



**PHILIPPINE OBSTETRICAL AND GYNECOLOGICAL SOCIETY
(Foundation), Inc (POGS)**

**PRIMER
ON
SERVICE DELIVERY NETWORK
AND EXPERIENCES**

First Edition
November 2022

**POGS ORGANIZATION OF GOVERNMENT
INSTITUTIONS
(P.O.G.I.)**



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FOREWORD



Congratulations to the Ad hoc Committee on Health Education Aligning Lying-In To Hospital (H.E.A.L.T.H) and the POGS Organization of Government Institutions (P.O.G.I) for this Service Delivery Network/ Health Care Providers Network (SDN/HCPN) Primer.

Our society is constantly reinforcing its advocacy on improving maternal and newborn health. We are now an active partner of AFOG, WHO and MCGL in strengthening the Maternal and Perinatal Death Surveillance and Response (MPDSR) as a recognized tool in decreasing maternal death. The POGS Committee on Maternal and Perinatal Welfare is now working with the Department of Health, its different Center for Health Development, Epidemiology Bureau, Central Office Operations and Program Department to utilize MPDSR efficiently. As experts on maternal care and handling maternal complications to deliver healthy babies, we call on our members to respond and get involved to this MPDSR collaboration with the other stakeholders. We have a vital role in information dissemination, imparting expertise in opinions, management and intervention and providing directions to preventive approach and sustained programs and policies.

This primer will strengthen the formulation of SDN programs aligned with the implementation of the Universal Health Care (UHC) Law informing and guiding our members on the specifics of processes, roles, responsibilities, limitations, and opportunities.

I would like to acknowledge the people behind this primer and its authors. I would like to commend in advance the POGS members from all over the country who will be proactively responding to the call of our local individual community to decrease maternal deaths. I firmly believe that with knowledge, willingness, and commitment, POGS is truly a leader in maternal and women's health that can be globally recognized as well.

A handwritten signature in black ink, appearing to read 'Annette Magno-Macayaon'.

Annette Magno-Macayaon, MD

Chair, POGS Committee on Maternal and Perinatal Welfare

MESSAGE FROM THE PRESIDENT



The provision of an excellent perinatal care during pregnancy, labor, delivery, postpartum care, and the neonatal period is one of the core missions of POGS. POGS continues to make sure that health care workers are able to provide the highest quality care and this standard is maintained through advocacy programs and

through continuous education of the health care providers and the community. Despite its efforts to meet the global realization of the Millennium Development Goals (MDGs) of the WHO in 2015, though there was some improvement, the goal to reduce the child by mortality under 5 by two-thirds, to improve maternal health three-quarters, and to achieve universal access to reproductive health in 2015 were not met.

The vision of the past POGS Presidents to answer to this challenge led to the formation of the Ad hoc Committee on Health Education Aligning Lying-in To Hospital (H.E.A.L.T.H.), with the cooperation of the POGS Organization of Government Institution (P.O.G.I.) with Dr. Mario A. Bernardino as Project Director and Dr. Benjamin D. Cuenca as Chair. Our goal is to always move forward, and it is but timely that we gear ourselves towards more improvements and the implementation of the Universal Health Care (UHC). The Service Delivery Network (SDN) has been formed and it through this medium that identified health care institutions will receive referrals from nearby health units when necessary. POGS will collaborate with government and private health institutions as well as local health units, and we will offer training programs to the health workers and respond to their needs. With these advancements, the ultimate goal is to deliver quality health services and also to reduce the socioeconomic burden of our country.

Congratulations to the editor and contributors of the P.O.G.I./SDN primer as this will help us better understand the SDN process of providing continued quality care to mothers and children.

A handwritten signature in black ink, appearing to read 'Marlyn T. Dee'.

Marlyn T. Dee, MD
POGS 2022 President

INTRODUCTION



The Philippine Obstetrical and Gynecological Society, the country's premier maternal and fetal health organization has always been in the forefront of mother and child health care. Ever since its conception, several projects were initiated, spanning from academic teaching to practical training, and to actual delivery of health care in every region of the country. Despite all the efforts for the past 75 years, targets will always be missed every year,

realizing that such impregnable goal cannot be achieved by Desire, Effort, and a Lot of hard work alone. More Interventions are required including a Voluntary breakdown of barriers. Every aspect must be touched, and system Revolutionized to be able to DELIVER.

The POGS through POGS Organization of Government Institution (P.O.G.I.) taking the lead, is committed to deliver substantial results for both mother and child health care through a concerted effort with other stakeholders including the Department of Health, private and government hospitals, and other allied health care workers like the midwives in lying-in private or in local health units. Integral to these efforts is the health education of patients, with goals of creating a higher level of health care for a satisfactory journey towards the culmination of good health on a national level. Such desire will entail a long and continuous effort of promotion, education, and systemic organization of health care to sustain a significant improvement in health.

The POGS has defined its role as a catalyst in nation building and in the promotion of Universal Health Care Law, wherein part of the concept is the Service Delivery Network (SDN). POGS' purpose is to have a primer to guide our members and allied professionals in setting up SDNs all over the country, with POGS members as major participants. The different experiences and varying model SDNs were highlighted to achieve the best possible health care for the patients. With the basic elements of a SDN, this primer will lead to standardization while filling in the gaps and streamlining management for more efficient and effective health care delivery, with monitoring systems and eventually leading to quality in quantity. In the long run, it is also our intention to develop regional and local champions of SDNs. The POGS through this primer is not only for the good and well-being of a patient but of the whole country.

A handwritten signature in black ink, appearing to read 'Mario A. Bernardino'.

Mario A. Bernardino, M.D.

Project Director, POGS Organization of Government Institution (P.O.G.I.)

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- This is the POGS Service Delivery Network Primer, First edition, November 2022.
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- The prime objective of this Primer is to serve as a reference handbook to inspire the readers to take part, in whatever way possible, in whatever capacity, big or small, to lower the maternal mortality rate in the Philippines through enhanced implementation of Service Delivery Network (SDN) or Health Care Professional Network (HCPN).
- It is not the intention of this primer to give exact, precise, and encompassing answers or solutions to all situational scenarios. Through this guidebook, it is encouraged to always consider individual scenario as distinct, and solutions may be different and may not necessarily come from this Primer.
- It is hoped that with this Primer at hand, any healthcare worker or clinician will have a handy guide to fully grasp and appreciate what the service delivery network under the UHC law can do in order to find specific solutions to lower the maternal mortality rate in the country.
- On behalf of the POGS, its Board of Trustees, the Ad hoc Committee on H.E.A.L.T.H. and the POGS Organization of Government Institutions (P.O.G.I.), this Primer is meant to increase awareness among healthcare professionals to be Champions in the Service of the Filipino Women that will benefit the Family, the Community, and the entire Nation.



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PART I

**HISTORY, OBJECTIVES, AND PROGRAMS
OF P.O.G.I.**

Chapter 1
POGS MATERNAL AND PERINATAL PROGRAMS

Ma. Cynthia Fernandez-Tan, MD

*POGS, A Catalyst in Lowering Maternal and Perinatal Mortality
and Morbidity in the Philippines*

RATIONALE

“The Philippine Obstetrical and Gynecological Society (POGS) being the leading organization in women’s health care has a mission of delivering quality health care through advocacy and health education of health care providers. Being a leading organization, we take the lead, but we cannot do it alone as our members attend only to about ten to twenty percent of the population and the rest are attended to by our co-health workers in private and in government health units. POGS to accomplish such a vision needs to work hand and hand with government hospitals, private health workers in hospitals and birthing homes. Such a mission can be further accomplished by collaboration with the Department of Health (DOH), city and town health administrators and workers, Maternal and Child organizations, Midwifery educators and organizations, etc. In POGS, we tried to look at the bigger picture and look at what we can do and what we cannot do. We thought of making it not by a yearly program but a long-term program but continuous. Several programs were done in the past but got derailed because of problems on continuity and sustainability.”

-Dr. Mario A. Bernardino, POGS President 2019

POGS MATERNAL AND PERINATAL PROGRAMS

In keeping with its mission and vision, POGS embarked on various programs with the goal of reducing maternal and perinatal mortality.

In 1983, Dr Rogelio Mendiola launched the Abortion, Breastfeeding, Contraception and Cancer Detection (ABCC), a cooperative effort with the Integrated Midwives Association of the Philippines. It entailed the training and cooperation of midwives nationwide in a campaign against induced abortion, for breastfeeding support, in family planning and cancer detection with the ultimate goal of lowering our high maternal mortality. Project ABCC continued for over 15 years.

Dr Virgilio Oblepias initiated another big project in 1990 which he called "BALIKATAN para sa Kalusugan ng Mag-Iina". The objectives of this project were 1) to reduce maternal mortality and morbidity, 2) to improve the knowledge and skills of midwives and later on, traditional birth attendants by implementing Information, Education, Communication and Consultancy (IECC), 3) to develop a mechanism of collaboration between POGS and IMAP for better referral system to assist midwives in handling maternal complications, and gaining more confidence to handle maternal cases, and 4) to gain excellent alignment between POGS and health workers. This project had members of the CCS very busy as they went to different regions of the country conducting the seminar workshops for the midwives. In later years, Project ABCC and the Balikatan were linked, as they both had IMAP midwives as target audience.

1993 POGS President Rebecca Ramos inked a memorandum of agreement with the Department of Health adopting two communities in Bulacan to assist in updating maternal care and minimize maternal mortality. After a needs assessment, POGS

conducted lectures and demonstration workshops for midwives. The government hospitals (Dr. Jose Fabella Memorial Hospital, Jose R. Reyes Memorial Medical Center and Quirino Memorial Medical Center) were venues for the midwives' practicum. Safe Motherhood Seminar Workshops continued in the following years for midwives and general practitioners, updating knowledge and skills on prenatal care, identification of high-risk pregnancies, infection prevention, intrapartum and postpartum care. These Safe Motherhood workshops eventually replaced the ABCC-Balikatan seminars for midwives.

In 2007, Dr Rogelio Mendiola embarked on a Life Saving Skills (LSS) Training Course for Midwives, a six-day (2 days didactics and 4 days practicum) training course designed to enhance the skills of public and private sector midwives in recognizing and responding to life-threatening obstetrical situations. This was the beginning of the earnest efforts of POGS in helping the country attain its Millennium Development Goals (MDG) Goals 4 and 5. Over 1200 midwives were trained by POGS Fellows from all over the country from 2007-2008 in 28 regional DOH and Local Government Unit (LGU) hospitals. The program was recognized by the DOH and PhilHealth in the accreditation of midwife's maternity clinics, and it continued for a couple more years.

Dr. Regta Pichay collaborated with the United Nations Population Fund (UNFPA) in the POGS Millennium Development Goals (MDG) Countdown Program, an expanded capacity program for midwives on maternal and newborn care in 2010. This differed from the LSS program in that the Philippine Society of Newborn Medicine was involved to assist in the training of midwives (MW) on newborn care. The module was presented to stakeholders DOH, World Health Organization (WHO), United Nations Children's Fund (UNICEF), the Board of Midwifery, Integrated Midwives Association of the Philippines (IMAP), Association of Philippine Schools of Midwifery, among others before a Training of Trainers (POGS

Fellows) was conducted. The program was unique in that after the 7-day skills training, a post training evaluation was conducted where midwives had to hurdle written, oral, and practical examinations before they could be awarded the certificate of training. DOH Secretary Enrique Ona lauded POGS for its accomplishments. The program was continued by 2011 President Dr Sylvia Carnero.

The Ad Hoc Committee on Maternal Mortality Reduction was created by Dr Blanca de Guia-Fuerte in 2016. The main project of this committee headed by Dr Filomena Santiago-San Juan was a collaborative study protocol to establish a structured networking and referral system to POGS accredited hospitals by health care workers in birthing homes and lying-in clinics in select barangays in the City of Manila.

For her part, 2017 POGS President Dr. Mayumi Bismark continued the improvement of networking systems and launched the POGS Recognized Partnership Program.

In 2019 POGS President Mario A. Bernardino, MD continued to work on the networking systems by initiating the H.E.A.L.T.H. Program (Health Education Aligning Lying-in To Hospital) and establishing the P.O.G.I. Cluster (the POGS Organization of Government Institutions). For purposes of continuity of function and program, it was proposed that anything to do with Service Delivery Network will be the function of the POGI cluster to take care and it was accepted. Even if there will be changes in the POGS administration, the job continues to be the responsibility of the POGI cluster so there will be continuity of the program. It was also proposed that it will be reporting to the President and the BOT through the Committee on Maternal and Perinatal Welfare. The POGI cluster functionally becomes the administrative and implementing arm of POGS on this program.

Chapter 2

POGS AT THE FOREFRONT OF IMPROVING MATERNAL AND PERINATAL HEALTH CARE: P.O.G.I. and H.E.A.L.T.H. PROGRAM

Mario A. Bernardino, MD

Since time immemorial, POGS upon its conception and even our founders have always thought of maternal and perinatal welfare. When we mean welfare, as obstetrician-gynecologists, foremost in our mind is health welfare as basic and the rest will follow, or everything will center on health welfare. This is the *raison d'être* of POGS. For this reason, it has existed for more than 75 years working for maternal and child welfare. It is a force, an academic and health service national organization that can be harnessed to benefit the greater good for the mother and child.

POGS is composed of more than four thousand obstetrician-gynecologists in the different regions of the country but more concentrated in the urban areas. With the Philippines having a population of about a hundred ten million which is partly composed of the women population that gives birth to about two million per year. Our obstetricians attend only to a fraction of the birthing population, but the greater majority is attended by other health care workers such as midwives, hilots, etc.

Other factors come into play aside from the availability of our members. Foremost is the maldistribution of practitioners and health facilities in our country because of the geographical archipelago. Another very significant factor is the high financial cost of healthcare vis-à-vis the financial capability of the population. So, the birthing population gravitates to government hospitals and public birthing homes for health care services because of the subsidized cost. These institutions are doing their best to give services with the meager available resources that they are always

wanting because of the mounting number of patients that their facilities can accommodate. As always it is never enough.

A very significant part in this equation is the mindset of the health care providers and the patients. The overworked and overburdened usually have very little patience as they need to give it to an enormous number of not very health literate patients. The patients on the other hand are quite evasive because they get the ire of the health care providers when they come late for management and in an advanced stage of complications. The non-hospital-based health care provider also gets the ire of the hospital personnel if the referral is late.

The POGS being the leading organization in women's health care has a mission of delivering quality health care through advocacy and health education of health care providers. Being a leading organization, we take the lead, but we cannot do it alone as our members attend only to about ten to twenty percent of the population and the rest are attended to by our co-health workers in private and in government health units. POGS to accomplish such a vision needs to work hand and hand with government hospitals, private health workers in hospitals and birthing homes. Such a mission can be further accomplished by collaboration with the Department of Health, city and town health administrators and workers, Maternal & Child organizations, Midwifery educators and organizations, etc. In POGS we tried to look at the bigger picture and look at what we can do and what we cannot do. We thought of making it not by a yearly program but a long-term program but continuous. Several programs were done in the past but got derailed because of problems on continuity and sustainability.

POGI HISTORY

The POGS Organization of Government Institution (P.O.G.I.) is an offshoot of the objective of POGS to be a catalyst in the lowering of

the maternal mortality and morbidity in the Philippines. Several very notable programs were initiated by POGS in the past. They were successful but unfortunately as any other program, it terminates or stops because of changes of term officers. It was also realized that the greater majority of maternal health frontliners are midwives and only a small segment of patients is attended by obstetrician-gynecologists. Another realization is that the complicated conditions were referred to hospital at a later time which further aggravate the complications. In 2019, POGS initiated the POGS H.E.A.L.T.H. Program, an acronym for Health Education Aligning Lying-in To Hospitals. It is with an objective of establishing a good working relationship of midwives and other health workers with the hospital. In the center of this program are POGS members in government hospitals or institutions, thus the organization of P.O.G.I. as a government cluster.

It was organized in 2019 with different major government hospitals in the National Capital Region (NCR). It is the hope that all government hospitals nationwide participate in this cluster. Initially in its organization it was joined by POGS members of the following hospitals: Amang Rodriguez Medical Center, Andres Bonifacio General Hospital, East Avenue Medical Center, Dr. Jose Fabella Hospital, Jose R. Reyes Memorial Medical Center, Dr. Jose Rodriguez Hospital (Tala), Ospital ng Makati, Navotas City Hospital, Ospital ng Maynila, Pasig City General Hospital, Quirino Memorial Medical Center, Rizal Medical Center, Tondo General Hospital, and Valenzuela Medical Center. P.O.G.I. is just the lead organization, but it enjoins the private sectors particularly lying-in and private hospitals to participate in this endeavor.

The P.O.G.I. as a cluster and the POGS H.E.A.L.T.H. Program was formally launched on the President's Hour in the 2019 Annual Convention, and then Asia Oceania Congress of Obstetrician and Gynecologist (AOCOG) in Manila.

Currently, it is working on the harmonious relationship of hospitals and satellite healthcare units for a smooth health service delivery network as we help the government in the national program of Universal Health Care.

POGI LOGO



Inside the P.O.G.I. logo is the POGS logo. POGS being the origin of the organization is centered in the spirit of what POGS stands for, its mission, vision, and values. Arising from the POGS logo are the three persons with the center person lifting the hands of the two persons on both sides. The Center person is the P.O.G.I. (POGS Organization of Government Institution) who is taking the lead in this task and bringing the two together for a common objective. The Second person is the POGS member who belongs to the private sector, academe, and other sectors. The Third person belongs to the midwives and other allied health workers. The three persons are holding up hand and hand to show their sense of oneness in this task of health care for the mother and child. They are held together by a horizontal crescent with the POGS logo which is like a hand offering to the two triangular spikes which represent the mother and child.

There are seven yellow triangles or rays above the three persons. These are the seven attributes that three persons enshrine in their task to render their task. Yellow in color because these are

the attributes P.O.G.I. wants to shine with. These are Professionalism, Collaboration, Equality, Enabling Environment, Accessibility, Safety, and Service in Health Care. Service in the Health Care being at the center of that attribute. One side are the three attributes of the person being Professional, Collaborative, and fostering Equality among us and allied professions. On the other side are the attributes that we want to create for the mother and child which are Enabling Environment, Accessibility and Safety of the health care delivery. The yellow concave line below is the uniting act of P.O.G.I. to put all the attributes together.

The logo is inside the circle with the name of POGS Organization Government Institutions. It is a circle because it is the cluster of POGS that will make it roll like a wheel to help in the service delivery health care network roll nationwide for the mother and child.

P.O.G.I. is not simply an organization of government institutions, but a POGS cluster led by POGS members that belong to different government institutions. Its task is to take the lead in enjoining the other obstetrician-gynecologist, allied medical professions, and other sectors for a safe, accessible delivery of health care network.

Chapter 3
**IMPACT OF COVID-19 PANDEMIC ON
SERVICE DELIVERY NETWORK (SDN)
MAPPING THE NATIONAL PROGRAMS
AND HARNESSING REGIONAL CHAMPIONS**

Christia S. Padolina, MD

INTRODUCTION

The Coronavirus disease (COVID-19) pandemic is a public health emergency requiring significant changes in obstetric and gynecologic health care delivery to minimize the risk of transmission to healthy patients, and health workers. With regard to risk of COVID-19 infection, patients from low-income households represent a particular vulnerable population with limited ability to practice risk reducing behaviors. COVID-19 cases overwhelmed the capacity of the healthcare systems, highlighting the structural inequities and disparities in healthcare access. The pandemic also exacerbates the stress level and fear for this emergent infection.

The outbreak started in late December 2019 in Wuhan, Hubei Province, China. The first confirmed COVID -19 patient was from Hongkong, China on January 22,2020. The World Health Organization (WHO) officially declared the COVID-19 outbreak as a pandemic on March 11,2020. By March 15,2020, the Philippines declared and implemented a series of lockdowns and quarantines.

I was prepared to undertake the programs of our beloved POGS in safeguarding women’s health and decreasing maternal mortality under a collaborative leadership platform. It was the perfect vision for 2020. The COVID-19 pandemic forced us to rethink our priorities. We were all ill prepared to handle the worldwide health crisis.

OBJECTIVES

The purpose of this article is to provide an overview of a conceptual framework on how to strengthen women’s health issues during the time of the COVID-19 pandemic using the nexus of the Service Delivery Network (SDN)). We also need to define how as an academic organization we were able to continue to promote maternal welfare amidst the crisis situation.

The specific objectives are:

1. To present burden of COVID-19 on women’s health in the Philippines
2. To discuss how maternal health care was affected by COVID-19
3. To showcase how COVID-19 accelerated the implementation of Service Delivery Network (SDN)
4. To recommend action points made by POGS in strengthening women’s health during the pandemic

THE POGS PERSPECTIVE - GAPS IN OUR HEALTH SYSTEM (SITUATION OVERVIEW)

The pandemic highlighted existing gaps in our health system. We were not prepared to handle a health crisis of this magnitude. First of all, we need to ensure the safety and welfare of our members because if we don’t, our patients will be displaced.

We ensured that guidelines and bulletins were scientifically researched, reviewed, and collaborated by experts in POGS and our subspecialty societies. These were properly communicated to all members and trainees through webinars. Standardized data collection and archiving of data were also accomplished

electronically to provide a database for decision making in this evolving disease.

Collaboration with the national agencies like Department of Health (DOH), Inter- agency Task Force (IATF), with international academic organization like Asia & Oceania Federation of Obstetrics & Gynaecology (AOFOG) and The International Federation of Gynecology and Obstetrics (FIGO), with academic and nonacademic organizations and non-governmental organizations (NGOs) like Philippine Medical Association (PMA), Healthcare Professionals Alliance Against Covid-19 (HPAAC), and midwives were done to ensure not only advocacies but implementation of programs on women's health.

