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NHS Trust

Developing a clinical prioritisation model for reducing health inequalities

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Intro

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- Current structures which are supposed to guide trusts on where to focus on inequalities are not particularly relevant to the ambulance service e.g. Core 20Plus5 and national statement on inequalities
- Makes it hard for ambulance services to know where to focus their attention and several ambulance services are going away to do some thinking on how they might do something more relevant
- Recognising all ambulance services have their own priorities and unique populations – can we agree a small number of focussed areas in which there is the greatest potential for ambulance services to work collaboratively with their system partners to address health inequalities?
- Opportunities for learning from each other greater if we're working on the same things

Intro

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- Ambulance data holds valuable information on vulnerable populations where patients may not for various reasons access other forms of healthcare
- Approximately 44% of incidents attended to by ambulance services in England in 2023/24 were not conveyed to an emergency department (and these patients therefore do not appear in hospital data often used by the health service to try and measure need).
- This data ‘blind spot’ hampers efforts to address the unmet health needs of these highly vulnerable groups. As a result, their needs often go unaddressed until they reach crisis point, driving up demand and escalating costs across the wider health and care system.

Can we agree clinical priorities?

- Whilst we are not trying to recreate an ambulance Core20 Plus5 (eh hem)
- Can we agree 5 clinical priorities ambulance services could all focus on?
- What does the data say?
- (now we'd have liked to use ADS for this and we tried reeeeally hard to get it – but unfortunately this is a YAS perspective)

Can we agree clinical priorities?

- Decided to focus on 2 things:
  - That 44% that aren't in other datasets
  - Where are the greatest inequalities?

What did we do?

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- Looked at our electronic patient records – if we're going to understand clinical reasons for calls it needs to be our best understanding of what's really wrong with them
- (e.g. when we looked at calls labelled in call data as breathing difficulties only 37% had something respiratory in ePR)
- What were the top reasons for see/treat attendances?
- Which reasons for attendance had the most inequality?
- Can we combine those 2 measures?

Top reasons for attendances

ADS group 1	Count of attendances	% of all attendances
Env / social / comp / NAD	116421	15.7%
Medical specialties	111317	15.0%
Cardiovascular	102643	13.8%
Infectious disease	101051	13.6%
Psych / tox / D+A	76257	10.3%
Soft tissue inj / wound	64479	8.7%
Gastrointestinal	49575	6.7%
Trauma / FB	27766	3.7%
Fracture / dislocation	26679	3.6%
NULL	14412	1.9%
Urinary tract	12549	1.7%
Paediatric	10842	1.5%
Head and neck	8706	1.2%
Musculoskeletal	8466	1.1%
Obstetric / Gynae	7492	1.0%
Cancer	3557	0.5%

NAD

What?

More what?

Does this need expanding?

Top reasons for attendances

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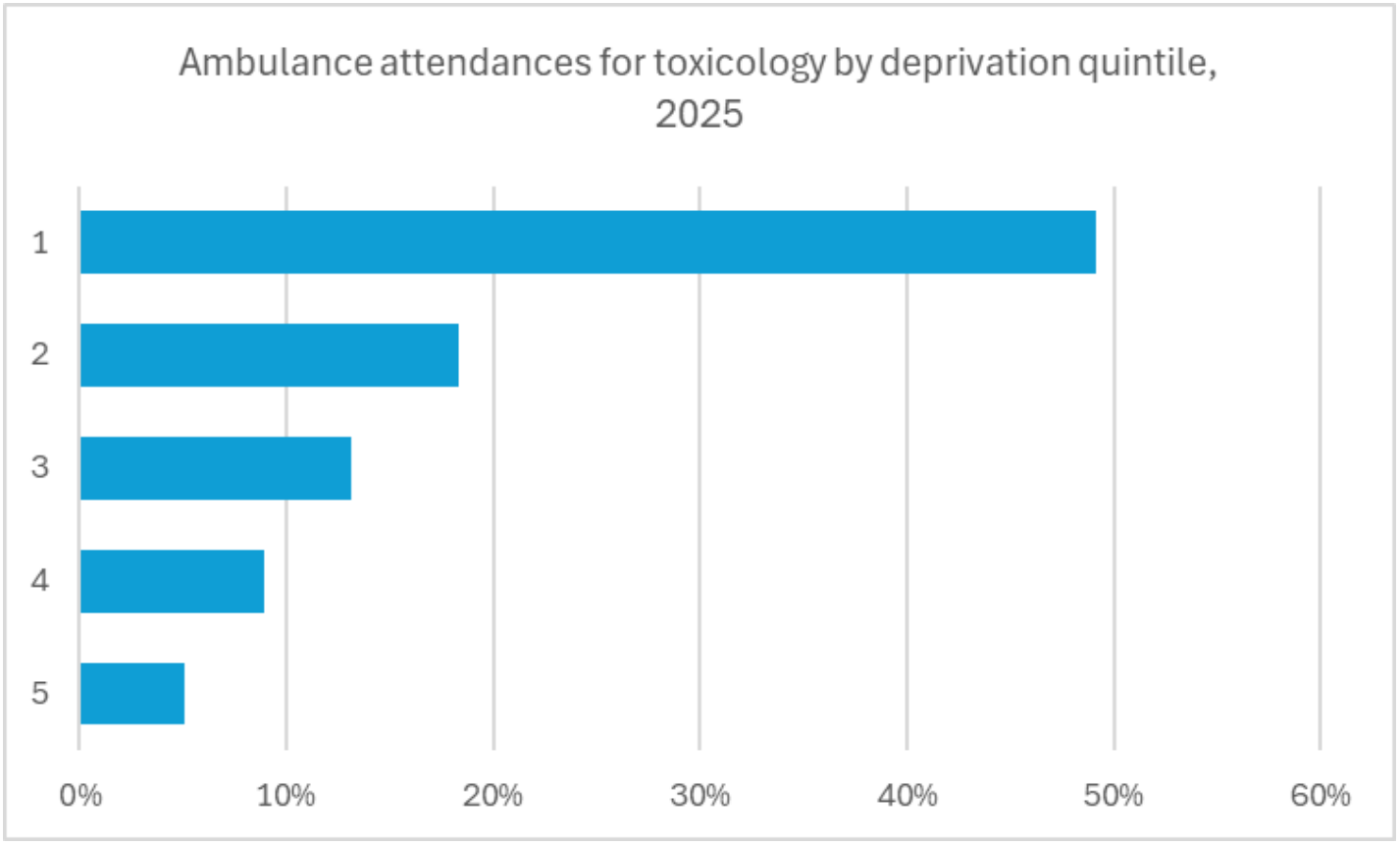
Disease grouping	Count of attendances	Proportion see and treat
Cardiovascular	102643	15%
Respiratory	72516	24%
Soft tissue inj / wound	64479	38%
Neurology	56606	19%
Gastrointestinal	49575	18%
Mental health	39801	52%
Trauma / FB	27766	21%
Fracture / dislocation	26679	6%
Systemic / CNS	24068	9%
GU / GI	23135	23%
Drug / alcohol	23085	35%
Endocrine / metabolic	15426	20%
Toxicology	13371	18%
Urinary tract	12549	11%
Paediatric	10842	8%
Head and neck	8706	36%
Musculoskeletal	8466	27%
Obstetric / Gynae	7492	13%
Skin	5838	25%
Notifiable disease	4988	41%
Haematology	4804	10%
Allergy	3696	20%
Cancer	3557	21%

