the centre for suicide prevention

the national confidential inquiry into suicide and homicide by people with mental illness

Quality Improvement for Suicide Prevention: the evidence

Professor Louis Appleby

Professor Nav Kapur

The National Confidential Inquiry into Suicide and Safety in Mental Health

30 April 2018

HQIP Healthcare Quality Improvement Partnership

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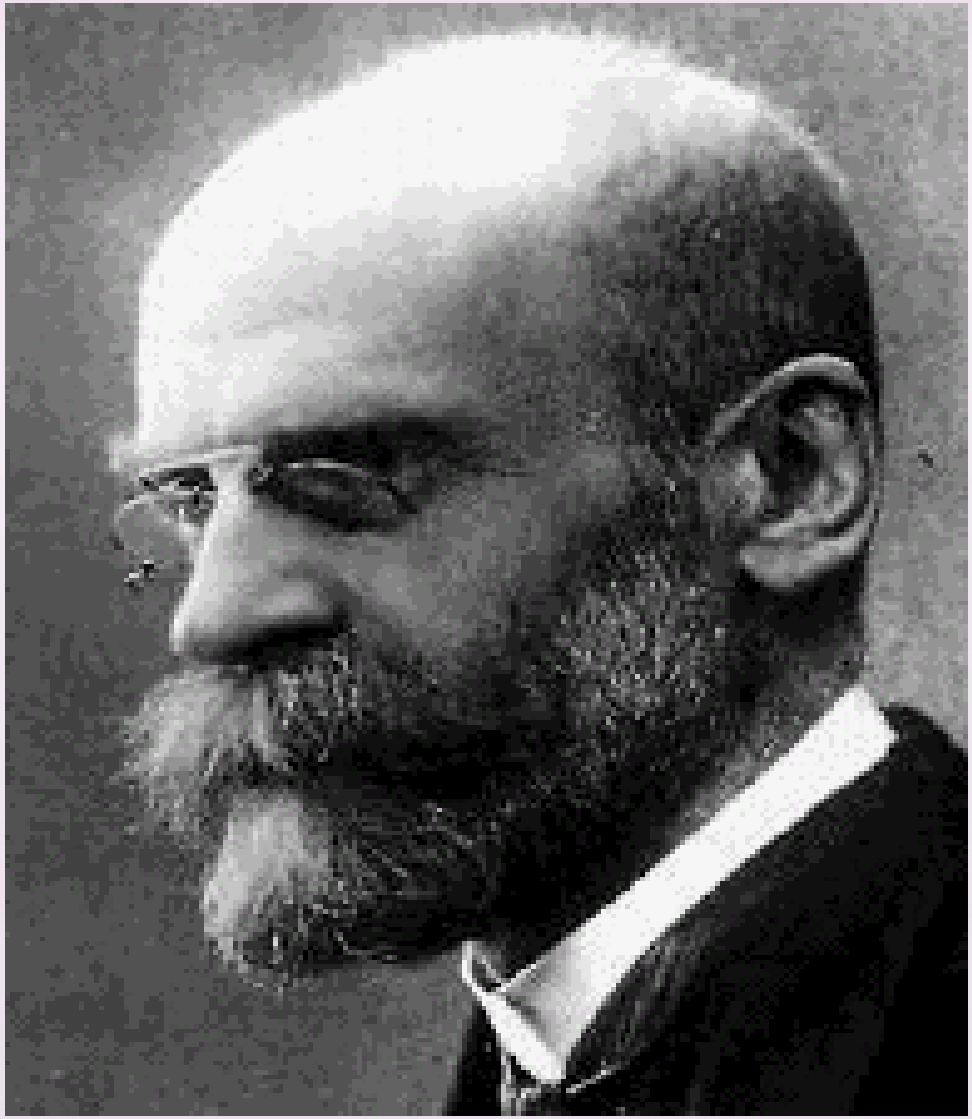
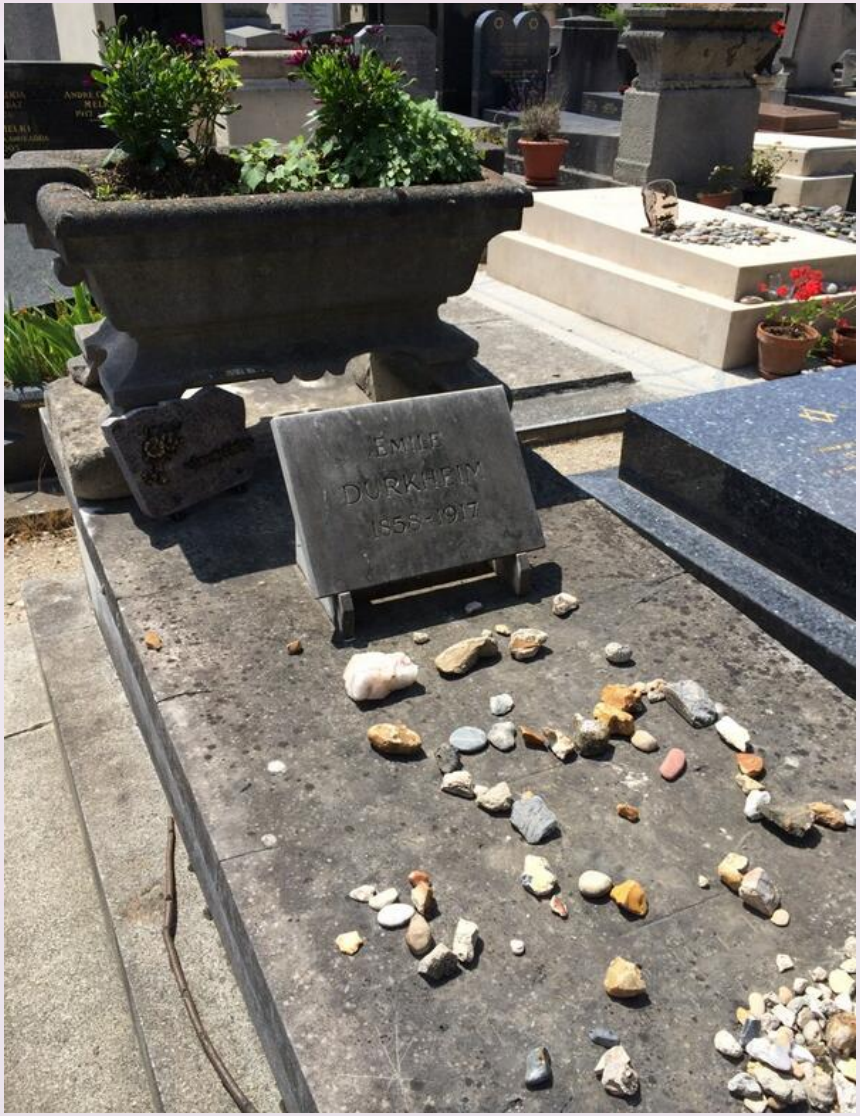
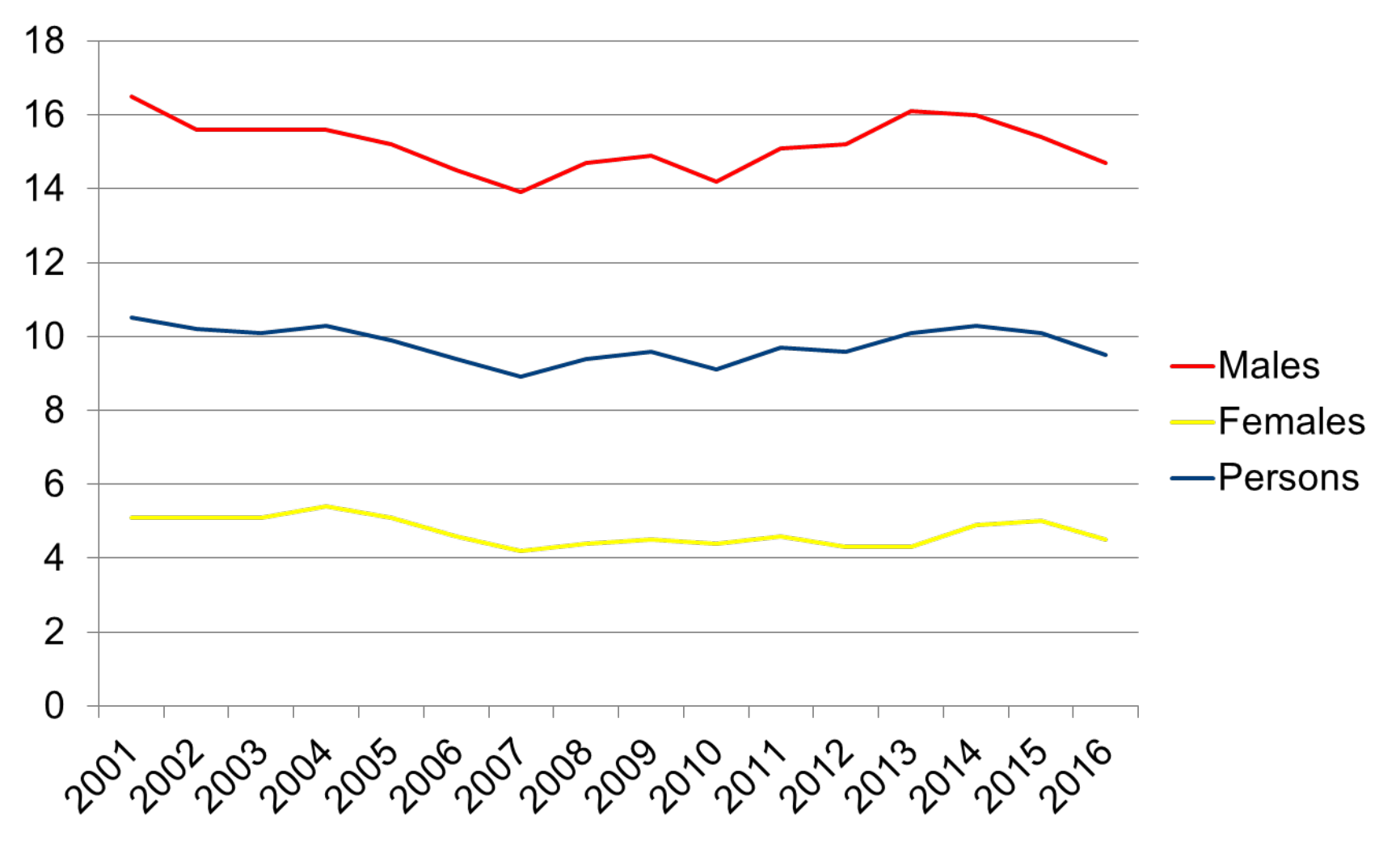
Emile Durkheim 1858-1917





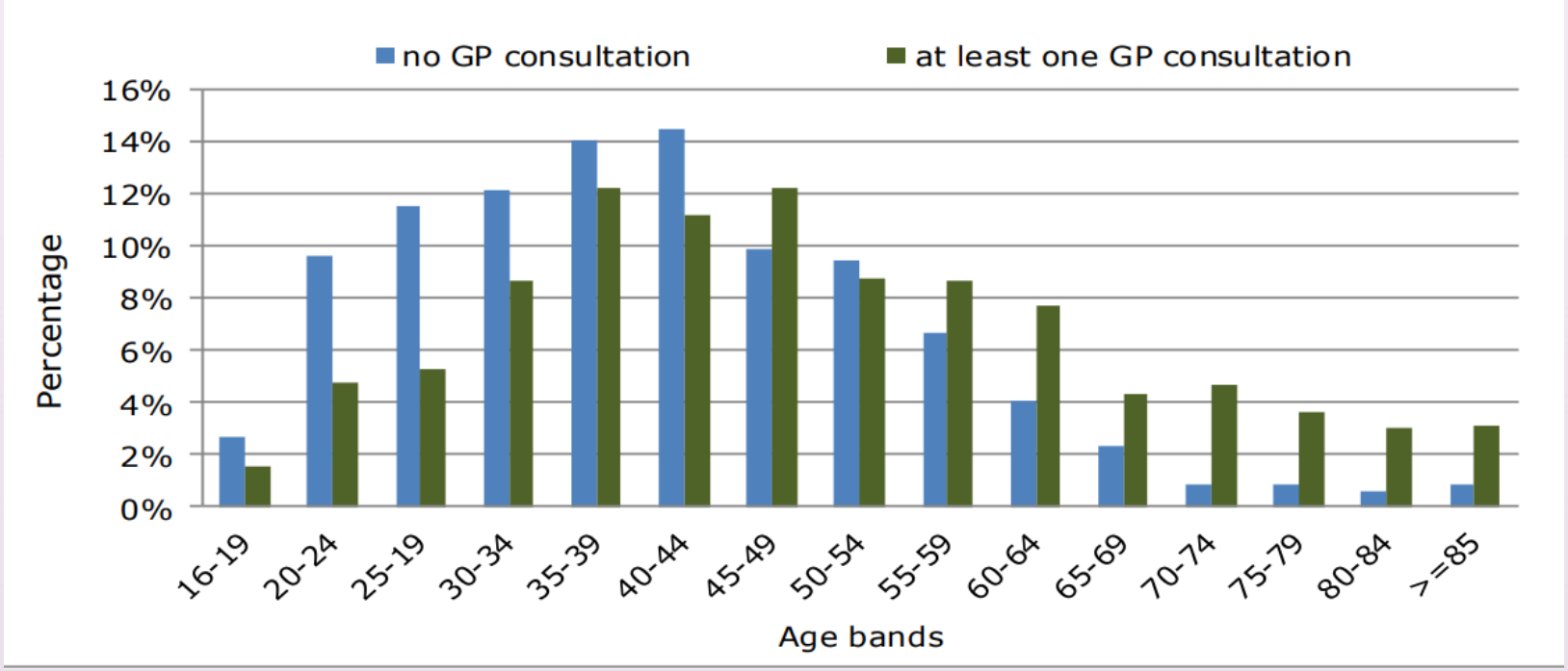
Age-standardised suicide rates (2001-2016)



Source: ONS

Contact with NHS in year before suicide

- Around 1/3 have contact with mental health services
- Additional 1/3 have contact with primary care only
- Around 1/3 have no contact, mainly young & male



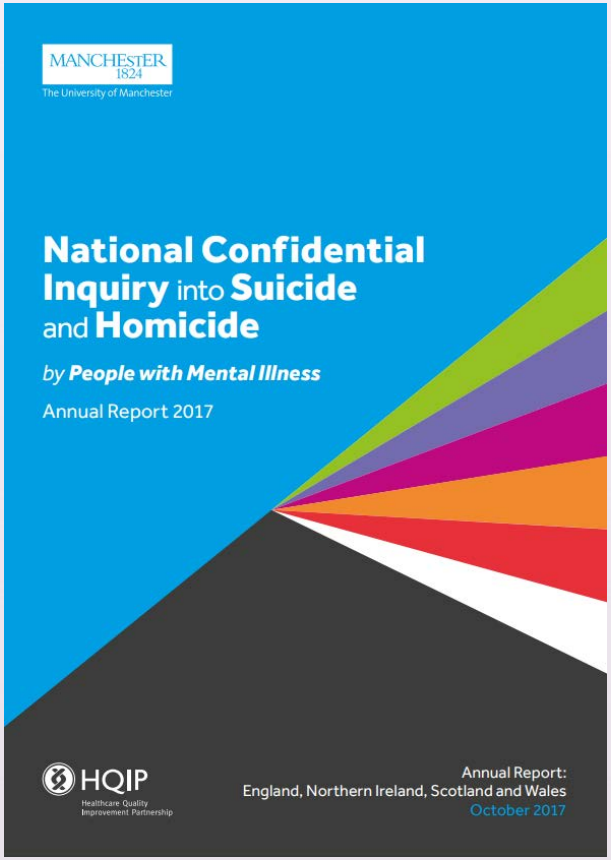
Collecting NCISH data

All potential cases nationally
(e.g. ONS, GRO (N. Ireland and Scotland), Homicide Index)