THE COVID-19 PANDEMIC AS A DISASTER (AS A PUBLIC HEALTH EMERGENCY)

Prenatal care, delivery and postpartum care are essential to health and well-being of patients and infants. In the wake of the pandemic, the healthcare team is committed to delivering care in the safest and most respectful and safest way. Our organization is rapidly developing and communicating guidance for our members and their patients based on the best available evidence to help inform their provision of care amid the pandemic.

Effective communication is essential in this time of stress and uncertainty. The safety and well-being of families and communities is of paramount importance. We are committed to providing quality, patient -centered care to pregnant patients and their infants during this challenging times

We protect access to care, mitigate existing gaps and barriers that the pandemic may exacerbate. We provided guidelines to maintain safe access to hospitals and delivery units. We capacitated

the midwives to handle delivery at the lying-in units thru webinars when the patients head away from the hospitals or when they were full capacity because of covid cases. We protect access to reproductive health care. We reached out to our patients for self-care.

Other areas of concern include broadening the perspectives on victims of intimate partner violence and prioritizing combating disparities in maternal health access, services, and health outcomes.

IMPACT OF COVID 19 ON SDN

The most badly hit area by COVID-19 pandemic is the National Capital Region (NCR). The chaotic scenario of overwhelmed hospitals, exhausted frontliners and displaced patients however are present in all hospitals during the four (4) surges from 2020 to the early part of 2022.

The One Hospital Command is a service delivery network on a national scale. Over time there was limited success as decisions to accept and receive referrals were carried out mostly in a ‘cordial’ but not structured way. This leaves the marginalized in the mercy of the receiving hospital. It took days to transfer patients.

Those with an existing SDN were far better as they only needed to fine tune the referral system taking into account the adherence to minimum safety protocols. One all lab exams were undertaken from the referring institution, transfer was facilitated.

Badly hit conditions include transfer of patients requiring emergency surgical procedures, those requiring blood transfusion, access to chemotherapy or radiotherapy and the silent pandemic of gender violence.

MOVING FORWARD: WHAT CAN WE DO CONCLUSIONS AND RECOMMENDATIONS

The PDITR-V

Prevent, Detect, Isolation, Treat, Reintegration-Vaccinate

For the P.O.G.I. program, the focus supposedly in 2020 is Mapping Out the National Programs and Harnessing Regional Champions. The Universal Health Care Law Roadmap includes capacitating and advocating for the SDN which evolved into the Health Care Provider Networks (HCPN) over time for POGS members. This was not realized then, but it opened other opportunities.

The lockdowns and quarantines made us explore other avenues to ensure that we stay on track. From physical seminars we shifted to webinars and reached far more POGS members and interacted with midwives in all 12 regions. The e learning platform ensured standardization of capacity building and opened avenues for other health care professionals. The virtual platform enabled us to benchmark other models of SDN in maternal healthcare. The members in the regions were mobilized to look into their areas of practice and map up hospitals and lying-in clinics as part of the preparatory stage in the importation of the SDN.

I cannot overemphasize the importance of coordinated effort in handling the crisis. Fast forward to 2022, there should be resoluteness in reviewing the gains in the past 2 years of the pandemic and lay out the practices that would enable us to better handle the next surge. The pandemic has accelerated changes that were long overdue for POGS. It marked a lot of ‘firsts’ in POGS. First Webinar, first telemedicine, First hybrid convention, first community service on a virtual platform.

Chapter 4
**HARNESSING COMMUNITY CHAMPIONS AND
PUSHING THE UNIVERSAL HEALTH CARE ACT (UHC)**

Benjamin D. Cuenca, MD

POGS CONTINUES TO STAY AFLOAT

The start of the fiscal year 2021 continued to witness the challenges imposed by the continuing global health crisis. Topmost among the governance priorities of the 2021 Board of the Society is to sustain, if not to further push strategies towards the empowerment of the members to serve the community as healers, educators, counselors, key opinion leaders and health advocates. This is made possible largely by the series of seminars virtually sponsored by the various POGS committees, which featured a wide array of timely and relevant subject matters related to the pandemic based on the most current data and evidence available in the medical literature.

With the lockdown in effect, the POGS members in their respective homes find the platform very effective in defining the goals set by the webinars, in the same way that the sponsoring committees appreciate the pragmatic efficiency of the platform to be far-reaching, time-efficient, and less demanding logistically.

WHERE ARE THE PREGNANT AND THE PARTURIENTS?

Considering factors like limited bed capacity and the vacuum of information that remains to be filled up about the virus, hospitals, both government and private alike, tend to be more selective in admitting patients, women in labor included, regardless of gestational age. Aside from full occupancy as one of the primary

reasons, admitting RT-PCR and other prerequisite laboratory tests required by the hospitals proved to be another hurdle for the marginalized group to be veered away from institutional delivery and seek refuge in birthing homes, lying-in clinics or home deliveries assisted by midwives and trained nurses, or worse by traditional birth attendants. .

This prevailing scenario is what prompted the POGS, through its Committee on Community Service, to conduct regional webinars and teleconsultations with midwifery groups across all twelve regions of the country, to give updates on the evolving health guidelines in rendering obstetrical care during the pandemic, including practical family planning methods after delivery.

THE POGS ORGANIZATION OF GOVERNMENT INSTITUTIONS (POGI): RESPONDING UNIT OF THE SOCIETY ON SDN AND UNIVERSAL HEALTH CARE

Appreciating the old and unresolved challenge of the POGS, that is the Maternal Mortality Rate (MMR) reduction, the POGS leadership of Dr. Mario Bernardino in 2019, conceptualized and established the POGS Organization of Government Institutions (P.O.G.I.), which primarily aims to organize POGS members in government institutions to initiate and eventually champion an efficient and sustained networking with the midwives and other health care workers, organizations and institutions in the allied professions to establish service delivery networks (SDN's) that are in consonance with programs and future plans of the Department of Health. And as an academic society, the POGS, through the POGI, hopes to align and consolidate (intensify) all its efforts Programs to address MMR reduction and forge alliance with other academic, government and non-government organizations (NGOs) with the same objectives for wider scale of action and ideally encompassing

outcomes in preparation for the full implementation of the Universal Health Care Act (RA 11223).

Service Delivery Network (SDN), as the Department of Health (DOH) defines it, is a network of organizations that plans to provide equitable, comprehensive, integrated, and continuous good quality health services to a defined population, with minimum duplications and inefficiencies. ¹ It is a network of health facilities and providers within the province- or city-wide health system, offering core packages of health care services in an integrated and coordinated manner, according to the Responsible Parenthood and Reproductive Health (RPRH) Law.²

Service delivery refers to the integral parts of the health system where patients receive the treatment and the supplies they are entitled to. To be viably functional, the network should be established and organized by local government units (LGUs) in coordination with the DOH so that reproductive health care services are effectively delivered to the priority population.

In view of these mandatory developments in our local health system, the POGS, as a private academic organization of certified obstetricians and gynecologists, is readily adopting these provisions using its various existing committees and advocacy programs in order to be relevant and eventually, effective partner of the government in the health care delivery.

The rural health unit (RHU) is the basic entity that executes every detail of the SDN program. It provides the preventive, regulatory, medical care services in the municipality including general consultations, dental services, maternal health, family planning, nutrition, immunization, simple laboratory examinations, health promotion and other health-related issues.

Very crucial here is the identification of potential community champions who will be the catalysts of initiatives and implementation² and it is in this respect where the POGS strongly finds its members to be imperatively important candidates. The prospective champions must be guided on how to establish an SDN, specifically in (1) identifying needs of the priority population, (2) mapping available health care providers that can serve the needs of the priority population on health services, (3) designating priority population to facilities, and (4) monitoring the utilization and provision of health services.²

One of the first successful SDN programs was witnessed in the Cordillera Administrative Region (CAR), which indeed resulted to reduced maternal and child mortality owed to the effectively operational networking program established across the region.⁴

THE POGS SDN PRIMER

This primer will surely instill pride among the readers as they appreciate the details and varying approaches of celebrated success stories of POGS members who bravely took the initial steps and exhibited unparalleled passion and dedication to champion SDN programs in their respective places of clinical practice. Each one of them has a story to tell, given the differing demands and limited resources salient to their place. It is earnestly hoped that their chronicles can inspire more POGS members to duplicate, adopt or adapt and enhance these networking models in their own areas.

We all understand that the POGS is a private academic health organization working to promote the highest standard of women's healthcare. And in consonance with such a mission, the POGS intends to be a staunch partner of the government in the wake of

these changes in the health system, by mobilizing its 5000 members into the matrix of SDN and UHC act.

Through this primer, the POGS is hopeful that the members will be able to define and identify our collective roles as a society and the individual roles as members as these changes in the health system unfold. At all times, at all levels and at all fronts, we must endeavor to deliver the best maternal health services to all Filipinos and achieve everyone’s long-dreamt hope of decreasing maternal mortality, no matter what changes in the health system are bound to happen.

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Chapter 5
**POGS (THEORETICAL) FRAMEWORK FOR SERVICE DELIVERY
NETWORK (SDN)**

Ma. Theresa M. Vergara, MD

For more than 75 years, the Philippine Obstetrical and Gynecological Society (POGS) has continued to embark on maternal health programs to lower the Philippines Maternal Mortality Ratio, and to improve the health of women and mothers of our society. Though these programs were not linked directly to the present Universal Health Care (UHC) law, such programs served as preparation toward the full implementation of its principles into the POGS system. Currently, there is a lot of passion from our members to see this program into fruition.

The general objective into creating a POGS-UHC framework is for the integration of UHC into the POGS vision, mission, and goals. This will help guide the POGS society in achieving its' mandate in training and setting standards of care in the OBGYN practice. The framework's specific objectives primarily include the following: (1) to merge the UHC law mainly in the areas of training, governance, and setting standards in OBGYN clinical practice including primary care. (2) Secondly, to determine the financial impact of UHC on the OBGYN practice and its' members in collaboration with Philippine Health Insurance Corporation (PHIC). Health Maintenance Organizations (HMOs), and other private health insurance companies mutually beneficial to its' members, other healthcare workers (HCWs) and the communities being served. (3) Thirdly, to establish guidelines for an effective network of referral system among the POGS accredited private/public training and service hospitals, POGS members practicing individually or with other healthcare workers and health facilities in the Health Care Provider Network. Lastly, to collaborate with Department of Health (DOH)

and Professional Regulation Commission (PRC) in defining the POGS role in governance and direction of primary health care program in the country.

The successful implementation of the UHC-POGS framework is of an utmost consideration since this will greatly affect the very essence of OBGYN practice in the country especially when the clinical practice is focused more on curative rather than preventive care. The framework will help the POGS’ institutional committees and subcommittees that will be responsible in putting into action the activities to establish the UHC principles into the POGS system. These are the recommended steps to be followed to streamline the smooth implementation.

5. The first step is to develop an effective governance and leadership that will re-evaluate the policies, establish board-level risk committees and clarify the goals of all POGS committees. This will be headed and steered by the board of trustees through P.O.G.I., formulating additional policies on preventive and promotive programs and eventual memorandum of agreements with other HCW in the network.
6. The second step is to identify the role of POGS members in the health care provider network for a functional health service delivery system. This will involve the training officers, regional Council for Residents’ Education, Enhancement and Development (CREED) and Philippine Board of Obstetrics and Gynecology (PBOG) members. They will also be responsible in collaborating with the training and service hospitals, both public and private.
7. The third step is to establish a unique POGS- Health Care Provider Networks (HCPN) design receptive to the principles of UHC. The Board of Trustees (BOT), together with chairs and regional directors and cluster presidents can formulate

guidelines for an effective health care delivery system. They will also consider areas of practice of all members who practice individually, or hospital based.

8. The 4th step is the Construction of a standardized risk assessment tool that can be utilized by the POGS system for clearer guideline in the outward and inward referrals. Having an assessment tool will standardize the referral system with consideration of medical risks and other psychosocial and economic risks.
5. The 5th step will be centered on creating, reviewing, and reestablishing an evidence-based standards of care for at least the top ten conditions of each subspecialty following the spectrum of health delivery system. Levels of care will help delineate different functions of a generalist, specialist, and subspecialist members of the society. This will be a major task of the different subspecialties. This will also consider the different practices set by the DOH and out partner midwives and their organizations.
6. The sixth step is the institutionalization of a program of an effective quality control program to assess the health impact of all POGS-UHC related programs. This will be managed by the committees like the patient safety, maternal mortality, and other committees whose functions involve assessment of the impact of the program on the society.
7. The 7th step is to conduct continuous monitoring and documentation for accurate statistical analysis that will guide the BOT in the formulation of policies related to UHC. Committees tasked to implement this will be the stats PNSS and research committees with the participation BOT, PBOG and Creed.

8. The last step is to ensure equitable financing services that will benefit all the stakeholders especially by POGS members and other HCW in the Health Care Provider Network established in Philippine UHC in collaboration with PHIC and HMOs committees of POGS.

It is imperative to investigate the whole spectrum of health service delivery in Obstetrics and Gynecology which one can utilize as a reference. Understanding this will help define the various roles of POGS members during the OBGYN practice. Regardless of how we see ourselves in the health care network, we will be part of the health care network!

Lastly, with POGS vision and mission to oversee training programs and certify future OBGYN specialists, POGS, as a professional organization, should ensure the utilization of clinical standards of excellent maternal care in the development of the functional health care provider network in the city or in the provincial health system as mandated by the UHC law.

Chapter 6
**BASIC CONCEPTS, PRINCIPLES, AND PROCESSES
IN SERVICE DELIVERY NETWORK (SDN)**

Maria Stephanie Faye S. Cagayan, MD

INTRODUCTION

In 2000, the Department of Health (DOH) established Inter-local health zones (ILHZs) through the Executive Order No. 205, s.200 or the “Providing for the Creation of a National Health Planning Committee and the Establishment of Interlocal Health Zones (ILHZs), throughout the Country, and for Other Purposes” for a more efficient utilization of health resources. Despite this effort, problems remained leading to the inability to meet expected outcomes such as improved population-wide health, improved care of individuals, and improved management of health resources. To address the still existing gaps in maternal health referral systems, the DOH now introduced a Service Delivery Network (SDN) approach following its Maternal , Newborn, and Child Health and Nutritional (MNCHN) Strategy, which is an enhanced version of the Inter-Local Health Zones (ILHZ) guidelines through Administrative Order (AO) 2014-0046 to support the functions of local government units (LGUs) to deliver essential services by ensuring that elements of a well-functioning Service Delivery Network (SDN) are in place. The SDN, as defined in DOH AO 2014-0046 is primarily a network of public and private Family Planning (FP) or MNCHN service providers. They are identified or designated to cater to the Responsible Parenthood and Reproductive Health (RPRH) service needs of the priority population. The aim of this policy is to put mothers, women, and children at the center of the health and development agenda in local settings so that safe, acceptable, and equitable health services are provided in all its health care facilities. Additionally, it aims to:

1. Enhance client access to needed services
2. Improve quality of services and standards of care
3. Increase client use of the MNCHN-FP services
4. Widen the scope of service coverage
5. Improve links between:
 - a. clients and service providers
 - b. service providers and facilities
 - c. levels of care and support services
6. Encourage local communities/ LGUs to create locally responsive initiatives

These desired results can come with improvements in the informed decision-making process of mothers, families and communities in timely seeking and using health care, as well as in their confidence and trust in local health systems.

MNCHN SDN LEVELS OF CARE

The three levels of care in the MNCHN SDN are (1) community-level service providers such as rural health units (RHUs), barangay health stations (BHS), and private clinics with their staff and volunteer workers who are in charge of providing primary healthcare services; (2) Basic Emergency Obstetric and Newborn Care (BEmONC)-capable network of facilities and providers which can be based in hospitals, Rural Health Unit (RHU), Barangay Health Station (BHS), lying-in clinics and birthing homes that operate on a 24-hour basis with a set of skilled health professionals such as doctors, nurses, midwives, and medical technologists; and (3) Comprehensive Emergency Obstetric and Newborn Care (CEmONC)-capable network of facilities and providers either private or public end-referral facilities situated 2 hours away from the residence of priority populations and a more extensive team of

healthcare providers. Each level of care corresponds to different services and functions (Figure 1).

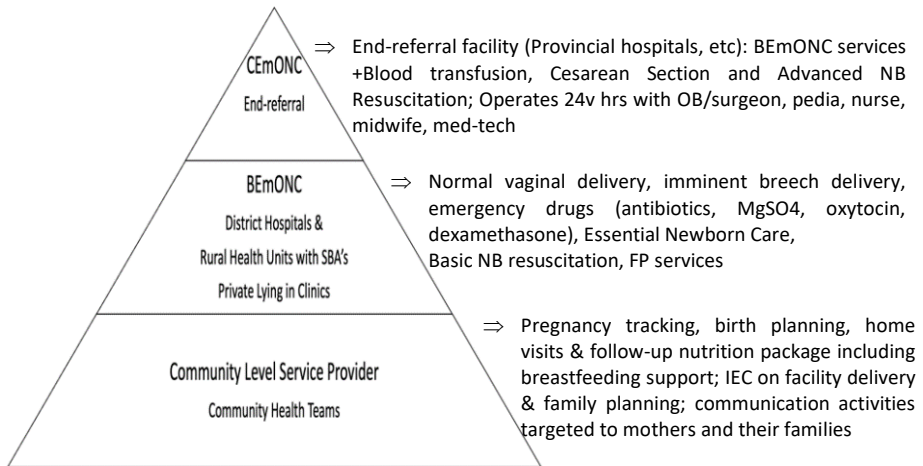


Figure 1. Maternal and Child Health SDN

IMPLICATIONS OF AN EFFECTIVE IMPLEMENTATION OF MNCHN SDN GUIDELINES

The currently existing two-way referral system does not have clear guidelines for its implementation. Internal and external audits are also not done, or its results are ignored. Moreover, the system lacks the power to provide adequate solutions for the delays in obstetric care as evidenced by the slow decline in the Maternal Mortality Rate (MMR). To address this, four key requisites (Figure 2) are needed for efficient implementation of a referral system (Alcock et al., 2015; Aradeon & Doctor, 2016; Awoonor-Williams et al., 2015; Jackson, et al., 2016; Murray and Pearson, 2006).

First, the referral system has to be informed of population needs and health system capabilities. It has been mentioned that a culture's belief system may influence delays in obstetric care,

particularly in phases I and II (Aradeon & Doctor, 2016). To set up a working system, one must be able to know the population, culture, and capabilities of the constituents.

Second, the need for a referral center with adequate resources was also pointed out. In pyramidal systems like what we have in the Philippines, primary healthcare units like barangay health stations are ideally the ones to cater to the bulk of patients. Only when cases are too complicated for their training and technology are they supposed to pass on the patients to the next level of healthcare units.

Third, active collaboration between referral levels is also needed. All levels of the health system need to conform to the guidelines set by national and local authorities to avoid “bypassing” of referral structures. Alcock et al (2015) observed that women tend to proceed directly to referral hospitals depending on their ability to mobilize economic and social resources. Outlining specific guidelines and protocols regarding referrals would make the referral system run smoothly. The health providers in community health teams would not be burdened by the decision to refer a patient or not.

Last, it is also important to provide an avenue for checks and balances, particularly when it comes to the providers’ performances. This strategy would address issues of health providers being abusive, thereby preventing mothers from seeking maternal care (Keri et al., 2010). By empowering the patients, asking for their feedback, and making sure the healthcare providers are responsible for their actions, patients are assured that they are safe and well taken care of in health centers. With inequity being one of the biggest problems in the Philippine healthcare system, there must be pro-poor protection against the costs of an emergency referral. Should these key requisites be achieved, unity and coordination in SDNs are realized, and the three delays in

obstetric care will be addressed. Referral systems offer a promising solution to the increasing rates of maternal morbidity and mortality.

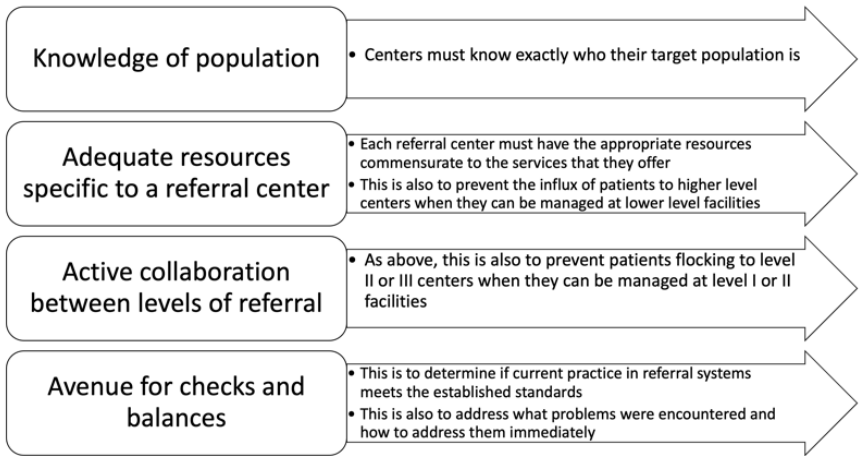


Figure 2. Key requisites for an effective referral system

OPERATIONALIZING A SERVICE DELIVERY NETWORK

The three-phased approach in establishing or improving an SDN referral mechanism consists of three phases, namely: (1) Advocacy and assessment, (2) Establishing an operative mechanism, and (3) Sustaining the SDN operations (figure3).

Phase one acts as preparation and planning step for organizing and operationalizing an SDN. A rapid assessment if there is an existing SDN and its status is an important first step followed by a needs and purpose assessment for an SDN. Facilities and service capacity mapping are necessary to identify possible members of the SDN. Furthermore, securing potential stakeholders from public and private health sectors is needed to operationalize an SDN.

Phase two focuses on the formation of SDN operative documents. These documents include categorization of referrals and detailed referral guidelines along with the service provider’s agreement; and Monitoring and Evaluation (M&E) Mechanism and Indicators.