Lots of calls – convey most of them

Lots of calls – convey 2/3rds

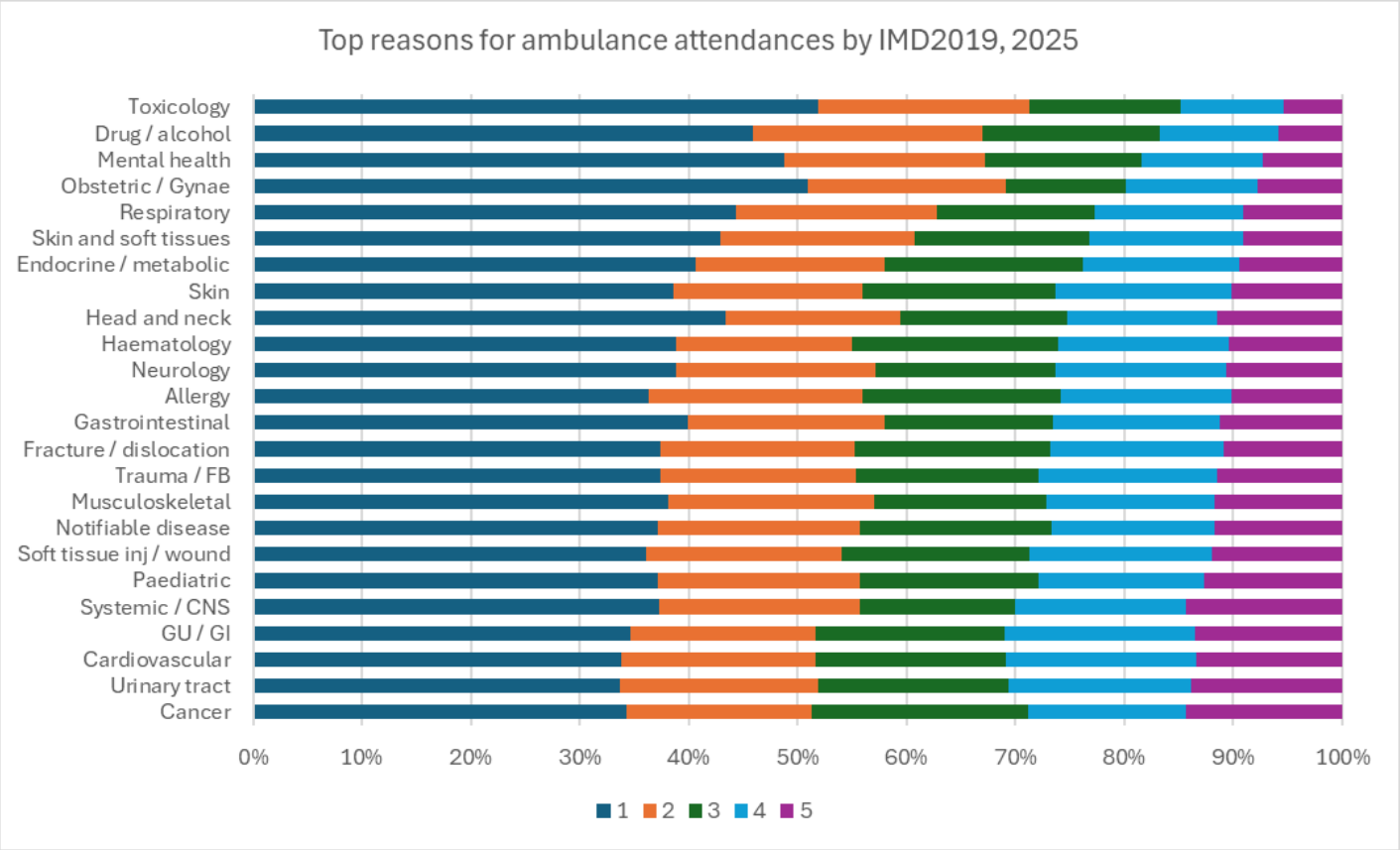
Lots of calls – convey less than half

Where were the greatest inequalities?



There were almost 10 times the number of attendances for toxicology in the most deprived quintile compared to the least

5 clinical areas



- This was followed by alcohol/drugs (7.8 times), mental health (6.7), obstetric/gynae (6.6 times) and respiratory (4.9 times).

5 clinical areas

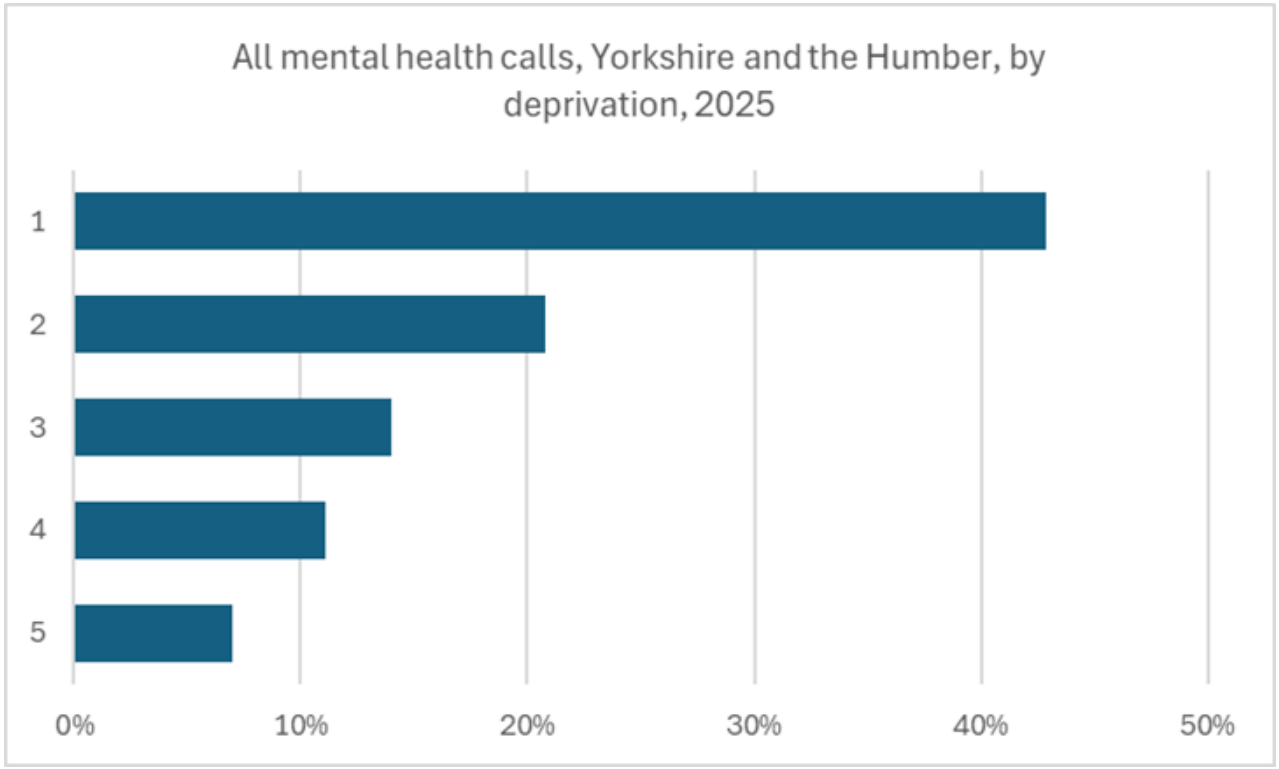
	Rank in terms of non-conveyed attendances	Rank in terms of inequalities	Composite score
Mental health	24	46	70
Drug / alcohol	19	48	67
Respiratory	23	42	65
Toxicology	14	50	64
Endocrine / metabolic	16	38	54
Neurology	21	30	51
Obstetric / Gynae	7	44	51
Head and neck	15	34	49

Diabetes

Epilepsy

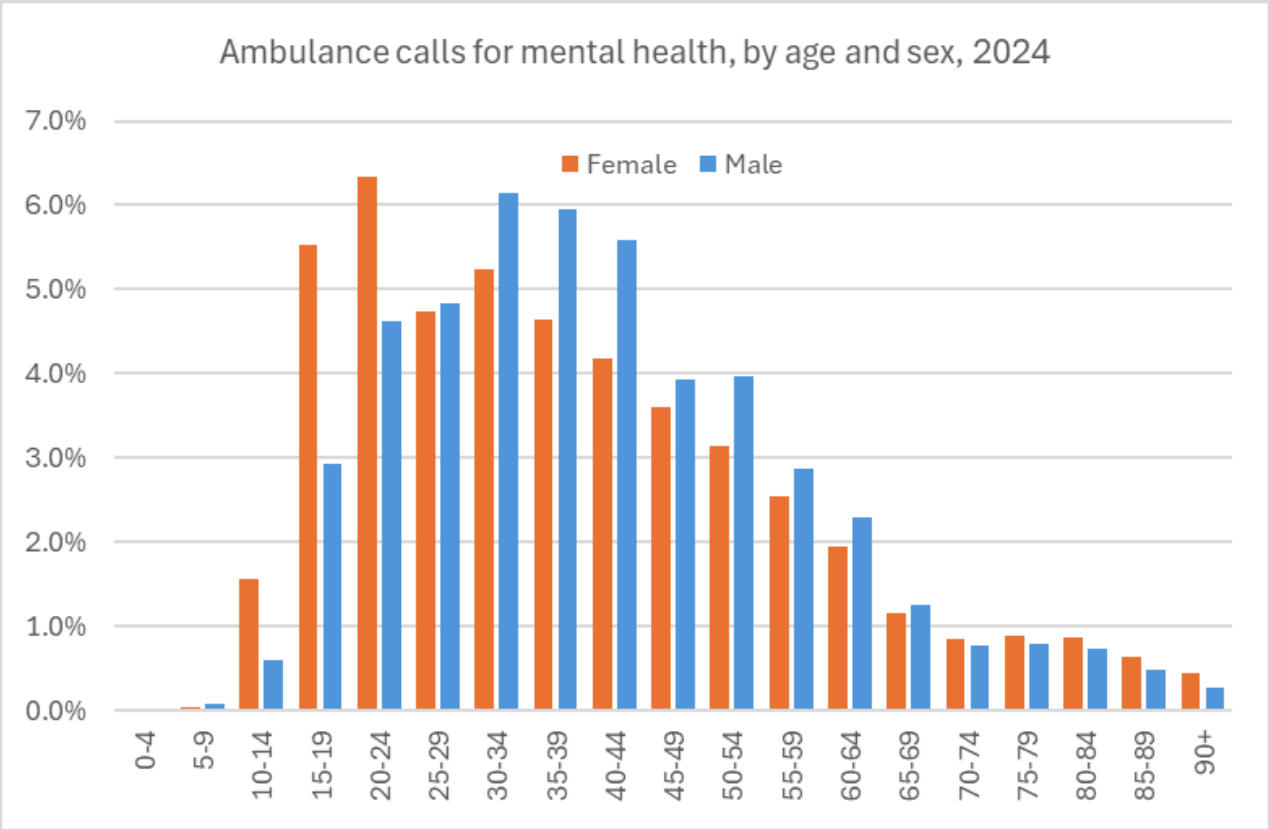
- We have weighted inequalities more highly – but also needs volume of non-conveyed because these are the hidden populations
- Mental health scores highest when attributed across both measures, this is followed by drugs/alcohol
- Respiratory is third

