NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

Structural neuroimaging for first episode psychosis

Response to consultee, commentator and public comments on the ACD

Consultee and Commentator response to the ACD

Consultee or commentator	Comments	Institute response
Royal College of Nursing	The Royal College of Nursing welcomes the opportunity to review the Appraisal Consultation Document (ACD) of the technology appraisal of the use of Structural neuroimaging in first episode psychosis. The ACD is comprehensive and in our view, the relevant evidence has been taken into account in coming to the recommendations. We consider that the summaries of clinical and cost effectiveness are reasonable interpretations of the evidence and that the preliminary views on the resource impact and implications for the NHS seem appropriate. The provisional recommendations of the Appraisal Committee seem sound. However we wondered whether the wording of item 1.1 should qualify that the first episode of psychosis could occur with the absence of any other signs/symptoms suggestive of other pathology where MRI/CT would be appropriate. It maybe that this point has been addressed in other NICE guidance (for example CT scanning for Stroke), but it would be helpful to clarify for this guidance.	Comments noted. No action required The objective of carrying out this appraisal was to determine the clinical and economic value of routine structural neuroimaging for all patients with first episode psychosis as against selective scanning only when there are additional neurological signs and symptoms suggestive of a structural lesion. See introductory text to section 4 of the FAD. Based on the evidence considered, the guidance given in section 1 of the FAD does not recommend routine neuroimaging of people when there are no signs, symptoms or clinical findings suggestive of an underlying structural lesion.

Consultee or commentator	Comments	Institute response
Department of Health	The Department of Health has just two comments to make and they are as follows: 1. para 2.1 Would you please consider defining the first episode psychosis a bit more tightly? It is generally suggested that symptoms be present for at least a month. (certainly for the first episode teams to take people on), and 2. In para 2.3 we feel that the reference to finished episodes may not be clear to all audiences.	See amendments to FAD section 2.1. It has been suggested that a two year duration limit should be used for first-episode psychosis but this has not been generally accepted. There was no evidence presented regarding a generally accepted *minimum* duration of symptoms. See also Technology Assessment Report (page 2). There is currently no clinical consensus on the duration and time limit for defining first-episode psychosis, considering also the date of presentation of first-episode psychosis does not usually coincide with onset of the condition and often psychosis has a gradual onset. See amendments to FAD section 2.3 to include a definition for finished episodes.

Consultee or commentator	Comments	Institute response
NHS Quality Improvement Scotland	i) Whether you consider that all the relevant evidence has been taken into account? Yes. Although the document is not referenced and thus it difficult to ascertain whether the sources of evidence were exhaustive, there are no glaring omissions.	Comments noted. No action required. Note that references are provided in the associated Technology Assessment Report
	ii) Whether you consider that the summaries of clinical and cost effectiveness are reasonable interpretations of the evidence? Yes.	Comments noted. No action required.
	iii) Whether you consider that the provisional recommendations of the Appraisal Committee are sound and constitute a suitable basis for the preparation of guidance to the NHS? The key message is that structural neuroimaging for first episode psychosis offers no persuasive overall benefit. The research data available to date supports this. Importantly, routine imaging of this sort would not alter immediate treatment as things stand currently.	Comments noted. No action required.
	iv) Whether you consider that there are any potential policy implications for SEHD? The only issue that has a Scottish context is that of neuroimaging those at high genetic risk of developing a psychotic illness. My reading of the data available to date is that we are some way off recommending such a course of action as a matter of routine.	Comments noted. No action required.

Consultee or commentator	Comments	Institute response
NHS Quality Improvement Scotland	Reviewer 1 i) Whether you consider that all the relevant evidence has been taken into account. *A* limited *evidence base was noted. What was found seems to have been used.* ii) Whether you consider that the summaries of clinical and cost effectiveness are reasonable interpretations of the evidence. *Given the evidence provided, the summaries appeared fair.* iii) Whether you consider that the provisional recommendations of the Appraisal Committee are sound and constitute a suitable basis for the preparation of guidance to the NHS. *Yes – given the uncertainty of the evidence, a 'no change' seems reasonable* iv) Whether you consider that there are any potential policy implications for SGHD? *I have consulted colleagues with policy responsibility for aspects of mental health. The view is tha. From a mental health policy perspective,t not recommending structural neuro-imaging for all patients with first episode presentation of psychosis is acceptable for the time being given the evidence. There are therefore no policy implications at this time.*	Comments noted. No action required Comments noted. No action required Comments noted. No action required. Comments noted. No action required.

