

# Might screening for NHS staff work?

Prof Neil Greenberg on behalf of the NHS CHECK team  
*@profngreenberg*



**CONFERENCE** 2023



**KING'S**  
*College*  
**LONDON**



**So what's the 'real' prevalence of mental ill-  
health in NHS staff**

# Adverse mental health prevalence rates vary widely across studies

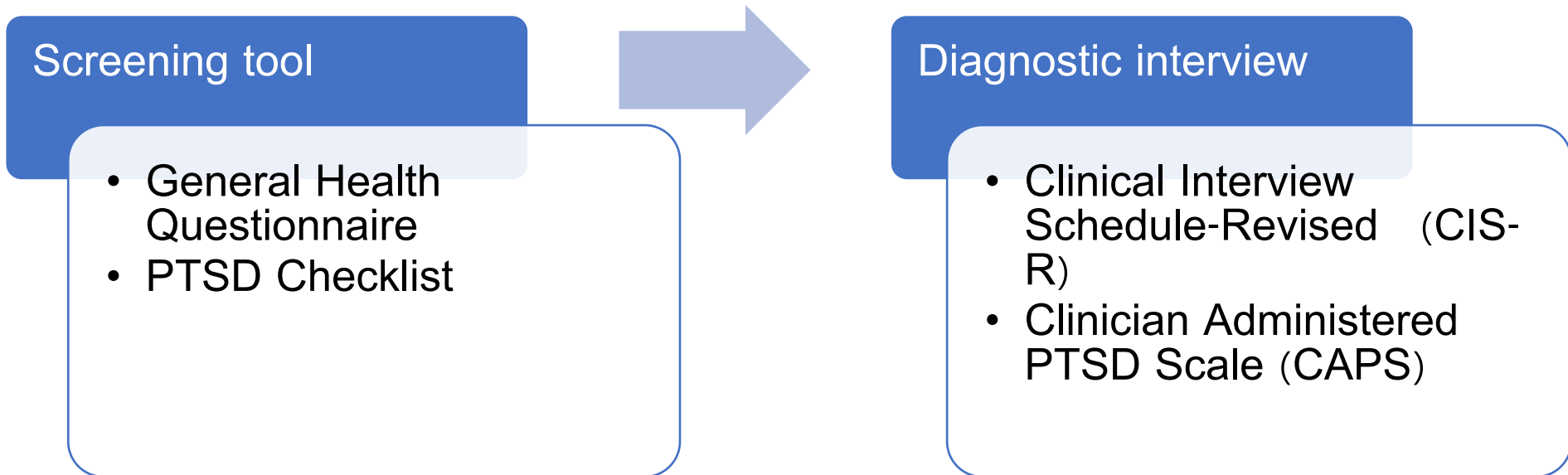


- 9-90% anxiety
- 5-65% depression
- 7-37% PTSD
  
- Mostly cross-sectional, online, frontline staff

# Screening measures tend to overestimate prevalence estimates



# A two-phase epidemiological design for a more accurate estimate of CMD and PTSD in healthcare workers



# 251 healthcare workers assessed for CMD and 96 for PTSD using diagnostic interviews

- Half of the sample was selected based on meeting the GHQ or PCL-6 caseness criteria at baseline
- Diagnostic interview samples comparable to the screening sample
- Diagnostic interview samples had slight overrepresentation of people from white ethnic background compared to NHS staff composition across 18 Trusts

# Estimated population prevalence were calculated for CMD and PTSD



Use of weighing and the diagnostic interview estimates to ensure generalizability to healthcare workers in England

# Prevalence rates were about 2-3 times lower when using diagnostic interviews instead of screening tools

	Screening tool (GHQ-12/PCL-6) % (95% CI)	Diagnostic interview (CIS-R/CAPS) % (95% CI)
Common mental disorders	52.8 (51.7-53.8)	21.5 (16.9-26.8)
Generalised Anxiety Disorder	NA	14.3 (10.4-19.2)
Depression	NA	13.7 (10.1-18.3)
PTSD	25.4 (24.3-26.5)	7.9 (4.0-15.1)



STRENGTHS

WEAKNESSES

Only study we know of that used diagnostic interviews in UK

- Use of administrative data to create weights (ethnicity, age, sex and clinical role)
- Clinical and non-clinical staff
- Comparable characteristics to NHS workforce
- Convenience sample of 18 NHS Trusts, low response rate to diagnostic interviews (13%)
- Framing effect – occupational studies

# One in five of HCWs are likely to meet criteria for a diagnosable mental disorder

- Overestimation of mental disorder prevalence estimates when using screening measures
- Further calibration needed when using screening tools in research
- So should formal mental health screening be used in practice?



