

# Are CT Head scans in patients presenting with first episode psychosis (FEP) being requested in accordance with NICE guidelines at a District General Hospital?

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## AIMS AND BACKGROUND

- To assess the compliance with NICE guidelines of CT head scan requests to a district general hospital for patients presenting with first episode psychosis (FEP).
- There is no international consensus on guidelines for requesting neuroimaging in the investigation of FEP.
- There is a growing body of evidence to suggest that neuroimaging in FEP should not be routinely performed.<sup>1</sup>

**NICE (National Institute for Clinical Excellence) guidelines** state that neuroimaging in FEP should be used:

*“Selectively to exclude organic causes of psychosis where people’s symptoms or other aspects of their presentation suggest a higher likelihood of an underlying organic cause”.*<sup>2</sup>

## METHODS AND RESULTS

- All CT head studies carried out at a District General Hospital between November 2020 to November 2021.

- Key-word searches of radiology requests and reports: *“bizarre”, “delusion(s)”, “delusional”, “hallucination(s)”, “behaviour”, “agitation”, “confusion”, “encephalitis”, “psychosis” and “psychotic”.*

311

• FEP-related indications identified for screening.

- All obtained requests were then screened for indication by the authors. Clinical records were examined where clarification was required.

12

• Total discarded due to insufficient Information

251

• Total Discarded as not requested for FEP

- Choosing Wisely Canada guidelines used as a reference to guide what constitutes a *“higher likelihood of underlying cause”*.<sup>3</sup>

28

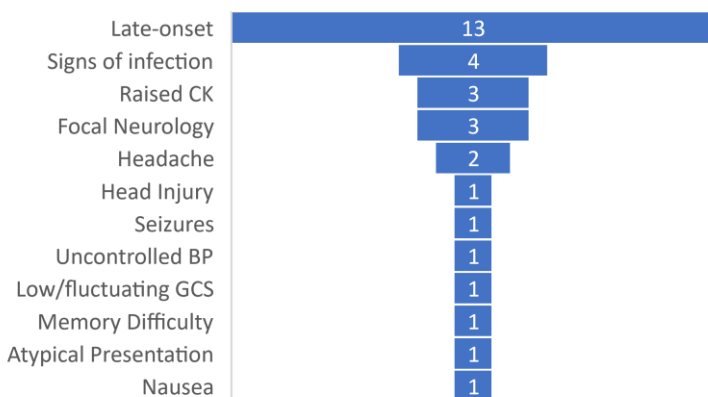
• Total Consistent with NICE Guidelines

20

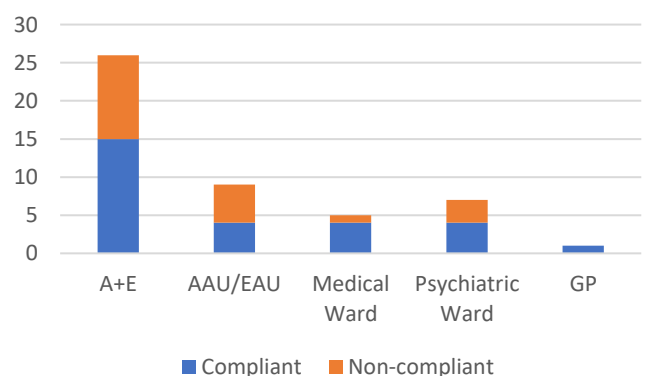
• Total Inconsistent with NICE Guidelines

- Mean age = 35y Range = 16y to 59y

### Cited Reasons for compliant CT Head scans



### Compliant vs Non-compliant requests by department



## DISCUSSION AND RECOMENDATIONS

- In a clinical setting, there are many factors that may play a role in the decision to request a CT Head scan in this patient group: Medico-legal concerns, facilitating diagnostic buy-in, and avoiding diagnostic overshadowing in an often marginalised patient group. Missing a potential organic, reversible cause has huge implications for the patient.*
- Where NICE guidelines were not followed, the risks associated with radiation exposure could have been avoided.
- Local teaching sessions and appropriately placed posters targeted at the A&E and radiology department may improve practice.

1. Forbes M et al. The clinical utility of structural neuroimaging in first-episode psychosis: A systematic review. The Australian and New Zealand journal of psychiatry. 2019;53 (11).  
 2. NICE UK. Overview | Structural neuroimaging in first-episode psychosis | Guidance | NICE. 2022.  
 3. Choosing Wisely Canada 2022 [Available from: <https://choosingwiselycanada.org/>].