UGANDA REPORT 3

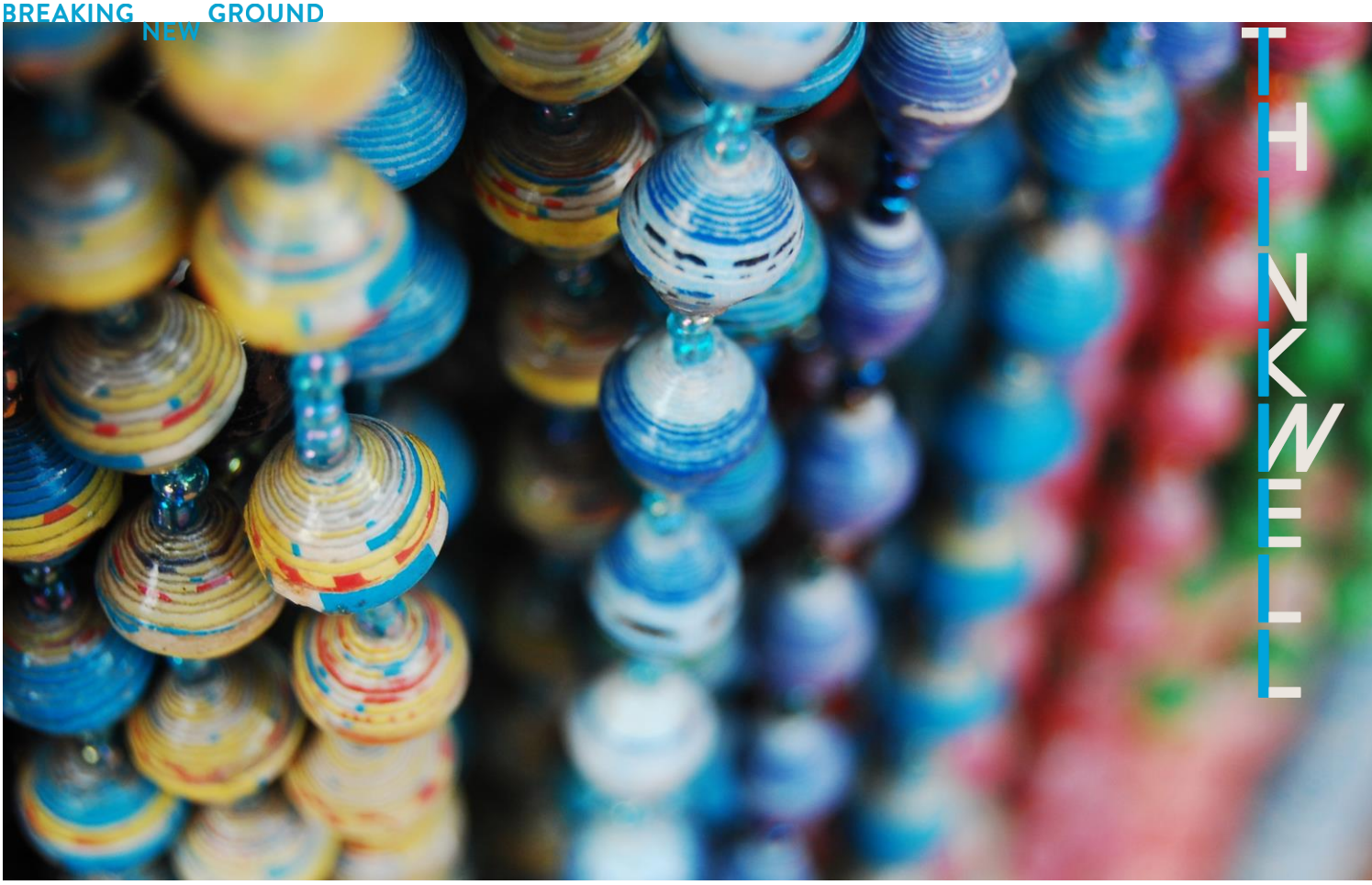
THE REPUBLIC OF UGANDA
MINISTRY OF HEALTH

SP4PHC
Strategic Purchasing for Primary Health Care

Reproductive Health Voucher Schemes in Uganda: How They Worked and Lessons for the Future

February 2021

BREAKING NEW GROUND



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SP4PHC is a project that ThinkWell is implementing in partnership with government agencies and local research institutions in five countries, with support from a grant from the Bill & Melinda Gates Foundation. For more information, please visit our website at **https://thinkwell.global/projects/sp4phc/**. For questions, please write to us at **sp4phc@thinkwell.global**.

