3.1 Overview of the DigiCare Model

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To effectively manage chronic conditions, individuals need knowledge, skills, and competences to take care of their own health. The DigiCare Model has been developed to empower individuals in their self-management and equip healthcare professionals with the necessary competence. It encompasses multiple layers with key concepts that foster these skills. Serving as a structured framework for healthcare education, the DigiCare Model is designed to enhance the understanding and application of self-management principles. In this chapter, we provide a concise introduction to the background and foundational insights of the DigiCare Model. We also present the illustration of the DigiCare Model and its various layers.

The DigiCare Model enables future healthcare professionals to leverage existing infrastructure (e.g., environment, technology, digitalization, support, culture, customs, economy, privacy, and politics) to integrate digital coaching into the delivery of health services (Barr & Tsai, 2021). Digital coaching emphasizes communication (Brandt et al., 2018), patient empowerment (Rutten et al., 2014), and a need for feedback to support patients (Early et al., 2017; Lindberg et al., 2017) with chronic diseases and their families to achieve self-management competence (Blackberry et al., 2013; Uhm & Kim, 2022), motivation (Komkova et al., 2019; Rutten et al., 2014), and improved health literacy, leading to a better quality of life (Hesseldal et al., 2022). It is important to note that this model may need to be adapted to diverse cultural and societal contexts, as the role and influence of families, communities, and societal factors can vary. Additionally, as digital health continues to evolve, it will be crucial to continue updating the model to incorporate modern technologies and understand their impact on chronic disease self-management.

The DigiCare Model is built upon the socio-ecological model, which recognizes the interplay between individuals and their surrounding environments throughout their lives, encompassing both formal and informal aspects. The ecological environments encompassed within this model include the microsystem (such as immediate relationships with parents or caretaker), mesosystem (interactions within peer groups and workplace), exosystem (interaction and influence within the neighbourhood and local community), and macrosystem (relation to broader social, economic, or political environments) (Bronfen-brenner, 1977). Despite being developed several decades ago, the socio-ecological model continues to be effectively utilized in various recent health programs and interventions. Examples include fostering community engagement in health programs (Caperon et al., 2022), promoting health through policy and environmental changes (Golden et al., 2015), and conducting research in health promotion (Wold & Mittelmark, 2018). The socio-ecological model provides a valuable framework for understanding the complex interrelationships between individuals and their environments, thereby informing the design and implementation of effective health interventions.

The DigiCare Model is based on the positive health paradigm and guided by sustainable and ethical principles, which encompass the rights and responsibilities of individuals, equity in digital healthcare, and robust governance of health data.

In terms of health-related concepts, the DigiCare Model is based on the positive health paradigm and guided by sustainable and ethical principles, which encompass the rights and responsibilities of individuals, equity in digital healthcare, and robust governance of health data. The DigiCare Model aligns with the four domains of the nursing metaparadigm proposed by Fawcett (1984), namely person, environment, health, and nursing. These domains continue to serve as a foundational framework in nursing science and education, including in South-Asia. The DigiCare Model incorporates and interconnects these domains, emphasizing the interrelationships and relationality between the person, environment, health, and nursing or care. This integration is also reflected in the layers of the DigiCare Model, as described by Bender (2018).

The DigiCare Model is represented by the shape of a spinning top, as depicted in Figure 4. This analogy illustrates the dynamic and continuous nature of digital health coaching within the model. The focus of the DigiCare Model is centered around individuals who have one or more chronic conditions, with an emphasis on considering the involvement of their family, community, and society. Like a spinning top, an external force is required to initiate its movement. Similarly, motivating individuals to take responsibility for their actions and improve their quality of life necessitates external support. This motivation is fostered and sustained through a coaching relationship with a healthcare professional. Together, they collaborate to develop an individualized care plan that guides the patient and their family in self-management, ultimately working towards achieving the desired outcomes. (Nevelsteen, 2021.)

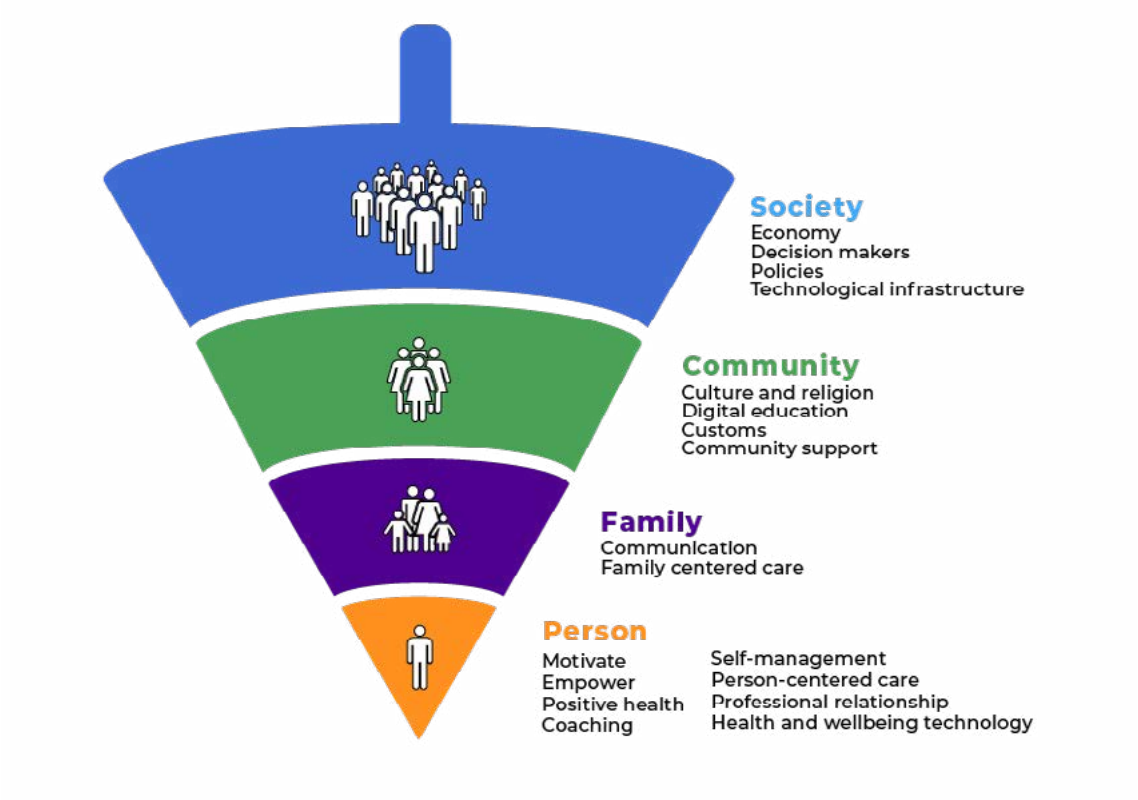

Figure 4. The DigiCare Model.

The DigiCare Model comprises of four layers. Each layer plays a vital role in delivering effective self-management support to individuals with chronic diseases. Within each layer, there are key concepts that are integral to its functioning, highlighting the unique characteristics and elements associated with that particular layer. It is important to note that while these key concepts are primarily associated with specific layers, there may be instances where they intersect and overlap with concepts from other layers, further emphasizing the interconnectedness of the model.

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