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EDITORIAL

Community-led approaches to strengthening primary health care delivery

Alvin S Concha[1]

The Philippines has made significant strides in reforming its primary health care system under the Universal Health Care Act of 2019.[1] The law mandates automatic enrollment of all Filipinos in the National Health Insurance Program via the Philippine Health Insurance Corporation (PhilHealth). The law also directs PhilHealth to improve how it pays and contracts providers to make the purchasing of health services—including primary care—more effective.[2] To operationalize these mandates, the health system has developed strategic purchasing for PHC through benefit design, provider selection, payment mechanisms and performance monitoring to make health care more efficient. However, persistent disparities in access and health financing—including high out-of-pocket spending and challenges in PhilHealth reimbursement—provide important context for why strengthening primary health care remains urgent.

Through the Konsulta (Konsultasyong Sulit at Tama) Package, PhilHealth ensures financial access to primary care providers delivering basic essential services at every life stage.[3] The program has since evolved into the PhilHealth YAKAP (Yaman ng Kalusugan Program),[4] which redesigns outpatient diagnostics and medicines coverage and within which the PhilHealth GAMOT (Guaranteed and Accessible Medications for Outpatient Treatment)[5] benefit is implemented. Capitation payments for Konsulta are disbursed in performance-linked tranches, with key performance indicators including the initial patient encounter and prompt submission of encounter data.[6] This scheme shifts health financing away from fee-for-service toward preventive and coordinated care.

More recently, the Department of Health (DOH) introduced PuroKalusugan, an initiative to improve primary health care by strengthening the capacity of barangays and puroks (sub-barangays) to address the specific health needs of their communities.[7] PuroKalusugan delivers community-based primary care at the purok level through multidisciplinary health teams—including barangay health workers, midwives, barangay nutrition scholars, and others—offering services such as immunization, maternal and newborn care, nutrition, and non-communicable disease management, all aligned with DOH priorities and local government needs.[7]

Yet, challenges persist. Many health care providers report difficult reimbursement processing,[8] unpaid claims,[9] and low Konsulta package uptake,[10] all of which impair the providers' capacity to purchase medicines, pay operational staff, or upgrade their facilities. Some local reports indicate cash-flow problems that are causing service disruptions in municipalities.[11] Despite PhilHealth's expansion of its outpatient drug list to 75 medicines, including treatments for common chronic conditions, the Php 20,000 annual cap means access to essential therapies remains only partial.[5 12 13] In 2024, total out-of-pocket health spending was estimated at Php 615 billion—about 42.7% of total health expenditure.[14]

Community-level financing and service innovations can help address these persistent gaps and serve as feasible complements to national reforms. These strategies are not intended to replace the existing system or any system-wide reforms, but they can function as scalable pilots adapted to the Philippine setting.

Barangay Savings Funds: At barangay level, families could contribute a small amount, say Php 100 to Php 200 monthly, into a local health savings fund, possibly matched by LGUs or PhilHealth. These funds would cover primary health care visits, teleconsultations, screening services, minor procedures, or even predetermined causes for tertiary health care utilization. Community savings groups have been shown to increase utilization of health services in small or rural communities, with members using group funds to access care.[15 16] Formalizing this model in Philippine barangays could build local resilience, strengthen community-government health engagement, and reduce financial fragility.

Diagnostic Subscription Model: LGUs can pre-purchase diagnostic quotas (e.g., complete blood count,

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urinalysis, lipid/glucose panels, chest X-ray, ultrasound) and allocate them to RHUs via subscription contracts. This ensures predictable lab revenue and guaranteed access for RHUs, moving away from variable fee-for-service. Community-based diagnostic services have been used internationally and are not yet standardized in the Philippines—thus representing a viable pilot option.[17]

Health Financing Cooperatives: LGUs can encourage the establishment of health financing cooperatives, which could strengthen local primary care by pooling resources to pre-purchase diagnostics, bulk medicines, and health kits, provide micro-loans for catastrophic health expenses, and invest in essential PHC infrastructure such as barangay health stations, community diagnostic labs, and basic equipment for maternal and chronic care. Similar, albeit larger, cooperative and pooled-financing models in other countries have improved access to services and reduced financial barriers.[18 19] Piloting this approach at a smaller scale in the Philippines at the barangay level promises to boost service delivery, financial protection, and local health system resilience.

These community-level innovations differ from existing PhilHealth mechanisms by emphasizing local pooling of resources, predictable financing, and direct support for primary health care delivery, rather than relying solely on fee-for-service reimbursement. If implemented, they could improve service utilization, financial protection, and local health system resilience, while strengthening preventive and coordinated care. Further study is needed to evaluate their relevance, cost-effectiveness, and economic impact, as well as their scalability across different Philippine contexts.

The policy foundation for universal health care in the Philippines is robust. However, the system must tackle implementation issues and financing bottlenecks to fully unlock the potential of these policies. Pairing national policy reforms with grassroots innovation can build a primary health care system that is not only universal, but resilient, inclusive, and responsive to the health needs of every Filipino.

AI use declaration
I used an AI language model to assist with phrasing, structural refinement, and summarization of publicly available information. I independently verified all evidence, and the final analysis and opinions in this editorial are entirely my own.

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RESEARCH

Characteristics and outcomes of patients with colorectal cancer who underwent laparoscopic colorectal surgery: descriptive study

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ABSTRACT

Background. Laparoscopic surgery is a widely accepted treatment modality, but with few disadvantages.

Objective. To describe the demographic, clinical, tumor, and operative characteristics of patients with colorectal cancer who underwent laparoscopic surgery.

Design. Descriptive study.

Participants. 47 males and 40 females, aged 19 years and older with colorectal cancer who underwent laparoscopic colorectal surgery.

Setting. Surgery Department - Colorectal Surgery section, Southern Philippines Medical Center, Davao City, August 2014 to August 2018.

Main outcome measures. Demographic and clinical characteristics, tumor profile, and operative outcomes.

Main results. This study analyzed 87 patients with colorectal cancer who underwent laparoscopic colorectal surgery. The participants had a mean age of 56.55 ± 11.99 years, with a slight male predominance (54.02%). Most patients resided within Davao Province (72.41%) and commonly presented with comorbidities, particularly hypertension (22.99%). Tumors were mostly located in the rectum (62.07%), and the majority of patients had advanced disease, with 59.77% classified as stage IIIB. Advanced tumor invasion was common, with 60.92% of patients presenting with T3 and 32.18% with T4 disease, while lymph node involvement was observed in 75.86% of cases. Distant metastasis was present in 11.49% of patients, most frequently involving the liver. Low anterior resection was the most commonly performed procedure (39.08%). The mean operative time was 278.89 ± 72.76 minutes, with a mean blood loss of 476.73 ± 341.86 mL and a conversion-to-open rate of 23.26%. Postoperative outcomes showed a morbidity rate of 26.44% and a mortality rate of 3.45%, with patients resuming oral intake after a mean of 4.02 ± 2.17 days and a mean hospital stay of 8.35 ± 6.38 days.

Conclusion. Laparoscopic colorectal surgery at our institution was performed among middle-aged patients, mostly males. Rectal cancer was the most common diagnosis, with most patients presenting with advanced stage IIIB disease, and low anterior resection was the most frequently performed procedure. The mean operative time was 279 minutes, with a conversion-to-open rate of nearly 25%. The mean intraoperative blood loss was 476 mL. Oral intake was resumed after a mean of 4 days. The mean hospital stay was 8 days, with low mortality despite a moderate morbidity rate.

Keywords. minimally invasive surgery, tumor, malignant, mortality

INTRODUCTION

For conditions requiring bowel resection, such as colorectal cancer, laparoscopic surgery is a widely accepted treatment approach.[1] With ongoing advancements in techniques and continuous surgeon training, it is considered as safe and effective as open colorectal surgery. Advantages include lower postoperative complications, shorter hospital stay, reduced intraoperative blood loss, decreased systemic inflammatory response, and improved cosmetic outcomes.[2 3]

Despite its advantages, laparoscopic colorectal surgery has several challenges. Even for experienced surgeons, safe identification and transection of vascular structures, determination of target segments,

IN ESSENCE

Although laparoscopic surgery is widely used and well established, it presents some inherent disadvantages.

Laparoscopic colorectal surgery was predominantly performed in middle-aged patients, the majority of whom were male. Rectal cancer was the most common indication, with most patients presenting with advanced stage IIIB disease. The mean operative time was comparable to those reported in the literature, and outcomes were characterized by low mortality and moderate rate of postoperative morbidity.

This study highlights the operative outcomes of patients who underwent laparoscopic colorectal surgery.

bowel mobilization and resection, specimen retrieval, and creation of anastomoses can be difficult.[3-7] Moreover, the procedure is still evolving and not universally adopted due to the lack of standardized techniques, technical complexity, concerns about adequacy of oncologic resection, and longer operative times.[6 8 9]

Since 2011, minimally invasive procedures have been performed at Southern Philippines Medical Center (SPMC) across multiple specialties, including gynecology, hepatobiliary surgery, colorectal surgery, pediatric surgery, orthopedics, neurosurgery, and surgical endoscopy. However, data on surgical outcomes remain unavailable. We did this study to describe the demographic, clinical, tumor, and operative characteristics of patients with colorectal cancer who underwent laparoscopic surgery at SPMC.

METHODOLOGY

Setting

We did a retrospective descriptive study among patients who underwent laparoscopic colorectal surgery under the Surgery Department - Colorectal Surgery section of SPMC between August 2014 to August 2018. The department handles an average of approximately 125 colorectal cancer surgical cases annually.

Table 1 **Demographic and clinical profile of patients who underwent colorectal surgery.**

Characteristics	Values (n=87)
Median age ± SD, *years*	56.55 ± 11.99
Sex, *frequency (%)*	
Male	47 (54.02)
Female	40 (45.98)
Place of residence, *frequency (%)*	
Within Davao Region	63 (72.41)
Outside Davao Region	24 (27.59)
Comorbidities, *frequency (%)*	
Hypertension	20 (22.99)
Diabetes mellitus	8 (9.20)
Hyperthyroidism	1 (1.15)
Pneumonia	1 (1.15)
Tuberculosis	5 (5.75)
Asthma	1 (1.15)
Others	3 (3.45)
With history of abdominal surgeries, *frequency (%)*	6 (6.90)
Baseline serum albumin ± SD, *g/L*	32.56 ± 6.91

Participants

We included patients aged 19 years and up with colorectal cancer who underwent elective laparoscopic colorectal surgery at SPMC. All patients had preoperative localization of tumor using either colonoscopy or computed tomography. We excluded patients initially operated on at another institution and subsequently transferred to SPMC for management, as well as those who underwent emergency laparoscopic colorectal surgery.

To determine the minimum sample size for this study, we assumed that the mortality rate of patients who underwent colorectal surgery is 6.52%.[10] Using a sample size calculation for descriptive research carried out with a 5% margin of error, a design effect of 1.0, and a 90% confidence level, a minimum sample size of 66 would be needed.

Data collection

We reviewed the medical records of each patient with colorectal cancer who underwent elective laparoscopic colorectal surgery and were included in the study. From the records of these patients, we collected data on age, sex, place of residence (within or outside Davao Region), comorbidities (hypertension, diabetes mellitus, hyperthyroidism, pneumonia, bronchial asthma, pulmonary tuberculosis, and others), history of previous abdominal surgery, and serum albumin levels. We also collected data on tumor profiles such as tumor location (rectum, left or right colon, sigmoid colon, or transverse colon), postoperative cancer staging, and Tumor/Node/Metastasis (TNM) classification. The operative profiles were also collected including the type of procedure performed (anterior resection, abdominoperineal resection, hemicolectomies, Hartmann's procedure, intersphincter resection, sigmoidectomy or total colectomy), intraoperative blood loss, conversion to open surgery, if blood transfusion was done, time to resumption of oral diet, postoperative morbidity, mortality, and length of postoperative hospital stay.

Statistical analysis

We summarized continuous variables using means and standard deviations, and expressed categorical variables as frequencies and percentages. For all our statistical tests, we utilized Epi Info™ 7.2.2.6.

Table 2 Postoperative tumor profile.

Characteristics	Values (n=87)
Tumor location, *frequency (%)*	
Rectum	54 (62.07)
Left colon	4 (4.60)
Right colon	9 (10.34)
Bilateral colon	1 (1.15)
Sigmoid colon	18 (20.69)
Transverse colon	1 (1.15)
Postoperative cancer staging, *frequency (%)*	
I	2 (2.30)
IIA	12 (13.79)
IIB	3 (3.45)
IIIA	6 (6.90)
IIIB	52 (59.77)
IIIC	2 (2.30)
IVA	9 (10.34)
IVB	1 (1.15)
T stage, *frequency (%)*	
T0	0 (0.00)
T1	0 (0.00)
T2	6 (6.90)
T3	53 (60.92)
T4	28 (32.18)
N stage, *frequency (%)*	
N0	20 (22.99)
N1	66 (75.86)
N2	1 (1.15)
M stage, *frequency (%)*	
M0	77 (88.51)
M1	10 (11.49)
Metastasis location, *frequency (%) (n=10)*	
Liver	7 (70.00)
Lungs	3 (30.00)

RESULTS

This study included 87 records of patients with colorectal cancer who underwent laparoscopic colorectal surgery. Table 1 shows the preoperative demographic and clinical profiles of the participants. Participants had a mean age of 56.55 ± 11.99 years, and a sex distribution of 47/87 (54.02%) males and 40/87 (45.98%) females. Most of the participants (63/87; 72.41%) lived within Davao Region, while the remaining participants (24/87; 27.59%) lived outside of Davao Region. Of the 87 participants, 22.99% had hypertension, 9.20% had diabetes mellitus, 1.15% had hyperthyroidism, 1.15% had pneumonia, 5.75% had tuberculosis, 1.15% had asthma, and 3.45% had other comorbidities. Out of the 87 participants, 9 (6.90%) had history of previous abdominal surgery. The mean baseline serum albumin of all participants was 32.56 ± 6.91 g/L.

