

HEALTHCARE

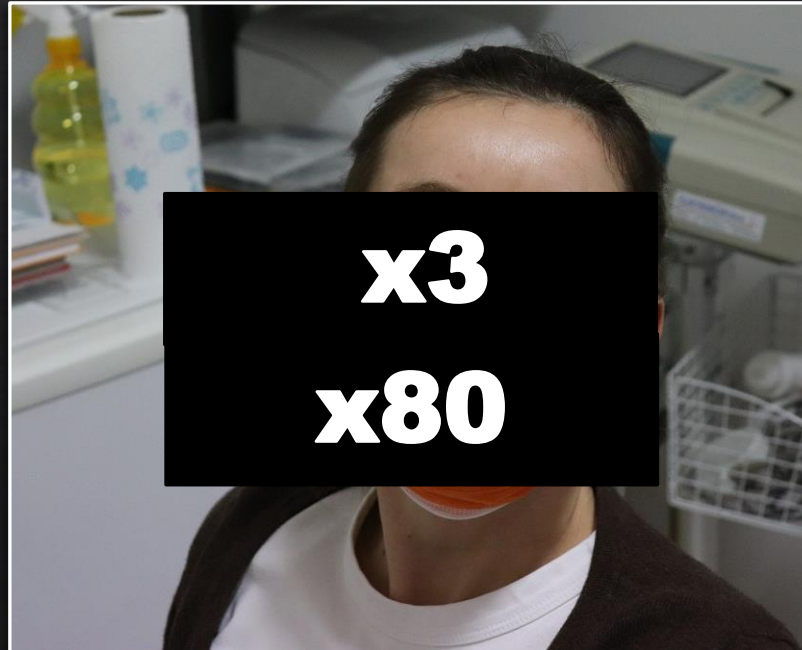
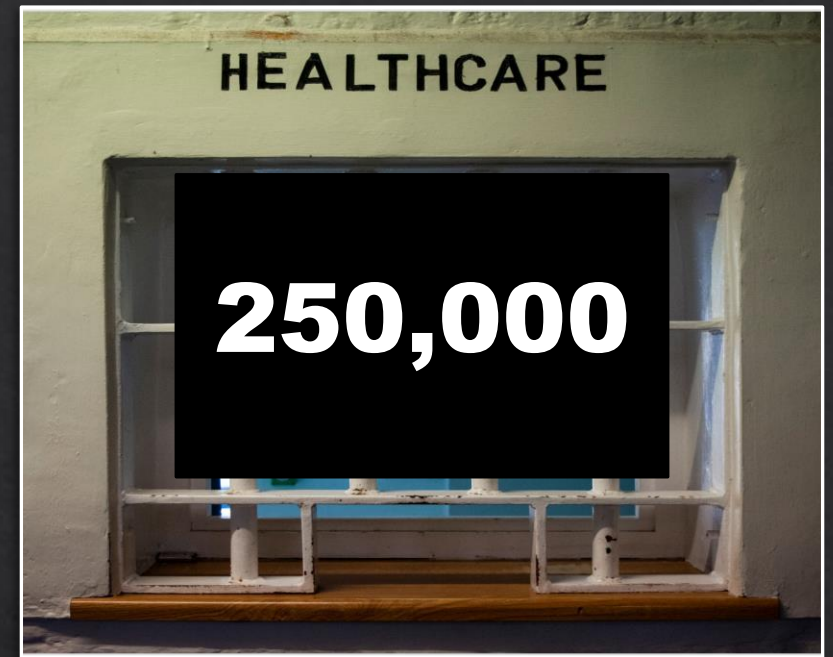
WELCOME

**Understanding and improving the quality of
primary care for people in prison:
a mixed methods study**

Tracey Farragher, Kate McLintock & Pip Hearty
on behalf of the Qual-P Team

9th RCGP SEG Health and Justice Summit
20th October 2022

Why Qual-P



HEALTHCARE

Understanding and improving the quality of primary care for people in prison: a mixed methods study

To explore gaps and variations in the quality of
primary care for people in prison and identify
quality improvement interventions to promote
high quality prison care

