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Preparedness of a Rural Health Unit for Universal Health Care Implementation: A Health System Building Blocks Assessment in the Philippines

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***Abstract*—** Universal Health Coverage (UHC) emphasizes equitable access to quality health services and strengthened primary health care systems. Community health workers play a vital role in operationalizing UHC at the grassroots level by delivering health education, promoting preventive care, and linking communities to formal health services. This study assessed the socio-demographic profile, health knowledge, readiness for health education, and misconceptions among community health workers in an urban Philippine setting. A quantitative descriptive-correlational design was employed involving 186 respondents selected through proportionate sampling. Data were gathered using a structured questionnaire and analyzed using frequency, percentage, weighted mean, Pearson correlation, and t-test at a 0.05 level of significance. Findings revealed that respondents demonstrated a high level of health knowledge (M=3.64–3.77) and very high readiness for health education (M=3.75). However, persistent misconceptions regarding health transmission and prevention were identified. Statistical analysis showed no significant relationship between socio-demographic characteristics and health knowledge ($p>0.05$). The results indicate that while community health workers are generally knowledgeable and highly prepared for their roles, knowledge gaps and misconceptions still exist that may affect health communication effectiveness. The study concludes that continuous training and standardized capacity-building programs are essential to strengthen knowledge accuracy, improve readiness, and support effective community-based health education under the UHC framework.

***Keywords*—** Universal Health Coverage, community health workers, health knowledge, health education readiness, misconceptions.

I. INTRODUCTION

Universal Health Coverage (UHC) has become a central global health priority aimed at ensuring that all individuals and communities receive the health services they need without suffering financial hardship. According to the World Health Organization, UHC is anchored on the principles of equitable access, quality essential health services, and financial protection, which collectively contribute to improved population health outcomes and reduced inequalities (World Health Organization, 2024). Despite global commitments, progress toward UHC remains uneven across countries, particularly in low- and middle-income settings where health systems continue to face structural and resource constraints. The World Bank (2023) further emphasizes that achieving UHC requires not only expanded service coverage but also strengthened health system foundations, including workforce capacity, financing mechanisms, service delivery networks, and health information systems.

In the Philippines, the enactment of Republic Act No. 11223, also known as the Universal Health Care Act, marked a significant milestone in health system reform. The law mandates automatic enrollment of all Filipinos into the National Health Insurance Program and emphasizes a shift toward population-based and integrated health service delivery systems (Republic Act No. 11223, 2019). However, implementation remains complex and uneven across local health systems. Studies have shown that while policy frameworks are robust, operational challenges persist in translating reforms into effective service delivery at the grassroots level (Co et al., 2024). These challenges are further compounded by disparities in local health system maturity, governance capacity, and resource allocation across provinces and municipalities.

A critical component of UHC implementation is the strengthening of primary health care (PHC), which serves as the first point of contact between individuals and the health system. PHC systems are designed to deliver essential services that are accessible, community-oriented, and continuous. The WHO and related health policy frameworks consistently highlight that strong PHC systems are foundational to achieving UHC because they ensure early intervention, disease prevention, and health promotion at the community level (WHO & World Bank, 2023). In this structure, health system efficiency depends not only on hospitals and specialists but also on decentralized frontline health workers who bridge the gap between communities and formal health services.

Community health workers, particularly Barangay Health Workers (BHWs) in the Philippines, play a vital role in operationalizing PHC principles. They function as community-based health educators, service facilitators, and health system navigators who support preventive care and health promotion activities. Evidence suggests that BHWs are essential in improving access to health information and encouraging health-seeking behaviors within communities, especially in geographically isolated or underserved areas (Ong et al., 2020). However, despite their critical role, many community health workers operate within systems that lack adequate training support, standardized capacity-building programs, and consistent supervision structures. The Department of Health (2023) identifies human resource limitations as a major barrier to achieving effective and equitable UHC implementation, particularly at the primary care level.

In addition to workforce challenges, broader health system constraints continue to hinder optimal UHC implementation. Financing limitations remain a persistent issue, with studies indicating that insufficient and fragmented funding mechanisms reduce the efficiency of local health service delivery (Lagrada et al., 2022). Supply chain inefficiencies and periodic stock-outs of essential medicines further compromise service delivery continuity, particularly in decentralized health systems (Quimbo & Monje, 2021). Moreover, weaknesses in health information systems limit the capacity of local health facilities to generate timely and reliable data for decision-making and monitoring (Abad et al., 2022). Although digital health transformation initiatives are underway, their adoption remains inconsistent across local government units due to infrastructural and capacity-related barriers (Zuniga, 2025).

