ADQI 27 Figures

Figure 1: Categories of digital health interventions and strategies for employing digital health across the care continuum.

A digital health strategy centers around the patient and involves digital health tools (the inner circle) deployed with intention across various venues (outer circle). Because digital health may have unintended consequences, it is imperative to embed ethical, legal, and social principles as digital health matures.

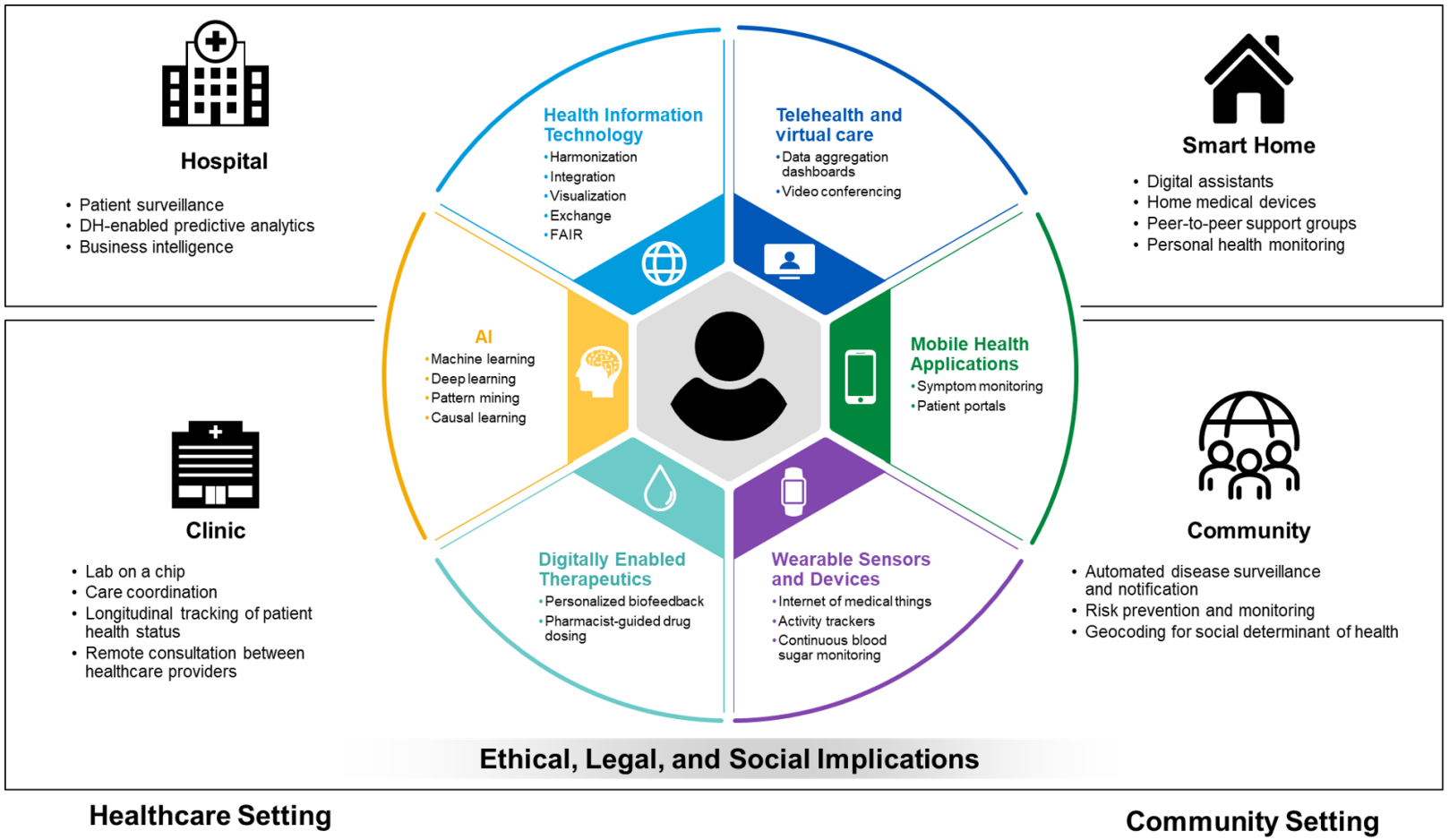


Figure 2: Areas with potential impact by digital health solutions across the AKI care continuum

