



What are patient preferences for use of virtual consultations in an orthopaedic rehabilitation setting? Results from a discrete choice experiment (DCE)

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Background

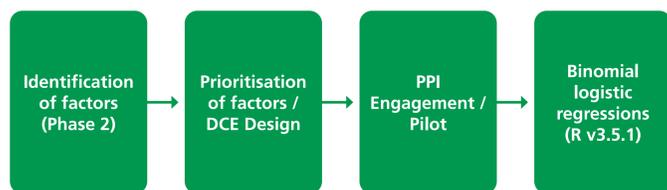
- Videoconferencing (VC) has been cited as being able to reduce the number of face-to-face (F2F) outpatient appointments over the next 10 years.
- This study reports the conduct of a Discrete Choice Experiment (DCE), a deductive investigation to quantitatively measure how each factor influences preferences for patients in a pragmatic real-world scenario.

Objectives

- To identify factors that significantly influence patient preference for or against VC in an orthopaedic rehabilitation setting.
- To develop a conceptual model providing explanations for these observed mechanisms.

Methods

Approval was received on 18 October 2019 from the London-Hampstead Research Ethics Committee (IRAS ID: 248064, REC Reference 19/LO/1586).



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Patient and Public Involvement

The CONNECT Project Patient and Public Involvement steering group (PPISG) has been set up to provide guidance on the conduct of the research (details available from www.theconnectproject.info). The first meeting of the PPISG was held in August 2016 prior to the submission of the research to the National Institute for Health Research in May 2017. A discussion was held about the overall research aims which supported the identification of the research questions. The PPISG has supported the design of the overall research plan and will continue to be involved during the development and refinement of each phase prior to the completion of each study protocol. The participant information and consent forms and the discussion guide for this research was reviewed by the PPISG. The wording of the Discrete Choice Experiment and questions were reviewed by the PPISG prior to the pilot. In addition, the PPISG will support the development of the lay summary outputs to be disseminated to patients and the public.

Authors contributions to the published manuscript

AG wrote the paper and conceived the project with CRM, JJ and MS. EM and JJ provided expertise on Discrete Choice Experiment design, conduct and statistical analysis. JJ assisted with data analysis, and with AG, CRM and MS developed the model. JJ, EM, MS and CRM edited and critically revised the paper. All authors have read and approved the manuscript. AG is the guarantor of the manuscript.

Declaration of Conflicting Interests

The Authors declare that there is no conflict of interest.

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Results

The study was abandoned prematurely due to COVID-19. Sixty-one questionnaires (122 patients) were used for analysis from site A. This therefore led to 976 choice sets.

Time of day, length of session, level of education, access to VC equipment, whether the patient has difficulty with multiple activities, multiple problems or pay more than £5 to travel were significant predictors of preference.

Scenario A

Pathway Factors

- The appointment is:
 - With a therapist known to the patient
 - In 12 weeks' time
 - To last 15 minutes
 - At 8am

Demographic Factors

- The patient:
 - Does not have a degree
 - Has access to the equipment and software to undertake a virtual consultation
 - Has difficulties with day to day activities
 - Is undergoing rehabilitation for multiple problem areas
 - Has to pay more than £5 for their return journey

Probability of choosing a VC
90%

Scenario B

Pathway Factors

- The appointment is:
 - With a therapist not known to the patient
 - In 1 weeks' time
 - To last 60 minutes
 - At 2pm

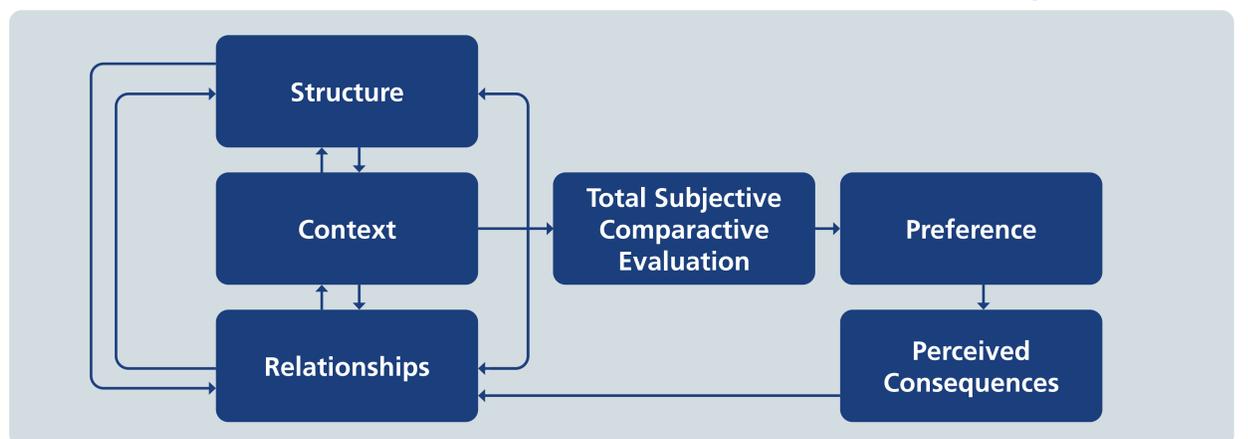
Demographic Factors

- The patient:
 - Has a degree
 - Does not have access to the equipment and software to undertake a virtual consultation
 - Does not have difficulties with day to day activities
 - Is undergoing rehabilitation one problem
 - Has to pay less than £5 for their return journey

Probability of choosing a VC
<1%

	Context		Structure		Relationships	
	Pathway Factors	Clinical Factors	Socioeconomic Factors	Equipment Factors	Objective Factors	Interaction Factors
DCE Factors	<ul style="list-style-type: none"> • When • Duration • Time of Day 	<ul style="list-style-type: none"> • Difficulty with Activities • Multiple Problems 	<ul style="list-style-type: none"> • Degree • Travel Cost 	Access Equipment	Previous Care (Demographics)	Therapist New
Definition	How long the appointment is, when the appointment will be and the time of day of the appointment	The clinical context, including patient symptoms, the effect of travel on these and difficulty with daily tasks.	The financial position and cost to the patient and the impact of this.	Access to, and willingness to engage with, technology	The requirements of the consultation	Whether the patient feels the interactions required to fulfill the objectives of can be achieved with their clinician.

Interactions between factors that influence preferences for videoconferencing consultations



Impact

A thorough understanding of these factors that influence preference can be used to aid the design of care pathways.