

Screening for suicide risk in prison

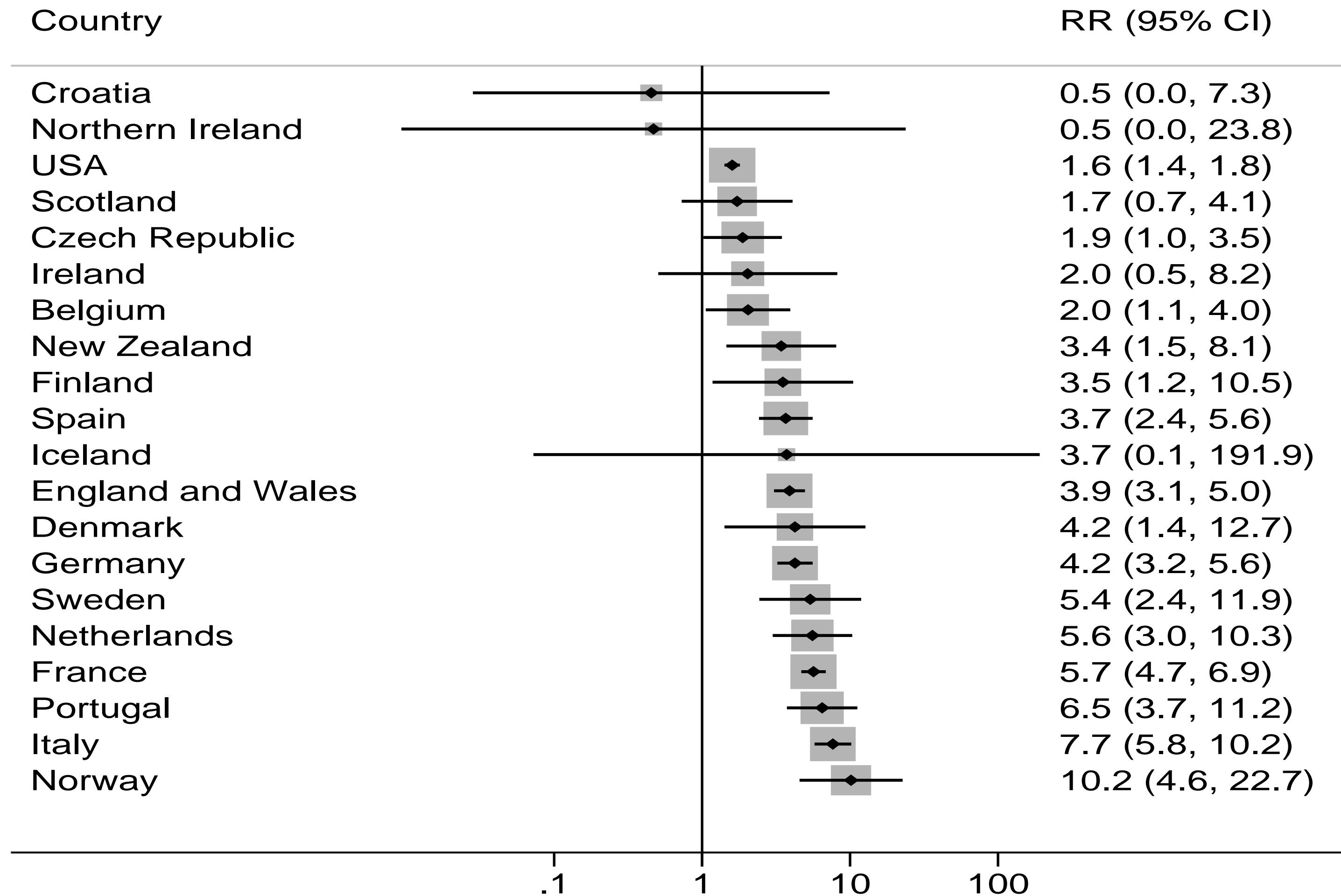
