How bad should the Oxford Hip or Knee score be to justify total joint replacement?

Every day, Surgeons make a clinical judgement about the severity of symptoms and whether total joint replacement is justified. This depends on many other factors over and above a patient- completed score, including age, work and intercurrent disease. This is part of the art of being a clinician.

Nevertheless NHS doctors are being asked to ration joint replacements on the basis of Oxford Hip and Knee scores. How bad should the scores be to justify joint replacement?

One way of assessing this is to look at reported series where patients have come to hip and knee replacements and see what the recorded pre-operative Oxford Hip and Knee Scores were.

The calculation of the score has recently changed from a **60-12 bad-good** scoring, to a **0-48 bad-good** scoring. The interpretation below of the published scores takes this into consideration.

Orthopaedics Scores uses the new 0-48 system, where 0 is the worst and 48 the best.

Fink etal 2010 Mean pre-op Oxford Hip Score - THR **19.4** (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2918552/?tool=pubmed)

Sandiford etal pre-opMean Oxford Hip Score – THR **23** (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2831868/?tool=pubmed)

Soljak etal Mean Pre-op Oxford Hip Score -THR **16.7** Mean Pre-op Oxford Knee Score -TKR **18.1** (<u>http://intqhc.oxfordjournals.org/content/21/5/311.full?sid=b479892d-e48e-4ff5-b542-c23412f2f830</u>)</u>

Williamson etal Mean Pre- op Oxford Knee Score - TKR 19.8 (http://rheumatology.oxfordjournals.org/content/46/9/1445.long)

Conclusion: There is therefore reasonable scientific evidence that; <u>Anyone</u> with an Oxford Hip or Knee score below 20 should be referred for joint replacement.

Finally, **post-operative grading for Hip replacement** was proposed by Kalairajah etal (<u>http://www.ncbi.nlm.nih.gov/pubmed/16376260</u>) and is adopted in orthopaedicscores.com as follows:

Excellent 42-48, Good 34-41, Fair 27-33, Poor 0-26

Measure 3 - Condition-specific scoring

Within the questionnaires for varicose veins and hip and knee replacements there are condition- specific questions with an accompanying scoring mechanism. For more information on each of the condition-specific scores please refer to the PROMs guide.

For hip and knee replacements the Oxford Hip Scores and Oxford Knee Scores (joint-specific outcome measure tools) are used. The scores comprise of twelve multiple-choice questions relating to the patient's experience of pain, ease of joint movement and ease of undertaking normal domestic activities such as walking or climbing stairs. Each of the 12 questions on the Oxford Hip/Knee Score is scored in the same way with the score decreasing as the reported symptoms increase (ie become worse). All questions are presented similarly with response categories denoting least (or no) symptoms scoring four and those representing greatest severity scoring zero. The individual scores are then added together to provide a single score with zero indicating the worst possible and 48 indicating the best possible score.





Chart 18: Oxford Hip Score

Chart 19: Distribution of Oxford knee scores for knee replacements (1 April 2009 - 30 November 2009)



Chart 19: Oxford Knee Score

Charts 18 and 19 show distributions that appear approximately normal with a peak around 17. This means that these sets of scores are more suitable for standard parametric statistical tests then those for EQ-5D scores.

For varicose veins the Aberdeen Varicose Veins Questionnaire (AVVQ) has been used. It is a disease-specific questionnaire that measures the health status of patients with varicose veins. The questionnaire, designed in 1993, consists of 13 questions relating to key aspects of problems of varicose veins.

The questionnaire has a section in which patients can indicate diagrammatically the distribution of their varicose veins. There are questions relating to the amount of pain experienced, ankle swelling, and use of support stockings, interference with social and domestic activities, and the cosmetic aspects of varicose veins.

The questionnaire is scored from 0 to 100, where 0 represents a patient with no evidence of varicose veins and 100 represents the most severe problems associated with varicose veins. In the development of this questionnaire, two independent vascular surgeons weighted the individual questions in proportion to the perceived contribution to severity of the question.