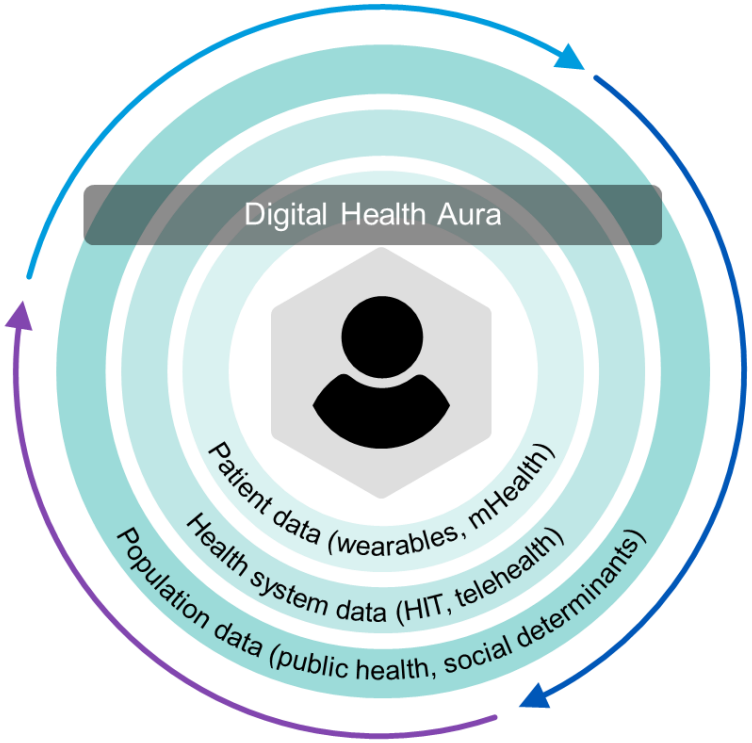
Examples are provided in the associated tables.

Community Applications

	Examples
Risk stratification	Mobile health for prediction of drug-associated nephrotoxicity
Recognition	Wearable sensor for point of care creatinine testing
Tailor Response	Pre-procedural telehealth and virtual care consultation with providers
Guide AKI recovery	Virtual health coaching

Post-Acute Care Applications

	Examples
Risk stratification	AI-guided risk scores to predict recurrent hospitalization, CKD, cardiovascular events
Recognition	Wearable sensors to recognize recurrent AKI and AKI complications
Tailor Response	Wearable sensors to tailor therapies for blood pressure, fluid management; mHealth to optimize medication management and adherence
Guide AKI recovery	Point of care testing to monitor recovery; Virtual navigation to engage relevant healthcare providers



Acute Care Applications

	Examples
Risk stratification	Health record-embedded AKI risk score
Recognition	AI-guided AKI alerts; Mobile health activation of AKI rapid response teams; AI-phenotyping of AKI
Tailor Response	Telehealth to deliver specialty care and eConsultation in resource-limited settings; Clinical decision support to guide AKI prevention bundle use; Precision RRT; AI-guided drug dosing
Guide AKI recovery	AI-guided disposition planning; HIT tracking tools to facilitate care transitions for AKI survivors