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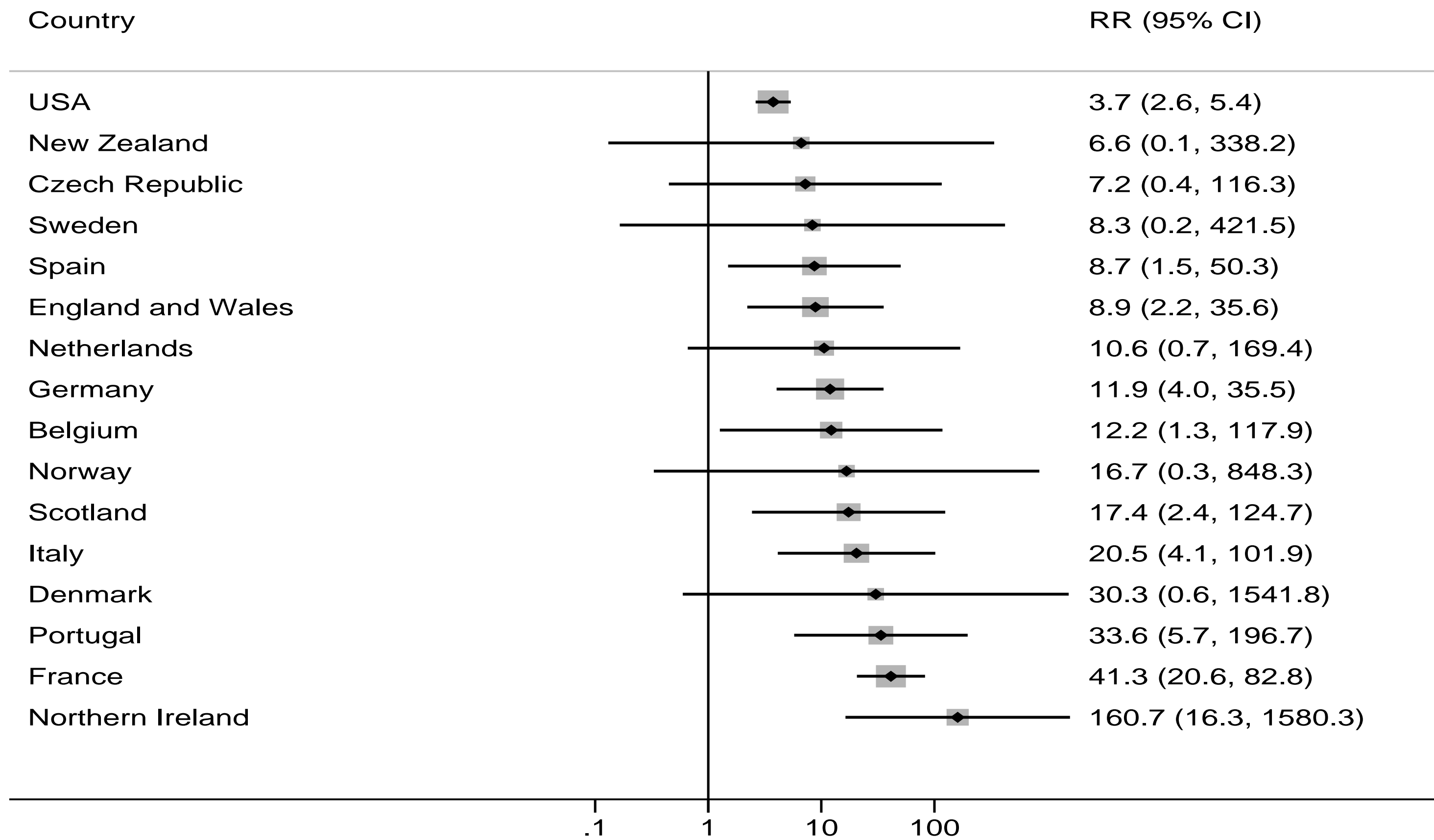
Overview