Mental health



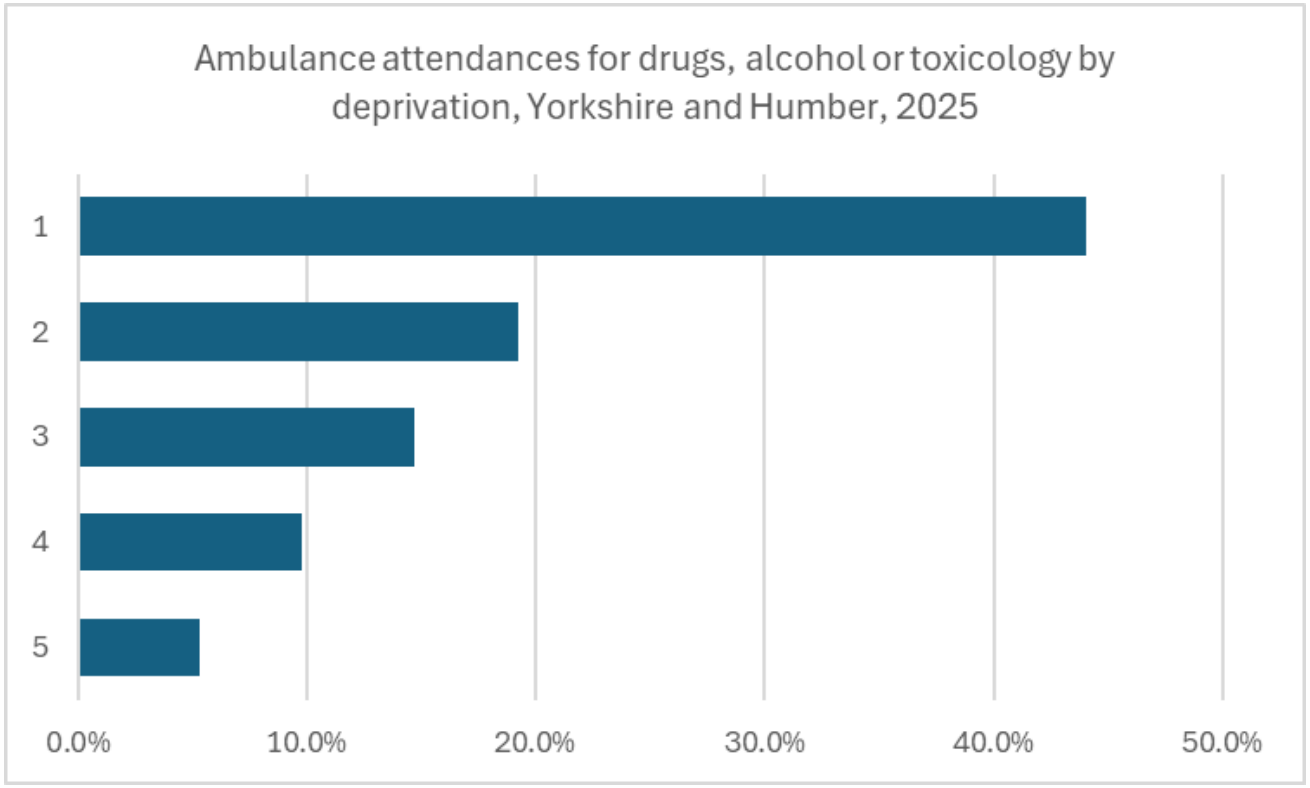
- When CAD and ePR are combined there were over 93,500 calls for mental health conditions in 2025 across Yorkshire and the Humber
- 43% of all calls for mental health coming from the most deprived quintile nationally compared to just 7% from the least deprived
- Only 43% of these patients were conveyed meaning 53,400 patients were only seen by YAS

Mental health



- We know these calls affect some of the youngest members of our populations – particularly young women

Drugs / alcohol / toxicity



- There were around 36,500 ambulance attendances for with a main working impression of drugs, alcohol or toxicology in 2025, 71% were conveyed to hospital – although this still left over 10,000 patients not conveyed
- 44% of patients were from the most deprived quintile compared to 5% in the least

Drugs / alcohol / toxicity

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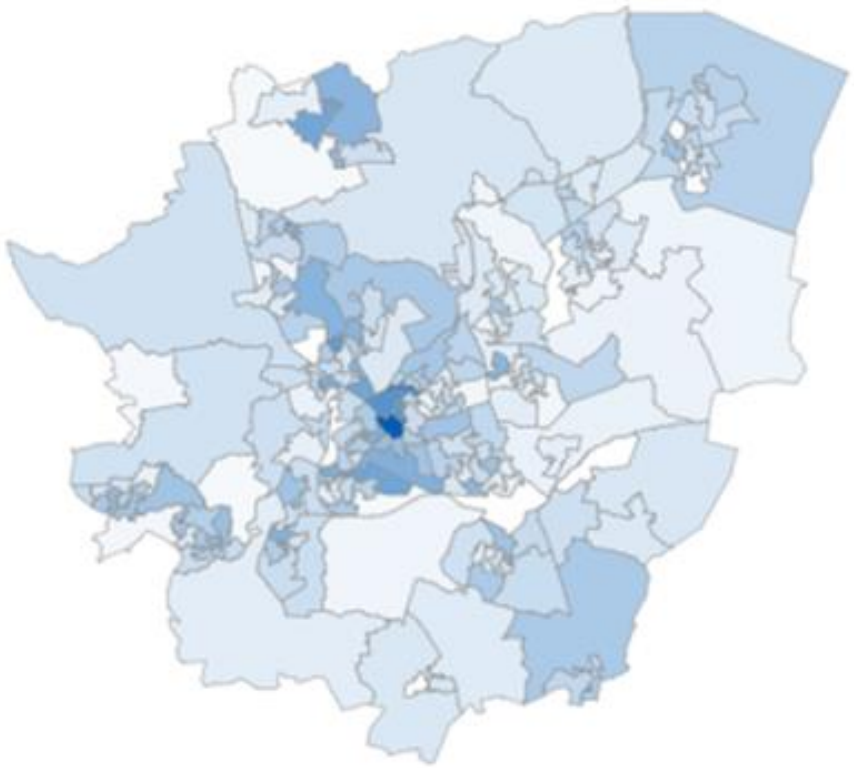
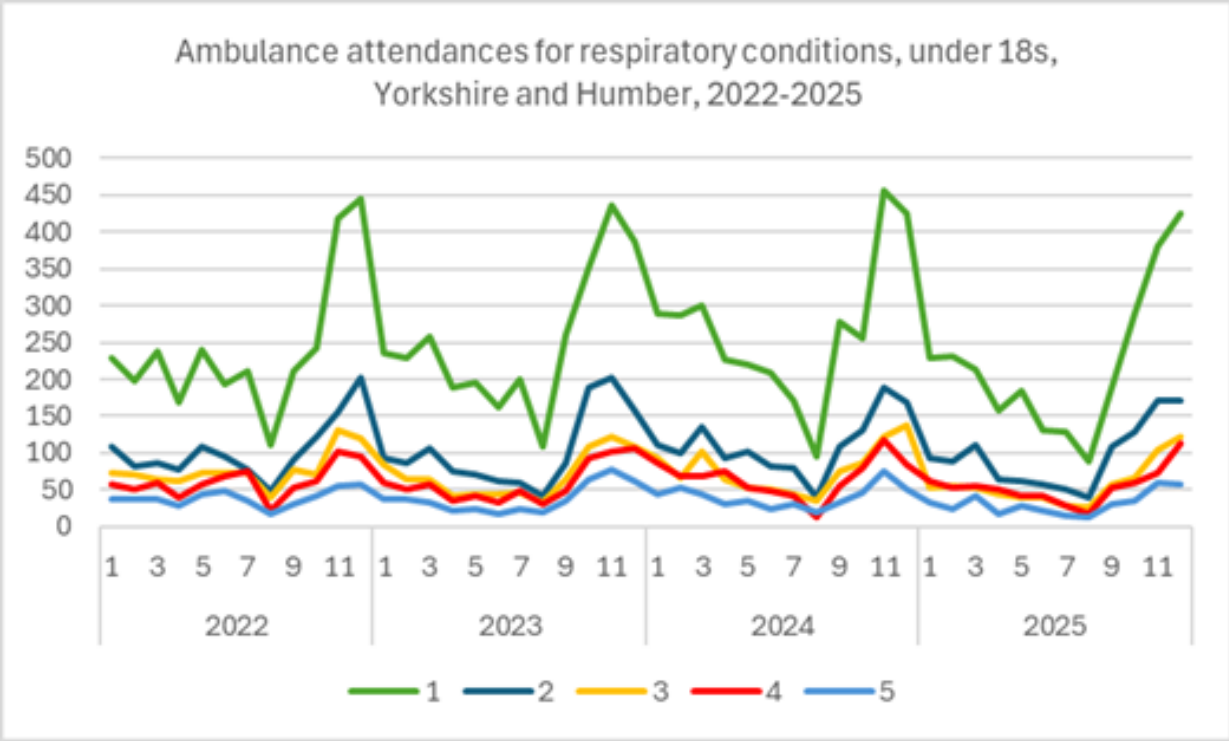