Phase three ensures that the SDN is sustainable and continues to improve with the changing times and needs of the people and the health care providers. This phase focuses on the performance, functionality, and other indicators in the M&E. Regular and accurate M&E provides more and consistent data to guide the improvement and decision-making needed to grow the SDN. A list of M&Es are the standardized referral slip, referral logbooks, manual and electronic data capture and consolidation forms, standardized feedback form; and minutes of meetings during SDN team meetings

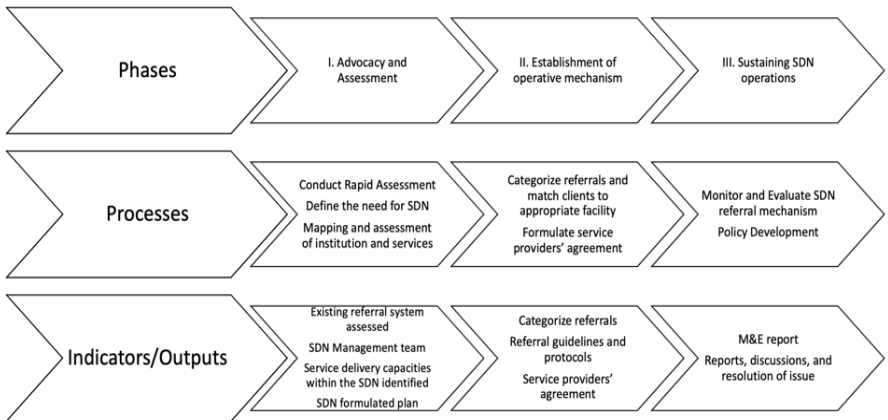


Figure 3. Modified from the Technical Guide for the Operationalization of a Referral Mechanism in Service Delivery Network (DOH, USAID, RTI n.d.)

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Chapter 7
**COLLABORATION OF STAKEHOLDERS INVOLVED
IN MATERNAL AND PERINATAL HEALTH**

Melchor C. Dela Cruz, Jr., MD

The maternal and perinatal health care systems are part of the public health system functioning in the Local Government Units (LGUs) and National Government Agencies (NGAs). In 1991, the decentralization of powers, authority, and resources to LGUs, including the delineation of functions, pursuant to Republic Act (RA) No. 7160 (Local Government Code of 1991), resulted in the fragmentation of the public health system. To address the problems created in the different levels of care and in the continuity of services provided, and to meet the demands and needs of constituents, there was a need for reintegration of hospital and public health services for a wholistic delivery of health care. In January 2000, Executive order No. 205 was issued, providing for the establishment of Inter-Local Health Zones (ILHZ) throughout the country. Each ILHZ would have a defined population within a defined geographical area consisting of a core referral hospital and several primary level facilities.

The Implementing Rules and Regulations (IRR) of RA No. 10354 (Responsible Parenthood and Reproductive Health Act of 2012 and RA No. 10351 (Sin Tax Law) in 2013 and 2014 respectively, provided for the establishment of Service Delivery Network (SDN) which aimed for an integrated, coordinated, and efficient provision of health care services. AO No. 2017-0014 on Service Delivery Network would serve as a guide in the organization and operationalization of SDNs. Several provinces had already initiated the establishment of their respective SDNs, with assistance from the Department of Health (DOH)-Centers for Health Development

and some Development Partners, mostly using the existing ILHZs or programmatic SDNs as the starting point for the type of SDNs that will provide a comprehensive set of health care services.

With the passage of RA No. 11223 (Universal Health Care Act) in 2019, the provision of continuous, coordinated, and integrated care is further facilitated through the organization and functionality of Health Care Provider Networks (HCPNs) involving the public, private and mixed frameworks. The program's section on Service Delivery focuses on the development of policies, research, and other technical documents, provision of technical assistance, and conduct of monitoring and evaluation related to the establishment of the public HCPN. Furthermore, local health systems are strengthened through private sector engagement and implementation of primary care strategies. The objectives of the program are achieved through the cumulative and coordinated efforts of the DOH, Philippine Health Insurance Corporation (PHIC), LGUs, development partners, and other stakeholders.

Doctors particularly the obstetricians, and the midwives, play a very significant role in the implementation of HCPN in maternal and perinatal health care systems. The roles of obstetricians and midwives, as well as all other health workers, have to be clearly defined in order to achieve a favorable outcome for the whole system. The essential role of obstetricians and midwives in maternal and perinatal health care systems entails them to be actively involved in the three pillars of a profession, namely, education, regulation of practice and membership in the accredited professional organization.

The concept of HCPN in the light of universal health care is now being integrated in the curricula of Medicine and Midwifery courses. Aside from the Commission on Higher Education (CHED), the Association of Philippine Medical Colleges, Inc. (APMC) and the Association of Philippine Schools of Midwifery (APSOM) are

ensuring the inclusion of HCPN through Universal Health Care in the schools. The professional regulatory boards of Medicine and Midwifery of the Professional Regulation Commission are working on the formulation of policies and guidelines on the practice of profession for proper implementation. The accredited professional organizations (Philippine Obstetrical and Gynecological Society or POGS and the Integrated Midwives Association of the Philippines or IMAP) are deeply engaged in monitoring and mentoring their members. Even within the organizations, each field of specialization has a role to contribute to the achievement of a common goal.

The pillars of the practice of a profession are represented by associations assigned to each field of responsibility. All the groups are expected to work harmoniously together in order to come up with a system that benefits the entire community. A collaboration of the health workers (members of POGS and IMAP), together with government (CHED, DOH, Professional Regulation Commission (PRC), PHIC, LGUs) and private agencies (private clinic owners) is imperative. The overall impact is the success of the health care provider network system.

Chapter 8
**THE MIDWIFERY SERVICE DELIVERY NETWORK (SDN):
PROVIDING CARE, IMPROVING PARTNERSHIP AND MOVING
FORWARD**

Alejandro R. San Pedro, MD.

INTRODUCTION

The place where women give birth has changed over the years. In the Philippines, the majority of women are now giving birth in health facilities.¹ The Department of Health (DOH) has encouraged women to deliver in these facilities to make childbirth and pregnancy safer. To make this happen, there must be a sufficient number of competent health human resources, properly equipped and staffed health facilities including lying-in for normal physiologic births, adequate financial support, a functioning health system that includes the service delivery network, participation and education of patients and the community among others. The maternity care team: the obstetricians, general practitioners, nurses, and midwives in birthing facilities provide care that are consistent with their education, expertise, and scope of practice. When they work together and collaborate, they can create systems to enhance effective communication, clear roles, access to services, and coordination of care to improve maternity outcomes.

THE MIDWIFERY-LED BIRTHING HOMES/LYING-IN

A Birthing Home/Lying-In is a facility that provides maternity services on prenatal, intrapartum, and postnatal care, normal spontaneous delivery to low-risk women, including care of the newborn.² Because the DOH, as part of its regulatory functions, requires that “every birth should be assisted by skilled birth

attendants”, these birthing centers are manned either by a physician, a midwife, or a nurse. The birthing home can either be public (Local Government Unit owned) or private (Physician or Midwife-Led). Many birthing homes are midwifery-led, and its beginning can be traced back in the 1990’s when a social and business development model was developed to deliver Family Planning and Maternal Child Health (FP/MCH) services.³ This model was soon expanded to cater to service provision for families who can afford to pay for quality Family Planning and Maternal, Neonatal, Child Health and Nutrition FP/MNCHN services. In this model, the midwife is the primary maternity care provider offering routine (antenatal, intrapartum, postpartum) and preventive care, assessment, health promotion and education to low-risk patients. If the care needed by the patient is beyond the scope of function and skill of the midwife, she is expected to refer and coordinate further care with the physician or hospital within her Service Delivery Network (SDN).⁴ Currently, the provision of non-surgical family planning services and supplies is still a main function of the birthing homes.

Midwife-led birthing homes follow the DOH safe motherhood program shift in emphasis from the *risk-approach* which identifies high-risk pregnancies during the prenatal period to an approach that includes birth preparedness and complication readiness for all pregnant women.⁵ Health referral is carried out by the midwife if she is unable to provide the necessary intervention to a patient’s need. This vertical form of referral from a midwife to her back-up physicians (obstetrician and pediatrician) is a DOH and Philippine Health Insurance Corporation (PHIC) requisite for accreditation of the midwife-led birthing facilities.⁶

To further improve the readiness of midwives in birthing homes to respond to unexpected obstetric emergencies, the Department of Health added the training in Basic Emergency Obstetric and Newborn Care (BEmONC) and Essential Intrapartum and Newborn

Care (EINC) among its requirements for maternity care providers.⁷ Timely access to higher level healthcare through the BEmONC – Comprehensive Emergency Obstetric and Newborn Care (CEmONC) network within the bigger Service Delivery Network aims to improve health outcomes. The Birthing facility is also required to have a patient transport vehicle or a Memorandum of Agreement (MOA) with a hospital for ambulance service to ferry patients from the birthing home if ever the need arises.

To enjoy the benefit of insurance coverage, the PHIC provides funds through the maternity care package for low-risk women. "Low risk" refers to the absence of active complications and any maternal or fetal factors that will make the pregnancy at risk for complications. Women with conditions like having a previous cesarean section, breech presentation and hypertension are among the exclusions for coverage and are not compensable in birthing homes deliveries.⁸ The main causes of maternal mortality and morbidity like hemorrhage, eclampsia, sepsis and prolonged or obstructed labor are some reasons for referral to the hospital.

BIRTHING HOMES SHOULD ACTIVELY PARTICIPATE IN THE SERVICE DELIVERY NETWORK

There are currently 2250 birthing homes accredited by PHIC for maternity care package (MCP) benefits.⁹ Board certified and trained obstetricians or BEmONC-trained general practitioners and Local Government Unit physicians provide back-up in these facilities. The required practice in midwifery-led birthing homes is to refer complicated or high-risk cases to their back-up physicians and in cases of emergency like bleeding or eclampsia, rush the patient to the hospital within their SDN. Such a set-up will need a clear referral agreement with guidelines (MOA) between the referring and referral facilities. Another referral model is the transfer of care of the "low-risk" pregnant woman from the hospital to the birthing

home to give birth as exemplified by the Quirino Memorial Medical Center SDN.¹⁰ This practice helps unburden busy public hospitals of “low-risk” cases while sharing maternity care provision with qualified midwife-led Lying-ins that meet their set quality and safety standards. An additional inducement in this set-up is the financial benefit derived by the birthing home through the MCP. This set-up brings to practice a provision in RA 10354 (Reproductive Health Law) for health facilities to be a part of the SDN.¹¹

Although trained in providing assistance during obstetrical emergencies, the DOH-BEmONC for Midwives only allows the administration of life-saving drugs like parenteral antibiotics, anticonvulsant and corticosteroid following doctors’ orders because of regulatory and legal requirements.¹² Midwives trained in BEmONC are also taught to handle imminent breech delivery and perform basic newborn resuscitation. The administration of oxytocin after delivery is an independent function of midwives but they are not allowed to give oxytocic drugs to augment or induce labor. Although many midwives have already attended the BEmONC skills training, the results of local studies on their application in clinical practice are worrisome because several participants have not achieved enough competence and confidence to perform them in real life situations.^{13, 14}

CHALLENGES IN REFERRAL FROM THE LENS OF REFERRING AND RECEIVING FACILITIES

The Service Delivery Network, to be functional, requires a buy-in, the knowledge of protocols and guidelines, coordination between facilities, good and active working relationship among its members (birthing homes and hospitals). The midwife must be conscious of her role, functions, and accountability while the doctor should also be knowledgeable on the scope of practice, skills, and competencies of the midwife she is providing back-up to, including

the obligations contained in their MOA. In addition, the leadership of the hospital must be supportive of this SDN framework to effectively establish a functioning system. However, there are a number of issues and concerns surfaced by midwives and physicians that are hurdles in the process.

The following are some issues from the Midwife-Led birthing centers:¹⁵

1. Some hospitals do not readily accept referrals or at worse, some hospital staff even scold the referring midwife when they bring emergency patients to the hospital.
2. Resident doctors in the referral hospital are unfamiliar with the scope of practice of midwives leading to miscommunication/misunderstanding.
3. Patients are being shuttled from one hospital to another, sometimes due to financial constraints, contributing to the delays in receiving appropriate and timely care.
4. Even when contacted by phone, the hospitals say they are already at full capacity and unable to accept the referral from the midwife.
5. While many midwives are compliant with their scope of practice, it is the few who go outside the limit of functions that get media coverage to their detriment.

These are some comments from the facilities/hospitals receiving referrals:

1. There is delayed referral of patients with life-threatening conditions who arrive moribund or were given sub optimum management in the birthing facility (e.g., postpartum hemorrhage).
2. The midwife did not accompany the patient during transfer to the hospital, even in urgent emergency cases.
3. Midwife managing high risk cases like hypertension and primigravida.

4. Cases of prolonged and obstructed labor from midwife clinics resulting in uterine rupture .
5. The midwife's failure to perform obligations in the MOA, e.g., "Nagpapapirma lang ang midwife ng MOA pero hindi naman nagrerefer sa akin," said the doctor.
6. Midwives doing induction of labor or writing prescription medicines, which are clearly beyond their lawful scope of practice.

By listening to and surfacing such issues and complaints, the dialogue between the concerned health professions can be done. The professional health associations can further clarify roles, obligations, responsibilities of each party in the MOAs, add needed training on specific competencies or revisit lifesaving interventions and guide health workers who want to join the SDN?

The Local Government Unit-led Bulacan Medical Center (BMC) Department of Obstetrics and Gynecology has been holding its annual seminar for the health staff for more than 10 years now. The most recent one, in 2021, focused on the SDN. The participants of these yearly activities are doctors, nurses and midwives who are employed in the Rural Health Units, District Hospitals and Midwife-led Lying-In in the province. Among the aims of this endeavor is to strengthen the linkage between the referring and referral facilities in order to improve the timely identification and safe referral of patients with complicated pregnancies. The bottom line is to lessen maternal death and disability through a collaborative process. In addition, because the consultant and resident staff are active participants in the Provincial Health Office-led Maternal Death Review, they also learn and benefit from a deeper understanding on how the local health system functions and the important role that each one plays.

INTERPROFESSIONAL COLLABORATION AND MOVING FORWARD

On the individual level, learning about the midwife scope of practice is a first step in collaboration. Many of us may be unfamiliar with the details of the educational backgrounds, competencies, and limitations of the midwife. Because midwives attend to normal physiologic pregnancies, there may be some overlap in competencies with physicians that may result in friction. In the SDN, the midwife must consider the important role of the partner obstetrician providing support when the patient's need is outside the midwife's limit of practice.

On a final note, during the referral, try to listen and learn the reason for the transfer of care. Everyone has a story to tell. Learn the hurdles and the delays the woman had to go through to reach the hospital when confronted with obstetric emergencies. With Universal Health Care, now a law, lying-in and birthing homes will be an integral part of the maternity service provision landscape. Midwives and doctors are autonomous health practitioners, working within their own scopes of practice and are responsible and accountable for their own provision of care, but by working together through the SDN they can help improve the health care outcomes for women and babies.

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PART II

SEVICE DELIVERY NETWORK EXPERIENCES WITH COMMENTARIES

**DESCRIPTIVE CASE STUDY OF QUIRINO RECOGNIZED PARTNERS
NETWORK OF CARE IN QUEZON CITY, PHILIPPINES**

Ma. Theresa M. Vergara, MD

ABSTRACT

At an overcrowded government multi-specialty hospital serving the most densely populated area of Metro Manila, inward referrals of women in a moribund state and high volumes of low-risk maternity cases added to significant overcrowding and quality challenges in the maternity wards, resulting in high rates of maternal and neonatal death and near-miss. This case study of the public-private Network of Care Quirino Recognized Partners (QRP) describes a series of pragmatic steps taken to build and maintain the network, particularly: building trust through agreements with private and public birth centers within a ten-kilometer radius, rolling out antenatal use of a clinical and socio-economic risk scoring tool, reaching out to potential clients, and establishing clear communication channels and protocols for care. These actions, consistent with the schematic of an effective Network of Care, helped decongest the hospital, build rapport and teamwork among health providers, and improve maternal and neonatal outcomes throughout the network. The purpose of this descriptive case study was to explore how QRP was established to solve particular contextual problems, especially congestion and poor maternal and neonatal health outcomes, with express attention to how actions taken relate to the domains of Networks of Care. Data collected through semi-structured interviews with relevant health care and other workers, institutional documents, observations, and field notes was interpreted through the domains of Networks of Care and reported through rich description.

INTRODUCTION

Quirino Memorial Medical Center (QMMC) is a 500-bed tertiary care hospital in Quezon City, the most densely populated and largest part of the Metro Manila National Capital Region in the Philippines. QMMC is known colloquially as the “Labor Hospital,” in reference to its history: ownership of the land and construction of the facility was made possible by the International Labor and Marine Union of the Philippines in the early 1950s. That moniker is commonly misunderstood to signify that the hospital is dedicated to maternity care, despite its multi-specialty offerings. Due in part to this misperception, QMMC is deluged with maternity cases, both registered and walk-in. One other key factor for the high number of maternity cases relates to the impact that decentralized management of health services has had on use of the system. Since the Republic Act No. 7160, Local Government Code of 1991, was enacted, the quality of clinical care and availability of skilled providers and essential supplies at lower-level facilities became uneven throughout the Philippines and is thought to contribute to patients bypassing lower-level facilities to seek care directly at tertiary care centers such as QMMC.

At QMMC, 95 of the 500 beds are dedicated to obstetrics, yet admissions regularly outstripped that intended capacity. This situation has existed for many years, as has the perception of the risk. Between 50-60% of all admissions to QMMC are obstetric, with 50-60 deliveries per day. This congestion results in significant overcrowding. When all beds are occupied, mothers often recover from delivery seated in chairs cradling newborns in their arms. Newborns falling from the arms of their mothers during postpartum recovery has been reported and poses a real risk of injury.

Private midwife-led maternity care is a vibrant sector throughout the Philippines, and Quezon City is no exception.

Private birth centers, called lying-in clinics, are heavily regulated, including requiring engagement of an obstetrician consultant. In cases of obstetric emergency or other complications, these providers refer their patients to referral hospitals; however, the midwives and their specialist consultants are not necessarily known to the referral hospitals they need to access. A further problem is the harsh reality of road traffic in Quezon City; traffic is unpredictable, and it is common for traveling even two kilometers to take two hours. Before the formation of QRP in 2013, patients from lying-in clinics frequently arrived at QMMC in a moribund state, making obstetric care for them more challenging, and ultimately contributing to maternal mortality and morbidity at QMMC. Some inward referrals were delayed due to length of time in traffic, but the lack of relationships between the lying-in clinics and the specialists at QMMC was also an issue, creating hesitancy on the part of the midwives. Tense exchanges occurred between private midwives and doctors receiving their referrals. The QMMC doctors sometimes felt that the referrals arrived too late and represented poor clinical practice on the part of midwives; in other instances, the QMMC providers were simply overwhelmed by the volume of patients and reacted poorly to receiving inward referrals from unknown private providers.

In 2013, in the face of the ongoing challenge to reduce maternal death, the head of the Ob/Gyn Department at QMMC decided to take a proactive approach by designing a program to decongest the maternity ward with the aim of improving quality of care and outcomes. The QRP, as a Network of Care (NOC), identified public and private lying-in clinics within first a seven, then a ten-kilometer, radius around the hospital. These were identified as potential “spokes” in a hub-and-spoke model. Identifying clinical sites to partner with was the first step in the process of creating a group of intentionally interconnected maternity care touch points within a defined catchment area. This group, the nascent Network of Care, defined common goals while distributing maternity cases rationally

among the facilities and to achieve better outcomes for the women and newborns in their care. QRP is a public-private partnership, uniting the public hospital, some public health centers, and a host of private birth centers run by entrepreneurial midwives. Together, the partners distribute maternity cases by risk profile and location, communicate fluidly, and share monitoring information to track performance of the Network of Care.

The comprehensive effort made to build and maintain the QRP is documented through the NOC framework below, with the purpose of exploring how QRP was established to solve particular contextual problems, especially congestion and poor maternal and neonatal health outcomes. How the actions taken to establish and operate QRP relate to the NOC domains is given express attention, by applying the NOC schematic to the observations of how QRP was built and operated.

DOMAIN I: AGREEMENT AND ENABLING ENVIRONMENT

Purposeful arrangements:

The first step in building QRP was assessing potential nodes for the network. Several potential partners were identified by their location in a ten-kilometer array around QMMC; the head of the Ob/Gyn Department visited each to see the facility, meet the manager, and assess their compliance with local and national regulations for lying-in clinics.

QMMC and each lying-in clinic then signed a memorandum of understanding (MOU), the pivotal element for QRP in this first domain. The MOUs detail the respective responsibilities of QMMC and the lying-in clinics for delivering maternity services and managing their relationships within the network. These agreements are formal, detailed with deliverables for each party, and are reviewed and renewed annually.

Buy-in:

Getting hospital management to buy-in to the NOC structure was difficult at first because they feared losing income through outward referrals to lying-in clinics and had doubts about the quality of care possible at those sites. Persistent advocacy by QRP leadership eventually assured hospital administration buy-in by contending that rational distribution of cases would improve quality of services delivered and not result in income losses, demonstrating early signs of this success through presentation of QRP data and less formal anecdotal evidence. Ultimately, the arrangements in QRP resulted in an increase in early inward referrals of higher risk cases, so while the caseload was not significantly reduced, the caseload of patients assessed early and seen more often increased. Currently the hospital administration's buy-in has become very strong—independently looking for ways to bolster QRP, such as identifying and mobilizing funds to procure equipment or support additional training for all nodes of QRP.

Professional culture and trusting relationships:

While the MOUs provide crucial legal and administrative structure to the QRP NOC, there are less tangible but important, aspects of this domain. A professional culture of compassionate service and pragmatism pervades the ranks of both public and private providers. Before the formation of the NOC, this culture was not perceived as shared; each sector reportedly mistrusted the practices and intentions of the other. From the point of view of QMMC and its staff, the private lying-in clinics were an unknown quantity; there was no real communication or familiarity with the midwife entrepreneurs; private midwives did not provide good quality care, their birth centers were not sufficiently clean or properly equipped, and their practices were contributing to excess maternal and neonatal death and morbidity. The private midwives, meanwhile, generally felt unwelcome in the hospital.

