

Abstract

Digital transformation has reshaped healthcare by enabling patients to search for physicians and book appointments through PRWs, which help reduce information asymmetry in credence-based services. However, existing PRW research is fragmented and largely focused on Western and Chinese contexts. This thesis addresses this gap by examining patient decision-making across two key stages: the Online Information Search Stage (OISS) and the Evaluation and Decision-Making Stage.

Study 1 investigates how structured and unstructured cues at OISS influence patients' decisions to visit physicians' homepages and book appointments. Using a mixed-methods design, a vignette-based study with 22 participants revealed that physician online reputation, service quality cues (such as consultation fees and years of clinical experience), and profile picture features (including facial positive emotion, eyeglasses, beard, and aesthetics) shape initial impressions. These insights guided a large-scale quantitative analysis of 10,008 physicians. Results show that positive facial emotions, brighter images, consultation fees, experience, and online reputation increase appointment bookings, while beards reduce demand, and colorfulness has no effect. Online reputation partially mediates several relationships, acting as a cognitive filter at OISS. Gender-based analyses further reveal that female physicians rely more on reputation cues, whereas male physicians are more influenced by appearance-based and pricing cues.

Study 2 examines the role of waiting time (WT) as a platform-assured operational signal in the evaluation and decision-making stage. Using data from 11,173 physicians, negative binomial regression shows that longer waiting times consistently increase appointment bookings, confirming WT as a positive quality signal. However, its strength weakens when consultation fees or online reputation are high, and it is unaffected by clinical experience. Contextual analyses further indicate stronger WT effects for high-disease-risk cases and offline consultations, but weaker effects for clinic-based practices.

Collectively, the two studies advance theoretical understanding of digital healthcare platforms. Practically, the findings offer actionable guidelines for PRW design, recommending optimized profile pictures, reputation management tools, fairness-aware interface features, and context-specific WT communication.

Keywords: Physician review websites, Appointment slot bookings, Patient decision making, Profile picture, Operational efficiency.