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Concepts and consequences of IT affordance in healthcare: A literature review

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Information Technology (IT) affordance has been widely adopted as a lens to study IT use and its consequences, as it acknowledges the material nature of technology as well as the interpretation of IT artifacts by users (Hutchby, 2001; Markus and Silver, 2008). It has been used as a perspective to explain issues related to IT deployment and use, at both organizational and individual levels in many contexts – among them – healthcare (Strong et al. 2014).

Healthcare, involving multiple stakeholders in providing complex, consequential yet sensitive patient services, is unique and complex, with peculiar social, economic, organizational, technological, and regulatory dynamics and constraints. For instance, state and federal regulations such as HIPPA impose constraints on healthcare organizations with respect to privacy protection and information management. Additionally, healthcare organizations operate independent IT systems that prevent cross-organizational health information exchange. Furthermore, healthcare IT systems have often failed to deliver expected use and outcomes (Bell et al. 2020). Meanwhile, the shift towards patient-centered evidence-based care requires seamless health information sharing across stakeholders and smooth coordination of care. Thus, it is crucial for research to investigate and have effective means – particularly theoretical underpinning – to study deployment and consequences of IT use in healthcare.

While IT affordance has been suggested as an important lens for studying how healthcare IT use can lead to desired outcomes (Strong et al. 2014), research on healthcare IT affordance is in an early stage characterized by diverse definitions, no established operationalizations, fragmented understanding about the impacts of healthcare IT affordance. Thus, we propose a literature review study of healthcare IT affordance to provide synthesized insights about (1) how healthcare IT affordance has been conceptualized; (2) how it has been operationalized; and (3) what consequences of healthcare IT affordance have been examined.

Based on the literature analyses, we propose a multi-dimensional conceptualization of healthcare IT affordance and propose a research framework linking healthcare IT affordance to its outcomes. Establishing unified definition and sound measures of healthcare IT affordance is critical for studying this important concept and for helping healthcare organizations to achieve desired outcomes by appropriately planning and managing IT affordance.

References

- Glaser, J. (2020, June 12). It's Time for a New Kind of Electronic Health Record. *Harvard Business Review*. <https://hbr.org/2020/06/its-time-for-a-new-kind-of-electronic-health-record>
- Hutchby, I. (2001). Technologies, Texts and Affordances. *Sociology*, 35(2), pp. 441–456.
- Markus, M. L. and Silver, M. S. (2008). A Foundation for the Study of IT Effects: A New Look at DeSanctis and Poole's Concepts of Structural Features and Spirit. *JAIS*, 9(10), pp. 609–632.
- Strong, D. M., Volkoff, O., Johnson, S. A., Pelletier, L. R., Tulu, B., Bar-On, I., Trudel, J. and Garber, L. (2014). 'A Theory of Organization-EHR Affordance Actualization', *JAIS*, 15(2), pp. 53–85.