# Screening – potential options



- Selection (pre-joining, pre-role)
- Health screening (post exposure)
- Surveillance (research, unit climate surveys)

# The seduction of pre-screening

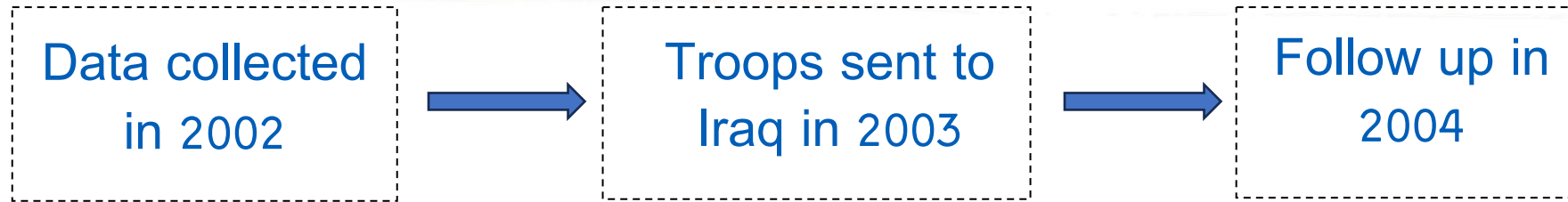


- Screening beforehand for “vulnerability to PTSD” is seductive
- The grandmother test is good...however other tests are very poor
- Historically - US Army and WW2



| CONFERENCE 2023

# King's College London – Screening research



Research

BMJ

Mental health screening in armed forces before the Iraq war and prevention of subsequent psychological morbidity: follow-up study

Roberto J Rona, Richard Hooper, Margaret Jones, Lisa Hull, Tess Browne, Oded Horn, Dominic Murphy, Matthew Hotopf, Simon Wessely

# Pre-role screening in police

*Occupational Medicine* 2020;70:162–168  
Advance Access publication on 10 February 2020 doi:10.1093/occmed/kqaa008

## A prospective study of pre-employment psychological testing amongst police recruits

**R. E. Marshall<sup>1</sup>, J. S. Milligan-Saville<sup>1,2</sup>, Z. Steel<sup>1,2,3</sup>, R. A. Bryant<sup>2,4,\*</sup>, P. B. Mitchell<sup>1,2</sup> and S. B. Harvey<sup>2</sup>**

<sup>1</sup>School of Psychiatry, University of New South Wales, Sydney, New South Wales 2031, Australia, <sup>2</sup>Black Dog Institute, Sydney, New South Wales 2031, Australia, <sup>3</sup>St John of God Hospital, Richmond, New South Wales 2753, Australia, <sup>4</sup>School of Psychology, University of New South Wales, Sydney, New South Wales 2031, Australia.