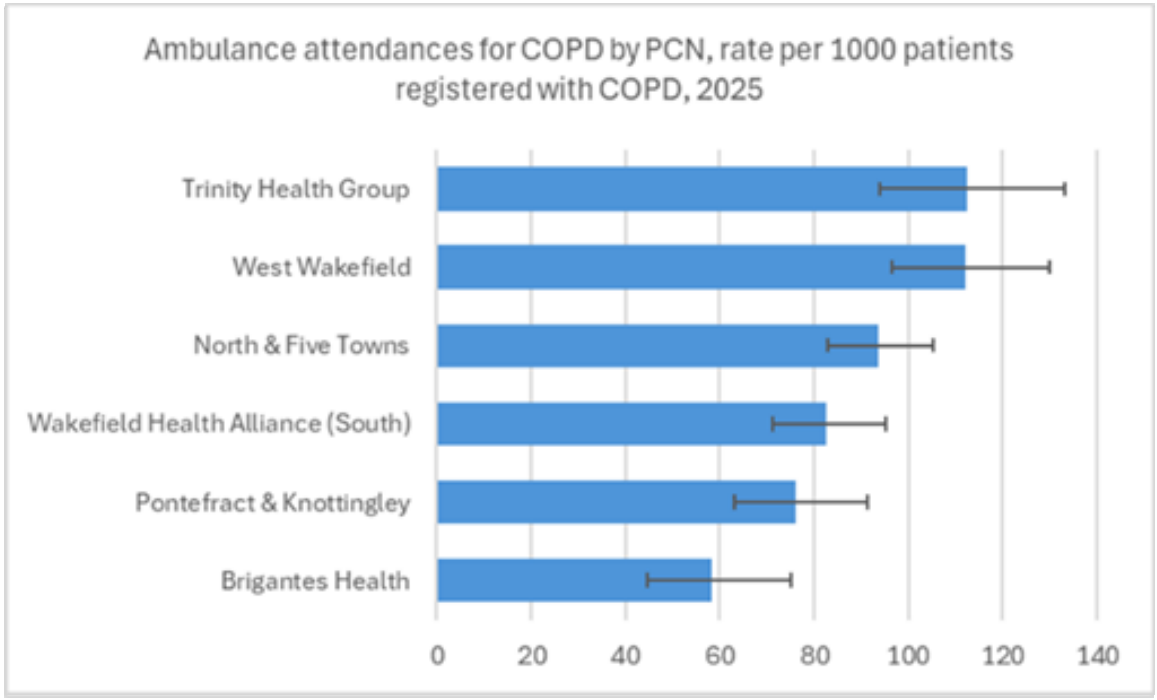
- Ambulance services are key in understanding the patterns of alcohol harm because unlike other health services we know where the harm is happening
- In Yorkshire LSOA level alcohol data is used by local authorities in Yorkshire to feed into alcohol harm reduction matrix to help with licencing decisions

Respiratory



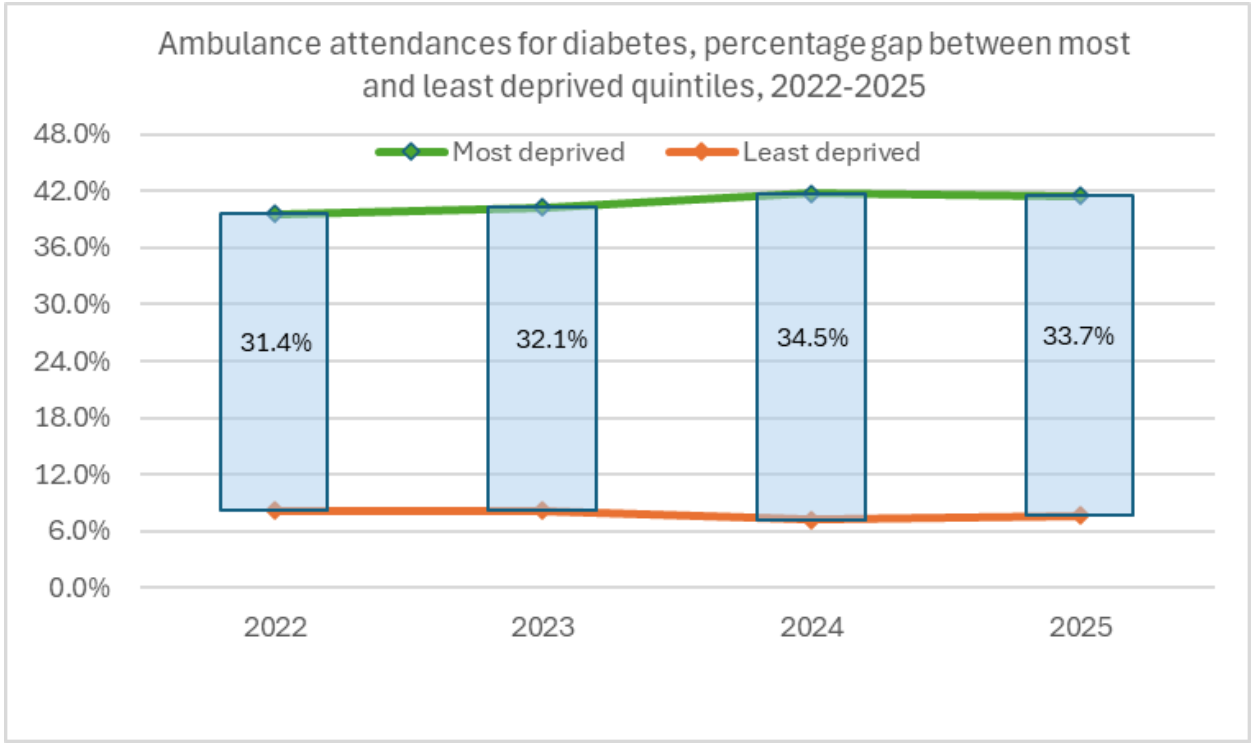
- In 2025 the total number of respiratory attendances in the most deprived group were almost 5 times that in the least deprived.
- Although the most deprived quintile has most attendances all year, it's over winter pressures period that there are the most significant spikes in attendances for this group