Table 2 shows the tumor profile based on the biopsy of tumors from the 87 participants in the study. Of the 87 participants, 62.07% of the tumors were located in the rectum, 4.60% in the left colon, 10.34% in the right colon, 1.15% in both left and right colon, 20.69% in the sigmoid colon, and 1.15% in the transverse colon. For the postoperative cancer staging distribution, 2.30% had Stage I colorectal cancer, 13.79% had Stage IIA, 3.45% had Stage IIB, 6.90% had Stage IIIA, 59.77% had Stage IIIB, 2.30% had Stage IIIC, 10.34% had Stage IVA, and 1.15% had Stage IVB. For the TNM classification, most patients presented with advanced T stage disease, 60.92% classified as T3 and 32.18% as T4. Lymph node involvement was common among the participants, such that 75.86% of patients were staged as N1, while 22.99% had no nodal involvement. Distant metastasis was identified in 11.49% of patients, with the liver being the most frequent metastatic site (70%), followed by the lungs (30%).

The operative profile of patients who underwent laparoscopic colorectal surgery is shown in Table 3. Among the 87 patients included, the most frequently performed procedure was low anterior resection (39.08%), followed by anterior resection (17.24%) and abdominoperineal resection (12.64%). Other surgical procedures include hemicolectomies, Hartmann's procedure, intersphincter resection, sigmoidectomy and total colectomy. The mean intraoperative blood loss was 476.73 ± 341.86 mL, and conversion to open surgery occurred in 23.26% of cases. The mean duration of surgery was 278.89 ± 72.76 minutes. Blood transfusion was required in 18.39% of patients, with a mean of 1.33 ± 1.29 units transfused among those who received transfusions. Postoperatively, the mean time it took for patients to resume oral intake was 4.02 ± 2.17 days. Overall morbidity and mortality rates were 26.44% and 3.45%, respectively. The mean length of postoperative hospital stay was 8.35 ± 6.38 days.

Table 3 Operative profile of patients who underwent laparoscopic colorectal surgery.

Characteristics	Values (n=87)
Type of procedure performed, *frequency (%)*	az
Abdominoperineal resection	11 (12.64)
Anterior resection	15 (17.24)
Extended left hemicolectomy	1 (1.15)
Extended right hemicolectomy	1 (1.15)
Hartmann's procedure	9 (10.34)
Intersphincter resection	1 (1.15)
Left hemicolectomy	4 (4.6)
Right hemicolectomy	8 (9.20)
Low anterior resection	34 (39.08)
Sigmoidectomy	1 (1.15)
Total colectomy	1 (1.15)
Total proctocolectomy with radical cystoprostatectomy	1 (1.15)
Mean volume of blood loss ± SD, *mL (n=75)*	476.73 ± 341.86
Converted to open surgery, *frequency (%)*	20 (23.26)
Mean operating time ± SD, *mins*	278.89 ± 72.76
With blood transfusion, *frequency (%)*	16 (18.39)
Mean number of blood units transfused ± SD, *(n=15)*	1.33 ± 1.29
Mean time to resumption of oral intake ± SD, *days (n=75)*	4.02 ± 2.17
Postoperative morbidity, *frequency (%)*	23 (26.44)
Mortality, *frequency (%)*	3 (3.45)
Mean length of postoperative hospital stay ± SD, *days (n=83)*	8.35 ± 6.38

DISCUSSION

Key results

This study showed that laparoscopic colorectal surgery at our institution was most commonly performed in middle-aged patients, with a slight male predominance, and a high proportion of rectal cancer cases. The majority of patients presented with stage IIIB disease, characterized by T3 or T4 tumors and frequent lymph node involvement. Distant metastasis was observed in a small proportion of patients, most commonly involving the liver and lungs. Low anterior resection was the most frequently performed procedure. The mean operative time was 279 minutes, and conversion to open surgery occurred in nearly one-fourth of cases. The mean intraoperative blood loss was 476 mL, with 16 patients requiring blood transfusion. Among these, the mean transfusion transfusion requirement was one unit of blood. Patients resumed oral intake after an average of 4 days postoperatively, and the mean length of postoperative hospital stay was 8 days. Postoperative morbidity occurred in 23 patients, and 3 in-hospital deaths were recorded.

Strengths and limitations

This study provided a detailed description of the demographic and clinical characteristics, as well as postoperative outcomes, of patients with colorectal cancer who underwent laparoscopic colorectal surgery at SPMC. However, since this is a descriptive research, we cannot establish associations between preoperative or intraoperative characteristics and postoperative outcomes. To explore these associations, conducting an analytic research is recommended. We also recommend looking at long-term outcomes, including disease recurrence and disease-free survival.

Interpretation

Colorectal cancer predominantly affects older adults, particularly those aged over 50 years, making age a well-established risk factor for disease development.[11-14] However, advances in colorectal cancer screening—especially in developed countries—have coincided with a rising incidence among younger adults (<50 years).[15 16] Early-stage colorectal cancer is often asymptomatic, contributing to delayed diagnosis and a higher likelihood of advanced-stage disease at presentation.[17] Although distant metastases occur in approximately 20% of patients at the time of diagnosis—lower than in many other malignancies—they most commonly affect the liver and lungs.[18-22] The operative time in our study was comparable to those reported in previous literature.[23 24] While laparoscopic colorectal surgery typically requires longer operative times than open surgery,[24 25] it offers several advantages, including reduced blood loss, shorter hospital stay, earlier resumption of oral intake, and lower postoperative morbidity and mortality.[23 24 26]

Generalizability

In this study, we focused on patients with colorectal cancer who underwent laparoscopic colorectal surgery. As one of the institutions providing minimally invasive surgery for colorectal cancers, findings of this study are applicable to majority of patients seeking medical treatment for this disease.

CONCLUSION

In this study, laparoscopic colorectal surgery

was primarily performed in middle-aged patients, with a slight male predominance, and rectal cancer as the most common diagnosis. Most patients presented with advanced disease (stage IIIB), characterized by T3–T4 tumors and frequent lymph node involvement, while distant metastases were uncommon, primarily affecting the liver and lungs. Low anterior resection was the most frequently performed procedure. The mean operative time was 279 minutes, with nearly one-fourth of cases converted to open surgery. Mean intraoperative blood loss was 476 mL, and 16 patients required blood transfusion, receiving an average of one unit. Patients resumed oral intake after a mean of 4 days, had a mean hospital stay of 8 days, and postoperative morbidity and mortality were observed in 23 and 3 patients, respectively.

Contributors
KRSDLR and ORBJr had substantial contributions to the study design, and to the acquisition, analysis and interpretation of data. KRSDLR wrote the original draft and subsequent revisions. All authors reviewed, edited, and approved the final version of the manuscript. All authors agreed to be accountable for all aspects of the work.

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We used an AI language model to assist with phrasing, structural refinement, and summarization of publicly available information. We independently verified all evidence, and the final analysis and opinions in this editorial are entirely our own.

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This study was reviewed and approved by the Department of Health XI Cluster Ethics Review Committee (DOH XI CERC reference P19030801).

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SPMC JHCS

CASE IN IMAGES

Malignant peripheral nerve sheath tumor in a pediatric patient: case in images

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A 15-year-old female presented to our outpatient clinic with a lower back mass after initial evaluation by a private spine surgeon.

CLINICAL FEATURES

At birth, the patient was noted to have a hyperpigmented patch over the lower back. Approximately three years prior to the current admission, a mass measuring about 1 cm developed at the same site and gradually increased in size. Four months before admission, the mass rapidly enlarged to approximately 7 cm, prompting medical consultation. An initial ultrasound demonstrated a fluid-filled vascular mass, and subsequent biopsy revealed a spindle cell neoplasm. One month prior to admission, the patient consulted a private spine surgeon who obtained magnetic resonance imaging (MRI) of the thoracolumbar spine, which showed an encapsulated, skin-covered, complex cystic soft tissue mass in the posterior lumbar region. Based on the MRI findings and biopsy results, the patient was initially diagnosed with a spindle cell neoplasm and was advised to undergo immediate surgical intervention. Due to financial constraints, she was referred to the Orthopedic Service of our institution, where a wide resection of the lumbar mass with soft tissue reconstruction was planned. The patient denied lower extremity weakness or paresthesia. There was no family history of similar hyperpigmented lesions or masses, and she had no history of radiation exposure.

On physical examination, a well-demarcated cystic mass measuring approximately 14 × 14 × 8 cm was observed over the lower back (Figure 1). The mass was soft, non-tender, and non-erythematous, with no evidence of discharge or necrosis, though a transverse incision scar from a prior biopsy was present. An overlying hyperpigmented patch with irregular borders extended from the thoracolumbar region to the superior gluteal area and contained sparse superficial hair. No café-au-lait macules were identified. The rest of the physical examination findings were unremarkable. Based on the patient's clinical history and examination findings, a spindle cell neoplasm was initially suspected.

DIAGNOSTICS AND THERAPEUTICS

A CT scan and MRI prior to admission revealed an encapsulated, skin-covered, complex cystic soft tissue mass measuring 11.14 × 4.2 × 12.03 cm in the posterior lumbar region, extending from L1 to L5, without evidence of spinal extension (Figure 2). The imaging characteristics demonstrated overlapping features with plexiform neurofibromas, contributing to diagnostic uncertainty.

The patient was initially admitted under the Orthopedic Service. On admission, chest and lumbosacral spine imaging confirmed the posterior lumbar mass and additionally revealed intervertebral disc disease at L2–L4, with possible anterolisthesis at L2–L3. She was subsequently referred to Pediatric Oncology and Dermatology for multidisciplinary comanagement. Dermatologic evaluation identified a congenital melanocytic nevus corresponding to the hyperpigmented patch present since birth. The patient was also referred to Plastic and Reconstructive Surgery for planning of soft tissue reconstruction.

An ultrasound-guided core needle biopsy with frozen section demonstrated spindle cells with bland nuclear features, indistinct cytoplasm, inconspicuous nucleoli, focal necrosis, and rare mitotic figures. Histopathologic findings were consistent with a spindle cell sarcoma of the lower back (Figure 3). Immunohistochemical (IHC) staining showed positivity for S100, TLE-1, and CD34, supporting the diagnosis of a nerve sheath tumor (Figure 4).

The patient was subsequently readmitted for definitive surgical management and underwent wide tumor resection of the lumbar mass with intraoperative frozen section biopsy. Postoperatively, she developed a surgical site infection complicated by wound dehiscence and febrile episodes. Broad-spectrum intravenous antibiotics, including vancomycin, meropenem, and ciprofloxacin, were initiated. Wound cultures yielded *Candida*

albicans and *Acinetobacter baumannii*, prompting the addition of intravenous fluconazole and colistin while continuing prior antibiotics. The infection was managed with surgical debridement and two cycles of vacuum-assisted closure therapy, followed by placement of a full-thickness skin graft harvested from the bilateral gluteal folds (Figure 9). After resolution of the infection, the patient was discharged and later readmitted for adjuvant chemotherapy.

Gross examination of the resected specimen revealed a well-circumscribed mass measuring 16 × 16 × 7.5 cm (Figure 5). Serial sectioning demonstrated approximately 70% necrosis and 40% hemorrhage. Microscopically, the tumor exhibited a marbled low-power appearance with a fascicular growth pattern of atypical spindle cells; all surgical margins were negative for tumor involvement (Figure 6). Additional IHC staining showed focal SOX10 positivity and a mosaic pattern of H3K27me3 expression, indicating partial loss (Figure 7). These histopathologic and immunohistochemical findings were consistent with a low-grade malignant peripheral nerve sheath tumor (MPNST), although the presence of high-grade components in unsampled areas could not be entirely excluded.

The hyperpigmented patch was further evaluated by Pediatric Dermatology to assess for neurofibromatosis type 1 (NF1). Histologic analysis revealed keratinocyte hyperpigmentation without atypical cells (Figure 8), a finding that may be seen in NF1; however, in the absence of other clinical manifestations, the lesion was classified as a giant congenital melanocytic nevus. Genetic testing was recommended to definitively exclude NF1. The patient was discharged with a final diagnosis of MPNST arising in association with a giant congenital melanocytic nevus. Comprehensive counseling was provided by the Pediatric Oncology Service regarding chemotherapy goals, potential adverse effects, and the risk of recurrence or metastasis. The Orthopedic and Plastic Surgery teams also provided detailed postoperative wound and graft care instructions.

Two weeks following discharge, the patient initiated adjuvant chemotherapy with a doxorubicin–ifosfamide regimen and successfully completed seven cycles. Additionally, she underwent external beam radiation therapy, receiving a total dose of 30 Gy delivered in 30 fractions. Post-radiotherapy CT imaging showed no evidence of recurrent or metastatic disease in the chest, abdomen, or pelvis. At present, the patient remains in good health with no radiologic signs of disease recurrence. She is functionally stable and is preparing to return to school after one year.

