







PROGRAM ON HEALTH SYSTEMS DEVELOPMENT

Toward Inclusive Digital Health

Policy Solutions to Expand Telemedicine in the Philippines

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Executive Summary

Despite the growing global recognition of telemedicine as a transformative tool in health service delivery, its usage in the Philippines remains challenging, especially in rural and remote areas. This policy brief synthesizes findings from a cross-sectional study under the Philippine Primary Care Studies (PPCS) examining the behavioral, social, and infrastructural barriers to telemedicine use across urban, rural, and remote communities. It identifies actionable policy solutions to enhance adoption, grounded in the Theory of Planned Behavior. Investing in user-friendly platforms, capacitating frontline workers, and tailoring interventions to local contexts are vital for mainstreaming telemedicine as part of the Universal Health Care (UHC) implementation.

Telemedicine in Primary Care

Telemedicine plays a vital role in primary health care by improving access, reducing costs, and minimizing the need for in-person visits. Evidence from the United States shows it enables timely prescription and medical advice, while a Canadian study found that 85 percent of patients preferred continued telemedicine use due to significant cost savings (Fabian et al. 2024).

In the Philippines, telemedicine use surged during the COVID-19 pandemic, often through mainstream messaging platforms like Facebook Messenger and Viber. However, adoption across settings remained sporadic (Fabian et al 2024). Urban areas showed greater uptake than rural and remote communities, which faced technological, economic, and informational barriers. These limitations hindered sustained telemedicine usage and exacerbated existing health inequities.

Why the status quo is no longer effective

- Infrastructural gaps (e.g., electricity, signal strength, internet access) hinder access to reliable telemedicine services

- Lack of familiarity with digital tools limits engagement with telemedicine platforms
- Limited trust in remote consultations reduces patient willingness to participate
- Support systems fail to guide patients and providers through the virtual care processes

Ground-Level Barriers and Drivers of Telemedicine Use

From 2020 to 2022, the PPCS facilitated telemedicine consultations in three sites: an urban university-based facility in Metro Manila, a rural health unit in Bataan, and a remote municipality in Sorsogon. The study used focus group discussions to understand behavioral drivers and barriers among 60 users and nonusers of telemedicine. Findings were analyzed using the theory of planned behavior, examining attitudes, subjective norms (the perceived social pressure to use or not use telemedicine), and perceived behavioral control (the individual's perception of their ability or capacity to access and use telemedicine services). Key findings are summarized in table 1.

Table 1. Factors Influencing Telemedicine Use In Urban, Rural, and Remote Philippines

Domain	Positive Influences	Negative Influences
Attitudes	<ul style="list-style-type: none"> ■ Provides convenience by saving time and reducing costs ■ Reduces risk of exposure to COVID-19 ■ Supports care for minor illnesses and chronic conditions 	<ul style="list-style-type: none"> ■ Perceived impersonal nature of consultations ■ Doubts about diagnostic accuracy and provider fit ■ Distrust in technology and privacy concerns
Subjective Norms	<ul style="list-style-type: none"> ■ Acceptance was shaped by peer experience, community leaders, and health workers ■ Perceived legitimacy was strengthened by information from trusted sources (e.g., barangay health workers, employers, local health authorities) 	<ul style="list-style-type: none"> ■ Limited exposure to positive peer experiences ■ Lack of community-level promotion, especially in remote areas
Perceived Behavioral Control	<ul style="list-style-type: none"> ■ Urban users had better access to devices and the internet ■ Some systems were accessible via SMS or landline 	<ul style="list-style-type: none"> ■ Poor digital literacy, especially in rural/remote areas ■ Lack of smartphones/internet ■ Language and communication difficulties ■ Unreliable electricity ■ Natural disasters disrupting access

Bridging the Digital Divide in Health Access

The study identified key barriers limiting telemedicine adoption in the Philippines. Table 2 summarizes these barriers alongside actionable interventions that can be scaled through national and local health systems.

Table 2. Barriers and Solutions for Telemedicine Adoption

Challenges	Proposed Solutions
Low digital literacy: Users hesitate or avoid telemedicine due to unfamiliarity with platforms	<ul style="list-style-type: none"> ■ Conduct community-level orientation and trial runs ■ Include telemedicine modules in community health education sessions (e.g., during prenatal checkups or vaccination drives) ■ Set up digital health hubs in places people already visit and trust (e.g., barangay health centers) where users can get assistance navigating platforms (Aldridge 2020; Dastidar et al. 2022) (see table 3)
Poor infrastructure: Remote areas lack stable electricity, internet, and devices	<ul style="list-style-type: none"> ■ Establish signal-optimized satellite consultation hubs; strengthen the implementation and enforcement of Executive Order No. 127 (s. 2021) ■ Provide access to digital tools (see table 3) in digital health hubs
Weak provider-patient trust: Patients prefer in-person care due to a lack of emotional connection online	<ul style="list-style-type: none"> ■ Train providers in digital communication and “webside manners” to build rapport, empathy, and trust during virtual consults (Isip-Tan et al. 2020) (see table 4) ■ Encourage continuity of care by assigning consistent providers for follow-up teleconsults to strengthen provider relationships over time
Limited support from the health system: Understaffed facilities fail to assist users during digital consults	<ul style="list-style-type: none"> ■ Deploy digital health navigators (e.g., trained barangay health workers or volunteers) to assist patients in navigating telemedicine platforms ■ Integrate telemedicine support roles into healthcare worker job descriptions with dedicated allowances or incentives (Juban et al. 2020) ■ Establish accredited academic pathways for healthcare workers to gain professional certification in telemedicine ■ Establish regional telehealth command centers that can remotely support understaffed sites

