Papua New Guinea: Complex challenges and women's, children's and adolescents' health

© Lynton Crabb, Burnet Institute

Background

Papua New Guinea (PNG) is the most populous country in the Pacific region with more than nine million people speaking over 800 languages. About 80% of the population live in rural areas with poor or no roads, making access to health care difficult. For the remote rural tribes, difficult terrain and limited infrastructure make providing effective rural health care challenging. In addition, rapid urbanization has increased urban poverty and inequitable access to services in the culturally mixed urban centres. From an individual and community perspective, health care is sought from three sources: traditional herbal remedies and 'good' sorcery, religion and prayer, and western medical interventions, if available. A recent analysis of the available health workforce for reproductive, maternal, newborn, adolescent and child health indicates that PNG only has 24% of the workforce required to meet the current needs. Political leadership and accountability are critical for PNG to address its complex health delivery challenges. In a few districts, politicians are facilitating partnerships between government and non-government health providers to propel communities into e-medicine using mobile phone technology and innovative strategies that link isolated health workers with urban based specialists. Shortly after independence in 1975, political power was decentralized by creating provincial governments, complete with legislatures and executives. The division of powers between the two levels of government was set down in the Organic Law on Provincial Government, and subsequent delegations of power by the National Executive Council. The legislated mandate for decentralization, with the rollout of provincial health authorities, provides the basis for service delivery. Local level governments are mainly responsible for the funding and delivery of provincial and lower level health care services. Church organisations receive government subsidies to deliver health care, particularly in rural locations, and, alongside other NGOs, play a vital role.

The Government is the main financing agent of the health care sector, but resourcing shortfalls have led to the closure of some peripheral facilities (especially in the rural areas). Associated with these operational funding

shortfalls is the widespread practice of user fees, even though this is not endorsed by national policy. There are also major ongoing concerns around endemic corruption at all levels of government. Emphasizing this point, in 2018, the UN High Commissioner for Human Rights, Zeid Ra'ad Al Hussein, called on the Government of Papua New Guinea to take firm measures to combat corruption, build good governance and strengthen the rule of law. A number of institutional checks and balances are in place at judicial and government level. Notable among these is the Ombudsman Commission, with a mission to "Promote and protect the integrity of Leaders and to help improve the work of Government Bodies and investigate any complaints against them to ensure there is Good Governance, Accountability, Transparency and Quality Leadership in the public sector". Yet, despite a twenty-year anti-corruption strategy, and initiatives such as the Taskforce Sweep in 2011, corruption and misuse of resources is a vital impediment to accountability, management and delivery of health services.

This context of decentralization, funding shortfalls and complex logistical challenges impacts women's, children's and adolescents' health, compounded by multiple negative socioeconomic factors, including the lower status and restricted autonomy of women in PNG, illegal abortion and high rates of early marriage, gender-based violence and poverty. Of particular concern are violence and abuse towards women and children. The Medicins San Frontieres report *Return to Abuser* (2016; see Annex 1 for list of key references) examined data from 3,000 survivors of family and sexual violence. The conclusion was that a lack of protection mechanisms, a weak justice system and a culture of impunity endangered the health and lives of patients even if they were able to access medical care.

More generally, the recent review paper by Robbers et al (2019) has shown that women and newborns in PNG experience high rates of preventable morbidity and mortality. Noting the dearth of reliable data, the authors provide an overview of the past eleven years of research on key maternal and neonatal health (MNH) indicators in PNG, comparing research findings to global MNH estimates of the indicators. In terms of mortality indicators (maternal mortality ratio, neonatal mortality rate and stillbirth), there is considerable variation in studies in PNG, but the outcomes are generally poorer than most countries in the Pacific region.

In terms of monitoring and evaluation, the health facilities and hospitals in each province are required to submit a monthly report to the Provincial Health Authority (PHA). These data form the basis for the annual National Sector Performance Annual Review (SPAR) report. This provides basic health information on births and deaths, with some classification on illnesses (e.g. malaria, TB and febrile illnesses). There are no specific data on adolescents. At the local level, every facility completes a monthly tally sheet, on paper, that is consolidated by the PHA then reported to the Monitoring and Research Branch of the National Department of Health (NDOH). NDOH analyses the reports to generate around 27 summary measures of performance, across all health sector outcomes and activities. NDOH then publishes the SPAR, which includes comments on provincial performance.