RELEVANCE

MPNSTs are rare malignant mesenchymal neoplasms, accounting for approximately 5–10% of all soft tissue sarcomas[1] and 3–10% of pediatric sarcomas.[2] They affect approximately 0.001% of the general population, with 40% arising sporadically, 50% associated with NF1, and 10% occurring in patients with a history of radiation exposure.[3 4] Anatomically, MPNSTs most commonly arise in the soft tissues of the extremities or trunk; therefore, involvement of the lumbar spine is considered an exceedingly rare presentation.[5-7] Historically, MPNSTs lack distinct clinicopathologic features or defining molecular alterations but are typically associated with loss of function of the NF1 tumor suppressor gene, followed by additional genetic abnormalities such as CDKN2A inactivation and polycomb repressive complex (PRC) protein alterations that contribute to malignant transformation.[8-10]

Establishing a definitive diagnosis remains challenging, as clinical presentation varies depending on anatomic location; lumbar spine tumors may manifest with limb pain, abdominal or back pain, urinary or bowel dysfunction, or may be entirely asymptomatic.[10 11] Additionally, MRI findings of MPNSTs and benign neurofibromas often overlap, rendering radiologic differentiation difficult.[13 14] Consequently, histopathologic evaluation with an extensive immunohistochemical panel is essential to exclude other malignancies.[15 16] Although no single immunohistochemical marker is pathognomonic, 50–60% of MPNSTs demonstrate scattered S100 positivity and weak to moderate CD34 expression.[15] Complete or mosaic loss of H3K27me3 expression has emerged as a valuable diagnostic marker in confirming MPNST.[17]

The primary treatment modality is surgical excision with negative margins to minimize recurrence risk and improve survival outcomes.[18] In tumors arising at rare anatomic sites, treatment typically consists of surgery with adjuvant therapy. For tumors larger than 5 cm, adjuvant chemotherapy with doxorubicin and ifosfamide is generally recommended.[1 19]

Despite aggressive multimodal management, five-year local recurrence rates range from 27.3% to 85.7%,[18] and overall survival averages 34–52%, corresponding to a median survival of 5–8 years.[20] Overall, prognosis for patients with MPNST remains poor due to the tumor's rarity, aggressive behavior, and high propensity for recurrence and metastasis.[1]

In our patient, the clinical presentation, radiographic findings, and initial histopathologic evaluation were highly suggestive of spindle cell carcinoma; however, an extensive IHC panel ultimately excluded this diagnosis. The case was particularly challenging due to multiple radiologic, histologic, and immunohistochemical features that mimicked other tumor entities. Furthermore, the absence of NF1 association, lack of prior radiation exposure, and the tumor's rare anatomic location added to the diagnostic complexity. A definitive diagnosis was established only after comprehensive IHC analysis of the resected specimen. Given the aggressive behavior of MPNSTs, early and accurate diagnosis is critical, as delays may result in more complex surgical management, reduced responsiveness to chemotherapy, and poorer survival outcomes. In this case, imaging and routine histologic evaluation were insufficient, and confirmation required the integration of multiple immunohistochemical markers to reach the correct diagnosis.

Figure 1 Large, palpable cystic mass in the lumbar region with a transverse scar and an overlying hyperpigmented skin lesion.

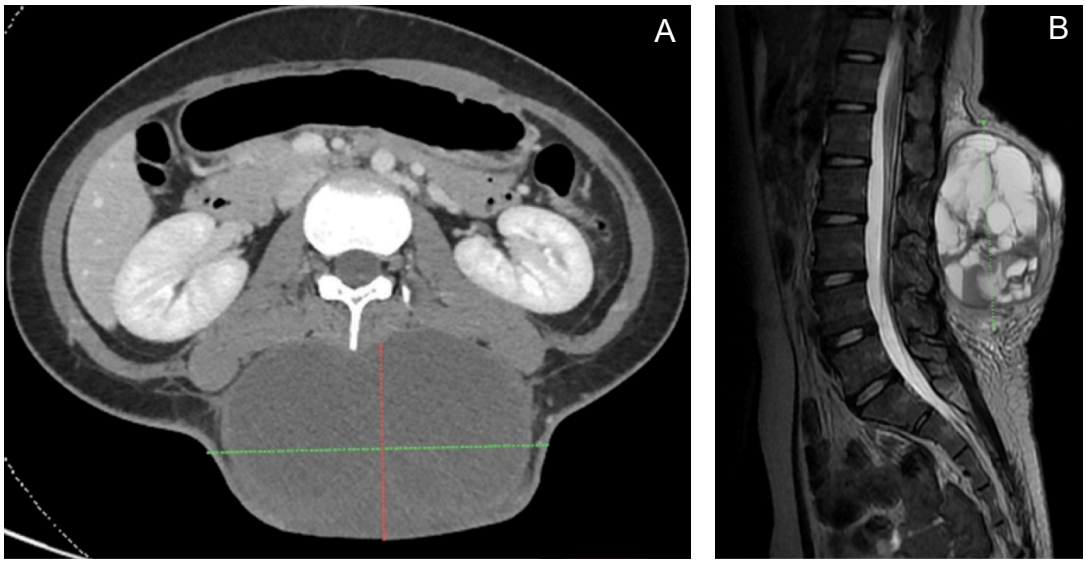

Figure 2 Contrast CT scan (A: axial view) and MRI (B: sagittal view) prior to admission showing an encapsulated, skin-covered, complex cystic mass from L1 to L5 in the posterior lumbar region.

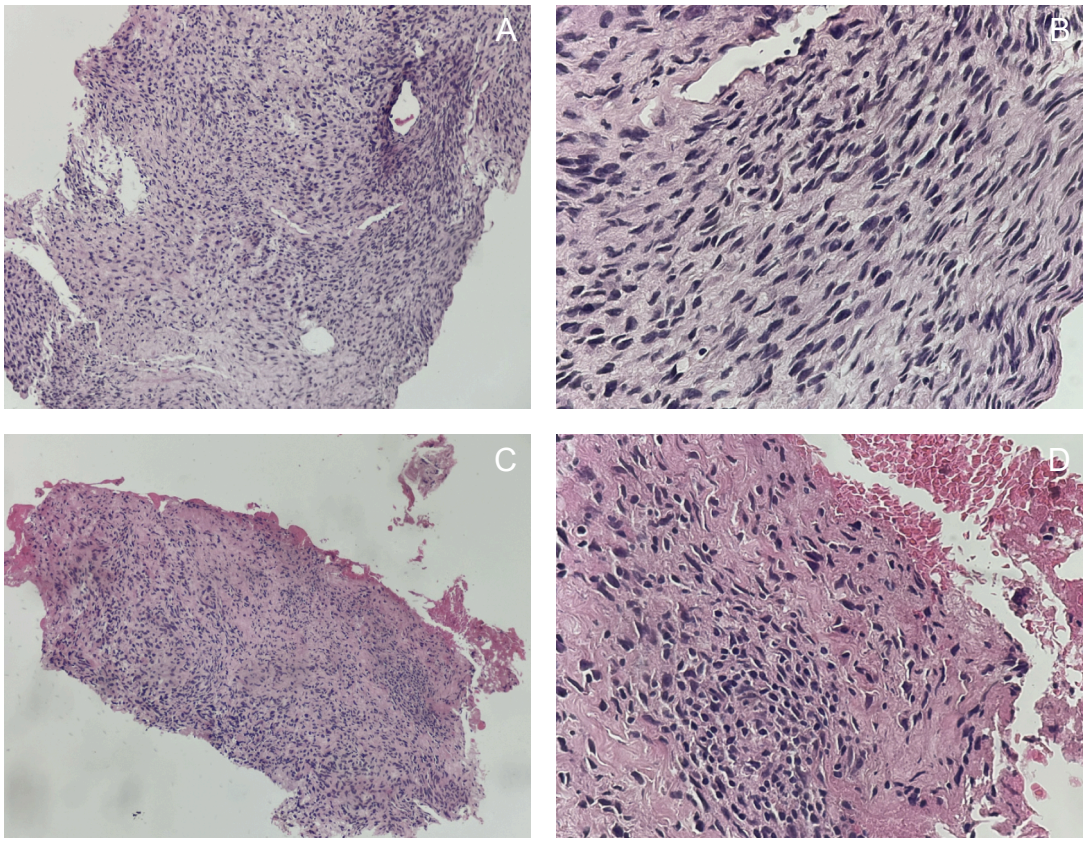

Figure 3 Histopathology of the lumbar mass demonstrating areas of necrosis at low-power field (LPF) (A: hematoxylin-eosin stain, x100) and high-power field (HPF) (B: hematoxylin-eosin stain, x400). Sheets of spindle cells with bland nuclear features are observed at LPF (C: hematoxylin-eosin stain, x100) and HPF (D: hematoxylin-eosin stain, x400).

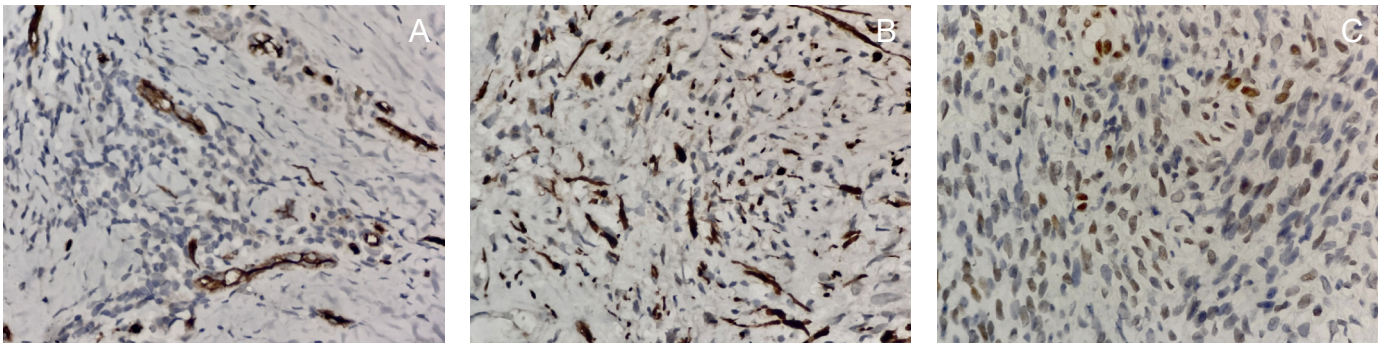

Figure 4 Immunohistochemical staining at high-power magnification (hematoxylin-eosin stain, x400) showing focal positivity for CD34 (A: membranous), S100 (B: cytoplasmic and nuclear), and TLE1 (F: nuclear).

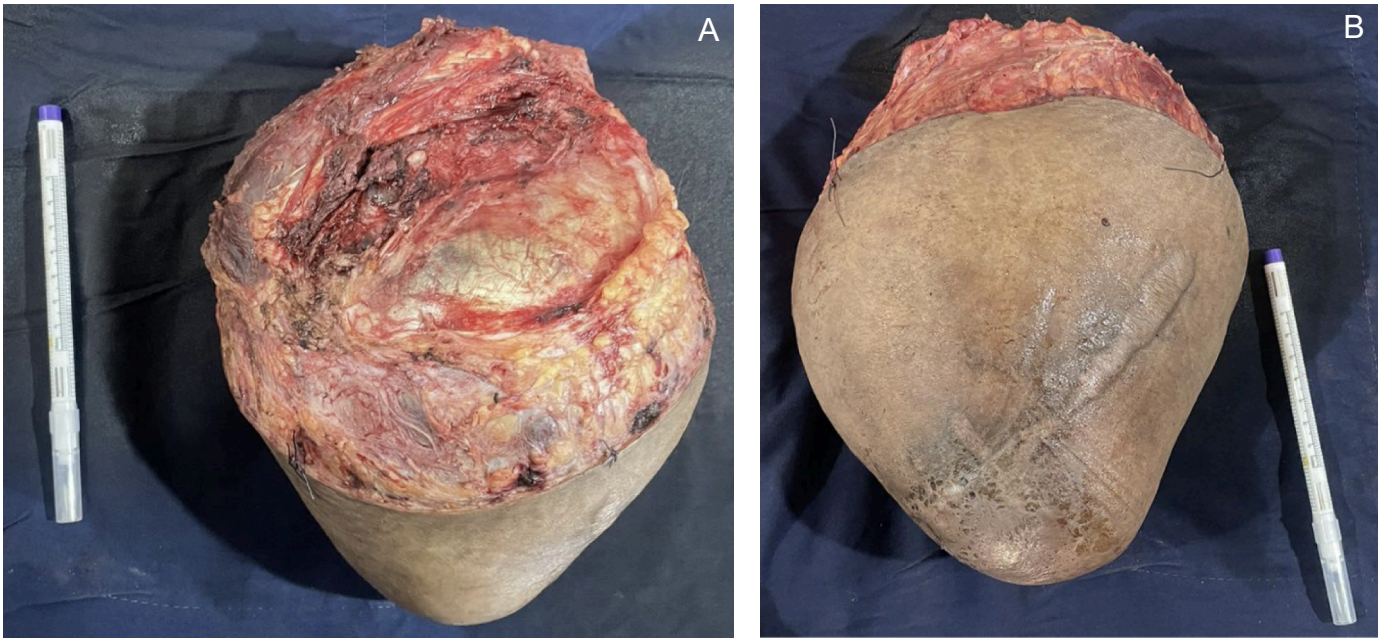

Figure 5 The excised tumor from the lumbar region, measuring approximately 16 × 16 × 7.5 cm.

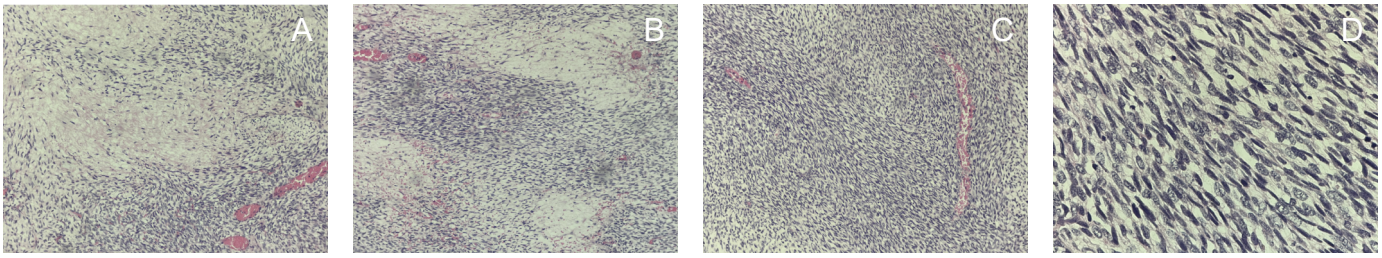

Figure 6 Histopathology of the resected tumor showing marbled hypo- and hypercellular areas with perivascular accentuation (A, B: hematoxylin-eosin stain, x100), fascicularly arranged atypical spindle cells invading the stroma (C: hematoxylin-eosin stain, x100) and high-power view of spindle cells with stromal invasion (D: hematoxylin-eosin stain, x400).

