Brain Injury

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RC PSYCH
ROYAL COLLEGE OF PSYCHIATRISTS

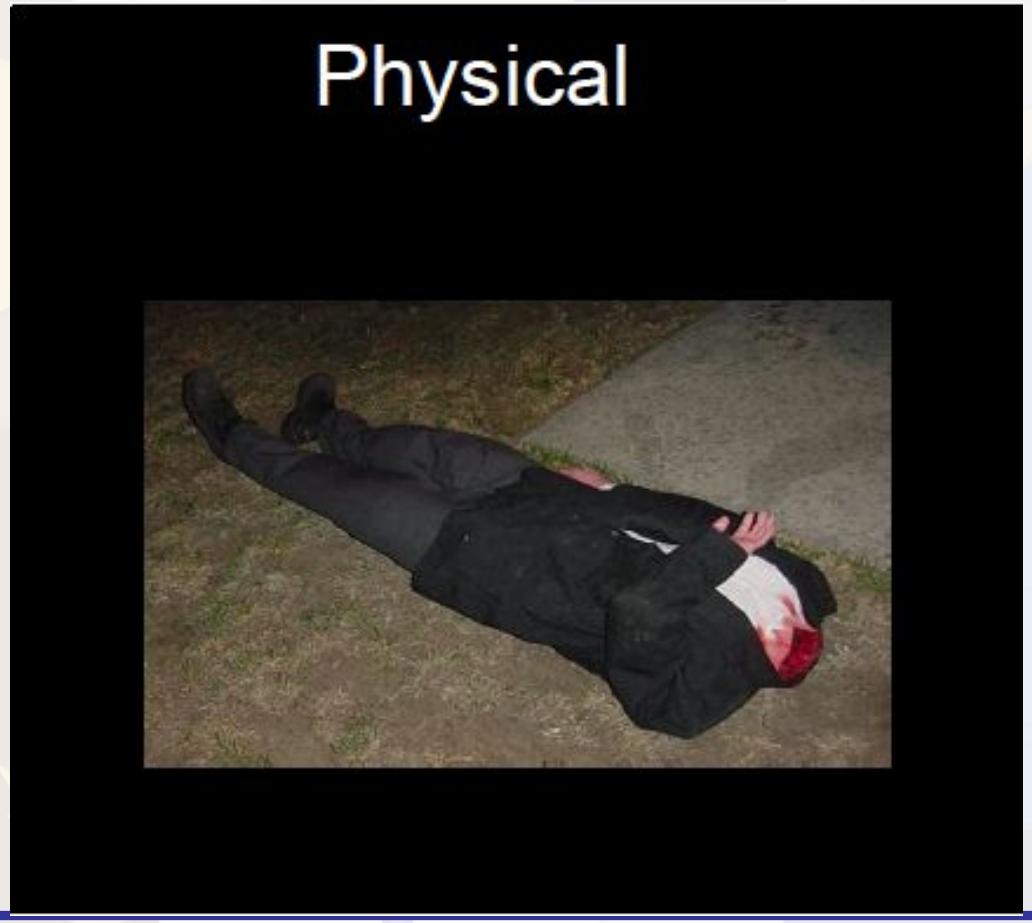
UKABIF
The United Kingdom Acquired Brain Injury Forum

