## **Revive and Thrive**

As the global population ages, addressing the healthcare needs of older adults has become a pressing priority. Mobility and independence are crucial factors in maintaining the quality of life for this demographic group. Yet, significant barriers often impede their access to outpatient rehabilitation services, particularly in developing countries like Thailand. This report explores the feasibility and potential impact of implementing a comprehensive home-based rehabilitation program to address the growing demand for accessible care solutions tailored to Thailand's rapidly aging population.

### The Need for Home-Based Rehabilitation

Thailand's aging population is projected to grow rapidly, with 28% expected to be over 60 years old within the next decade (Nanthamongkolchai et al., 2022). Notably, 20% of older Thai adults live with disabilities, and over half (55.89%) have physical and mobility impairments, highlighting the urgent need for accessible rehabilitation services (Nanthamongkolchai et al., 2022). However, significant geographic and functional barriers hinder their ability to access existing outpatient rehabilitation facilities, particularly in urban areas like Bangkok, where traffic congestion and transportation challenges pose substantial obstacles (WHO, 2018).

### Market Dynamics and Competitive Landscape

The healthcare market in Thailand has witnessed a steady increase in expenditure, driven by factors such as the aging population, rising incomes, and the growing prevalence of chronic diseases (ITA, 2024). Furthermore, the portion of private health expenditure funded by health insurance and employer benefits has been increasing, indicating a growing ability and willingness to pay for private healthcare services, including specialized offerings like home-based physiotherapy programs (Caring With Innovations, 2024).

BDMS, Thailand's largest private healthcare operator, has identified strategic priorities that align with the growing demand for preventive care, wellness services, and home-based healthcare solutions, particularly for the aging population (BDMS, 2024). The company and other leading healthcare providers in Thailand have ambitious plans to expand their bed capacity and invest in new facilities and services, creating opportunities for introducing innovative home-based physiotherapy programs. (TRIS, 2023)

#### Feasibility and Stakeholder Insights

Research studies have explored the feasibility and effectiveness of home-based rehabilitation programs, providing insights into their potential benefits and challenges. These studies support the potential benefits and feasibility of home-based rehabilitation programs, particularly for older adults facing mobility challenges and barriers to accessing traditional outpatient facilities.

Interviews with leaders from various rehab at-home, home health, and outpatient therapy providers offered a ground-level view of operational models, challenges, and best practices in home-based rehabilitation. Key themes emerged regarding service delivery approaches, target

populations, technology utilization, staffing considerations, barriers and challenges, metrics for success, and financial implications.

The rehabilitation at home model typically involves a combination of in-person and telehealth visits. Geographic clustering of visits is crucial for operational efficiency, with therapists able to conduct around four in-person visits per day within localized areas. A hybrid workforce model, leveraging full-time and gig-based therapists, could help maximize workforce utilization.

Key barriers to program success include workforce limitations, logistical challenges of in-home visits, unpredictable technology environments, patient compliance with virtual visits, and reimbursement models not optimized for home-based care delivery. Success metrics encompass patient-level goals, functional outcomes, hospital readmission rates, patient satisfaction scores, and overall cost savings compared to facility-based care episodes.

#### Recommendations

Based on the comprehensive analysis, two potential options are recommended for BDMS to address the growing demand for accessible rehabilitation services among Thailand's aging population:

# 1. Hybrid Model – Telehealth Physiatry Consultation with Subsequent Home-Based Services

In this approach, patients would have an initial assessment with a physiatrist either at a BDMS clinic or via a telehealth consultation, followed by in-home visits from a physiotherapist for ongoing treatment and monitoring. Milestones and follow-up assessments would be conducted in-home with the physiotherapist and via telehealth consultations with the physiatrist. Patients can use the existing BDMS patient portal to schedule appointments and access any exercise content or educational materials provided during the rehabilitation program.

## 2. Bundled Home-Based Rehabilitation Package

The second option offers a discounted bundled approach that includes an initial virtual consultation with physiatry followed by both virtual and in-person visits by physiotherapy for 20 visits. In this model, patients can use the BDMS patient portal to schedule appointments and access any exercise content or educational materials provided during the rehabilitation program.

## Conclusion

As Thailand navigates its demographic transition, proactive investment in accessible and comprehensive rehabilitation services will be pivotal in addressing the evolving healthcare needs of its citizens. The home-based physiotherapy program represents a promising solution that capitalizes on the synergies between technological advancements, market dynamics, and the strategic vision of healthcare providers like BDMS. By embracing this innovative care delivery model, Thailand can pave the way for a more sustainable, equitable, and resilient healthcare landscape that empowers its aging population to maintain independence, dignity, and well-being.

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