Enhancing wound care management via a comanagement platform for healthcare providers, patients and caregivers

A. Problem Statement (Current State)

The heavy clinical and economic burden of managing chronic wounds poses significant challenges to healthcare providers, patients and caregivers. Effective management of wound care requires a co-management approach involving hospital specialists and primary care providers, in collaboration with patients and caregivers over several months.

For healthcare providers, chronic wounds not only demand intensive clinical attention but also place a substantial financial strain on healthcare systems. With the need for regular monitoring and treatment, hospital specialists such as surgeons and podiatrists are required to conduct monthly reviews to ensure proper wound healing. Primary care providers, including nurses and family physicians, also play a pivotal role with weekly reviews to assess wound progress. This comanagement approach is necessary to prevent complications and ensure optimal wound care outcomes. However, the constant involvement of healthcare providers in wound care management can place a significant pressure on already-stretched healthcare resources.

On the other hand, patients and caregivers face a multitude of challenges in managing chronic wounds. This necessitates their active participation in the wound care process, often involving daily dressing changes and places a considerable burden on patients and caregivers to dedicate time, effort, and resources to ensure proper wound healing. The prolonged duration of wound care, spanning several months, can also take a toll on patients' overall well-being and quality of life.

Addressing the heavy clinical and economic burden of chronic wounds requires a comprehensive approach that involves effective collaboration and communication between hospital specialists, primary care providers, patients and caregivers. By streamlining and optimising the wound care management process, we can alleviate the burden on healthcare providers and empower patients and caregivers to actively participate in their own healing journey.

B. Challenge Statement

How might we leverage technology (e.g., wound imaging and AI analysis) to monitor and manage wound healing, using a common platform for healthcare providers, patients and caregivers to comanage wounds?

C. What are we looking for? (To-be State)

- 1. Outcomes of the desired state include:
 - a. **Al-enabled** leveraging Al and analytics to support users to make more informed and timely decisions
 - b. **Co-management platform** facilitating healthcare providers, and empowering patients and caregivers to co- and self- manage wounds
 - c. **Integration with other systems and applications** flexibility to interface and integrate with other systems and applications
 - d. **User friendly** solutions should not be complicated but should be simple and intuitive for users to operate given the need to self-manage

2. Overall collaboration requirements:

- a. **Collaboration:** Applicants must be willing to collaborate towards achieving the desired state, which may include tweaking existing solutions or collaborating to prototype a solution (IP and commercial discussions will pursue where relevant)
- b. **Security requirements:** Solutions must comply with the cybersecurity standards in place especially where personal data is involved
- c. **Cost-effective:** The proposed solutions must be cost-effective and beneficial to the public healthcare in Singapore
- d. **Scalable:** The proposed solutions should consider a broader plan to scale across other institutions and healthcare settings, and consider the need to integrate and interface with the various relevant systems

Participate in this challenge statement by submitting a proposal via email to healthx@synapxe.sg.

Have any questions? Check out our <u>FAQ section</u>.