Core team

Laura Sheard (Co-principal Investigator)

Robbie Foy (Co-principal Investigator)

Kate McLintock (Co-investigator)

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 **Spectrum**
COMMUNITY HEALTH CIC
a spectrum of care and recovery

MANCHESTER
1824
The University of Manchester

NHS
North of England
Commissioning Support Unit

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NIHR | National Institute
for Health Research

Qual-P Objectives



1: Identify quality indicators based on national guidance which can be assessed using routinely collected data

30 indicators identified from 371 candidates



2: Explore perceived barriers to and enablers of adherence to our indicators

43 interviews with prison healthcare staff & prison leavers



3: Apply the quality indicators in assessing the provision of primary care in prisons

13 prisons served by Spectrum over 2017-20, including up to 25,811 people in prison



4: Integrate findings from 1-3, select priorities for improvement, and identify quality improvement strategies that can be monitored by our indicators

Series of workshops

WP 3 Methods



Operationalise quality indicator definitions – extract from Spectrum

Sample of each indicator, reviewed by Team

		Number Eligible	Number done elsewhere	Number declined	Number achieve QI (%)
Cardiovascular Disease	Atrial fibrillation stroke risk				
	Atrial fibrillation treatment				
	Blood pressure control in patients aged 79 years or under				
	Blood pressure control in patients aged 80 years or over				
	CHD treatment				
	Heart failure 1 treatment				
	Heart failure 2 treatments				
	Myocardial infarction secondary prevention				
	Stroke treatment				
	Accept opt out DBST				
	Hepatitis B vaccination				
	Influenza immunisation				
Diabetes, Asthma & Epilepsy Care	Asthma review				
	Blood pressure control in diabetes				
	Diabetes glycaemic control frailty				
	Diabetes glycaemic control				
	Processes of care for diabetes				
	Treated epilepsy seizure free				
Mental health	Antipsychotic monitoring M2				
	Dementia records various				
	Mental state exam				
	Polypharmacy				
Prison specific	Consent to transfer medical records				
	Medicine reconciliation				
	Opioid and gabapentinoid prescribing				
Screening	Abdominal aortic aneurysm (AAA) screening				
	Breast cancer screening				
	Cervical screening aged 25-49				
	Cervical screening aged 50-64				
	NHS health checks				

WP 3 Methods



Operationalise quality indicator definitions – extract from Spectrum

Sample of each indicator, reviewed by Team



Descriptive analysis

By Prison, Prison category, Sentence Status, Gender, Age and Length of Stay

Summaries of Indicators - as at 16/04/2021

Indicator	Number and percentage of new receptions accepting the DBST						Community achievement 2019/20 (%): NA
ID1	Domain: Infectious disease						
Variable	Population	Eligible ¹ (% popIn)	Satisfy ² (% eligible)	Elsewhere ³ (% eligible)	Achieve ⁴ (% eligible)		
Year							
2017/18	21,677	13,072 (60.3)	81 (0.6)	64 (0.5)	145 (1.1)		
2018/19	22,099	12,401 (56.1)	3,436 (27.7)	337 (2.7)	3,773 (30.4)		
2019/20	25,811	12,606 (48.8)	4,711 (37.4)	942 (7.5)	5,653 (44.8)		

Descriptive analysis

- By Prison, Prison category, Sentence Status, Gender, Age and Length of Stay
- Reviewed/sense check by team and queries raised with Stephen

WP 3 Methods



Operationalise quality indicator definitions – extract from Spectrum

Sample of each indicator, reviewed by Team



Descriptive analysis

By Prison, Prison category, Sentence Status, Gender, Age and Length of Stay



Model of indicators

By Prison, (Prison category), Sentence Status, Gender, Age and Length of Stay

Summaries of Indicators - as at 30/04/2021

Indicator	<i>Number and percentage of new receptions accepting the DBST</i>					
ID1	Domain: Infectious disease					
Variable	Univariate		Multivariable			
	Odds Ratio (OR) of achieving indicator	(95% CI) of OR	OR	(95% CI)	Probability of achieving indicator	(95% CI) of probability
Year						
2017/18 (comparator)	1.0	-	1.0	-	0.01	(0.01, 0.01)
2018/19	38.99	(32.95, 46.12)	59.44	(50.05, 70.59)	0.30	(0.3, 0.31)
2019/20	72.48	(61.31, 85.69)	146.32	(122.93, 174.17)	0.46	(0.45, 0.47)