Trust is an important element of an enabling environment but is difficult to measure. In the case of QRP, the key transformation in trust required to make the NOC effective was between the midwives and Ob/Gyn staff. Since QRP became an official part of the Ob/Gyn Department, a standard operating procedure (SOP) requires all new Ob/Gyn residents to tour the nodes of the QRP. The facility visits had the effect of encouraging them to participate in QRP actively, including referring low-risk clients out to the lying-in clinics. The visits enable them to quickly understand the implications of the contrast between the clean, two- to four-bed private clinics where care is provided by QRP partners and the hospital ward, where a large proportion of patients do not get their own beds.

The QRP is a health care service delivery network built on trust. The key to the success of QRP highlighted trusting relationships within a positive professional culture. It is mother and child delivery of care that successfully helps solve the common problems of maternal health care in the area. The trust relationship covers defining the boundaries of the relationship; the development of the reliability of providers, facilities and including the education of patients; accountability was well defined; keeping and sharing of values and confidentiality; integrity in the relationship is a must; a non-judgmental stance was taken by everybody; and most of all, generosity in extending understanding, assistance, and help.

Policy and finance:

The Philippines national health insurance program reimburses for both public and private services. However, maternity services at lying-in clinics are reimbursed at a rate higher than that which QMMC and other tertiary hospitals receive. This policy is intended to discourage tertiary care hospitals from accepting too many low-risk pregnancies but was seen as a possible disincentive for the lying-in clinics as well as for the hospital. QRP sets standardized rates for the network so that all facilities are reimbursed at the

same rate for QRP patients. Thus, the location of care is based solely on risk and geography, not on pursuit of fees by the facilities. The QRP standardized rate was lower than what the lying-in clinics normally receive, but they agreed to it based on the expectation that the network structure would result in them enrolling more clients.

Fee splitting is illegal in the Philippines. Distributing clients by clinical and socio-economic risk was proposed as a way both to distribute caseload rationally and to provide more low-risk clients to lying-in clinics. Acceptance of clients regardless of their economic status became easier with the evolution of Universal Health Care, which began incrementally in the Philippines in 2012 and was signed into law in February, 2019. All pregnant women regardless of income are eligible for a benefits package under all four types of social health insurance coverage. QRP has medical social workers on staff at QMMC to assist clients with point-of-care enrollment in PhilHealth (the national health insurance scheme which is now the vehicle for universal health care in the Philippines) and exploration of additional benefits for which clients may be eligible. The participation of social workers in QRP is important, as they both ensure that clients have access to the services they need and that all participating facilities can be reimbursed properly, contributing to sustainability of the network of care.

DOMAIN II: OPERATIONAL STANDARDS

Standard operating procedures (SOPs):

An Operational Manual for QRP was written in 2014. It details all the standards and credentials required to be part of QRP. This includes verifying the accreditation of each node by PhilHealth, plus a variety of other operational standards, licenses, and certificates, many of which need to be renewed regularly. Credentials are required both for the facilities and for the providers working in

them, and range from management standards, such as availability of a manual of operations, to the Department of Health's certification to deliver basic obstetric care, to licenses to practice for each provider. Local municipal government certification for lying-in clinics is included as well; these are renewed regularly, with a "superior seal of excellence" awarded to high-scoring lying-in clinics.

Referral, communication, and transportation:

Each lying-in clinic has at least nominal access to an ambulance. The ambulance from QMMC is not usually dispatched to pick up referrals from the lying-in clinics, as this has the drawback of doubling the turn-around time. Private clinics do have access to the local health centers' ambulances, as do government lying-in clinics. Private midwives are allowed to use the ambulance if they buy the necessary fuel.

Communication around referrals is standardized, where the clinical details of both inward and outward referrals are communicated by telephone before the patient arrives to prepare the receiving providers as well as to confirm that there is space available. Details are also documented on three-ply paper referral forms. QRP has a dedicated phone line, which the on-call OB-GYN at QMMC carries, to contact when there is an obstetric emergency. Routine communication is also standardized; a group SMS is used for messages about QRP meetings and other updates, such as infrastructure work at facilities that may cause delays or reduce the number of available beds.

Midwives and doctors alike noted that the need for emergency response has declined since implementation of the QRP, which encourages them to transfer care of higher risk clients before delivery. Before QRP, there were no outward referrals of low-risk patients, and inward referrals were nearly always emergencies. These emergency referrals frequently came in without

documentation or communication, so average time for transfer before QRP is unknown. Anecdotally, transfer times were often long, because knowing where to go and making the decision to go were more difficult for providers working in isolation. With the QRP Network of Care in place, using SOPs for referrals regarding communication and hand-off, the average transfer time is 45 minutes, which is considered a short turnaround time in Metro Manila.

Monitoring:

Paper-based records are used by QRP and represent a daunting challenge. Organizing and storing the volume of paper is difficult, and information that exists only on paper referral forms often goes missing.

Another challenge for QRP monitoring relates to the commingling of data from QRP with the general data from the QMMC Ob/Gyn practice. Because QMMC is a tertiary care center, it receives referrals from a variety of facilities, most of which are not in the QRP network. A great proportion of this caseload are complex and at-risk obstetric cases. Because of these admission dynamics, the statistics for QMMC reflect high facility rates of death and morbidity. The morbidity and mortality rates within QRP however are far lower, but can only be assessed through targeted analysis. SOPs, including separation of beds for high-risk deliveries, so that high-risk patients are positioned closer to the operating theater at QMMC.

Domain III: Quality, Efficiency and Responsibility

The clinical skill of the QRP network providers has never been a focal issue. Thus, QRP never faced one key challenge that other NOC face: the need for quality improvement initiatives that concentrate on skills building in order to provide consistently good

quality care. In the Philippines, requirements for professional certifications and licenses to practice are well defined and must be renewed regularly. Annual continuing medical education for providers is overseen by their professional organizations, and competency requirements are enforced. Therefore, clinical mentorship was not a priority for QRP, which then focused on other domains to make the targeted improvements in service delivery.

Care coordination and efficiency:

Through the detailed agreements between QMMC and each node of the network, all midwives, doctors, and nurses are made aware of and agree to clear roles and responsibilities within QRP. An important initiative of QRP was the creation of a harmonized antenatal risk scoring tool for use by providers throughout the network of care. The QRP risk scoring tool expands beyond the usual clinical risks to include socio-economic risk factors as well. Use of the tool was emphasized both through stipulation in the MOUs and review of its use at QRP meetings, with the stated objective that scores could be used to distribute cases more evenly throughout QRP. This resulted in increases in early inbound referrals of high-risk pregnancies from the lying-in clinics to QMMC as well in outbound referrals from QMMC for low-risk pregnancies. Additional management initiatives initially applied to QMMC to reduce prolonged patient waiting times and other inefficiencies in the flow of patient care were cascaded to the nodes of QRP to promote network-wide improvements in efficiency of service delivery.

Documentation and use of data:

The QRP managers at QMMC monitor the maternal and neonatal outcomes within the entire network continuously and periodically analyze the data, though data collection specific to QRP and separate from QMMC-wide Ob/Gyn services, has proven to be a challenge. Each month, providers from the network of care come together to review challenging clinical cases and to follow up on all

the referrals conducted in the previous month, identifying cases that should have been referred earlier, for example, due to anemia.

DOMAIN IV: LEARNING AND ADAPTATION

User preferences:

The majority of private lying-in clinics have routine ways to get feedback from women and families who use their services. Whether they use suggestion boxes or satisfaction surveys, the private midwives actively seek input from clients in order to maintain a competitive edge. Changes to services, such as the type of food or pharmacy products available, and rules about family involvement at the birth center, have resulted from this proactive seeking of user preferences.

Evolution:

In early 2019, the Universal Health Care (UHC) Act was signed into law in the Philippines. The new law included eligibility for all citizens to enroll in the national health insurance scheme where previously, enrollment required an application with fee. The UHC Act expanded the existing PhilHealth insurance program, making a host of medical consultations and laboratory tests that previously required out-of-pocket expenditures free. The QRP benefitted automatically from these changes, with more secure compensation for services delivered. The shift to UHC also presented QRP with an opportunity to learn how to work with the new law to secure payment on behalf of people with low income. Services that are not covered under the UHC Act require payment by those with cash income. Through the QRP risk scoring tool, families in need who seek care in the nodes of QRP are identified early and referred to QMMC for assistance.

Resilience:

During the current COVID-19 pandemic, many patients were afraid to come to the hospital for obstetric care. QRP was leveraged to help reduce the number of hospital deliveries dramatically, from 895 deliveries per month to 349. The option to refer women out to a QRP lying-in clinic was very important to meeting patients' needs, controlling infection, and freeing up hospital resources during the COVID-19 response.

Another aspect of resilience promoted by the Network of Care is seen in training. With the decline of deliveries taking place in QMMC during the pandemic, the training of Ob/Gyn residents is at risk, because there are not enough normal deliveries for them to attend. As a solution, residents can rotate through QRP nodes to increase the number of normal deliveries they attend while at the same time gaining exposure to the community lying-in setting and becoming well acquainted with their midwife colleagues.

Improving neonatal care:

As a priority moving forward, QRP seeks to include colleagues working in pediatric care in the network. While rates of neonatal survival improved and perinatal asphyxia decreased after the QRP became operational, those improvements were not statistically significant. Data analysis suggested a lack of targeted attention to the needs of newborns. In response, the QRP is planning for formal recruitment of neonatologists from QMMC into the QRP, and to seed the idea of using the QRP model for pediatrics.

Flexibility and extended reach:

Congestion at QMMC remained an issue even after QRP had been running for more than a year. Women were still coming to QMMC from farther than the initial catchment area of seven kilometers. Thus, additional lying-in clinics were added to the QRP, extending the reach to a ten-kilometer radius. In addition to the literal extension of reach through adding lying-in clinics farther afield, QRP also reached out in another way: by running an annual

health fair. At the fair, providers from throughout the Network of Care, as well as from other complementary service delivery touch points such as cervical cancer screening, hosted information booths to create awareness of the availability of comprehensive services for women and babies. This public-facing display of unity among health care providers had never been done before. It was designed to build clients' trust in QRP, as they could see which lying-in clinics and other services were in QRP and were fully vetted by the specialty hospital. The fair promotes integrated and comprehensive care for expectant women, and hosts a vaccination campaign, giving 300 HPV, tetanus toxoid and Hepatitis B vaccinations for free at each annual fair. Newborn care, newborn screenings and the benefits of breastfeeding are also promoted and provided.

IMPACT, COST, SUSTAINABILITY AND SCALABILITY

Though the impact of health interventions is usually measured through morbidity and mortality, QRP has had a significant impact on the business of the private lying-in clinics. The midwife who owns the Tamayo birth center reported that since becoming a node in QRP, her business has increased so that she sees 10-15 antenatal clients per day, refers between 10 and 20 higher risk clients to QMMC and attends a minimum 18-20 deliveries each month. She said: "Due to increased income for all the deliveries, I am now able to open a new location."

Survival:

The QRP has had a clear impact on reduction of maternal mortality. Between 2011 and 2013, Quezon City reported a maternal mortality rate of 68.71/100,000 live births; QMMC facility data from 2010-2013 showed an average MMR among all admissions of 153.75/100,000. Comparing these figures with the results from QRP underscores the dramatic decline in maternal mortality achieved in the network: in 2014 within the QRP, the rate

was 49% lower than the city rate: 35/100,000, among 9,503 births at QMMC and 4,857 at the lying-in clinics. Neonatal outcomes have also improved, but those improvements have not been statistically significant. Neonatal mortality improved within the QRP from an average of 44.25/1,000 live births in 2010-2013 to 32/1,000 in 2014. Additionally, there was an observed decline in incidence of perinatal asphyxia at QMMC after the launch of the QRP, which anecdotally is attributed to earlier and quicker referrals from lying-in clinics to QMMC in the event of prolonged or otherwise complicated labor.

Cumulative data are hard to obtain; the records are not completely electronic and only a small proportion, about 10%, of deliveries are within the QRP. To collate QRP-specific MMR is difficult as data from the 31 nodes must be collected manually and QMMC data that are specific to QRP separated from hospital-wide figures.

Cost to implement and maintain:

The QRP was implemented as a management initiative of a chief obstetrician without any additional capital investment. Rather than dedication of new funds, it was mainly executed with redirection of available funds. Furthermore, it has minimal ongoing operational costs, having been designed and implemented primarily as a reorganization of existing service delivery. Improvements to the network that required funding, such as the addition of a dedicated ambulance, have been secured through special financing streams available to the QMMC from national-level programs. In 2020, QRP was approved for its own dedicated ambulance with financing from a National Department of Health program, the Gender Awareness Development (GAD) fund, which represents about 5% of the hospital's total budget.

Sustainability:

The QRP has endured in various forms since its start in 2012. It has suffered periods of low fidelity to the model, such as after turnover of key administrative positions at hospital or in the absence of a champion. Recognizing this risk, a roster was formed of Ob/Gyn residents who are tasked with management of QRP on a rotating basis. The QRP, largely through its Operational Manual, has become SOP in the Ob/Gyn department, and became institutionalized in the hospital by formalizing the roles of ancillary workers. Some graduates of residency who now practice elsewhere report that they have shaped their new practices after the QRP model.

Scalability:

While the exact model of QRP has not been replicated as yet, it has been adopted in principle for replication by the Philippine Obstetric and Gynecological Society. It has also been identified as a scalable model for a host of other clinical services delivery, not limited to maternal and neonatal care. The president of the national Ob/Gyn society brought together a group of affiliates of government institutions in 2019 to consider how the model could be applied in their own practices. With the advent of UHC in the Philippines, the Department of Health has adopted a policy of fostering “service delivery networks” to provide integrated and coordinated care for patients in a given catchment area. Currently, the service delivery network model, which essentially mirrors the steps taken to build and maintain the QRP, is the recommended approach for providing tuberculosis treatment and control, sexual and reproductive health, and primary care services.

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COMMENTARY ON QUIRINO HOSPITAL RECOGNIZED PARTNERS (QRP) MODEL

by Pilar Lagman-Dy, MD

The ideals, goals and implementation of the model is admirable. It broke that barrier between a tertiary center and a primary center catering to gravidas. As mentioned, there was that hesitancy of the lying-ins to refer patients, mainly due to economic reasons (for the facility and personal) on why they referred only when there is an extreme need to. Their inability in referring cases in a timely manner may also because they do not know how to go about it, thereby just instructing the patient to “pumunta sa malaking ospital,” leaving the patient to thrive for themselves, with the uncertainty of where and how to go about things. This may have led them insisting to be seen in another lying-in or not seek consultation at all, unless emergency situation sets in. Showing a patient, a set of instructions, assuring them that there is a working system, can make both parties confident and in turn, QMMC gets a timely referral.

While it has been said that improving clinical skills is not a priority in the model, addressing the alleged lack of skills will immensely improve outcome. This may have been dealt with partly by creating a tool and using it to decipher which and how patient will be referred to. Although using tools alone may have that tendency to make a clinician not use his/her clinical acuity and rely solely on the score guide. A study on the applicability of the study may also be done to effectively convince stakeholders to use it.

The continuous improvement in the model is admirable, despite that it has already shown statistically significant improvement. The inclusion of more institutions, increasing the identified radius, acquiring a dedicated vehicle, etc. what may be looked into would be inclusion of another tertiary center, willing to be part of the model. Because of the UHC (where rates will be standardized and

funds allocation will be different), likelihood of including private institutions might be viable although government institutions might be more viable as of this writing. This will address the problems that are still present: congestion, maternal outcomes, neonatal outcomes, etc. and may significantly increase the radius of the network. With this, the model may not only be like a “hub and spoke” but several gears working together, with the tertiary centers acting as the hub in every gear.

Training (residency) wise, with the decline in low-risk cases catered to the tertiary centers (even in government institutions), allowing them to rotate in partner institutions will be beneficial. A call for recognition of this model by the POGS and creating a framework or guidelines for this might even address certain problems especially in private training institutions. This too will expose trainees to public health and maybe encourage them to be more involved.

To streamline communication, a paperless framework will be best where missing papers and burden of organizing will be handled. Having this too will make implementation in other areas be easier as this is one hurdle for this to be effective.

P.S. The fact that the program was commended by Madam Melissa Gates of the Gates Foundation is something very admirable and can make the movers behind this endeavor very proud.

RIZAL MEDICAL CENTER AND EAST RIZAL PARTNERS MODEL

Nelinda Catherine P. Pangilinan, MD

Rizal Medical Center is the only Department of Health (DOH) retained hospital and an end referral facility in Eastern Manila and CALABARZON (Cavite-Laguna-Batangas-Rizal-Quezon) for the following services: surgery, ophthalmology, neuroscience, oncology, and dermatology in 2022. For the maternal services it was partially achieved in 2022, as we need to collaborate the services with the neonatology unit.

The performance governance services for maternal and neonatal sector is a challenge in Eastern Manila for both Rizal province and Pasig City in terms of providing quality health services and the population to serve. For Rizal province, the total population is three million three hundred thirty thousand and one hundred thirty-three (3,330,143), with a female population of one million six hundred five thousand and twenty-five in 2020. The annual population change (2015-2020) is increasing at 3.1%. Likewise, the population of the city of Pasig is six hundred seventeen thousand and three hundred one (617,301) with a population growth rate of 2.31%.

The Service Delivery Network (SDN) was conceptualized to align with the DOH goal of rapidly reducing the maternal neonatal mortality and shall be achieved through effective population – wide provision and use of services as appropriate to the locality being served. We also adopted the strategies aiming to achieve immediate results in the following : 1). every pregnancy is wanted, planned, and supported; 2). Every pregnancy is adequately managed throughout its course; 3). Every delivery is facility-based and managed by skilled birth attendants/ skilled health

professionals and 4). Every mother and newborn pair secures proper post-partum and newborn care, and we included the family planning counselling and services for proper pregnancy spacing and health recovery of the mother. Both Rizal province and Pasig Local Government Unit (LGU) service delivery network utilizes a similar process flow and program to sustain the program, figure 1.

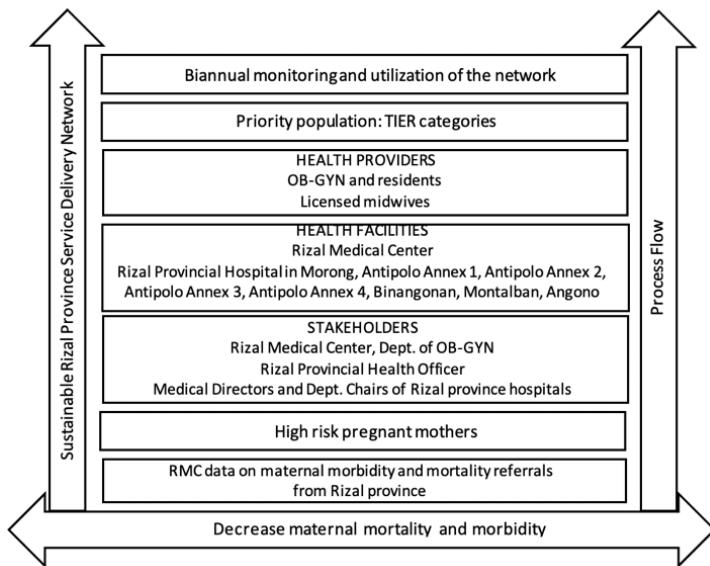


Figure 1. Rizal Medical Center and Rizal Province Service Delivery Network Process Flow

The essential steps in establishing the service delivery network were patterned from Department of Health and maternal, newborn, child health and nutrition (MNCHN) services, figure 2. A standard service package of services should be provided for each life event as well as each facility to deliver and compliment the services available and to provide the basic communication for effective delivery of the services within the network.

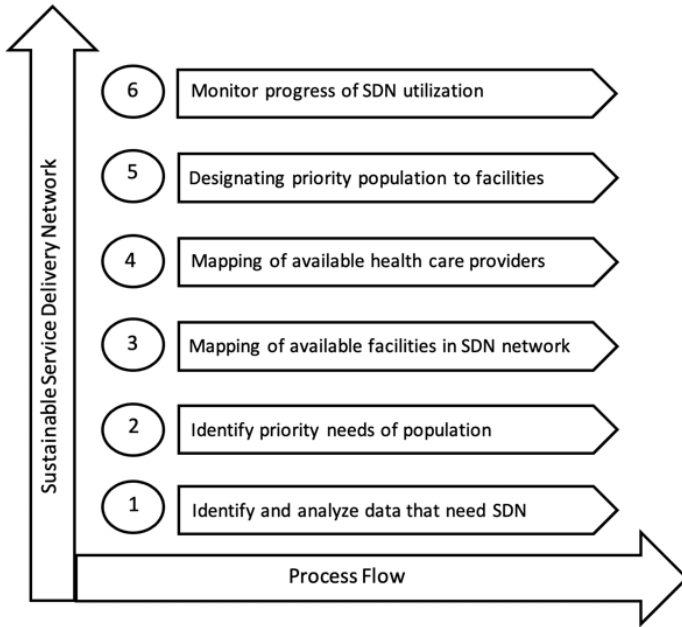


Figure 2. Six Basic Guides in the Establishment of Service Delivery Network

The initial approach in the development of service delivery network in the Department of Obstetrics and Gynecology, Rizal Medical Center with Rizal province and Pasig LGU was identifying and analyzing the departments data on maternal and neonatal morbidity. Majority of the maternal morbidity were cases referred from Rizal province and Pasig City and the top five (5) maternal morbidity cases were the following : preeclampsia/eclampsia, preterm labor, gestational diabetes mellitus-uncontrolled, dystocia and post-partum hemorrhage. For the neonatal morbidity, prematurity and sepsis were the two (2) most common cases of facility referral.