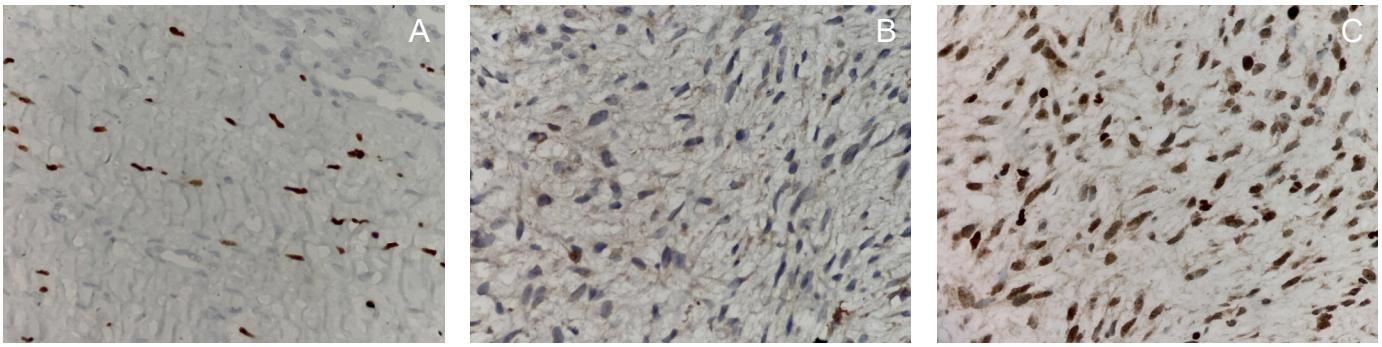

Figure 7 Immunohistochemical staining at high-power magnification (hematoxylin-eosin stain, x400) demonstrating SOX10 with focal nuclear positivity (A), EMA negative (B), and H3K27me3 with diffuse nuclear staining and focal loss (mosaic expression) (C).

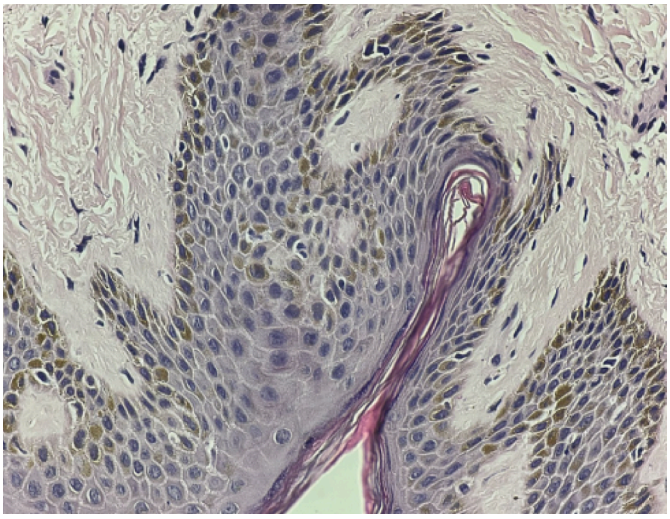

Figure 8 Histopathology of the hyperpigmented skin lesion showing basal keratinocyte hyperpigmentation.

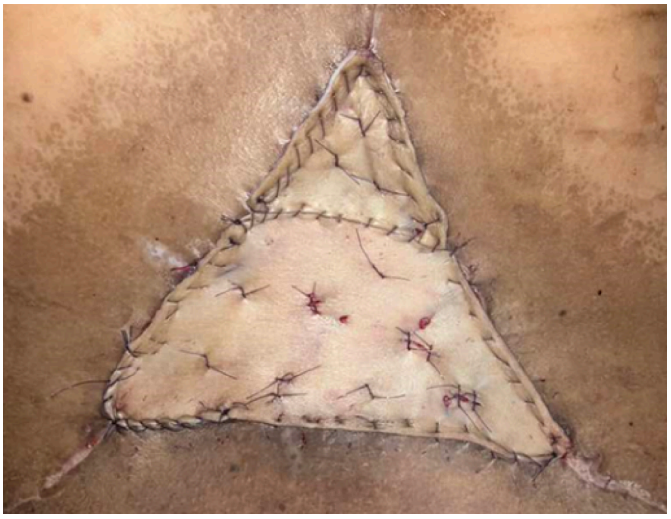

Figure 9 Postoperative appearance of the patient's lower back after placement of a full-thickness graft.

Contributors
VBA and SMR contributed to the diagnostic and therapeutic care of the patient in this report. All of them acquired relevant patient data, and searched for and reviewed relevant medical literature used in this report. VBA wrote the original draft, performed the subsequent revisions. All approved the final version, and agreed to be accountable for all aspects of this report.

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SPMC JHCS

CASE IN IMAGES

Lutembacher syndrome in a 33-year-old male: case in images

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A 33-year-old man presented to our outpatient clinic, referred by a private cardiologist, for further management of a 3-year history of palpitations.

CLINICAL FEATURES

Two years prior to admission, the patient developed sudden-onset of intermittent palpitations, which he initially tolerated, and for which he did not seek medical consultation. One month before admission, however, his symptoms worsened, and became associated with occasional chest discomfort and two-pillow orthopnea. This prompted him to consult a cardiologist, who advised 2D-echocardiogram. Imaging revealed an atrial septal defect (ASD) with concomitant mitral stenosis (MS), consistent with Lutembacher syndrome (LS). He was subsequently referred to our service for surgical management.

The patient initially denied any history of tonsillopharyngitis or rheumatic heart disease (RHD). He did not smoke, drink alcohol or use illicit drugs. There was no family history of congenital heart disease. He denied any episodes of syncope, cyanosis, or exertional dyspnea. On chest examination, a parasternal heave was appreciated on palpation. Cardiac rate and rhythm were regular. Auscultation revealed a grade 4/6 holosystolic murmur at the left 2nd to 4th intercostal spaces, parasternal to midclavicular line, radiating to the mid-axillary area. There was no neck vein engorgement, hepatosplenomegaly, or bipedal edema. The rest of the physical examination findings were unremarkable..

DIAGNOSTICS

A chest radiograph revealed gross cardiomegaly, pulmonary congestion, and minimal right pleural effusion (Figure 1). Preoperative 2D echocardiography showed a normal left ventricular dimension with normal wall motion and contractility, and a left ventricular ejection fraction of 63%. The right atrium, left atrium, and right ventricle were all dilated. There was a moderate MS, with mitral valve area of 1.5 cm2 by both planimetry and pressure half-time, and mild mitral regurgitation. A concomitant secundum-type ASD was noted, with predominant left-to-right shunting and a Qp/Qs ratio >1.5:1. Mild pulmonic hypertension was present, with a pulmonary artery pressure of 42 mmHg. Histopathology of the excised mitral valve revealed areas of fibrosis.

THERAPEUTICS

The patient was admitted to our institution and comanaged with the Cardiology Service, which performed an intraoperative transesophageal echocardiogram (TEE) (Figure 2A and 2B) prior to the mitral valve replacement and patch closure of the ASD. We carried out the procedure via a median sternotomy. After achieving adequate anticoagulation, aortic and bicaval cannulation were performed. We initiated cardiopulmonary bypass (CPB), cooled down the patient, and applied the aortic cross-clamp. Adequate myocardial preservation was achieved using modified Del Nido cardioplegia, delivered antegrade into the aortic root, and retrograde through the coronary sinus. We then performed a right atriotomy, gaining access to the ASD (Figure 3A). We examined and excised the mitral valve through a transseptal approach (Figure 3B) and then implanted a mechanical valve (Figure 3C). Finally, we repaired the ASD using an autologous pericardial patch (Figure 3D). Post-bypass intraoperative TEE demonstrated an intact ASD patch and good function of the mitral valve prosthesis (Figure 2C and 2D). We successfully weaned the patient from CPB without any intraoperative complications.

We extubated the patient on the first postoperative day. We started warfarin therapy and later removed his chest drains. By postoperative day 11, we achieved the target anticoagulation, with an INR of 2.64. We discharged him on postoperative day 12 after an

excellent recovery. During follow-up, a postoperative echocardiogram revealed an intact mitral valve prosthesis with good opening and closing motion and no residual shunt at the ASD patch. The Cardiology Service closely monitored his prothrombin time—INR while he continued oral warfarin. He remained asymptomatic throughout his outpatient follow-up.

RELEVANCE

Lutembacher's Syndrome is a rare structural cardiac abnormality characterized by the coexistence of a congenital or iatrogenic ASD and a congenital or acquired MS.[1] Congenital ASD is present in 0.6% to 0.7% of patients with MS.[2] The incidence of LS in the United States has been reported at 0.001 per million people.[3] The condition has been reported more frequently in Southeast Asia, where RHD remains prevalent. It is more common in females than in males. In our patient's case, the clinical history and physical examination, echocardiographic findings, and histopathology results suggest RHD as the probable cause of the MS, despite the absence of a reported history of tonsillopharyngitis. The findings of pulmonary congestion and pleural effusion on the chest radiograph indicate possible left-sided heart failure in our patient, which may be producing the holosystolic murmur noted on physical examination. Other etiologies of LS—such as congenital mitral valve anomalies, autoimmune disease (e.g., systemic lupus erythematosus or rheumatoid arthritis), or mitral annular calcification typically associated with older age—are less likely.[4]

The coexistence of ASD and MS results in a distinct hemodynamic interaction that significantly alters the clinical presentation compared to having either condition alone.[2,5] In LS, the MS increases the magnitude of left-to-right shunting across the ASD, exacerbating right ventricular volume overload, and predisposing patients to atrial fibrillation.[2,6] Our patient had moderate MS with a secundum-type ASD, making surgical intervention essential to prevent progressive pulmonary hypertension caused by increased right-sided flow. If pulmonary artery pressures continue to rise undetected, patients may eventually develop a right-to-left shunt with worsening symptoms.[7]

Management options that offer a favorable prognosis include surgical ASD closure with mitral valve replacement, both of which were successfully carried out on our patient. Percutaneous interventions—such as percutaneous transluminal mitral commissurotomy and ASD device closure using the Amplatzer device—may be appropriate in situations where the mitral valve and atrial septum have favorable anatomical characteristics and the ASD is hemodynamically significant.[8-10] Ultimately, timely diagnosis and appropriate intervention are critical to prevent irreversible hemodynamic deterioration and to achieve favorable long-term outcomes for patients with Lutembacher syndrome.

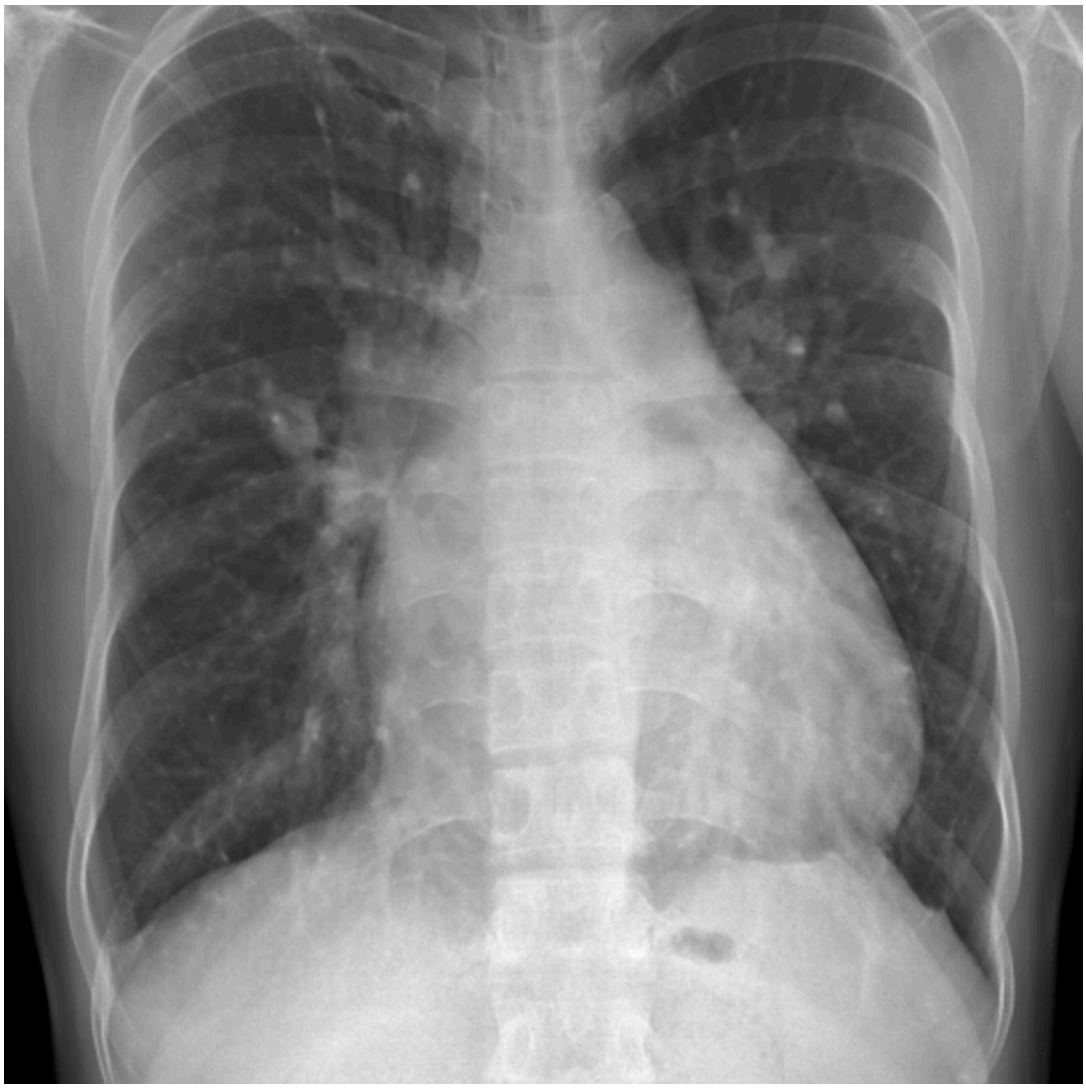

Figure 1 Anteroposterior chest radiograph showing prominent pulmonary vascular markings, hilar fullness, and perivascular haziness. Multichamber cardiac enlargement is evident along with blunting of the right costophrenic sulcus.

