



**WEST MIDLANDS**  
COMBINED AUTHORITY



Public Health  
England

# Primary Healthcare Issues amongst the Homeless in Birmingham:

## Data from a specialist homeless healthcare centre

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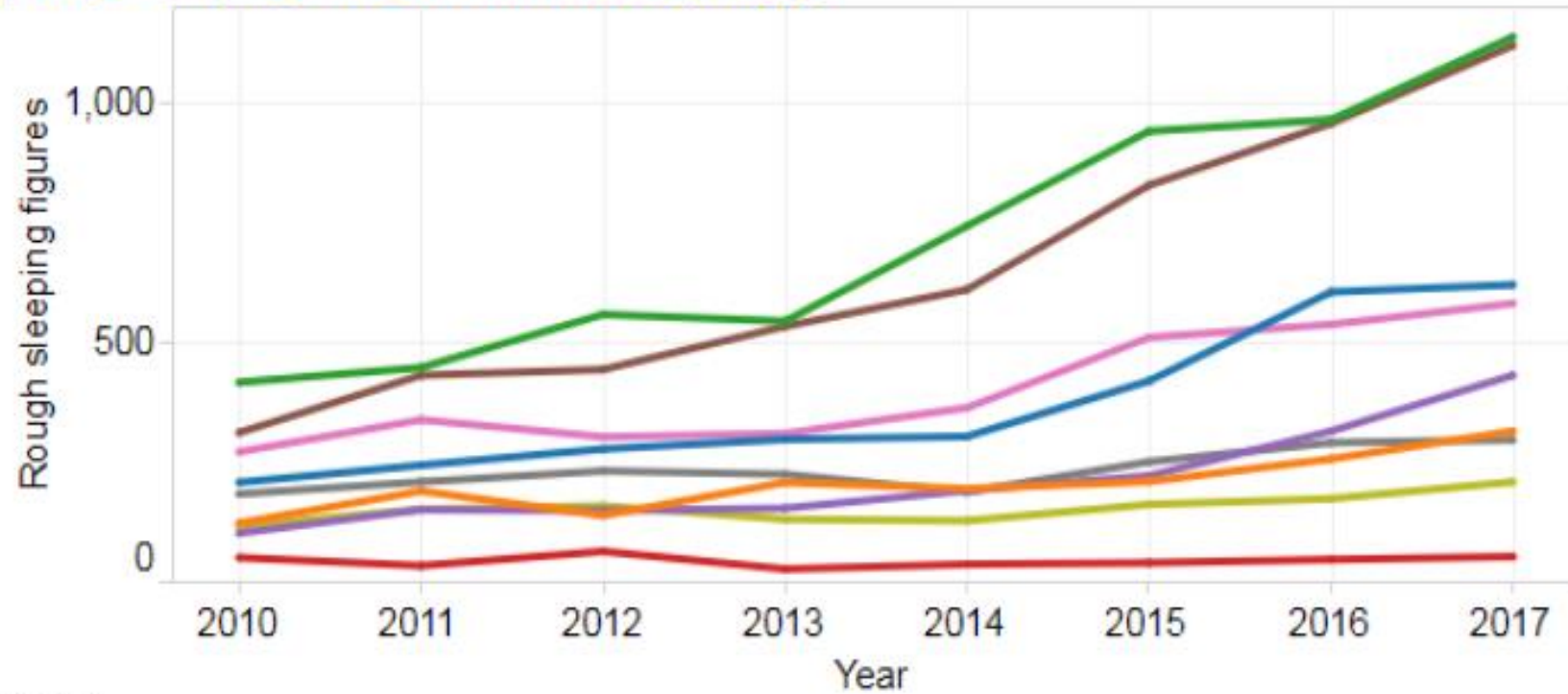
Birmingham and Solihull   
Mental Health NHS Foundation Trust



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# Background

Rough sleeping 2010-2017 for All region(s)



## REGION

■ EAST ENGLAND  
■ EAST MIDLANDS  
■ LONDON

■ NORTH EAST ENGLAND  
■ NORTH WEST ENGLAND  
■ SOUTH EAST ENGLAND

■ SOUTH WEST ENGLAND  
■ WEST MIDLANDS  
■ YORKSHIRE & THE HUMBER

Source: Homeless link



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# Background: Methodological challenges in healthcare needs assessment of the homeless

