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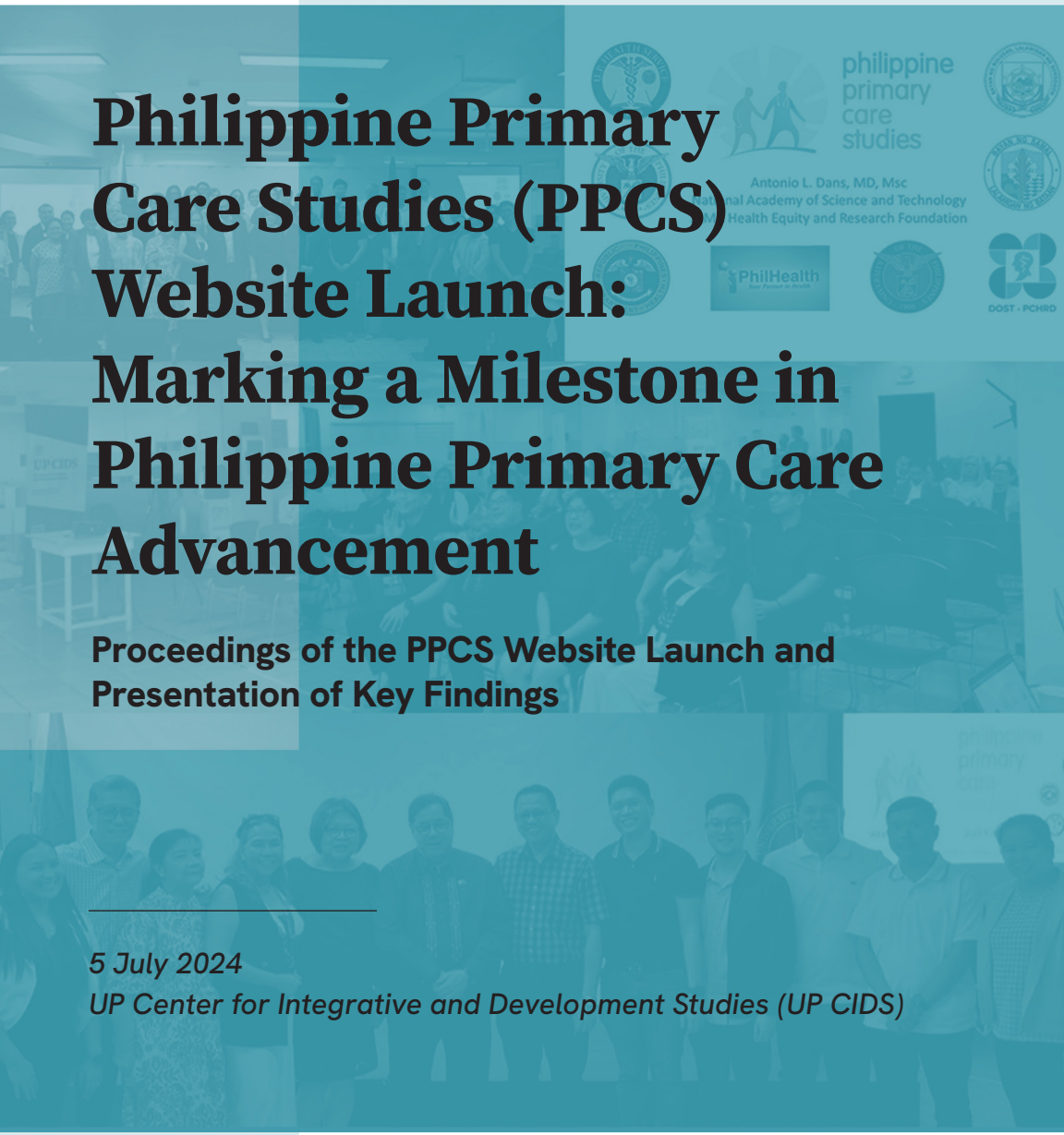

Philippine Primary Care Studies (PPCS) Website Launch: Marking a Milestone in Philippine Primary Care Advancement

Proceedings of the PPCS Website Launch and Presentation of Key Findings

5 July 2024

UP Center for Integrative and Development Studies (UP CIDS)

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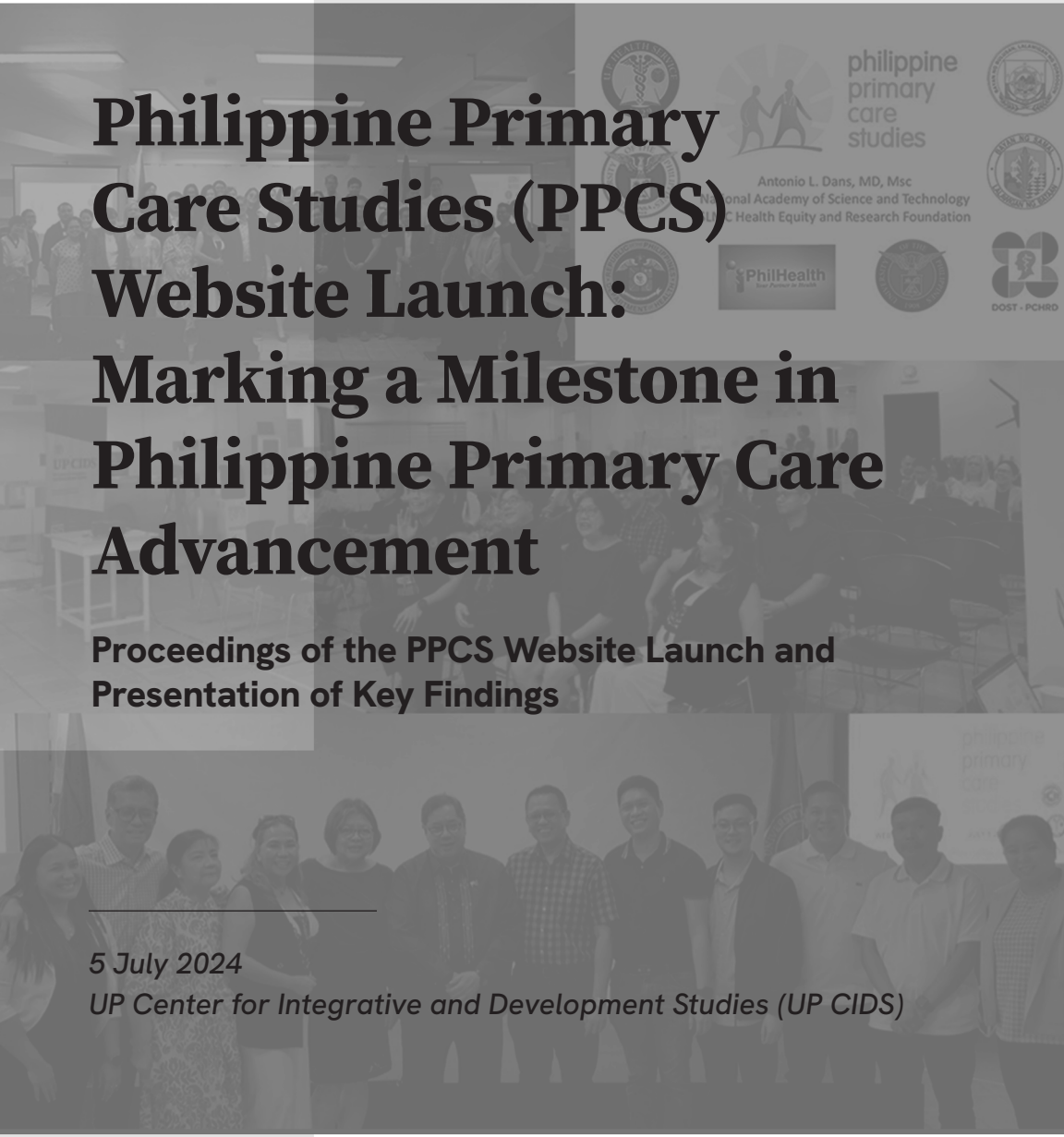