Figure 3: DHAKI implementation cycle

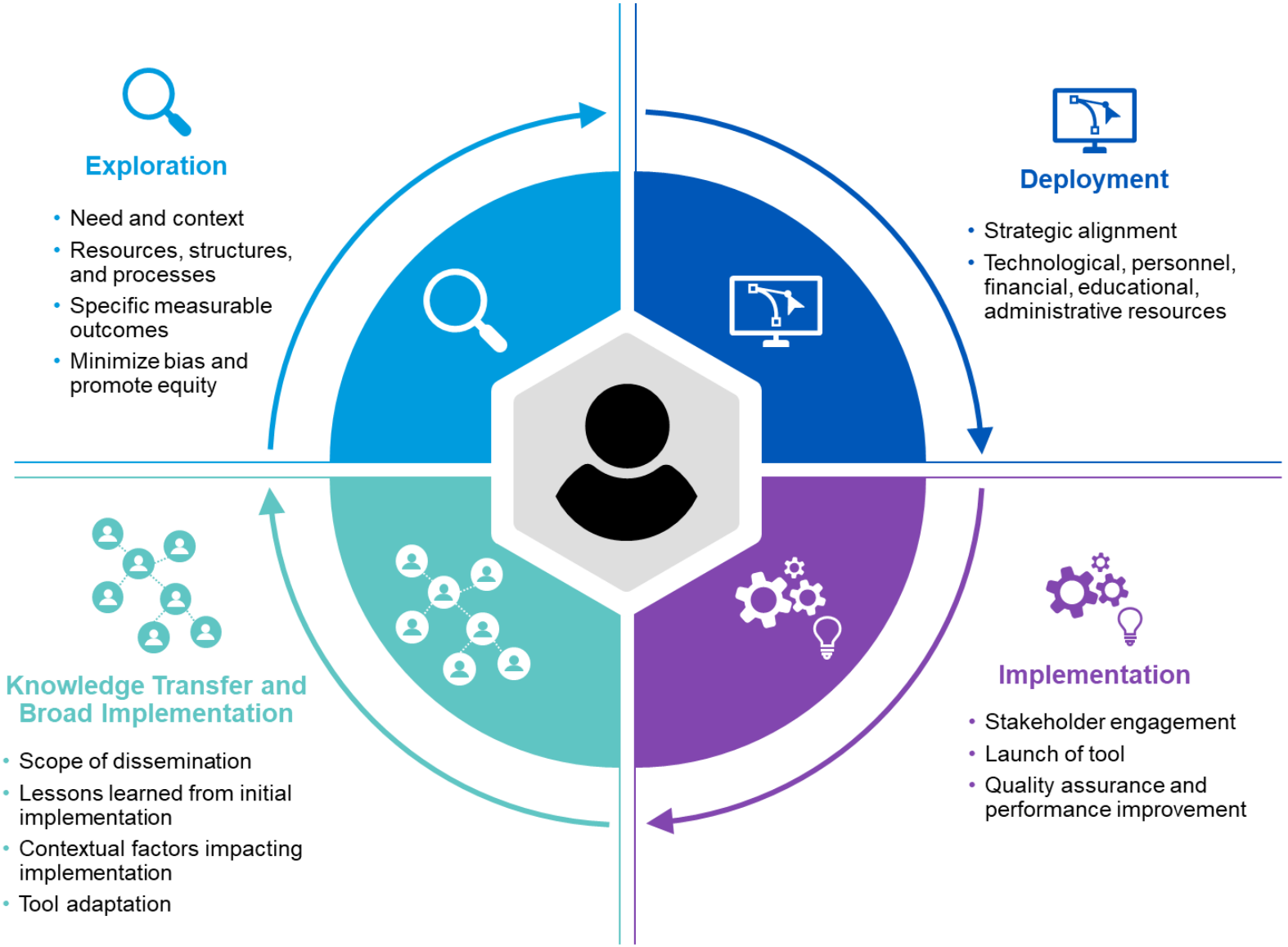


Figure 4: DHAKI implementation steps, barriers, enablers, and constraints that may inhibit or promote the identification of healthcare needs and appropriate choice of digital health solutions to improve the prevention, detection, or treatment of AKI at different health determinant levels and geographical scales.

This figure outlines the DHAKI solution implementation steps, barriers, and constraints, along with their examples. The implementation features may vary depending on health determinant levels, including patients, providers, healthcare systems, and population. In addition, the implementation steps, barriers, constraints, and health determinant levels may differ based on the geographical scales.