The main national resource of data is the *PNG Demographic & Health Survey*, 2016-2018 (Annex 2). Its primary objective is to provide estimates of basic demographic and health indicators, including information on fertility, family planning methods, breastfeeding practices, nutritional status of children, maternal and child health, adult and childhood mortality, women's empowerment, domestic violence, malaria, awareness and behaviour regarding HIV/AIDS and other sexually transmitted infections (STIs), and other health-related issues. It also collects information on household agricultural activities and household food security. This survey illustrates the variable, decentralized nature of health provision and data collection. In practice, provincial level reporting is inconsistent and uneven, making any nationwide assessment challenging.

There are a number of national documents to guide PNG policy. These include the ambitious *PNG Vision 2050* (Annex 3), where 'improvement in governance' and 'improvement in service delivery' are two of its seven pillars. This is reflected in relation to youth and adolescent health. PNG's *Youth and Adolescent Health Policy 2014* (Annex 4) states that adolescents face multiple health problems, notably: early and unwanted pregnancies, early and unwanted marriages, high prevalence of STIs, and abuse of alcohol, tobacco and other substances. The document notes the dearth of data and "limited capacity in the country to provide health services friendly to adolescents" along with adolescents "so often lacking access to health information and services".

It is most timely, and much needed, that the Ministerial Task Force on Maternal and Newborn Health, along with the Reproductive Maternal Newborn Child and Adolescent Technical Advisory Group, has recently drafted a situation analysis, a national position paper and a costed strategic plan on maternal and newborn health issues, especially morbidity and mortality. The resulting *Maternal and Newborn Health Strategic Plan 2020-2025* has a number of key objectives, the fourth of which aims to "Provide national leadership and strengthen provincial accountability through use of data for benchmarking performance and accreditation". In addition, there have been several ongoing collaborations with multiple stakeholders seeking to address maternal, adolescent, child (including newborn), nutrition, immunization and gender, and men's health issues in PNG. It is hoped that the findings of this current case study can supplement and complement these developments.

Due to PNG's decentralized governance and health care provision, it was not viable to provide a comprehensive country-wide overview with the resources available. Rather, we have gathered original data from one province, East New Britain (ENB), and supplemented this by reference to existing data sources and a Multi-Stakeholder Dialogue (MSD) meeting consisting of a range of partners from across the country, government, international and non-government agencies. The MSD was invaluable in giving context and generalizability to the ENB data. In ENB, we conducted separate focus groups with women, men, adolescent boys and adolescent girls. This was complemented by in-depth interviews with key informants (from government, non-government and academia) engaged in women's, children's and adolescents' health (see Annex 5 for Approach and Methodology). These data provide a rich vein of information, sourced through the voices of the participants, and which form the backbone of this report.

The objective of the case study is to "highlight what accountability means to individuals in fragile settings, how it benefits women's, children's and adolescents' health, and where accountability barriers obstruct progress on health, rights and SDGs. Case studies will convey women's, children's and adolescents' experiences and accountability implications, including in fragile settings." … (and to) … "make actionable recommendations and promote accountability for remedy and action" (see Annex 6).

Culture of accountability

Significantly, the word 'accountability' does not have a direct translation in PNG languages.

"Not in Motu as Pidgin. The concept has to be described in sentences that refer to the aspect of accountability that you are talking about. Like *henao henao karana lasi* or *nogot pasin bilong stealman*. I think many of us use too many one-word concepts with the assumption that it is understood at community level. The concept is actually understood, but the word is not and thus there is a disconnect." [MSD][1]

Our interviewers reported the need to explore aspects of accountability, especially in the focus groups, before any meaningful discussion could continue. Terms such as 'responsible', 'care', 'helping', 'providing' and, notably, 'who takes the blame' came up in the focus groups to describe how respondents understood accountability.