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UP CIDS | PROCEEDINGS | 2025-47

UP CIDS Proceedings
is published by the

University of the Philippines
Center for Integrative and Development Studies
Lower Ground Floor, Ang Bahay ng Alumni
Magsaysay Avenue, University of the Philippines
Diliman, Quezon City 1101

cids.up.edu.ph

Telephone: (02) 8981-8500 loc. 4266 to 4268 / (02) 8426-0955
Email: cidspublications@up.edu.ph
Website: cids.up.edu.ph

ISSN 2718-9295 (Print)
ISSN 2718-9309 (Online)

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Table of Contents

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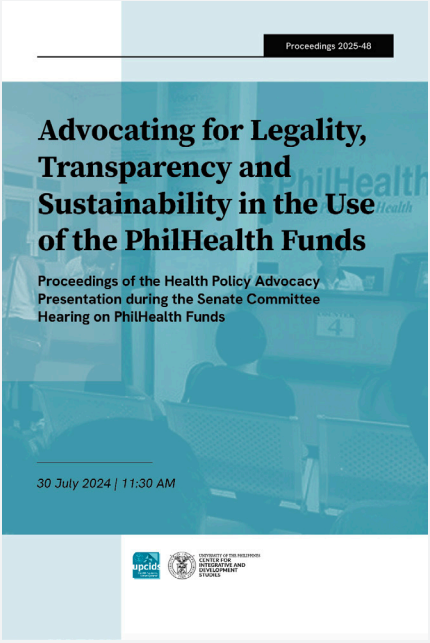

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About the Event

On July 5, 2024, the Philippine Primary Care Studies (PPCS) program celebrated a significant milestone with the launch of its website at the UP Center for Integrative and Development Studies (UP CIDS) in Diliman, Quezon City. This event marks a pivotal moment in the ongoing efforts to enhance primary care delivery across the Philippines.

The PPCS, funded by the Department of Health (DOH), PhilHealth, and the University of the Philippines, is a comprehensive research initiative aimed at demonstrating effective strategies for improving primary care in rural, remote, and urban settings. The program has been a collaborative endeavor with local government units (LGUs) to address key challenges in primary care through targeted interventions. These include improvements in primary care financing, the development of robust health information systems, strengthening human resources for health, fostering networks among public and private healthcare providers, and enhancing community engagement and governance.

The newly launched website serves as a repository of key findings and results from the PPCS program, offering valuable insights for the future implementation of the Universal Health Care (UHC) Law in the Philippines. It provides a crucial resource for local and national officials to guide the advancement of UHC initiatives based on documented successes and challenges.

The event was attended by esteemed guests and stakeholders, including high-ranking government officials, prominent healthcare leaders, academic experts, and representatives from various health institutions and local government units. This diverse assembly highlighted the collaborative effort and broad support behind the PPCS initiative, reflecting a unified commitment to enhancing primary care delivery and informing the implementation of the Universal Health Care Law in the Philippines. The event served as a testament to the collective dedication towards improving healthcare for all Filipinos.

The launch of the PPCS website represents a significant step forward in the quest for effective and equitable primary care across the nation.

Highlights of the PPCS Website Launch and Presentation of Key Research Findings

Introduction to the Philippine Primary Care Studies (PPCS)

Dr. Antonio Dans

Dr. Antonio Dans introduced the Philippine Primary Care Studies (PPCS), emphasizing the project as a collaborative effort involving various professionals such as public health experts, IT engineers, social scientists, governance and business experts, doctors, nurses, and even a student nurse who contributed significantly. The initiative engaged local teams and officials from different areas, including Bulusan in Sorsogon, Samal in Bataan, and the UP Health Service.

The PPCS aims to pilot and test a primary care benefit package that is effective, efficient, and equitable; addressing the needs of rural, remote, and urban settings. Launched in 2016, before the Universal Healthcare Law, the study sought to address the fragmented healthcare system in the Philippines, where individuals often face confusion about where to seek care. Dr. Dans highlighted the inefficiencies observed during the pandemic, such as scattered laboratories, pharmacies, and clinics, as well as the lack of clear patient pathways. The PPCS' goal is to reorganize healthcare by establishing primary care providers who serve as dedicated caregivers with defined responsibilities, a framework now integrated into the Universal Healthcare Law.

He detailed the role of primary care providers, who serve as the first point of contact for patients and deliver comprehensive care, capable of addressing 90 percent of illnesses. These providers also act as coordinators, referring patients to hospitals, laboratories, or pharmacies when necessary, and ensure continuity of care by being the central point patients return to after receiving specialized services. Primary care is currently delivered by family physicians, internists, pediatricians, nurses, midwives, and barangay health workers, who support patients at the community level.