Model of indicators

- Multi-level logistic regression of achievement of QI – univariate and multivariable
- Odds Ratios and Probability of Achievement
- By Prison, (Prison category), Sentence Status, Gender, Age and Length of Stay

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Summary of Quality Indicators

Highlights from analysis of adherence to indicators

*Selected on basis of one or more of: most scope for
overall improvement across all prisons; highest
variations between prisons; or evidence of
inequalities by personal characteristics*

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National Institute
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Kate McLintock

KEY TO INFOGRAPHIC

Indicator description



**Variation between
men and women**



Variation by age



**Variation by
ethnicity**



**Variation between
prisons**



**Variation by
security category**



**Variation by
length of stay**

**Number of
people eligible**

eligible

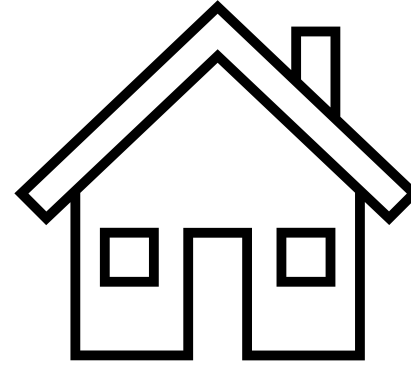
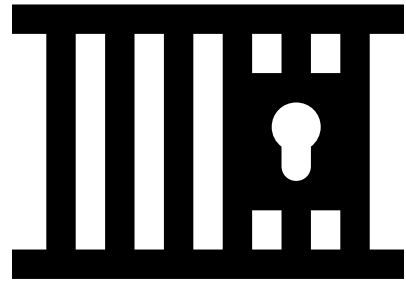


**Achievement in
prison**

achievement



**Achievement in
the community**



Examples of scope for improvement



The percentage of people with coronary heart disease, stroke or transient ischemic attack, diabetes and/or chronic obstructive pulmonary disease who have had **'flu vaccination** in the preceding 1 August and 31 March



no difference



no difference



**less likely:
Black/Black
British,
Chinese/Other**



18-fold variation



**more likely: A/B

less likely: B, D,
YOI & Closed**



**less likely:
shorter stay

more likely:
longer stay**

1,752

eligible



44.9%

achievement



70%



The percentage of people on the **diabetes** register, (a) who have had a blood pressure reading recorded in the last 12 months, and (b) in whom the last **blood pressure** reading (measured in the preceding 12 months) is 140/80 mmHg or less



no difference



**more likely:
20-39, 80-89 years**



**less likely: Asian/
Asian British**



3-fold variation



**more likely: A/B,
C, D, Closed**



**more likely:
longer stay**

770

eligible



33.9%

achievement



68%



The percentage of people on the asthma register, who have had an **asthma review** in the preceding 12 months that includes an assessment of asthma control using the 3 RCP questions



no difference



more likely: 50-79 years



**more likely:
Asian/Asian
British,
Chinese/Other**



11-fold variation



**more likely : A/B
less likely: all
other categories**



**less likely: shorter
stay
more likely: longer
stay**

4,459

eligible

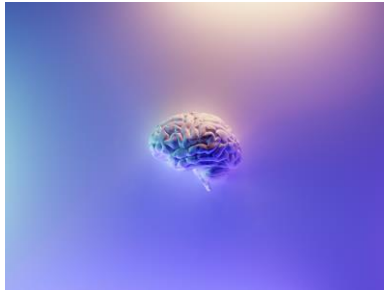


3.1%

achievement



67.14%



The percentage of people with a coded diagnosis of epilepsy and who have been prescribed drug treatment for epilepsy, (a) who have had an **epilepsy annual review** in the past 12 months, (b) been coded as **seizure free** in the last 12 months