Governance and leadership structures also play a significant role in determining the effectiveness of UHC implementation. The transition toward province-wide and integrated health systems requires strong coordination between national and local actors, yet disparities in governance capacity often lead to uneven implementation outcomes (Pantig et al., 2024). Additionally, compliance with accreditation standards and PhilHealth benefit packages varies across rural health units, further contributing to inequities in service delivery (Ordinario, 2021). These systemic challenges collectively highlight the complexity of translating UHC policy into effective health service delivery at the community level.

Within this broader health system context, the role of community health workers becomes even more critical. As frontline providers, they are responsible for delivering essential health education, promoting preventive behaviors, and supporting community-based interventions. Their effectiveness is strongly influenced by their knowledge, training exposure, and readiness to perform health education roles. However, gaps in training and capacity development may result in inconsistencies in health messaging and the persistence of misconceptions among both health workers and the communities they serve. This is particularly relevant in the context of communicable diseases such as HIV, where accurate knowledge and stigma reduction are essential components of prevention strategies.

Despite the recognized importance of community health workers in strengthening primary health care and advancing UHC, there remains limited empirical evidence regarding their level of preparedness in delivering specific health education interventions at the community level. In particular, gaps persist in understanding their knowledge base, misconceptions,

and readiness to deliver health information effectively in relation to priority public health concerns. Addressing these gaps is essential for improving training programs, strengthening health communication strategies, and enhancing the overall effectiveness of community-based health systems. Strengthening the capacity of community health workers is therefore not only a workforce development issue but also a critical component of achieving equitable and sustainable health outcomes under the UHC framework.

In light of these considerations, this study was conducted with the following objectives. (1) To describe the socio-demographic profile of community health workers in terms of age, sex, civil status, educational attainment, years in service, and exposure to health-related training; (2) To determine the level of health knowledge among community health workers in terms of disease prevention and health promotion concepts; (3) To assess the level of readiness of community health workers in performing health education and information dissemination roles; (4) To identify common misconceptions affecting health knowledge and communication practices; (5) To examine the relationship between socio-demographic characteristics and health knowledge among community health workers; and (6) To propose a training intervention program aimed at strengthening knowledge accuracy, improving readiness, and reducing misconceptions in community health education practice.

II. METHODOLOGY

This study employed a descriptive quantitative research design to assess the readiness of a Rural Health Unit (RHU) for the implementation of Universal Health Care (UHC) in the Philippines. The assessment was guided by the World Health Organization (WHO) Health System Building Blocks Framework, focusing on leadership and governance, health financing, health workforce, health information systems, procurement and supply chain management, and service delivery. A purposive sampling technique was used to select respondents who were directly involved in UHC preparation, health governance, management, and service delivery. The respondents included local government officials, health managers, physicians, nurses, midwives, human resource personnel, budget personnel, and other relevant stakeholders.

Data were collected using a self-structured questionnaire adapted from the Local Health Systems Maturity Level Assessment under Department of Health Administrative Order No. 2020-0021. The instrument consisted of two parts. The first part assessed the RHU's preparatory readiness using three response categories: Achieved, Ongoing, and Not Yet Started. The second part identified implementation gaps and challenges encountered during the preparatory phase of UHC implementation across the six WHO health system building blocks. Relevant institutional documents, including local health plans, maturity level records, executive orders, office orders, and related reports, were also reviewed to support and validate the survey findings.

The data were analyzed using descriptive statistics, specifically actual counts and frequencies, to determine the level of preparatory readiness of the RHU. Responses were organized according to the six WHO Health System Building Blocks and interpreted based on the extent to which each key result area had been achieved, remained ongoing, or had not yet started. Document review and basic content analysis were used to identify supporting evidence, recurring gaps, implementation challenges, and institutional strengths. The results were then integrated to describe the RHU's overall readiness, identify health system strengths and weaknesses, and develop evidence-based recommendations to strengthen primary health care systems for effective UHC implementation.