Six Implementation Strategies of the PPCS

1. Financing

The PPCS received PHP 27 million from PhilHealth to implement its primary care model across three sites, with an allocated budget of PHP 400.00 per person annually. To manage this limited funding, the approach included risk pooling, where high costs for some patients were offset by minimal expenses for others, and a spending cap of PHP 2,000.00 per patient per year, beyond which out-of-pocket expenses applied.

To reduce administrative costs, opportunistic registration was employed—patients were registered upon their first visit for care rather than through pre-registration processes. Challenges arose, such as the complexity of the first patient encounter under current "*Konsulta* packages," which required detailed medical histories that barangay health workers and non-physicians could not reliably complete. This underscored the importance of having trained healthcare professionals to handle these initial interactions effectively.

Dr. Antonio Dans elaborated on strategies employed to expand and optimize primary care services under the PPCS. By the second year of opportunistic registration, two-thirds of the population in the pilot areas were enrolled, and by the third year, near-total registration was achieved without additional effort. This approach ensured that all funds were directed toward healthcare delivery rather than administrative costs. It also enabled the implementation of a comprehensive care package covering all illnesses, tests, and treatments available at the centers, including health-related transport, especially in remote areas like Bulusan, where patients often traveled hours via tricycle to reach healthcare facilities.

2. *Workforce Development*

Workforce development was a critical focus due to the severe shortage of healthcare providers, exemplified by the severe ratio of one doctor per 30,000 patients in areas like Bulusan and Samal. Additional doctors were hired to address this, and the doctor-to- patient ratio gradually improved to around 1:10,000, significantly alleviating the workload. Recruitment challenges were addressed by increasing salaries incrementally.Initial offers of PHP 40,000.00 and PHP 50,000.00 per month attracted no applicants, but raising the salary to PHP 60,000.00–PHP 70,000.00 per month led to a surge of interest, even for remote postings.

Support staff, including nurses, midwives, and barangay health workers, were also compensated to reflect the increased patient load due to free services. They received pooled payments of around PHP 50.00 per consultation, distributed based on workload intensity, to mitigate feelings of being undervalued and ensure team motivation.

To address challenges in training healthcare workers, he described how the PPCS shifted from traditional workshops to a cost-effective, ongoing professional development model. Workshops were unsustainable due to high costs and frequent staff turnover, requiring repetitive sessions. Instead, the team adopted "UpToDate," a mobile decision support system provided for free by Walter Skluer to all unit employees, including doctors, nurses, midwives, medical technologists, and barangay health workers (BHWs). The platform features both professional and layman-accessible content, offering real-time, constantly updated medical information.

This approach allowed healthcare workers to remain updated while taking ownership of their learning. The subscription system's shared access also significantly expanded its reach, allowing a single doctor's account to benefit entire teams.

"UpToDate" facilitated task-shifting, empowering BHWs to provide patient education—a crucial role often constrained by the limited time of overworked doctors. BHWs could explain illnesses, their causes, and necessary treatments to patients, enhancing understanding and adherence to care plans. This approach streamlined care delivery and improved patient outcomes by leveraging the entire healthcare team's capabilities.

3. *Healthcare Provider Network*

Dr. Antonio Dans highlighted the development of a mixed healthcare provider network (HCPN) that integrated public and private facilities, including laboratories and pharmacies in Samal and Bulusan. This public-private involvement was formalized through memorandums of agreement (MOAs), enabling efficient collaboration.

The private sector played a crucial role in responding to the increased demand for laboratory tests and medications, showing greater flexibility compared to public facilities. Private providers reduced the procurement burden on municipalities as patients accessed services directly through them. Surprisingly, private pharmacies and laboratories offered lower prices for drugs and tests compared to municipal procurement, likely due to economies of scale and other logistical advantages.

A key requirement for the network's functionality was regular and timely payment, particularly for private facilities, which faced financial instability if payments were delayed. While institutionalized entities like UP could manage annual payments without issue, smaller private pharmacies and labs in remote areas, such as Bulusan and Samal, required monthly payments to remain operational. This underscored the need for efficiency in financial management to sustain healthcare services in underserved regions.

4. *Health Information System*

Dr. Antonio Dans discussed the integral role of a robust health information system (HIS) as the foundation of their work, emphasizing that an HIS encompasses more than just software; it also requires considerations for hardware, its aging (senescence), networking infrastructure, IT staff, and budgeting. In many countries, IT staff are regarded as essential components of medical teams, underscoring their critical role in maintaining functional systems. Without an IT team, implementing a reliable HIS is impractical.

A key insight was that health information technology should be seen as an investment integrated into the overall health budget. The system they developed was built "from the bottom up," focusing on the needs of frontline healthcare providers—doctors, nurses, and midwives—rather than being driven by policy-level requirements like those of PhilHealth

or the Department of Health. This approach avoided overloading the system with irrelevant data points, like tracking non-essential metrics.

The system prioritized automating daily tasks and reducing medical errors, especially during patient transfers between facilities, where 50 percent of errors occur. Ensuring the system's usability for healthcare workers was critical to its success, making it a practical tool for improving care delivery and reducing administrative burden.

He outlined the inefficiencies caused by excessive data collection in healthcare systems. Municipalities in their study sent approximately 20 kilograms of forms to provincial offices monthly, creating a significant administrative burden. Addressing this, meant streamlining the system by eliminating unnecessary data points, retaining only essential information for healthcare workers.

A major focus was extending the information system's reach to barangay health stations, as these are the true hubs of primary care. Current systems often stop at the municipal level, limiting the effectiveness of primary care delivery. The team also ensured interoperability with laboratories, pharmacies, and treasury offices to integrate financial tracking with healthcare operations.

Managing outpatient services required a sophisticated HIS due to the sheer volume of transactions. Unlike hospitals, which deal with fewer high-value transactions, outpatient services handle millions of low-cost transactions. Dr. Dans emphasized the importance of an efficient digital system to process these transactions, as manual methods are inadequate for such scale. This integration improved cost monitoring and overall system efficiency, enabling a more functional and responsive primary care network.

Dr. Antonio Dans detailed the challenges and solutions for connectivity in remote areas like Bulusan, characterized by dense forests and mountainous terrain. Traditional connectivity options, such as hardwiring, cellular towers, and standard wireless connections, were unfeasible. Satellite connectivity emerged as the only viable solution. The team used data from Bulusan to advocate for satellite liberalization, leading to a decree signed by then-President Duterte, making satellite internet more accessible. Despite this, many LGUs have yet to capitalize

on the opportunity. In Samal, long-distance routers on towers were implemented to provide reliable and fast connectivity to rural health units (RHUs).