This was followed then by the identification of point person and stakeholders who will be part of the SDN. For Rizal province, the identified point person was the provincial health officer and medical directors of the different local hospitals and with their

assistance the specific stakeholders were identified. The stakeholders were the different department chair of the department of obstetrics and gynecology in the eight facilities affiliated with Rizal province. Likewise for Pasig LGU service delivery network, the point person was the head of the Maternal, Newborn, and Child Health and Nutritional Situation (MNCHN) and the department chair of PCGH.

The third approach was to map out of available health care facilities and provider. In Rizal Province there are eight local health facility namely: Rizal Provincial Hospital in Morong, Antipolo Annex 1, Antipolo Annex 2, Antipolo Annex 3, Antipolo Annex 4, Binangonan, Montalban , Angono. Each department of Obstetrics and Gynecology has trained health provider and an OB-GYN specialist. The OB GYN specialist goes on a 24-hour duty in the wards ,delivery and operating room while another OB GYN specialist mans the emergency room. For Pasig LGU, Pasig City General Hospital (PCGH), a local government unit and a level III DOH accredited facility with an accredited residency training program in OB-GYN and the LGU has 4 birthing centers and 1 super lying in, the CHAMP (Center for Dialysis Healthy Lifestyle Ambulatory Surgery, Maternal Clinic and Newborn care of Pasig City). Each birthing center has an OB-GYN and a trained health provider.

The fourth approach is to identify the capability of each facility in providing health services and manpower complement in providing the maternal and neonatal services to the constituents, table 1. All the eight hospitals of Rizal Province are level 1, but we identified Rizal Provincial Hospital in Morong as second level referral facility in the area and as well as a step-down facility. Likewise for Pasig LGU, PCGH is the identified as a referral center for Tier 1 and 2 cases, table 2.

Rizal provincial Hospitals	Bed capacity	Number of OB-GYN	DOH facility accreditation	OB-GYN capable to do
1. Morong Hospital	Covid beds: 3 Covid probable and suspect : 5	8 OB GYN staffs (1) – Deployment	1	Simple OB cases NSD and CS Preeclampsia
2. Angono Hospital	NSD = 10 beds CS = 7 beds GYNE = 3 beds	6 OB GYN staffs (1) deployment	1	Simple OB cases NSD and CS
3. Casimiro Hospital	30 OB beds	6 OB staffs (2) DOH deployment	1	Simple OB cases NSD and CS
4. Binangonan Hospital	31 OB beds	7 OB staffs (2) DOH deployment	1	Simple OB cases NSD and CS
5. Antipolo Annex 1	18 OB beds	4 OB staffs	1	Simple OB cases NSD and CS
6. Antipolo Annex 2	15 OB beds	8 OB staffs	1	Simple OB cases NSD and CS
7. Antipolo Annex 3	Covid facility	4 OB staffs	1	Simple OB cases NSD and CS

Table 1. Distribution of Rizal Province hospitals based on manpower complement and capability of each facility to provide health services.

Pasig LGU	Bed capacity	Number of OB-GYN	DOH facility accreditation
Pasig City General Hospital	25 OB clean 9 Covid beds	10	Level III
PCCH	9 beds	2	Level 1
CHAMP	8	4	Birthing center
Mangahan lying in	8	3	Birthing center
Napayong lying in	8	3	Birthing center
Santolan lying in	8	3	Birthing center
San Joaquin lying in	8	3	Birthing center

Table 2. Distribution of Pasig LGU health facility based on manpower complement and capability of each facility to provide health services.

The fifth approach is identifying priority population to be included in the service delivery services, how to assign the priority population with a designated health provider. We have classified the cases into three (3) tier categories in triaging patients for referral, this is to prevent overcrowding in the end referral facility. Tier I includes the following cases parity of more than 4, BMI >28., first and second trimester abortion, history of preterm birth <37 weeks, post-partum hemorrhage, prolonged labor or difficult delivery, still birth or neonatal death, cesarean delivery, gynecologic disease like fibroids, ovarian cyst and synechiae, premature rupture of membranes, preterm labor pains, polyhydramnios, oligohydramnios, malpresentation at term, first and second trimester bleeding, mild anemia (hemoglobin < 10 gm%, minor fetal malformation, placenta previa, gestational hypertension, preeclampsia, gestational diabetes-diet controlled, pregestational diabetes-controlled and thyroid problems (controlled or newly diagnosed). Cases categorized as Tier II are as

follows: epilepsy, family history of genetic abnormalities, hypertension – uncontrolled, moderate pulmonary disease, moderate renal disease, cervical insufficiency, threatened early labor, prior fetal abnormality, prior preterm or low birth weight delivery, uterine malformation, RH isoimmunization, hypertensive disorders in pregnancies and placenta accrete spectrum. And for Tier III category, direct referral to the perinatal services of Rizal Medical Center. Cases warrants direct referral to perinatal services includes the following: severe bronchial asthma or asthma in acute exacerbation, complex congenital heart disease , Eisenmenger syndrome, severe valvular heart disease, NYHA class III-IV, mechanical valves, cardiomyopathy, poorly controlled Diabetes Mellitus despite medical and dietary modification, hemoglobinopathies, hematologic disease, chronic hypertension with concomitant renal and cardiac disease, uncontrolled hypertension where delivery is not immediate option (<34 weeks), severe fetal growth restrictions (< 5th percentile for AOG) remote from term, history of intracranial disease, severe or obstructive pulmonary disease, renal disease, immunologic disease, severe systemic disease, severe connective disease, severe polyhydramnios with maternal respiratory compromise/preterm labor < 24 weeks < 20 weeks, early onset oligohydramnios without rupture of membrane < 28 weeks, twin gestation complicated by discordant growth > 20%, twin to twin transfusion syndrome, death of one twin, conjoined twins, acadia twin, pregnancies with anomalies and hydrops fetalis.

And the last strategy is on monitoring the service delivery services within the network and its utilization. For Rizal Province, we conduct a bi-annual zoom meeting and assess the process flow of the referral system who need to be revised and modified. Evaluate patients' feedback of the health system provided including the step-down facility-based management. For Pasig LGU, we conducted a quarterly assessment thru Pasig Maternal, Newborn, and Child Health and Nutritional Situation (MNCHN) which includes

discussion on morbidities and mortalities. All stakeholders are required to attend and is given the chance to express their opinions and comments on how to improve the system.

To be able to sustain the service delivery network, all stakeholders and health providers should be committed to the program and continuously evaluates the process flow in order to achieve the basic goal. The network should be able to provide a strategic partnership to deliver a comprehensive health service and to provide equitable access to quality health care service by improving doctor -to-patient ratio and upgrade hospital services and facilities . One significant impact of the network is the timely referral to a tertiary facility hence appropriate health service is provided. With the technology we have right now, collaboration of health services in helping each other in cases one health facility is in full capacity, even patient’s category is not suited for a tertiary healthcare, the situation is easily addressed and managed. The patient is not left alone in seeking for a health facility where she can be attended. There will be no facility shopping as we address the situation immediately.

COMMENTARY ON RIZAL MEDICAL CENTER AND EAST RIZAL MODEL

by Leilani C. Chavez-Coloma, MD

The effective implementation of the Service Delivery Network (SDN) of the Rizal Medical Center (RMC) with its partner institutions and facilities in the East Rizal area can be attributable to active collaboration with the heads of the Local Government units and facilities as they establish functional links.

The different strategies they made, termed as the step-by-step approaches have helped them in establishing the SDN framework and model that is best and applicable in their scenario and position. The referral mechanisms they implemented with the different affiliate facilities of the Rizal province and Pasig City have helped them in strengthening the proper coordination of patients from facilities deemed offering only primary level of care to a higher and tertiary level of care facilities. In this manner, the gaps in the healthcare system commonly encountered by their patients as they seek access to healthcare and admissions to appropriate health care system are prevented and dealt with accordingly.

This East - Rizal model has aided both the providers and facilities in achieving their main target of lowering Maternal and Neonatal deaths and morbidities by rendering quality health care to all Filipino women and newborns at an affordable cost by integrating province- wide and city- wide health systems maximizing the use of human resources for health.

If we can pattern the process flow in our own facilities like such as that of the East Rizal province, maybe we can realize the systematic approach laid out in the Universal Health Care (UHC) Act/ Law wherein, primary caregivers will be organized to be the first point of contact giving the essential health services at the least

cost possible and later help patients navigate to the next level of care as necessary.

It is with a good Healthcare Provider's Network (HCPN) amongst stakeholders that the net worth of the quality healthcare services is measured through regular assessments and feedback mechanisms of the health outcomes in the particular areas.

Chapter 11
**NAVOTAS CITY HEALTH CARE MODEL:
LOCAL GOVERNMENT UNIT (LGU) MODEL OF REFERRAL**

Christia S. Padolina, MD

INTRODUCTION

Navotas City is a first-class highly urbanized city in National Capital Region (NCR) with a population of about 270,000. It is known as the fishing capital of the Philippines and the third largest in Asia. Roughly, there are 20,000 depressed families, or 8.0 % of the total population. Navotas belongs to the 3rd district of NCR called CAMANAVA (Caloocan, Malabon, Navotas and Valenzuela).

The city is composed of 18 barangays. There are 11 health centers, one public lying in, one Wellness center for the Navotas Health Department, and one primary hospital, the Navotas City Hospital. The 50-bed capacity primary-level hospital is departmentalized and manned by hospitalists who are graduates of residency training program. It commenced its operations on June 16, 2015. There are eighteen (18) private clinics, eight (8) diagnostic facilities, and nine (9) lying ins.

The Department of Obstetrics and Gynecology is the busiest of all the clinical departments. However, the pre-pandemic annual number of admissions was reduced by 45% during the pandemic.

HISTORICAL PERSPECTIVE

The UP-PGH College of Public Health was instrumental in the conceptualization and planning of the hospital. It was important to provide a responsive health system based on equitable health

financing, IT enabled and aligned with the provisions of integrated public health (UHC). To maximize the utilization of resources and to avoid overcrowding in the hospital, a gatekeeping mechanism was implemented. The health centers function as its outpatient department. The rural health physicians manning the health centers will triage and refer patients to the specialists in the Navotas City hospital.

The initiative is to have an integrated healthcare approach using the health centers as the OPD and the hospital services for specialized care. Healthcare should be comprehensive and inclusive.

Way back in 1994 when I was still the medical director of Ospital ng Maynila Medical Center and head of the Health Cluster of Manila, we developed and published 'The Manila Health Cluster Interagency Referral System' under the auspices of the European Union. Then and now, we are bound with the same guiding principles of ensuring the best interest of the patient founded on mutual respect and collegiality of both institutions. At that time challenges included: manual referral using landlines, documentation and monitoring was incomplete and accomplished with much difficulty because of limited use to the internet and IT. Likewise there were no structured meetings between the intrazonal and internal referrals. Documentation, monitoring, and evaluation were lacking in the referral system.

Fast forward in the future, it was envisioned that the networking protocols will be undertaken on an electronic platform. At that time all the health centers in the city of Navotas were using the Community Health Information Tracking System (CHITS) an open-source medical record developed by UP Tele health System. Birthing pains were encountered though because of interoperability concerns. The implementation of the Data privacy

law also created some hitches in the electronic implementation of the referral system.

OBJECTIVES

The purpose of this article is to present the LGU model of SDN. It is our hope that in showcasing the city’s policy on effective management of healthcare technology, and the development of a referral system that would pave way for the integration of healthcare making it more responsive to the needs of the community en route to the full implementation of the UHC.

Specific objectives include the following:

- To showcase the integrated referral system in Navotas City pre-pandemic phase.
- To provide learnings/enhancement of health systems responsiveness made during the pandemic.
- To discuss the plans for an IT-enabled, holistic, community-linked secondary healthcare.

CREATION OF AN ENABLING ENVIRONMENT FOR SDN

As initially envisioned by the city’s administrators and as guided by the UP College of Public Health, the integration of the functions of the Navotas City Hospital and the Navotas Health Department were underway even during the planning stage.

It is also to our advantage that in the organizational setup the city health department and the medical director of the hospital is one and the same. A memorandum was issued to operationalize the referral system.

The standard operating procedures (SOP) were drafted (Figure 1). The Community was also educated that first contact should be in the health centers. For pregnant mothers, prenatal visits were done in the health centers but once evaluated as high risk or once patients reach 32 weeks and above, they are referred to the Navotas City Hospital.

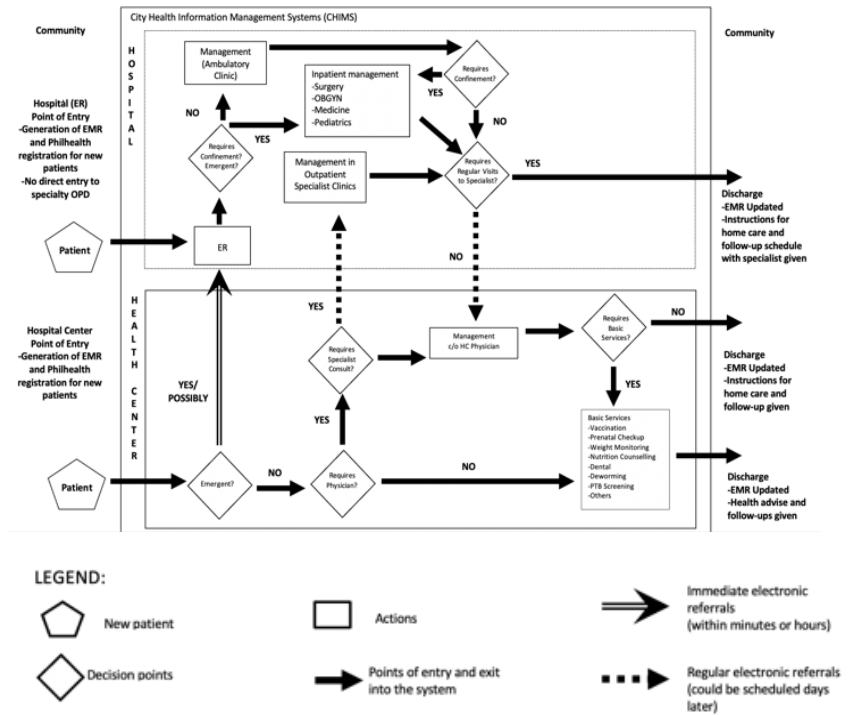


Figure 1. City Health Information Management Systems (CHIMS): Standard Operating Procedure

SDN WITH THE PRIVATE LYING INS

The private lying-ins were included in the SDN by virtue of City ordinance No. 2016-09. This ordinance operationally set up the SDN of the Navotas Health Department and the private lying ins specifically for Maternal and Child Health and Family Planning

services. The evaluation and monitoring of this system are still ongoing until the present with quarterly meetings.

In 2018, the lone public lying in was relocated in Tanza, District 2 Navotas City, as the Navch was fully catering to district 1 of the city. During the pandemic, the RX Box from DOTC was utilized so that the fetal tracing can be sent to the OBGYNs on duty at navch. In this way it enhanced the early referral of high-risk patients .

INSTITUTE OF SOLIDARITY OF ASIA (ISA) AND HEALTH CARE PROVIDER NETWORKING (HCPN)

ISA is a non-profit organization committed to transforming the public sector. It works closely with national government agencies, local government units and hospitals to spur growth in the country. In 2017, the NavCh started our Performance Governance System (PGS) journey . We believe in building a shared vision of a Dream Philippines, where every government institution delivers, and every citizen participates and prospers. The PGS is a framework for transformation that empowers institutions to deliver breakthrough results. Our strategic position - Position Navotas City Hospital as the pioneer in an IT-enable, holistic, community-linked secondary healthcare in CAMANAVA.

We successfully hurdled the initiation stage in 2017 and in 2019, the compliance stage of good governance. We got sidetracked during the pandemic but were making strides this 2022 for the full institutionalization stage (Figure 2).



Vision by 2022, NCH shall be the preferred hospital of every Navoteño rendering quality and holistic care.

**STRATEGY MAP 2022
Navotas City Hospital**

Impact	Better health outcomes in Navotas City	Responsive health systems	Financial risk protection
Strategic Position	Position Navotas City Hospital as the pioneer in an IT-enabled, holistic, community-linked secondary healthcare in CAMANAVA		
Core Process	Provide a holistic multi-disciplinary management approach to specific diseases	Create a culture of research to improve the quality of patient care	Engage patients & communities in lifestyle modification & health promotion programs in partnership with the RHUs
Support Process	Ensure adequate and competent staff to meet expansion requirements	Create a culture of accountability & commitment	Develop e-health systems to enhance efficiency of services and establish community linkages
	Meet infrastructure requirements for a secondary hospital to address demand for health services	Pursue effective resource mobilization and proper fund management	
MISSION: To provide excellent general healthcare to patients and their families by a highly, dynamic, and professional workforce through a financially equitable system.		CORE VALUES Patient Advocacy Excellence Integrity Integrity Trustworthiness	

Figure 2. Navotas City Hospital Strategy Map 2022

PRE-PANDEMIC: GUIDING PRINCIPLES, SOPs, FLOW CHARTS, REFERRAL COMMUNICATION AND TRANSPORTATION

Crucial to the implementation of the HCPN is the setting up of the City Health Information Management System (HIMS). This is vital in ensuring smooth hostile operations as well as effective integration of the referral from the health centers and referral to higher level of care. The integrated local health system used the Bizbox. The investment of HIMS aims to capacitate each facility of having EMRs and creating a database for the community.

There is a Memorandum of Agreement between the NavCh and Tondo Medical Center as our referral center. In the early stages of the networking, we had monthly reconciliation meetings of our referrals. During the pandemic this was accomplished virtually. On these three (3) tiers of referral guiding principles and policies were drafted including flow charts. (Figure 3).

SDN ONLINE REFERRAL SYSTEM

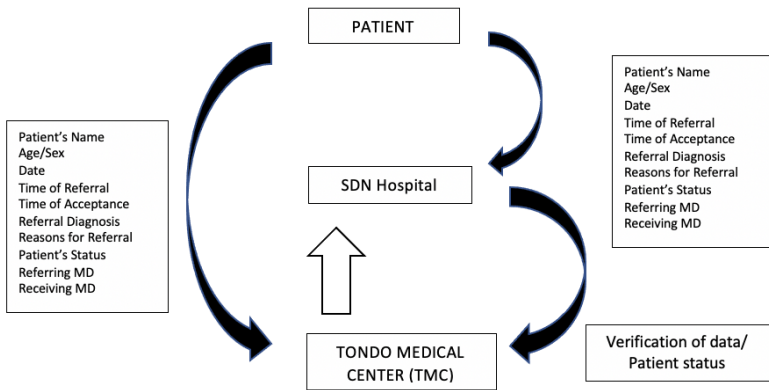


Figure 3. Learning And Adaptation Modification Best Practices

PANDEMIC: COORDINATION, SAFETY AND TELEMEDICINE (NAVOGABAY)

The pandemic in a way accelerated the SDN. Through the NavoGabay, a call center type of consultation was built. The contact tracers were capacitated to answer COVID questions from the community. They were the conduit to the healthcare workers in home isolation and transfers to TTMF or CIF. Ambulance services were facilitated through this set up, easing up referrals from primary to tertiary and apex hospitals initially on COVID response and later, on other health care needs. It is as if there is a One Hospital Command within the city .

Crucial to the implementation of the SDN is the participation of the community and the Barangay. Risk communication strategies were built . Every Saturday the mayor and the CHO held a two-hour FB live-streaming situationer report on Covid and health concern especially on vaccination. Everyday there is a ZOOM meeting with

all the Barangay captains, City Hall department heads, contact tracers etc. to enhance the covid response and referral system. This was presided by the mayor which started when the GCQ was declared until early 2022 when the Omicron surge waned.

The SDN was carried out on a platform of Patient Safety. Daily morning huddles were conducted to enhance the referral and coordination. Communication among the different stakeholders was an important foundation in its implementation .

SUSTAINABILITY AND SCALABILITY

Now that we were slowly transitioning back to the New Normal, recalibration of policies and referrals are once more being revisited to make them more adaptable . Currently we utilized both the physical consultation and the tele consults in all tiers of healthcare.

It is important that the healthcare system remain dynamic and adjust to the call of times and covid status. We still involve the local disaster risk management office to help us in the transport of our patients to transfer to other healthcare system or for transfer to isolation facilities. To augment the limited capacity of the hospital, once a negative covid status is confirmed for parturient we transfer them to TTMFs to make room for other admissions.

TRANSITIONING TO IMPLEMENTATION OF UHC

For 2022, both the health centers and NavCH are being accredited for the 'Konsulta' package of the PHIC. This is a step towards full implementation of UHC for the community of Navotas. This close engagement with the public will definitely be the realization of our PGS strategic positioning in making NavCH an IT-enabled, holistic, community linked secondary healthcare in CAMANAVA.

COMMENTARY ON THE NAVOTAS CITY SDN MODEL

by Alejandro R. San Pedro, MD

Skilled health professionals providing care during labor and childbirth, the provision of emergency obstetric care when complications happen and a functioning referral system within the Service Delivery Network (SDN) are among the effective interventions to lessen preventable maternal death and morbidity. The Navotas model of the Service Delivery Network, as described in the article, includes an integrated system that starts from the community with the City Health Centers (CHC) providing basic care and acting as a gatekeeper for referral to higher levels of care where specialist services are available. While the model encompasses the different medical specialties and services, this commentary shall focus on the maternal care aspect in their SDN.