There was consensus that **accountability for the management, delivery and monitoring and evaluation of services is important.** All service delivery and provincial government key informants acknowledged responsibility. "Accountability to me, from the public servant's perspective, is what is expected of us to deliver to the people what they have a right to." [ID1] The understanding and appreciation of **accountability was expressed as multi-dimensional**, particularly towards the population to be served and institutional agencies, both governmental and non-governmental. "As a health manager, I am accountable to the staff employed to provide the services at the facilities in their catchment areas. We are all accountable to each other in terms of the services delivered and if not then we are accountable to the people. We also have community health boards which are accountable for the

[1] *[Focus Group Female=FGF; Male=FGM; Female Youth=FGFY; Male Youth=FGMY; In-depth Interviews =IDI; Multi-Stakeholder Dialogue Meeting=MSD]*

delivery of services." [IDI]

One function of the health facilities' monthly reports submitted to the PHA is to help services assess progress and be accountable. Each PHA allocates a staff member to be responsible for collating these reports and compiling an annual report, which is then submitted to NDOH. These are the reports that form the SPAR report. In theory, the Family Health Services coordinator at the PHA will work with health information staff to review progress on a more regular basis, but it is not clear as to the extent that this happens in ENB or elsewhere. There is also a scheduled quarterly meeting of all district health managers, where gaps and successes can be discussed.

The decentralized nature of governance in PNG, and the devolved responsibility for service delivery between government and non-government agencies has resulted in uncertainty among key populations as to where accountability lies. It was commonly voiced across the focus groups that various agencies 'should be', 'must be' accountable for service delivery, management and assessment. The list as to where these responsibilities are included all levels of health service delivery and management, ward leaders, community health boards, national and provincial government. Individuals in the focus group discussions expressed the view that accountability was often lacking, due, in some part, to the complexity of the health system and decentralization. For instance, " … the Health Board has to be reviewed so that they must know their roles and responsibilities towards the community on health issues, so when the hospital has meetings these Health Board members should go back to the communities and share that information with them." [FGF] This perceived disjuncture in responsibilities and accountability was a common theme. "The health chairman is supposed to, but doesn't, inform all the communities of issues and also bring those issues to the PHAs with the health officer in charge. The chairman is also supposed to let the ward members know of the issues." [FGF] This also impacts on critical issues, such as medical supplies. "The supply chain from the health authority to the health facility is inconsistent. There should be a system where the authority knows how many supplies are supposed to be supplied to certain facilities according to their population catchment." [FGM] The reality is that no matter how good a service is, it cannot effectively function without critical medical equipment. "It is said that 'where there is no product, there is no programme'. So, even if we have the hospitals, we have the health clinics, we have all of that, if there are no lifesaving commodities for them to work with, then nothing works. There is no service." [MSD]

For adolescents there was an enduring sense that no one was accountable for their health needs. "No one takes responsibility for our health needs." [FGYM]. "Health awareness and information sharing is not available to us from growing up, to pregnancy, to laboring, and how to take care of us and our babies." "Young people cannot access family planning information and therefore there is a lot of misconceptions on family planning among young mothers." [FGYF]

On a more positive note, the fact that PHAs are in place provides a focal point for responsibility and accountability for health services. "The PHA system makes it possible to manage health – not that it automatically happens, of course, but under the old system, it was just not possible because the people in charge of health or the leaders of the health [system] had no authority and no actual responsibility for managing health in their provinces. So, the PHA system makes it possible." [MSD]

Central to a culture of accountability and meeting key health demands are functioning assessment and monitoring. There is a province-wide system in place in PNG for the collection of routine health information and indicators, the E-HIS (Electronic Health Information System), but there is variance in the way the system is utilized. At its best, and as described by one of the NGO health providers, it can provide valuable data for assessment and review. This NGO described how it collated data for the national health information system from its services and forwarded this to the NDOH, while also using the reports to plan and coordinate its own activities. This key informant also described other ways to translate data into action. These included monthly meetings and quarterly staff meetings, "… also patient review so to better provide for the people, review plans against the yearly targets to see the progress of each activity, staff roster to help us monitor staff performances and attendance, and staff appraisal is done to see who is performing or not, and for those who are not performing, we help them." [IDI]