- Social disadvantage is not recorded in patient medical records and vital registrations
- Difficult to separate the homeless from the rest of the population in data from mainstream services
- Survey lends limited self reported data and often small in sample sizes, difficult to engage patients



# Taxonomy of specialist primary healthcare centre for the homeless

Types of services	Service delivered from fixed health site	Outreach clinic(s) at hostels or day centres	Service primarily for people who are homeless	Service has two or more health workers	Provides GP registration
Specialist health centre	Yes	Most services	Yes	Yes	Yes
GP practice with homeless services	Yes	Some services	No	Yes	Yes
Mobile homeless health team	No	Yes, multiple sites	Yes	Yes	Not usually
Single-handed mobile homeless nurse	No	Yes, multiple sites	Yes	No	No
Nursing service based at hostel or day centre	No	Yes, one site	Yes	Not usually	No
Volunteer health care service	No	Yes, one or multiple sites	Yes	Some services	No
Other medical / nursing arrangements	No	Yes, one site	No	Yes	Not usually

Crane et al. 2018



# Background

- Having evidence based information on the healthcare needs of the homeless population is imperative-at national and local level
- Limited health care needs assessment data from the UK. We identified eight previous studies looking into morbidity and/or mortality in the homeless
- Lack of healthcare needs assessment data in West Midlands



# International literature...

- A systematic review and meta-analysis of the morbidity and mortality amongst the socially disadvantaged in high income countries

Socially disadvantaged men and women face up to 8 and 12 times greater mortality risk than the general population respectively

Aldridge et al. 2018. The Lancet :391:0117:p241–250



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# Aim

To explore demography characteristics and primary healthcare issues amongst homeless by using routinely collected datasets from a specialist homeless healthcare centre in Birmingham



# Methods

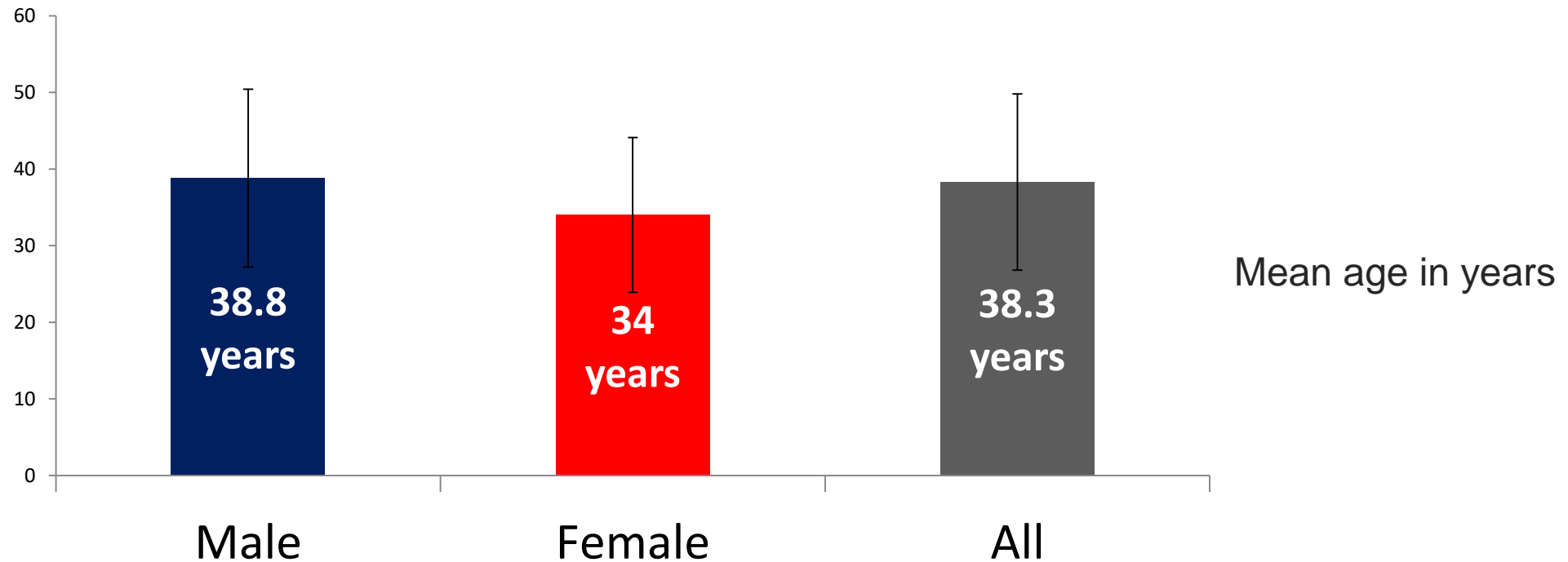
- Data collection through EMIS and QOF search
- Included all patients registered in the healthcare centre
- Demography data
- Prevalence data on 21 health conditions
- A&E attendance data