Respiratory



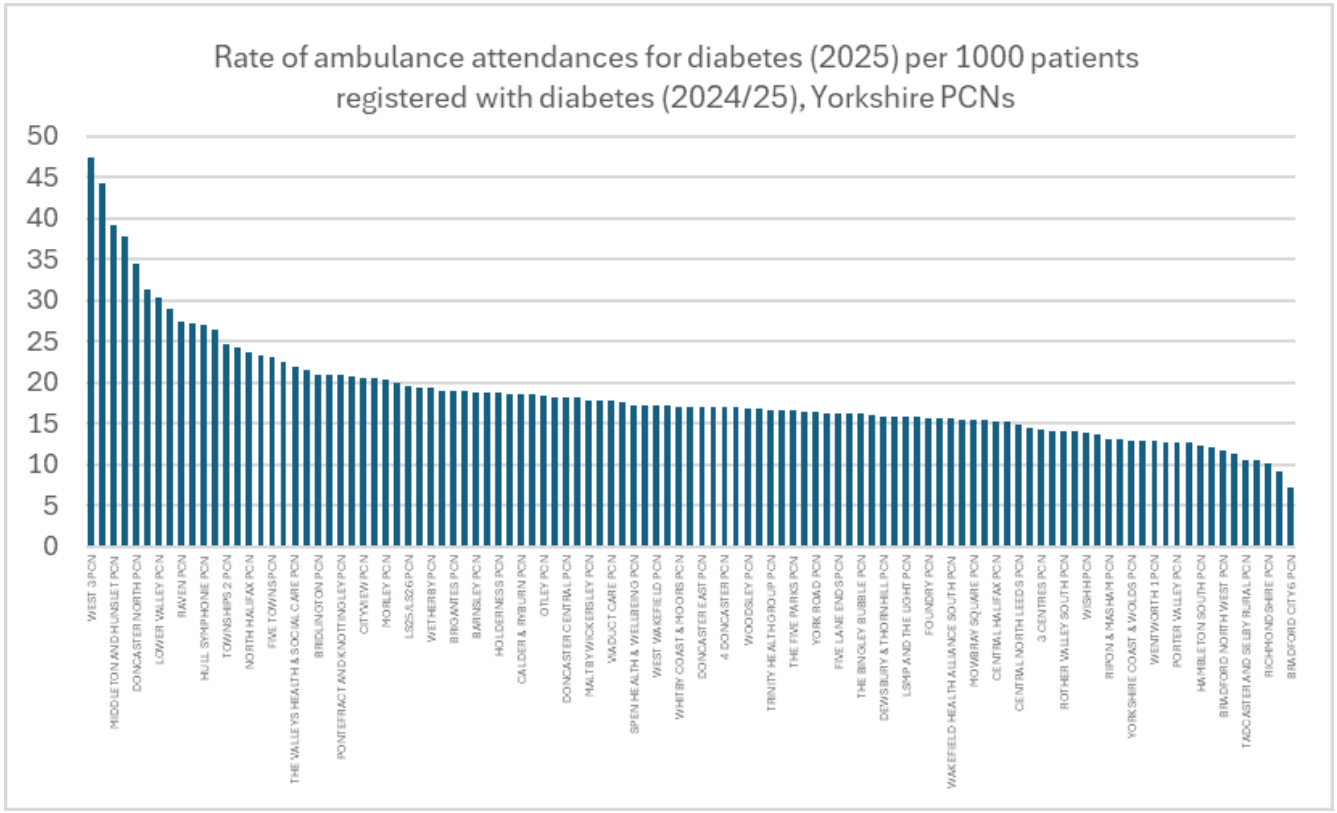
- Using data on ambulance attendances for COPD in a local project in Wakefield as a measure of unmet need
- Trinity PCN has the lowest prevalence of recorded COPD
- But the highest rate of ambulance attendances for COPD – does this suggest unmet need?

Diabetes



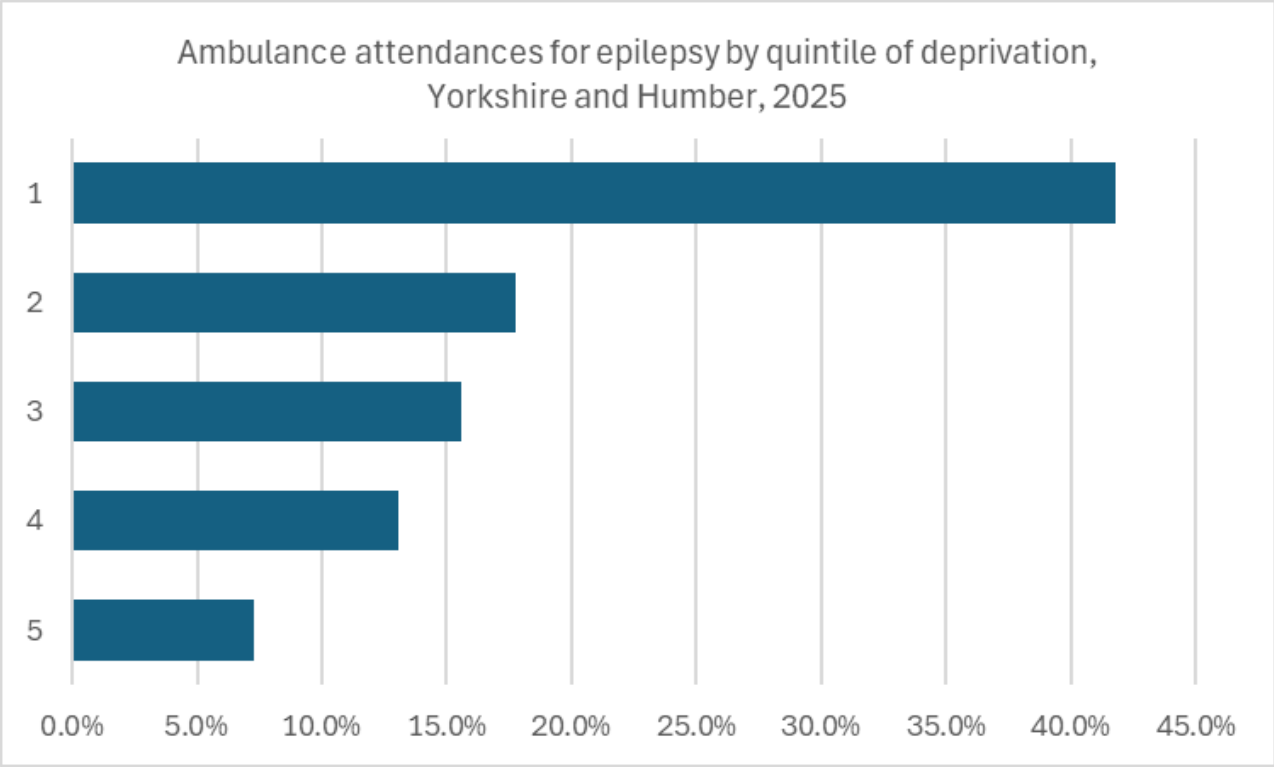
- Complications from diabetes, and resulting ambulance attendances, may be a result of inadequate management and therefore an opportunity for prevention.
- Not only are there 5.5 times the number of attendances for diabetes in the most deprived group compared to the least deprived – there is some evidence that inequalities are widening

Diabetes attendance rates per 1000 patients registered with diabetes



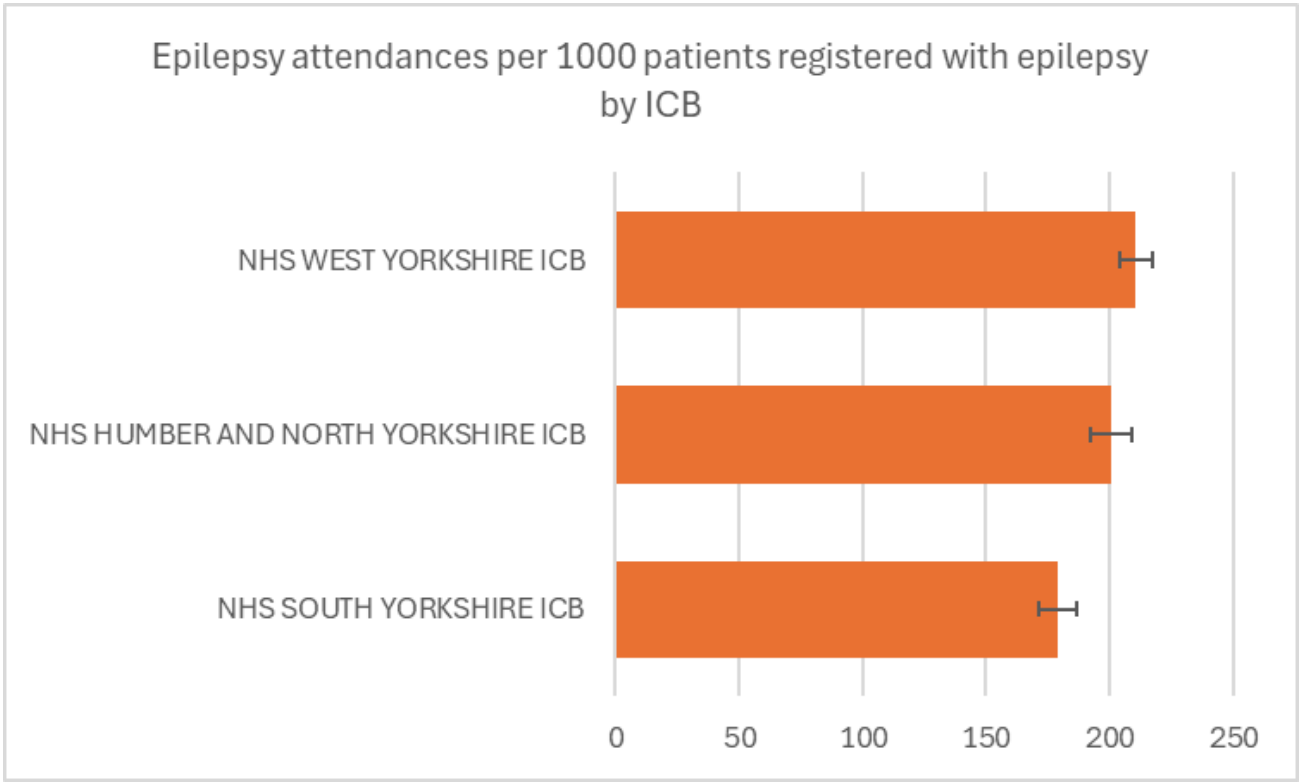
We can do the same kind of PCN level analysis for diabetes - there is significant variation in terms of PCNs from 47 attendances per 1000 patients with diabetes to 7 per 1000 in another PCN.