too small



too small



too small



too small



too small



too small

419

eligible



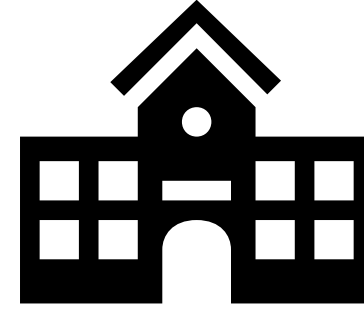
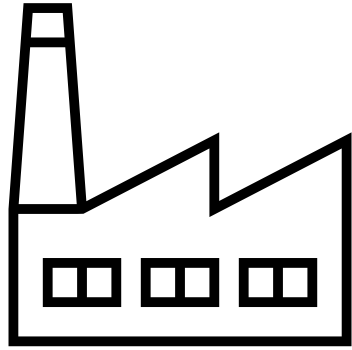
AR 1.2%

SF 0.2%

achievement



SF 57.5%



Examples of variation across prisons



The percentage of people with a record of a **myocardial infarction** who are prescribed an **ACE-I, ARB, anti-platelet therapy, beta-blocker** or a **statin**



more likely: men



less likely: 20-49 years



no difference



**statin 74,000-fold
ACE-I 13m-fold**



**less likely:
shorter stay**

492

eligible



**All 0%
statin 70.3%
ACE-I 42.1%**
achievement



**statin
70.57%**



The percentage of people

(a) out of the whole prison population, prescribed

(i) any opioid

(ii) any strong opioid

(iii) benzodiazepines AND any opioid

(b) with any mental health diagnosis, prescribed any opioid

(c) out of the whole prison population with NO coded diagnosis of neuropathic pain, prescribed pregabalin or gabapentin

...during an 8-week period

Opioid prescribing



The percentage of people
(a) out of the whole prison population, prescribed
(i) **any opioid** ...during an 8-week period



no difference



**less likely: ≤ 29
more likely: 40-49**



**less likely: Mixed,
Asian/Asian British,
Black/Black British,
Chinese/Other**



5-fold variation



**less likely:
A/B, B, D**



**less likely:
shorter stay**

**more likely:
longer stay**

25,811

eligible



11.5%

achievement



**12.8%
(estimate)**



The percentage of people
(a) out of the whole prison population, prescribed
(ii) **any strong opioid** ...during an 8-week
period

no difference

less likely: ≤29
more likely: 40-59

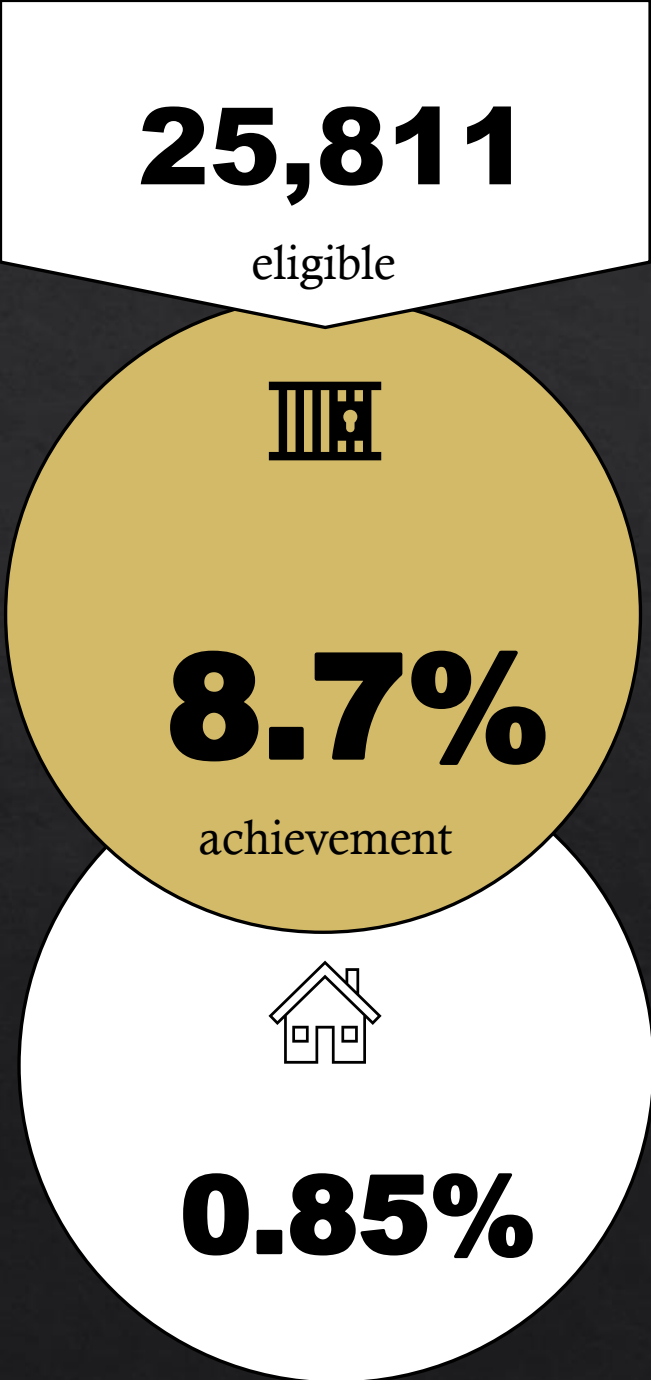
**less likely: Mixed,
Asian/Asian British,
Black/Black British,
Chinese/Other**

