



AI-ENABLED, COMMUNITY-BASED DIGITAL SANCTUARY FOR PEOPLE-CENTRED MENTAL HEALTH SUPPORT IN THAILAND

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BACKGROUND / INTRODUCTION

- Mental disorders are now a top cause of disability in Thailand, with demand accelerating amid demographic shifts and post-pandemic pressures.
- Persistent access barriers—workforce shortages, stigma, distance, and time constraints—hit rural and underserved communities hardest, deepening inequities in care.
- With >90% smartphone penetration (NBTC, 2024), there is an unprecedented opportunity for scalable, equity-driven digital mental health solutions.
- **Gap: Thailand currently lacks an integrated, evidence-informed digital mental health platform combining empathetic AI support, self-care tools, community engagement, and safe crisis escalation pathways.**

CURRENT STATUS & EXPECTED OUTCOMES

- Current Progress:**
Prototype is in ongoing usability testing
- High initial engagement and positive user feedback
 - Strong perception of empathy and confidentiality in AI interactions
 - Preliminary reviewers valued the concept’s anonymous access and 24/7 availability
 - Cultural appropriateness of “easing the heart” (NapJai) concept validated
- Planned Pilot Evaluation Targets:**
- ≥70% onboarding completion
 - ≥80% weekly check-in adherence among active users
 - ≥0.5 SD symptom improvement in ≥50% of users
 - ≥30% 30-day retention
 - ≥100 supportive peer interactions with minimal moderation flags



Scan to explore prototype concept



OBJECTIVE

1. Develop NapJai—a people-centred, equity-focused digital mental health platform co-designed with Thai communities.
2. Provide accessible, anonymous, 24/7 early emotional support with culturally sensitive communication.
3. Integrate safe crisis responses aligned with Thailand’s 1323 hotline to ensure seamless, human-oversight escalation.
4. Assess feasibility and user needs through planned prototype testing and rigorous mixed-methods evaluation.



METHODOLOGY

- Co-Design & Prototype Development**
- Evidence-informed design incorporating insights from digital mental health research
 - Participatory co-design sessions are planed for early development with students, young workers, and community volunteers
 - Iterative prototype refinement planned based on upcoming usability testing and early-stage feedback.
- Platform Features (concept-stage design pending real-world pilot deployment)**
- AI-supported emotional check-ins
 - Weekly mood tracking
 - Peer listening space
 - Evidence-based grounding tools
 - Crisis referral pathways with human oversight
 - Direct linkage to Thailand's 1323 national hotline
 - Privacy-by-design framework aligned with WHO digital health principles
- Planned Pilot Study (2025-2026)**
- Mixed-methods evaluation with 200+ participants
 - K6 and PHQ-9 assessments (baseline, day-7, day-20)
 - Engagement analytics and qualitative interviews
 - Pre-pilot usability testing to ensure cultural sensitivity, safety, and functional readiness.

CONCLUSION / LESSONS LEARNED

- Concept- and prototype-stage findings suggest strong potential for community acceptability and early emotional support.
- Human-centred co-design is critical for trust, safety, and engagement in mental health technology.
- Clear crisis pathways and privacy-by-design elements must be integral before deployment.
- The upcoming pilot will be essential to assess real-world usability and early outcomes.
- **NapJai highlights the potential of AI and community-based design to complement Thailand’s mental health workforce, especially in rural and underserved populations.**

POLICY RECOMMENDATIONS

1. Support development of evidence-informed digital mental health platforms to expand early access across populations.
2. Encourage university–government–community partnerships to co-create safe digital health tools.
3. Integrate digital mental health with existing national services (e.g., hotline 1323) to strengthen system capacity.
4. Utilize anonymized insights from digital platforms to inform population-level planning and equity-focused policy.
5. Promote inclusion of digital mental health literacy into national health promotion strategies to strengthen sustainable community engagement.



References:

- NBTC. Thailand Telecommunications Market Report 2024. Bangkok: National Broadcasting and Telecommunications Commission; 2024.
- Institute for Health Metrics and Evaluation (IHME). Global Burden of Disease Study 2021 Results. Seattle, WA: IHME; 2023.
- Fitzpatrick KK, Darcy A, Vierhile M. Delivering cognitive behavioral therapy using a conversational agent (Woebot): A randomized controlled trial. JMIR Ment Health. 2017;4(2):e19.