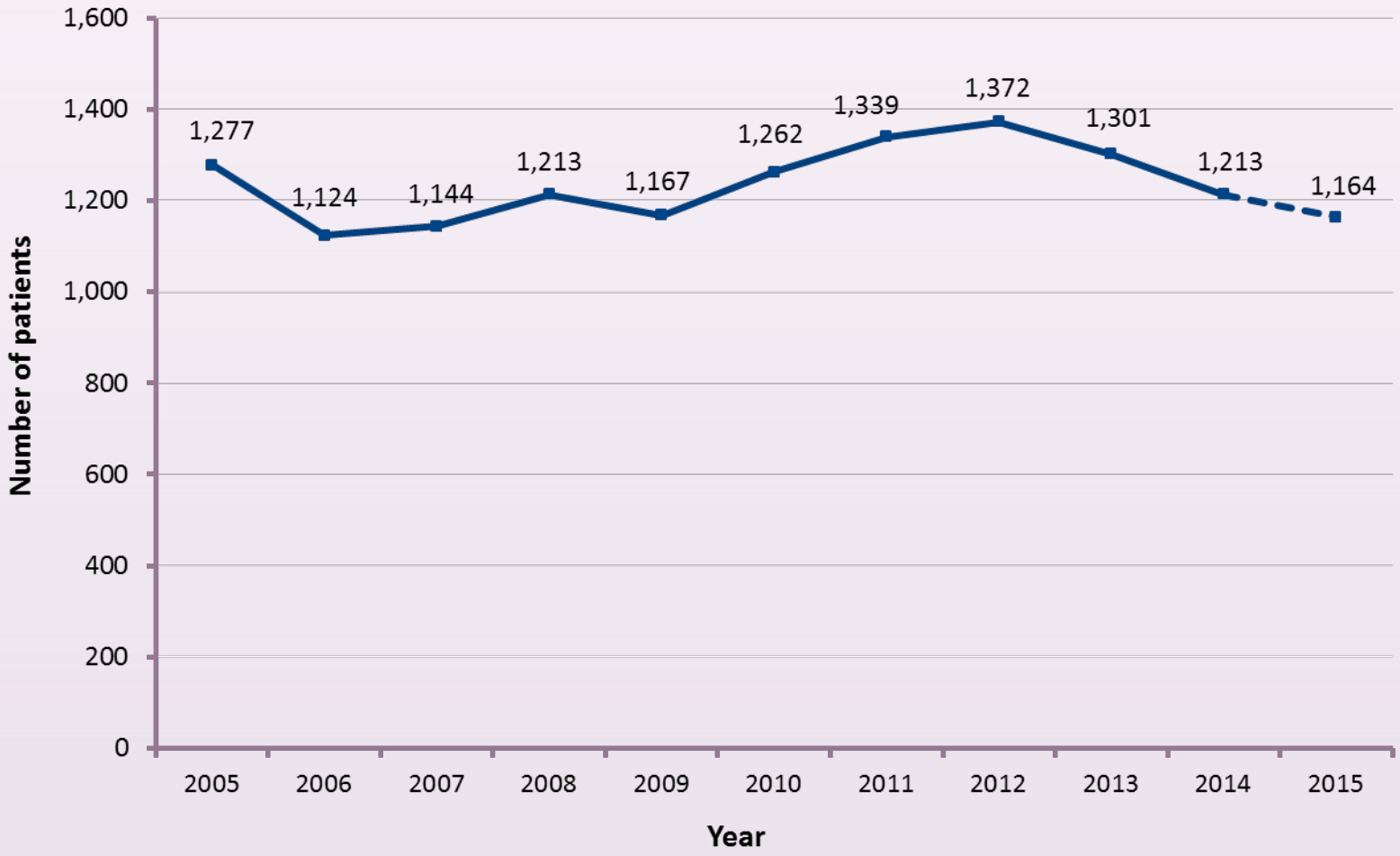
Contact with mental health services

Detailed data collection via questionnaire

Key findings: suicide



Patient suicides



ENGLAND_SUICIDE (2005-2015)

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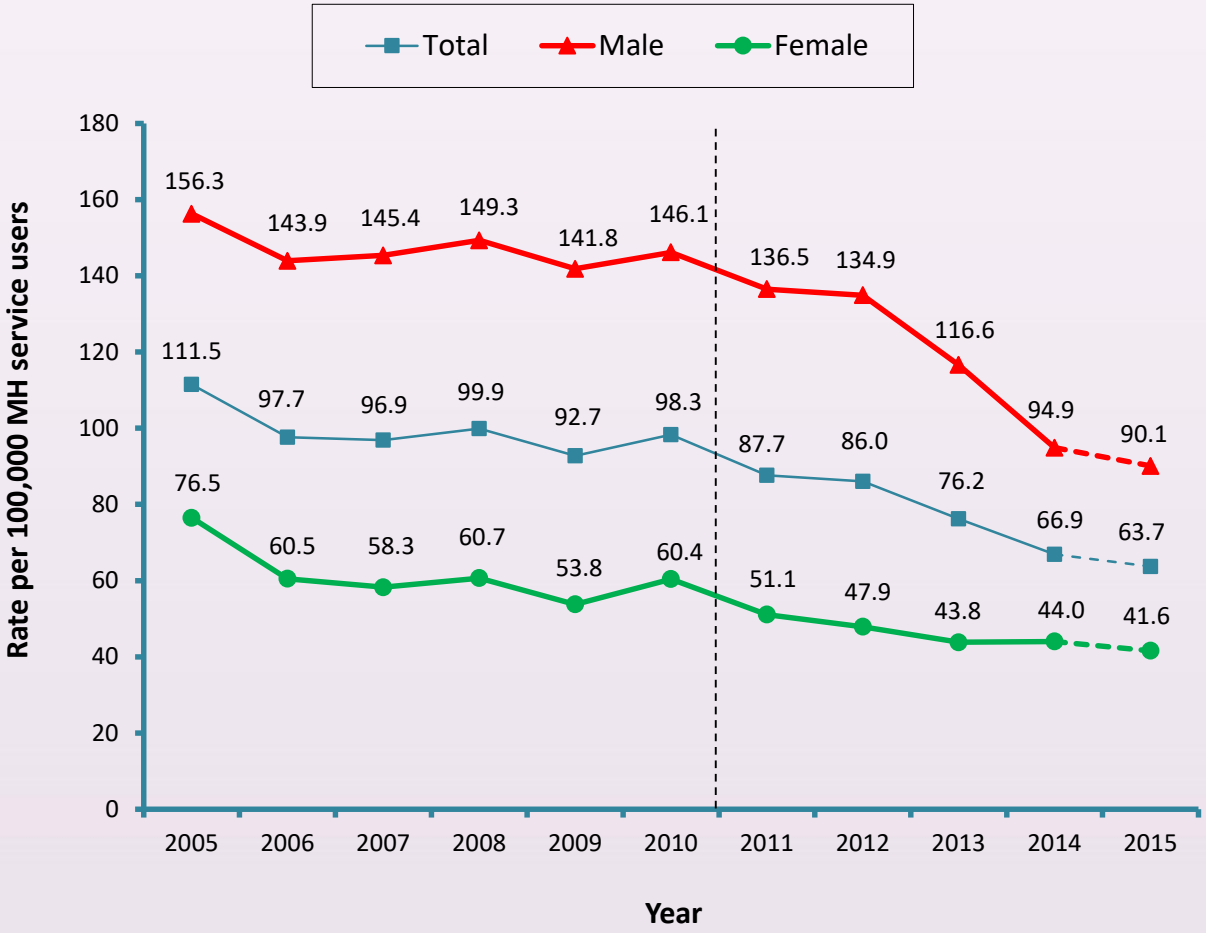
Patient suicide rates



- **Falling rates but problem estimating patient numbers**
- **Changing clinical population**

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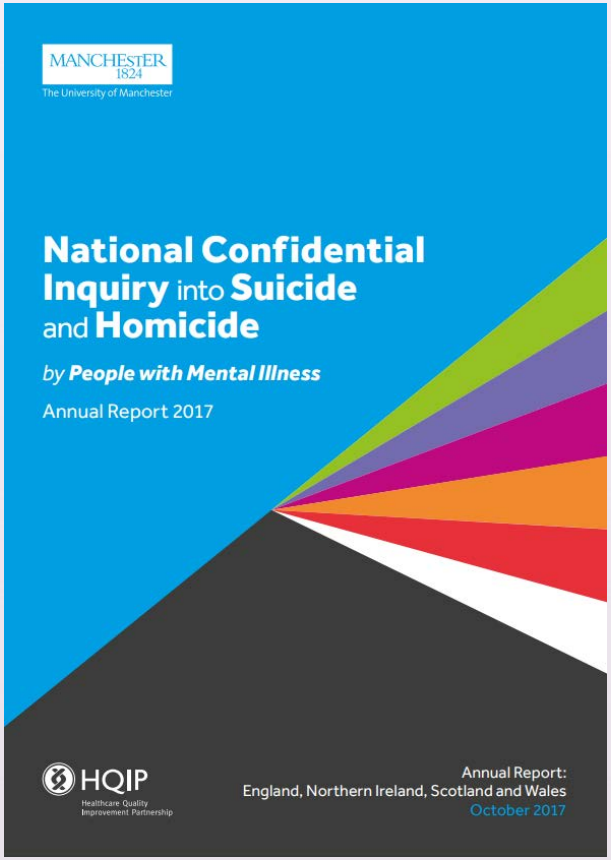
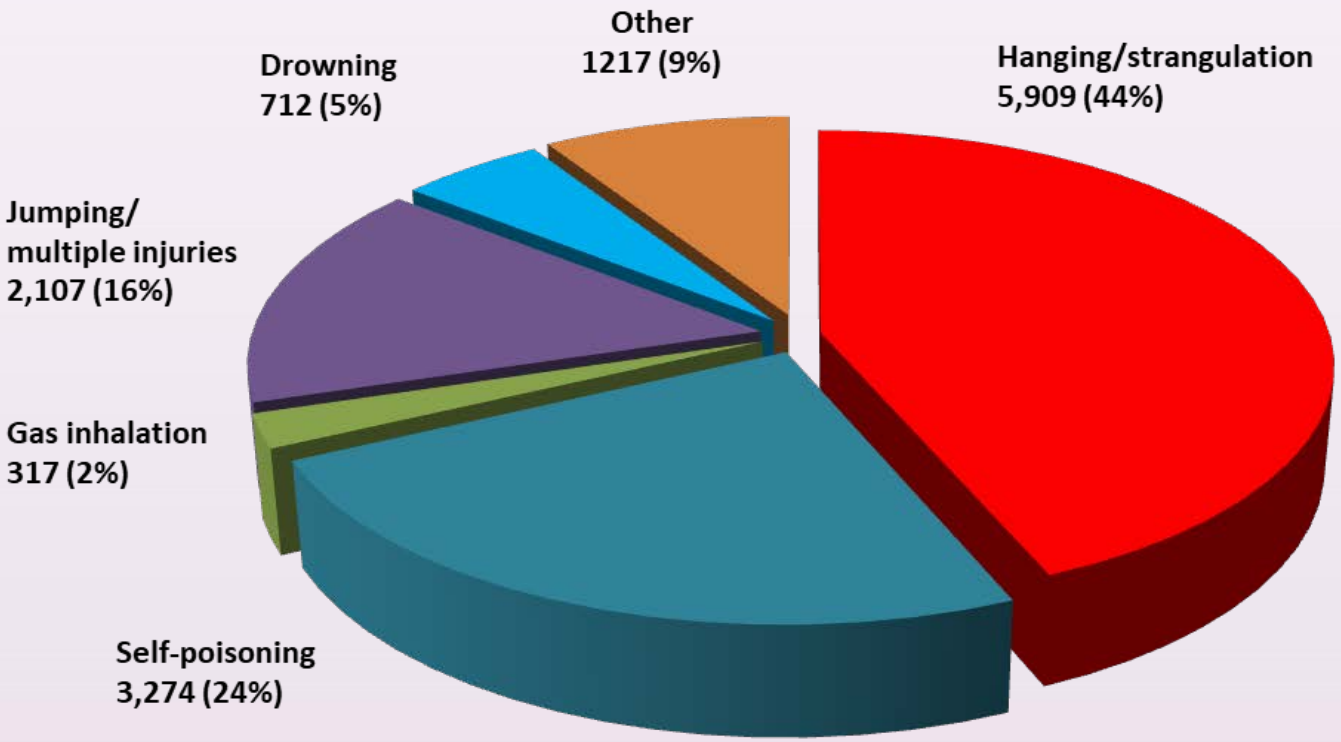
Method of suicide



Patient suicide: main causes of death



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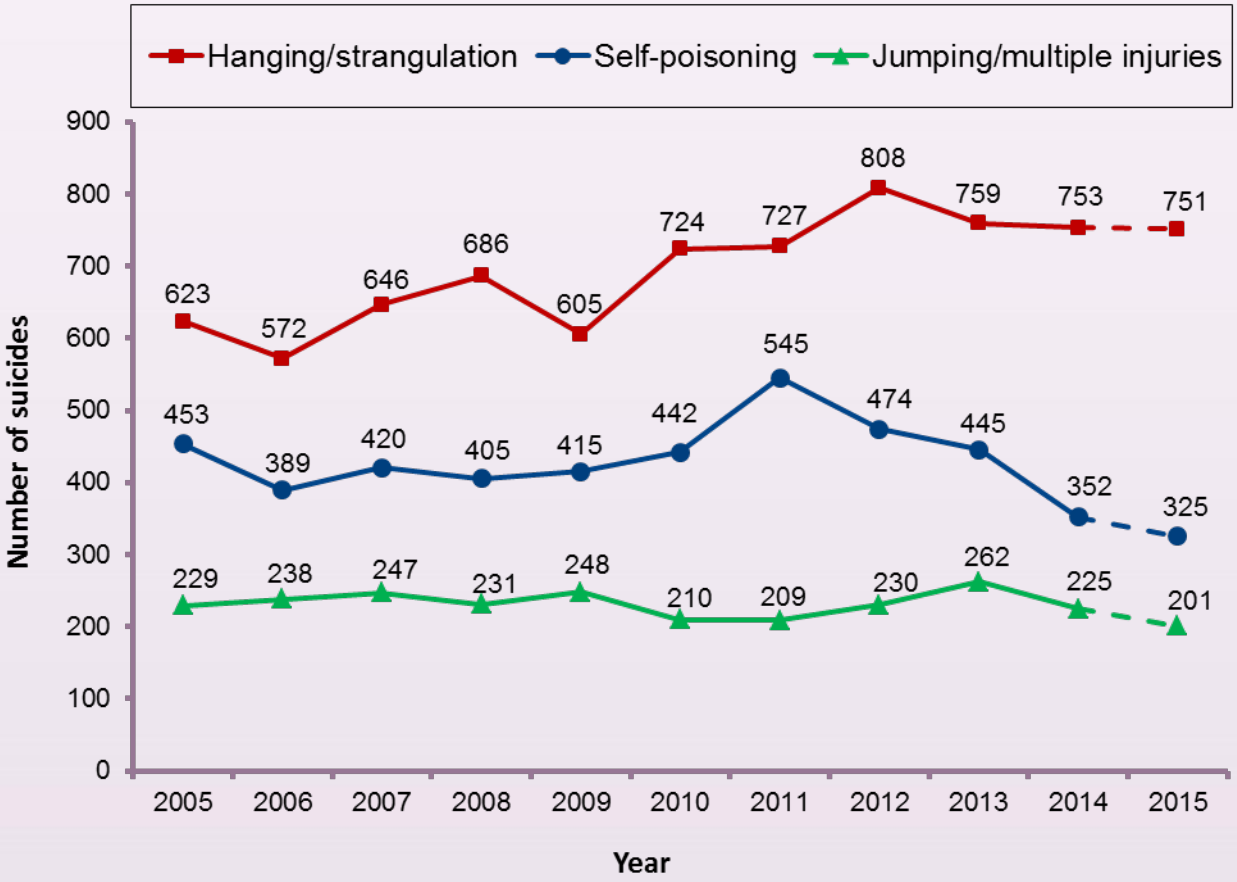
Patient suicide method



- **Hanging commonest method & rising over 10 years**
- **Almost half died by hanging in 2015**
- **Fall in self-poisoning**