Epilepsy



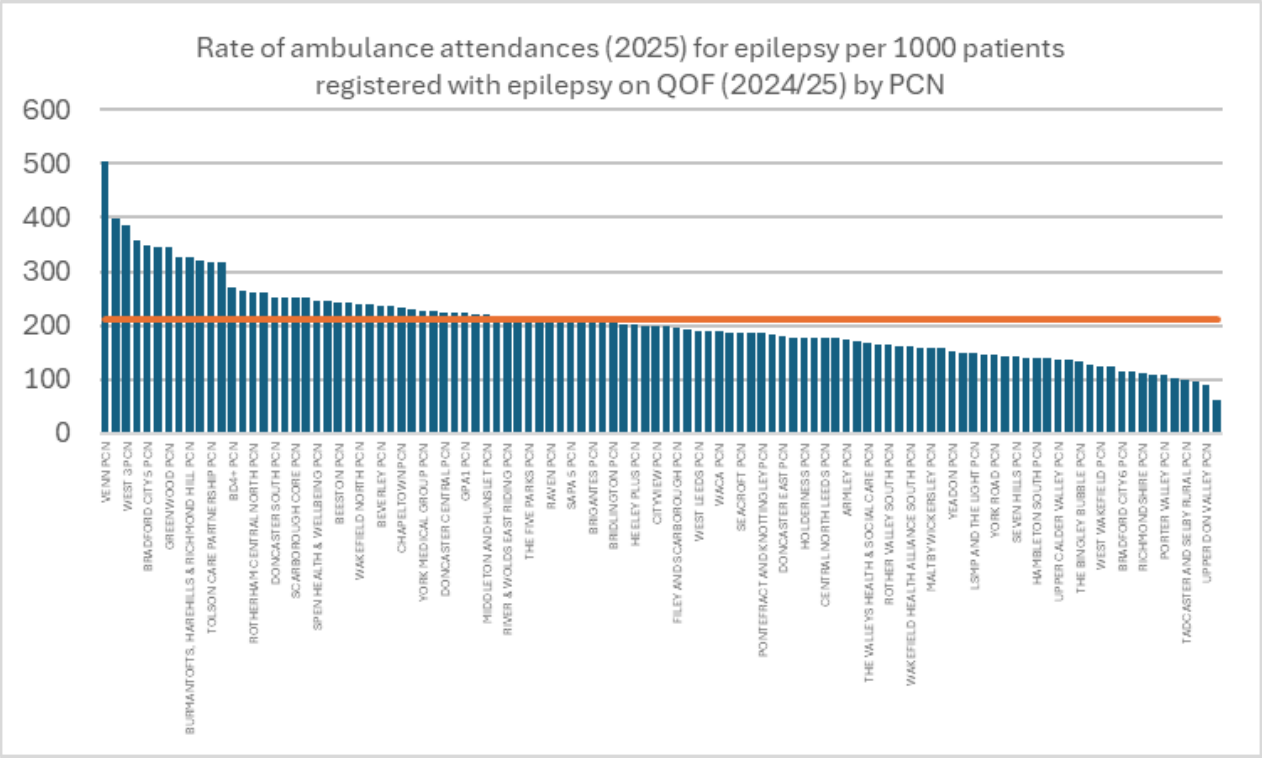
- Overall in 2025 there were almost 15,000 ambulance attendances for epilepsy – a quarter of these were not conveyed to hospital
- 42% of attendances for this population were from the most deprived quintile nationally, compared to 7% from the least deprived – does this suggest more unmanaged disease in the most deprived group?

Epilepsy



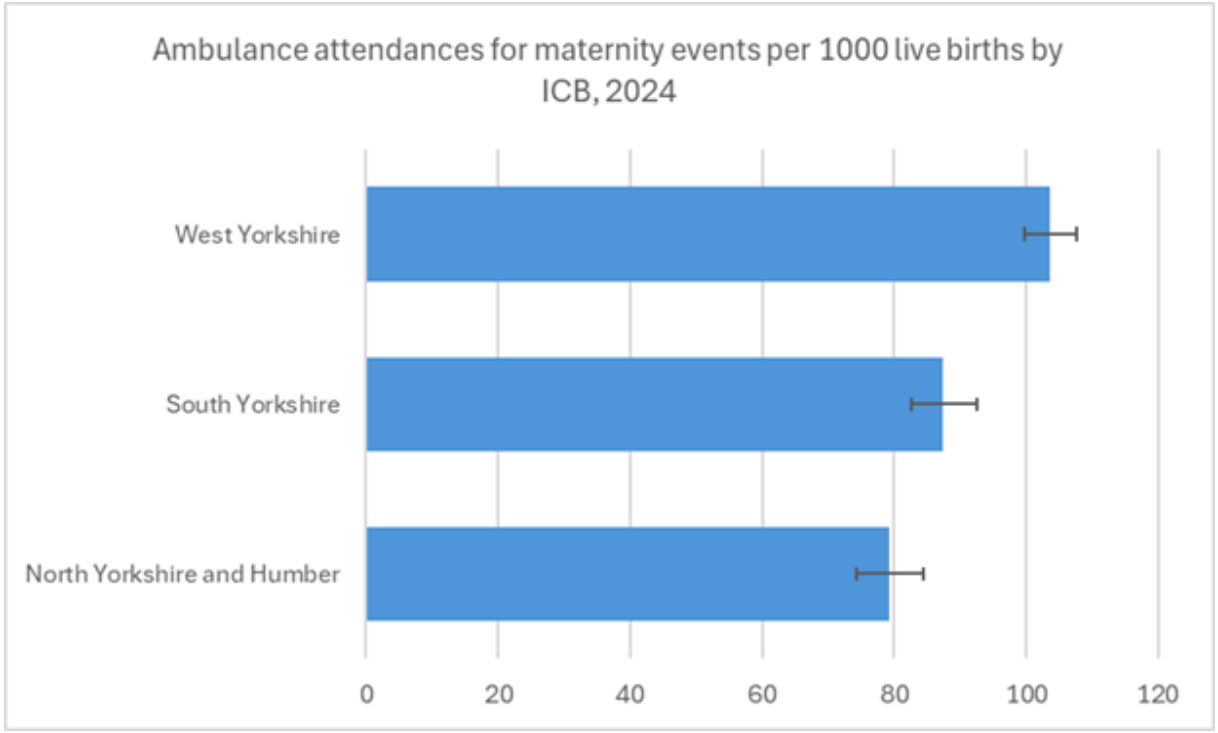
- There is significant variation across ICB areas

Ambulance attendances for epilepsy by PCN



- ..and at PCN level across Yorkshire when calculating rates of ambulance attendances per 1000 patients registered with epilepsy from 505 attendances per 1000 patients in Venn PCN to 61 in UOS Student PCN – an 8-fold variation
- 12 PCNs had a rate of attendances that was significantly higher than average – and this might form a basis for targeting any work

Obstetrics / gynae



- The number of attendances for maternity in the most deprived group is 6.6 times that in the least deprived
- There is significant variation across the patch
- We know there are significant differences in maternal outcome by ethnicity what is the ambulance role in this??