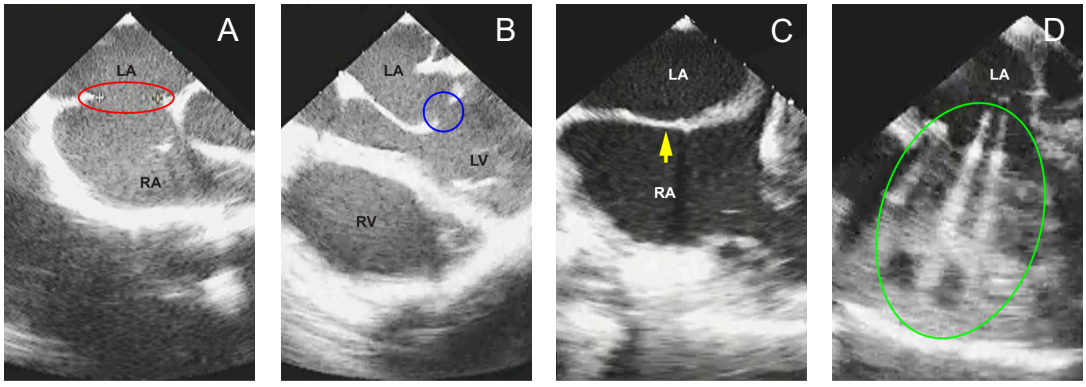

Figure 2 Intraoperative transesophageal echocardiogram (TEE) before cardiopulmonary bypass (A and B) showing a large atrial septal defect (ASD) (A: red circle) and dilated right atrium, left atrium, and left ventricle. The mitral valve shows leaflet thickening, anterior leaflet doming, and narrowing of the valve opening (B: blue circle). Postcardiopulmonary bypass TEE (C and D) demonstrated an intact ASD patch (C: yellow arrow) and normal function of the mitral valve prosthesis (D: green circle).

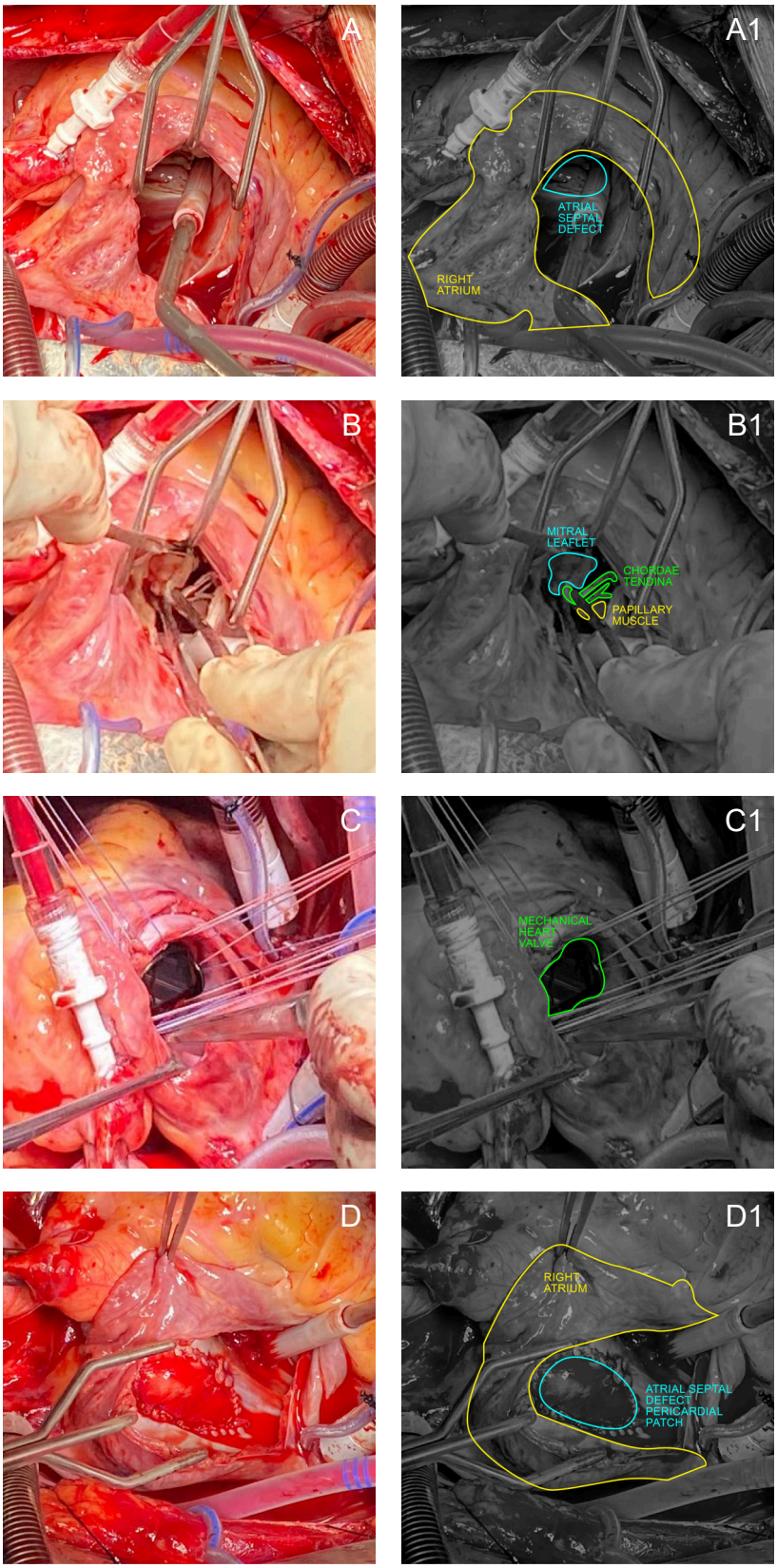

Figure 3 Intraoperative image during right atriotomy showing a large atrial septal defect (ASD), secundum type, measuring 3x3 cm in size, with a deficient posterior and inferior rim (A). Examination of the mitral valve using transseptal approach showed a thickened and calcified mitral leaflet, fused commissures, shortened chordae tendinae, and fused papillary muscles (B). A mechanical valve was implanted in the mitral position (C). An autologous pericardial patch was used to close the ASD (D).

Contributors
KRSDLR, KRDM, JRLA, MEAMM, EMV, VBOH, and JVPL contributed to the diagnostic and therapeutic care of the patient in this report. All authors acquired relevant patient data, and searched for and reviewed relevant medical literature used in this report. KRSDLR wrote the original draft, performed the subsequent revisions. All authors approved the final version, and agreed to be accountable for all aspects of this report.

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We used an AI language model to assist with phrasing, structural refinement, and summarization of publicly available information. We independently verified all evidence, and the final analysis and opinions in this editorial are entirely our own.

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SPMC JHCS

HEALTH CARE FOCUS

PhilHealth's outpatient primary care package through the years

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PhilHealth's outpatient benefits have evolved over time, particularly with the implementation of the Universal Health Care (UHC) Act, transitioning from basic packages to more comprehensive primary care services.

In 2007, an outpatient package for Overseas Filipino Workers, called Outpatient Benefit Package (OPB) for Overseas Workers Program (OWP) Members, was introduced. This package included consultations and diagnostic tests in accredited DOH hospitals, often with a zero co-pay system.[1] In 2012, the Primary Care Benefit 1 (PCB1) Package was implemented, in support of the Aquino Health Agenda, which aimed to provide UHC for all Filipinos—particularly the poor and vulnerable—equitable access to essential primary and preventive health care services. The beneficiaries of PCB1 included not only OWP members but also Sponsored Program members, and Organized Groups members, and their qualified dependents.[2] In 2014, the Tamang Serbisyo para sa Kalusugan ng Pamilya (TSeKaP) sought to expand PCB1 to include additional diagnostic tests and medicines for conditions with a high burden of disease, covering not only the previous beneficiaries of PCB1 but also the teaching and non-teaching personnel of the Department of Education.[3] [4] However, it was officially deferred in November 2015.[5] In 2018, PCB1 was expanded—now termed as Expansion of the Primary Care Benefit (EPCB)—to include members from the "Formal Economy (employed), Lifetime Members, and Senior Citizens in PhilHealth-accredited public and private facilities such as Level 1, 2, and 3 hospitals, infirmaries or primary care facilities, ambulatory surgical clinics, and medical outpatient clinics."[6]

More recently, significant updates and expansions have taken place, particularly with the enactment of the UHC Law in 2019, which broadened population coverage and prioritized comprehensive outpatient and primary care services, including medical consultations, diagnostic tests, and outpatient drug benefits.[7] In line with the UHC Law, PhilHealth integrated PCB1 and EPCB Packages into the PhilHealth Konsultasyong Sulit at Tama (PhilHealth Konsulta), which now covers all Filipinos.[8]

The PhilHealth Konsulta package is an expanded primary care benefit that offers registered members access to primary care services, including consultations, health screenings, and essential medicines. This program aims to provide affordable and accessible outpatient health care services, promoting early diagnosis and prompt treatment of various illnesses. It serves as an interim UHC program of PhilHealth for all Filipinos. PhilHealth also developed eKonsulta, a standalone web application that Konsulta facilities can utilize as a temporary electronic reporting system. It allows providers to encode patient data, including diagnoses, diagnostic procedures and results, and prescribed or dispensed medicines.[8]

Recently, PhilHealth issued Circular No. 2024-0013 to improve the Philhealth Konsulta Benefit Package, incentivize providers to deliver primary care service, and promote broader screening for the early detection of chronic diseases, including breast cancer. This issuance has been revised three times to reflect important policy updates, as seen in PhilHealth Circular Nos. 2022-0005, 2023-0013, and 2024-0002.[9]

The main goals of the PhilHealth Konsulta are to ensure accessible primary care through a flexible financing approach for delivering primary care services, and to establish guidelines on primary care provider registration, benefit availment, payment mechanisms, reporting rules, and performance evaluation. The policy covers all payments for select primary care services and goods obtained in accredited Konsulta Package Providers (KPPs) as part of the implementation of the Comprehensive Outpatient Benefit Package or Konsulta+.[10] Its main goal is to provide more affordable and accessible health care services to the poorest Filipinos.[9]

The key features of PhilHealth Konsulta Benefit Package include: free medical consultations for registered members with primary care providers in accredited KPPs for health monitoring and maintenance; health

risk screening and assessment to identify potential health risks; access to select laboratory and diagnostic services; and the provision of essential medicines for common health conditions. KPPs are required to deliver preventive health services such as health screenings and assessments, primary consultations—including counseling on family planning, smoking cessation, medication adherence, and regular monitoring for both communicable and non-communicable diseases—based on the life stages and health risks of individuals in their service area.[9]

The first patient encounter (FPE), which is the initial contact with the primary care provider where essential health information of qualified beneficiaries are recorded to determine the health risks of each member, may be conducted by the KPP or other eligible health workers (e.g., barangay health workers, nurses and midwives in barangay health stations, medical clerks or interns, nurses in on-site clinics, physicians, or any duly trained allied medical or health support staff) under the accredited KPP. The maximum per capita rate for every member is P1,700 annually. The first tranche, or FPE payment, represents 40% (PHP 680) of the per capita rate. The KPP receives this amount in full based on the number of members registered with FPE, provided that the KPP has conducted at least one medical consultation for the member within the previous year. The second tranche, which represents the remaining 60% (PHP 1,020), is determined by the number of registered beneficiaries with validated FPE and the extent to which the KPP meets its year-end performance targets. These performance indicators include the number of primary care consultations, utilization of laboratory services, and the dispensing of antibiotics and maintenance medications for non-communicable diseases.[9]

KPPs generally view the program positively for its intent and its potential to help more patients. However, they face considerable challenges, particularly delayed reimbursements, administrative burdens, and limited resources.[11 12]

PhilHealth Konsulta was piloted in Aklan and Guimaras in 2020 and expanded to other provinces in the Western Visayas the following year.[13] In July 2021, Davao City began implementing PhilHealth Konsulta, reaching 18 accredited KPPs—all district health centers—by the end of December.[14] Southern Philippines Medical Center (SPMC) later became accredited as a KPP on November 2, 2022, initially serving hospital personnel and eventually extending services to outpatients. Over time, SPMC registered a large number of beneficiaries, serving not only nearby residents but also those living farther away who were not yet enrolled in other health facilities. This enabled the institution to increase revenue by maximizing capitation rates, meeting performance targets, improving service utilization, ensuring timely reimbursements, and ensuring that FPEs are thoroughly documented.