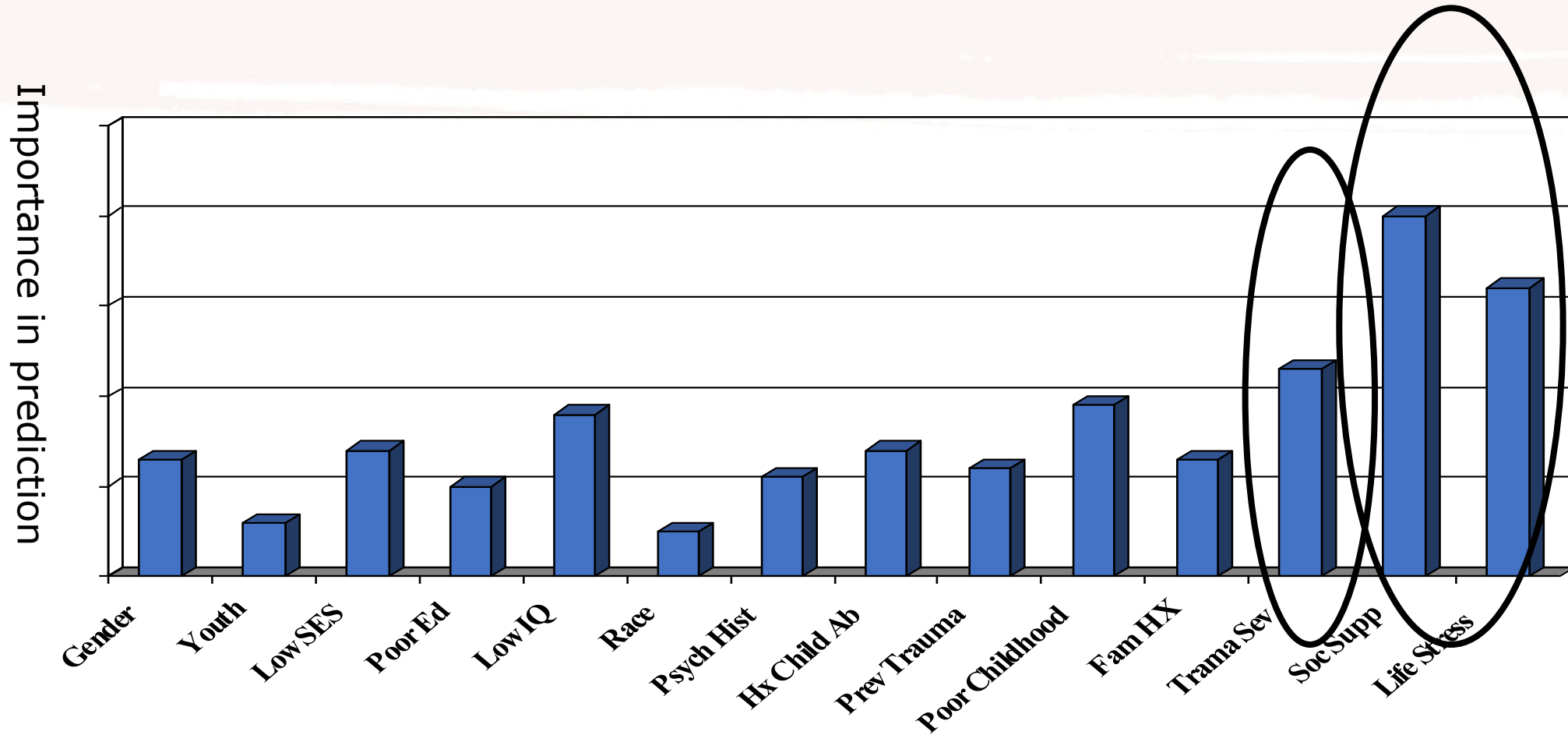
## MMPI – seven year follow up

### Results

Contrary to expectations, we were unable to demonstrate any association between validated pre-employment measures of personality and psychopathology with mental health outcomes amongst newly recruited police officers over a 7-year follow-up.