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ABBREVIATIONS

ANC	antenatal care
BEmONC	Basic Emergency Obstetric and Newborn Care
CEmONC	Comprehensive Emergency Obstetric and Newborn Care
COVID-19	coronavirus disease 2019
DHT	district health team
EMHS	essential medicines and health supplies
EMTCT	elimination of mother-to-child transmission
FGD	focus group discussion
FP	family planning
GOU	Government of Uganda
HIV	human immunodeficiency virus
IVEA	independent verification and evaluation agency
KII	key informant interview
MMR	maternal mortality ratio
MNCH	maternal, newborn, and child health
MNH	maternal and newborn health
MOH	Ministry of Health
MSU	Marie Stopes Uganda
NHIS	national health insurance scheme
NMR	neonatal mortality rate
NMS	national medical stores
PBF	performance-based financing
PGT	poverty grading tool
PHC	primary health care
PHP	private health provider
PNC	postnatal care
PNFP	private not-for-profit
QI	quality improvement
RBF	results-based financing
SP4PHC	Strategic Purchasing for Primary Health Care
SQIS	self-regulatory quality improvement system
UCMB	Uganda Catholic Medical Bureau
UDHS	Uganda Demographic Health Survey
UGX	Uganda shillings
UHF	Uganda Healthcare Federation
UNMHCP	Uganda national minimum health care package
URHVP-II	The Second Uganda Reproductive Health Voucher Project
UVPA	Uganda Voucher Plus Activity
VCBD	voucher community-based distributor
VHT	village health team
VMA	voucher management agency
VMIS	voucher management information system
VSP	voucher service provider

EXECUTIVE SUMMARY

In Uganda, voucher schemes improved access to family planning (FP) and maternal newborn health (MNH) services for poor women in rural areas. This was largely due to their targeted approach of improving access to high-quality services. On the national stage, voucher schemes demonstrated at scale the opportunities and challenges of implementing demand-side purchasing by generating methods, tools, and lessons that can inform future health financing reforms.

Uganda has more than a decade of experience with FP- and MNH-focused voucher schemes. The two latest large-scale voucher schemes in Uganda covered approximately half of the country, were implemented at nearly the same time, and were completed by 2020. These included:

- The Uganda Reproductive Health Voucher Project (URHVP-II), financed through the World Bank Global Partnership on Output-Based Aid, implemented by the Ministry of Health (MOH) with Marie Stopes Uganda (MSU) as the Voucher Management Agency (VMA).
- The Uganda Voucher Plus Activity (UVPA), supported by the United States Agency for International Development (USAID) and implemented by a consortium of partners led by Abt Associates.

The URHVP-II and UVPA schemes together supported over 400,000 women to access safe delivery services and improved providers' quality of care. A key measure of success in both projects was the number of safe deliveries accessed with voucher support. The URHVP-II exceeded its target of 156,400 safe deliveries by almost 50,000. The UVPA supported nearly 200,000 safe deliveries, short of their target of 250,000. Additionally, both projects successfully improved the quality of care provided by contracted providers, much of which was financed by providers investing in their facilities.

The MOH has made the decision to discontinue these efforts in "project mode" and instead integrate capacities and lessons produced by them into government purchasing arrangements. In collaboration with the MOH, ThinkWell undertook this study to document the lessons learned from the URHVP-II and UVPA voucher schemes for future purchasing reforms. Under the Strategic Purchasing for Primary Health Care (SP4PHC) project, supported by the Bill & Melinda Gates Foundation, ThinkWell works closely with the MOH to support improvements in the purchase of primary health care (PHC) services. In conducting this study, the joint ThinkWell and MOH research team reviewed literature, conducted qualitative key-informant interviews and focus group discussions, and analyzed voucher scheme data to assess performance.

Findings

The URHVP-II and UVPA voucher schemes implemented extensive efforts to mobilize communities, generate demand, selectively contract providers, support quality improvement, and manage a robust claim vetting process to control fraud. Each scheme established a voucher management agency (VMA) as an independent purchaser of services. Village-based voucher distributors identified poor pregnant women, provided them with relevant health education, and sold them vouchers at highly subsidized prices. Women redeemed their vouchers at VMA-contracted public, non-profit, and private health facilities, known as voucher service providers (VSPs), for a package of FP and MNH services. VSPs submitted claims to the VMA, which were extensively vetted before payment.

The voucher schemes created responsive and dynamic service delivery networks. In Uganda's fragmented health sector, the voucher schemes' contract-based approach established service delivery networks that included public, private not-for-profit (PNFP), and private health provider (PHP) facilities. These networks of providers were purposely selected and dynamically maintained to ensure access to services for voucher clients. A fundamental limitation of this approach was that it could not work in remote areas that lacked providers. However, as an approach to coordinating care throughout Uganda's health sector, the use of a contract-based approach to purchasing services holds promise. Essential to this approach were robust systems that monitored contracted VSPs to ensure accountability and adherence to service standards.

VSPs used revenue from the voucher schemes to increase their facilities' capacity and improve the quality of care they provided. By paying facilities fair rates for the service outputs they provided, contracted facilities had the resources and autonomy necessary to ensure sufficient staffing, medical supplies, and equipment were available to meet demand. In negotiating contracts, many private VSPs accepted payment rates lower than their standard services fees, knowing that increased case volumes from new client segments were an attractive business opportunity.