With Primary Health Care as a goal of Universal Health Care (UHC), health promotion, preventive, curative, and rehabilitative services with equitable and efficient health services will be on the center stage. Together with doctors, nurses and midwives providing basic health services, the barangay health workers (BHW) work with the CHC staff and are an integral link of the health system with the community. As mentioned in the article, the local government executives, and grassroots leaders like the Barangay captains were active and supportive in their Covid-19 pandemic response. One can imagine the benefit of obtaining the same support of these leaders for health care/safe motherhood programs. With the organizational set-up of the Navotas City Health Department and the Navotas City Hospital (NavCH) being synchronous, operationalization of the referral system between the two institutions helped facilitate the coordinated transfer of patients. An example is the regular antenatal care of a patient at the CHCs; but when the patient is assessed as high-risk or once she reaches 32 weeks age of gestation, a shift of care to the NavCH is done. This scheme avoids overcrowding the public hospitals and allows care to be provided at the health center level too. To lessen

the delay in reaching care for patients with complications, they have coordination with the local disaster and risk management office, to expedite transport. Continuity of care is likewise assured, even after treatment in the hospital, because the CHC staff can provide the follow-up services in the community once the patient has been discharged from confinement.

The three-tier model of care from the CHCs, the NavCH and the tertiary referral facility, Tondo Medical Center, with their guidelines and patient safety protocols follows the ideal model of a functioning referral system. Regular meetings, monitoring and evaluation and feedback should continue as best practices can be learned and shared. In addition, the practice of up-referral or down-referral can lessen the patient load for both health facilities while still providing the patients' specific maternity/medical needs. This practice has gain acceptance in other SDN areas. An example of their application of the internet technology in pregnancy care is sending of the fetal Cardiotocography tracing to the Obstetricians on duty at the NavCH for interpretation and appropriate action. Telemedicine for patient consultation is being practiced as it gained wide use during the Covid-19 pandemic.

Hopefully, the City Health Management Information System (HIMS) database for the community with be completed and result in a coordinated referral practice for the timely transfer of patients.

Navotas has only one public Lying-in which is unable to provide care to all the normal childbirths in the city. However, the city has nine privately owned birthing homes that can help fill the gap. A city ordinance for an operational set-up of the SDN of the Navotas Health Department and the private lying-in was passed by the Local Government Unit (LGU). Its focus is on maternal, child health and family planning services which are also among the tasks of the birthing homes. It will be useful to learn the outcome of the monitoring and evaluation of this set-up, how they fit into the local health system and what role and functions, if any, the midwife-led lying-in has to offer or has provided, in their facility. Likewise, because the lying-ins have their back-up physicians, being a

regulatory requirement, it will be worthwhile to know the role the private practicing obstetricians, whom we want to engage, in this SDN model.

Because establishing the SDN requires financial investment for human resources in health, infrastructure, and transport among others, this remains a challenge for LGUs with limited resources. In April 2019, the Supreme Court affirmed its decision (Mandanas case) that increased the Internal Revenue Allotment (now called National Revenue Allotment) of the LGUs. This will provide LGUs with added funds for locally devolved functions that include health care. This is an opportunity for non-government organizations and supporters to lobby with local leaders and the health boards to participate in strengthening the SDNs.

In summary, Navotas created an SDN with a strong community link through its eleven health centers and its local 50-bed hospital and preparing the city for universal health care. A strong gatekeeper set-up of frontline CHCs filter patients who will just need primary care from those requiring hospital or specialist care thus avoiding overwhelming hospital services. The three-tier referral system is in place and is functional. The support of local leaders in the whole system approach for SDN should be maintained for sustainability. Community support is vital too for they are the users of these health services. The numerous recognitions given by agencies like the Philippine Health Insurance Corporation for Outstanding Health Services and awards for the city's other public health programs will provide added motivation to the local leaders, their health care workers, and other stakeholders to continue providing accessible, affordable, high quality and responsive health care services to its citizens.

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Chapter 12

EASTERN SAMAR SERVICE DELIVERY NETWORK MODEL

Nelinda Catherine P. Pangilinan, MD

The Eastern Samar service delivery network is an example of a private facility-initiated collaboration with local government units. Immaculate Conception Clinic and Hospital (ICCH) is a family-owned corporation which started its operation in 1979 and is located in Guiuan Eastern Samar.

The municipality of Guiuan is located at the southernmost tip of Samar Island. It is bounded on the north by the municipality of Mercedes, on the east by the Pacific Ocean, on the south by the Surigao Strait, and on the west by the Leyte Gulf (Figure 1).

Guiuan (pronounced as ghee-wan) is a second-class municipality in the province of Eastern Samar, Philippines with a population of 52,991 people, composed of sixty (60) barangays and the only town in the province with the largest number of island barangays.

Guiuan has three (3) level 1 private hospitals and one district hospital operated under the governor's office. Nearby towns are classified as fifth class municipalities and do not have their own local health facility hence most patients go to Guiuan for medical consultations and or admissions. And in cases, a municipality does have a local health facility, mostly infirmary level and even the basic services are incomplete. Therefore, services are limited to general medical services, obstetrics, gynecologic and general surgeries are usually referred to Guiuan Samar.

The ICCH initiated service delivery network was conceptualized primarily to decrease maternal morbidity, expand health services deliverables, and reach out to under-served barangays. ICCH

strength in terms of health services is in obstetrics and gynecology. The facility does have a complete team of obstetrician gynecologist, pediatrician, and anesthesiologist. But the service delivery network is not exclusive to maternal and neonatal services but also medical and surgical services.

As we reviewed our data in the past five years, there is a dramatic increase in teenage pregnancies and pregnancies complicated with preeclampsia and gestational diabetes mellitus. Pregnant patients with no prenatal check-ups and missed opportunities of family planning services as supplies were not always available. Expanding the review of data on medical cases, diabetes mellitus and hypertension were the top cases of referrals and admissions. For pediatric cases, there is no significant change in cases referred and or admitted except when there is a spike of dengue cases.

The service delivery network in Eastern Samar was patterned from Rizal Medical Center (RMC) service delivery experiences with Rizal Province and Pasig LGU. RMC being the model network, the SDN process flow was modified, suitable and workable to ICCH – Eastern Samar SDN. A much different approach as the service network is privately initiated and cannot provide a free health service like RMC but promised to have quality, affordable health services.

The service delivery network of ICCH and Eastern Samar municipalities was intended to protect the health of their constituents and to assure them of access to services necessary to their health care needs which includes the following:

- a. Collaboration between the local government unit and ICCH on family planning activities.
- b. Private ambulance service by ICCH for your constituents in life threatening conditions.

- c. Referral to ICCH (as referral facility) of constituents for their health care needs such as, medical, pediatric, maternity care and surgical cases.
- d. Joint bloodletting activity of the local government unit and ICCH once a year.

This health service agreement between ICCH and the local government unit for the municipalities of Mercedes, Salcedo, McArthur and Quinapondan went into a process by having it approved thru the local council. Other municipalities, such as Balangiga, Giporlos and Lawaan were temporarily put on hold because of the ongoing electoral process.

For this private initiated service delivery network to be sustainable and achievable, health services funding is the most common problem as PhilHealth alone will not be enough to cover the medical and service expenditure. Hence, we collaborated with the governor's office and proposed the service delivery network among the local government units specially on the problems identified and health care services that the district hospital cannot provide. The Malasakit Center and the Department of Social Welfare and Development (DSWD) funding was extended to the privately initiated service delivery network and has allocated funds for prescription of medicines, medicine supplies/devices and diagnostic tests and other hospital care services to support indigent, vulnerable and disadvantaged patients as outpatient and in-patient basis. The agreement is valid for one (1) year commencing from the execution of the agreement and renewable every year at the mutual consent of ICCH and concerned LGU as well as governor's office. It was such a big relief on our end with the approval of socialized funding, as we can now move on in the implementation of the service delivery network.

As the health problems and stakeholders were identified, mapping out of available health facilities and health providers

within the network was a challenge in the initial phase. The district and community health facilities have limited medical health providers. One internal medicine graduate mans the community infirmary facility while the district hospital has 4 medical providers and no obstetrician. The district hospital benefitted from the Post Residency Deployment Program (PRDP) of DOH. A team of OB-GYN, internal medicine, surgery, and anesthesia from the Eastern Visayas Regional Medical Center (EVRMC) were assigned to Felipe Abrigo Memorial Hospital (FAMH) , the district hospital in Guiuan Samar which provided additional manpower and health services to the locality. Local health units with the municipal health officer, nurses and midwives were the frontliners who made the initial assessment of the patient's health status. Stakeholders which include the municipal mayors, municipal health officers, ICCH and FAMH medical director and community hospital medical head collaborates with the referral system thru Viber messages and/or direct calls to facilitate timely and coordinated transfer or referral of cases.

To address the missed opportunities in the delivery of family planning services, the supply of family planning commodities was coordinated with Rizal Medical Center and Valenzuela Medical Center and was brought to Eastern Samar. Family planning commodities such as combined oral contraceptive pills, DMPA and intrauterine devices(IUDs) were distributed to the local health units. Part of the services agreed in the SDN is to teach the midwives and nurses on how to perform Implanon insertion and removal which is a work in progress activity yet.

The problem of transporting patients from home to facility and from facility to intermediate and tertiary care and in cases of step-down facility-based treatment were addressed as both the private and municipal ambulance collaborate well in the transfer of patients.

Another identified problem, common cause of morbidity and or reasons for unnecessary transfer to tertiary facilities is the lack of blood component for blood transfusion, hence we included the bloodletting drive in the service delivery network. The collaborative bloodletting drive which we do every quarter in the different municipalities is to augment supplies and facilitate accessibility of blood products and support the DOH bloodletting drive. The target is to be able to produce 30 bags of blood products in each bloodletting drive activity and is being donated to Red Cross and or to the tertiary end referral center in Tacloban. This will facilitate easier access to blood for the service delivery network group.

The last step in the service delivery network is the monitoring and sustainability of the program. So far, we have not yet reached this stage , as the national election is in process, we refrain from conducting SDN activities beyond the agreed services as they might be used in the political sorties of candidates involved in the project. The monitoring aspect is anticipated to be challenging one and the proposal is to conduct a municipal feedback, evaluation, and assessment of all the agreed services within the SDN bi-annually via zoom in each municipality. So far, this process was agreed verbally and is a work in progress in some municipalities.

This is the first service delivery network between a private facility and with the different local government units belonging to fifth class municipalities. The goals were well defined and the stakeholders were coming from different political affiliations, but all agreed to prioritize the health services of the locality by providing quality affordable health care.

COMMENTARY ON EASTERN SAMAR SDN MODEL

By Carolina Paula C. Martin, MD

The existence of an interlocking relationship between public service and service delivery has always been perceived to become operational through government machinery so that services are provided at low cost or no cost at all. Healthcare service delivery is among them as a very basic need of every citizen.

The provision of healthcare initiated at the government level may be free to the citizens but actually comes with more cost that most of the time quality and sustainability is compromised when funds allocated for the budget are consumed ahead of time. This is the reason why private partnership most often becomes a solution to reduce the cost-of-service delivery.

This private facility-initiated collaboration with its local government unit is an amazing innovation in healthcare service delivery that we as physicians in the private sector must look into as a way to change our perspective that health care service delivery is possible only at the level of public hospitals. Immaculate Conception Clinic and Hospital (ICCH) as a private and family-owned corporation collaborating with the LGU of Guiuan, Eastern Samar to make quality healthcare delivery readily accessible to patients at low or no cost at all through networking with other agencies with capabilities is truly a concept of BAYANIHAN where the spirit of civic unity and cooperative endeavor exists towards preservation of life.

This is one living proof that private institutions can initiate and be instrumental in ensuring that access to services that will promote maternal and newborn care are affordable and readily available. This innovation at the private level of service delivery being more direct and accountable will definitely help change the health seeking behaviors of patients.

SERVICE DELIVERY NETWORK OR HEALTHCARE PROVIDER NETWORK SYSTEM ON CHILDBIRTH IN SANTIAGO CITY, ISABELA.

Melchor C. Dela Cruz, Jr., MD

The Service Delivery Network (SDN) or the Healthcare Provider Network (HCPN) system on childbirth is based on the premise that low risk pregnancies are managed in primary health facilities while high risk pregnancies are referred to higher level facilities.

In the province of Isabela, Southern Isabela Medical Center (SIMC) is the apex hospital serving as a referral hospital from lower-level health facilities in the provinces of Isabela, Nueva Vizcaya, Quirino and Northern Ifugao, in addition to the city of Santiago and other neighboring municipalities of Isabela itself. Its catchment area is composed of 23 municipalities and 2 cities with a total of 1,124, 344 population (as per 2015 Philippine Statistics Authority). There are 4 district hospitals and a provincial hospital but due to lack of necessary equipment and supplies as well as medical specialists in Obstetrics and Pediatrics, referrals to a higher-level facility are sent to SIMC which is a level three Department of Health (DOH)-retained hospital strategically located in the center of region 2.

The process of SDN or HCPN system on childbirth in Isabela generally starts with initial prenatal consultation in a health facility, a primary or a higher-level facility, where the pregnant patient is seen and examined and classified as low risk or high risk. Detailed history is initially taken, thorough physical examination is done, and basic laboratory and other indicated ancillary procedures are requested and carried out. Thereafter the patient is advised to have the continuation of prenatal care in the appropriate health facility until term gestation. Low risk pregnancies are managed in

primary health facilities while high risk pregnancies are referred and managed in the apex hospital. SIMC is the apex hospital and the primary health facilities are the rural health units (BEmONC facilities), private birthing homes and maternity lying-in clinics in central and southeastern Isabela, Quirino province, Northern part of Nueva Vizcaya and Ifugao.

As the apex hospital, SIMC has established a Memorandum of Agreement (MOA) with the primary health facilities within the catchment areas. The MOA in which the primary health facility is the first party and SIMC is the second party, contains the functions and responsibilities of each party, considering the definition of low and high-risk pregnancies. In other words, SIMC is the base hospital of such primary health facilities with the departments of Obstetrics-Gynecology and Pediatrics providing the partner Obstetrician and Pediatrician specialists, as required by Philhealth.

The Department of Obstetrics-Gynecology in cooperation with the Department of Family Medicine and the Public Health Unit of SIMC, is spearheading the program. A meeting with the government and private birthing home managers has been initially held to discuss the details of the process, particularly the procedure in referring patients for admission.

A two-way referral system is organized to ensure a complete quality management care system. A referral from a primary health facility requires a referral form to be filled up in duplicate indicating the general data, pertinent history and physical examination findings, clinical impression and the reason for referral which is submitted to the referred institution. The other half of the form is properly filled up by the referred institution and sent back later to the referring institution. Prior to bringing the patient who is accompanied by a nurse or midwife, a call is made, or a message is sent to SIMC to make sure that the referral is accepted. The resident on duty in Obstetrics in SIMC receives the referral and the

patient is managed accordingly. A report is made on the management undertaken indicating the outcome for both the mother and the baby. Perinatal mortality and morbidity are noted and recorded, and a report is sent back to the referring facility. A quarterly maternal and perinatal mortality and morbidity conference is conducted at SIMC, and the health workers involved are invited to attend.

On the other hand, patients seeking admission at SIMC are seen and evaluated in the Emergency Room. Those assessed to have a low-risk pregnancy are referred to the most accessible primary birthing facilities with patient’s consent. High-risk pregnancies are managed in SIMC accordingly.

This is the SDN or HCPN system on childbirth in Santiago City, Isabela while the provincial and district hospitals in Isabela are in the process of upgrading their services. Meanwhile, SIMC is establishing the incorporation of telemedicine in the system.

COMMENTARY ON SANTIAGO CITY, ISABELA SDN MODEL

By Marivic C. Agulto-Mercadal, MD

The Service Delivery Network for childbirth in Santiago City, Isabela represents a functional and organized system of referral network ensuring proper triaging of obstetric patients into low- and high-risk groups and guaranteeing access to appropriate and comprehensive healthcare services and facilities from prenatal care to delivery.

The implementation of the Universal Health Care (UHC) Act in the country as a deliberate and focused approach towards health reform, provides financial risk protection to the poor, especially to the most vulnerable population groups: the mothers, newborn, and children. Enrollment to the National Health Insurance Program, improvement of equitable access to quality healthcare facilities, and attainment of health-related Millennium Development Goals (MDG) like reducing maternal and child mortality are three strategic drives in the realization of UHC. A sustainable and functional service delivery network like that in Santiago City, Isabela is vital in improving healthcare access in the larger population, with decentralization of health services to the local government units (LGUs).

The previous chapters 5 and 6 of this Primer discussed the recommended steps in the successful implementation of UHC-POGS framework and operationalization of a referral mechanism in the SDN. Commendable in the Santiago City, Isabela's SDN is the well-structured operative mechanism, categorizing and matching patients with the appropriate facilities, after having mapped and assessed existing institution and services in the province. Referral guidelines and protocols are in place with a two-way referral system to make sure that patients are accommodated and managed accordingly in the referral center.

Monitoring and evaluation of the implementation of their SDN is also assured in their framework, contributing to the sustainability and quality assurance of their service delivery network. Perinatal morbidity and mortality are reported and discussed at Southern Isabela Medical Center conferences which serves as the check and balance in the value of care provided in their institution and organizational framework. Also, true to staying updated with the changing times especially in the practice of medicine, embracing telemedicine and incorporating it in their framework will potentially increase the healthcare coverage of their service delivery network by making it possible for healthcare professionals to evaluate, diagnose and even treat patients in remote areas, at any time.

Truly, implementing this kind of sustainable and functional service delivery network for childbirth in every province in the country will bridge people, especially mothers, children, and newborns, to attain better health care and consequently decrease maternal and neonatal morbidity and mortality. A health that is for all!

Chapter 14
**VICENTE SOTTO MEMORIAL MEDICAL CENTER (VSMMC)
MODEL**

Helen V. Madamba, MD

In 2015, the overwhelming problem was the high maternal and perinatal mortality. The VSMMC Department of Obstetrics and Gynecology, together with the Department of Pediatrics jointly organized monthly Perinatal Statistics since 2015 to identify areas for improvement. The aim was to identify the different causes of mortalities and morbidities, assess as to whether these causes were preventable or non-preventable, to improve the coordination between the stakeholders within VSMMC so as to have better patient outcomes. It soon became apparent, however, that being an apex hospital, VSMMC needed to coordinate with hospitals within the service delivery network. Like other government hospitals, VSMMC was inundated with patients - as many as 10 patients sharing one bed. Most of the patients were referrals from district and provincial hospitals from all over Cebu Province.

An assessment of referrals revealed that the main reason for patient transfer was the unavailability of expert assessment (obstetrician, anesthesiologist, pediatrician), and services required were beyond the capability of the referring institution (no operating rooms, medical equipment and maternal and/or neonatal intensive care units). The department's annual statistics show that there were 16,375 obstetric admissions in 2017. The turnaround time for cesarean section was as long as 2 days with an average of 12 hours. The long turnaround time was often identified as one of the key factors which contributed to poor maternal and neonatal outcomes. Up to 40% of patient admissions in 2015 to 2017 were low risk obstetric admissions, which could have been managed adequately in lying-in clinics, birthing homes, and primary hospitals.

In order to spearhead regular meetings of the chiefs of hospitals within the service delivery network to identify the problems that can be solved, the VSMC Department of Obstetrics and Gynecology set well in advance the schedule for the QUARTERLY MATERNAL-PERINATAL STATISTICS (QMPS), which initially started as a whole day event at a hotel function room. Later on, the meeting was scheduled as three half-day virtual conferences during the COVID19 pandemic. The main goal for the Maternal-Perinatal Statistics is to assess and develop strategies to strengthen the referral system in order to reduce maternal and perinatal mortality. Initially, the goals were simple, such as: the provision of the initial dose of antenatal corticosteroid for patients with preterm labor, and magnesium sulfate for patients with preeclampsia or eclampsia, prior to transfer to VSMC, until it ballooned to all sorts of problems with corresponding suggested solutions (Figure 1). The QMPS began as a platform where healthcare workers from different hospitals, lying in clinics and birthing centers, could express issues and concerns and expect acceptable solutions.

With the promotion of the Service Delivery Network (SDN) by the Department of Health Central Visayas Center for Health Development (DOH CVCHD), the aim was to ensure that the right patient is at the right facility at the right time, which means that patients admitted to the apex tertiary government hospital are (1) patients needing emergency care; (2) patients referred from other hospitals and (3) patients with high-risk conditions like preterm pregnancies <35 weeks age of gestation, and (4) those patients needing intensive care. This is made possible through the electronic referral system developed as a real-time inter-hospital communication platform. In recent years, the buy-in for hospitals to use this system was the refusal of VSMC to accept walk-in patients, and those not documented through the electronic referral system.

PROBLEM	SOLUTION
Difficult to call to VSMMC because phone lines are always busy	Develop a real-time online platform for electronic referral system
Long turnaround time for CS due to the long times of patients for CS	Empower peripheral hospitals to perform CS for uncomplicated cases, schedule patients for elective CS improved functionality of peripheral hospital
40% of patient admissions at VSMMC are low risk pregnancies	Clarified the CVHRS that high risk patients be referred to VSMMC, while other hospitals admit low risk pregnancies and uncomplicated elective CS cases; Top 10 referring institutions were presented during every meeting; developed draft memorandum of agreement on two-way referral
Referring healthcare providers undergo “revalida” by residents on duty at VSMMC	Clarified that the residents in VSMMC also need to know the patient’s history and previous intervention provided, but that they should learn how to communicate properly
Need to improve quality of referrals	Created technical working group that meets during the Quarterly Maternal-Perinatal Statistics
Healthcare workers in the RHUs, lying in clinics and even in Level I and Level II hospitals lack confidence in managing pregnant patients and need updates on BEmONC	Index cases of obstetric violence were presented, and midwives invited to attend to correct improper practices; postgraduate courses were provided for continuing professional education of doctors, nurses, and midwives
High nosocomial infection rates in hospitals due to high patient density	Hospitals coordinated a schedule for fumigation and general cleaning of OB complex and NICU areas to reduce nosocomial infections while ensuring continuous patient access to emergency obstetric and neonatal care
High maternal and perinatal mortality in Cebu, most seen in VSMMC	Annual Maternal Perinatal Statistics to assess and develop strategies to strengthen the referral systems in order to reduce maternal and perinatal deaths in Cebu, from 132 maternal mortalities in 2015 to 33 maternal mortalities in 2021
Need to ensure access for pregnant patients during the Covid-19 pandemic	Sharing of Covid-19 admission algorithms; exchange of infection control practices; daily real-time dashboard of statistics on bed vacancies and patient load

Figure 1. Identified Problems and Proposed Solutions during the Quarterly Maternal Perinatal Statistics from 2018 to 2022

To facilitate this, the technical working group was created, members of which committed to meet quarterly to review statistics, accomplishment reports and selected patient cases to recommend policies and guidelines for maternal healthcare service delivery. The functionality of peripheral hospitals was improved with funding from the DOH Health Facility Development Bureau. Continuity of these conferences to maintain transparency and accountability for hospital mandates will ensure implementation of universal healthcare within the Central Visayas healthcare provider network.