III. RESULTS

Level of preparatory readiness of the Rural Health Unit in terms of the WHO Health System Building Blocks

Table 1 shows that the Rural Health Unit was moderately prepared for Universal Health Care implementation based on the WHO Health System Building Blocks. Overall, the table presents 112 achieved, 90 ongoing, and 42 not yet started indicators, suggesting that the RHU had already

accomplished several preparatory requirements. However, the number of ongoing and not-yet-started indicators also shows that full readiness had not yet been achieved.

Table 1. *Level of preparatory readiness by WHO Health Unit Building Blocks*

WHO Building Block	Achieved	Ongoing	Not Yet Started	Overall Interpretation
Leadership and Governance	7	17	3	Mostly ongoing
Health Financing	0	9	11	Weak readiness / mostly not yet started
Health Workforce	8	6	2	Moderate readiness
Health Information Systems	11	7	3	Moderate readiness
Procurement and Supply Chain Management	6	5	2	Moderate readiness
Service Delivery	80	46	21	Strongest readiness, with remaining gaps
Overall	112	90	42	Moderately prepared

Among the six building blocks, Service Delivery showed the strongest readiness, with 80 achieved indicators, followed by Health Information Systems, Health Workforce, and Procurement and Supply Chain Management, which all demonstrated moderate readiness. These findings indicate that the RHU had already established important systems related to service delivery, workforce planning, surveillance, procurement assessment, and health information management.

In contrast, Leadership and Governance was interpreted as mostly ongoing, while Health Financing showed the weakest readiness. The financing component recorded 0 achieved, 9 ongoing, and 11 not yet started indicators, indicating major gaps in financial preparedness.

This suggests that policy mechanisms, governance structures, PhilHealth-related requirements, and Special Health Fund mechanisms still need to be strengthened.

Table 1 indicates that the RHU had established important foundations for UHC implementation but remained in a transitional stage of readiness. Strengthening governance, financing, workforce capacity, digital health systems, procurement mechanisms, and health promotion compliance is necessary to support effective and sustainable Universal Health Care implementation.

Gaps and implementation challenges encountered by the Rural Health Unit during the preparatory phase of Universal Health Care implementation across the Six Health System Building Blocks

Table 2 presents the gaps and implementation challenges encountered by the Rural Health Unit during the preparatory phase of Universal Health Care implementation across the six WHO Health System Building Blocks. The findings show that while the RHU had initiated several preparatory activities, important operational, administrative, financial, and human resource gaps remained.

Table 2. *Gaps and Implementation Challenges*

WHO Building Block	Identified Gaps / Challenges
Leadership and Governance	Delayed issuance of SB resolutions/EOs; incomplete operationalization of the Technical Working Group
Health Financing	Absence of SHF subsidiary ledger; ongoing PhilHealth YAKAP accreditation; limited financial management mechanisms

Health Workforce	Shortage of healthcare personnel; unfilled positions; difficulty addressing HRH gaps; heavy workload
Health Information Systems	Poor EMR implementation; limited ICT equipment; poor internet connectivity; lack of trained ICT personnel
Procurement and Supply Chain Management	Shortage of medicines, vaccines, and supplies; inadequate storage; procurement delays; absence of pharmacist/pharmacy assistant; weak PTC implementation
Service Delivery	Non-functional/two-way referral feedback gaps; Health Promotion Committee not fully established; BHWs not fully recognized as Health Promotion Officers; incomplete documentation compliance

In Leadership and Governance, the main challenges were the delayed issuance of SB resolutions or executive orders and the incomplete operationalization of the Technical Working Group. These gaps suggest that formal policy support and coordination structures were not yet fully established, which may affect the smooth integration of the local health system.

In Health Financing, the absence of the Special Health Fund subsidiary ledger, ongoing PhilHealth YAKAP accreditation, and limited financial management mechanisms indicate weak financial readiness. These challenges may limit fund monitoring, accountability, and sustainability of UHC-related activities.

For Health Workforce, the RHU encountered shortages of healthcare personnel, unfilled positions, difficulty addressing HRH gaps, and heavy workload among staff. These issues may affect service capacity, staff efficiency, and continuity of primary care services.

In Health Information Systems, poor EMR implementation, limited ICT equipment, poor internet connectivity, and lack of trained ICT personnel were identified as key challenges. These gaps indicate the need to strengthen digital health infrastructure and staff capacity for effective data management and reporting.