- Epidemiology of suicide in prison
- Development of a screening tool
- External validation of the tool (results not published here)
- Management of suicide risk

Suicide in male prisoners



Suicide in female prisoners



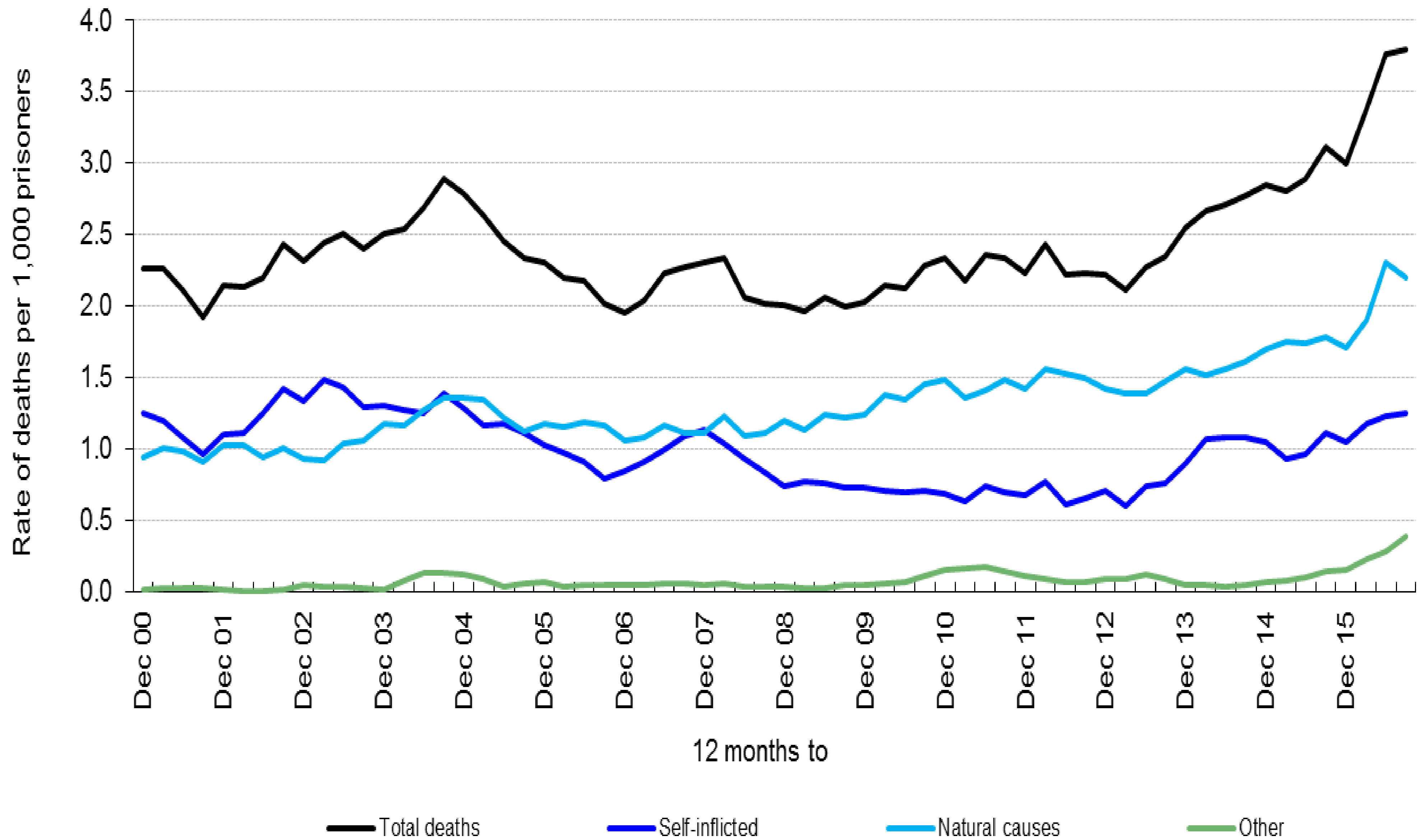


Table 1. Risk Factors Associated With Suicide in Prisoners (ranked in order of effect size)