The COVID-19 pandemic reflected the weakness in our healthcare system, but it also revealed our strengths. Under the supervision of the DOH CVCHRD, the QMPS is actively and consistently participated by ten (10) government hospitals in the island of Cebu. There are four (4) DOH-mandated hospitals, namely the Vicente Sotto Memorial Medical Center (VSMMC), Eversley Childs Sanitarium and General Hospital (ECSGH), Saint Anthony Mother and Child Hospital (SAMCH) and the Cebu South Medical Center (CSMC). There are four (4) Cebu Provincial Hospitals (CPH): CPH-Bogo, CPH-Danao, CPH-Balamban and CPH-Carcar. There are two (2) city hospitals, the Lapu-Lapu City Hospital, and the Cebu City Medical Center. While VSMMC presents the maternal mortalities, perinatal statistics and census of referrals, the other hospitals present their quarterly accomplishment reports for accountability.

Utilizing the electronic referral system as a real-time tool to facilitate coordinated patient transfers between health facilities to ensure people safety, the system allows for monitoring and evaluation of the quality of referrals as well. During meetings, there is a no-blame policy where the discussion is considered safe space, where we could openly discuss and identify areas for improvement in the cases of maternal mortalities presented, to learn from our mistakes. This allows for everyone to be on board

and commit to the process of identifying problems and proposing solutions.

The decreasing trend in obstetric admissions and deliveries at the end-referral apex hospital (Figure 2) is a function of low-risk pregnancies effectively managed at the grassroots level and more high-risk pregnancies referred to VSMCC (Figure 3). Direct communication between healthcare providers through text messaging and chat groups augments the electronic referral system for coordinated patient transfers to ensure patient safety.

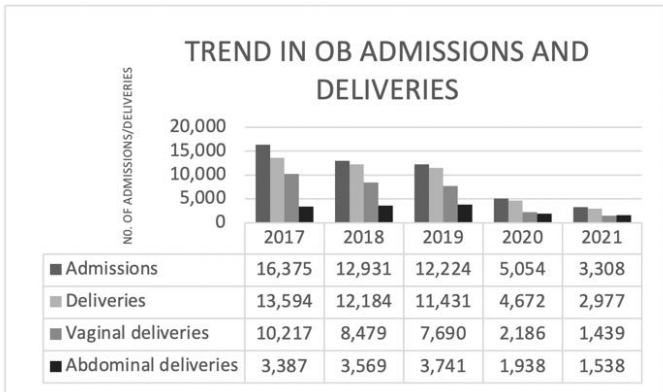


Figure 2. Trends in Obstetric Admissions and Deliveries from 2017 to 2021

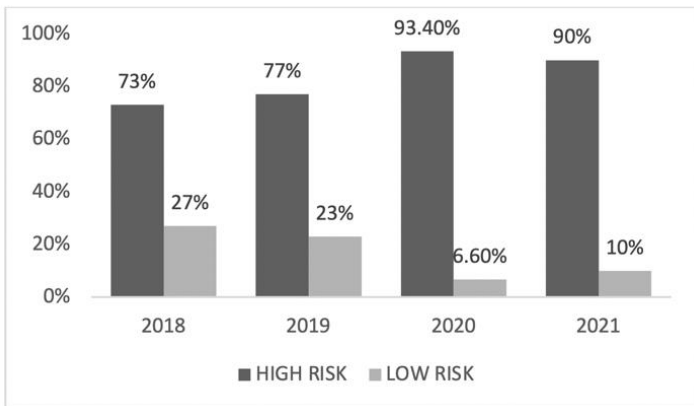


Figure 3. Proportion of high risk – low risk obstetric patients admitted at VSMCC from 2018 to 2021 show an increasing trend

To address infection control issues, a coordinated schedule of general cleaning of the obstetric complex, neonatal ICU and wards of each government hospital is made possible without interrupting patient access to health service delivery.

Continuing professional education is provided free of charge for healthcare workers within the network to boost confidence and improve their capacity to serve. Bottomline, the impact of the quarterly maternal-perinatal statistics is the dramatic reduction of annual maternal mortalities from 132 maternal mortalities in 2015 to 33 maternal mortalities in 2021.

Universal healthcare advocates financial risk protection and VSMMC believes in shared identity and shared responsibility. The QMPS is a low cost, high impact intervention that is highly recognized by the Department of Health during the regional field implementation coordination team meetings with the electronic referral system as a best practice unique to Central Visayas.

Moving forward, the members of the technical working group is in the process of editing the second version of the Central Visayas Health Referral System Manual and developing collaborative research for documentation of evaluation and impact analysis of these interventions toward improved maternal and perinatal health, because at Vicente Sotto Memorial Medical Center, quality service is our pride!

COMMENTARY ON VICENTE SOTTO MEMORIAL MEDICAL CENTER MODEL

By Leilani C. Chavez-Coloma, MD

QMPS – Quarterly Maternal Perinatal Statistics

From the regular census collated by Vicente Sotto Memorial Medical Center (VSMMC) in 2015, relating an increase in maternal and perinatal mortality rate through their Quarterly Maternal-Perinatal Statistics (QMPS) review, an organized referral system was developed in time in their province and locality.

Through the initiative of the leaders of the OBGYN Dept. and Pediatrics Department of this DOH mandated tertiary hospital in the province Cebu, (Central Visayas) all Chiefs of hospitals of the different facilities within the Service delivery network were encouraged and empowered to engage and actively participate in the regular meetings being conducted. The aim of which is to provide a platform for all stakeholders to express issues and concerns in the delivery of services to their clients seeking medical attention in real time, with a target accomplishment of coming up with an acceptable and most feasible solutions for those.

Its primary goal is to be able to help all patients regardless of social status, of medical and OBGYN conditions access quality and affordable healthcare services.

This particular (HCPN) framework/ model emphasizes on three important points that we may ponder upon and later on maybe worthwhile emulating in our own settings and positions.

A. Establishment of a respectful and direct communication amongst stakeholders, without passing improper judgement and being indecorous during the regular meetings.

B. The utilization of the (QMPS), with its identified TWG, as a means of reporting and discussing the accurate and vital data from the different facilities around the SDN of the whole province of Central Visayas.

C. The creation of a centralized and functioning real time Electronic inter hospital communication, referral system and platform, that is 24/7.

The above strategies are indeed encouraging and are positive ways in addressing perineal gaps and problems in the Philippine healthcare system.

With the thrust of the government in putting into practice the laid down policy of the Republic Act (RA) 11223 also known as the Universal Health Care (UHC) Act, it is but relevant that we in the Philippine Obstetrical and Gynecological Society (POGS), being the premiere medical organization implementing the awareness and education of women’s health issues, together with providing the highest quality of women’s healthcare take an active part in carrying out the best Service Delivery Network framework and model across all regions.

Chapter 15
**COTABATO REGIONAL AND MEDICAL CENTER
SERVICE DELIVERY NETWORK**

Aurora Helen D. Yambao, MD

Cotabato Regional and Medical Center is a Level 3 Tertiary Hospital located in Cotabato City. It is a Department of Health (DOH)-retained hospital and is also an end-referral facility. As such, the institution is a catch basin of all problematic cases from nearby areas be it a surgical or medical case. Before the pandemic, even if CRMC is a tertiary level end-referral apex medical center, there were still a lot of patients even of low-risk pregnancies who were admitted in our hospital thereby crowding up to the hallways of our wards. In the event of high-risk pregnancies, majority of our mortalities are referrals from far flung areas or GIDAs. Usually, a delay in referral is the primary root identified in our fish bone analysis of our mortality cases, which in our institution is 0.34 to 1.24 % for the year 2017-2021.

One of the goals of the DOH is to reduce maternal and neonatal morbidity and mortality, hence the conceptualization of the Service Delivery Network. The Cotabato Regional and Medical Center aligned their effort in order to attain a reduction in maternal and neonatal morbidity and mortality. The establishment of the service delivery network in CRMC was patterned from the maternal, newborn, child health and nutrition (MNCHN) of the DOH. Ideally, a standardized service package should be made available for every mother or child from conception until delivery and post-delivery. This package should include good communication and referral.

In establishing a service delivery network in the Department of Obstetrics and Gynecology of CRMC, we first analyzed the department's data on maternal and neonatal morbidity. The top

five causes of maternal morbidity are: preeclampsia/eclampsia syndrome, obstetrical hemorrhage, infection, preterm labor, and dystocia. Prematurity and sepsis remained as the top causes of neonatal morbidity for the past 5 years in CRMC. With the advent of the COVID-19 pandemic, the maternal mortality rate of CRMC was 1.24%. The neonatal mortality rate for the year 2021 was 9.05%. Before the pandemic, even if we are a tertiary level end-referral apex medical center. There were still a lot of patients even of low-risk pregnancies who are admitted in our hospital thereby crowding up to the hallways of our wards.

The usual problems identified in the maternal mortality and morbidity are the following: (1) Delay in transporting the patient due to unavailability of ambulance and roads are not passable; (2) No means of communication due to lack of cellular phone or internet connection and (3) Delay in receiving appropriate care at the health facility due to inadequate human resources, obstetricians and pediatricians are not on duty, no available medications or equipment, inadequately trained birth attendants.

At the primary level, a memorandum of agreement should be made between a primary health center and the specialist. In cases where there are no doctors, midwives, and nurses she can act as a primary health care provider provided that she has a registry of all the patients under her care. She/They Will act as a navigator and as well as a gatekeeper. She will determine the patients that can she is capable of managing given her skills and equipment and she also must recognize the need of referring the patient to a higher center. She can have herself and her clinic accredited for Konsulta package (Konsultasyong sulit at tama).

The Cotabato Regional and Medical Center in cooperation with DOH XII and currently Bangsamoro Autonomous Region in Muslim Mindanao (BARMM), have been actively training midwives from all over Mindanao in Basic Emergency Obstetric and Newborn Care

(BEmONC). So far, a total of 524 health care workers of which 465 midwives, 40 nurses and 19 doctors have been trained by our hospital. The BEmONC Training had been halted due to the pandemic. However as of now, the BEmONC team is due to train health care workers in Tawi-Tawi and nearby areas by the end of July 2022.

Midwives and other health care providers should know when to refer. They should be BEmONC –trained and should have a certificate of BEmONC training. They should pass the rigorous 7-day training for midwives; and for a team training composed of doctors, nurses, and midwives, they are required to training with required number of cases handled in eleven days. They should be able to identify complicated and high-risk pregnancies to obstetricians with whom they have a MOA, whether private or government hospital – based obstetricians.

Emergency cases are usually directed to Level 1 to Level 3 Health Care Provider Networks and Obstetrician can be the attending specialist of these facilities by having a memorandum of agreement with the office of Mayor or Governor; An Obstetrician - Gynecologist have to register to be accredited as a service provider of birthing homes to re-affirm service delivery network. With this the provincial health board through the governor can ensure equitable distribution of funds and services to the different health care facilities. Most of us are scared that we will lose more resources income-wise. But according to former USEC Jimmy Galvez Tan, by next year as the MANDANAS ruling from the supreme court, the province will have an increase revenue and budget by 30%. Other source of income to sustain SDN is the special fund which comes from taxes. In addition, whenever there are cases requiring tertiary care, they should be referred to the level III or APEX/ Multispecialty Hospital. At this level at least three to five obstetricians will be representatives at the provincial health board to help the government formulate policies in SDN.

At the national level, the Philippine Obstetrical and Gynecological Society (POGS) should have a Central committee to deal with central PHIC and DOH to negotiate our capitations, so as not to lose out strategic positions in SDN. They should have a permanent list of midwives who will refer patients to the health care provider networks. POGS should also have a permanent committee to evaluate and monitor SDN, as well as in family planning.

Referrals should be directed at the CRMC delivery room or ER triage. The referring facility should give a short history, physical examination, and partograph from BEmONC- trained birthing facilities. They should secure an informed consent to the patient and explain why she is being referred to a higher center. Two-way referral form (referral slip with return slip should be given by the patient to the referral hospital). Transportation should be available from the LGU/Birthing home to the referral hospital. During ambulance conduction, the patient should be accompanied / conducted by the HCW from the referring facility.

Fee payments, if the patient is indigent, in a government hospital, she is automatically enrolled in PHIC point of service and can avail of no balance billing; private patients without PHIC are allowed to apply but have to pay the one-year premium and should pay the excess hospital and professional fee charges. Patient who chooses private attending obstetricians should be oriented of all fees they should pay.

As of June 2022, the following health care facilities have a memorandum of agreement with the Cotabato Regional and Medical Center:

DPOCI Birthing Home Clinic De Mazenod Avenue Extension, Cotabato City	Norjhalil Birthing Home and Midwife Clinic	Making Birthing Clinic
	Cotabato City Office on Health Services Birthing Clinic	Iranon Hospital
Doc Sweet's Maternal Care & Lying – In Clinic	Mama Ron Paanakan and Midwife Clinic	Rural Health Clinic, Datu Blah
Monera Paanakan Midwife Clinic	Japal J. Guiani, Jr. Health and Birthing Clinic	Zuelig Birthing Clinic
Bangsamoro Maternity and Birthing Clinic	Skd Lying-In and Midwife Clinic	

A customer satisfaction survey is filled-up by all patients referred to CRMC. Quarterly meetings (for mortality audit) in the city health of Cotabato City are attended by one of the representatives of the Department of OB-GYN to answer all issues pertaining to the mortality and how they should have been avoided. Monitoring of all the facilities with memorandum of agreement to private or government obstetricians should be done at least twice a year for them to address emerging issues and concerns regarding service delivery network.

Service delivery network should be sustained therefore it is imperative to give spotlight to the role of all stakeholders and health care providers in the success of its implementation. They should remain committed to the objectives of SDN, and they should continuously abide by the process by which service delivery network is being implemented. SDN is very crucial in the provision of health care services on time should a referral be made as quickly as its need is identified.

COMMENTARY ON COTABATO REGIONAL MEDICAL CENTER

By Pilar Lagman-Dy, MD

The concept of SDN is supposedly simple and feasible. But in a place like BARMM where CRMC mainly caters to, its attainment can prove to be a challenge. All those problems identified and mentioned in the written document: transportation, communication, and human resources, were particularly prevalent in these areas. Furthermore, constituents from these areas can be the most deterrent in the success of these programs because of lack of understanding, education, and knowledge on basic maternal and child health issues. Also, the pervasiveness of old belief in the traditional ways and even dangerous practices add up to the challenges in the acceptance of these programs. And this includes even both the traditional and elected leaders. This is particularly important in securing the much-needed memorandum of agreements.

It is noted from the written document that the health care facilities which has an MOA with CRMC were located within Cotabato City. Needless to say, they are not the kind of facilities that really need the services offered by the SDN. Those facilities that badly need the SDN are those from nearby municipalities. Unfortunately, they are the ones described above.

As such, there must be a massive awareness campaign, information and education delivery on these areas which must include not only the health care facility personnel but also executives, leaders, and the community as a whole for these programs to be successful. These people must first fully understand the concept of SDN, otherwise it can fall prey to corruption, exploitation, and misuse and thus, bound to fail.

In the past few decades, there has been an increasing trend in the number of people from these areas who were able to finish their studies and thus the level of education is perceived to be improving. But it has also been noticed that the number of these educated individuals from these places who are transferring and

making permanent residences in the urban areas is also increasing and thus leaving these places to the same level of literacy.

Chapter 16
MANILA MATERNAL DEATH REVIEW

Carolina Paula C Martin, MD

INTRODUCTION

Maternal mortality in the Philippines continues to be a significant public health concern. Reports on the slow decline in maternal mortality rate between 2000-2017 indicates that Philippine commitments to the Millennium Development Goals (MDGs) has not been achieved.¹ Mortality review showed that significant reduction in MMR was not sustained after 2012 and higher deaths were reported in the succeeding years.² The COVID-19 pandemic caused a sharp increase in maternal mortality. An average of 5 pregnant women died daily due to maternal causes (Recidoro, 2020). According to the Philippine Statistics Authority, in 2020 the maternal mortality rate increased to 126 from 87 per 100,000 live births. The figure translates to a total of 1,975 deaths due to maternal causes out of 1,528,684 live births in 2020, and 1,458 deaths out of 1,673,923 live births in 2019. ³

The reasons for high maternal and neonatal mortality are the following:⁴

1. Young age at marriage and first pregnancy
2. Domestic violence and gender inequality
3. Poor maternal Health
4. Poor maternal hygiene during and after delivery
5. Poor newborn care

6. The three delays:
 - a. Delay in deciding to seek for medical care
 - b. Delay in identifying and reaching the appropriate facility
 - c. Delay in receiving appropriate and adequate care at the health facility

Despite the provision of maternal services at the primary, secondary, and tertiary level to make pregnancy at its optimum state and enable pregnant women to deliver safely in health facilities, three delays have continuously been considered as barriers to access timely maternal health services. During the pandemic, because the health care system was not able to respond efficiently to pregnant women, with more births in non-hospital primary birth facilities, even more women were not able to reach the hospitals for special care.

One component of the DOH National Safe Motherhood Program is to sustain maternal and newborn services by monitoring and evaluating Maternal Mortality Ratio, a key indicator that is used to assess effective implementation of programs, formulate management plans, and develop research that can provide information on innovative recommendations. This component can be achieved through a Maternal Death Reporting and Review System in collaboration with provincial and city review teams.⁵

MATERNAL AND NEONATAL DEATH REVIEW POLICIES, LAWS, AND GUIDELINES

Administrative Order No. 2008- 0029, “Implementing Health Reforms for Rapid Reduction of Maternal and Neonatal Mortality (MCHN) Strategy”⁴ DOH, Sept 9, 2008, mandates the LGUs to establish review teams that will conduct Maternal and Neonatal Death Reviews (MNDR) and provide responsible stewardship to ensure that the objectives of MNDR are met. This MNDR system is

just one methodology for an effective monitoring and evaluation system as well as a mechanism for the local implementation of the Health Reforms for Rapid Reduction of Maternal and Neonatal Mortality that aims to address critical reproductive health concerns and outcomes as reflected in the maternal and perinatal census submitted. This system is equipped with a set of readily available and verifiable health indicators that will establish baseline information and track progress at each level of the operation. Mechanisms are transparent with dissemination channels that are translated into formal feedback so it can be used to assess the impact of various interventions in the improvement of the delivery of services in a local health system and monitor the achievement of these health indicators. Data gathered shall be used to develop management plans and research on adaptable and sustainable measures given local constraints and conditions.⁶

Responsible Parenthood and Reproductive Health Act of 2012 (R.A. No. 10354) Implementing Rules and Regulations, Section 14 mandates that all local government units (LGUs), national and local government hospitals, and other public health units including private health facilities within the SDN shall conduct an annual Maternal Death Review (MDR) and Fetal and Infant Death Review (FIDR), in accordance with the guidelines set by the DOH in consultation with the stakeholders. Such review should result in an evidence-based programming and budgeting process that would contribute to the development of more responsive reproductive health services to promote women's health and safe motherhood.⁷

The MNDR system seeks to achieve the following objectives:^{8, 10}

1. *Generate accurate and timely maternal and neonatal mortality data.*

Reporting as soon as an event occurs helps guarantee that the report is accurate and timely. In conducting maternal and neonatal death reporting and review, it is important to

determine the factors that lead to death. Thus, it is essential that the maternal and neonatal death report be made soon enough to ensure that the primary sources of such information (e.g., relatives and health workers) have not forgotten the events surrounding the death.

The use of simple and concise reporting and review tools by frontline health workers encourages the timely and comprehensive reporting of maternal and neonatal deaths. User-friendly data collection tools facilitate the reporting task and help ensure its early completion. Well thought-out review tools, on the other hand, allow the Review Team to study each death more closely and analyze the events that led to it in a manner that is not threatening to health workers and relatives of the deceased.

2. *Identify major medical and non-medical causes of maternal and neonatal mortality.*

Reporting systems are usually successful in identifying the medical causes of death, but sometimes fall short in ascertaining the non-medical causes, which are just as important in preventing death. Prominent non-medical causes are usually attributable to delays in either taking action or making decisions crucial to the life-saving process.

3. *Formulate appropriate interventions to address these causes.*

A successful reporting system thrives on the actions and decisions that it stimulates. Frontline workers would be encouraged to render timely and accurate reports if they were certain that their reports would be useful to prevent further maternal deaths. It is therefore important to put in place a reporting system that leads to concrete interventions and programmatic improvements and then feeds the information on such results back into the system

to make frontline workers aware of what their reports have managed to accomplish.

4. *Institute improvements in the health delivery system.*

In the analysis of the reporting and review data, it is important to take consideration of a systems-wide view. This helps ensure that the health delivery system is always consider with a critical eye to make it more responsive to the evolving health needs of the community.