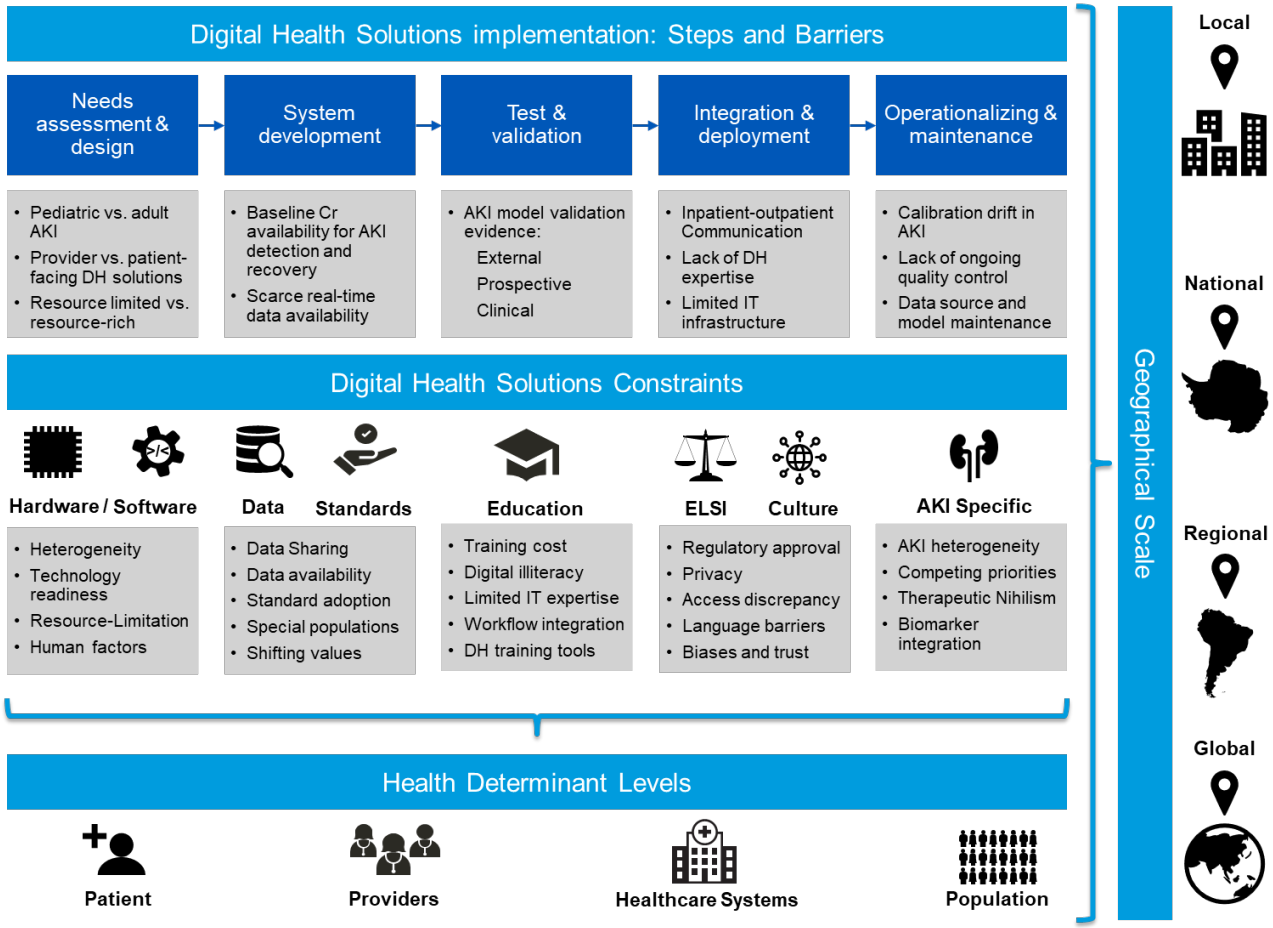
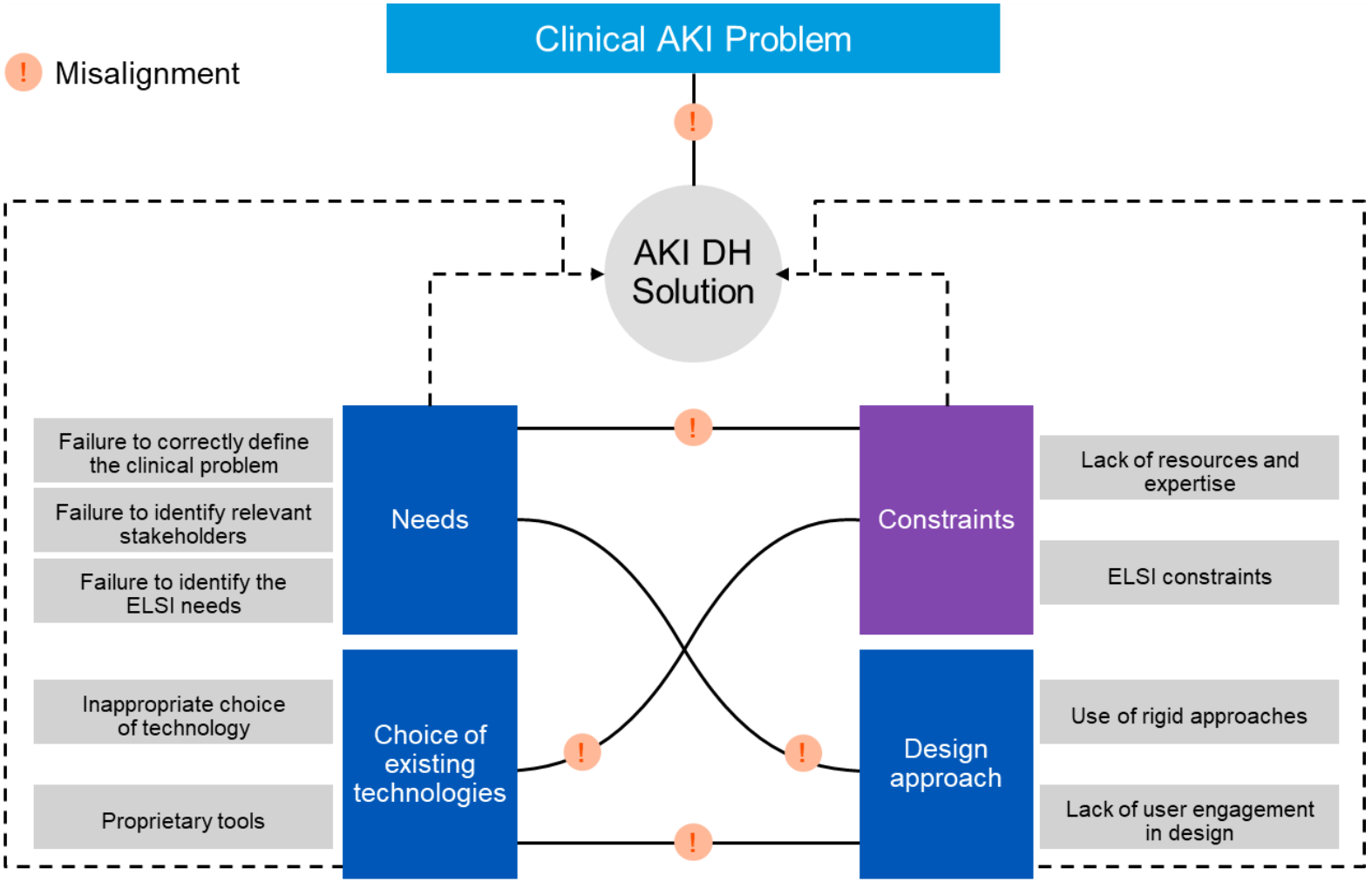


Figure 5: Interconnection among the needs, constraints, technology choices, and design approach in the development and implementation of DHAKI solutions. A successful DHAKI solution implementation requires alignment among all major components.



Supplemental Figure 1: The volume and composition of DHAKI literature