- whether been assaulted by attacker before
- relationship to attacker
- weapon used

- whether patient thought attacker to be drunk
- whether they had or were planning on informing the police
- location details of last drink consumed



TIIG PROCESS





TIIG DATA WAREHOUSE



- All A&E data is imported into the unified data warehouse
- Standardised/recoded for consistency
- Monthly data sharing e.g. for Lancashire – all Lancashire A&E attendances plus Lancashire residents attending out of area North West hospitals



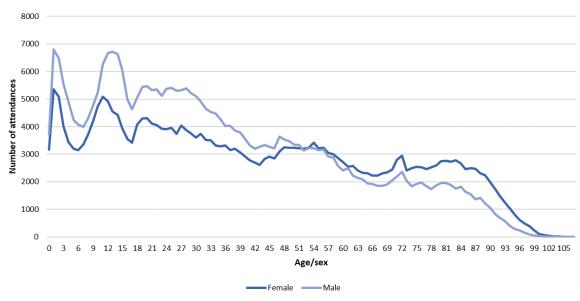
TIIG DATA REQUESTS 2019/20

- Seasonal injuries
- Deliberate self harm / overdose
- Violence inc violence with a weapon
- Young people violence trends
- Overview of intentional and unintentional injuries
- Identification of licensed premises to support licensing reviews
- Alcohol related injuries / assaults
- Falls in older people
- RTCs involving cyclists/pedestrians

- Violence Reduction Units
- EPRF (NWAS)
- Moving away from data completion to data quality
- Hotspot assault location mapping
- UCC/walk in centres

NORTH WEST A&E DATA: AN OVERVIEW OF 2019

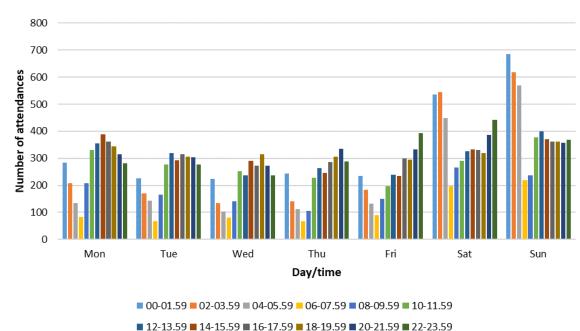
- During 2019 there were 631,771 injury attendances made to North West A&ES* 555,615 (88%) made by North
 West residents
- 43% were recorded as 'other injury', 17% as falls, 6% as sports injuries, 6% as RTCs, 4% as assaults and 3% as DSH
- Liverpool residents comprised 7% of attendees, Wirral residents 5%, Manchester residents 5% and Stockport residents 5%
- The highest number of attendances went to Stepping Hill Hospital (Stockport; 5%), Arrowe Park Hospital (5%), Whiston Hospital (5%), Burnley General Hospital (5%) and Leighton Hospital (5%).
- 52% of attendees were men and 48% women
- 13% were aged 75+, 9% 10-14 years, 8% between 0-4 years



^{*} Excluding Royal Albert Edward in Wigan

NORTH WEST A&E DATA: AN OVERVIEW OF 2019 - ASSAULTS

- During 2019 there were 23,458 assault attendances made to North West A&ES* 21,315 (91%) by North West residents
- Manchester residents comprised 10% of attendees, followed by Liverpool (6%), Oldham (5%), and Salford (5%)
- The highest number of attendances went to Aintree Hospital (8%), MRI (7%), Royal Oldham (6%) and North Manchester (6%).
- 70% of attendees were men and 30% women.
- 16% were aged 20-24 years, 15% 25-29 years
- Assault attendances peaked on Sat/Sun mornings



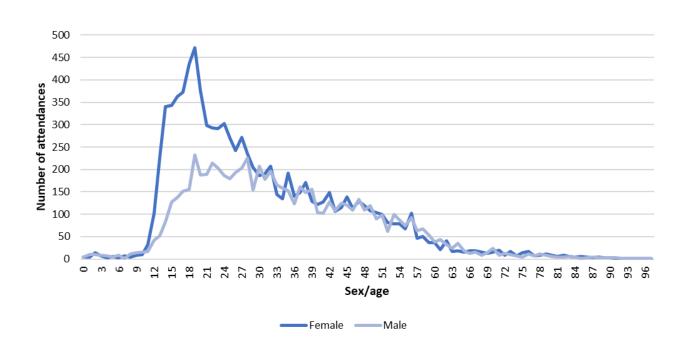
NORTH WEST A&E DATA: AN OVERVIEW OF 2019 - FALLS