Inclusion groups

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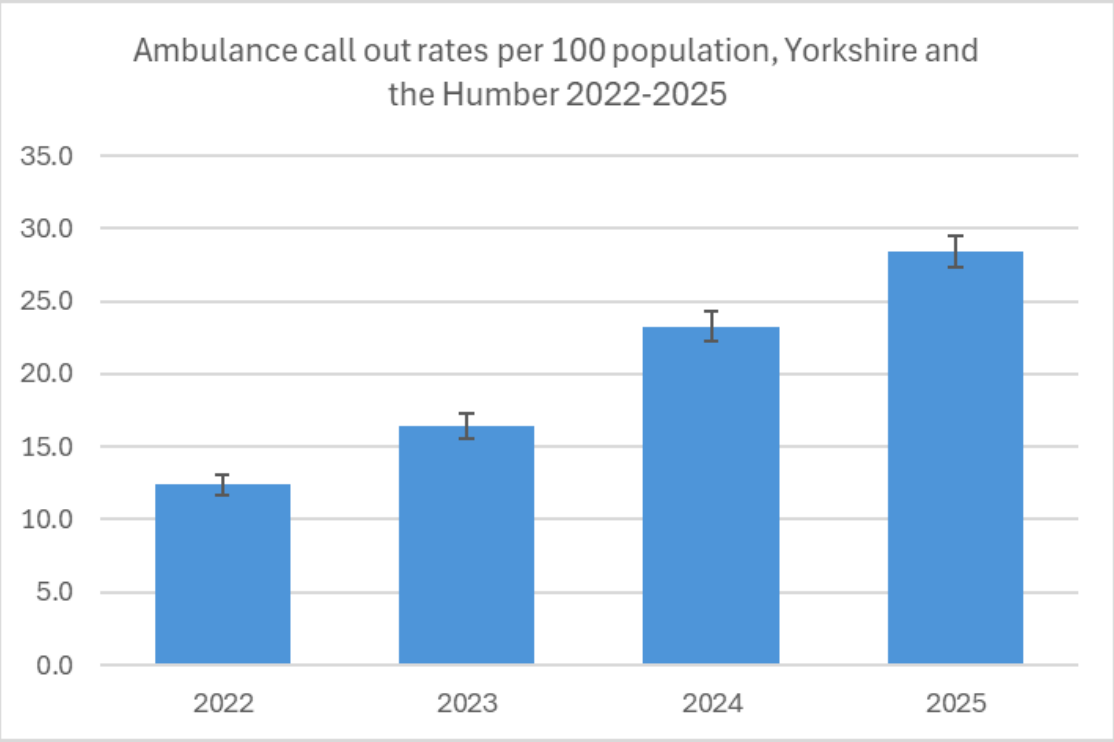
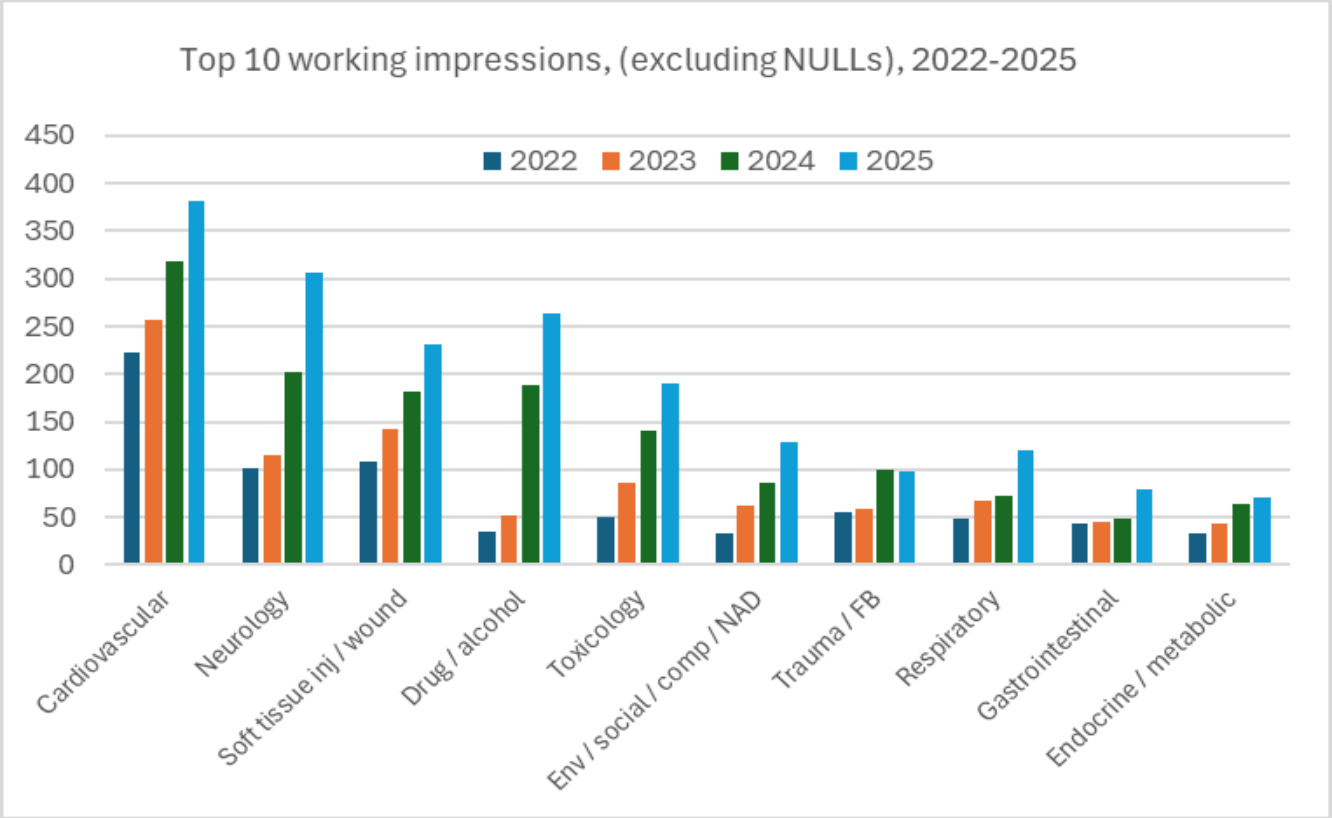
- Ambulance services are in a completely unique position within the healthcare system for a few reasons (USP?) which mean our part in understanding inclusion groups is key:
  - We see our patients in a home/incident context so we know where the patients are (e.g. homelessness)
  - We see patients when they have an emergency need so patients who do not access other services often use us (e.g. patients not registered with a GP, asylum seekers, sex workers)
  - Because we go to the patient we have information on populations other sectors do not (e.g. prisoners / care homes)
  - Because we understand where the incident happened and the context we often understand the cause of the injury illness rather than the clinical observation (e.g. violence, self-harm)

Inclusion groups



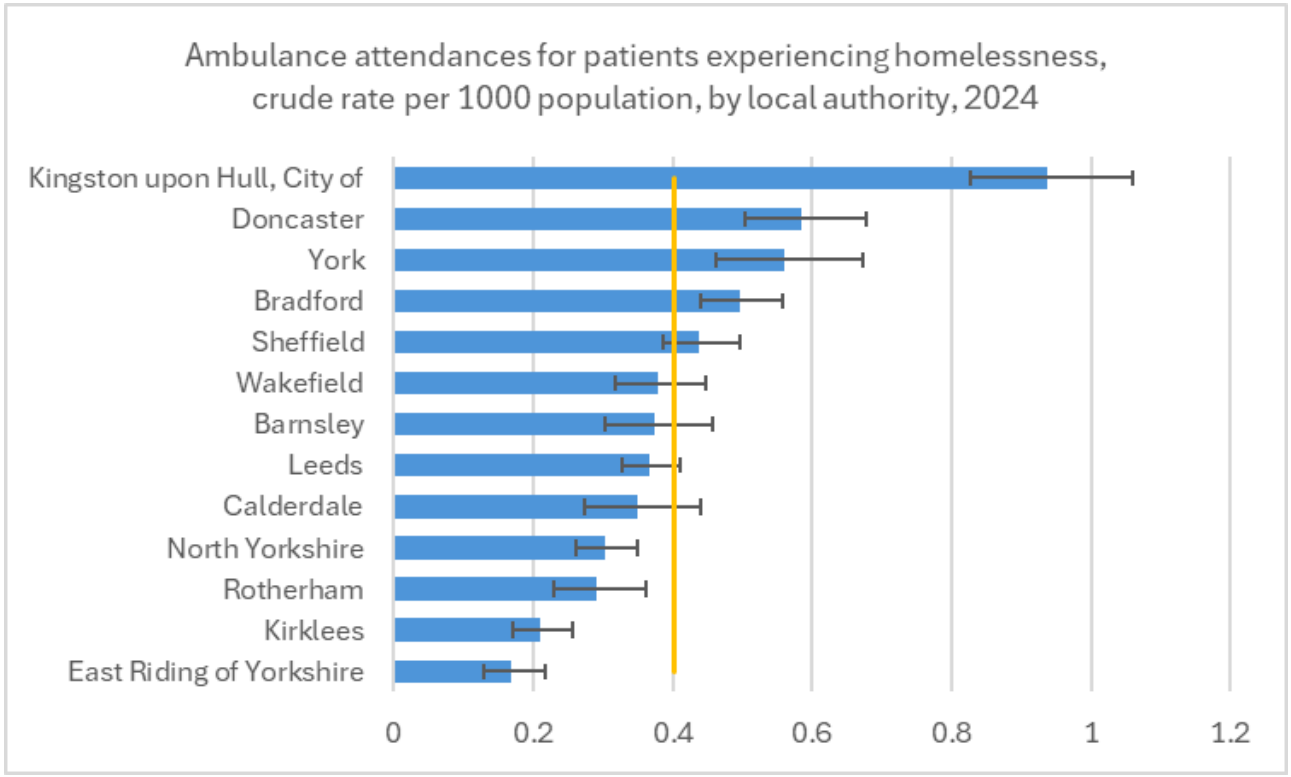
- The CMO report concluded that ‘Health data from prisons or people on probation is not currently routinely included or visible, or is of poor quality
- Calls to prisons in Yorkshire have increased by 2.5 times since 2022 – and as prison populations are published we can say that this is not because of an increase in prison populations

