This is the published version of a paper published in *European Journal of Public Health*.

Citation for the original published paper (version of record):


Access to the published version may require subscription.

N.B. When citing this work, cite the original published paper.

Permanent link to this version:
http://urn.kb.se/resolve?urn=urn:nbn:se:lnu:diva-62162
EQ-5D and Activity Inventory: Measures of Visual Health Outcome
Joana Cima

J Cima1,2, R Santana1, R Massof3, L Moreno4, A Baptista4, P Marques1, A Macedo4

1Health Policy and Management Dept., National School of Public Health – Univ. Nova Lisboa; Lisboa, Portugal
2School of Economics and Management, University of Porto; Porto, Portugal
3Johns Hopkins Wilmer Eye Institute, Baltimore, MD, USA
4Vision Rehabilitation Lab., Centre / Department of Physics and Optometry, University of Minho; Braga, Portugal
Contact: joana.cima@gmail.com

The aim of the study is to test if EQ-5D, a more generic instrument, and Activity Inventory, a more specific instrument to the visual condition, produce consistent results when considering the different levels of visual impairment. By assessing how these instruments reflect visual status in a sample of patients with visual impairment, we will help to understand how they can work in cultural context and population in which they were never tested before.

Method is based on Multivariate Analysis of Variance, in which the levels of visual impairment (slightly, moderate, severe/blindness) are defined through the visual acuity values, and the utility values derived from EQ-5D and the Activity Inventory.

Participants were recruited in 3 public hospitals as a part of an ongoing study of prevalence and costs of visual impairment in Portugal. Patients attending outpatient appointments in these hospitals with acuity in the better eye of 0.30logMAR or worse and/or visual field in the better eye <20 degrees were invited to take part in face-to-face interviews. Additional visual measures, as acuity was collected using standardize methods. Visual acuity was assessed using an internally illuminated ETDRS chart at 4 m with room lights extinguished.

The results show that both instruments have a good explanatory power. However when considering different clinical conditions, the AI presents better results. The EQ-5D due its low sensitivity/adaptability does not capture differences in health status in patients with slightly and moderate visual impairment.

Since EQ-5D is the instrument most used in the evaluation of public health programs performance, the results suggest that its use should be more cautious in a situation of different difficulty levels. The results indicate that in these cases the EQ-5D should be used with a complementary instrument more specific to the clinical condition.

Key messages
- The results suggest that with different difficulty levels the EQ-5D should be used with a complementary instrument more specific to the clinical condition to be produced more reliable results
- This study is supported by the Portuguese Foundation for Science and Technology (FCT) -POCTI & FSE GRANT: PTDC/DPT-EPI/0412/2012