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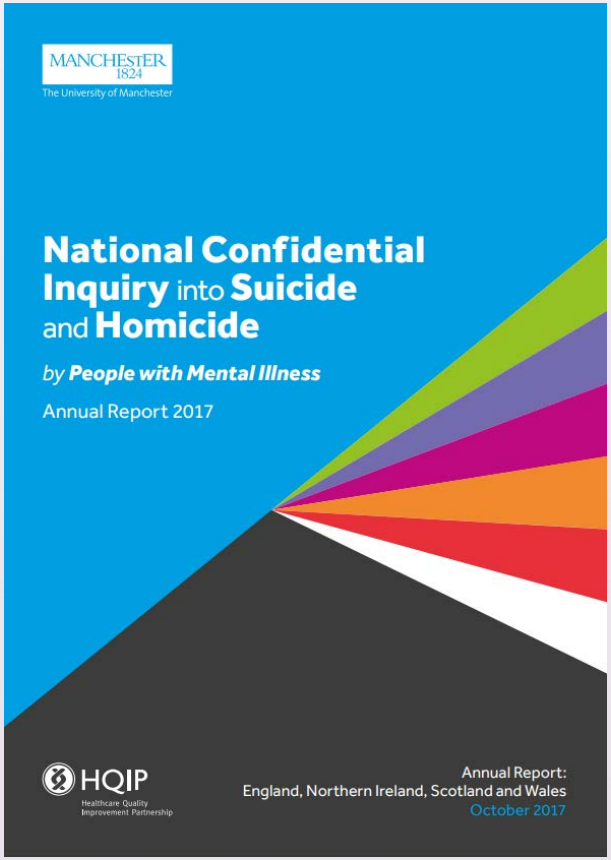
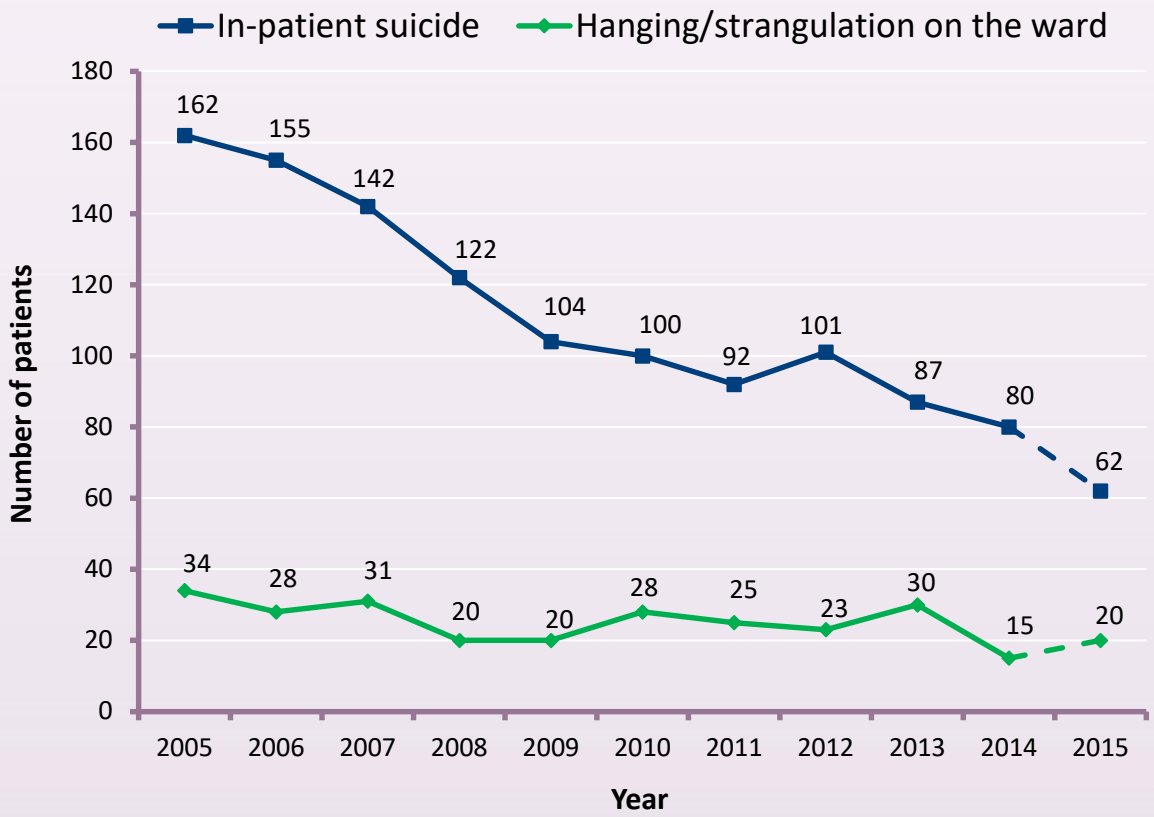
Suicide in clinical settings



In-patient suicide



- **Slower fall in recent years:**
  31% in 2005-10
  14% in 2010-15
- **Average 89 deaths per year since 2011**

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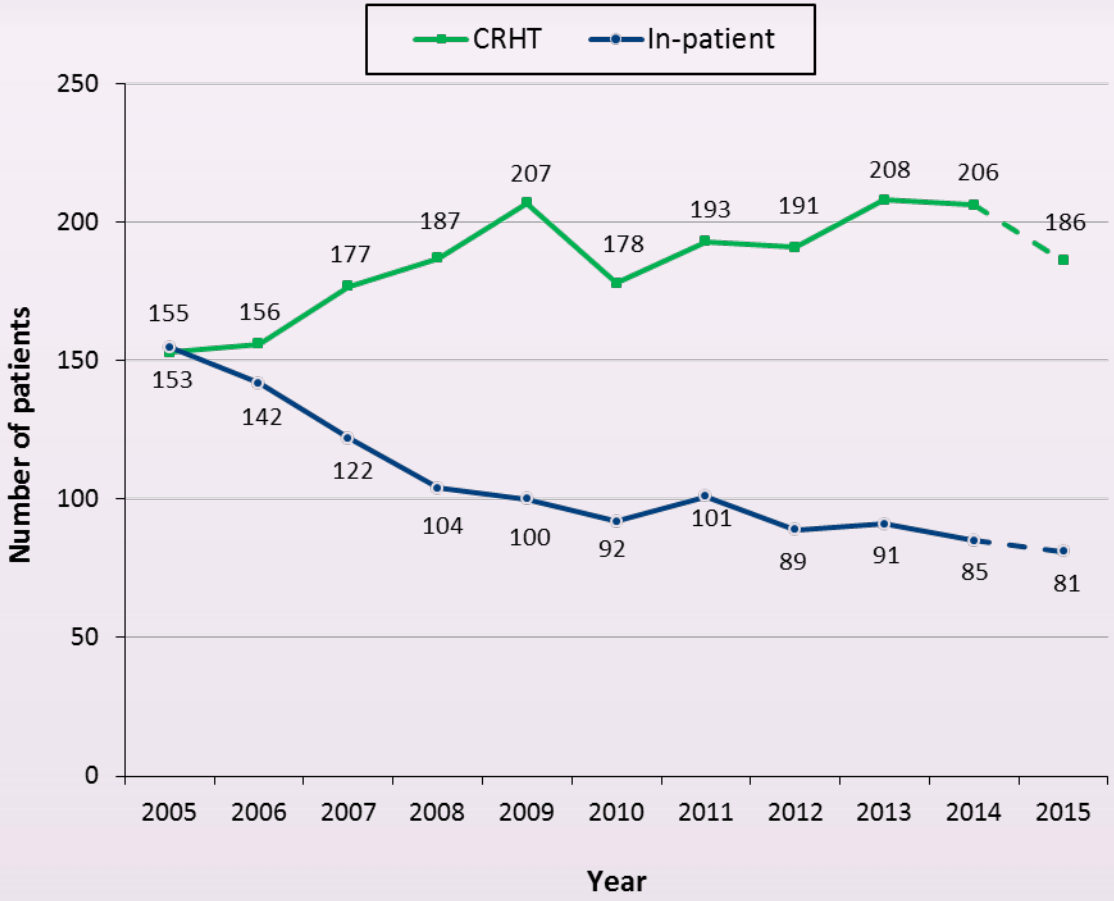
Suicide under crisis teams (CRHT)



- 2x as many suicides under CRHT as in in-patients
- ⅓ under CRHT for <1 week
- ⅓ recently discharged from hospital

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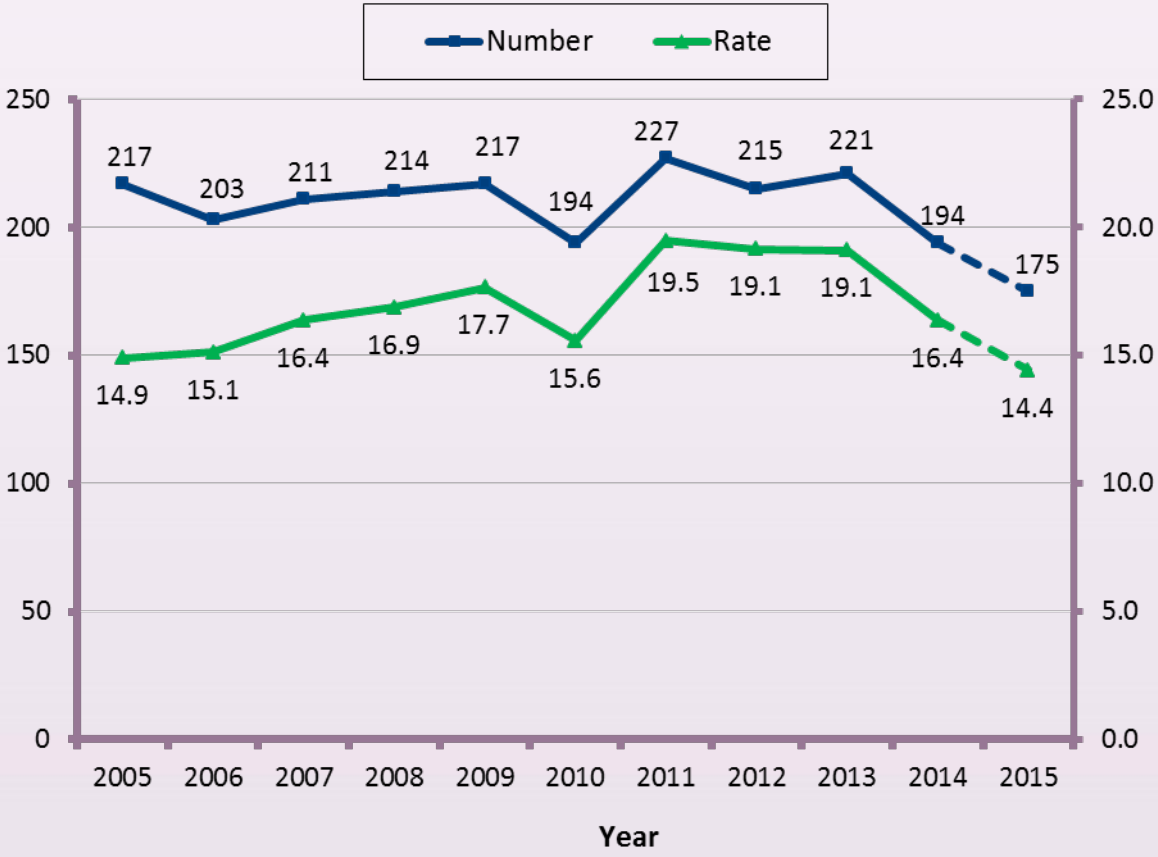
Suicide <3 months of hospital discharge



- **Downward trend in England and Scotland**
- **In the UK, 23% fall in 2011-2015**

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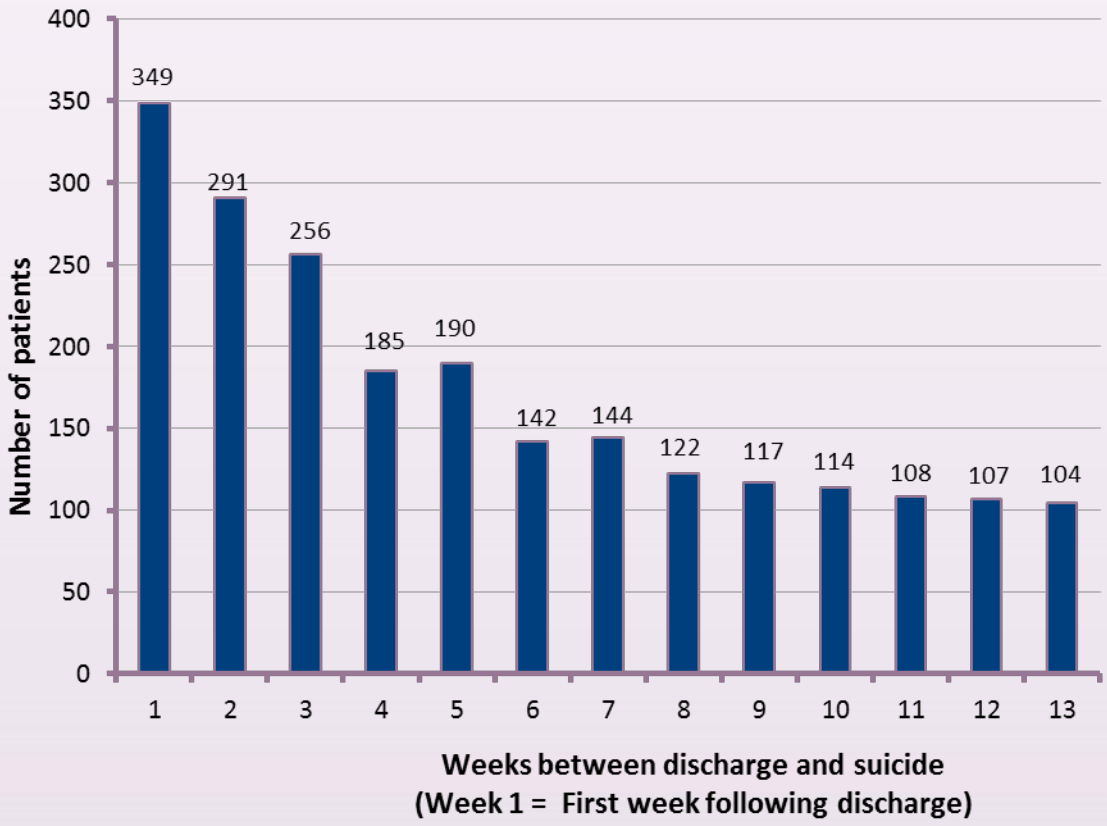
Suicides per week after discharge, England

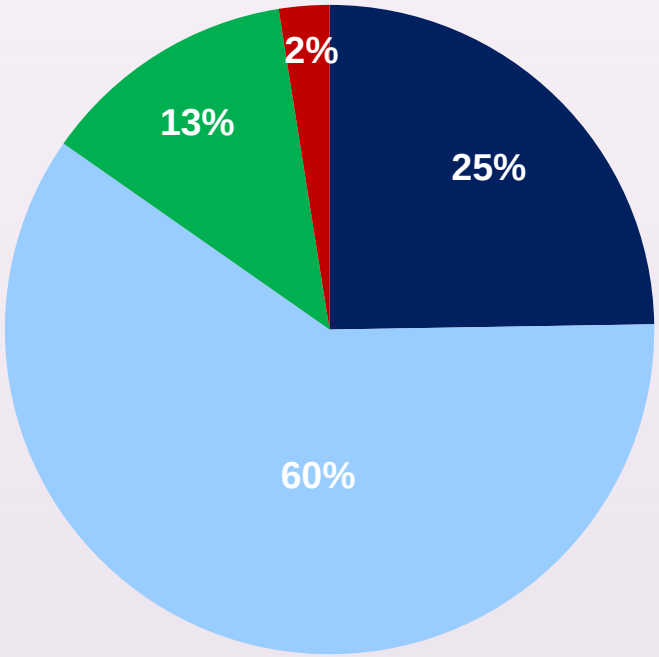


- **Peak risk in first 2 weeks**
- **Link to short admission, care plan, life events**