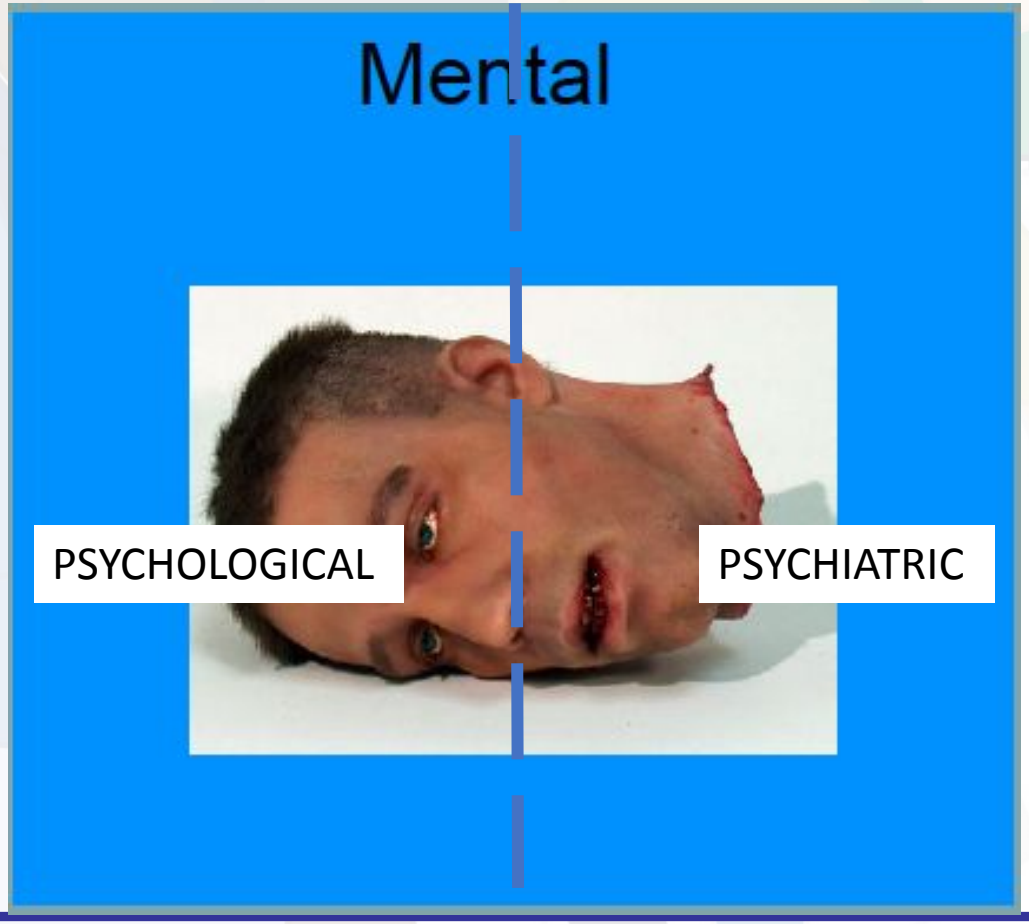
BRAIN & MIND

Social

The Mind-Body Problem

Pictures from Prof Michael Sharpe

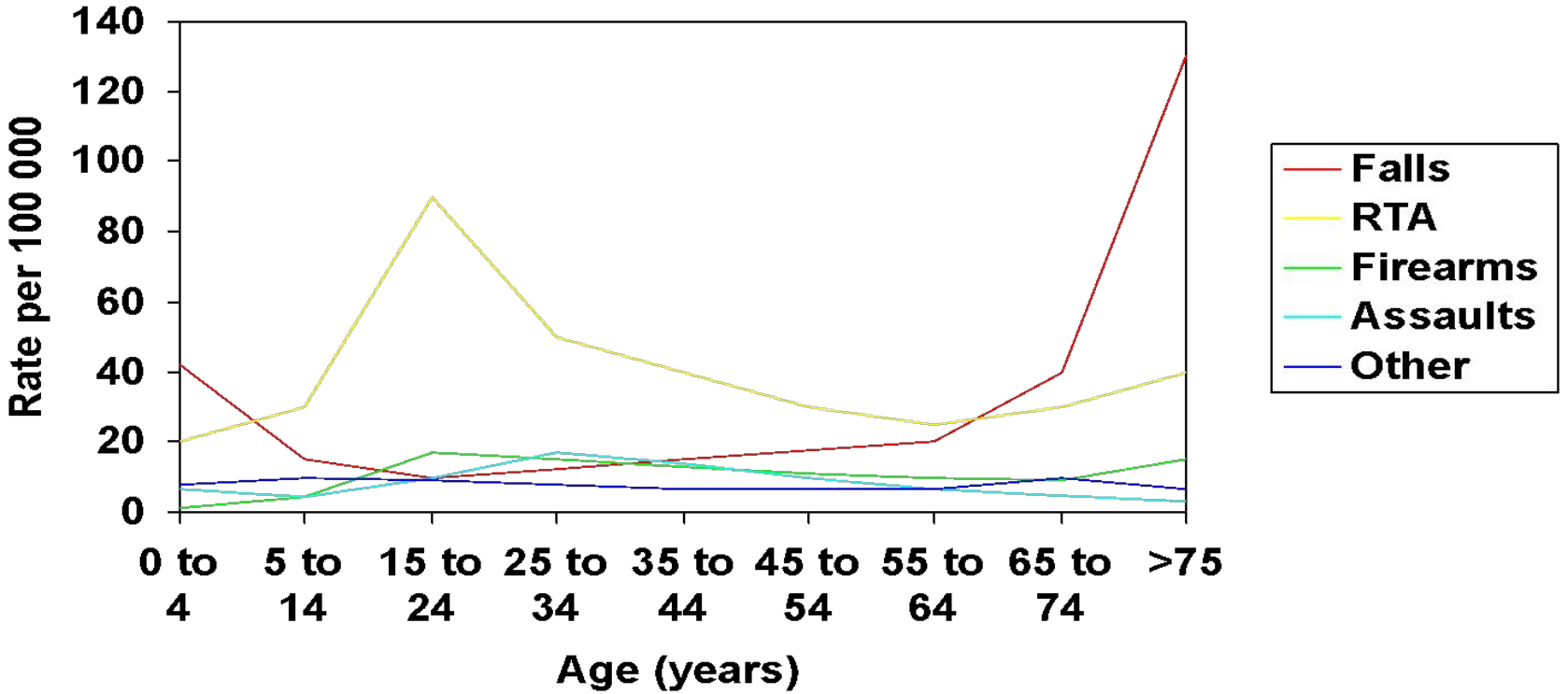




The Size of the Problem

- ECA 8.5% report history of head injury with LOC or confusion
- 200-300 per 100 000 attend hospital with a head injury, per annum
- 1/6 admitted to hospital
- 80% mild/10% moderate/10% severe
- 3□: 1□
- 15-25 years, alcohol & higher deprivation