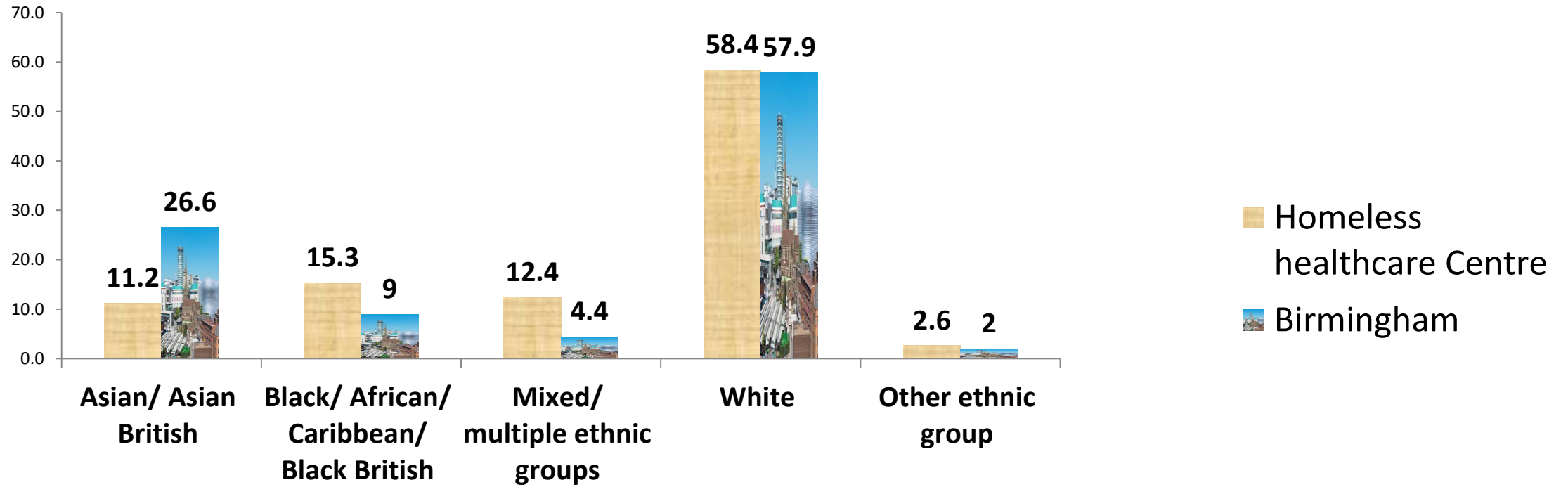


# Results: Demography characteristics

A total of 928 patients registered. *The majority were male (n=831, 89.5%)*



# Results: Ethnicity % (n=418)

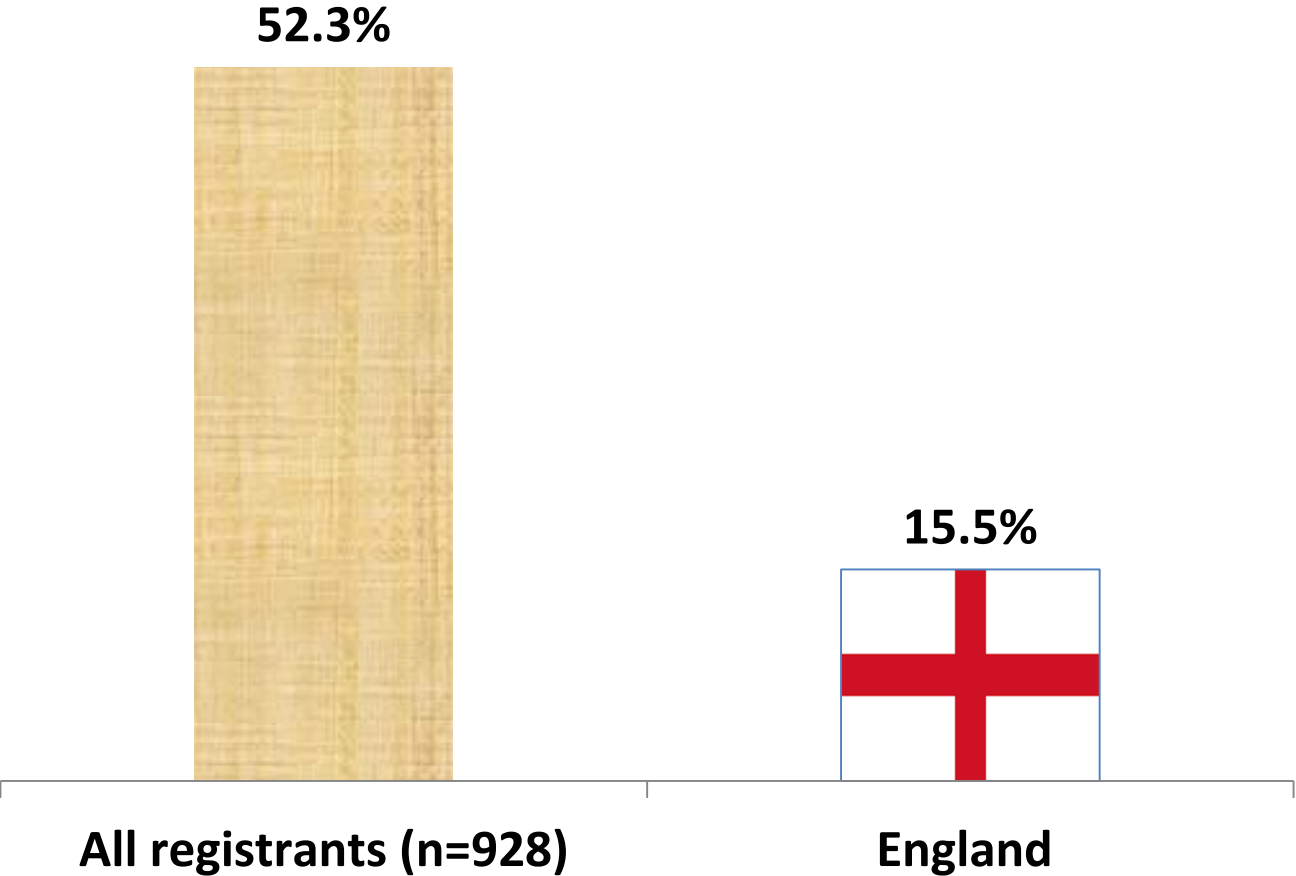