Source: NCI

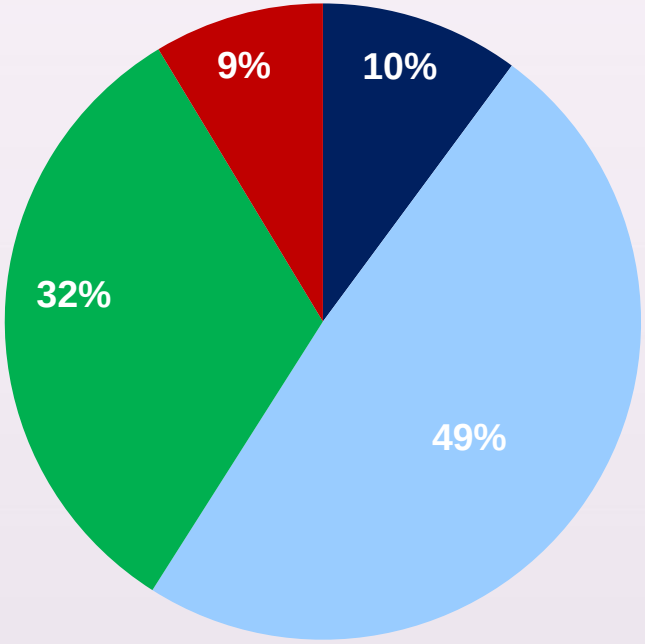
Risk assessment at final contact

Immediate



- None
- Low
- Moderate
- High

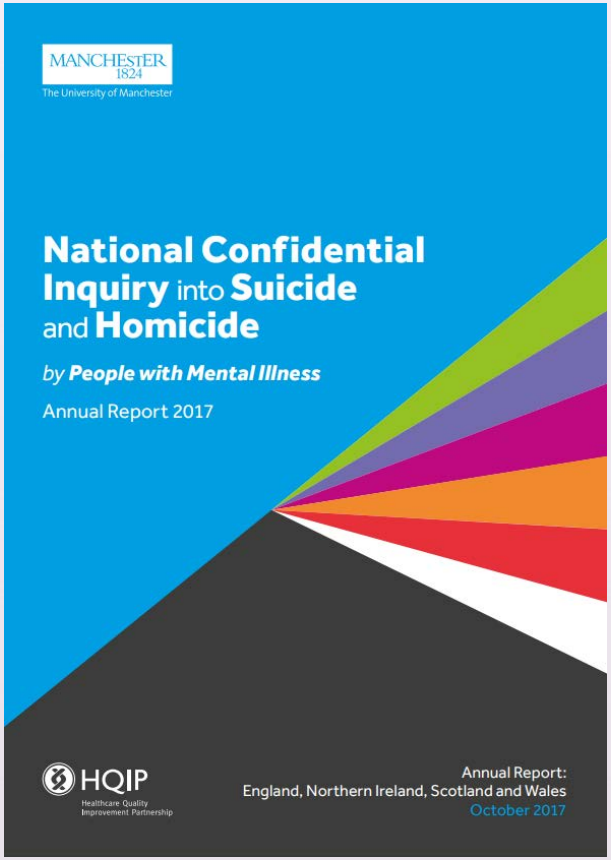
Long-term



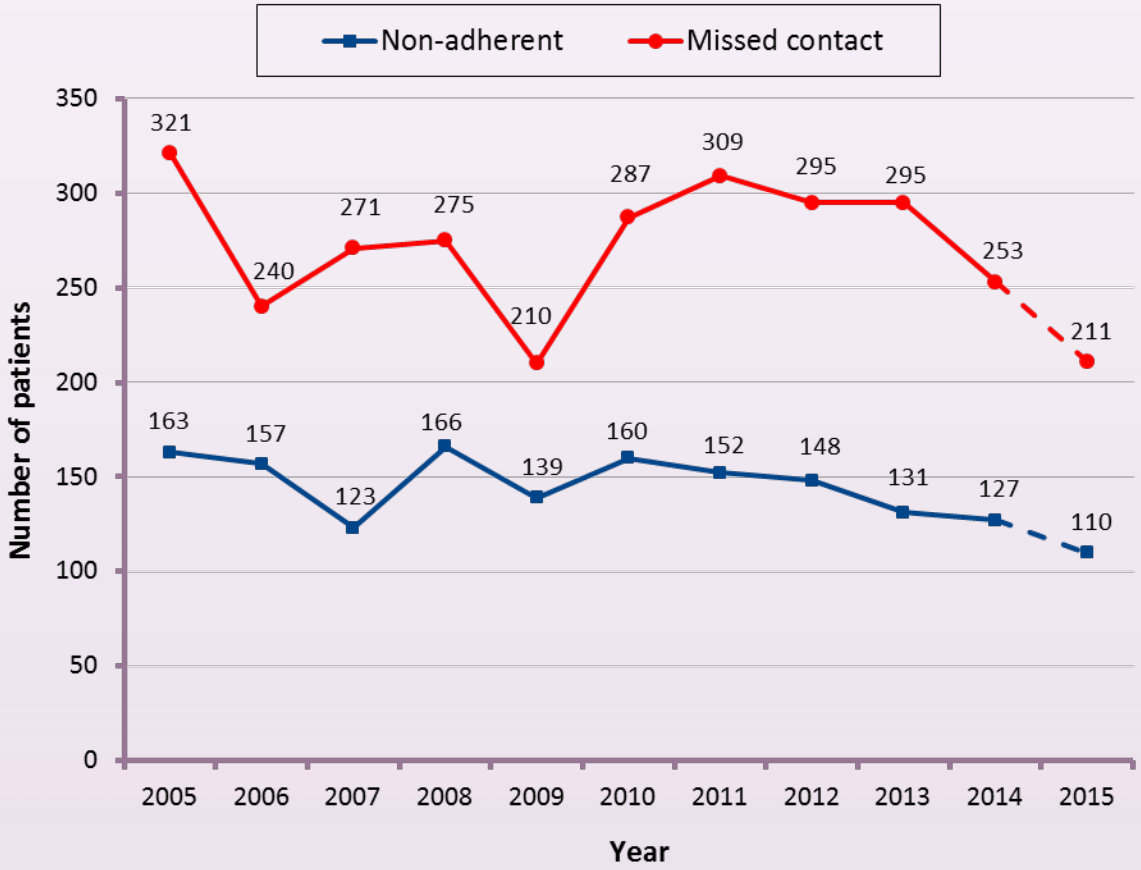
- **Most viewed as low/no risk**
- **Long-term risk seen as higher**

Source: NCI

Recent trends in patient suicide



Non-adherence or missed contact



- **Downward trend despite rise in overall patient numbers**
- **31% fall in non-adherence in 2010-2015**

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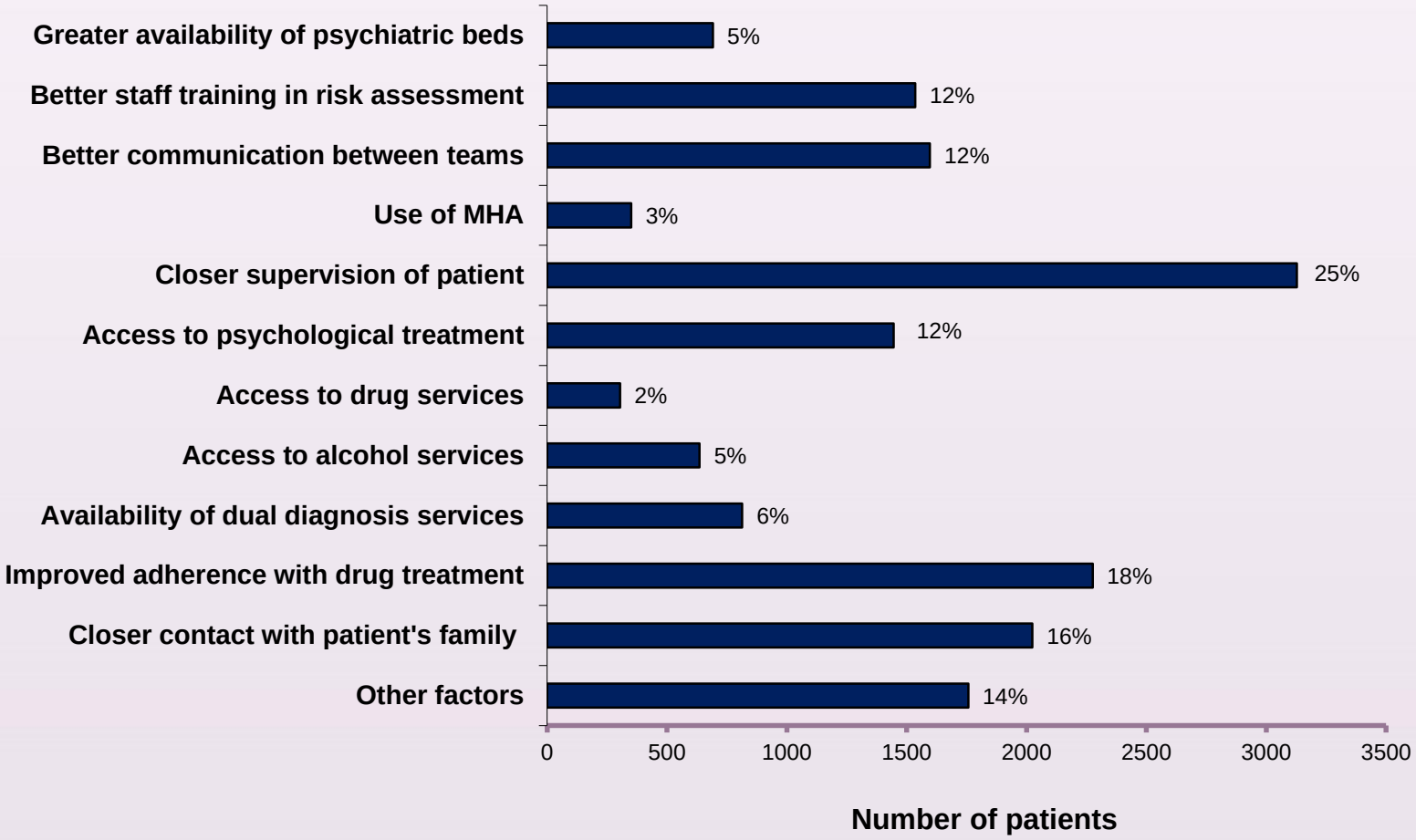
Mental health teams' views: preventability



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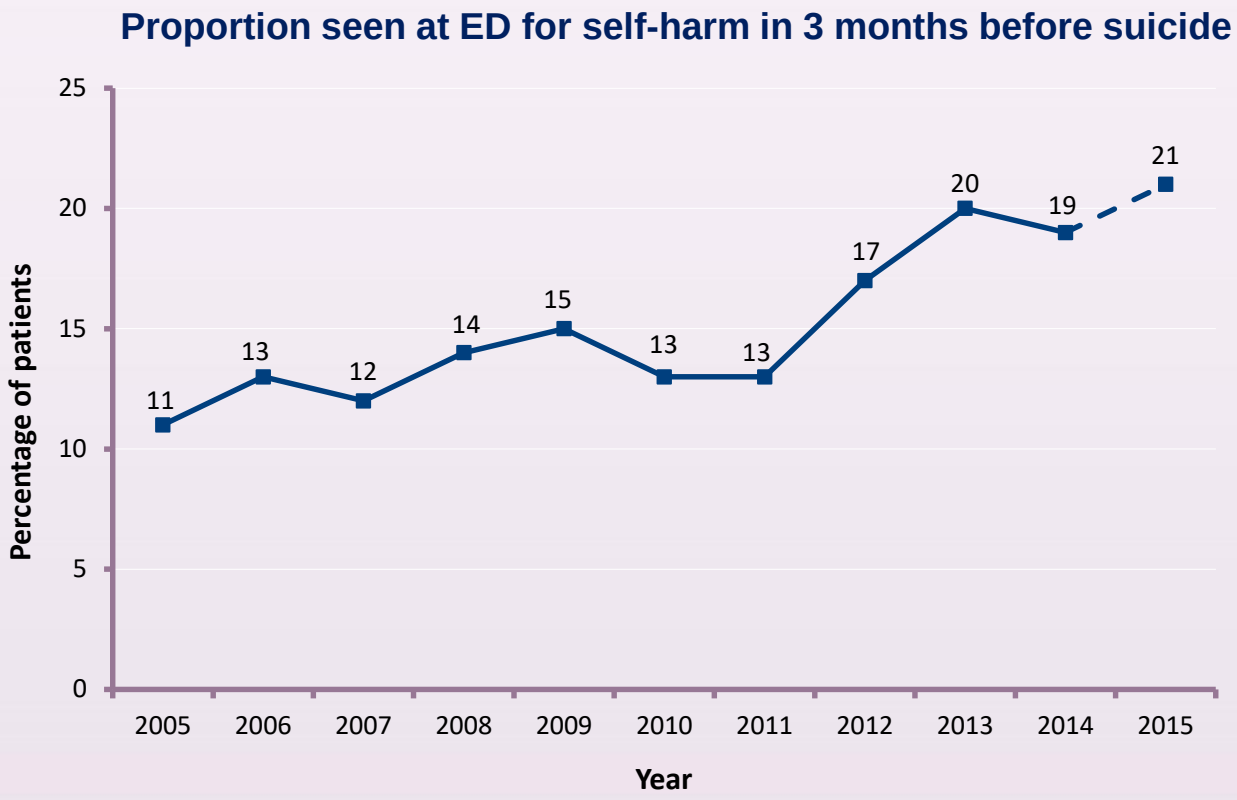
Changing pattern of antecedents



- Self-harm
- Economic adversity
- Migration
- Suicide websites

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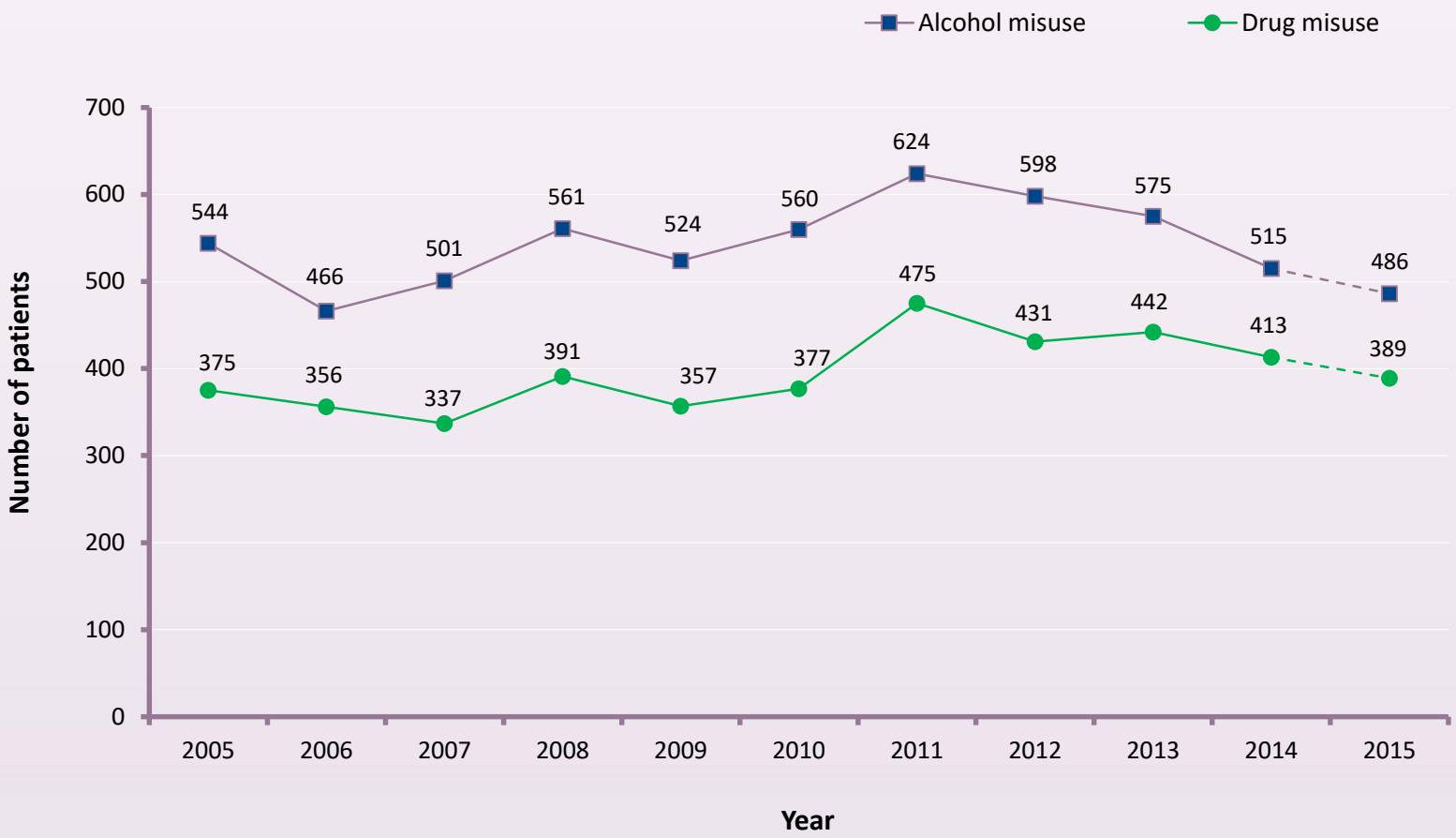
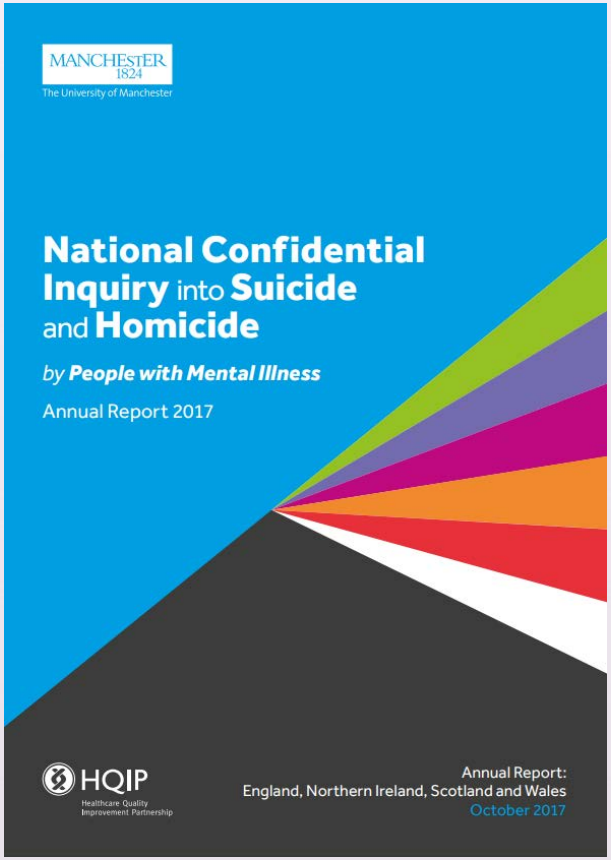
Patients with alcohol and drug misuse



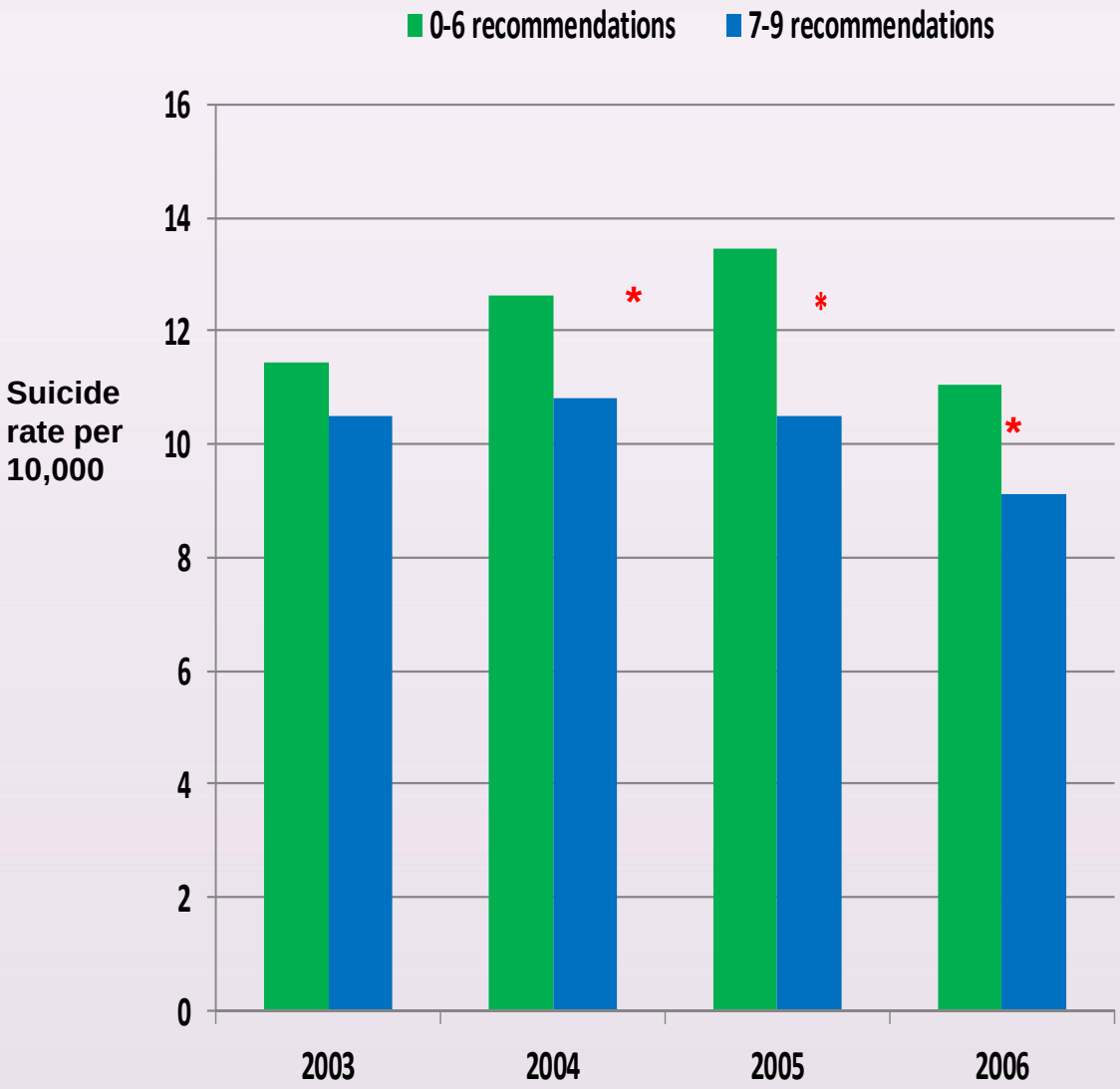
- **Alcohol and/or drug misuse – 54%**
- **Under either drug or alcohol services – 11%**

How to improve safety



Do NCI recommendations improve safety?