MATERNAL AND NEONATAL DEATH REVIEW IN THE CITY OF MANILA

Pre-pandemic, number of annual maternal deaths in the City of Manila from 2017 to 2019 were as follows: Manilan Residents – 19 in 2017, 20 in 2018 and 20 in 2019, while for Non-Manilan Residents – 18 in 2017, 28 in 2018 and 28 in 2019. In 2020 and 2021, there were 24 and 35 Manilan Resident deaths, respectively. There were higher deaths for Non-Manilan Residents, 35 in 2020 and 43 in 2021. (Manila Health Department Maternal Death Registry). The numbers increase despite the availability and access to maternity services in public and private hospitals and lying-ins. The impact of these untimely maternal loss to their families and the loss of economic productivity to the society and the country cannot be underestimated This “silent disaster” needs to be addressed through a range of maternal health services, policies, and programs. A collaborative project of Manila City Health Department, partner hospitals and organizations to strengthen the local maternal referral system by harnessing available health resources and addressing issues in maternity care presents data analyses to describe socio-demographic and clinical profiles that impact maternal death (E.Clark, 2019) is just one of them. ⁹

Most importantly, to further understand the numbers and the causes of maternal mortality and validate the reasons that have contributed to these maternal deaths, the Local Government Unit of the City of Manila through the Manila Health Department conducts the Maternal and Neonatal Death Review (MNDR). It is the responsibility of the Chief of the Division of Maternal Child Health to improve the provision of health services through implementation of programs, policies and laws provided by DOH, one of which is the MNDR. MNDR is a meeting wherein cases are discussed to identify the factors (using the 3 delays model) that contributed to maternal and newborn deaths. It is done to improve the quality of care delivered, enhance health-seeking behavior of clients, and reduce maternal and neonatal deaths.

A systematic review of maternal and neonatal death at the institutional and regional levels is a key instrument to improve the quality of maternal and neonatal health care services by identifying the causes of deaths and what could have been done to avoid each death. It enables the identification of major contributing categories, facilitates analysis, and allows consideration of possible interventions and strategies for prevention.¹⁰

CONDUCT OF MDR AND FIDR (MNDR) AT THE CITY OF MANILA LGU

It shall be conducted at least Annually or at shorter interval subject to discretion of Local Health Office. The design of MDR-FIDR (MNDR) Annual Review aims to identify gaps and clinical factors that contributed to reported deaths such as Human Resources, Blood Services, Emergency Transportation, Access to facility and Availability of Life-saving drugs. All cases are to be reviewed, unless sheer volume, team may decide to review only a representative sample case.

Existing Health Information System

1. Maternal and Neonatal Death Reporting System (MNDRS)- *Web-based*
 - MNDRS trained staff from hospitals submits Maternal and Neonatal Death cases/reports to MNDRS
 - Reports shall be validated by the M/CHOs to ensure their integrity and consistency
 - Compiled reports shall be used for the assessment of MDR and FIDR Review Teams

2. Monthly Tracking of Maternal and Neonatal Deaths
 - Master listing of Maternal and Neonatal deaths
 - Validation deaths by MNCHN Coordinator
 - LGU resident vs. Non-resident deaths

3. Documentation and Investigation of Maternal, Fetal and Infant Deaths
 - Deaths happened in and/or received by health facilities, including patients in transit using hospital-operated ambulances, the documentation and reporting shall be the responsibility of health professional who attended or received the patient whether in public or private

 - Deaths happened outside health facilities - documentation and reporting shall be the responsibility of Rural/Urban Health Midwife of the area where death occurred. *BHWs and CHTs* may assist the midwife of the area in carrying out the task and documentation and reports shall be
 - consolidated at the M/CHO level.

REPORTING SYSTEM PROCESS FLOW FOR MATERNAL DEATH IN THE CITY OF MANILA



HOW TO CARRY OUT COMPLETE MATERNAL DEATH REVIEW

Phase I: Preparing an MDR Session (6 Steps)

- Step 1: Identifying and selecting MDR participants
- Step 2: Making standards of good practice available
- Step 3: Identifying maternal deaths
- Step 4: Putting together a maternal death file
- Step 5: Developing a clinical case summary
- Step 6: Organizing an MDR session

Phase II: Conducting an MDR session (6 steps)

Step 1: The MDR session: setting the scene and chairing the session

Step 2: Re-evaluating results from the previous session

Step 3: Presenting a clinical summary

Step 4: Reviewing the case (MDR): systematic case analysis, case analysis summary, recommendations, and action plan

Step 5: Developing an MDR session report

Step 6: Planning the next session

PHASE I: PREPARING THE MNDR SESSION

Step 1: Identifying and selecting the members of the MNDR Committee

The following are the members of the MNDR Committee of the Manila Health Department, City of Manila:

1. City Health Officer
2. Chief, Division of Planning
3. Chief, Division of Maternal and Child Care
4. Lying -In Coordinator and Physician per district
5. DOH-NCRO Representative
6. Secretariat
7. Maternal Care Nurse Supervisor

The committee's main responsibilities are as follows:

1. Organizing the maternal death review
2. Disseminating the results
3. Monitor the implementation of recommendations

Step 2: Making standards of good practice available

To meet quality standards, the MNDR steps and process must be complete so that the implementation of recommendations at all levels can be efficiently assessed. All cases must contain vital information, case analysis must be conducted and action plans for implementing recommendations must be used. During the process, identification of determinants to lack of adherence to the standard will contribute to optimal choice of interventions and improving good practices in health facilities. ¹¹

Step 3: Identifying Maternal Deaths

All maternal deaths should be identified. Maternal death reviews entail reviewing all deaths that occurred at the facility during a defined period of time. Maternal death (Obstetric death) is defined as the death of a woman while pregnant, or within 42 days of termination of pregnancy, irrespective of the duration and the site of pregnancy. They are either direct obstetric deaths or indirect obstetric deaths. Direct maternal deaths are those “resulting from obstetric complications of the pregnant state (pregnancy, labor, and puerperium), and from interventions, omissions, incorrect treatment, or from a chain of events resulting from any of the above. Indirect maternal deaths are those resulting from previous existing disease or from a disease that developed during pregnancy, and which was not due to direct obstetric causes, but aggravated by physiologic effects of pregnancy. Accidental or incidental causes of death during pregnancy are not classified as maternal deaths.

Maternal deaths are usually identified through review of death certificate from Preventable Diseases Division and reports from health center. Special attention must be given to identifying cases which may be missed, such as those that occurred in early

pregnancy, are due to indirect causes and may have been misclassified/not recorded.

A countercheck can be performed by compiling a list of all deaths of women aged 15–49 years, through the examination of all death certificates. Once the list is compiled, those deaths that are not the result of either direct obstetric causes or of conditions aggravated by pregnancy can be eliminated, once the relevant medical records have been reviewed.

In facilities where maternal deaths are relatively few in number (or where there has been no death over a period of three months), the cases to be reviewed may include near-misses.

Step 4: Putting together a maternal death file

The circumstances surrounding each maternal death identified emerge through the collection of written information and data from multiple sources, such as the Hospital Records, Antenatal records from health centers and private clinics, Mother Baby Book, Verbal Autopsy. All documentation must ensure anonymity. A “Maternal Death Review Reporting Form (MDRRF)” provided by the “Maternal Death Surveillance and Response (MDSR) from the National Safe Motherhood Program Disease Prevention and Control Bureau must be accomplished by each health facility and submitted within 24-48 hours. The MNDR Committee then convenes and determine if the maternal death is preventable.

Step 5: Developing a Clinical Case Summary

There will be 5 maternal deaths and 1 neonatal death to be chosen from among the different health facilities. It will be reviewed by the MNDR Committee for development of a clinical case summary to be presented during the MNDR meeting.

The clinical summary contains the most significant events that took place from before the woman’s admission to the health facility until her death as well as the data of the patient’s obstetric history. The doctors and midwives who handled the case will be the preliminary person who will collect information through records and interviews to complete the facility death report that will be submitted to the MNDR Committee.

Step 6: Organizing the MDR session

The MNDR Committee chooses the date and venue of the session. The following are the participants are selected from the different health facilities of the City of Manila, government, and non-government institutions to attend and participate in the MDR session:

1. Clinicians: obstetricians/ gynecologists, midwives, nurses, pediatricians and/or neonatologists, general practitioners
2. Representatives of the hospital
3. Representatives of the health center which refer patients to the hospital
4. Representative of private clinics/ gov’t hospital where prenatal checkup was done
5. Representatives from DOHL and NGOs

PHASE II: CONDUCTING AN MDR SESSION

Step 1: The MDR session: Setting the scene and chairing the session

The purpose of the MDR session are as follows:

1. To fully understand the chain of events related to the case.

2. To identify the main problem or problems in the management of the case from the time before admission to death.
3. To come up with solutions to correct them.
4. To clarify the most likely medical cause(s) of death
5. To determine the circumstances and factors that might have adversely affected care (e.g., shortage of drugs, manpower, inadequate skill).

The MDR committee elaborates ground rules and participants are reminded of them at the beginning of each session. The Moderator chairs the session and facilitates discussion and debate. He/ She reminds the participants of the principle of confidentiality, and that a non-recriminatory atmosphere must be maintained so that discussion can be honest and without fear of blame. It is not a process for apportioning blame or shame but exists to identify and learn lessons from the remediable factors that might save the lives of more mothers in the future.

Step 2: Re-evaluating results from the previous session

The Summary of previous Maternal and Neonatal Deaths shall be presented and a re-evaluation of the status of the MNDR as to where the LGU of Manila is after 2 MNDRs

THE MATERNAL AND NEONATAL DEATH REVIEW WORKSHOP

The participants are divided into groups. Each group will handle one case of maternal death and a group will handle the neonatal death. Each group will assign a moderator/leader, a secretary, and a presenter.

Selecting the three main facilitators for the MNDR session:

1. The Case Presenter: This is the person responsible for identifying the cause/s of maternal death assigned to the group, gathering all information concerning cases, summarizing, and presenting clinical cases during the MDR session. All information to be presented must be drawn from the maternal death file collected by the Presenter prior to the session itself.
2. The Moderator: Responsible for presiding the session and the debates. The moderator must be able to stimulate debate, to put participants at ease, to encourage open discussions and to treat all participants fairly and with equity. The moderator is also responsible for making decisions such as stopping the case review because of problems that may arise during the discussion.
3. The Secretary: summarizes the case analysis and produces a report of the session.

Step 3 - 4: Presenting a Clinical Summary and Reviewing the MNDR Cases

Step 3.1: Systematic case analysis

1. A tool “MDR: Clinical summary form” is proposed which can facilitate the notifying/capturing of all information necessary to obtain a picture as complete and accurate as possible.
2. Review and analysis of the developed clinical case summary that contains the significant obstetric history and the course of events that took place before the woman’s admission to the health facility until her death.

3. This clinical summary “briefly” outlines the main steps in the management of the patient from prior to admission (whether direct primary admission or a referral from other institution/s) to her course of labor, delivery and postpartum until death. The Presenter should:
 - a. Fill in all parts of the form
 - b. Ensure that all information is anonymous (including the names of the patient, the health center, and health workers)

If some sections cannot be filled in, explain why. For some deaths, it may be impossible to obtain much information. However, these deaths should not be omitted. On the contrary, a special effort should be made to find out why so little information is available.

MATERNAL DEATH REVIEW PRESENTATION

Case :

Type of MDR:

Name of Presenter :

Facility of Presenter :

Date of Presentation :

Information on Mother:

1. General information
 - Age
 - Means of livelihood
 - Education level
 - Marital status
 - Coverage of Insurance
 - Property level / social class of family

2. Psychosocial Information

- Alcohol, cigarette, drug taking habits
3. Obstetric History of Mother
 - No. of pregnancy, births, abortion, and miscarriage
 - History of facility delivery (facility vs non facility)
 - History of complications on pregnancy / delivery
 - History of caesarian section
 4. History of delivery and labor of mother
 - Signs and symptoms
 - Treatment given
 - Type of delivery
 - Is mother alive or dead?
 5. Chronology of event
 - Start as early as event started till death
 - General conditions
 - Condition (hemorrhage, VS etc.)

ACTION TAKEN (TREATMENT, MEDICINES ETC.)

Date/ Time	General Situation	Patient Conditions	Action taken
3 Nov 2011 09:45	Referred from XX due to XX	Conscious no pain, BP 129/80	IV line
10:20		Start pain	Oxytocin (XX mg)
17:08		XX	
4 Nov. 2011, 09:45			
09:35	Declared Death		

6. Possible interventions and action plan
 - Intervention according to analysis
 - Action plan according to the levels

o (DOH – CHD EV, PHO/ CHO, MHO, BHS, LGUs, CHTs, Community)

The narrative summary (which can be written down in the last section of the form) aims at presenting facts without expressing any judgment on the appropriateness of actions undertaken. The style of the summary should be comprehensive and precise.

Step 3.2: Case analysis summary Based on the discussion, the Recommendations and action plan

1. Presentation of narrative summary of all the information gathered and summarized on the form.
2. Open Forum

Specialists will comment on the case, make the necessary recommendations and may present treatment standards. Recommendations are made and an implementation plan is drawn up, to promote concrete change and ensure follow-up. Moderator summarizes the main points by presenting to the audience.

Step 5: Developing an MDR Session Report

It is important to produce a written record which clearly outlines the main findings of the MDR. This will enable dissemination and facilitate the feeding-back of findings to the relevant people. The documentation of the review must be available and be presented on the next evaluation and be accessible as well for future external and internal use. The Secretary takes down notes during the discussion with the aim of producing a complete report of the session. The report contains the following:

1. Basic information on the MDR session (date, number, duration, place of venue)

2. The summary of the case analysis as presented by the Moderator, to include the following:
 - a. positive aspects of the case management
 - b. failures in the case management
 - c. main cause/s of identified dysfunctions
 - d. recommendations and action plan

ANALYSIS AND ACTION PLAN FOR MDR

1. Analysis of cases
 - a. Uses a combination of quantitative and qualitative analysis

Qualitative: factors that lead to a specific women’s death such as access to care and services, availability of resources and adequacy of treatment.

Quantitative: enables the identification of patterns and trends concerning mother such as age, ethnicity, education, cause of death and time of death

- b. Classification of causes

MEDICAL CAUSES	NON-MEDICAL CAUSES	CONTRIBUTORY FACTORS
Medical conditions Hemorrhage Toxemias Infection Prolonged labor Treatment received	Place of delivery Attendant at birth Delay in transport Cost of hospital delivery	Frequency of delivery Spacing Type of delivery Appropriateness and timeliness of delivery Health condition during delivery Inaccurate entries of data

- c. Identification of avoidable factors
 - Delay in the decision to seek care
 - Delay in the arrival at health facility
 - Delay in the provision of adequate care

PHASE III: DISSEMINATION OF MNDR FINDINGS

1. Translating findings into actions and interventions
2. Share findings to the stake holders

Findings from community reviews used to identify general areas for improvement may include:

- Behavior changes and interventions to improve behavior
- Birth planning
- Strength of referral system, local communication, and transport needs
- Upgraded health facilities
- Other very specific needs that may be highlighted

“No woman should die giving life”.

“Hospital births alone are not enough to save mother’s lives; high maternal mortality rates have occurred in hospitals where the quality care is poor.”

“The quality of care provided to the women is a key determinant in maternal outcome and (that) simple changes in practice can save lives”.

“Each maternal death has a story to tell and can provide indications on practical ways of addressing the problem”.

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COMMENTARY ON MANILA MATERNAL DEATH REVIEW

by Maria Stephanie SFay. Cagayan, MD

A maternal death review is an activity that provides venue for all stakeholders in the care of the pregnant and parturient to learn from a tragic, but in most cases, preventable, event. The purpose of this exercise is to improve the quality of safe motherhood programming to prevent future maternal and neonatal morbidity and mortality and to identify strategies and actions to prevent similar occurrences and improve provision and access to quality essential maternal and neonatal health services. These monitoring and evaluation strategies should be conducted as learning activities and avoid blaming, finger-pointing or punishment. A health systems approach with consideration for each building block such as infrastructure, personnel, drugs, transportation, and finance should be used in the analysis and reporting and review data. One important step in the conduct of the maternal death review is that all involved parties need to agree on key lessons learned from the process and commit to action that will improve these areas in the future. It is important to consider lessons and action related to both the community and to the health facility.

The Field Health Service Information System (FHSIS) and maternal death review reports remain to be the country's primary source of data for monitoring and planning for programs to improve maternal health outcomes. The accuracy of results depend on how complete and precise maternal deaths were reported in each municipality or province. The reporting of maternal mortality using facility service statistics and vital registries have several limitations especially for countries without well-established information systems. In this scenario, variations in the number of maternal mortalities across the years may be due to changes in reporting system rather than true changes in risk for mortalities. The timeliness, completeness and accuracy of maternal death reporting may vary from province to province despite initiatives from the regional office to standardize reports. Care must be taken that staff are well trained in the timely and accurate entries in the form.

PART III

**CURRENT AND FUTURE POSITIONING OF
P.O.G.I.**

Chapter 17

Future Plans and Programs

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POGS AS A CATALYST

Now that we are witnessing system reforms geared towards the dawning of the full implementation of the Universal Health Care (UHC) Law, the health care professionals (HCPs) have no better way forward but to fully understand the provisions of the law, especially its direct and implied effects on the practice of private clinicians, those working in the government health institutions and those affiliated in both sectors. The key message here is to prepare the HCPs to adopt and to adjust so that everyone from the health sector can continue to render quality services under the new system.

We have defined that the POGS, being the premier obstetrical and gynecological organization of the country, can be the influential leader in lowering maternal mortality and morbidity. With such role and defined mission, we took into consideration the scope of our influence as a private academic organization on all prospective stakeholders. And we came to a conclusion that we need to step up and be the catalyst of a united endeavor.

If we follow the definition of the word, *catalyst* refers to a person or organization that precipitates an event. Translating such definition to the role we choose to pursue, we ideally should adopt a catalytic form of leadership that will collate, analyze, and report collaborative outputs of independent groups of stakeholders which share similar, if not the same, visions.

The catalytic leader takes charge without imposing on others. He does not act superior, nor does he exert authority on other

collaborators. Simply put, the work experience with a catalytic leader is plainly working with a mentor. Such dynamics removes the element of fear or disdain to authority, and everyone comfortably interacts.

To further understand what catalyst leadership represents, here are its six characteristics. This type of a leader (1) generates initiatives, (2) sees something others have not seen, (3) takes an existing seed and grow it in a forest, (4) energizes people to give and to serve, (5) communicates with passion and story, and 6) attracts talented people.

POGS AS AN IMPLEMENTER

Promoting ORDER. With these characteristics of catalyst leadership, the P.O.G.I. envisions to create milestone results using a different yet very promising method. Activities will be initiated with resolute direction to lower maternal and perinatal morbidity. Initiatives will be in the form of ORGANIZATION of the various groups of stakeholders, RECOGNITION of already organized stakeholders, further DEVELOPMENT of their activities, ENGAGEMENT of all groups, and REWARD for their dedication.

Planting the Seed. The P.O.G.I. recognizes the contributions of POGS members and other stakeholders in maternal and perinatal health to the point that their initiatives were duly recognized and considered as model service delivery network (SDN). Such model networking systems are hoped to encourage and inspire more champions to adopt and modify, depending on the salient dynamics and resources available in their respective localities. This is the deeper meaning of “*planting the seed and growing in the forest*” and expecting it to grow beautifully in time.

Over this time, the POGS thru the P.O.G.I., has educated its members on SDN and define how they will undertake their role and medical practice within the realm of UHC. The P.O.G.I. recognizes

the fact that the POGS can provide expertise being the premier organization in maternal and women’s health and directly provide these inputs to the Department of Health (DOH). The POGS can include community obstetrics in its residency training program and can even be deputized by the DOH to accredit in primary health care.

POGS AS A COLLABORATOR AND PARTNER

Specific Strategies. Following the POGS’ information campaign (webinar series) for its members to have a full grasp of the UHC during the first three years of P.O.G.I.’s creation, the POGS, in the next two years, through the P.O.G.I., intends to cross the borders and establish more enhanced partnership with other stakeholders such as the DOH, Philippine Health Insurance Corporation (PHIC), local government units (LGUs) and other professional and academic health societies to advance further its cause on a nationwide scale. The details of this partnership will be the main agenda of the committee’s workshop late this year.

It is indeed high time for the POGS to directly engage with the LGUs which are the main implementers of the UHC. Hopefully in the near future, the POGS can explore a Public Private Partnership (PPP) that will serve as a model in the UHC SDN. This model will invest in preventive health care to bring down maternal mortality and may pave the way for the achievement of the United Nations Development Program (UNDP)’s Sustainable Development Goals.

The POGS, through the P.O.G.I., strongly holds on to the conviction that through an established public-private partnership, everyone in the stakeholders’ row can be truly enjoined with recognized appreciation of each one’s inputs and participation. A specific strategic roadmap will be designed for this purpose to ensure the winning position of all stakeholders in the pursuit of promoting the best quality of women’s health care by lowering

maternal mortality and morbidity rates in the Philippines over a defined time horizon.

R and R. Specific strategies will include the steady commitment of every partner who may furnish the P.O.G.I. with reports of their activities to be collated, reviewed, analyzed, or commented on, though final dispositions will still rest on the stakeholder, being more familiar with its internal dynamics.

Share and Serve. The P.O.G.I. realizes that the POGS members and all stakeholders in the collaboration have the potential to share and to serve. Simply devoting time is already a worthy contribution that any prospective collaborator can give. Talented people believe in the mantra that *“if others did it, then they can also do it.”* After all, whatever good things that this passion will bring about today will be a “good story to tell” tomorrow.

POGS AS AN ADVOCATE

Universal Healthcare is an excellent platform for improving the health system in the country. It highlights and focuses on the potential of primary health care with the progressive realization that SDN is the main pillar to adopt. There is a need for the POGS to redefine its role in this context in order to be more relevant to the changing times. This is an opportunity for all stakeholders to make a difference in nation-building.

Maybe it is about time that we institutionalize the P.O.G.I. in the mainstream of the programs of the POGS. Maybe we should endeavor to have more structured plans and programs for community service by creating services that can bring about sustained and impactful change in the community.



**POGS Organization of Government Institutions (P.O.G.I)
2019-2022**

“This primer is dedicated in service to the Filipino women.”