Another key informant noted how its service endeavoured to utilize the available data. "We use the national health

targets for child health and maternal health coverage, and also the global targets, and this is communicated to health workers every year. And this is reviewed by the national health conferences, which are attended by health managers, which is then communicated to their staff." [IDI]

There is hope that the E-HIS system will provide a strong basis for data collection and greater accountability once it is rolled out beyond the existing five pilot provinces. "It's giving us some triangulation of data and much better capacity to collect data … makes it much less likely that people who are responsible for inputting data don't just put last month's data in and change one or two of the numbers – which is I am afraid what happens in a lot of PNG." [MSD]

ENB has a **Local Advisory Group that meets quarterly** with PHA representation from health facilities and hospitals, Catholic Health Services and NGOs working in the health sector. The group meets regularly, though feedback to communities is mainly reliant on individual projects to build this activity into the design.

One **good and relevant example in ENB (of using monitoring and evaluation to inform service delivery)** is the Healthy Mothers, Healthy Babies (HMHB) research project. This has a Local Advisory Group (LAG) of provincial government, women's council and health office representatives that was established in 2015 to approve the study and to assess results on a rolling basis, with annual or six monthly (depending on the year) reports. One positive example followed the LAG meeting in December 2017, which, upon hearing results from the health services study on low coverage of postnatal care for women and newborns, resolved to scale up integrated postnatal care across ENB. This laid the groundwork for the accelerating postnatal care and chlorhexidine project, allowing the Burnet Institute with GSK funds to trial a program of enhanced pre-discharge family education and home visits to recent postpartum mothers. Another evolution is that the PHA, in 2019, took over control of the LAG and renamed it as the **Provincial Health Research Advisory Committee**, making it the main body to assess and hear results of health research activities in the province, such as the Institute for Medical Research's (IMR) WANTAIM study of point of care testing in antenatal care. This provides **a formal body to support important service delivery research and innovations in the province**.

"One good example is the education of women during antenatal care. This was the HMHB ANCP project in 2015 that uses the time women are waiting in antenatal care to provide education and advise on key pregnancy, childbirth and postpartum health issues, including breastfeeding and caring for a newborn. This program is now run by the ENB health services and they have a person in place to support and monitor its implementation." [IDI]

Accountability challenges

As noted above, accountability has multiple meanings and interpretations in the PNG context. This includes the way services are managed, delivered and received, and also how they are monitored and assessed, and how results and findings are fed back to both service providers and recipients. One of the participants in the MSD meeting made the poignant remark that "… we all know there are many barriers in PNG, documented already in many, *many* reports." [MSD] As alluded to in the introduction, we intend to use the voices of our participants (across a range of sources) to explore how both the barriers and enablers to accountability in health can be translated into recommendations for actionable outcomes that are realistic and practical.

All focus groups noted that **staff behaviour and attitudes** needed to be brought to account. Problems ranged from punctuality and care to lack of trust and confidentiality. "Staff attitudes and approach towards mothers and youths is very bad and therefore many mothers and youths are scared of accessing health services. Staff scream and swear at labouring mothers and say unwelcoming comments to teenagers who are pregnant, and therefore many mothers are still delivering at home." [FGF]

Cost (even though not supported by national policy) was a common concern, both in terms of fees for service and prescription charges. "Hospital fees are too high for youths and mothers to afford. Many different fees are imposed for all different checks and tests." [FGFY]

Another cost entailed travelling to appointments that were often not available of arrival. "Staff punctuality has to improve and the timings of the opening and closing of the clinics has to be reviewed. Staff come in late and open the clinics at around 10am and then they have lunch at 12 and then close the clinic at 2pm, which is not correct. Services must be provided on time so that mothers and children don't come and wait, or don't turn around and go back home without receiving the care they needed." [FGF]

Key informants were well aware of many of the **logistical problems endemic to the health system**, notably finance, transport, staff shortages and supply chains. One noted the political dimension. "Political intervention has to happen to cover maternal, youths and children. When there is positive political intervention, this will address political issues and point out health issues affecting mothers, children and youths." [ID1] On this point, a discussion from the MSD meeting noted the complexity of elevating these issues in a political environment inhabited by very few prominent women, especially at the national level. "Regards women's political participation … some women are entering politics at the local level by elective process. The National Council of Women has attempted to take ownership of those nominated seats but in many districts the women's representative is nominated by the District MP – sometimes on merit, more often through political patronage. A big issue is to get their male colleagues to really take their issues and concerns seriously and not be dismissive." [MSD]