5. *Community Engagement*

Community engagement was another cornerstone of their efforts. Town hall meetings, informational leaflets, and animated videos were used to educate and involve the public. Videos played in key areas, like waiting stations emphasized two critical messages: 1) the role and value of primary care as a central point for managing health and 2)the second message highlighted the dangers of fragmented healthcare, such as conflicting treatments from multiple specialists without coordination. By promoting awareness and understanding, the team encouraged the community to prioritize primary care for comprehensive and cohesive health management.

Dr. Antonio Dans emphasized the importance of educating communities about risk sharing in healthcare, likening it to a "*paluwagan*" system. He addressed misconceptions that individuals could fully utilize their allotted PHP 400.00 annually, regardless of necessity, for services like vitamins or tests. The concept of risk sharing required explaining that unused resources would be available for others in need during the current year, and in turn, those same individuals might benefit in the future when they require care.

This message was challenging to convey due to its complexity, requiring simplification for public understanding. Clear communication was essential to manage patient expectations and prevent disappointment or controversy upon the introduction of primary care. Educating the community on this principle helped foster trust and cooperation, ensuring a smoother implementation of the system.

6. *Health Performance Measures*

Dr. Antonio Dans shared the performance measures used in their study, focusing on both patient and healthcare worker outcomes. Patient satisfaction was assessed based on whether they used the primary care services, whether their out-of-pocket expenses were reduced, and overall satisfaction. These were horizontal measures, meaning they applied to any condition, and not just specific diseases like tuberculosis

or hypertension. Healthcare worker satisfaction was also measured, including their knowledge and whether the system made their work easier or more frustrating. Additionally, the financial performance of the system was monitored to assess cost efficiency.

The study showed a notable success in patient utilization rates, especially in rural and remote sites. In rural areas, consultations increased by 200 percent, while remote sites saw a 350 percent increase, indicating that the system helped bridge the gap between those who could afford healthcare and those who could not.

However, the study also revealed challenges, particularly in healthcare costs. While the rural site had lower total healthcare expenses per person (PHP 836.00), remote areas like Bulusan had higher out-of-pocket expenses, amounting to around PHP 153.00 per person annually. The primary reasons for this were the remote location, difficulties in accessing healthcare facilities, and connectivity issues, which hindered telemedicine services in Bulusan.

Conversely, Samal, with better connectivity, saw lower out-of-pocket costs and was able to implement telemedicine during the pandemic. The urban site had higher out-of-pocket expenses, but these were less significant because the population was largely composed of employees and faculty, who typically did not rely heavily on the primary care package.

Dr. Antonio Dans discussed the various measures of patient satisfaction and healthcare worker satisfaction in the study. Patient satisfaction improved in terms of how they felt cared for by the healthcare team, the knowledge of the healthcare workers, and overall satisfaction with the services. While the study did not claim to have perfect quality of care, it highlighted that quality was closely monitored with the health information system, which tracked disease clusters and treatment effectiveness.

The study resulted in multiple publications, including studies on primary care benefit utilization, patient satisfaction, healthcare worker knowledge, and health information system performance. These publications also covered the reduction of out-of-pocket expenses, quality of care, and the administrative efficiency of the primary care

system. A significant portion of these publications, about a third, have been accepted by international journals and will be made available on their website.

Ongoing Developments

Dr. Antonio Dans concluded by discussing the ongoing developments following the study. UP Manila signed a memorandum of agreement with Microcircuits to continue improving the

software used in the study, emphasizing that software requires regular updates and development. The system is now being utilized by 1.8 million patients across 180 health facilities in 67 municipalities, 11 cities, and 12 provinces. There are also plans for the first regional health information system, though details are under negotiation and will be announced soon.

Dr. Dans also mentioned that the website will be updated to share the study's findings and experiences as a resource for LGUs and the Department of Health to inform future healthcare decisions. He expressed gratitude for the support and concluded his presentation.

Philippine Primary Care Study Website Features

Dr. Leonila Dans

Dr. Leonila Dans introduced the Philippine Primary Care Study Group's website https://www.primarycarestudies.com, which serves as a repository of findings and resources aimed at strengthening primary care in the Philippines. The website underscores their goal of creating an equitable system, empowering healthcare workers, and providing evidence-based recommendations. It features three pilot sites as examples of how universal healthcare should be implemented.

The homepage includes two key videos:

1. A video explaining primary care, designed to educate healthcare workers and the public.
2. A summary video highlighting the achievements and findings of the Philippine Primary Care Study.

Dr. Leonila Dans elaborated on the features of the Philippine Primary Care Study's website:

1. *Research and Impact Tab*

This tab lists five primary strategies, with the sixth one—evaluation and monitoring—addressed separately. Among these strategies, one of the core areas is community engagement, and clicking on the "learn more" link directs users to a dedicated page explaining the strategies that were implemented. This page highlights the challenges encountered during the process, the solutions applied to address them, and the lessons learned from the experiences. It emphasizes the importance of learning from both successes and failures, which is central to refining approaches, particularly as universal healthcare is implemented in the country.

2. *Educational Resources*

The website also provides users with access to a variety of educational resources, including files and videos that can help facilitate the adaptation of the strategies used in the study to other settings. These resources are organized under each of the primary care strategies that were implemented. For example, the "lessons learned" section allows users to access a wide range of materials and tools that have been made available to help users understand the challenges and solutions, and to apply these insights in different contexts. The website ensures that these resources are easily accessible for use in other primary care environments.

3. *Detailed Strategy Descriptions*

The Research Section provides users detailed information about the project's strategies, outcomes, and associated publications. As users navigate through the website, they will see the five strategies previously described in more detail. Each strategy is linked to relevant educational materials, including presentations and lectures conducted to support these strategies. This section allows users to delve deeper into the methodology and implementation behind each of the strategies, providing a better understanding of their real- world application.

4. *Research Outcomes*

Further exploration of the website reveals the project's horizontal outcome measures, which reflect the broader impact of the strategies implemented. These outcome measures go beyond vertical metrics tied to specific diseases and focus on general improvements across the healthcare system. By clicking on the "Primary Care Benefit Utilization" outcome, users are directed to a section showcasing publications that provide a detailed analysis of the project's results. Though the website cannot display all the findings, it offers access to 19 in-depth studies that users can click through for detailed insights into the strategies, results, and conclusions drawn from the project.