Prisons



- We can not only see which prisons have increased their calls but for what conditions

Homelessness



- Data on patients experiencing homelessness is not well recorded in other health datasets
- In YAS in 2024 there were 2255 calls for patients experiencing homelessness and significant variation across Yorkshire and the Humber in where we saw them

Attendances for homeless patients in Hull by LSOA

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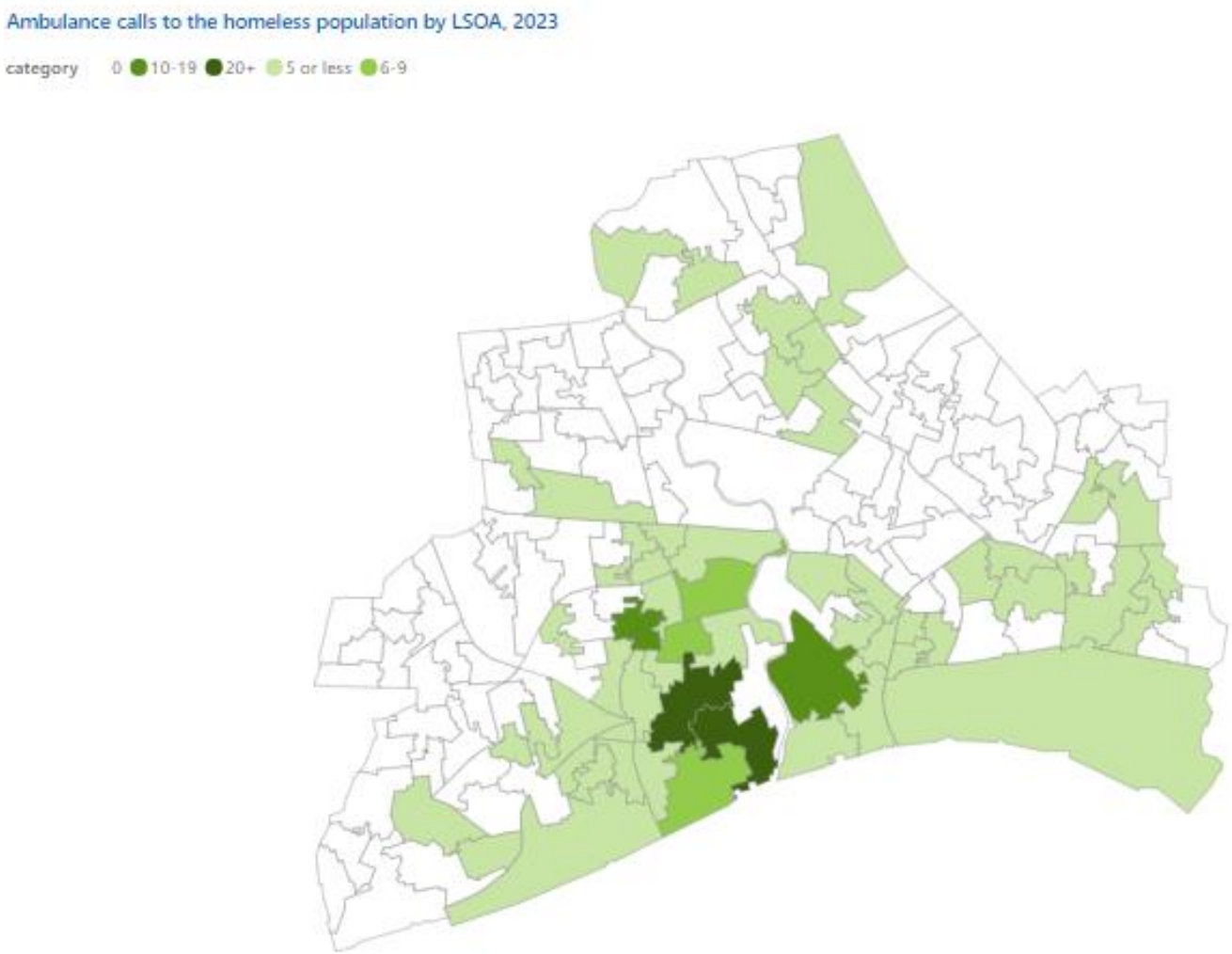

Where can we take action?

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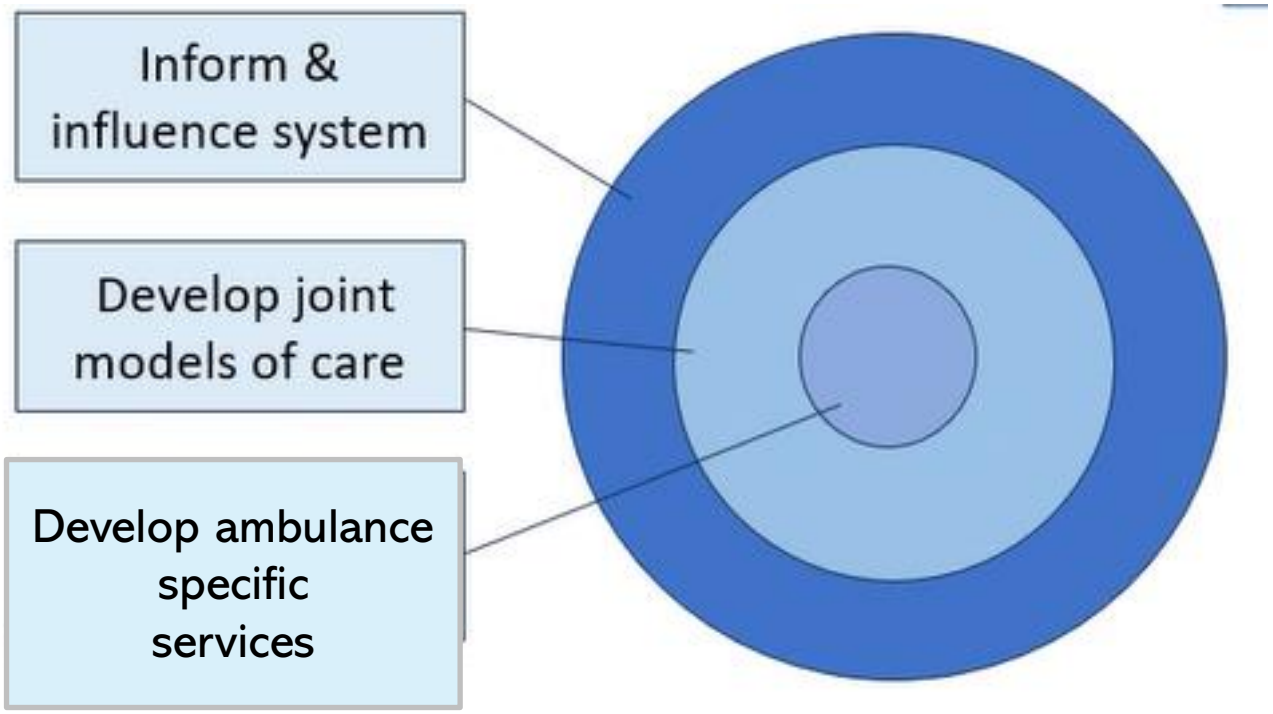

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Questions / thoughts??