**Ethnicity data missing for 55% of patients**

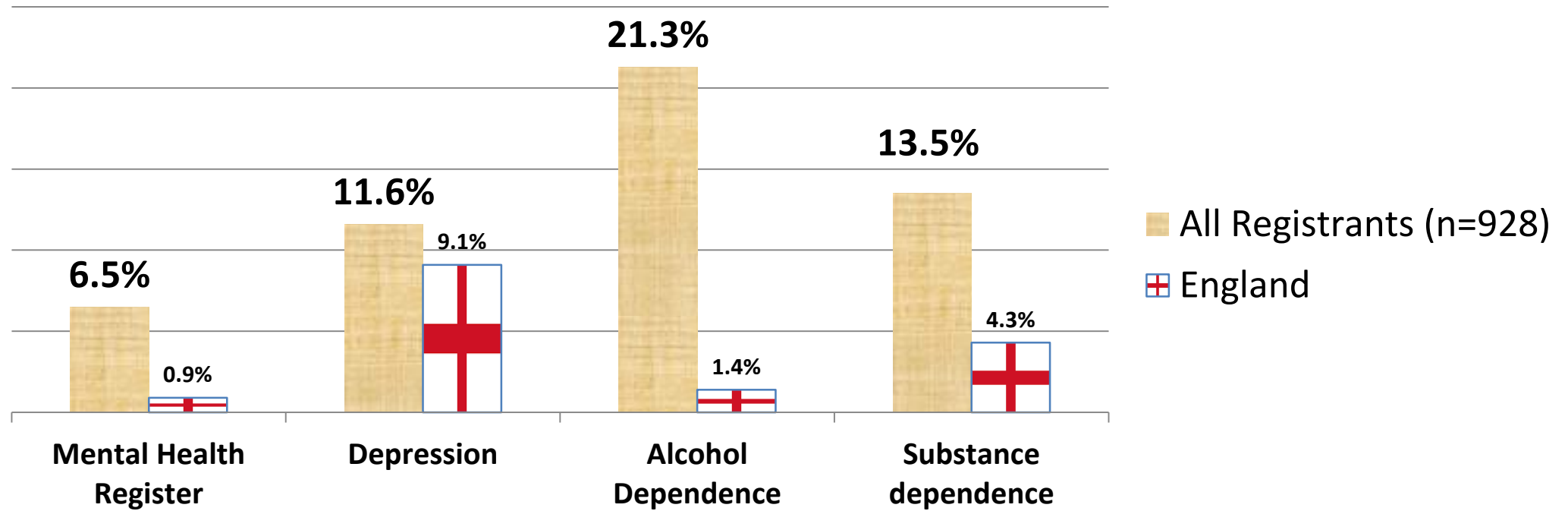
Birmingham data source: Census 2011



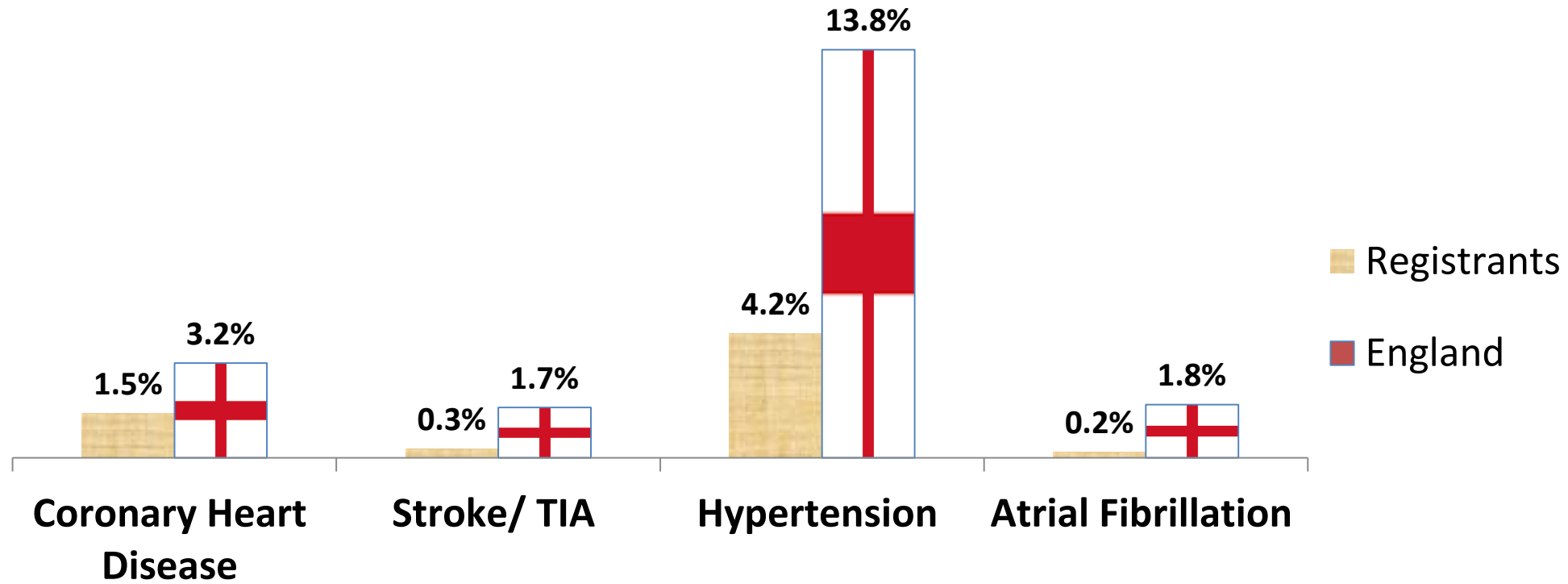
# Smokers



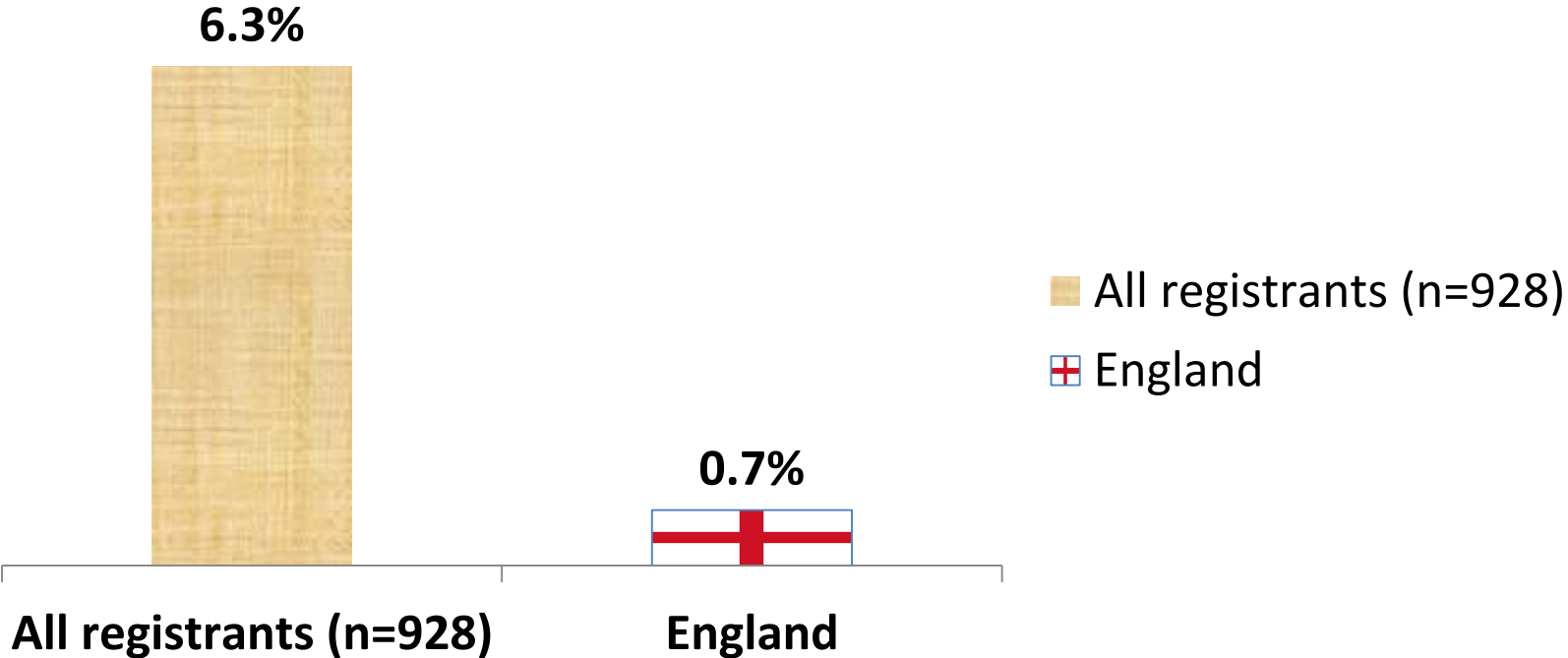
# Mental Health and substance misuse



# Prevalence: Cardiovascular diseases



# Hepatitis C



# Other health conditions...

Health conditions	Prevalence %	Prevalence rate in English general population or UK %	Prevalence data in homeless population
<b>COPD</b>	<b>1.5</b>	1.9	1.7% - Leicester 3% - Dublin 4-5% UK, Europe and US
<b>Asthma*</b>	<b>4.2</b>	5.9	16% - Leicester 21 % - Dublin
<b>Epilepsy</b>	<b>1.4</b>	0.8%	8.1% - Paris 4% - UK 6% - Canada 8%- Dublin
<b>Migraine</b>	<b>1.1</b>	1.4-15	25-36% - Canada