TBI Rates by Age & Cause
National Center for Injury Prevention & Control, 1999

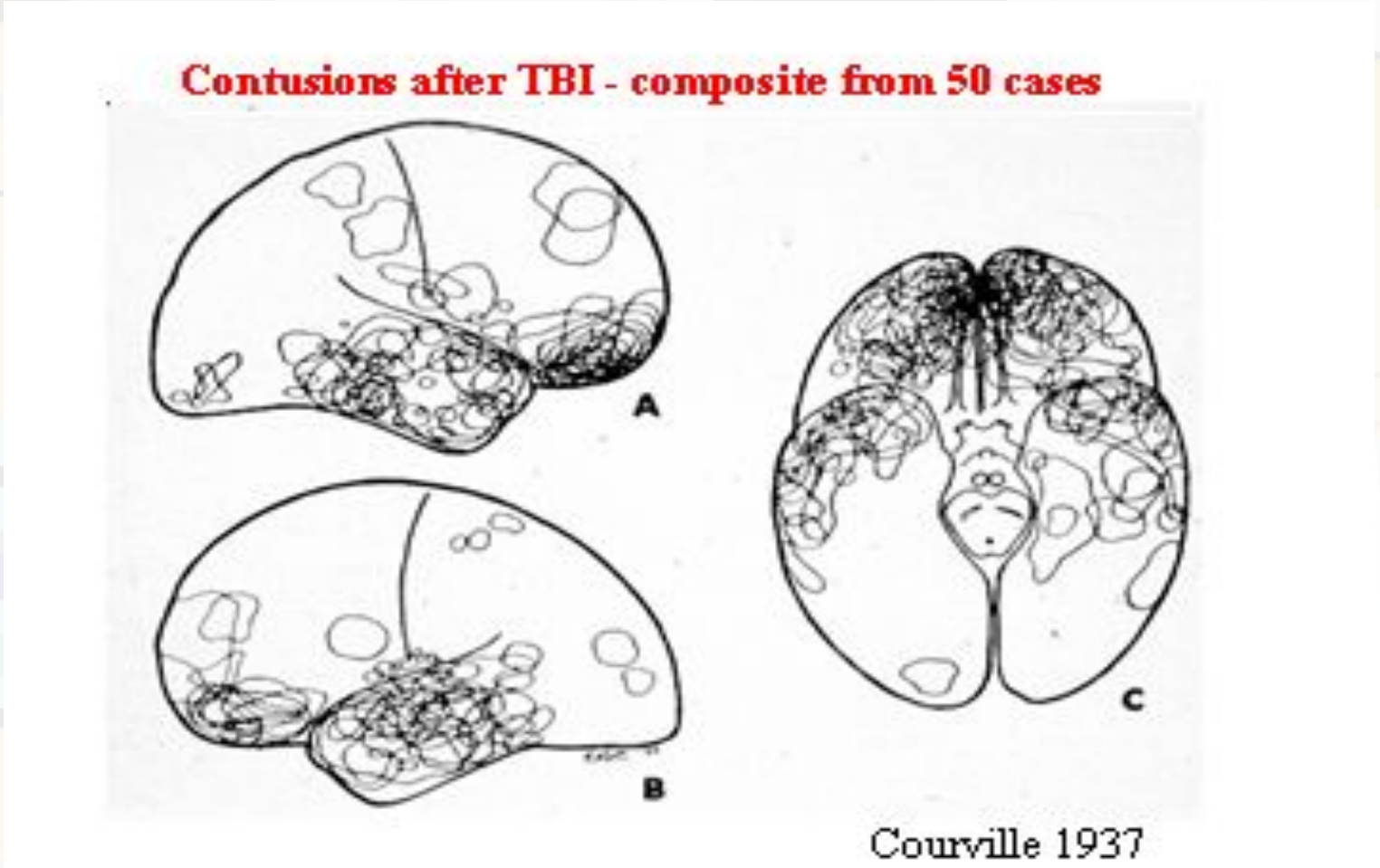


TBI and Offending – The Silent Epidemic

- TBI reported in 60% - 74% of male prisoners Williams, 2010; Kent, 2021
  - 15% moderate to severe, younger at age of first sentence, more likely to reoffend, higher levels of self-reported reactive aggression, mental illness and suicide Chitsabesan, 2015
- Prisoners with TBI 2.37x more likely to commit serious violent crimes Lennings & Kenny, 2007
  - Highest risk in those with substance misuse
- TBI reported in 78% of female prisoners, 40% with disability McMillan, 2021
  - Domestic violence as cause in 89%
- Economic cost of TBI in offenders £190k higher Williams, 2016