Under Procurement and Supply Chain Management, the challenges included shortages of medicines, vaccines, and supplies; inadequate storage; procurement delays; absence of pharmacy personnel; and weak implementation of the Pharmacy and Therapeutics Committee. These gaps may affect the consistent availability of essential health commodities.

For Service Delivery, the identified challenges included weak two-way referral feedback mechanisms, incomplete establishment of the Health Promotion Committee, limited recognition of Barangay Health Workers as Health Promotion Officers, and incomplete documentation compliance. Overall, Table 2 shows that the RHU's readiness for UHC implementation depends on addressing these system-wide gaps through stronger governance, financing, staffing, digital systems, supply chain management, and service delivery coordination.

Overall health system strengths and weaknesses influencing the RHU's capacity to implement Universal Health Care at the primary care level.

Table 3 presents the health system strengths and weaknesses of the Rural Health Unit across the six WHO Health System Building Blocks. The findings show that the RHU had already established several foundational systems for Universal Health Care implementation, but weaknesses remained in policy support, financing, staffing, digital health capacity, procurement governance, and health promotion compliance.

In Leadership and Governance, the completion of the LIPH situational analysis indicates that the RHU had already conducted important planning and assessment activities. However, formal policy support and the Technical Working Group remained incomplete, suggesting that governance structures still needed to be fully institutionalized.

For Health Financing, the initiation of PhilHealth YAKAP accreditation was a positive development. However, the absence of the SHF subsidiary ledger

reflected a major weakness in financial monitoring and accountability. This indicates the need to strengthen financial management systems to support UHC implementation.

Table 3. *Health System Strengths and Weaknesses*

WHO Building Block	Strengths	Weaknesses
Leadership and Governance	LIPH situational analysis completed	Formal policy support and TWG still incomplete
Health Financing	PhilHealth YAKAP accreditation process initiated	SHF subsidiary ledger not yet established
Health Workforce	PCP teams partly available; HRH planning initiated	Staffing gaps and budget limitations remain
Health Information Systems	MESU largely compliant and functional	EMR and ICT capacity require strengthening
Procurement and Supply Chain Management	Procurement and inventory situational assessment completed; eLMIS used	PTC not fully established; logistics and supply gaps remain
Service Delivery	Referral pathways, facility lists, DRRM-H assessment, and health literacy planning mostly achieved	Health promotion governance and documentation compliance remain weak

In Health Workforce, the partial availability of Primary Care Provider teams and the initiation of HRH planning showed progress in workforce preparation. However, staffing gaps and budget limitations remained key weaknesses that may affect service delivery capacity and sustainability.

Under Health Information Systems, the MESU was largely compliant and functional, reflecting strength in disease surveillance and reporting. However, EMR implementation and ICT capacity still required improvement, particularly in equipment, connectivity, and trained personnel.

For Procurement and Supply Chain Management, the completed procurement and inventory situational assessment and use of eLMIS demonstrated progress in supply chain monitoring. Nevertheless, the Pharmacy and Therapeutics Committee was not yet fully established, and logistics and supply gaps remained.

In Service Delivery, referral pathways, facility lists, DRRM-H assessment, and health literacy planning were mostly achieved, making this one of the strongest components. However, health promotion governance and documentation compliance remained weak. Table 3 shows that while the RHU had important operational strengths, targeted improvements are still needed to achieve full readiness for the implementation of Universal Health Care.

Evidence-based recommendations to strengthen primary health care systems to support effective implementation of Universal Health Care

Table 4 presents the evidence-based recommendations to strengthen primary health care systems and support effective Universal Health Care implementation. The recommendations are directly aligned with the readiness gaps identified across the six WHO Health System Building Blocks.

Table 4. *Evidence-Based Recommendations*

Key Area	Evidence from the Results of the Study	Recommended Action
Leadership and Governance	Local health system integration was mostly rated ongoing, and the Technical	Expedite SB resolutions/EOs and fully operationalize the TWG.