Digital Health Hubs in Community Settings

To expand equitable access to telemedicine, trusted community locations can serve as effective venues for community-based digital health hubs. These hubs have proven effective in improving digital health access in developed countries like the United Kingdom, Canada, and the United States, and even in resource-constrained settings like India, where health and wellness centers connect patients to remote providers via assisted digital platforms (Aldridge 2020; Dastidar et al. 2022). Drawing from these international best practices, Table 3 outlines key components for establishing inclusive, functional, and user-friendly hubs in the Philippines.

Table 3. Digital Health Hub Setup Guide

Use Community-Based, Trusted Locations	Establish hubs in places people already visit and trust, such as barangay health centers, rural health units, pharmacies, and schools
Provide Access to Digital Tools	Ensure availability of internet-enabled devices, reliable data connectivity, printers/scanners, and emergency power systems in disaster-prone areas
Offer One-to-One Support	Staff or volunteers should help people access digital health services, learn basic digital skills, and navigate online appointments, telehealth consults, and e-prescriptions
Train Local Digital Champions	<ul style="list-style-type: none"> ■ Recruit and train frontline staff or volunteers to act as “digital health champions” ■ Train a diverse support team, including paramedics, youth volunteers, and student interns, to expand capacity, especially in rural and remote settings ■ Focus on building confidence, empathy, and digital competence
Promote the Hubs Widely	<ul style="list-style-type: none"> ■ Use inclusive campaigns using the local language across barangay assemblies, radio, posters, social media, and local leaders to demystify telemedicine ■ Partner with local authorities and healthcare workers to identify and reach underserved groups
Tailor Services to Local Needs	<ul style="list-style-type: none"> ■ Involve community members in planning and feedback ■ Adapt the setup to language, literacy, and cultural preferences ■ Consider accessibility for people with disabilities
Create a Welcoming, Safe Space	<ul style="list-style-type: none"> ■ Provide patient-friendly forms and simple explanations of consent before every teleconsultation ■ Ensure privacy for health-related digital tasks ■ Make the environment inclusive and nonjudgmental

Training Providers in Digital Communication

Effective communication is central to quality telemedicine. Unlike in-person consultations, virtual encounters require providers to be intentional about building rapport, showing empathy, and gaining patient trust through a screen. To support this, the University of the Philippines Medical Informatics Unit has developed an evidence-based guide on digital communication, also referred to as “websites manners” (Isip-Tan et al. 2020). The table below summarizes this structured guide for Filipino clinicians.

Table 4. Digital Communication and Webside Manners for Filipino Clinicians

Preparation and Environment	<ul style="list-style-type: none"> ■ Choose a private, well-lit, quiet setting with minimal distractions ■ Ensure camera framing, lighting, and background are professional and neutral ■ Test audio-video equipment beforehand
Setting a Trustworthy and Professional Tone	<ul style="list-style-type: none"> ■ Begin with a warm greeting and smile ■ Introduce yourself and your role clearly ■ Ask the patient to introduce any companions present and confirm their identity (name, birthdate, address)

	<ul style="list-style-type: none"> ■ Acknowledge the online format and provide reassurance about its safety and reliability
Platform Familiarity and Contingency	<ul style="list-style-type: none"> ■ Demonstrate confidence in the technology and assist the patient/caregiver if needed ■ Explain what to do if the call drops and collect backup contact information
Telemedicine Etiquette	<ul style="list-style-type: none"> ■ Maintain eye contact by looking at the camera ■ Use a calm, clear, and empathetic tone ■ Avoid fidgeting or multitasking ■ If reviewing notes or labs, verbally explain what you are doing, e.g., “<i>Tinitingnan ko lang po ang result ng inyong laboratoryo ngayon</i>”
Building Rapport and Empathy	<ul style="list-style-type: none"> ■ Validate the patient’s concerns using supportive language ■ Use reflective listening and ask to restate key points to confirm understanding ■ Be mindful of nonverbal cues and audio and/or video lag
Consent and Privacy	<ul style="list-style-type: none"> ■ Clearly explain the teleconsultation process, including risks and limitations ■ Obtain documented consent and reassure the patient/caregiver of data confidentiality
Closure and Follow-up	<ul style="list-style-type: none"> ■ Provide a clear summary and plan at the end of the session, including where prescriptions will be sent, referrals, and follow-up schedule ■ Invite questions and clarifications ■ End with a reassuring and courteous goodbye

The Path Forward

A blended approach that combines infrastructure development, community-based digital literacy programs, and formalized telemedicine training among healthcare workers is essential to scale equitable access. This strategy not only drives adoption by addressing access, capability, and trust but also accelerates the effective implementation of UHC in underserved areas.

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