

## **Discrete choice experiment of patient choice when replacing missing teeth.**

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### **Objectives:**

The aim of this study was to utilise a qualitative method to determine what influences a patient to choose a treatment option when replacing a maxillary anterior tooth. A discrete choice experiment model was utilised to elicit preferences based on the premise that any goods or service can be described by its characteristics or attributes.

### **Methods:**

A discrete choice experiment (DCE) is a stated preference method where trade-offs are necessitated in choosing any given option. This approach also permits conversion of preferences to determine the willingness to pay (WTP), which is the amount a person would be willing to pay, sacrifice or exchange in order to receive an option or to avoid something undesirable. The study comprised of two sequential parts: Part 1- Focus Group, Part 2 – Survey. The published dental literature was used to determine initial treatment attributes that were developed and refined using two Focus Groups. The attributes and levels were then piloted on general and specialist dental practitioners. The proposed survey was then tested on laypersons for feedback.

### **Results:**

Three hundred participants attending the Dublin Dental University Hospital identified having a fixed restoration as the most important attribute when choosing a prosthesis, followed by appearance, the absence of tooth adjustment and the need for minor surgery. Gender, age, level of education, and employment status also influenced patient choice. Patients were willing to pay €10,310 in order to have a fixed prosthesis and €9,228 for an aesthetic restoration that blended completely with the adjacent teeth.

### **Conclusion:**

Having a fixed restoration was the most important variable for patients for which they were willing to pay the greatest amount, followed by appearance of the prosthesis. It is important to carefully understand a patient's chief complaint before embarking on treatment and recognise that patient priorities are not necessarily similar.