While SPMC has successfully implemented PhilHealth Konsulta to a considerable extent, the program continues to face key challenges common to many KPPs. First, KPPs struggle to secure FPEs and register beneficiaries due to low awareness,[15 16] with many members unaware of the need to register with a specific KPP or unaware that they are already registered elsewhere. System and digital issues—such as outdated or unverified dependent information requiring action from the main PhilHealth Office—add inconvenience for patients and administrative burden for providers.[17] Second, concerns have emerged over access to and transmission of patient data due to connectivity problems in Philhealth's or a KPP's eKonsulta system, which affect downloading of masterlists and reliable submission of required data.[18] Handling sensitive patient information also raises security and privacy risks. Third, many KPPs report inadequate coverage,[16] because capitation rates fall short of the actual cost of providing the full primary care package,[19] pushing patients to rely on other government health financing schemes for essential diagnostic tests and medicines. Lastly, claim verification issues—including data discrepancies between member records name and the PhilHealth database,[20] as well delays in posting and generating masterlists due to PhilHealth system errors[18]—can impede capitation payments. At SPMC specifically, members also report being unable to choose their provider. Those enrolled elsewhere cannot transfer to the SPMC KPP within the same year, even when their assigned provider does not meet their needs.

Issues in implementing PhilHealth Kon-

sulta in SPMC may be addressed by strengthening client education, improving health care worker training, and enhancing communication channels. Upgrading both Philhealth's and SPMC's eKonsulta systems can improve operational efficiency, while policy adjustments—especially on the Konsulta allotment—can help ensure adequate coverage. Establishing strategic access points in nearby KPPs can support member verification, and stronger government and non-government partnerships can further streamline operations.

To address the gaps in PhilHealth Konsulta's implementation and coverage, President Ferdinand R. Marcos, Jr. launched the PhilHealth Yaman ng Kalusugan Program (YAKAP) on July 25, 2025 in Quezon City.[21] YAKAP expands Konsulta by broadening primary care services and emphasizing health promotion and prevention. It offers 13 laboratory tests and additional cancer screening procedures that include upper abdominal, pelvic and breast ultrasounds, mammography, alpha feto-protein testing, liver ultrasound, colonoscopy, and low-dose chest CT.[22] The number of covered medicines has increased from 21 to 75,[23] [24] with each member entitled to free medicines worth up to PHP 20,000.00 annually. Of the covered medicines, 54 are available through Guaranteed and Accessible Medications for Outpatient Treatment (GAMOT) Facilities, and 21 through YAKAP Clinics based on the original Konsulta Package.[25] [26] PhilHealth implemented GAMOT in November 2023 as an outpatient drug benefit package to enhance access to essential medicines for Filipinos and reduce their out-of-pocket expenses.[27] As of October 31, 2025, there are 3,903 YAKAP Clinics accredited nationwide.[28] SPMC is transitioning to YAKAP and submitted accreditation requirements in October 2025.

With YAKAP's rollout, the country's health system is moving toward preventive care, supporting longer life expectancy, reduced health care costs from treating advanced illnesses, and improved public health.

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LTM and CCC conceptualized the article. LTM, and CCC wrote the original draft. All authors performed the subsequent revisions, approved the final version, and agreed to be accountable for all aspects of this article.

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SPMC JHCS

HEALTH CARE FOCUS

Reinforcing primary health care through Super Health Centers

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UNIVERSAL HEALTH CARE

The 2019 Universal Health Care (UHC) Law (RA 11223)[1] mandates automatic enrolment of all Filipinos in the National Health Insurance Program, promising access to a complete range of health services, including public health and specialized care. Despite this legal framework, the health system continues to face challenges such as limited funding, varying quality of services, and inefficiencies in system management. Out-of-pocket (OOP) spending is still the primary means of financing healthcare. In 2021, Philippines ranked third highest in the Asia Pacific for OOP expenditures at 44.61%, with only a slight contraction of OOP payment at 44.4% in 2023.[2]

UHC envisions accessible, continuous, comprehensive and coordinated care, but implementation lags. Health care provision remains hospital-centric, with hospitals accounting for 46.1% of current health expenditures (CHE) among health care providers in 2023. In terms of services, the nation's health care system continues to focus on curative care, while preventive care services are relatively underfunded. In the same year, curative care accounted for 37.7% of CHE, while preventive care represented only 6.6% of CHE.[3]

The Philippine Health Facility Development Plan (PHFDP) 2020-2040 calls for sustained health financing, and health human resources, but several gaps persist in funding, workforce, and infrastructure. According to the most recent data from the Department of Health (DOH), 43,135 health facilities operate nationwide—77% public, 23% private. The public health infrastructure includes 2,699 Rural Health Units (RHUs) and 26,856 Barangay Health Stations (BHSs).[4] However, there is uneven access to these facilities. Only 50% of the population can reach an RHU or a health center within 30 minutes.[5] This emphasizes the urgent need for facilities that offer affordable and accessible diagnostic and therapeutic services.

ESTABLISHMENT AND FEATURES OF SHCs

Through the initiative of Senator Bong Go, the establishment of Super Health Centers (SHCs) across the country began in 2022 to strengthen primary health care by investing in LGU health facilities. SHCs provide expanded public health services—particularly diagnostic and therapeutic care—in rural and underserved areas, functioning as medium-scale polyclinics and enhanced RHUs. SHCs are part of DOH's annual Health Facilities Enhancement Program (HFEP) projects implemented nationwide.

The first SHC was inaugurated on July 19, 2021, in Brgy. Catmon, Malabon City during the COVID-19 pandemic. Since then, over 700 SHCs have been funded nationwide, with 307 in 2022, 322 in 2023, and 132 in 2024.[6] SHCs provide a wider range of services than regular health centers, including patient database management, outpatient consultations, isolation units, laboratory tests (e.g., blood chemistry), diagnostic imaging (X-ray and ultrasound), pharmacy services, and ambulatory surgical units. They also offer ENT care, oncology, physical therapy, rehabilitation, and telemedicine for remote diagnosis and treatment. Core services from regular health centers—such as birthing facilities, basic laboratory tests (CBC, urinalysis), and other essential care—remain available.

Staffing is primarily sourced from existing RHUs. LGUs hire additional personnel—doctors, nurses, midwives and allied health professionals—to operate SHCs. Some LGUs also employ specialists, such as radiologists, to expand service offerings. SHC operations are funded through a combination of PhilHealth's Konsulta Package and local and national government support.[7,8] The Konsulta Package covers outpatient and primary care services, ensuring free access for registered beneficiaries as mandated by the UHC law.

SHCs function as navigators and coordinators within the Health Care Provider Networks (HCPN), facilitating referrals to higher-level facilities based on patient needs. They serve as the first point of contact and help ensure continuity of

care through structured referral pathways. However, challenges in referral implementation persist due to limited awareness of the roles and responsibilities of the LGUs under UHC law, leading to confusion and hesitation among local chief executives to participate. Resource-related issues are also common particularly in terms of staffing shortages and time constraints affecting integration into the referral system.[9]

OPERATIONAL GAPS IN THE PRESENT SHCs

SHCs were established to address the need for additional health facilities and to offer services, especially in geographically isolated and disadvantaged areas (GIDA). Despite their promise, SHCs face significant implementation challenges. During the COVID-19 pandemic, implementation and budgeting for the construction of SHC nationwide were earmarked, but most facilities only became operational in 2024. As primary care services resumed post-pandemic, expectations for SHCs were high. However, many remain partially operational or unreleased to LGUs due to staffing shortages.

Most LGUs were not fully prepared to staff SHCs, often depending on existing health personnel from other facilities. As a result, many SHCs are not functioning as intended due to inadequate staffing. In some areas, SHCs have been merged with nearby health centers, and rooms originally designated for diagnostic services such as ECG, ultrasound, or X-ray have been repurposed. Consequently, much of the medical equipment remains unused, with some units still boxed a year after delivery. The absence of trained personnel further prevents the use of these machines, which require certified professionals to operate and interpret diagnostic results. These constraints limit the ability of SHCs to deliver the diagnostic services they were designed to provide.

WAYS FORWARD

To address the gaps in SHC implementation, several coordinated actions are needed. While the DOH often enters into agreements with LGUs for the construction of SHC infrastructure,[10 11] these often do not include provisions to ensure the availability of qualified health care personnel to operate the SHC. Future DOH agreements withLGUs should explicitly require the inclusion of staffing costs--such as salaries, allowances, and mandatory benefits--in the SHC's annual operational plan. The DOH can also help ensure the deployment of additional doctors, nurses, midwives, and allied health professionals to augment RHU staff and assist LGUs in recruiting and retaining health workers.

To maximize the use of diagnostic services like ECG, X-ray, and ultrasound, SHCs should also establish formal partnerships with nearby training institutions or hospitals for support in diagnostic test processing and interpretation. A comprehensive system must be in place before diagnostic equipment delivery, covering installation, operation, maintenance, and eventual disposal, to prevent machines from becoming idle or unusable. Finally, prioritizing the placement of SHCs in GIDAs will significantly improve access to timely care. This will reduce unnecessary hospital referrals and allow early management of conditions at the primary care level, minimizing complications through timely and preventive interventions.

SHCs hold great potential to transform local health systems, but only if they are fully operational, properly staffed, and sustainably financed and managed. Stakeholders must act decisively to close implementation gaps, ensure functionality, and deliver on the promise of accessible and affordable care for all Filipinos.

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HEALTH CARE FOCUS

Reshaping Surgical Intensive Care Unit services at Southern Philippines Medical Center

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SPMC SICU SERVICES BEFORE 2022

Before the Trauma and Critical Care Division was established at the Southern Philippines Medical Center (SPMC) in 2022, the hospital lacked a structured Surgical Intensive Care Unit (SICU) system, and patient management varied widely depending on the individual practices of each specialty service. Admission and monitoring, particularly for postoperative cases, were primarily at the discretion of the attending surgeon.

The Surgery Department included several services: General Surgery (GS) 1 (head and neck, reconstruction, soft tissue, and burns), GS 2 (hepatobiliary, pancreas, and pediatric surgery), GS 3 (colorectal and hernia), Thoracic and Cardiovascular Surgery (TCVS), Neurosurgery, and Trauma. However, the absence of unified guidelines posed significant challenges, especially with regard to the management of critically ill patients in the SICU. For example, mechanical ventilator management was under the Pulmonary Service but lacked 24/7 availability due to staffing limitations.

There was also no continuous physician coverage, leaving nurses to monitor patients and refer concerns to attending physicians, who were not always able to respond promptly or initiate timely interventions. Furthermore, orders from different attending physicians were carried out without centralized coordination or oversight, creating gaps in patient care. SICU admission prioritization lacked clear criteria, relying solely on general assessments rather than the specific needs of critically ill patients. Daily patient assessments were inconsistent, further compromising the quality and continuity of care.

THE TRAUMA AND CRITICAL CARE DIVISION AT SPMC

The Trauma and Critical Care Division at SPMC was established in 2022, following the creation of the Trauma Division and the adoption of the Philippine Society for the Surgery of Trauma fellowship training curriculum in trauma and surgical care. Its primary goal is to decrease mortality among patients of the Surgery Department by setting clear standards for admission, discharge, and operations in the SICU, aligned with global best practices.

To ensure sustainability, the division also emphasizes continuous training and capacity building, not only within SPMC but across Mindanao. The fellowship training program, as outlined in the official manual, is designed to develop competency in managing critically ill surgical patients.

Fellows are trained to manage complex cases involving sepsis, hemodynamic instability, pulmonary care, endocrine crises, and multi-organ damage. They are expected to apply evidence-based standards and the latest critical care practices to improve patient outcomes. By managing all patients requiring critical care, fellows help strengthen local critical care systems in ways that reflect global health priorities identified by the World Health Organization (WHO) and the WHO Acute Care Network.

SICU SYSTEM REFORMS

The introduction of the new SICU Admission Guidelines in 2023[1] marked a turning point in how critically ill surgical patients were managed at SPMC. Before their adoption, the SICU functioned under an open system: primary surgical teams retained responsibility for their patients, with intensivist support largely absent. This arrangement often resulted in fragmented decision-making, delayed interventions, and inconsistent practices such as ventilator management.

With the implementation of the new guidelines in 2024, the SICU shifted to a hybrid model. In this system, critical care intensivists are physically present in the unit and serve as attending physicians, leading comprehensive patient assessment, monitoring, and management—such as hemodynamic support, resuscitation, and ventilation strategies—while also directing protocolized care. Today, critical care surgeons play a pivotal role in optimizing mechanical ventilation, ensuring adherence to lung-protective strategies, and overseeing weaning protocols—

