

Routine blood-borne pathogen screening on an adult inpatient mental health ward

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The problem

People with severe mental illness* (SMI) have poorer physical health outcomes and a higher premature mortality than the general population.¹ Much work has been done to improve health equity for people with SMI, yet there is a higher prevalence of blood-borne pathogens (BBP) in this population which has not widely been addressed.²

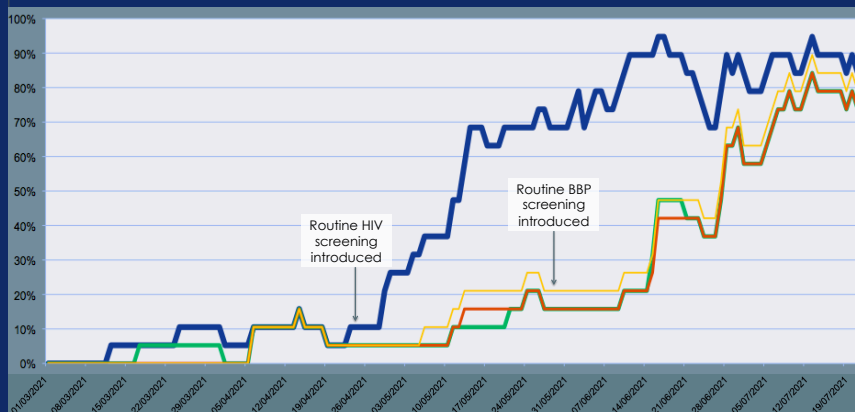
Avoidable harm to both physical and mental health is caused by BBP.³ Many BBP are asymptomatic until advanced disease is established.² Untreated BBP can produce symptoms which mimic a number of mental health conditions.^{4,5} Early detection and treatment can prevent complications, reduce transmission,⁶ and (in the case of syphilis and hepatitis C) may be curative.^{7,8} The elevated risk profile in people with SMI may be due to sociodemographic factors, substance misuse and sexual risk behaviours.^{2,9}

*SMI is a term which includes schizophrenia, bipolar disorder, schizoaffective disorder and major depressive disorder.

Our intervention

NICE recommends that adults should be tested for HIV in endemic areas with a prevalence >0.2%.¹⁰ Given the elevated incidence of BBP in patients admitted to tertiary mental health units compared with the general population,¹¹ **we believe asymptomatic BBP screening should be routinely offered in mental health services.** A proportion of patients with SMI do not access physical healthcare via traditional routes, so contact with mental health services provides a valuable opportunity to address their physical health needs. Across the UK, routine blood tests are performed upon admission to mental health units,¹² so it would be pragmatic to screen for BBP at the same time. Our quality improvement project tests this theory by introducing BBP screening on an adult inpatient mental health ward. We anticipate this will further enhance integration between physical and mental health services, and over time it may improve rates of BBP detection and treatment. We hope that routine screening will help to normalise BBP testing, challenging the stigma which acts as a significant barrier to testing.⁵

Results: % of inpatients tested for BBP from 01/03/21 - 21/07/21



- Before implementing routine screening, 11% of patients were screened for any BBP during admission.
- By the 21st July 2021:
 - 100% of patients were offered BBP screening.
 - Screening rates rose to: HIV= 84%, Syphilis= 74%, Hep B= 74% Hep C=79%.
 - In total, 49 were tested for HIV and 33 for Syphilis and Hep B and C.
 - 100% of patients tested negative for all BBP.
- Screening is ongoing and is likely to be introduced across CNWL Trust.

% inpatients tested for HIV
% inpatients tested for syphilis
% inpatients tested for Hep B
% inpatients tested for Hep C

Only one patient reacted negatively to being offered BBP screening, stating: "I'm not dirty." Following a longer conversation, they later consented to the test.

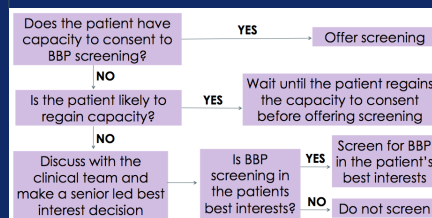
Aims

- Offer BBP (HIV, Syphilis, Hepatitis B and Hepatitis C) screening to 100% of inpatients.
- Screen at least 75% of patients admitted to Eastlake Ward for BBP.
- Assess if screening is pragmatic and acceptable to service users and staff.

Methods

- **PDSA Cycle 1:** Between April 24th - May 29th 2021 all inpatients and new admissions on Eastlake Ward were offered an HIV test with supporting written and verbal information.
 - Any distress caused by offering screening was recorded.
 - Consent was obtained using the decision specific capacity tool.
 - Gastroenterology, sexual health and HIV services were contacted to establish a management protocol in the event of any positive cases.
- **PDSA Cycle 2:** From May 29th 2021 screening was expanded to offer testing for Syphilis, Hep B&C.
- **PDSA Cycle 3:** BBP status was audited from 1st March 2022 to assess if screening led to an increased uptake of BBP testing.

Decision specific capacity tool



Lessons learnt

- Evidence-based medicine supports offering BBP screening to mental health inpatients.
- The offer of screening was not shown to cause significant distress.
- Screening was not overly burdensome to staff.
- Ongoing screening would be needed to identify positive cases.
- The majority of patients have capacity to consent to BBP screening and those who do not may still be screened in their best interests. The decision specific capacity tool can help with this process.
- BBP screening in mental health helps to integrate physical and mental health secondary prevention services.

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