Risk Factor	Study Group ^a	Number of Studies	Number of Cases		Number of Controls		Pooled Estimate (Odds Ratio)	95% CI	z Statistic	p Value
			Total	Exposed to Risk Factor	Total	Exposed to Risk Factor				
Suicidal ideation	1	2	250	93	401	15	15.2	8.5 to 27.2	9.2	< .001
Single cell occupancy	1	2	217	153	309	64	9.1	6.1 to 13.5	10.8	< .001
History of attempted suicide	1	4	400	198	750	81	8.4	6.2 to 11.4	13.5	< .001
Current psychiatric diagnosis ^b	1	4	423	175	603	63	5.9	2.3 to 15.4	3.6	< .001
Psychotropic medication	1	2	264	106	427	59	4.2	2.9 to 6.0	7.5	< .001
Detainee/remand status	1 and 2	11	1593	867	1789	485	4.1	3.5 to 4.8	17.5	< .001
Life sentence ^b	2	6	562	114	562	23	3.9	1.1 to 13.3	2.2	.03
Murder/manslaughter offense ^b	1 and 2	10	605	121	795	53	3.6	1.6 to 8.3	3.0	.003
Violent offense ^{b,c}	1 and 2	5	418	121	572	58	3.5	1.4 to 9.0	2.6	< .009
Alcohol use problems	1	2	158	61	340	54	3.0	1.9 to 4.6	4.9	< .001
White race/ethnicity	1 and 2	16	2245	1606	2585	1510	1.9	1.7 to 2.2	9.6	< .001
Male gender	1 and 2	17	2343	2264	2526	2371	1.9	1.4 to 2.5	27.1	< .001

Methods

Two studies of near-lethal attempts

MALES: 60 cases and 60 controls

FEMALES: 60 cases and 60 controls

- Aged 18 years and over
- Within a month of the act

Methods – information collected

Before imprisonment

- Family history
- Early and previous life events
- Criminal history
- Psychiatric history

In prison

- Psychiatric disorder
- Psychological and personality factors
- Social and environmental factors

Suicide screen

- 11 items – categorical
- Different items for men and women
- Simple, scalable model
- Draws on evidence from systematic review and research on near-lethal self harm in prison
- Based on discovery sample (near-lethal self harm studies), cut off of 5 had highest combination of sensitivity and specificity
- Tested in external validation (for outcome of any self harm within 6 months) in new project funded by NHS Innovations

SUICIDE SCREENING - MALE PRISONERS	YES	NO	D/K
<p>1. Are you currently diagnosed with an emotional or psychiatric disorder or are you currently being prescribed medication for emotional, psychological or psychiatric problems?</p> <p><i>Notes: Include any diagnosis/medication from a medical health professional apart from drug or alcohol problems. Do not include self-diagnosis.</i></p>	1	0	
<p>2. Have you ever had psychiatric treatment by a medical health professional?</p> <p><i>Notes: This includes inpatient or outpatient treatment, or treatment from a GP, psychologist, community psychiatric nurse or other person responsible for your mental health.</i></p>	1	0	
<p>3. Have you ever attempted suicide or self-harmed outside prison?</p> <p><i>Notes: Include any act of self-harm or attempted suicide no matter what the self-reported motivation or method.</i></p>	1	0	
<p>4. Have you ever attempted suicide or self-harmed inside prison?</p> <p><i>Notes: Include any act of self-harm or attempted suicide no matter what the self-reported motivation or method.</i></p>	1	0	
<p>5. Do you have current thoughts about wanting to harm yourself?</p> <p><i>Notes: Include any thoughts of wanting to harm oneself irrespective of the motivation.</i></p>	1	0	
<p>6. Have any of your family died by suicide or harmed themselves?</p>	1	0	