5. *Electronic Medical Records (EMRs) and Health Information System*

The importance of EMRs and the health information system is underscored in the website, as these components were found to be

critical to the success of the project, particularly in rural areas and other pilot sites. As the Philippine Primary Care Studies move forward, the enhancement of EMRs and health information systems will be a key area of focus. These systems were identified as essential to ensuring the success of primary care, facilitating better healthcare delivery, and improving the management of patient data.

6. *Publications on Health Information Systems*

The website also offers access to publications related to health information systems. For instance, the Calderon study, is available for users to access. This study discusses the feasibility, acceptability, and impact of using a clinical decision support tool such as "UpToDate" in the three pilot sites. This article, published in the British Medical Journal, details the experience of the Philippine Primary Care Study Group in engaging healthcare workers—including barangay health workers—to effectively utilize this online resource to improve healthcare delivery.

7. *Quality of Care Outcome Measures*

Finally, the website highlights the significance of the quality-of-care outcome measure, which plays an essential role in evaluating the effectiveness of the primary care strategies A major publication in this section focuses on adherence to clinical practice guidelines for common pediatric conditions, offering valuable insights on how these guidelines were implemented in the study sites. This study is particularly useful for addressing questions from the DOH about appropriate quality of care indicators. The website demonstrates that with a robust electronic health information system, primary care providers are better equipped to track vertical outcomes for specific diseases and manage other essential tasks like census management and monitoring the overall quality of care provided by Rural Health Units.

Dr. Leonila Dans concluded by emphasizing the PPCS' main goal: to enhance national health systems through evidence-based recommendations. She highlighted the importance of these findings as a resource for LGUs and policymakers.

Drawing on the successful examples from Bulusan, Samal, and the UP Health system, she conveyed optimism that these experiences prove the potential for implementing similar initiatives nationwide.

Reaction from Representatives of PPCS Pilot Sites

URBAN PARTNER – UP HEALTH SERVICE DILIMAN

Dr. Marissa Alip

Dr. Marissa Alip, the current Director of the UP Health Service Diliman emphasized the importance of primary care in the healthcare system, noting that a strong primary care system could reduce the need for secondary and tertiary care.

This aligns with the vision of the UP Health Service, which aims to be a model for primary healthcare services in the country.

She shared her experience working with the PPCS, starting in 2016, when the UP Health Service had no electronic medical records. The PPCS provided laptops and training for their team, which proved to be invaluable, especially during the pandemic. Initially, only the cardiology department had an EMR system, but with PPCS' assistance, they transitioned to a more user-friendly web-based system. Dr. Alip highlighted how the system allowed the healthcare team to access patient records remotely, which was crucial during the pandemic, as many clients would reach out at any time for consultations.

She noted that the system was continuously modified to meet the needs of healthcare providers, with input from doctors on the practicality of the software. Dr. Alip, who became proficient in using the system, played a key role in assisting other doctors with their technical challenges. She appreciated that the system was equitable, as it allowed even the lower- income employees and their dependents to benefit from the EMR system.

She explained that their priority clients were students, who initially did not have PhilHealth, but they also served the 7,000 UP employees and their dependents. The system was widely used by employees, especially those with lower salaries. When the program ended, there was a strong demand for its return, with faculty and dependents also seeking access to the system. She hopes that in the future, the program will be reinstated and become a permanent benefit for UP employees.

The most significant impact of the EMR system, Dr. Alip shared, was the ability to quickly shift to teleconsultations in 2019 when the pandemic began, as they already had a stable system in place. However, since the program ended, they have been facing challenges with managing their own EMR system and are looking for solutions to continue offering efficient healthcare services. She expressed hope that the PPCS might be able to provide support again, ideally without additional costs for software and other related expenses.

RURAL PARTNER – SAMAL, BATAAN

Dr. Cristina Santos-Espino

Dr. Cristina Santos-Espino shared the journey of Samal's involvement in primary care, which began in 2017 with brainstorming sessions with Dr. Antonio and Dr. Leonila Dans. This began with substantive discussions on primary care and the introduction of electronic medical records, a concept that initially seemed daunting to her.

The Samal team, consisting of 60 health personnel, including many older staff members, took on the challenge of learning how to use the new EMR system. This included training midwives with limited computer skills. The team also focused on educating the local community about the new system. The Governor of Samal provided crucial support, including giving access to a signal tower, while the PPCS supplied laptops, printers, and other necessary equipment.

Dr. Espino recounted how Samal faced significant challenges during the pandemic, but the teleconsultation capabilities enabled by the EMR system allowed Samal to remain operational even with health personnel in quarantine or otherwise affected. Samal was one of the few areas that maintained consultations during this time, and Dr. Espino believes that the trust and respect Samalenos had for their healthcare workers were key to their success.

The PPCS' support allowed them to continue providing healthcare despite the many challenges, including the loss of a nurse during the pandemic. Dr. Espino also highlighted the importance of the regular seminars provided by PPCS, which allowed even barangay health workers to explain health topics

in simple terms. She shared that despite her recent retirement due to health issues, she was still able to witness the completion of the study in Samal.

She hopes that the research would be extended with potential future funding and that the new Municipal Health Officer, along with local officials, would continue to support the program.

She concluded by emphasizing the gradual, step-by-step approach taken by the PPCS ensured that everyone understood the system, and expressed her deep appreciation for the opportunity to be part of this transformative project.

GEOGRAPHICALLY ISOLATED DISADVANTAGED AREA SITE – BULUSAN SORSOGON

Hon. Michael Guysayko

Mayor Michael Guysayko shared that in 2019, during the start of his second term as mayor, he first encountered the PPCS through Dr. Tony.

When the PPCS began in Bulusan, there was a major issue with connectivity, particularly in remote barangays. Mayor Guysayko had spent a significant amount of money to install boosters to improve the signal, and eventually, they managed to connect all the barangays. Thanks to the efforts of the PPCS and their focus on primary care and universal healthcare, Bulusan now has 95 percent internet connectivity in all barangays, a huge improvement for a rural area. This allowed Bulusan to be one of the first to introduce telemedicine in Sorsogon during the pandemic, offering eKonsulta services that allowed residents to consult with physicians from the safety of their homes.

He also shared the significant impact of the program, which included establishing partnerships with local pharmacies. These partnerships allowed patients to receive free medicines, billed directly to the municipality, reducing corruption and administrative burdens. This initiative made healthcare more accessible, as it covered not only consultations but also transportation costs and, when necessary, even meals for patients who appeared to be in poor health.

