

VP146 A Comparative Assessment Of 3D/2D Laparoscopic Display Systems

AUTHORS:

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INTRODUCTION:

The purpose of the study was to gather evidence on safety and overall effectiveness of performing laparoscopic surgery by using 3D versus 2D display systems in a variety of pediatric surgical procedures in order to efficiently support the final investment decision on the video system to be acquired.

METHODS:

A new methodology, that is, Decision-oriented HTA (DoHTA) (1) was applied to assess the technology on clinical, technical, organizational, economic, social, ethical and safety domains. A decision-tree covering all the relevant assessment aspects of 3D systems has been derived and weighted following the Analytic Hierarchy Process. Afterwards, another pairwise comparison list was set up to compare both alternative technologies with respect to every lowest indicator.

RESULTS:

DoHTA results of the 3D system has mainly forecast its impact on clinical efficacy and productivity within the specific context of use. The 3D system is particularly suitable in reducing the mean error rate, thanks to the stereoscopic depth cues which are lost in 2D vision (2,3) From the technical perspective, the analyses have indicated the reduction in median instrument path length, an enhancement of median motion smoothness, and the decrease in grasper frequency with the 3D display. However, the comparative cost analysis has pointed out that the 3D procedure cost was higher than its comparator.

CONCLUSIONS:

The assessment of the 3D visual system seems to reasonably satisfy the criteria of feasibility, clinical effectiveness and safety. However, the adoption of the 3D display system in surgical practice could involve increased hospital costs, mainly because of the initial cost of the technology. Indeed, based on the appreciation of the results of DoHTA, especially taking into account the positive technical and clinical features, we conclude that the 3D system may be a good alternative to the 2D system.

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VP147 Implementing Electronic Health Record In A Children's Hospital

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INTRODUCTION:

Since the adoption of electronic health record (EHR) systems, which contain large volumes of aggregated longitudinal clinical data, promises a number of