

## **Internet-Based Patient-Physician Electronic Communication Applications: Patient Acceptance and Trust**

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### **ABSTRACT**

Healthcare consumers have increasingly demanded greater convenience and access to providers that is easily facilitated through electronic communications. Providers have resisted use of such a medium, citing concerns with potential escalating workloads, lack of reimbursements, limited diagnostic capability, as well as potential security, privacy, and liability issues (Kassirer, 2000; Neinstein, 2000). Conversely, patient concerns center on privacy and confidentiality (Bernhardt et al., 2002). Moreover, the Internet-based solutions currently being deployed to facilitate patient-physician communications constitute a departure from use of existing personal commercial e-mail accounts, as many patients might have anticipated and/or preferred. Accordingly, the current study seeks to understand how first-time users' attitudes toward Internet-based patient-physician communication applications influence intentions and use. Additionally, this work considers the role of trust with respect to both the technology vendor and healthcare provider.

This research conducted an empirical examination of patients' acceptance of an Internet-based patient-physician communication application, surveying 143 first-time users. This work incorporates Technology Acceptance Model (TAM) constructs in conjunction with trust beliefs, both grounded in the Theory of Reasoned Action (TRA). Results suggest that behavioral intentions shape use behaviors, perceived usefulness (PU) influences behavioral intentions, and perceived ease of use (PEOU) impacts PU. Additionally, the analysis reveals that patient trust beliefs in both their provider and the Web site vendor shape behavioral intentions, with perceived vendor reputation and PEOU influencing user trust beliefs in the vendor.

**Keywords:** e-health, e-mail, healthcare, Technology Acceptance Model, trust beliefs