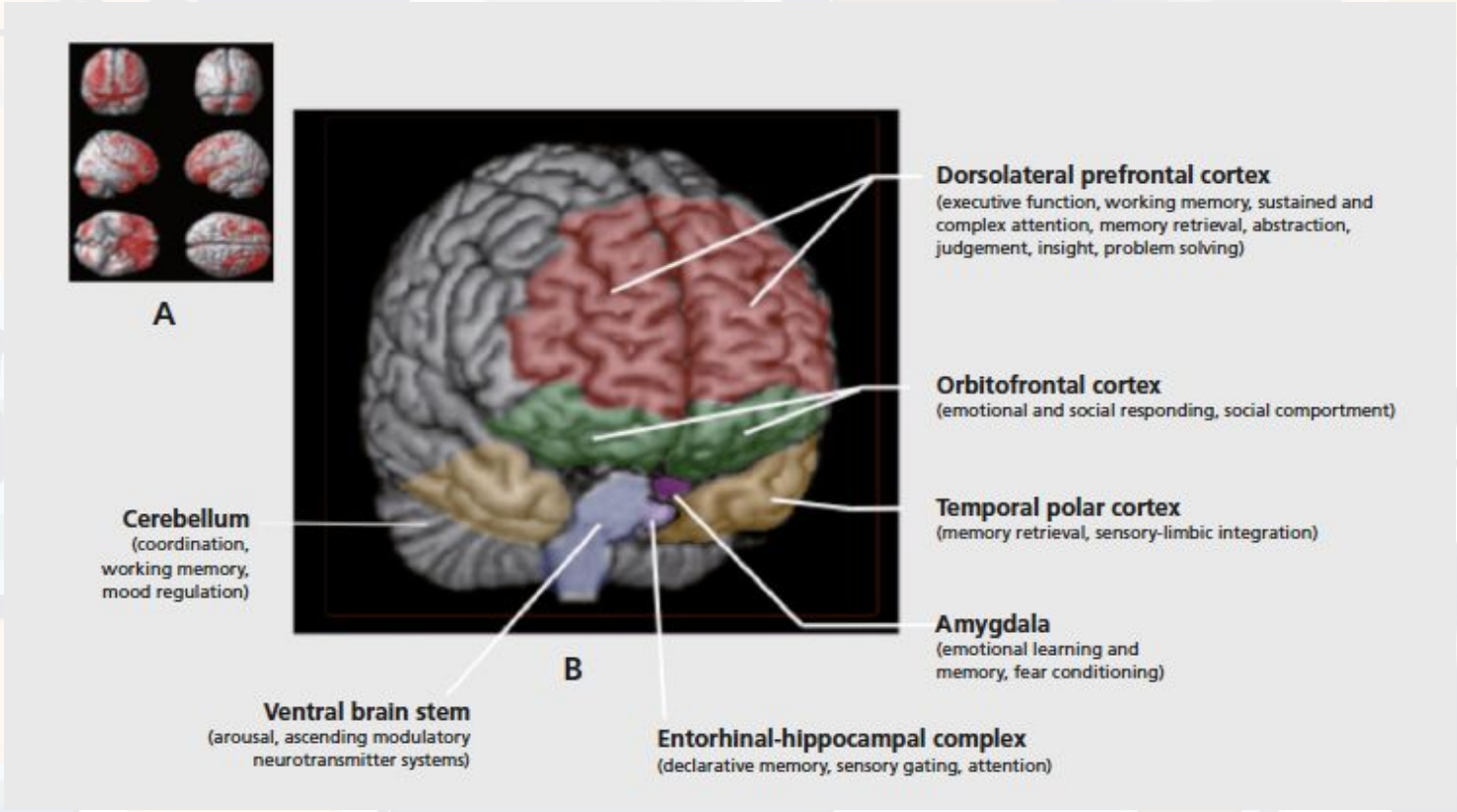
TBI and Homelessness Stubbs et al, 2020

- Lifetime prevalence of TBI 53.1%: 2.5-4x higher
- 22.5% for moderate to severe TBI: 10x higher
- 51-92% experienced first TBI before first episode of homelessness
- Associated with poorer self-reported physical and mental health
- Higher self-reported suicidality and suicide risk
- Increased health service use and criminal justice system involvement
  - Exemplar service - Lambeth hostels neuropsychology and brain injury service (LHNBIS)