Methods

Population and data sources

DATA

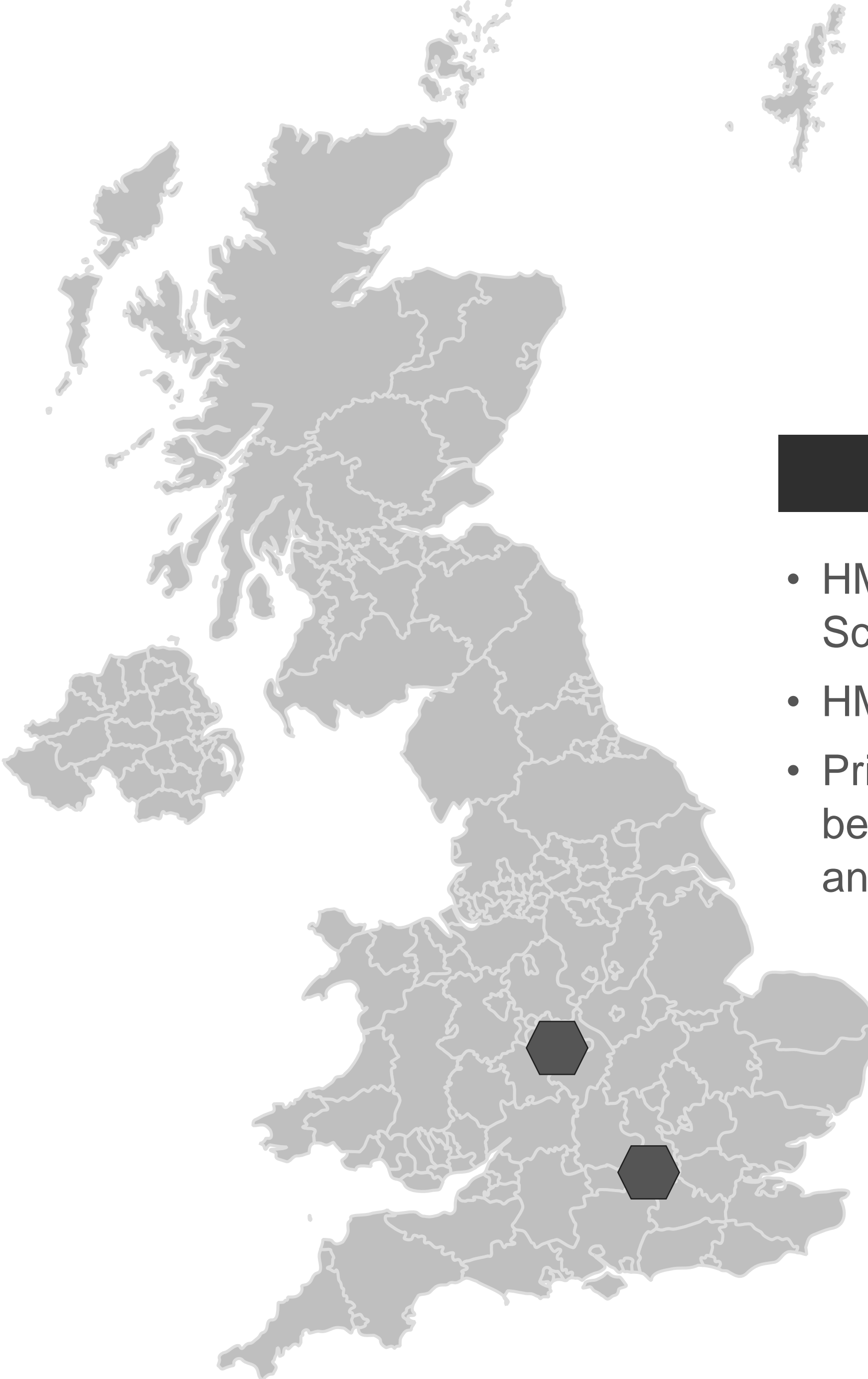
- HMP Wormwood Scrubs
- HMP Woodhill
- Prisoners screened between November and May 2016

SCREENING

- 11-item screening tool based on systematic review

FOLLOW UP

- Incident of self-harm within 6 months of screening
- All analyses pre-specified