- Removal of ligature points
- Assertive outreach
- 24-hour crisis team
- 7-day follow-up
- Non-compliance
- Dual diagnosis
- Criminal justice information sharing
- Multi-disciplinary review
- Training in suicide risk management



Source: Lancet, 2012

* = significant difference $p<0.05$

10 ways to improve safety

Safer wards

Dual diagnosis service

Low staff turnover

Outreach teams

Personalised risk management

Guidance on depression

Family involvement in 'learning lessons'

24 hour crisis teams

No out-of-area admissions

Early follow-up on discharge

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Outline

- Self-harm – the context
- Self-harm – what works?
- Primary care, men, and other population based approaches

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Self-harm – the context

Multicentre Study of Self-harm in England

DH Department of Health

The Manchester Self-Harm Project

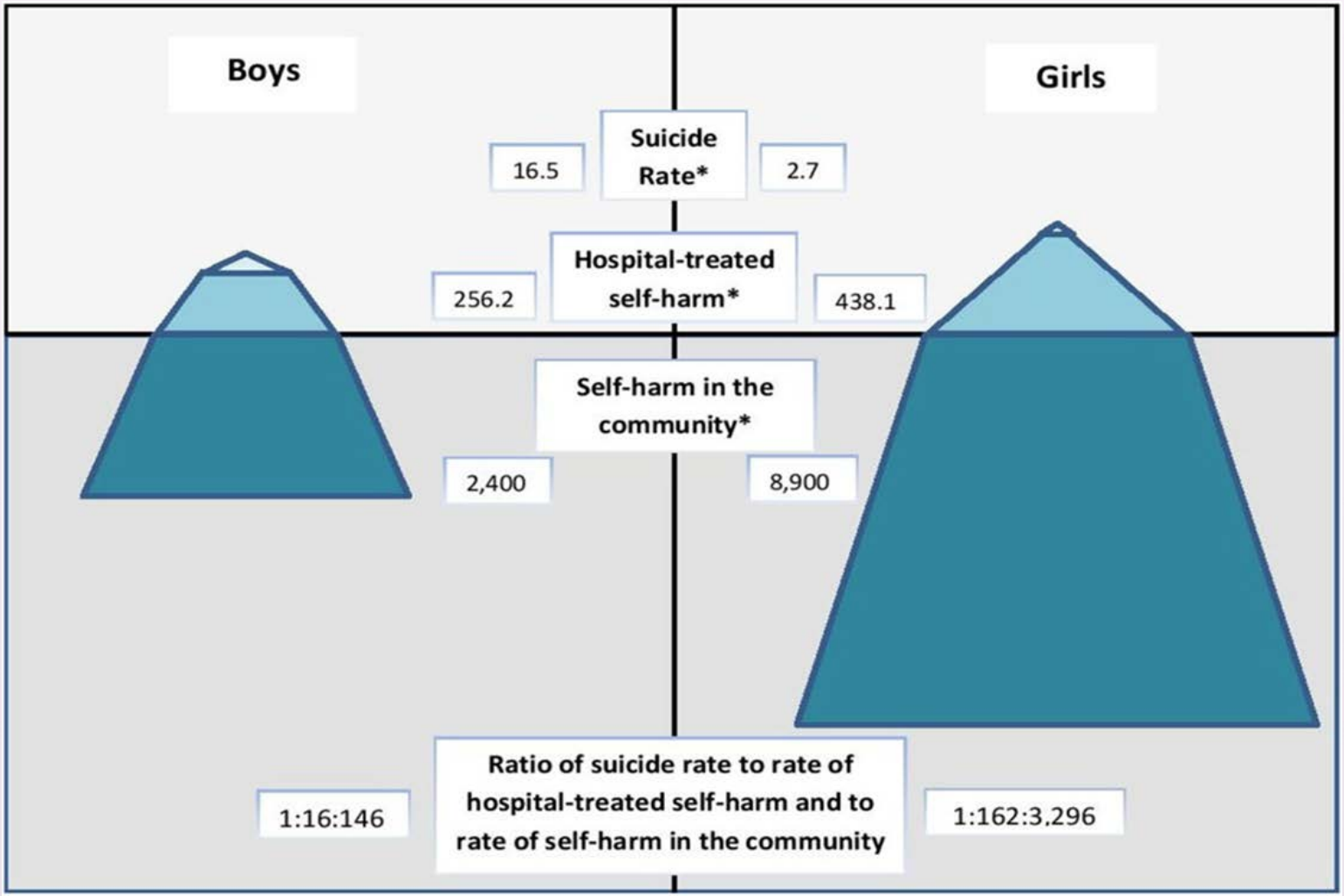
Self-harm

Self-poisoning or self-injury irrespective of apparent motivation or medical seriousness

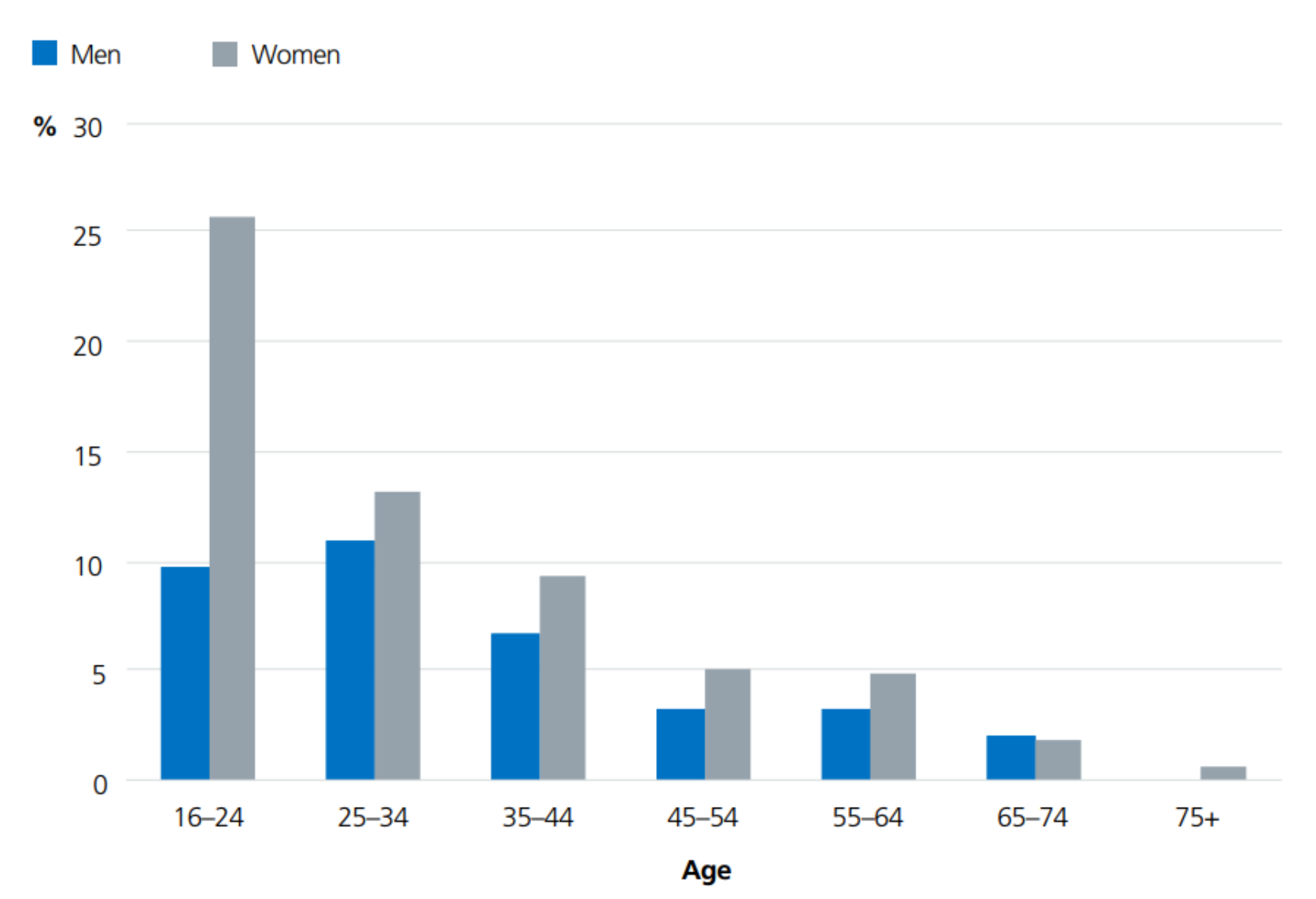
80%

20%

Iceberg model of suicidal behaviour

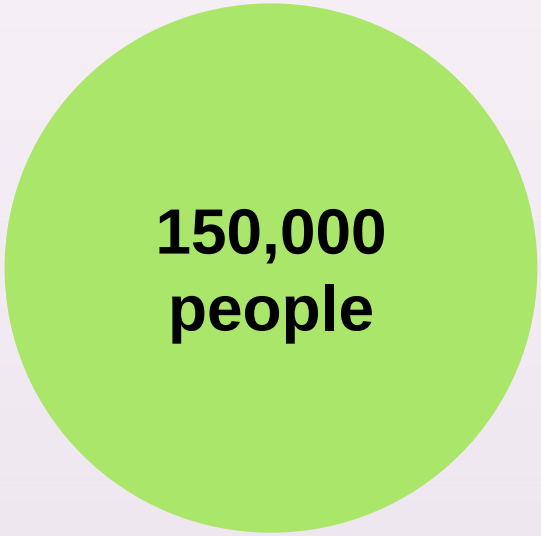


Percentage of population reporting self-harm



Source: NatCen 2016

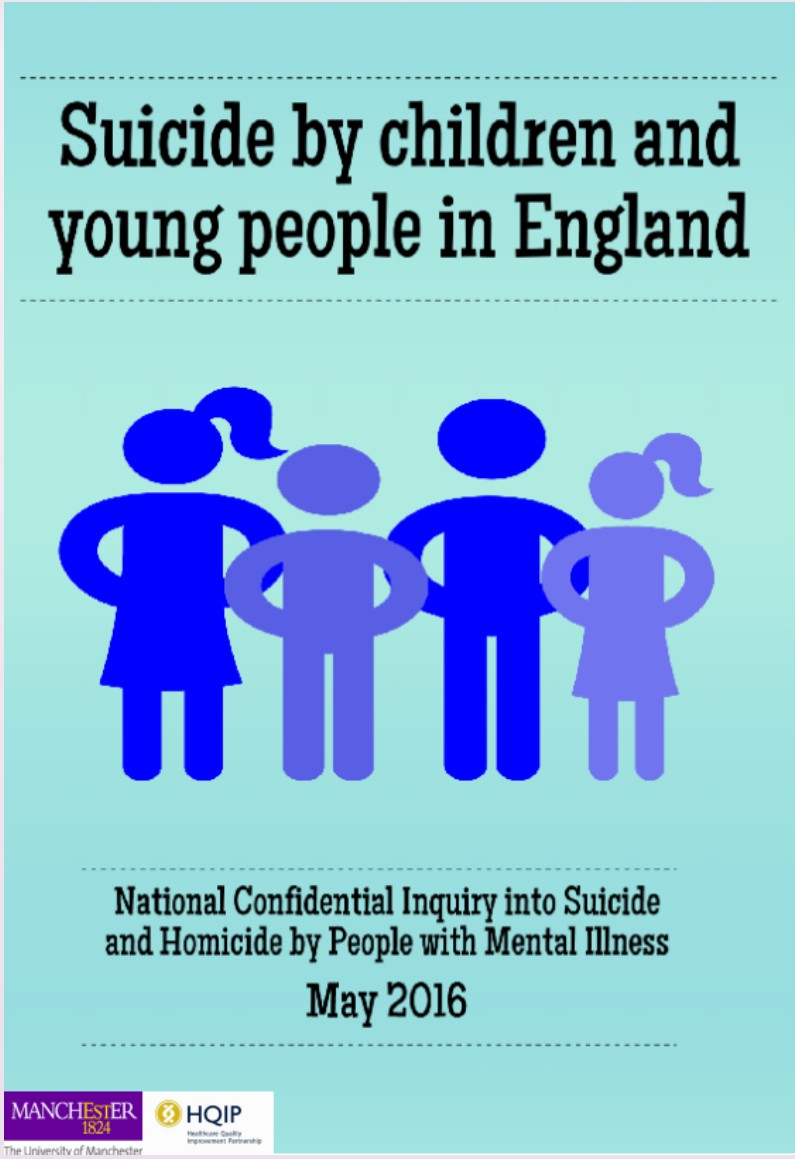
Self-harm in England



Every year, hospitals in England deal with around 220,000 self-harm episodes by 150,000 people

Hawton et al 2007

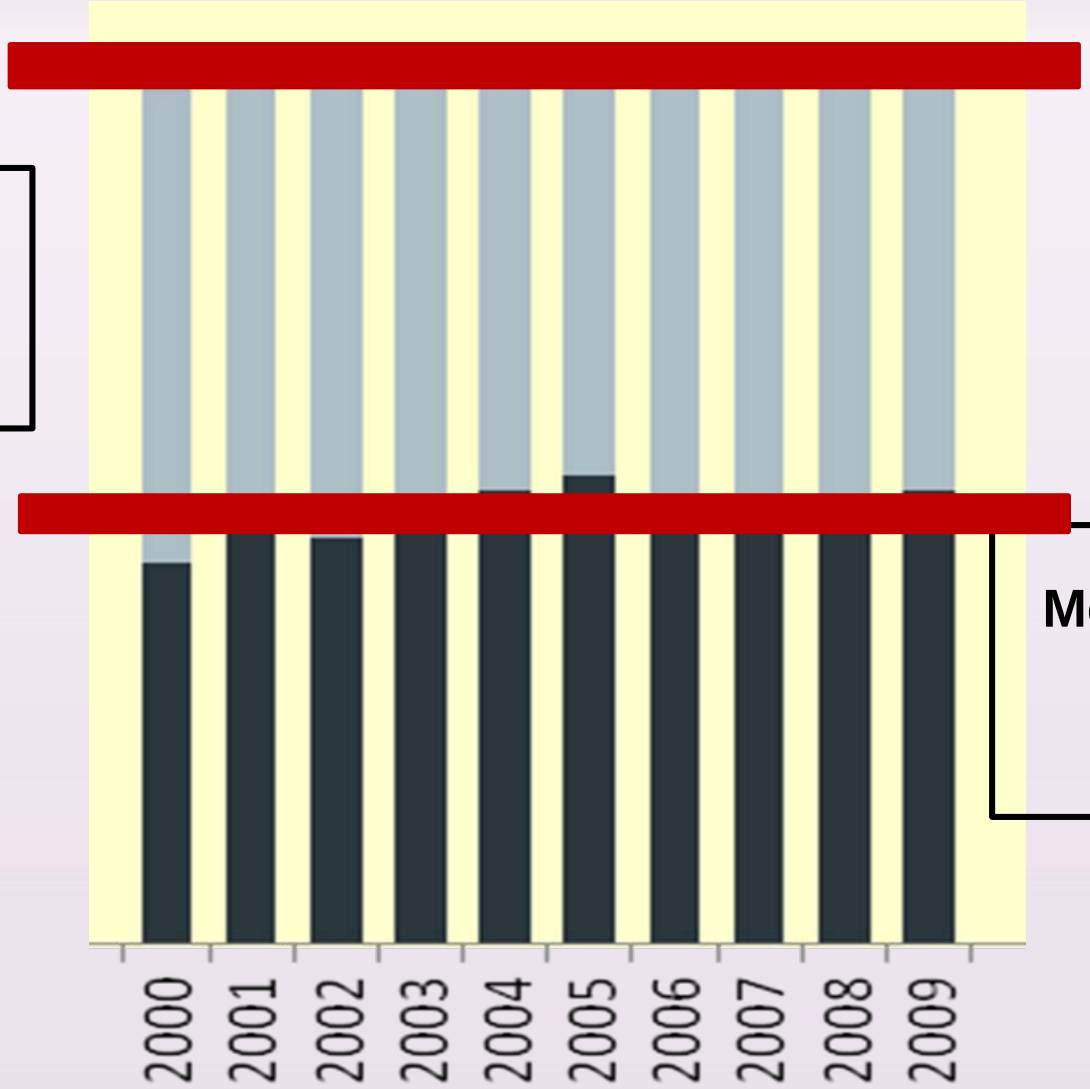
Self-harm in England



Over 50%
of children and young people who died by suicide had a history of self-harm