# Risk factors for PTSD



Brewin et al, 2000





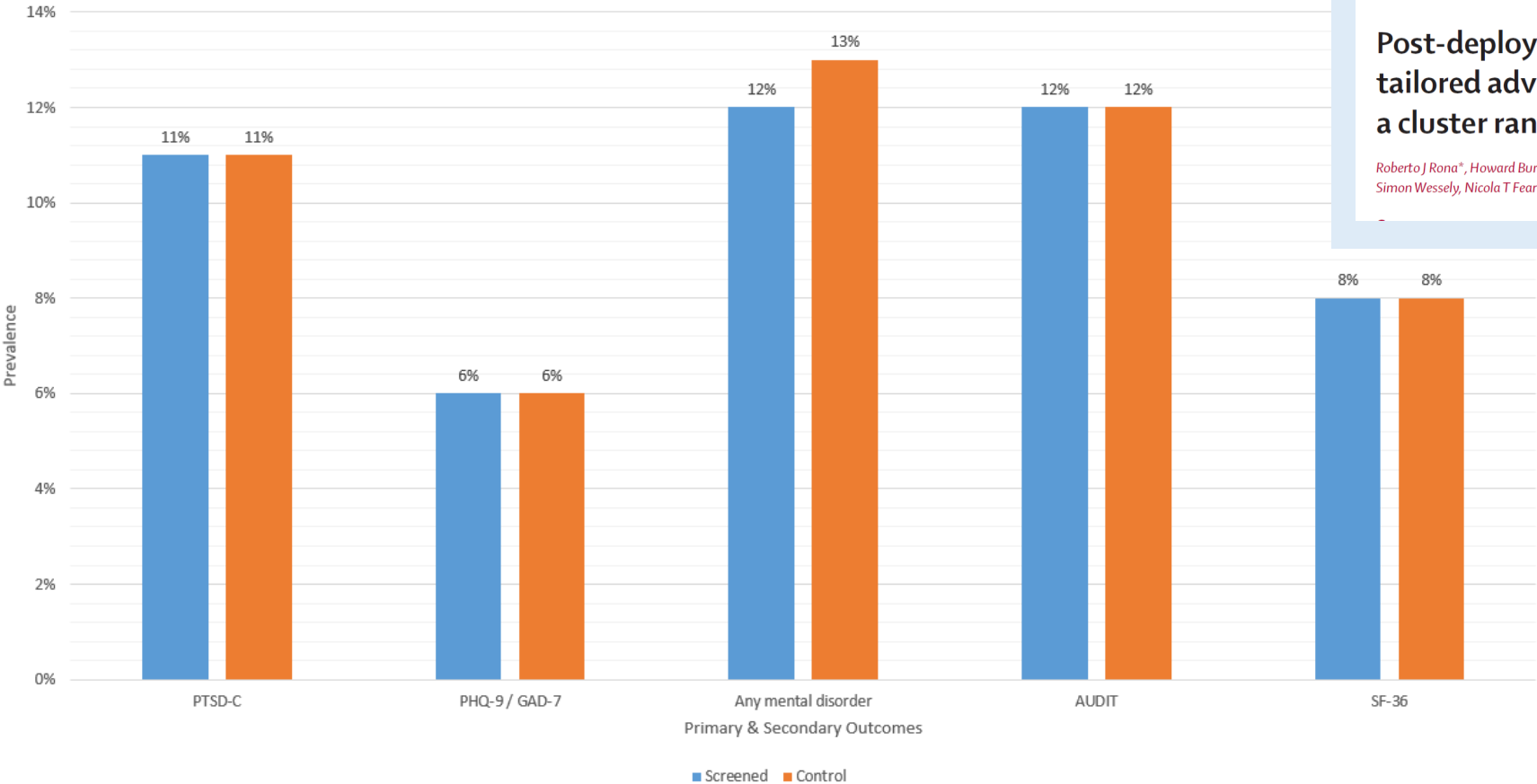
# Post incident screening



- Survey and/or face to face to identify MH problems
- Problems – advisory or mandatory MH referral
- Used by many military forces
- BUT worrying 2007 JAMA paper (US focused)
- So – POST study (n=9000, \$3M USD, 3 years...)

# POST Screening outcomes - MH

Outcome comparisons of those screened and controls



**Post-deployment screening for mental disorders and tailored advice about help-seeking in the UK military: a cluster randomised controlled trial**

*Roberto J Rona\*, Howard Burdett\*, Mizanur Khondoker, Melanie Chesnokov, Kevin Green, David Pernet, Norman Jones, Neil Greenberg, Simon Wessely, Nicola T Fear*





OXFORD

*Occupational Medicine*, 2023, XX, 1–2  
<https://doi.org/10.1093/occmed/kqad098>

## Editorial

# Workplace mental health screening for trauma-exposed workforces

Mental health screening protocols in organizations that routinely expose workers to intense psychosocial hazards, such as the emergency services, military and healthcare, attract considerable interest. Many trauma-exposed organizations [1] cur-

workers from engaging honestly with screening or seeking care after participation.

So, what is the evidence for the effectiveness of mental health screening within trauma-exposed workforces? A recent



| CONFERENCE 2023

# To conclude

- Real rates of MH ill-health much lower than 'screening' measures suggest
- Need to recalibrate screening measures used in research to reflect this
- No role for formal MH screening within organisational settings
- (but might work as an anonymous self-screen??)

# Any Questions?- Fire Away!

Neil.greenberg@kcl.ac.uk  
[www.kcl.ac.uk/kcmhr](http://www.kcl.ac.uk/kcmhr)  
@profngreenberg  
Neil.greenberg@kcl.ac.uk