Mayor Guysayko highlighted the importance of having a mobile application for healthcare, suggesting that it would be easier for people to access services. He mentioned how the app could be used for emergencies, allowing residents to send information directly to the emergency operations center. He expressed hope that this website and app could be extended to all municipalities, especially those in lower-income areas that struggle to fund healthcare services.

A challenge he addressed was the sustainability of barangay health workers (BHWs), who are critical to primary care. He noted that in some places, BHWs are replaced after elections, disrupting the continuity of healthcare services. In Bulusan, however, he introduced an ordinance that prevents the removal of trained BHWs unless there is a valid reason, ensuring that these workers remain in their roles despite changes in leadership.

Mayor Guysayko expressed his wish that the benefits of the PPCS be extended nationwide, especially to smaller municipalities, for primary care can be felt at the grassroots level. He emphasized the importance of local leaders working together to improve the health of their communities and assured Dr. Tony of his continued support.

Empowering Communities through Primary Care

DOH Secretary's Response and Vision for Philippine Healthcare

DOH Secretary Dr. Teodoro Herbosa reflected on the 1991 Local Government Code, which led to a fragmented healthcare system in the Philippines. He recalled how, in the past, rural health centers were well-equipped with essential medicines like prenatal vitamins, anti- diarrheal drugs, paracetamol, and antibiotics. However, this changed after the code was passed, which led to a decentralization of healthcare services.

He also mentioned the implementation of the Sin Tax Law about a decade ago when he was Undersecretary. The goal was to raise funds to improve the healthcare system, and while equipment in DOH hospitals was upgraded and primary care facilities were built in local government areas, staffing these facilities with doctors became a challenge. To address this, the "Doctor to the Barrios" program was expanded to ensure that municipalities without doctors could still have access to medical professionals.

However, a new issue arose when municipalities faced a lack of nurses. In response, the DOH developed the nurse deployment program to fill this gap. Herbosa shared that after becoming the Secretary of Health, he took a closer look at these efforts and recognized the continuing challenges within the healthcare system despite these programs.

He expressed frustration over the significant amount of money spent on primary care in the past 10 years, which he estimated at PHP 440 billion. Despite this large expenditure, he pointed out that the results were not visible, especially since primary care is not expensive. He questioned why, despite the large budget, there were no tangible improvements in primary care.

He also noted the problem where local health workers, including doctors, are dismissed when a new mayor takes office, especially after completing their terms. This leads to a disruption in services. Additionally, he highlighted the issue that municipalities tend to pay more for medicines than what is available in the private sector.

Herbosa then shifted focus to his own efforts as the current Secretary of Health. He pointed out that despite the Universal Healthcare Law, there was nothing in it that forbade the DOH from implementing primary care. He resolved to act by directly pushing for primary care initiatives, demonstrating his commitment to addressing the inefficiencies in the system.

In January 2024, he announced his plan to involve family medicine specialists in all DOH hospitals and offer mentorship and certification for Municipal Health Officers (MHOs) in family and community medicine. This was part of his vision for providing healthcare for all.

A key turning point for him was realizing that many doctors were stationed in regional and specialty hospitals, mainly overseeing outpatient departments (OPDs) and emergency services. To address this, he reassigned these doctors and create a new program called the "Bagong Urgent Care and Ambulatory Services Center" (BUCAS). His goal was to establish 28 BUCAS centers to serve the poorest 28 million people by 2028. This approach was intended to improve access to primary care across the country, especially for underserved communities.

He highlighted the disparity in healthcare access between the wealthy and the poorest sectors, pointing out that wealthier families can easily access high-quality care at private clinics and hospitals while the poorest communities are limited to barangay health station, where healthcare workers are often insufficiently trained, and essential services like medicine and laboratories are unavailable.

In rural areas, patients are typically directed to district hospitals, which, despite having doctors, lack critical diagnostic services such as x-rays, CT scans, and ultrasounds. This has led people to seek care in larger hospitals, overwhelming emergency rooms, and outpatient departments, which should be focused on more complex cases.

Herbosa acknowledged that the existing system had become unsustainable due to this overload, especially as big hospitals modernized. He praised the primary care model developed by Dr. Antonio Dans, which offers a practical solution for LGUs aiming to improve primary care services and avoid further burdening larger hospitals.

The first BUCAS Center opened in March 2023 in Santo Tomas, Pampanga, and has been a major success, seeing 1,000 patients daily. The center was modeled after Singapore's polyclinic and Cuba's healthcare system. Herbosa emphasized the importance of offering both primary healthcare services and treatment, including immunizations, maternal care, and chronic disease management, in an integrated setting.

He also highlighted the advanced technology used in the pharmacy, with robotic arms automated medication dispensing. Herbosa's goal is to modernize healthcare delivery in the Philippines and push for the adoption of innovative technologies to improve services, aiming to transform the country's healthcare system into one that is forward-thinking and capable of providing efficient, modern care for all.

The secret to Dr. Antonio Dans' solution for effective primary care is the integration of digital technology, specifically the use of EMRs and enabling healthcare professionals to engage in telemedicine. By adopting EMR systems and allowing doctors to use these technologies, it became possible to provide efficient and accessible primary care, even in remote areas.

Building on this approach, Secretary Herbosa introduced another key initiative: the Mobile Primary Care Clinics. These 83 mobile clinics are equipped with essential healthcare tools, including hematology, chemistry, ultrasound, X-ray, and a drug refrigerator for vaccinations. The goal is to distribute these clinics to governors across the country, with Bataan being one of the first recipients. Herbosa emphasized the need for accountability and results, encouraging local leaders to track the number of patients served and report back. This ensures that these mobile clinics are not merely parked and unused, unlike similar projects in the past. The mobile clinics, combined with the digital health technology, represent a significant leap forward in providing accessible healthcare services across provinces.

In June 2024, during the second national health sector meeting in Legazpi, Secretary Herbosa announced the next phase of his primary care initiative.

This effort focused on increasing access to medical care, which is the core of the primary health care program. The key component of this program is the BUCAS centers, designed to enhance healthcare access in underserved areas. By the end of May, 23 BUCAS centers were already operational across the country, including locations in Luzon, Visayas, and Mindanao. This was just five short of the goal of 28 centers by the end of 2028, highlighting significant progress in providing comprehensive primary care across the Philippines.

Secretary Herbosa shared an example of the rapid development of a BUCAS center in Tubau, La Union, where the groundbreaking took place in March and its completion by May. This demonstrates the speed and efficiency of building these primary care centers. Although the construction cost for the facility was PHP 6 million pesos, the DOH will invest PHP 24 million for necessary laboratory equipment.