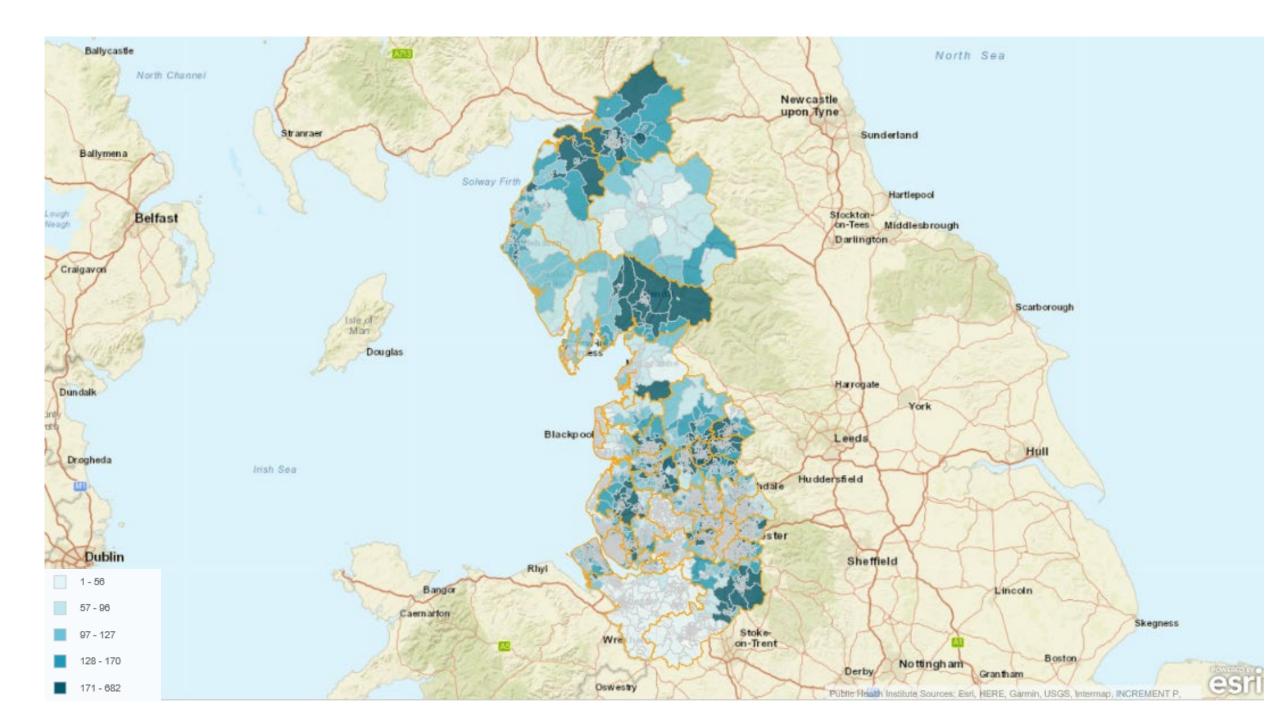
- During 2019 there were 109,258 fall attendances made to North West A&ES* 105,409 (96%) by North West residents
- Wirral residents comprised 11% of attendees, followed by Salford (7%), Oldham (6%) and Preston (5%)
- The highest number of attendances went to Arrowe Park Hospital (12%), Aintree (10%) and Royal Oldham (8%).
- 42% of attendees were men and 58% women
- 34% were aged 75+, 8% 0-4 years and 7% 70-74
- Likelihood of being admitted to hospital increased with age (48% of 75+ admitted compared to 34% of 70-74 year olds etc)