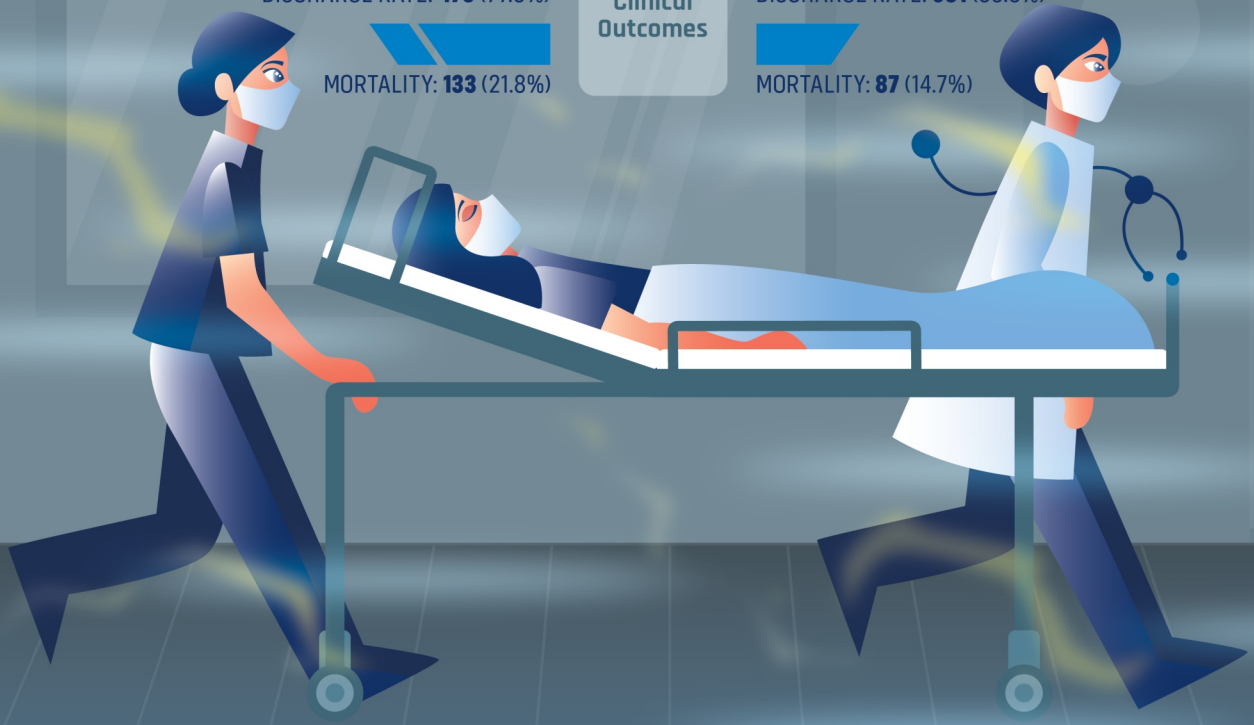
RESHAPING

Surgical Intensive Care Unit Services

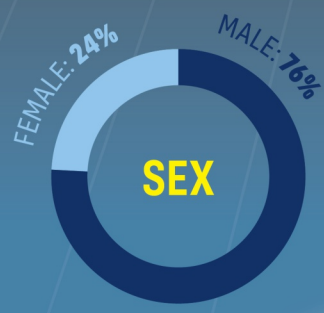
AT SOUTHERN PHILIPPINES MEDICAL CENTER

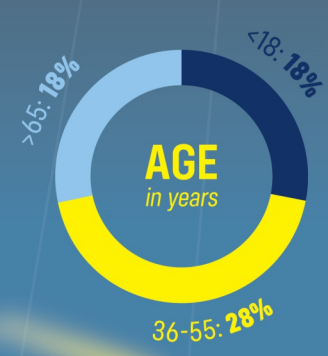
	2023		2024
	OPEN SYSTEM	Surgical Intensive Care Unit (SICU) System	HYBRID SYSTEM
Case Mix	TRAUMA: **244** (40%)		TRAUMA: **359** (61%)
	NON-TRAUMA: **364** (60%)		NON-TRAUMA: **231** (39%)
Clinical Outcomes	DISCHARGE RATE: **473** (77.8%)		DISCHARGE RATE: **501** (83.3%)
	MORTALITY: **133** (21.8%)		MORTALITY: **87** (14.7%)

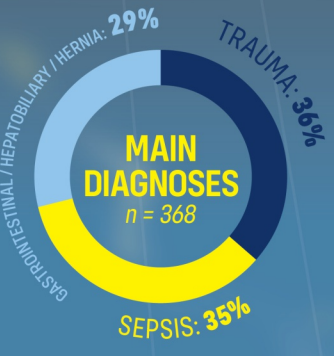
SICU

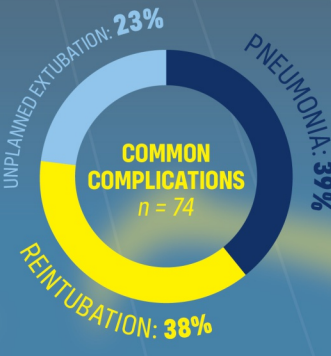


PATIENT PROFILE IN 2024









tasks that were previously fragmented among anesthesiologists, pulmonologists, or general surgeons. Comanagement with surgical subspecialists remains essential: trauma, cardiothoracic, and neurosurgical teams continue to provide input on operative complications, wound management, and re-interventions, while medical subspecialists such as nephrology, cardiology, and infectious diseases assist with complex comorbidities. Decision-making authority is carefully balanced, as intensivists determine ICU-specific interventions, including when to delay surgery due to instability, whereas surgeons retain operative control over operative timing and technique. Transfers out of the SICU follow standardized criteria, coordinated closely between intensivists and the original surgical teams to ensure continuity of care.

Institutional models further define this spectrum. Closed ICUs, common in academic centers, place full authority with intensivists and reduce variability of care. Open ICUs leave control with primary surgeons, but this often fragments decision-making. Hybrid models combine intensivist oversight with surgical collaboration, typically through multidisciplinary rounds. SPMC currently operates under a hybrid system but is actively transitioning toward a closed SICU to strengthen consistency and outcomes.

This progression has already resolved persistent issues of the open system, including inconsistent ventilator management, delayed interventions, and weak care coordination. By clarifying roles, standardizing workflows, and aligning intensivist leadership with surgical expertise, the SICU now delivers more efficient and team-based care. The next steps focus on fully consolidating the closed model, refining protocols, and expanding innovations such as telecritical care to maximize resources and sustain improved outcomes for critically ill surgical patients.

THE PRESENT SICU SYSTEM

Following the adoption of stricter triage guidelines and the shift toward nonoperative trauma care, the SICU has seen marked changes in admission patterns. Direct admissions from the emergency department (ED) have increased, reflecting the system's responsiveness to critically ill trauma patients. The average ICU stay of 8 days highlights the complexity of conditions being treated, as extended stays are often associated with more severe illness or complications. With bed occupancy at 82.6%, the ICU operates near capacity, underscoring the importance of effective patient management to ensure timely bed availability without compromising care quality.

In 2023, trauma accounted for 40% (244 patients) of admissions and non-trauma for 60% (364 patients). By 2024, the case mix had reversed, with trauma increasing to 61% (359 patients) and non-trauma decreasing to 39% (231 patients). This shift coincided with the transition from a traditionally open system—in which the referring surgeons served as the primary physicians for ICU patients—toward a hybrid ICU system that integrates intensivist-led management with ongoing surgical involvement. The current critical care team includes on-call intensivist consultants, 24/7 critical care fellows, and dedicated surgical residents, under a comanagement framework involving both surgical and medical subspecialists. The change in case mix has helped channel care towards more critical cases and established a more consistent critical care-led approach to patient management.

The 2024 transition to a hybrid ICU system with mandatory critical care oversight significantly reshaped referral patterns. Compared to 2023's open model, total admissions from non-ICU surgical departments and subspecialties decreased by 36.5%, reflecting stricter triage enforcement. General Surgery saw the steepest decline (-48.5%), indicating effective filtering of less critical cases. Monthly referrals stabilized (12 to 31/month), replacing prior volatility (e.g., 39 in February versus 15 in November 2023), with historically high-volume months (January, July, October) showing reductions exceeding 50%. Despite overall decreases, access for more critical patients was preserved: Urology (+30%), ENT (+17%), Neurosurgery (+33%), and new referrals from Obstetrics-Gynecology rose. However, persistently low referrals in late 2024 (e.g., October: 12; November: 14) merit review to avoid under-triaging that could delay care for critically ill surgical patients. Overall, the hybrid ICU model strengthened triage precision and reduced unnecessary admissions, though continued vigilance is needed to safeguard timely access to critical care.

To better contextualize these system-level changes, the following describes the profile of patients admitted to the SICU in 2024. There was a male predominance (76%), underscoring ongoing sex- or gender-related disparities in critical surgical conditions. The age distribution revealed three vulnerable cohorts: working-age adults (36-55 years: 28%), older adults (>65 years: 18%), and pediatric patients (under 18 years: 18%), highlighting the need for age-specific critical care strategies. Diagnoses reflected the complexity of ICU care, with trauma (134 cases), sepsis (128 cases), and gastrointestinal/hepatobiliary/hernia (106 cases) being the most prevalent. Morbidities included hospital-acquired pneumonia (29 cases) and airway complications (reintubation: 28; unplanned extubation: 17), pointing to opportunities for further care optimization. These demographic and clinical characteristics provide the necessary context for interpreting the outcomes observed in 2024.

Clinical outcomes improved markedly in 2024, with the discharge rate rising from 77.8% (473 patients) in 2023 to 83.3% (501 patients). Mortality declined to 14.7% (87 patients), reflecting a 7.1% absolute reduction from the previous year's rate of 21.8% (133 patients). This improvement occurred despite a rise in the proportion of trauma cases requiring intensive intervention, indicating more efficient utilization and targeted allocation of critical care resources. Mortality rates were comparable between trauma (14.2%) and non-trauma (14.4%) groups, and only 1% of patients left against medical advice. The selective admission strategy—driven by stricter triage protocols—correlated with this mortality reduction, suggesting that resources were concentrated on patients with greater clinical need.

PERSISTENT ISSUES

The SICU achieved a commendable discharge rate of 83.3% in 2024, indicating that most patients recovered sufficiently to leave and reflected positively on care quality. However, the mortality rate of 14.7% (representing 87 patients) highlights areas for improvement, while the 1% who left against medical advice raises concerns about patient satisfaction and support systems. Morbidities such as pneumonia and reintubation underscore challenges in maintaining optimal care, especially with respect to preventing hospital-acquired infections during prolonged ICU stays. These trends warrant a review of clinical processes, staff training, and monitoring practices.

WHAT THE PRESENT SICU HAS ACHIEVED

Reforms by the Trauma and Critical Care Division have reshaped SICU services at SPMC, correcting long-standing gaps in admission practices, patient care, and interdisciplinary coordination. Stricter triage and gatekeeping reduced unnecessary referrals, streamlined admissions, and ensured resources were directed to the most critically ill. Coordination with the OR, ED, and surgical services improved, minimizing delays and bureaucratic hurdles.

Clinical outcomes strengthened: discharge rates rose, mortality declined, and survival was comparable between trauma and non-trauma patients—evidence of consistent care quality. The hybrid ICU system reinforced intensivist leadership while preserving surgical input, standardizing protocols, and improving ventilation management. Although morbidities such as hospital-acquired pneumonia and airway complications persist, they reflect the inherent challenges of critical care rather than declining standards.

The case mix shifted toward higher-acuity trauma patients, underscoring SICU's evolving role as a specialized, resource-focused unit. Staff training also improved, with fellows and residents gaining structured exposure to evidence-based critical care.

All in all, the present SICU has become a more efficient, standardized, and collaborative system of care, aligning patient needs with resources while strengthening institutional capacity. Sustaining progress will require continued protocol refinement, consolidation of the closed model, and ongoing cultural change to secure durable gains in surgical critical care delivery.

Contributors
RAO and BEPV conceptualized the article. RAO, and BEPV wrote the original draft, while CXDL rendered the original draft of the infographic. All authors performed the subsequent revisions, approved the final version, and agreed to be accountable for all aspects of this article and its corresponding infographic.

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POLICY NOTES

Improving access and efficiency in PhilHealth Konsulta: policy notes

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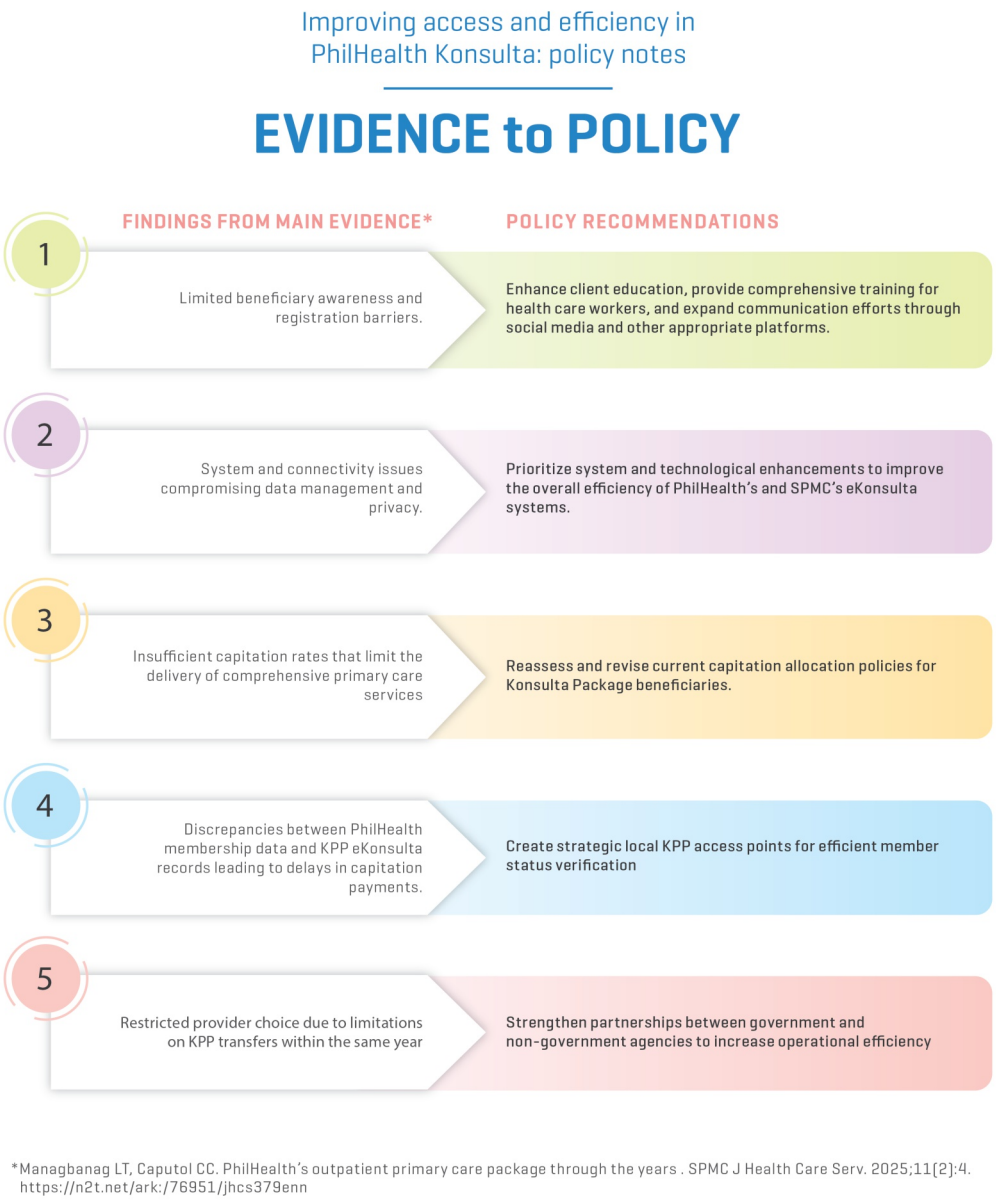

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INTRODUCTION

The enactment of the Universal Health Care (UHC) Law in 2019 mandated universal access to comprehensive, people-centered outpatient and primary care services for all Filipinos, including medical consultations, diagnostic testing, and outpatient medicines.[1] In response, PhilHealth established the PhilHealth Konsultasyong Sulit at Tama (PhilHealth Konsulta) program to deliver these primary care services in compliance with the UHC Law.[2,3] The main goal of the PhilHealth Konsulta program is to provide financial risk protection for the primary health care needs of Filipinos.[4] The program also aims to expand access to primary care

services through the establishment of accredited Konsulta Package Providers (KPPs). These KPPs are responsible for registering beneficiaries, facilitating benefit availment, and submitting required reports to PhilHealth. In return, they receive incentives for delivering primary care services to patients.[3 5]

Despite the successful establishment of PhilHealth Konsulta, significant gaps remain in ensuring seamless access to patient benefits.[6] This article aims to recommend health care policies to improve the current processes and implementation of the PhilHealth Konsulta program.

