Palli Sahayak: A Digital Public Good for Scaling Palliative Care
From Local Innovation to Global Replication

Executive Summary

Palli Sahayak represents a pivotal advancement in Digital Public Infrastructure (DPI) for health. Developed to bridge the severe gap in palliative care access, this AI-powered assistant operates as a Digital Public Good (DPG). It demonstrates high potential for replication not only across Low- and Middle-Income Countries (LMICs) facing resource constraints but also in developed nations seeking to scale efficient, patient-centered care models.

The Challenge: A Global Care Gap

According to the World Health Organization, only about 14% of people who need palliative care currently receive it. In LMICs, this gap is driven by a critical shortage of trained specialists and geographic barriers. In the developed world, while resources exist, systems are often overburdened, leading to fragmented care coordination and burnout among healthcare providers. Palli Sahayak addresses these disparities by democratizing access to expert-level guidance.

Palli Sahayak as a Digital Public Good

Aligned with the DPG Standard, Palli Sahayak is designed to be open, inclusive, and adaptable.

- **Open Source & Adaptable:** Built on open architectures, the platform allows developers and governments to inspect, modify, and improve the code to fit local needs.

- **AI-Driven Support:** Utilizing Large Language Models (LLMs) fine-tuned on verified palliative care protocols, it provides instant, accurate medical guidance to caregivers and patients via familiar interfaces like WhatsApp.

- **Privacy by Design:** Adhering to strict data protection standards, it ensures sensitive patient data remains secure, a prerequisite for global scalability.

Replication and Adaptation Potential

1. Adaptation in LMICs (Context: Resource Scarcity): In regions with low doctor-to-patient ratios, Palli Sahayak acts as a force multiplier. It empowers community health workers and family caregivers to manage symptoms (pain, nausea, anxiety) at home. The technology is "frugal"—functioning on low-bandwidth networks and basic mobile devices—making it ideal for rural settings in Africa, South Asia, and Latin America.

2. Scaling Access in the Developed World (Context: Efficiency): Developed nations face rising healthcare costs and an aging population. Palli Sahayak offers a model for:

- **Triage Efficiency:** Automating routine queries allows specialists to focus on complex cases.

- **Continuity of Care:** Providing 24/7 support for home-based care reduces unnecessary ER visits.

- **Standardization:** Ensuring consistent advice across fragmented health systems.

Implementation Framework

To replicate Palli Sahayak globally, stakeholders should adopt a three-step approach:

1. **Content Localization:** Contextualizing the medical knowledge base to align with local regulations, cultural norms regarding death and dying, and language.

2. **Technical Integration:** Deploying the open-source code on local servers to ensure data sovereignty and integrating with national health IDs or existing telehealth platforms.

3. **Capacity Building:** Training local healthcare workers to use the tool as a decision-support system, fostering trust in AI-assisted care.

Conclusion

Palli Sahayak proves that technology built for the constraints of the developing world often yields the most robust solutions for global challenges. By classifying this innovation as a Digital Public Good, we invite policymakers, technologists, and health systems worldwide to replicate, adapt, and scale this infrastructure. Palli Sahayak is not merely a tool; it is a blueprint for compassionate, scalable, and equitable healthcare delivery.

Data Source: https://inventcures.github.io/palli-sahayak/