Methods

Samples & Analyses

SAMPLE

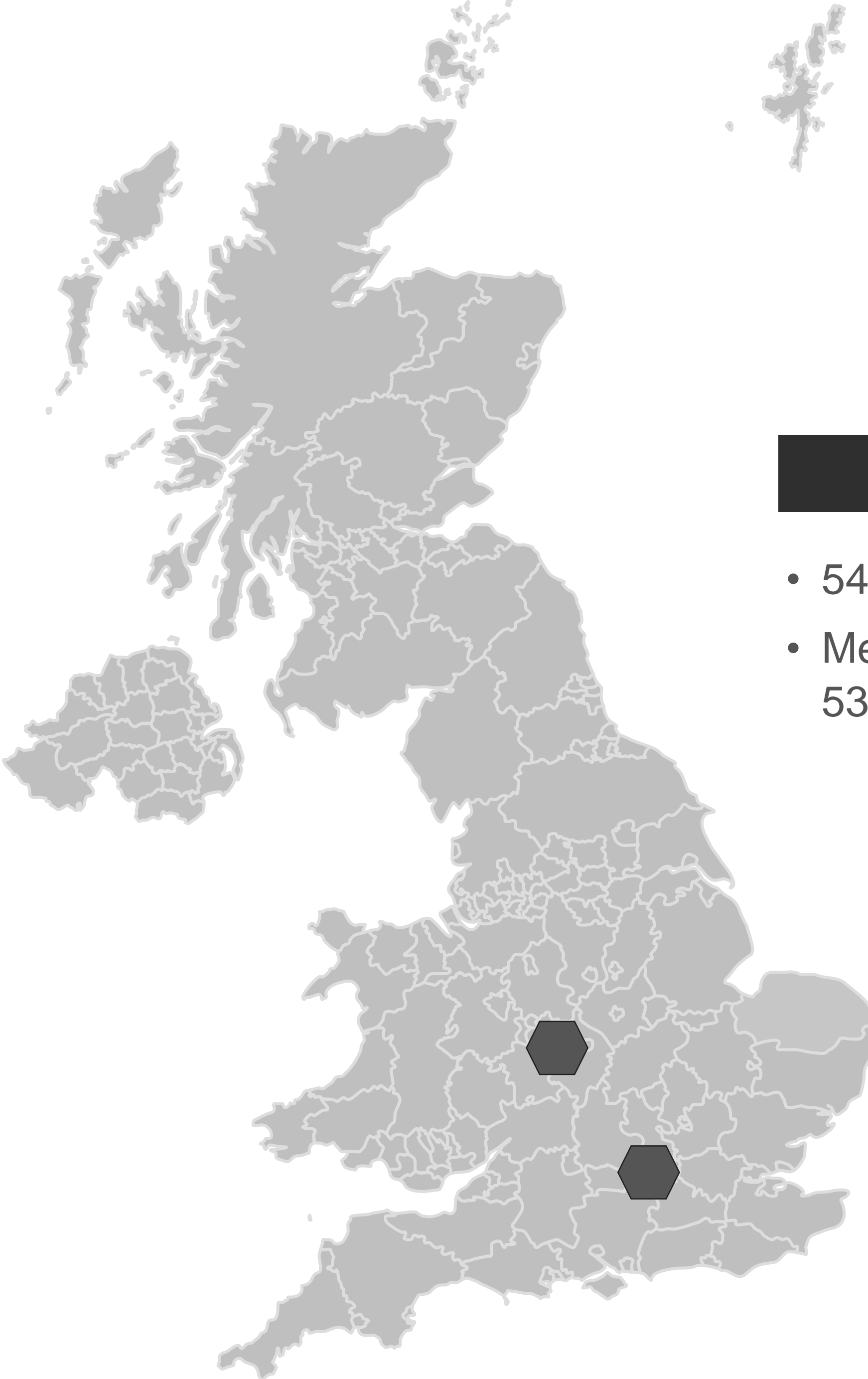
- 542 prisoners
- Median follow-up of 53 days (IQR 22-118)

OUTCOMES

- 17 individuals with incident of self-harm within 6 months

VALIDATION

- Low / High 5+
- Sensitivity/Specificity
- PPV/NPV
- AUC
- Brier score



- Results (not published yet)

Conclusions

- This tool has utility to screen out people
- Screening for suicide risk is possible but good methods matter
- Good methods – prespecified protocol, testing individual factors, weighting them, externally validating on large enough sample
- Focus on high risk population – e.g. those at the end of an ACCT