All focus groups commented on **systemic problems with delivering health awareness and information**. "No proper awareness or health education – for all women and youths – on health issues and dangers like illegal abortion practices and the dangers woman can be faced with." [FGF] Along with a lack of youth specific services, it was noted that "…there's no proper education materials to help with information sharing. No health education or information dissemination to youths around health issues affecting youths and no sex health counseling." [FGMY]

The men's focus group added to this theme, noting the lack of health education to combat long standing **taboos reinforcing gender roles**. "… there is a strong taboo or culture that fathers cannot help mothers or babies or youths when it comes to diseases or other issues, and therefore causing a lot of mothers in the remote areas to face issues alone and causing death." [FGM] Sorcery related violence towards women and children was also raised, alongside the endemic problem of domestic and sexual violence, as highlighted in the MSF report *Return to Abuser* (2016) referenced in the introduction.

"Death and illness are too often accepted fatalistically in PNG, and sorcery or ancestor anger will often be used to explain death or chronic illness. Failures in the system are acknowledged but people often feel powerless to change these things for many reasons." [MSD]

While the print and TV media has picked up relevant matters (such as the Parliamentary Public Accounts Committee's Health Enquiry into drug supplies), the media does not have a strong tradition of investigative journalism, and health related stories are rarely pursued to conclusion. "I don't think that you would call the mainline media (newspapers, radio and TV) robust, challenging, independent and outspoken on issues such as accountability and corruption. They do report on various enquiries … but it fizzles out. Internet and social media is very active, but sometimes ill-informed negative ranting rather than proactive analysis and sustained action. The media can play a far more prominent role; this would necessitate more training in investigative journalism, plus identifying the appropriate people to interview to dig deeper." [IDI]

Reiterating what was noted in the section above, focus group participants highlighted lack of **accountability and institutional support as a major health challenge**. This was perceived to be the case at a number of levels in the health system. "Community support through the ward member is lacking." [FGMY] Key informants were fully aware of these institutional problems, noting that systemic problems around **funding and staff resources,** along with the **topographic and geographic difficulties** in receiving and delivering health services. "Finances are not always on time to support health facilities." [IDI] "Maybe staff are aware of the referral pathways, but they are overworked." [IDI] This has led to certain segments of the population becoming disadvantaged. "Women in the rural areas are the main ones who are being left behind because of their location, and most of them walk hours to get a service. In addition to that, the trained midwives are not in these remote locations. They are in the urban clinics where the doctors are, and in other day clinics. The purpose of the midwives is to be in the remote clinics

so that they can be able to help these mothers in the remote areas, which today is not happening." [IDI]

It was clear from the interviews that women, children and adolescents face **interrelated health problems**. Commonly identified were unsupervised births, teenage pregnancy, poor immunization coverage, gender bias, domestic violence, and lack of access to sexual and reproductive health services. This was set against insufficient funding, poor medical supplies and staff shortages (especially in rural areas).

© Lynton Crabb, Burnet Institute

More generally, accountability is inhibited by **barriers arising due to systemic and infrastructural problems and shortages**. "Planning and budgeting is being done every year for sustainability development. But monitoring is supposed to be done every year from the PHA down to the district and to the wards. At the facility level in the past, there were disease control officers and health educators, and there was proper monitoring and evaluation (M&E) done, whereas today, there is only one staff, the health manager, to do M&E, supervisory visits and compile reports. It is a big challenge." [IDI]

Much has been done to improve compliance and efficiency, with computers and training in data collection being more widely available. However, many **systemic and infrastructural problems were identified as barriers to effective monitoring and assessment**. These included inconsistent practices, remote facilities lacking equipment and network access, shortage of reporting templates, negative staff attitudes to evaluation, vacant or redundant positions of responsibility and overstretched workforce, and disaffection with monitoring that has not resulted in changes in policy or practice.