For comparison, a typical mobile primary care bus costs only PHP 9.9 million, while a full primary care facility can cost anywhere from PHP 12 to 15 million without equipment, utilities, or infrastructure. This highlights the significant investment required to establish primary care systems. Herbosa pointed out that the PHP 440 million spent over the past decade by the DOH on primary care programs yielded little visible results in terms of infrastructure and services.

Secretary Herbosa emphasized the significant investments made in programs like Doctor to the Barrios, Nurse Deployment, and Rural Midwives Program, yet there has been little return in terms of effective primary care delivery. He introduced a concept called "*PuroKalusuguan*," derived from the word purok, the smallest unit of governance within a barangay (the smallest local government unit in the Philippines). Each barangay is subdivided into puroks, each with a leader. Herbosa's idea is to target puroks to enhance primary health care.

The goal is to visit households, identify children needing immunization, detect health issues like tuberculosis, diabetes, hypertension, and screen women for cancer. Herbosa shared his personal experience in providing primary care. As a surgeon, he took on the role of primary care physician for his patients and their families, managing issues such as hypertension and diabetes before referring complex cases to specialists. He noted that without primary care physicians, patients often sought specialists, trusting them for broader care, such as geriatric, pediatric, and OB/GYN care. The key,

he pointed out, is trust, which used to be the cornerstone of the Philippine healthcare system, before the primary care responsibilities shifted to hospitals.

He shared his evolution of perspective regarding family medicine and primary care. He explained that, as a medical student, he found family medicine unappealing compared to specialties like surgery, where doctors appeared more glamorous and successful. However, as he began practicing medicine in remote areas, he witnessed firsthand the desperate need for healthcare, especially in communities lacking access to basic services. This experience highlighted the importance of primary care as the real solution to many of the healthcare challenges the country faces.

He emphasized a key philosophical debate within healthcare: where should the money be invested? Should it be spent on primary care, or should more resources go toward advanced treatments like proton beam therapy for cancer or heart centers? He noted that while the number two killer in the Philippines is cancer, breast cancer specifically posed a challenge due to late detection. In fact, only one percent of cases were diagnosed at an early stage (stages one and two), while the majority (99 percent) were found at more advanced stages (three and four).

This issue raises concerns about treatment costs, especially when considering the expensive drugs and therapies required for advanced cancer cases. Secretary Herbosa questioned the lack of investment in early detection tools, such as mammography, highlighting that many DOH hospitals lacked functioning machines. He cited the cost of mammography in the private sector (between PHP 4,000.00 to 8,000.00), making it difficult to screen women, especially for those over 40, for breast cancer.

As part of the BUCAS initiative, the Secretary implemented cancer screenings, including ultrasound tests for solid lesions. If any suspicious findings emerge, the patients are then referred for a mammogram at a DOH hospital. This approach is a proactive step toward better healthcare outcomes and early detection of serious illnesses.

Secretary Herbosa elaborated on the importance of rethinking the health system and the need for a balanced approach between primary care and specialized healthcare facilities. He highlighted the critical need for heart centers, lung centers, and kidney centers across the country to address the

long wait times for cardiac surgeries and specialized treatments. The lack of accessible care for patients, particularly those coming from remote regions, underscores the urgency of building more specialized centers.

He shared that during his tenure with Dr. Enrique Ona, they had worked on the development of Heart Kidney Lung Centers (HKLs), a major step in addressing the gaps in specialized care. Additionally, the Specialty Center Law was introduced, streamlining the process for hospitals to establish specialty centers within their facilities. Prior to this law, hospitals had to apply for separate licenses if they wanted to set up specialty centers in different locations.

With the Specialty Center Law, a hospital like East Avenue Medical Center can establish, for example, a Cancer Center in a separate facility without needing a new operating license—just an extension of the original hospital's license. This law makes it easier to expand healthcare services and address specific patient needs. The primary challenge now is securing the necessary funding to build these centers.

Secretary Herbosa discussed the DOH's current inability to fully absorb its budget, particularly due to substantial spending on health promotion campaigns, such as advertising. He questioned the necessity of these expenses, highlighting that instead of focusing on advertising, the funds could be better allocated toward primary care studies to sustain continuous funding for health initiatives.

He suggested renaming the Bureau of Health Promotion to Bureau of Health Promotion and Wellness, to better reflect the shift in focus from treating illness to promoting overall wellness and longevity. This aligns with his vision of healthcare not only addressing illness but emphasizing prevention, food, exercise, and maintaining health.

Secretary Herbosa emphasized the need for the PPCS to continue studies on initiatives like BUCAS centers and mobile clinics, as well as integrating EMRs into these facilities. He encouraged research groups to explore how EMR systems could be implemented in BUCAS centers, which are operational and expanding.

There is a greater need to focus on provinces struggling with their health indices. These regions still face significant health challenges, including high

stunting rates, low immunization coverage, and high maternal mortality, despite advancements in infrastructure such as midwives and birthing centers. Herbosa pointed out that while the Philippines is set to become a high-middle-income country next year, its health indices lag many African countries, with maternal mortality rates still alarmingly high and child malnutrition prevalent.

To address these issues, he advocated for a stronger focus on primary health care, particularly in maternal health, nutrition, and water, sanitation, and hygiene (WASH), which are foundational for improving overall health outcomes. Herbosa also mentioned the outbreak of diarrhea in Baguio, which reflects a failure in WASH programs and local governance efforts. He emphasized that addressing these basic health needs should be a priority to ensure better health outcomes across the country.

The importance of addressing water, sanitation, and hygiene as a vital part of the country's public health efforts was underscored. He explained that the DOH previously limited its responsibility to testing water quality at the source. However, this approach was insufficient to prevent diarrheal diseases. He argued that the solution lies in ensuring potable water in homes and flushing toilets, which are crucial to preventing contamination and disease.

Many communities still rely on traditional and unsustainable methods, such as dip wells for water and backyard toilets that lead to contamination between water sources and waste.

This results in outbreaks of diseases like diarrhea and cholera. He noted that local government officials often delegate these issues to municipal engineers who may not be qualified in sanitary engineering, causing further complications in water and sanitation infrastructure.

He also highlighted the double burden of illness in the country, where the major causes of death are no longer communicable diseases like cholera, but non-communicable diseases (NCDs), such as heart disease, diabetes, and hypertension. This shift in disease burden requires a reconsideration of health priorities and a stronger focus on preventing and managing NCDs alongside improving basic health infrastructure.

