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TECHNOLOGY ENTREPRENEURSHIP

BLUEPRINT : SMART KNEE

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COMPANY'S LOGO

SMART KNEE



Enhanced your lifestyle

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CHAPTER 1

1.0 PRODUCT DESCRIPTION

1.1 Introduction

After several study done on knee devices in post-operative cases, the team had decide to develop a product that can help to enhance patients functional activity which focusing more in knee post-operative care. The product is called ‘Smart Knee’. Nowadays, it may be inconvenient for some patients to attend the physiotherapy centre regularly for rehabilitation session. To overcome this problem, this home-based knee rehabilitation device is proposed to gradually reduce and replace the physical training effort of a therapist and caregivers. On top of that, it may help in reducing the cost for physiotherapist services and save more time.

1.2 Purpose of development

This device will help to:

- i) Restore normal knee range of motion.
- ii) Strengthen back hamstring muscles.
- iii) Providing immediate feedback to the user
- iv) Allowing the physical therapist to monitor a patient’s knee health at home.
- v) Give feedback to the patients to be more alert in performing the correct exercises at home.
- vi) Provide information to the physical therapists to know if the patients are following correct prescribed home workout routine.

1.3 Product Concept

- For post-operative knee
- For patient with knee problem