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EXPLORING THE INTEROPERABILITY FOR INFORMATION EXCHANGE BETWEEN ACUTE AND POST-ACUTE CARE SETTINGS

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By
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DISSERTATION APPROVAL FORM

This dissertation is approved as a credible and independent investigation by a candidate for the Doctor of Philosophy degree and is acceptable for meeting the dissertation requirements for this degree. Acceptance of this dissertation does not imply that the conclusions reached by the candidate are necessarily the conclusions of the major department or university.

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ABSTRACT

The seamless transfer and assimilation of healthcare data is foundational to delivering holistic, timely, and effective patient care across the healthcare spectrum. In an era where medical histories are as intricate as they are critical, information exchange ensures clinicians and caregivers have a comprehensive view of patient journeys, irrespective of where care was previously rendered. However, disparities in Electronic Health Record (EHR) system adoption, especially in long-term and post-acute care (LTPAC) settings, have consistently obstructed unrestricted interoperability.

While much of the historical discourse around interoperability has been limited to hospital-to-hospital data exchanges, the complexities and barriers associated with consistent data transfer in LTPAC settings remain inadequately explored. This dissertation seeks to bridge this gap, delineating the factors that impede and facilitate health information exchange in LTPAC environments.

Grounded theory served as the overarching methodology for our qualitative case study research, guiding our exploration of interoperability within the complex healthcare environment encompassing acute and post-acute care settings. This approach facilitated a systematic examination of data, steering our data acquisition activities throughout the case study. Drawing on the insights from 35 stakeholder interviews, encompassing a spectrum from technical specialists to decision-makers, we navigated four predominant facets: technical, operational, organizational, and compliance. Expanding on these facets, key findings are captured by nine distinct categories along these four facets:

1. **Technical Aspects**: At the heart, “Data Management and Integrity” stood out as pivotal, underscoring the indispensable need for integrated, reliable data structures. This technical backbone was further strengthened by insights from “Infrastructure and Integration” and the call for globalized “Standardization and Best Practices.”
2. **Operational Dynamics**: Operational efficiency hinged on streamlined “Operational Processes and Workflows” that encapsulated patient transitions. The equilibrium between visionary tech adoptions and their financial implications was captured in “Resource and Financial Management.” The necessity for continuous upskilling and proficiency was captured in “Learning and Proficiency Enhancement.”

3. **Organizational Framework**: A transformative shift in "Organizational Management and Strategy" was evident, moving towards an integrative, patient-centric paradigm. The crucial interplay between healthcare entities and external partners was crystallized in "Stakeholder and Vendor Dynamics."
4. **Compliance Challenges**: With a dynamic healthcare landscape, the evolving nature of "Compliance and Governance" was spotlighted, emphasizing the need for setups to be proactive, adaptive, and future-ready in their compliance efforts.

In conclusion, the findings distill a multifaceted exploration into actionable insights for health information exchange in LTPAC scenarios. As the healthcare landscape shifts towards more integrated, data-driven approaches, the findings capture the current challenges and potential pathways for a cohesive, interoperable future. At its core, it advocates for a harmonized approach, weaving together technology, operations, strategy, and compliance, all converging towards enhanced patient care. The insights provided are pivotal for policy-making, healthcare operations, and guiding further research in healthcare interoperability.