30-50 times greater risk of suicide in the year after self-harm

Life expectancy

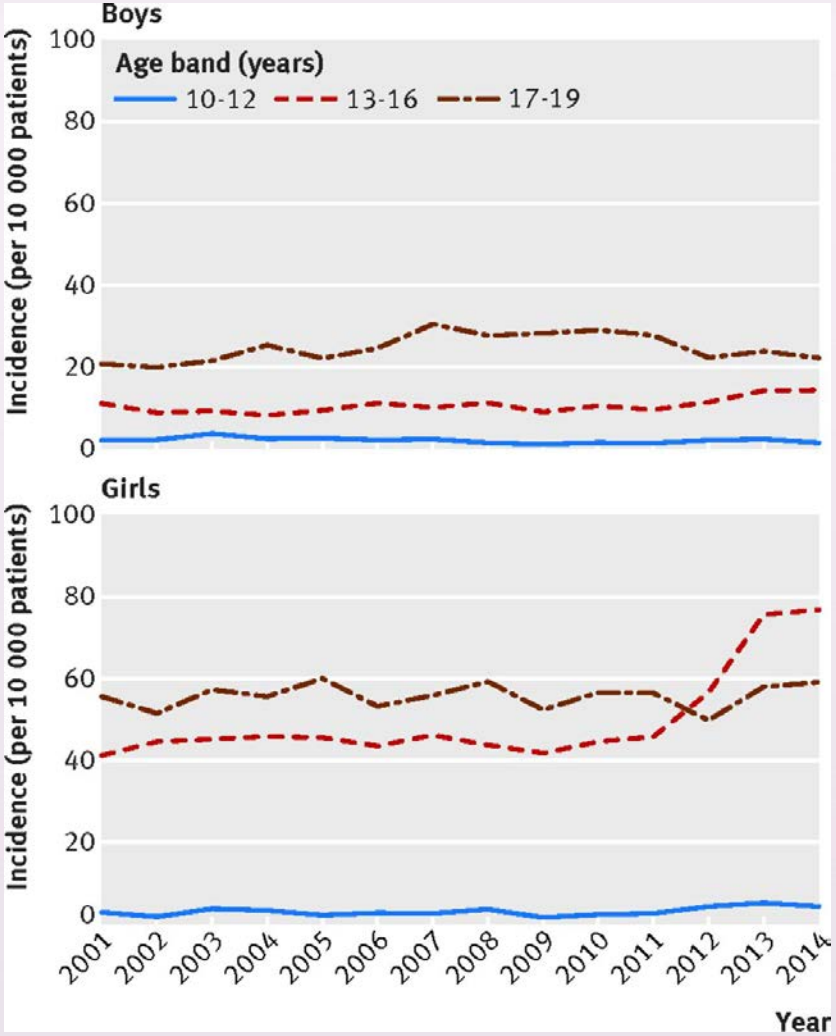


Men
80+ years

Men who self-harm
40 years

Bergen et al 2012, Lancet

Temporal trends in annual age specific self harm incidence stratified by sex



Catharine Morgan et al. BMJ 2017;359:bmj.j4351

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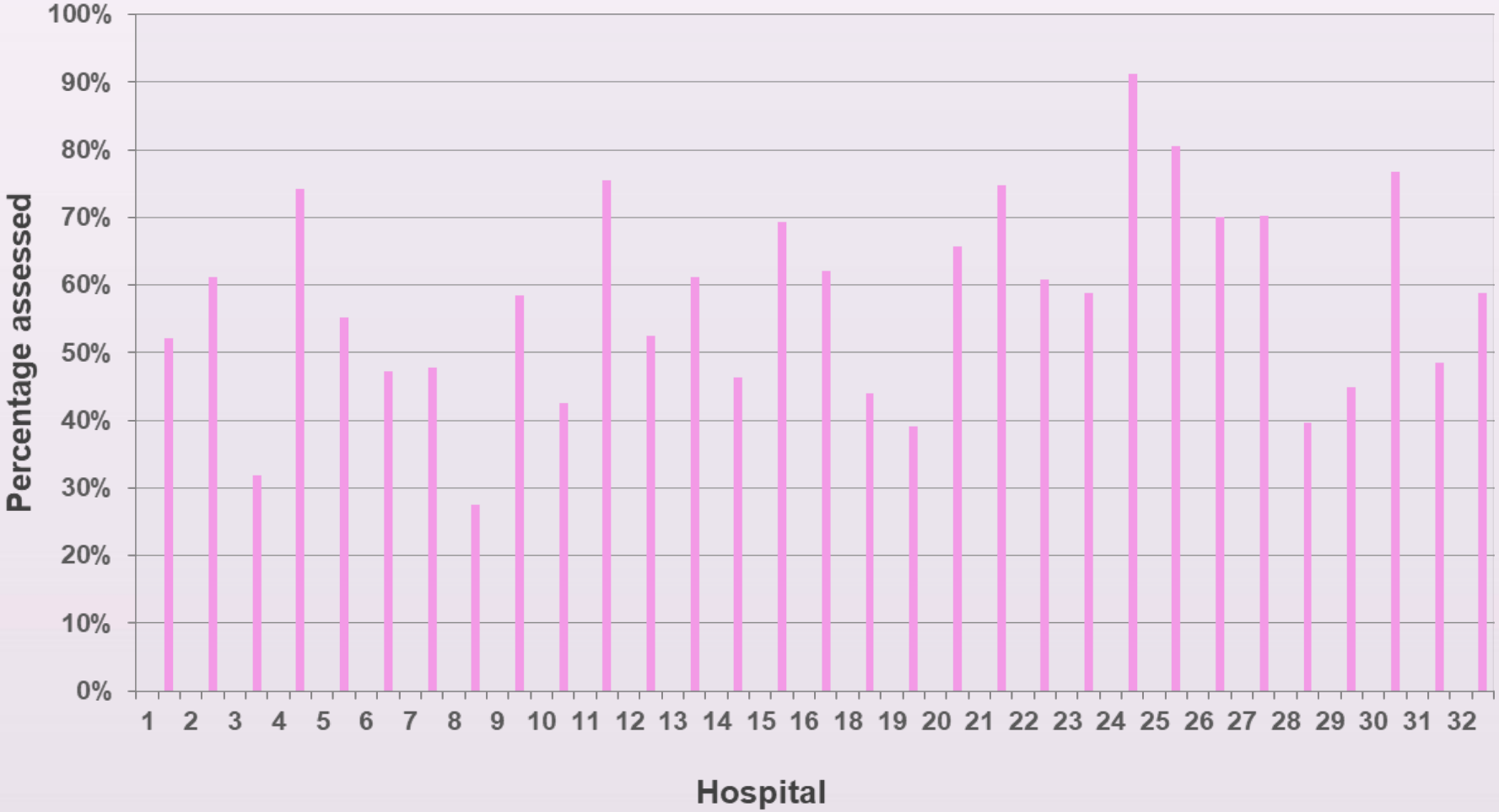
Variations in self-harm services



Cooper et al 2013

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Guidelines

NICE quality standards for self-harm 2013

1. People are treated with compassion, respect and dignity
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3. They receive a comprehensive psychosocial assessment
4. They receive the monitoring they need to keep them safe
5. They are cared for in a safe physical environment
6. Collaborative risk management plan are in place.
7. They have access to psychological interventions.
8. There is a transition plan when moving between services.

What works?

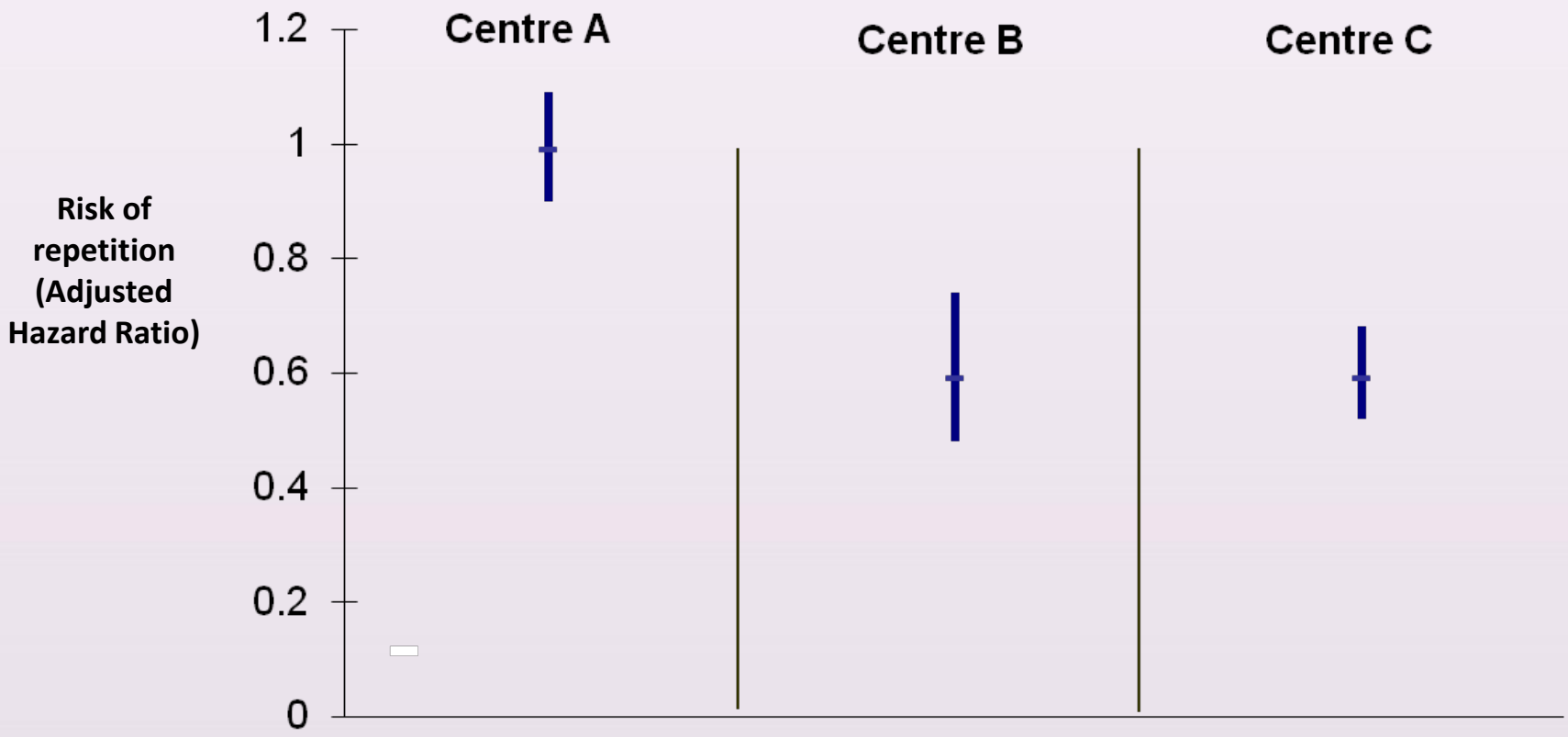
Psychosocial assessment may reduce the risk of repeat self-harm by 40%

Kapur et al 2013

What works?

Psychosocial assessment

Observational data on 35,938 individuals presenting with self-harm to 3 centres in England, comparing repetition in those receiving vs not receiving specialist assessment (adjusted for baseline characteristics)



Kapur et al 2013

What helps?

The assessment itself

The main thing was that [psychiatrist] did look as if he actually cared, that's it, and he wanted, he really wanted to help me, and so that was a very positive thing" **(P4)**

Access to aftercare

[I'm] hugely grateful that I've got the help, it's made a whole world of difference [yeah], I'm getting regular phonecalls, people are phoning me, keeping me informed, my care people are coming, I know that within the next couple of weeks, I will have the support I need" **(P10).**

Hunter et al 2013

What helps?

Psychosocial assessment may reduce the risk of repeat self-harm by 40%

Talking treatments as part of aftercare have an important role too (NNT 33)

Kapur et al 2013

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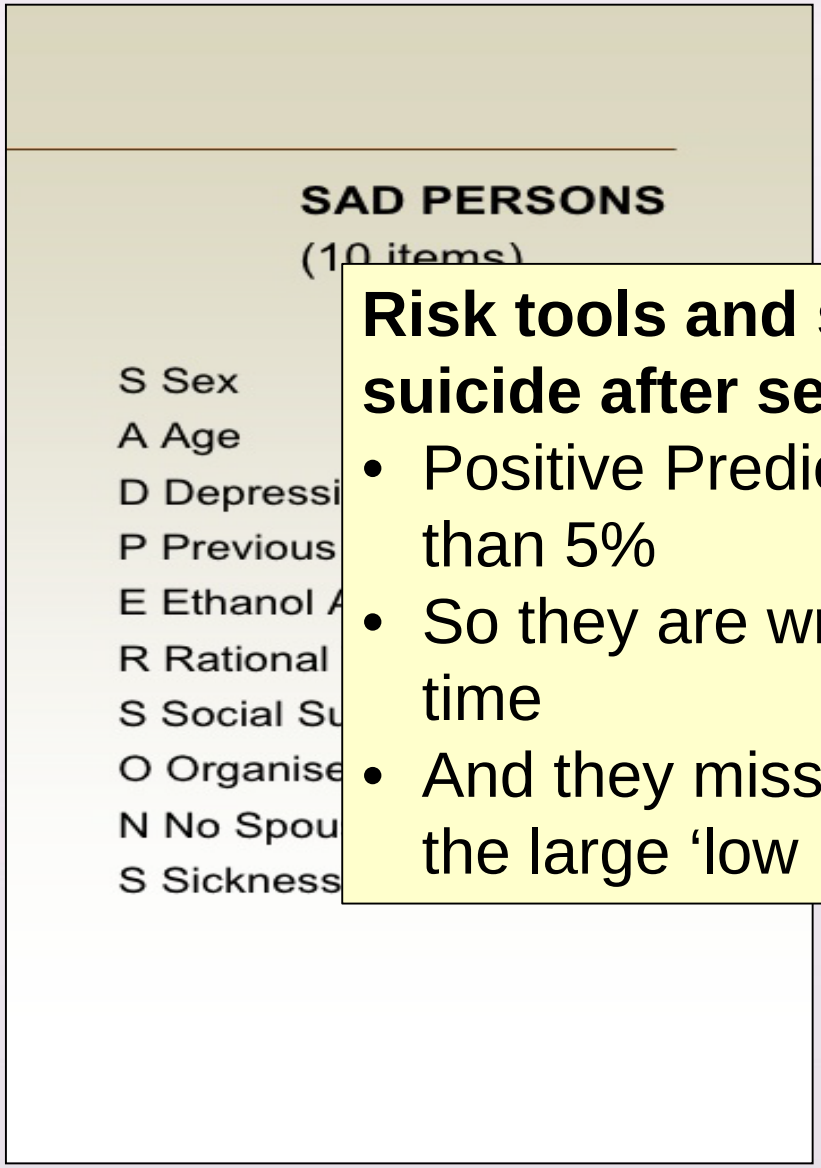
	n/N	n/N		CI
1 Individual psychotherapy				
Brown 2005	13/45	23/40	5.9 %	0.30 [0.12, 0.74]
Davidson 2014	4/10	4/4	0.5 %	0.08 [0.00, 1.81]
Dubois 1999	8/43	10/41	4.5 %	0.71 [0.25, 2.02]
Evans 1999b	10/18	10/14	2.4 %	0.50 [0.11, 2.21]
Gibbons 1978	27/200	29/200	12.6 %	0.92 [0.52, 1.62]
Guthrie 2001	5/58	17/61	4.3 %	0.24 [0.08, 0.71]
Hatcher 2011	36/253	51/299	16.6 %	0.81 [0.51, 1.28]
Hawton 1987a	3/41	6/39	2.4 %	0.43 [0.10, 1.87]
Husain 2014	1/102	1/111	0.7 %	1.09 [0.07, 17.64]
Salkovskis 1990	3/12	4/8	1.5 %	0.33 [0.05, 2.24]
Slee 2008	26/40	21/33	5.3 %	1.06 [0.41, 2.78]
Stewart 2009	3/23	2/9	1.4 %	0.53 [0.07, 3.82]
Tapolaa 2010	2/9	4/7	1.1 %	0.21 [0.02, 1.88]
Tyrer 2003	84/213	99/217	21.0 %	0.78 [0.53, 1.14]
Wei 2013	1/25	5/27	1.1 %	0.18 [0.02, 1.69]
Weinberg 2006	12/15	14/15	0.9 %	0.29 [0.03, 3.12]
Subtotal (95% CI)	**1107**	**1125**	**82.3 %**	**0.66 [0.53, 0.84]**