"We need to use the data collected to inform our decision-making. Too often the focus shifts from one health issue to another. This leads to much needed staff being moved from one important health issue to another. As was the case in ante- and postnatal care in MCH where nurses were moved to the immunization programme. The staff are not empowered to speak out, and do as they are told. Of course, the funder is focused on seeing progress in the program they support. This shift negatively impacted on MCH. We need a holistic approach to accountability with planning across all health sectors and issues." [IDI]

On the ground, end users expressed concern that **many services were neither monitored nor being held accountable**, with **little or no feedback to the communities**. "Health Board members must consist of different village members who will then carry back information to their respective places. Health boards should follow up with facility management on programmes, and if the programmes are not rolled out according to the schedules then the health board members must question those in charges as to why this programme didn't happen as scheduled. In that way, we will be able to see if those issues are being addressed, such as immunization to cover the children." [FGF]

"I think within individual programs we have accountability, particularly to the donors, but I am not sure this always extends to the communities we work in." [IDI]

On a positive note, an example was given how digital technology has provided a valuable feedback loop. "Previous speakers mentioned the digital technology. If I could just point out that one province is doing that quite well. The Western Highlands Provincial Health Authority has a closed user group that allows and encourages the community to report if the health centre has no health workers in it when they go to seek care when it should be open. It's kind of a name and shame thing. I guess you can do it with sticks and do it with carrots, so that's one stick they used." [MDM]

A major challenge to accountability concerns **workforce capacity and professional development in using data effectively**. There is a **lack of fully qualified and proactive epidemiologists** who are able and available "to put all the

data together and turn the data into information, and give feedback, and look at the gaps and know what gaps there are and try and fill them. Consequently, information doesn't get back to the communities, that's for sure. It doesn't get back to the health workers either. So, they don't know if they're doing a good or bad job, and nobody ever tells them." [MSD]

Alongside the challenge of not receiving information or feedback on service delivery and management, it was noted that there is **no teaching on accountability issues** in pre-service education. "Nothing about accountability, about data … not for community health workers, nurses, midwives, doctors. We need to put this stuff into the curriculum so that people come out of the health workers' training programmes with a very clear idea of what accountability is, and do it, and support it." [MSD]

This problem is compounded in the rural and remote areas (where 87% of the population in PNG lives). "Health workers are frightened, they know they don't know enough, and they know they don't have the skills, or the equipment, or the drugs, or the opportunity of education. And often they just stop working when they don't think they can do anything." [MSD].

Some good examples were noted to ameliorate this challenging issue. In Western Highlands Provincial Health Authority, there is a **closed user group** where professional health workers and nursing and midwifery officers, and primary health care workers can ring their senior medical officers in obstetrics, pediatrics, surgery or nursing to get much needed expert advice for assistance in dealing with medical issues beyond their knowledge. In another rural province, there was a direct phone line to a labour ward, so every health centre had a phone link up to be directly connected to a knowledgeable mentor.

Actionable outcomes

One issue that stands out from these data is the **need for clear and unequivocal lines of accountability both for service delivery as well as for assessment, monitoring, evaluation and, importantly, remedy and action**. This is critical, yet also complex in a multi-layered and decentralized country such as PNG, with its unique infrastructural and topographic challenges. This topic ran through all the groups and interviews. As one key informant noted "As for children, accountability counts when they are being cared for and identifying communicable diseases and treating them on time." [IDI] Similar sentiments were expressed elsewhere, such as "Ward members and health board or youth reps must know their roles and responsibilities so they can implement effectively in the communities, and address some of the health issues and bring health services to the communities. Health information sharing has to happen and has to happen for all groups of people, and has to happen continuously. Health staff have to be trained properly or sensitized on how well they can approach youths and vulnerable groups. Their punctuality has to be addressed, and staff have to be caring." [FGFY]

This case study highlights that **more information is needed to better understand the mechanisms to improve or enhance indicators, and address availability, accessibility, affordability and quality of care.** We need a clearer understanding of the capacity of the health workforce to deliver effective reproductive, maternal, newborn, child and adolescent health interventions at scale in a complex environment such as PNG. **PNG is facing significant health workforce shortages, especially trained midwives and nurses, compounded by the widespread implications of the COVID-19 pandemic, which will considerably hamper any efforts to provide quality care** that has the capacity to improve outcomes. A key focus is **to determine how best to build and sustain a quality workforce and its deployment within an enabled environment, especially in rural and remote settings**.