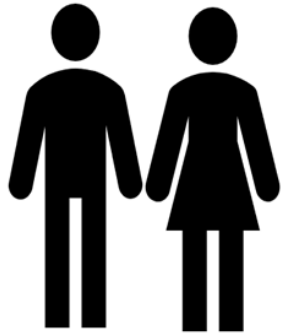
4-fold variation

**less likely:
A/B, B, C, D**

**less likely:
shorter stay**

**more likely:
longer stay**

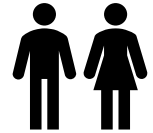




**Examples of variations by
personal characteristics**



The percentage of **new receptions** who have been **asked for consent to transfer medical records** from their GP to the prison healthcare service in the past 12 months



less likely: men



less likely: 50-69 years



less likely: Mixed, Asian/Asian British, Black/Black British, Chinese/Other



337-fold variation



more likely: YOI, Closed

less likely: A/B, B, D



less likely: shorter stay

more likely: longer stay

17,957

eligible



70.4%

achievement





The percentage of people **prescribed three or more psychotropic drugs** (antipsychotics, sedative antidepressants, hypnotics and anxiolytics, pregabalin or gabapentin, opioids) at the same time during an **8-week period**



no difference



less likely: 20-29



**less likely:
Asian/Asian
British**



≥3 12-fold

≥4 33-fold



**more likely:
Closed**

less likely: D



**less likely:
shorter stay**

**more likely:
longer stay**

25,811

eligible

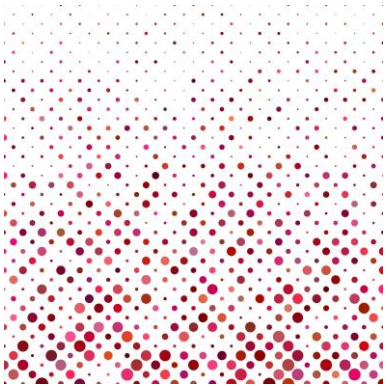


3/+ 0.8%

4/+ 0.4%

achievement





The percentage of **new receptions** who have had **dried blood spot testing** in the past twelve months



no difference



no difference



no difference



**169-fold
variation**



less likely: A/B, B

**more likely: C, D,
YOI, Closed**



**less likely:
shorter stay**

**more likely:
longer stay**

12,606

eligible



44.8%

achievement



Summary

Variations across indicators, prisons and prisoner characteristics widespread, even after 'fair comparisons,' but not surprising

Straight comparisons between prison and community 'unfair'

Much scope for improvement – perhaps with emphasis on what can be realistically achieved

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Q & A

Pip Hearty

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