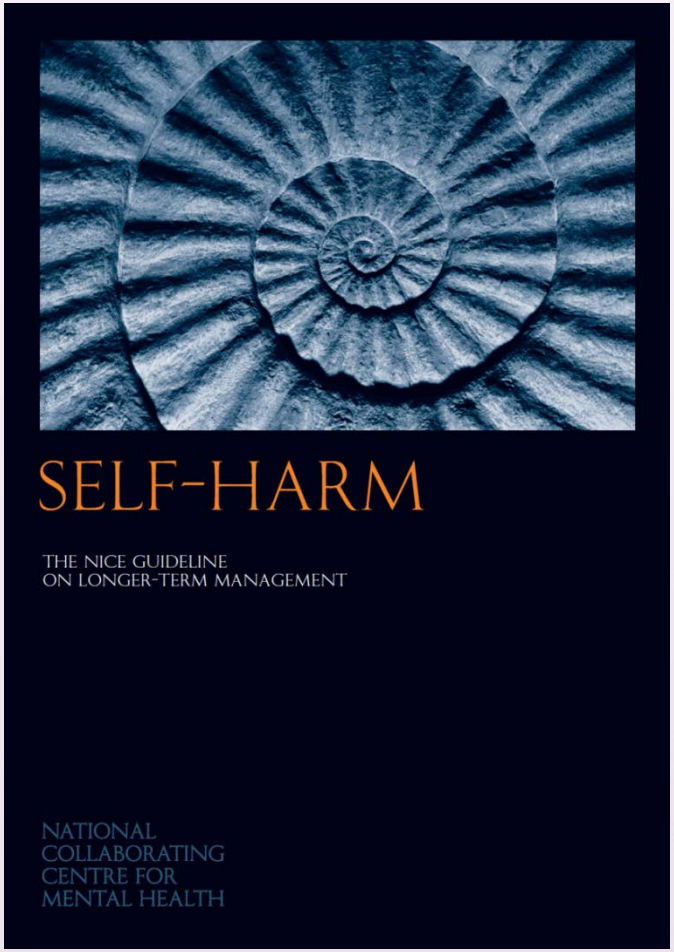
Risk tools and scales



Risk tools and scales to predict suicide after self-harm:

- Positive Predictive Value less than 5%
- So they are wrong 95% of the time
- And they miss suicide deaths in the large ‘low risk’ group

Risk tools and scales



UK NICE Guidelines:

- Do not use risk assessment tools and scales to predict future suicide or repetition of self-harm.
- Do not use risk assessment tools and scales to determine who should and should not be offered treatment or who should be discharged.
- Risk assessment tools may be considered to help structure, prompt, or add detail to assessment.

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So what should we do instead?

- Recognise that risk prediction is a fallacy
- Address patient needs
- Focus on the therapeutic aspects of the assessment
- Use clinical guidelines and make evidence based treatments available
- Individualised assessment and assessments which inform management
- Adopt population approaches to prevention – ‘something for everyone’

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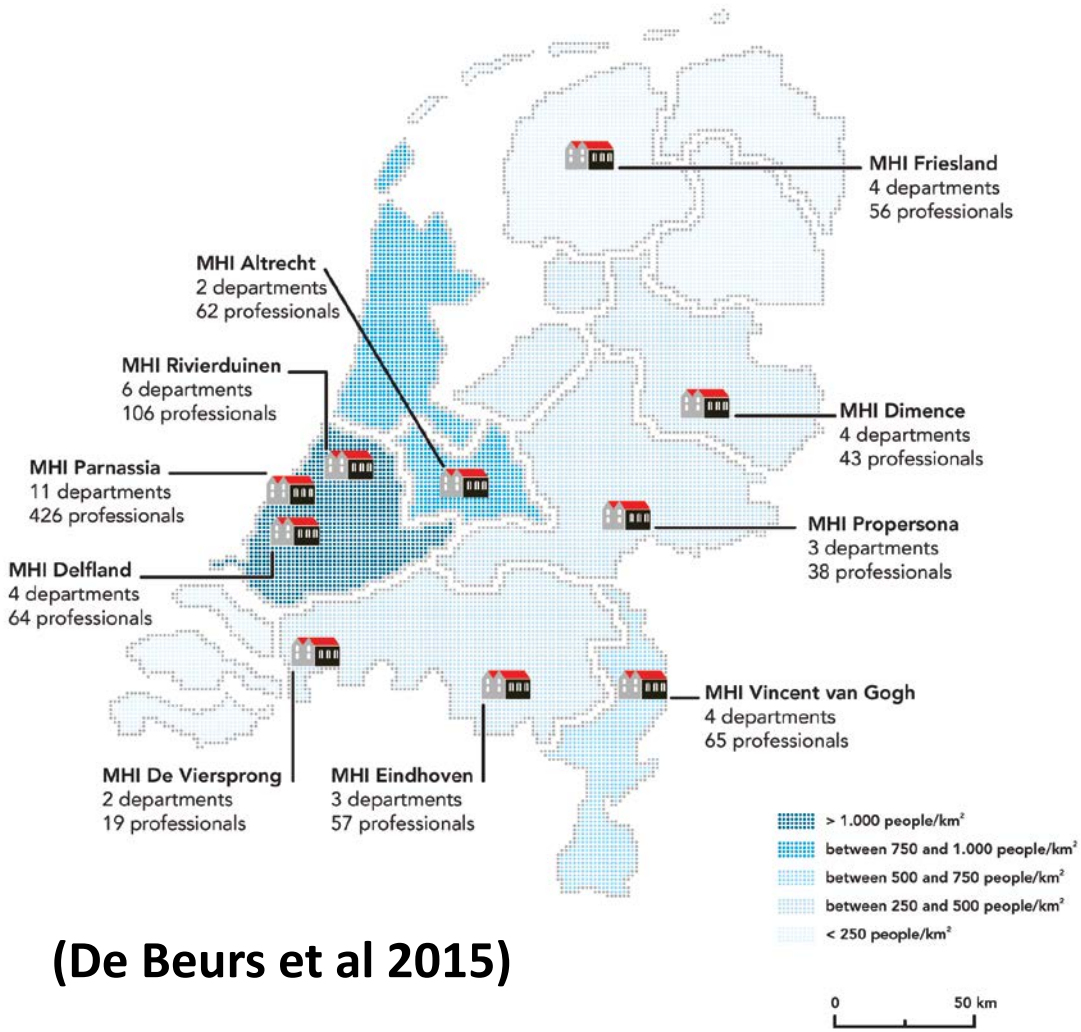
PITSTOP Trial - Findings



(De Beurs et al 2015)

Clinicians

- Better guideline adherence
- Improved knowledge and confidence
- Around a 10% improvement

Patients

- Little effect overall on change in suicidal ideation, future attempts, satisfaction
- A possible effect on patients with depression?

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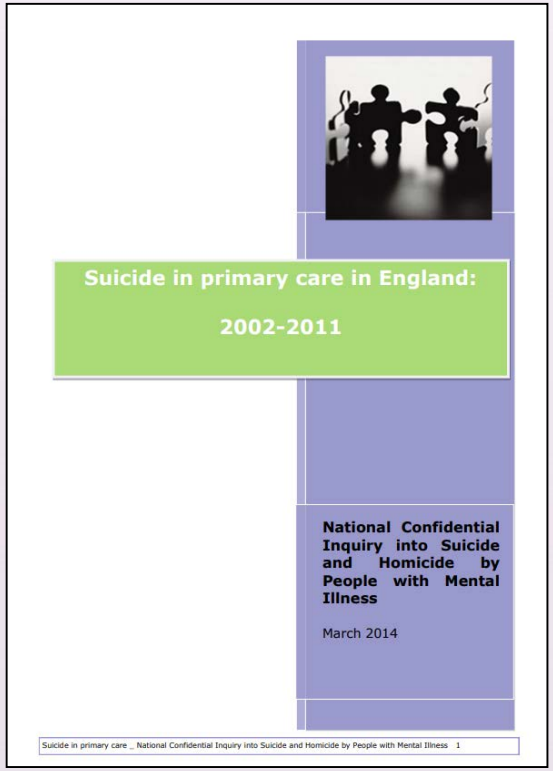
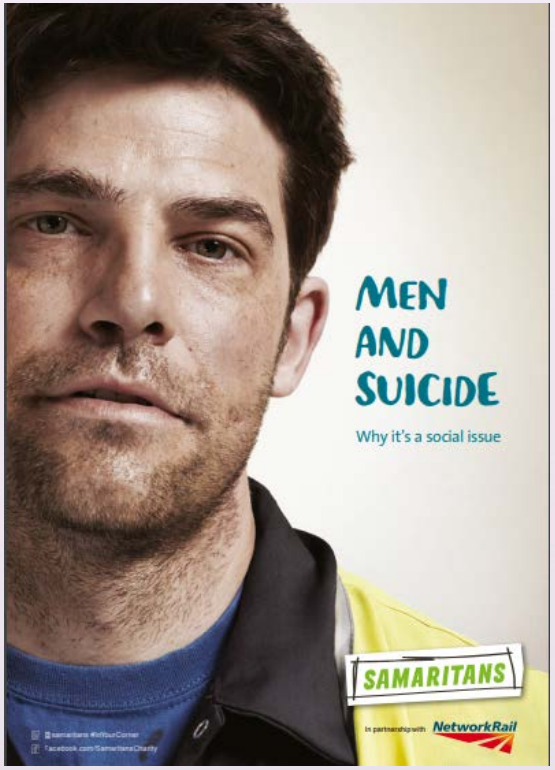
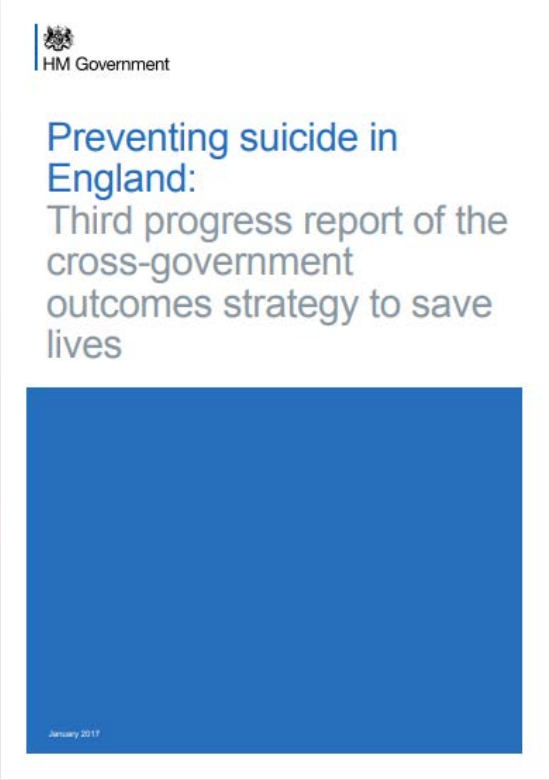
Primary care, men, and other population based approaches







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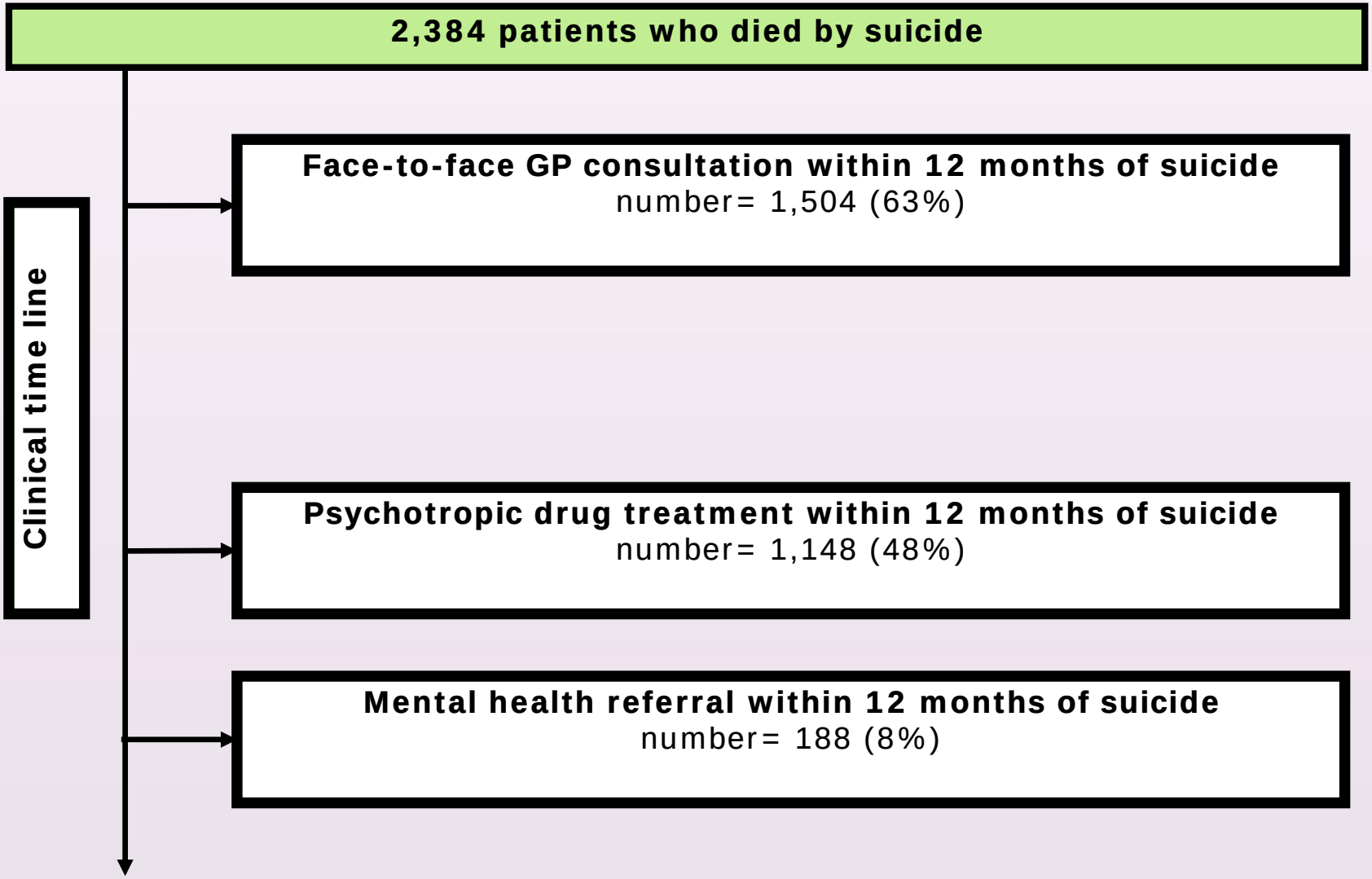
Patients who died by suicide 2002-2011: primary care consultation, treatment, and referral