^{*} Excluding Royal Albert Edward in Wigan

NORTH WEST A&E DATA: AN OVERVIEW OF 2019 - DSH

- During 2019 there were 16,025 self harm attendances made to North West A&ES* 14,205 (89%) by North West residents
- Sefton residents comprised 8% of attendees, followed by Liverpool (8%), Tameside (8%) and Manchester (7%)
- The highest number of attendances went to Aintree Hospital (16%), Tameside General (8%) and Cumberland Infirmary (7%).
- 41% of attendees were men and 59% women
- 17% were aged 15-19 years, 15% 20-24 years
- Spike in young women DSH (12 24 years)





DATA QUALITY – ROYAL LIVERPOOL EXAMPLE

- Persistent issues with Royal Liverpool's assault data
- Poor quality of information recorded as well as low numbers of assaults
- Combination of IT issues, (TIIG not receiving all relevant fields), system changes (move over to ECDS) and staff reluctance to collect specific data items

	Jan-19	Feb-19	Mar-19
No. assault attendances	7	13	12
Assault date	0%	62%	58%
Assault time	0%	62%	58%
Incident location type	100%	62%	100%
Incident location details	0%	46%	58%
Assault weapon	0%	62%	58%
Assault weapon details	0%	62%	58%
Alcohol consumed prior to incident	0%	62%	58%
Location last drink consumed	0%	100%	100%
Location details last drink consumed	0%	50%	100%
Relationship to attacker	0%	100%	58%

DATA QUALITY – ROYAL LIVERPOOL EXAMPLE

- TIIG met with Dave Roberts (Head of safeguarding) and Paul Evans (Deputy General Manager Urgent & Emergency Care) to look at how to improve the data
- A number of key actions were identified:
 - RLUH conducted a run through of the booking in system to identify gaps
 - RLUH completed a manual tally over a weekend of assaults seen to compare with the data recorded
 - TIIG/RLUH provided support and knowledge to reception staff around why this data was been completed and why
 - A&E staff training/awareness sessions
 - Looked at how different trusts captured data (sharing good practice)
- Important for violence reduction but also identified as important for safeguarding with patients being referred to safeguarding, because they have been identified quicker

DATA QUALITY – ROYAL LIVERPOOL EXAMPLE

- Most recent completion rates show improvement to both data completion and quality
- Need to maintain this and continue to look at the number of assaults recorded
- Rapid turnaround in data quality highlights importance of A&E engagement as well as an understanding why the data is important to collect

	Oct-19	Nov-19	Dec-19	Jan-20
No. assault attendances	39	67	97	66
Assault date	92%	97%	98%	94%
Assault time	92%	97%	98%	94%
Incident location type	100%	100%	98%	94%
Incident location details	92%	97%	98%	94%
Assault weapon	92%	97%	98%	94%
Assault weapon details	92%	97%	98%	94%
Alcohol consumed prior to incident	92%	97%	98%	94%
Location last drink consumed	100%	100%	100%	100%
Location details last drink consumed	100%	100%	94%	100%
Relationship to attacker	100%	100%	98%	94%