Comments received from website consultation

Commentator	Section of ACD	Comments	Institute response
Professional officer	3	3.2 Some MR neuroimaging may require contrast enhancement, normally of a gadolinium chelate. Although contrast reactions are rare they are not unknown and additionally patients with impaired renal function may be unsuitable for contrast enhancement.	Comments noted. Although, contrast enhancement may be needed, it is not generally required for MRI scanning. See amended FAD section 3.3.
	6	6.0 We should support further research and systematic studies to see if there are clinical benefits in imaging atypical psychosis on presentation. This would then support workforce development perhaps.	Comments noted. No action required. The research recommendations apply to structural causes of first-episode psychosis; not the various atypical psychotic disorders with unusual features.
NHS professional	1	We feel that the right decision has been made, however in future we think a joint-director of the National Collaborating Centre for Mental Health should be an observer on the group and not just a consultee. We would also like to add that there may be cases (suspected brain damage/atypical presentation) where you might wish to use such imaging techniques but clinicians may now be prevented from doing so. There is potential for misinterpretation and some slight adaptation of the words may help avoid this.	The objective of carrying out this appraisal was to determine the clinical and economic value of routine neuroimaging for all patients with first episode psychosis as against selective scanning with structural neuroimaging only when there are neurological signs and symptoms suggestive of a structural lesion. See introductory text to section 4 of the FAD. The guidance given in section 1 of the FAD does not recommend routine structural neuroimaging of people when there are no signs, symptoms or clinical findings suggestive of an underlying structural lesion. This doesn't deter the use of structural neuroimaging in the management of other illnesses.

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Other	1	Diagnosis: Recent development in MRI data analysis methods, which take into account multiple defects simultaneously from the whole brain, gives reason to believe that MRI can be valuable method in diagnostic and differential diagnostic for schizophrenia within functional disorders. It is important for exclusion of psychotic disorders caused by tumours, infections and other serious organic agents. Treatment plan and outcome assessment: Defects and their changes in CNS correlate with neurocognitive performance and outcome in patients with schizophrenia. Therefore, MRI scanning findings of first-episode patients are important and valuable when need-specific treatment and rehabilitation is planned for individual patients. MRI scanning of first-episode patients is as important as neurocognitive tests which are kept obligatory. Repeated MRI is valuable in the cases when the effect of drugs on certain CNS structures is assessed and/or when a patient shows unexpectedly poor outcome possibly correlating with pathological changes in CNS structures. Same comments concerns also patients at risk for psychosis. They often have MRI changes with same significance as in first-episode patients.	Comments noted. No action required.
Other	2	Point 2.5 - patients with psychosis may be reluctant to accept their condition because one of the features of psychosis is lack of insight. 2.6 - we deleted "but these are not routinely used in the UK" from the TAR because of peer review comments. In some areas of the UK it is routinely used but in others it isn"t.	Comments noted. The appropriate amendments have been made. See FAD sections 2.5 and 2.6.
	3	There is also the cost of escorting patients to and from psychatric care to the scanning centre	Comments noted. No action required.

Commentator	Section of ACD	Comments	Institute response
Other	4	We changed the base case for tumours/cysts from 5% to 1% as feedback from a variety of sources suggested this was more realistic. This changed our conclusions for the base case of the threshold analysis. We then used 5% and 0.5% as variables in the sensitivity analysis. No other comments.	Comments noted. No action required. The Technology Assessment Report, in contrast, states 1% and 0.5% as the prevalence rates for tumours and cysts used in the sensitivity analysis. The base case prevalence rate was 5%.