Contusions after TBI - composite from 50 cases
A
B
C
Courville 1937

Neuopsychiatric problems after brain injury

McAllister, 2011

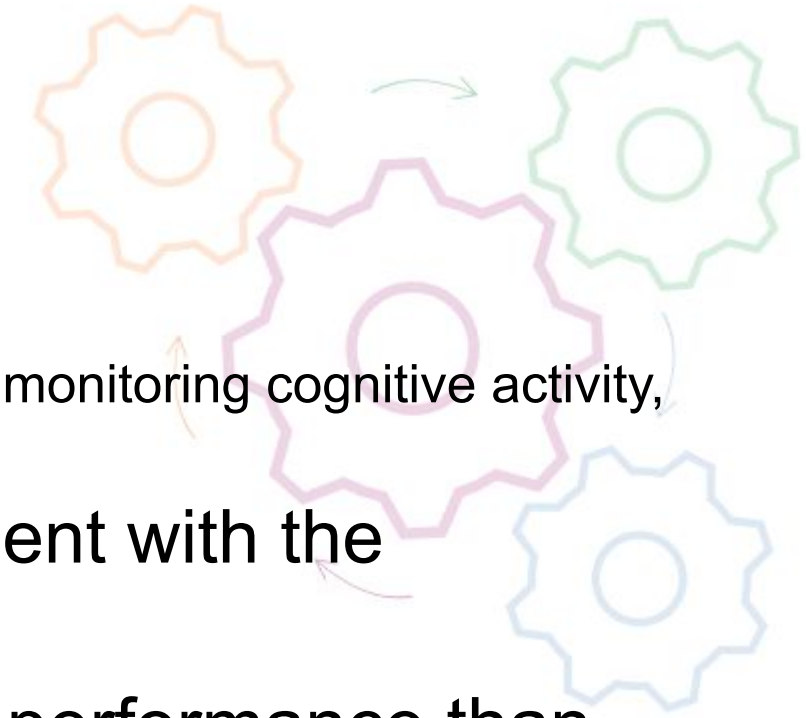


Neuropsychiatric problems after brain injury

Dilley & Fleminger, 2008

Syndrome	*Mean prevalence, %[1]*	*Clinical features*
Depression	35	Feeling miserable or hopeless, tearfulness, demotivation, decreased appetite and weight loss, reduced interactions
Mania	Rare	Elevated mood, decreased sleep, thought disorder, grandiosity
Bipolar affective disorder	Rare	Alternating symptoms of depression and mania
Anxiety disorder	25	Uncontrollable fear or apprehension, restlessness, somatic anxiety symptoms
Apathy without depression	20	Avolition, anhedonia and demotivation
Psychosis	Rare	Delusions and hallucinations
Emotionalism	20	Impairment in the control of crying and, more rarely, laughing
Catastrophic reaction	20	Bursts of aggressive behaviour, anxiety, crying
Cognitive impairment	25	Visuospatial neglect, apraxia, impaired learning, reduced attention

Dysexecutive Syndrome



- More specific impairments
  - Deficits in organizing, planning, scheduling, prioritizing, monitoring cognitive activity, multitasking
- Isolated medial orbito-frontal lesions can present with the dysexecutive syndrome alone
- Neuropsychological tests may suggest better performance than the real world

Mental Capacity Challenges in ABI

- Ongoing challenges in implementing the MCA across all professions
- Psychiatric assessments are inconsistent and variable (even with training) Jayes et al, 2019; Spencer et al, 2017
- Unstructured assessments have poor reliability Marson et al, 1997
- 38% of COP cases experts disagree and, in 4 cases, Judges disagree with experts Ruck Keene et al, 2019

The Frontal Lobe Paradox George & Gilbert, 2005

- Disparity between interview/test performance and actual decision-making abilities
- Ignoring the paradox can lead to detrimental outcomes and lack of necessary care or supervision.
- The paradox involves impaired adaptive functioning and executive skills, which are masked by preserved language and reasoning abilities in traditional assessments
- Brain injury can result in a lack of insight, overestimation of abilities, and ineffective use of compensatory strategies in real-world situations
- Essential collaboration between professionals to consider patients' adaptive behavior alongside self-reported intentions.

Restriction & Empowerment

- The importance of the 'support principle'
  - Is often not described in assessments
- In many with ABI, the structure, scaffolding and support that is required to make a decision is critical to DMC
- Provision of support often seen as restrictive and decreasing independence, 'not empowering'
- It is in those especially with executive impairment that that support empowers people to make decisions

Common Challenges for Vulnerable Groups with TBI

- Identification of TBI and complex neuropsychiatric comorbidity
  - Severe mental illness, substance misuse and multimorbidity
- Poor screening and recognition
  - Need for structured interviews to identify need for further assessment
- Inequality of access to physical and mental health and social care
  - Disabilities Trust BI Linkworkers; LHNBIS; Guild Lodge Neuropsychiatry Unit
- Few services providing supported access to treatment
  - Vulnerable groups often transient contacts – need for proactive engagement
- High societal, human and economic cost of TBI in vulnerable groups

The Brain/Mind Interface: Clinical & Medicolegal Challenges Conference, 5 October, RCP

- Healthcare and social drivers to bias and inequality at the Brain/Mind Interface.
- Functional Neurological Disorder: Less Equal than Others.
- Traumatic Brain Injury: Why is it so common in seldom heard from groups and what are the consequences?
- Can biomarkers decrease inequalities in neuropsychiatric conditions?
- Health Inequalities through the Chronic Pain Lens.
- Making the Unequal, Equal – Solutions to Inequalities in Interface Disorders.
- Challenges for the Courts: Brain & Mind Inequalities in Medicolegal Settings