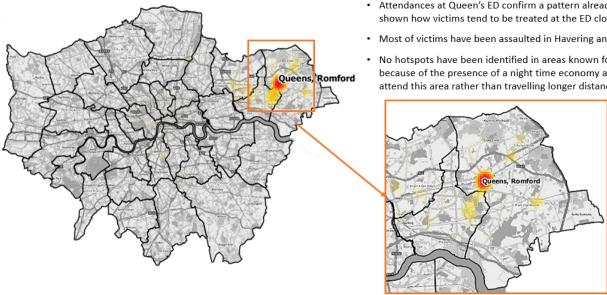
DATA QUALITY

Trust	ED	CEM/ISTV Completion rates Jan 2020					
		Assault date	Assault time	Assault location	Assault location details	Assault weapon	Assault weapon details
Royal Liverpool & Broadgreen University Hospitals NHS Trust	Royal Liverpool	94%	94%	94%	94%	94%	94%
Wirral University Teaching Hospital NHS Foundation Trust	Arrowe Park	100%	100%	100%	100%	100%	100%
St Helens & Knowsley Hospitals NHS Trust	Whiston	80%	80%	84%	43%	68%	68%
Alder Hey	Alder Hey	100%	100%	100%	0%	88%	88%
Aintree University Hospitals NHS FT	Aintree	70%	70%	100%	45%	95%	95%
Salford Royal NHS Foundation Trust	Salford Royal	100%	100%	100%	77%	73%	73%
Tameside Hospital NHS Foundation Trust	Tameside General	100%	100%	100%	63%	100%	100%
Stockport NHS Foundation Trust	Stepping Hill	100%	100%	94%	0%	88%	88%
Manchester University NHS Foundation Trust	Wythenshawe	74%	74%	71%	64%	100%	100%
	Trafford	86%	86%	86%	14%	29%	29%
	Manchester Royal Childrens Hospital	66%	66%	66%	66%	0%	0%
	Manchester Royal Infirmary	55%	55%	55%	44%	33%	33%
	Fairfield General	100%	94%	100%	92%	100%	Do not collect
Poning Acute Trust	North Manchester General	100%	98%	100%	90%	100%	Do not collect
Penine Acute Trust	Rochdale Infirmary	98%	96%	100%	92%	100%	Do not collect
	Royal Oldham	100%	99%	100%	85%	100%	Do not collect
Bolton NHS Foundation Trust	Royal Bolton	Do not collect	Do not collect	Do not collect	Do not collect	Do not collect	Do not collect
University Hospitals of Morecambe Bay Foundation Trust	Furness General	100%	100%	100%	81%	95%	95%
Blackpool Teaching Hospitals NHS Foundation Trust	Blackpool Victoria	100%	100%	100%	12%	100%	100%
East Lancashire Hospitals NHS Trust	Royal Blackburn UCC	100%	6%	40%	18%	44%	44%
East Lancashire Hospitals NHS Trust	Royal Blackburn Hospital	100%	0%	22%	0%	33%	0%
Lancashire Teaching Hospitals NHS Foundation Trust.	Chorley & South Ribble	100%	100%	100%	100%	100%	100%
	Royal Preston	100%	100%	100%	100%	100%	100%
Southport & Ormskirk Hospital NHS Trust	Ormskirk and District General	85%	85%	100%	41%	81%	81%
University Hospitals of Morecambe Bay Foundation Trust	Royal Lancaster Infirmary	100%	100%	100%	71%	100%	100%

- Monthly completion rates/ data quality reports
 - Redesigning
- A&E engagement events
- Training to reception staff
- Issues compounded by changes to IT systems

DATA QUALITY REPORTING

Location of the assault



- · Attendances at Queen's ED confirm a pattern already identified for other EDs (excl. MTCs) which has shown how victims tend to be treated at the ED closer to the location of the assault.
- · Most of victims have been assaulted in Havering and the neighbouring boroughs of Barking and Redbridge.
- · No hotspots have been identified in areas known for night time economy in central London . This could be because of the presence of a night time economy area in Romford, Havering, and people are more likely to attend this area rather than travelling longer distances to central London.

Romford is the area with the highest volume of serious assaults according to patients attending Queen's ED.

Several victims also disclosed being attacked in Hornchurch area (no further details).

- Accurate location information such as the name of a street or station can be used to identify areas at high risk of harm, allowing the deployment of resources to address the problem.
- About 35% of records include the location of the assault, of which 45% could be assigned to a point location (full address or street name). These records have been used to generate the hotspot map. Improved location info such as name of public places or streets name with associated area (useful when there is more than one street with the same name in London) will allow the identification of further hotspots for serious violence and better inform targeted interventions.
- The location of the assault is never recorded for incident occurred at private addresses and this is to protect the identity of the victim and avoid the risk of identification.
- 28% of people who attended Queen's Hospital as a result of a violent incident had been attacked at a private address ("private address" entries are considered as a proxy indicator of domestic violence attendances).

TIIG 2020/21 WORKPLAN

- Better categorisation of 'other' injuries
- Supporting non compliant A&Es to record ISTV data
- Improving data quality reporting
- Continuing to support the North West Violence Reduction Units
- Incident location hotspots

Thank you to all commissioners, local partners, A&Es and NWAS for their continued support of TIIG!