MAIN EVIDENCE

The article of Managbanag, et al. in 2025 highlighted challenges in the implementation of PhilHealth Konsulta at SPMC.[6] Despite substantial progress in implementing PhilHealth Konstulta at SPMC, several challenges continue to limit effective enrollment and service delivery. Low awareness of the registration process and beneficiaries' prior enrollment with other KPPs hinder providers' ability to secure First Patient Encounters (FPEs) and enroll eligible members. Systemic and digital issues—such as outdated or unverified dependent information requiring intervention from the central PhilHealth office—further increase inconvenience for patients and administrative burden for providers. Connectivity problems within PhilHealth and KPP eKonsulta systems raise concerns about data reliability and security, as these issues impair the downloading of registration masterlists, delay data submission, and heighten risks related to the handling of sensitive patient information. In addition, insufficient capitation rates limit service coverage by failing to reflect the true cost of comprehensive care, compelling patients to seek alternative financing for essential diagnostics and medicines. Claims processing is also affected by inconsistencies between PhilHealth membership records and KPP eKonsulta data, resulting in delayed or denied capitation payments. Finally, limited provider choice remains a concern, as members enrolled with another KPP are unable to transfer to the SPMC KPP within the same year, restricting access to providers that may better meet their health care needs.

RELATED EVIDENCE

An effective outpatient primary care system seeks to improve population health outcomes by providing accessible, affordable, high-quality, and comprehensive health care services, with a strong emphasis on preventive and promotive care to reduce disease burden and health care costs. Therefore, PhilHealth must ensure the proper implementation of the Konsulta program, now the PhilHealth Yaman ng Kalusugan Program (YAKAP), to guarantee the effective delivery of primary health care services.

The majority of beneficiaries reported limited awareness of the Konsulta Package, with many learning about it for the first time.[7 8] To improve awareness and utilization, marketing and communication strategies should align with members' preferences and information-seeking behaviors, including dissemination through social media, television advertisements, and posters in hospitals and clinics.[9] Other avenues for promotion include mobile health initiatives and caravans, community events, and partnerships with national and local agencies such as the Department of Education and the Philippine Information Agency.[10 11] Strengthening the use of effective communication channels and targeted messaging is essential for successful program promotion. Additionally, PhilHealth should provide sustained technical support and allocate adequate budgetary resources to ensure effective implementation of the program.[9]

Connectivity issues in PhilHealth's and SPMC's eKonsulta systems hinder reliable data submission and retrieval.[12] Strengthening information systems is therefore critical to maintaining an accurate membership database. PhilHealth should implement efficient, well-integrated data management systems supported by strict data governance policies, including routine validation and quality checks, to ensure the integrity and reliability of member information. Additionally, PhilHealth should enhance collaboration with partner agencies by coordinating with the Department of Social Welfare and Development to verify survey data through supporting documents, and partnering with the Philippine Statistics Authority for data sharing to further improve data accuracy and completeness.[13]

Low capitation rates under the initial PhilHealth Konsulta limited access to essential services and increased reliance on other government health financing schemes and out-of-pocket payments.[8 14] To address this, capitation rates have been raised from P500–P750 to P1,700 for both government and private providers,[3] and coverage for medicines under the YAKAP program now reaches up to P20,000 annually.[15 16] Ongoing monitoring and evaluation are needed to ensure rates remain sufficient and responsive to changes in healthcare costs and service needs.

Discrepancies between PhilHealth records and KPP eKonsulta data, along with delays in patient masterlist generation due to system errors, can hinder timely capitation payments to KPPs.[12 17] Addressing this problem by establishing strategic KPP access points through local government units would enable healthcare providers to quickly confirm eligibility, enrollment, and coverage details, reducing delays in service delivery and claims processing. By decentralizing access to membership information, these points can improve operational efficiency, minimize administrative burden on providers, and enhance patient experience by ensuring timely and accurate service provision.[18]

At SPMC, beneficiaries face restricted provider choice, as transfers from other KPPs within the same year are not allowed, even when their current provider does not meet their needs. Currently, PhilHealth policy generally restricts beneficiaries from transferring to a different KPP (now YAKAP provider) to the fourth quarter of the year (October 1 to December 31), effective the following January.[19 20] Nevertheless, PhilHealth should allow beneficiaries to transfer to a different KPP within the same year under specific conditions, such as dissatisfaction with service quality or lack of necessary services.[21] Additionally, procedures for inter-KPP transfers should be standardized to ensure transparency, fairness, and equity.

Since its launch, PhilHealth's YAKAP has driven key improvements aimed at expanding access to primary and preventive health care. Proper implementation of this program can further enhance access by decentralizing services and ensuring the availability of essential care. The program emphasizes prevention and early detection, reducing the need for hospitalization, while improving financial protection by minimizing out-of-pocket costs. Additionally, YAKAP strengthens the healthcare system by reinforcing primary care networks and fostering a system that is more responsive to evolving health needs.

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CMPA, and RCR contributed to the conceptualization of this article. CMPA, and RCR wrote the original draft. Both authors performed the subsequent revisions, approved the final version, and agreed to be accountable for all aspects of this article and its corresponding infographic.

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A. Case reports

Authors should follow the CARE Checklist (Table 1) in preparing the manuscript for case report.

Case report submissions should contain the following sections:

1. Title: should state the final diagnosis
2. Authors and affiliations
3. Abstract: up to 250 words (refer to the CARE checklist for specific contents)
4. Keywords: 2 to 5 words or phrases that do not repeat the title
5. Introduction
6. Clinical features
7. Diagnostic approaches
8. Therapeutic approaches
9. Outcomes
10. Discussion
11. References
12. Acknowledgments

Use 2000 words or less for the main text of the report (excluding title, abstract, tables, figures, references, and acknowledgments).

Every attempt should be made in order to obtain an affidavit of consent to publish the article and photos that describe a patient. The affidavit should be duly executed by the patient or by the patient's legally acceptable representative. You may use the SPMC template provided by the Hospital Research and Publication Office or the Legal Office for this purpose. Submit a copy of the affidavit along with the case report and photos of the patient.

B. Research reports

Authors should follow the appropriate EQUATOR Network checklist for reporting research. Listed in Table 1 are the common study/article types and their corresponding checklists. Also visit the EQUATOR Network website for a complete list of reporting guidelines and checklists.

Research report submissions should contain the following sections:

1. Title
2. Authors and affiliations
3. Abstract: up to 250 words; should generally include, as applicable, the subheadings: Background, Objectives, Design, Setting, Participants, Interventions (if any), Main Outcome Measures, Main Results, and Conclusion; for subheadings of abstracts of specific study types, please refer to the appropriate reporting checklist
4. Keywords: 2 to 5 words or phrases that do not repeat words in the title
5. Introduction
6. Methods
7. Results
8. Discussion
9. References
10. Acknowledgments

Use 5000 words or less for the main text of the report (excluding title, abstract, tables, figures, references, and acknowledgments).

The conduct of research involving humans must have been reviewed and approved or favorably endorsed by an Institutional Review Board or Ethics Review Committee (IRB/ERC). Submit a copy of the Certificate of Approval or Certificate of Favorable Endorsement along with the research report. If the research has been declared exempt from review, a Certificate of Exemption from Ethics Review issued by an IRB/ERC may be submitted in lieu of an approval or endorsement to conduct the research.

C. Book reviews

Reviews of books relevant in health care services and the health professions may be submitted for publication. Book review submissions should contain the following:

1. Book details: title and author/s or editor/s of the book, ISBN
2. Author of the book review and affiliation
3. General contents and scope of the book
4. Significance of the book to its readers
5. (Optional) comparison of the book with other books within the same area or topic
6. References
7. Acknowledgments

Use 2000 words or less for the main text of the review (excluding title and references).

D. Clinical images

Images of unreported, unexpected or unusual physical examination, or intraoperative, histopathologic, radiographic or other medical imaging findings may be submitted for publication. Up to five photos can be used to describe a condition.

Submissions of this type should contain the following sections:

1. Title: should state the final diagnosis
2. Authors and affiliations
3. Brief clinical description, which should include: patient's age and sex, chief complaint, brief clinical history, physical examination findings, relevant diagnostics, final diagnosis, relevant

Table 1 **Reporting guidelines and checklists** (http://www.equator-network.org/)

Study/article types	Checklists and diagrams
Case report	CARE checklist
Randomized controlled trial	CONSORT checklist; CONSORT flow diagram
Observational studies (cohort, case-control, cross-sectional)	STROBE checklist
Meta-analysis and systematic reviews	PRISMA checklist; PRISMA flow diagram
Diagnostic accuracy studies	STARD checklist; STARD flow diagram
Prediction model for individual prognosis or diagnosis	TRIPOD
Qualitative studies	COREQ
Economic evaluation	CHEERS

therapeutics, outcomes, description of the individual photos
4. Photo/s with description/s
5. Acknowledgments

Use 300 words or less for the brief clinical description.

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E. Case in images

A series of unreported, unexpected or unusual physical examination or intraoperative, histopathologic, radiographic or other medical imaging findings may be submitted for publication. When taken together, the images should describe the chronology of clinical events, diagnostic interventions, therapeutic interventions, and/or clinical outcomes in a case. We offer assistance in determining the images to be included in the final version for publication.

Submissions of this type should contain the following sections:

1. Title: should state the final diagnosis
2. Authors and affiliations
3. Brief clinical description, which includes patient's age and sex, chief complaint, brief clinical history, brief physical examination findings, relevant diagnostics and therapeutics, final diagnosis and outcomes, detailed description of images
4. Photos with descriptions
5. Acknowledgement

Use 500 words or less for the brief clinical description.

F. Infographics

These are items or sets of information rendered in visual format. Infographics may contain health or health-related statistics, educational materials, program flow charts, clinical reports, research results, or any newly generated knowledge related to health care services. We accept drafts, sketches, or proposals, and we offer assistance in rendering proposed ideas into final publishable formats. Infographics should be accompanied by a short article, with up to 500 words in the main text and up to 20 references. In the submission, include a list of authors and their affiliations, statements of competing interests and, as appropriate, an acknowledgment section.

For research reports proposed to be presented as an Infographic, the conduct of the research on which the report is based must have been approved or favorably endorsed by an IRB/ERC. Submit a copy of the Certificate of Approval or Certificate of Favorable Endorsement along with the research report. If the research has been declared exempt from review, a Certificate of Exemption from Review issued by an IRB/ERC may be submitted in lieu of an approval or endorsement to conduct the research.

For case reports proposed to be presented as an infographic, every attempt should be made in order to obtain an affidavit of consent to publish the article and/or photos that describe a patient. The affidavit should be duly executed by the patient or by the patient's legally acceptable representative. You may use the SPMC template provided by the Hospital Research and Publication Office or the Legal Office for this purpose. Submit a copy of the affidavit along with the Infographic.

G. Editorials

These articles are usually commissioned, but we welcome submitted editorials on topics relevant to health care services. Use 1000 words or less for the main text of the article (excluding title and references). In the submission, include a list of authors and their affiliations, statements of competing interests and, as appropriate, an acknowledgment section.

H. Perspectives

These are brief essays based on personal experiences with health care services. We welcome submissions from different stakeholders of health care. Use 1000 words or less for the main text of the article (excluding title and references). In the submission, include a list of authors and their affiliations, statements of competing interests and, as appropriate, an acknowledgment section.

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Authors are required to ensure that article submissions fit the following descriptions. Submissions that deviate from these descriptions may be returned to their authors.

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2. The submission file is in OpenOffice, Microsoft Word, or RTF document file format.
3. Where available, URLs for the references have been provided.
4. The text is single-spaced; uses a 12-point font; employs italics, rather than underlining (except with URL addresses); and all illustrations, figures, and tables are placed within the text at the appropriate points, rather than at the end.
5. The text adheres to the stylistic and bibliographic requirements outlined in this set of Author Guidelines.
6. If submitting to a peer-reviewed section of the journal, the instructions in Ensuring a Blind Review have been followed.
7. If submitting a Case Report or Clinical Image, the properly accomplished Affidavit of Consent to Publish is available for uploading as a supplementary file (in Step 4 of the five-step submission process).
8. If submitting a Research Report, the IRB/ERC Certificate of Approval, Certificate of Favorable Endorsement, or Certificate of Exemption from Ethics Review is available for uploading as a supplementary file (in Step 4 of the five-step submission process).

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