The IAP's concept note underpinning this case study provided an **"Accountability Conceptual Framework"** (see Annex 6) consisting of structures (political, media); participation (voice, access); and process (monitor, review) elements. In determining our five key recommendations, we will use this framework as our reference point. Annex 7 provides a more detailed list of further recommendations derived from the ENB data.

(i) Raise the profile of women's, children's and adolescents' health (WCAH)

Support and encourage the heightened profile of the Ministerial Task Force and its current initiatives, notably its Strategic Plan. Encourage leadership and championing of WCAH at all levels of political leadership from the Provincial Governor to District MP to local level councillor. Encourage private sector forums such as B4H (Business for Health) to add WCAH to its portfolio. Advocate for a Parliamentary Forum on WCAH. In collaboration with the PHAs (a governance system well suited to health service accountability), identify and support prominent champions and relevant bodies and agencies to attain the above and to address significant barriers to success – notably corruption and resource allocation that particularly disadvantages those in greatest need in remote and rural areas. Another idea based on previous work [2] was to draw attention to WCAH priorities and challenges in "an annual accountability letter to Members of Parliament".

(ii) Regular and targeted use of media, social media and digital technology

Proactively engage with a wide range of media outlets to promote WCAH and explain rights and accountability concepts. Use short video clips of successes to inspire communities. Utilize PNG's expanding mobile network and potential for e-learning.

(iii) Enhance user engagement

Encourage greater involvement of peers and adolescents at the community level around WCAH and promote mechanisms and forums for the views and voices of service users to be heard. Initiatives such as the Integrated Community Development and TEAM (Together Everyone Achieves More) approaches have the potential to more fully engage the needs and experiences of service users, as well enabling more rigorous assessment and evaluation of MCAH interventions. Digital technology (such as closed user-groups) can be utilized and expanded to obtain community feedback, as well as providing support to the health workforce.

(iv) Improve MCAH health worker skills

Disillusionment, staff shortages and poor performance among MCAH health workers (midwives, nurses, doctors and community health workers) can be improved by a proactive programme of upskilling, including access to digital support and training. One option would be to provide ongoing support and training to community health workers to enable them to qualify as health educators. The adoption of a data feedback cycle, where data are collected, analysed and then fed back to the service level, would enable workers to make changes and improvements, and improve their self-worth and connectedness.

(v) Support a robust accountability cycle (monitoring, evaluation, remedy and action) of MCAH services

The E-HIS has great potential as a tool for monitoring, evaluation and assessment for MCAH and other health services and interventions, along with its function to analyse stock, drugs and commodities in real time. We should encourage all endeavours to develop routine, robust data collection and analysis. There is a need to upskill at all service levels, ranging from expertise in epidemiology at NDOH to basic data collection at the clinic level. A practical step would be to provide a broader training on data and accountability as part of all health worker Continuing Professional Development. The powers and responsibilities of existing structures, notably the Ministerial Taskforce, should be reinforced to support and guide the accountability cycle. Emphasis needs to be

[2] *Wendy J Graham, Endang L Achadi, Margaret Armar-Klemesu, Tim Ensor & Nicolas Meda (2007) Roundtable: Is Pregnancy Getting Safer for Women? Dear Minister, Reproductive Health Matters, 15:30, 211-213, DOI: 10.1016/S0968-8080(07)30324-8*

placed on ensuring that the data collected (such as through the E-HIS) is made available at relevant forums (from the community to government levels) and in appropriate formats in order for it to be translated into meaningful and practical information for decision-making and action.

The case study was developed under the leadership of Dame Carol Kidu, IAP Member, with Professor Robert Power and Professor Caroline Homer, Burnet Institute. Fieldwork support was provided by Alyce Wilson and Pele Ursila Melepia and other colleagues from Kokopo, Burnet Institute. 2020