Secretary Herbosa emphasized the needed shift in the country's primary care system. He pointed out that the old model was no longer sufficient for

addressing the health challenges, particularly with the burden of NCDs. He stressed the importance of incorporating diagnostic labs into primary care settings to effectively manage these conditions. For example, patients with hypertension should be tested for ECG, cholesterol, and triglyceride levels, while diabetes management should be proactive rather than merely treating the complications.

Herbosa also highlighted the growing financial burden of end-stage renal disease (ESRD), which is heavily linked to diabetes. According to a World Bank study, 80 percent of dialysis patients in the Philippines have diabetic nephropathy. He called for a shift from just treating diabetes to preventing it by promoting healthy lifestyles. His key message was the TED approach:

- *Tamang pagkain* (proper diet),
- *Ehersisyo* (regular exercise), and;
- *Disiplina sa katawan* (discipline in avoiding smoking, alcohol, and drugs).

It was stressed that primary health care workers must be equipped with the knowledge and skills to promote preventive measures, as part of the national effort to reduce NCD incidence and improve public health outcomes.

Secretary Herbosa shared his vision for primary care and the future of healthcare research in the Philippines, emphasizing the importance of evidence-based policy. He explained how the sin tax (tax on tobacco and alcohol) has enabled the DOH to allocate more funding toward wellness and primary care, areas that were previously underfunded.

With the additional resources, Herbosa hopes to establish the Philippine Primary Care Studies as an institute, one that will continuously evaluate the effectiveness of the government's healthcare initiatives. He also called for collaboration with UP and other State Universities and Colleges (SUCs), especially those with medical schools, to ensure multi-sectoral involvement in ongoing healthcare studies.

A commitment to funding research was expressed through making research funds accessible via the DOH's budget. He noted that each agency is allowed five percent of its budget for research, which amounts to approximately PHP 15 billion for the DOH. He emphasized that he is willing to fund research

proposals that focus on primary care implementation across the country, including Luzon, Visayas, and Mindanao.

Furthermore, he highlighted the importance of having performance measures in place for healthcare initiatives to ensure accountability and continuous improvement. He mentioned that using evidence such as graphs, tables, and data would be crucial in demonstrating that public funds, like those from the sin tax, are being well spent. He acknowledged that it is easier to convince legislators about the value of programs when there is solid evidence to back up the government's healthcare policies.

PHOTOS

Photo with DOH Secretary Ted Herbosa

Photo of audience at the PPCS Website Launch

Photo of PPCS personnel with Secretary Herbosa

philippine primary care studies

Antonio L. Dans, MD, Msc
National Academy of Science and Technology
SLMC Health Equity and Research Foundation

DOST - PCHRD

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Raffy Marfori MD
Public Health


Cayleen Capco
Software Developer


Edna Co
UP School of Governance


Inday Dans MD
Clinical Epi


Jessie Catabui MD
UP Health Service


Buching Paterno MD
Public Health


Cara Galingana
IT Officer


Nanette Sundiang MD
MBA


Carol Tan-Lim MD
Research Manager


Joy Sanchez RN
Overall Coordinator


Lei Alfonso
Public Health


Regine De Mesa
Anthropology


Mia Rey
UP School of Business


Bang Aquino RN
Finance Officer


Noleen Fabian
Research Editor


Bulusan, Sorsogon


Samal, Bataan

UP Dlliman


Bataan Provincial Board

philippine primary care studies

Objective:

To pilot test an effective, efficient and equitable primary care benefit package tailored to the needs of a rural, remote and urban setting in the Philippines.

6 IMPLEMENTATION STRATEGIES

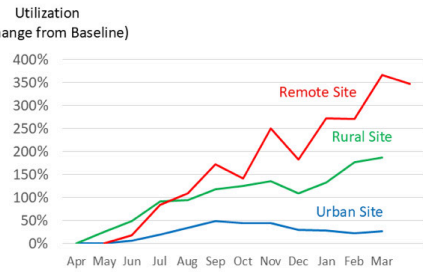
1. **Financing**
   a. 403/capita/year frontloaded
   b. Risk pooling, NOT rationing
   c. Opportunistic registration
   d. Truly comprehensive package
   e. Covered health-related transport
2. **Workforce development**
   a. Increased MDs (target density 1:10,000)
   b. Augmented salaries for all HCWs
   c. CPD using a mobile DSS (UpToDate)
3. **Healthcare Provider Network**
   a. Public/Private MOAs
   b. Reduced procurements, lowered price
   c. Faster payment
4. **Health information system**
   a. Hardware, software, network, staff, budget
   b. Automate daily tasks (build from bottom)
   c. Remove unnecessary data points
   d. Link clinics/BHS, labs, pharmacies, finance
   e. Improve connectivity
5. **Community Engagement**
   a. Importance of primary care
   b. Importance of risk-sharing

6. HORIZONTAL PERFORMANCE MEASURES

a. patient utilization
b. OOP expenses
c. patient satisfaction

d. healthcare worker knowledge
e. healthcare worker satisfaction
f. quality of care

g. cost (provider perspective)
h. administrative efficiency



	Rural site (Samal)	Remote site (Bulusan)	Urban site (UPHS)
Out of pocket expense per capita/year			
Total healthcare expense per capita/year			

Publications

Providing evidence-based policy recommendations.

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e-Med Adaptation Sites

(by UP Manila/Microcircuits)

1.8M Patients from
180 Health Facilities in
67 Municipalities in
11 Cities and
12 Provinces

First Regional HIS coming soon!

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The **Program on Health Systems Development (PHSD)** investigates problems of and innovates solutions for health systems and hopes to bridge some of the persistent divides that have hampered health systems in the Philippines. These include, among others, barriers between public health and clinical-surgical medicine; among levels and types of health professionals; among the differing perspectives and sometimes opposing interests of patients, health professionals, health policymakers, and other stakeholders; and between the public and private sector.

UNIVERSITY OF THE PHILIPPINES
CENTER FOR INTEGRATIVE AND DEVELOPMENT STUDIES
Lower Ground Floor, Ang Bahay ng Alumni, Magsaysay Avenue
University of the Philippines Diliman, Quezon City 1101

Telephone (02) 8981-8500 loc. 4266 to 4268
(02) 8426-0955

Email cids@up.edu.ph
cidspublications@up.edu.ph

Website cids.up.edu.ph