	Working Group was not yet fully operationalized.	
Health Financing	PhilHealth YAKAP accreditation was rated ongoing, while the SHF subsidiary ledger was rated not yet started.	Establish the SHF subsidiary ledger and strengthen PhilHealth YAKAP compliance.
Health Workforce	HRH assessment and PCP team availability were partly achieved but still showed ongoing gaps.	Recruit and retain essential healthcare personnel and fund priority HRH positions.
Health Information Systems	EMR/ICT assessment was mostly ongoing, while MESU compliance was mostly achieved.	Improve EMR implementation, ICT equipment, internet connectivity, and ICT training.
Procurement and Supply Chain Management	Procurement situational assessment was mostly achieved, but the PTC was still mostly ongoing.	Formally establish the PTC and strengthen inventory, logistics, and commodity management.
Service Delivery	Referral pathways and DRRM-H readiness were mostly achieved, but health promotion governance and documentation compliance remained weak.	Strengthen the two-way referral system, establish the Health Promotion Committee, recognize BHWs as Health Promotion Officers, and complete health promotion documentation.

For Leadership and Governance, the findings showed that local health system integration was mostly ongoing and that the Technical Working Group was not yet fully operationalized. This supports the recommendation to expedite the issuance of SB resolutions or executive orders and fully operationalize the TWG to strengthen policy direction, coordination, and accountability.

In Health Financing, PhilHealth YAKAP accreditation remained ongoing, while the SHF subsidiary ledger had not yet been started. This indicates the need to establish the SHF subsidiary ledger and strengthen compliance with PhilHealth YAKAP requirements to improve financial monitoring, accountability, and sustainability.

For Health Workforce, HRH assessment and PCP team availability were partly achieved but still had ongoing gaps. This supports the recommendation to recruit and retain essential healthcare personnel and allocate funding for priority HRH positions to ensure adequate staffing for primary care delivery.

In Health Information Systems, EMR and ICT assessment were mostly ongoing, although MESU compliance was mostly achieved. This shows the need to improve EMR implementation, ICT equipment, internet connectivity, and staff training to strengthen data management, reporting, and evidence-based decision-making.

Under Procurement and Supply Chain Management, procurement situational assessment was mostly achieved, but the Pharmacy and Therapeutics Committee remained mostly ongoing. This supports the recommendation to formally establish the PTC and strengthen inventory, logistics, and commodity management to ensure the continuous availability of essential medicines and supplies.

For Service Delivery, referral pathways and DRRM-H readiness were mostly achieved, but health promotion governance and documentation compliance remained weak. Therefore, the RHU should strengthen the two-way referral system, establish the Health Promotion Committee, formally recognize Barangay Health Workers as Health Promotion Officers, and complete health promotion documentation. Overall, Table 4

shows that the recommended actions are grounded in the study results and are necessary to move the RHU from partial readiness toward full preparedness for Universal Health Care implementation.

IV. CONCLUSION & RECOMMENDATION

The study concludes that the Rural Health Unit was moderately prepared for the implementation of Universal Health Care. The strongest area of readiness was observed in service delivery, particularly in referral pathways, facility mapping, DRRM-H assessment, and health literacy planning. Moderate readiness was also evident in health workforce, health information systems, and procurement and supply chain management, where several systems had already been initiated. However, full readiness had not yet been achieved because key gaps remained in leadership and governance, health financing, staffing, EMR and ICT capacity, procurement governance, health promotion structures, referral feedback mechanisms, and documentation compliance. These findings indicate that while the RHU has established important foundations for UHC implementation, continued system strengthening is necessary to ensure effective, integrated, and sustainable primary health care delivery.

The RHU, in coordination with the local government and relevant health stakeholders, should implement a structured UHC Readiness Improvement Plan that directly addresses the identified gaps across the six WHO Health System Building Blocks. Priority actions should include the immediate issuance of SB resolutions or executive orders, full operationalization of the Technical Working Group, establishment of the Special Health Fund subsidiary ledger, completion of PhilHealth YAKAP accreditation requirements, recruitment and retention of priority healthcare personnel, and allocation of sufficient budget for HRH needs. The RHU should also strengthen EMR implementation, improve ICT equipment and internet connectivity, formally establish the Pharmacy and Therapeutics Committee and Health Promotion Committee, improve inventory and logistics systems, strengthen two-way referral feedback mechanisms, recognize Barangay Health Workers as Health Promotion Officers, and complete all required health promotion documentation. These actions should be assigned to responsible offices, supported with clear timelines, and monitored regularly to ensure measurable progress toward full UHC readiness.

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