Population approaches

- Reducing access to means of self-harm and suicide
- Improving training for prison officers
- Prisons should become more research-friendly environments

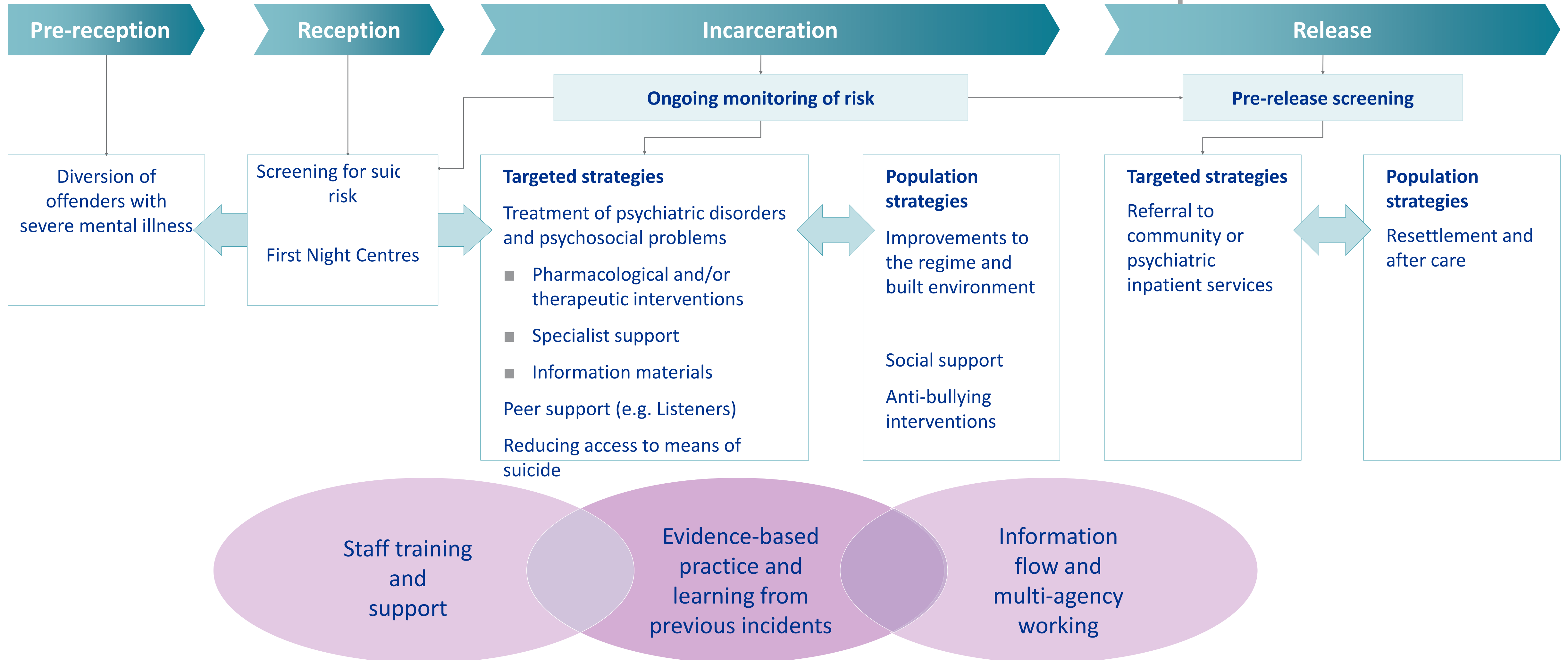
Targeted approaches

- Repetitive self-harmers (especially women)
- Ensuring mental health input into high risk prisoners
- Improving detection and treatment of mental illness (especially depression, PTSD, comorbidity)
- Psychological treatments for those with histories of severe trauma and abuse
- Prison-specific treatment guidelines

Other stages of the pathway

- Before prison – screening, sentencing policy
- After prison – improving links with community mental health services

Prevention of suicidal behaviour in prisoners



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Some references

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