\*Prevalence three times as much in females than males



# Other health conditions...

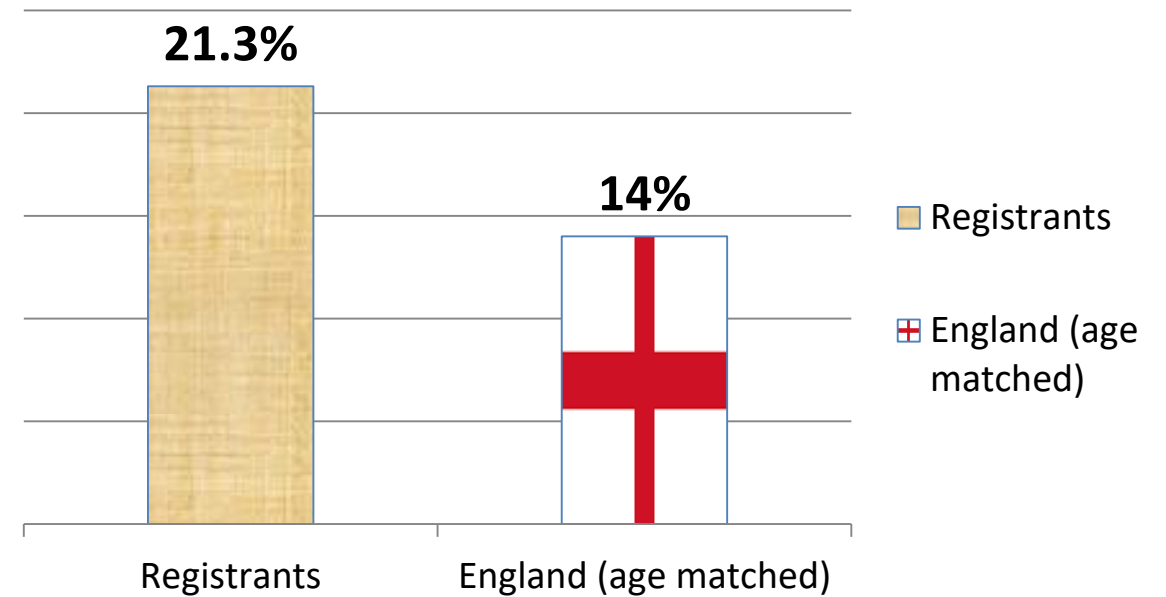
Health conditions	Prevalence %	Prevalence rate in English general population or UK	Prevalence data in homeless population
<b>Diabetes</b>	<b>2.8</b>	6.7%	8.0% - Ireland 6.1% - Paris 8.0-12.0% - USA 4% -Canada 8% - Dublin
<b>Cancer</b>	<b>0.4</b>	2.6%	3% - Dublin
<b>Learning Disabilities</b>	<b>0.3</b>	0.5	12% - England 36% - Canada 29.5% - Netherlands 39% - Japan
<b>Rheumatoid Arthritis</b>	<b>0.1</b>	0.7	6% - Dublin
<b>Leg Ulcers</b>	<b>6.5</b>	1%	23%– Dublin
<b>GI Ulcers or Bleed</b>	<b>0.6</b>	10% lifetime prevalence 0.12-15% yearly	11% - Dublin





# Multi-morbidity

Registrants with 2 or more health conditions



Number of chronic medical conditions	n(%)
None	476 (51.3)
1	254 (27.4)
2	110 (11.9)
3	56 (6.0)
4	25 (2.7)
5	6 (.6)
6	1 (.1)

Multi-morbidity was not associated with gender



# A&E attendance

- **Approximately 1 in 3; 302 (32.5%)** attended A&E in the last 12 months
- This rate nearly 60 times the rate in general population (200.2–552.7 per 100,000 population)\*
- Alcohol dependence and substance dependence were associated with A&E attendance - adjusted odds ratios 2.85 and 2.31 respectively
- A&E Attendance was not associated with gender or age

\*Source: Public Health England



# Discussion and conclusion

- High prevalence of mental health conditions, including substance and alcohol misuse- need to widen and streamline services
- High rates of co-morbidity requires diversification of expertise
- High prevalence of hepatitis C- community opportunistic screening
- High rate of A&E attendance- also linked to registrants misuse of substance and alcohol



# Future priorities

- Data likely to be an underestimation- need multiple data sources
- Need of a multi-centre study, non-registrants and non-engaging registrants
- Need to maintain longitudinal databases
- Public health interventions, particularly preventative services, can prevent multi-morbidity where such outcomes are linked to the uptake of risky behaviours
- How interventions (including social policy interventions) affect these data?



# Acknowledgements

- Public Health England and West Midlands Combined Authority
- Staff at the homeless healthcare centre in Birmingham