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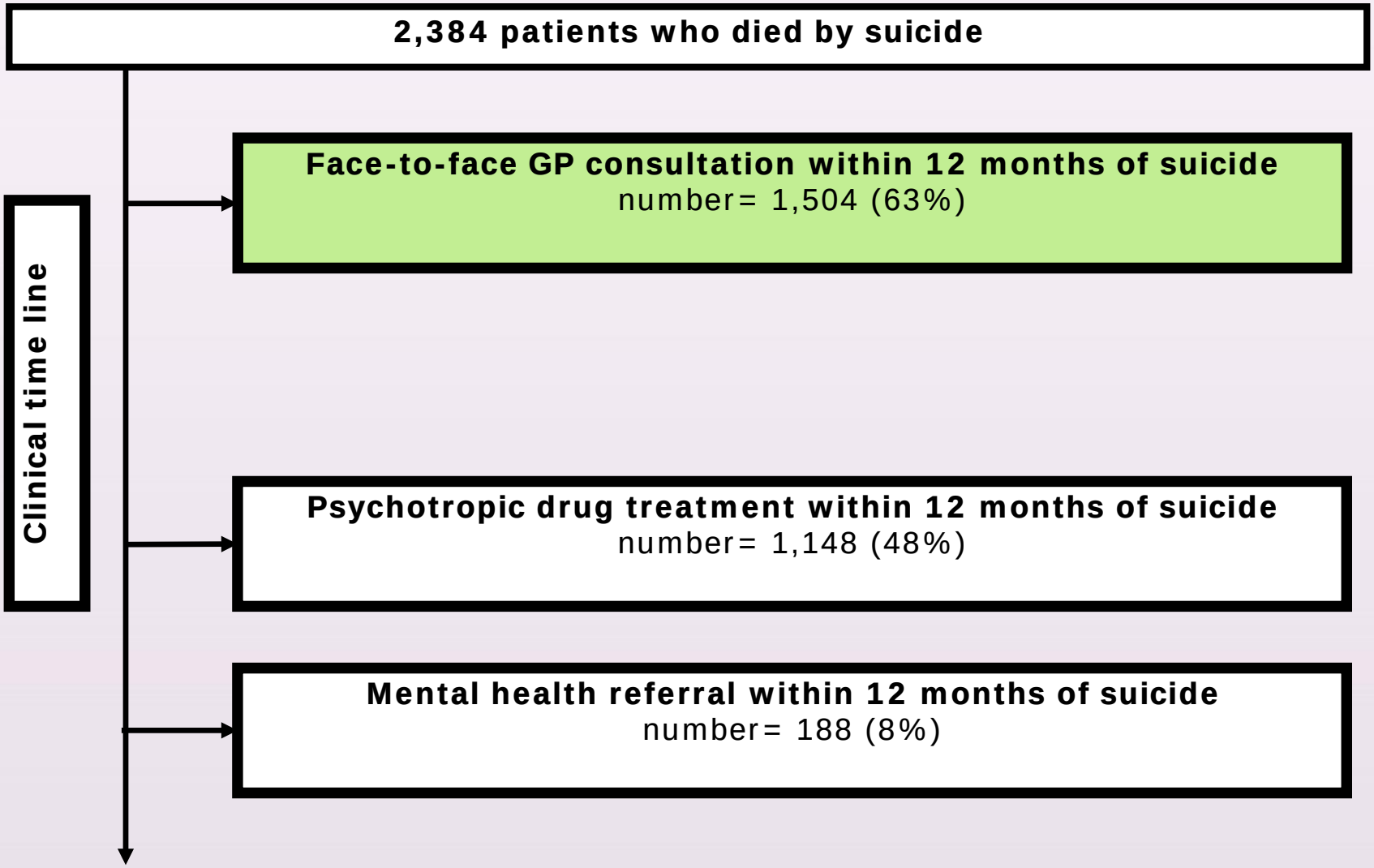
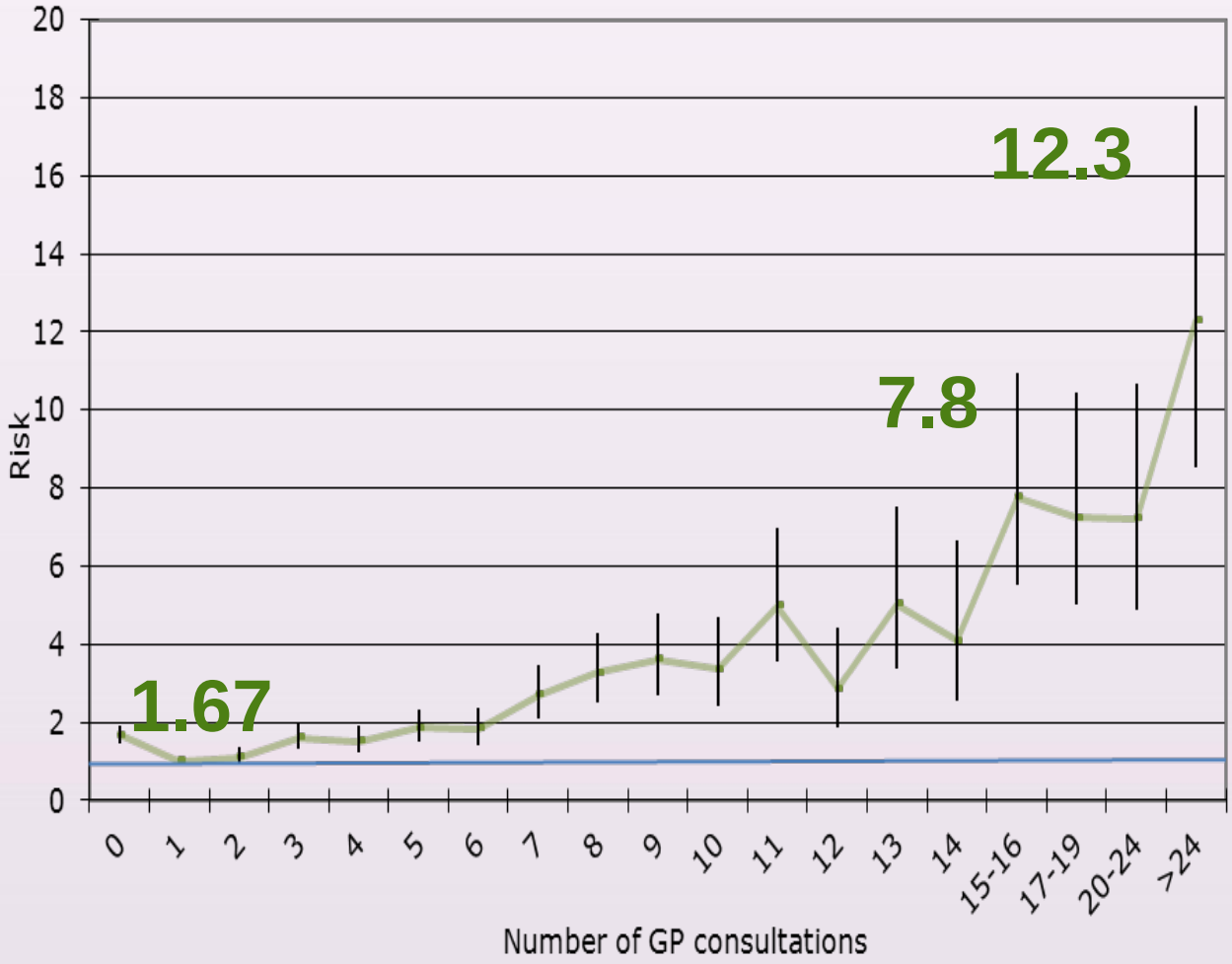
Patients who died by suicide 2002-2011: primary care consultation, treatment, and referral

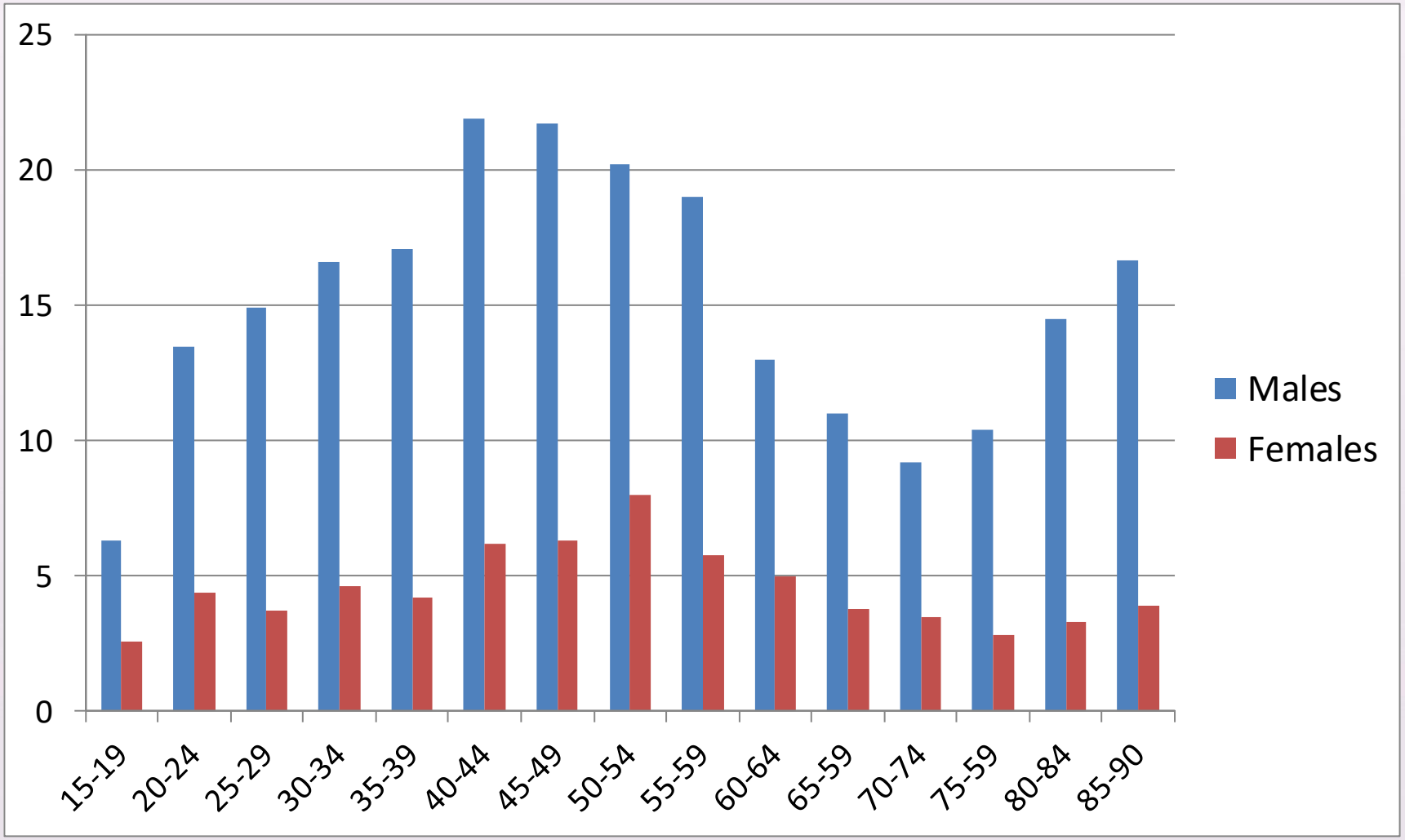


Suicide risk & number of GP consultations in previous 12 months



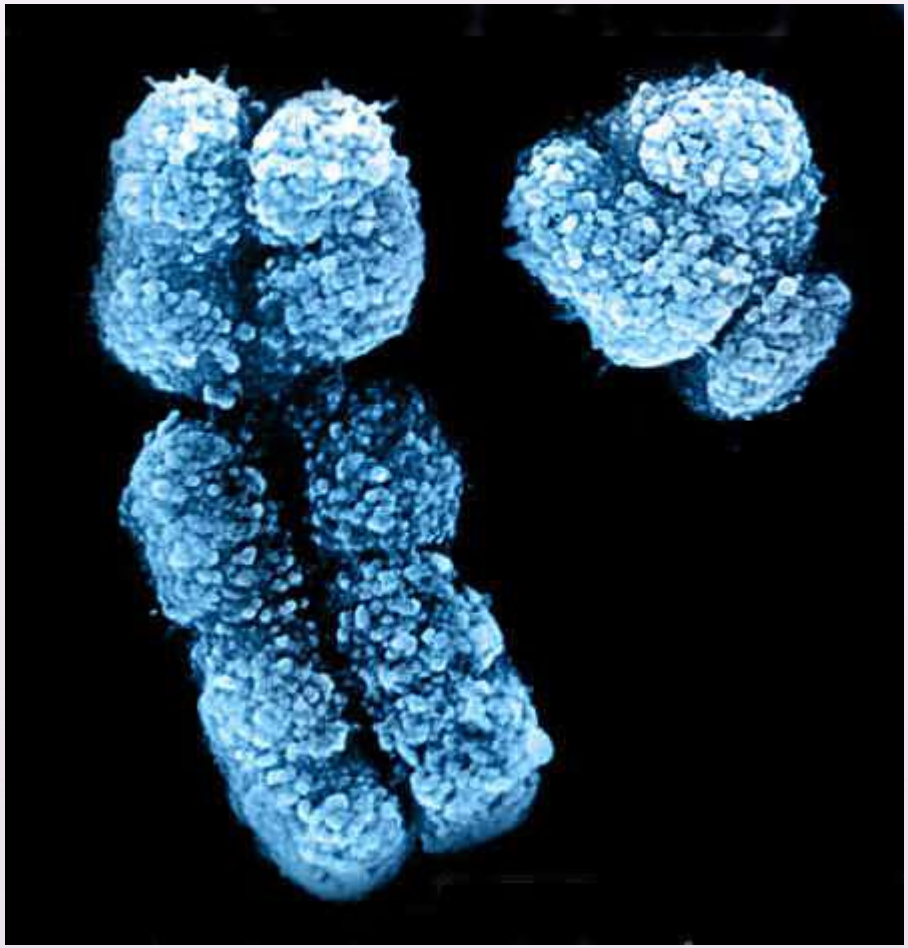
- Suicide linked to frequent GP consultation
- 12-fold increase with attendance x 2 per month
- Risk also high in non-attenders

Age-specific suicide rate, 2016



Source: ONS

Men and high suicide risk



- Dangerous methods
- Poor help-seeking
- More risk factors (drugs, alcohol, socioeconomic)
- Psychological characteristics

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Other population based approaches

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Home > NICE Guidance > Conditions and diseases > Mental health and behavioural conditions > Mental health and behavioural conditions: general and other

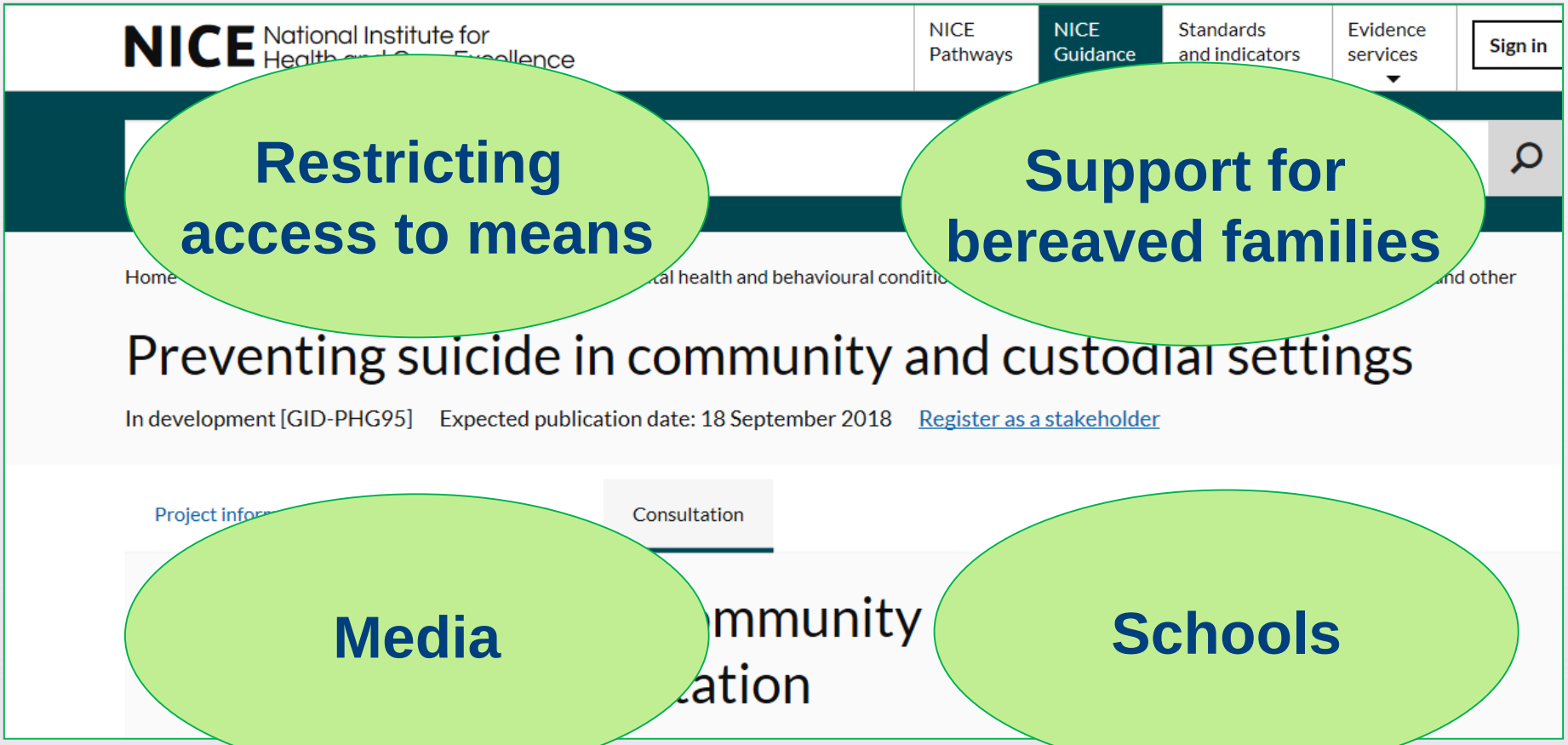
Preventing suicide in community and custodial settings

In development [GID-PHG95] Expected publication date: 18 September 2018 Register as a stakeholder

Project information | Project documents | Consultation

Preventing suicide in community and custodial settings: Draft guidance consultation

Other population based approaches



Working with your STP to improve safety

- Incorporating evidence into your Quality Improvement Plans
- Individual visits
- Focussing on your local concerns
- Providing bespoke data for your STP, working with you to understand your data

National Confidential Inquiry into Suicide and Safety in Mental Health

Website:
http://www.manchester.ac.uk/nci

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