Purchasing services on an output basis required significant administrative capacity on the part of both providers and purchasers. Having typically functioned on a cash-for-service basis, VSPs had to adjust to the voucher scheme's invoice and payment cycle, which could take weeks or even months to complete. This required the VSPs to financially plan to keep their facilities running while they waited for payment. A key challenge faced by both voucher projects was the timely review of claims and provider payments. Delays in payments to VSPs directly affected their ability to pay staff and purchase medical supplies, which threatened their ability to continue services to voucher clients. The coronavirus disease 2019 (COVID-19) pandemic led to a successful trial of partial prepayments to VSPs upon invoice submission before a full vetting of their claims, easing resource constraints without increasing risks to the project.

These schemes incurred high administrative costs; a fact used to argue that they were too expensive to retain. The Uganda Office of the Auditor General in 2019 found that the administrative costs of the URHVP-II voucher project, which included the costs of voucher scheme management, the independent verification and evaluation agency (IVEA), and MOH supervision of the project, accounted for 51.5% of the total project cost (Uganda Office of the Auditor General 2019). Concerns about the high cost of administration contributed to the decision by the MOH and other government stakeholders to end these projects. While these concerns are no doubt valid and important, it is worth considering that much of the project cost was driven by the up-front investments of initiating a demand-side financing mechanism. Had the voucher projects been implemented over a more extended period, a different picture would likely emerge. After the initial investment costs of establishing systems, the actual steady-state cost of administering a mature voucher scheme would likely be much less due to the realization of efficiency gains as well as increases in the volume of claims from demand-generation efforts. This is a critical area of research required in the near future that can directly inform Uganda's efforts to establish demand-side purchasing mechanisms, such as the proposed national health insurance scheme (NHIS).

Recommended Steps Forward for the Government of Uganda

Continue efforts to establish a government-financed demand-side purchasing mechanism in Uganda. As an enhancement to the public health system's current input-based financing, a demand-side approach to purchasing services from providers of all types (public, PNFP, and private) could better coordinate service delivery across the health sector and expand access to services.

Develop the systems and capacity to purchase services from private health care providers. By paying fair, evidenced-based rates for services delivered, a contract-based purchasing mechanism can engage private facilities to extend publicly financed services that are accountable for quality and performance.

In establishing a demand-side mechanism, progressively realize a comprehensive benefits package by starting with a focus on FP and MNH services. Recognizing that the start-up of a new demand-side mechanism requires intensive effort to establish and refine critical systems, an initial benefits package of FP and MNH services are high-impact priorities that address vital needs in Uganda.

Ensure claims management systems prevent provider payment delays. A purchaser can safely pay a provider a portion of the invoiced amount before a full vetting of claim details. During the vetting process, problems can be resolved via deductions or penalties applied to their remaining or future payments.

I. INTRODUCTION

Uganda has more than a decade of experience working with voucher schemes to improve reproductive and child health services. Starting in 2008 with the first Uganda Reproductive Health Voucher Project financed by the World Bank and followed by similar projects, vouchers have supported hundreds of thousands of women in Uganda to access family planning (FP) services and safely deliver their children. Early successes of the voucher projects generated significant interest, leading the Ministry of Health (MOH) to include them as a demand-side financing strategy in the Second Health Financing Strategy 2015/16-2019/20 (Uganda Ministry of Health 2016a). The latest two large-scale voucher projects were the Second Uganda Reproductive Health Voucher Project (URHVP-II), funded by the World Bank and implemented by the MOH with Marie Stopes Uganda (MSU) as the Voucher Management Agency (VMA), and the Uganda Voucher Plus Activity (UVPA), funded by the U.S. Agency for International Development (USAID) and implemented by an Abt Associates-led consortium of partners. The two projects, which shared a common design, started implementation in 2016 and together covered half of the country. They were both completed by 2020 when donor financing for the schemes ended.

While the Government of Uganda (GOU) does not plan to continue with voucher programs, it is actively engaged in moving forward with strategic health purchasing reforms in Uganda. The MOH, with the support of key stakeholders, has embraced significant purchasing reforms that include nationwide scale-up of performance-based financing and moving forward legislation to establish a national health insurance scheme (NHIS). Both of these efforts involve purchasing arrangements with health care facilities in the private sector. These reforms could support greater coordination across the health sector with providers of all types, including public, private not-for-profit (PNFP), and private health provider (PHP) facilities. The voucher programs offer valuable experiences and lessons learned about the contract-based purchase of health services in the Ugandan context.

Against this backdrop, ThinkWell and the MOH partnered to undertake this study to document the experience and learning from the most recent large-scale Ugandan voucher projects. The work is an initiative under the Strategic Purchasing for Primary Health Care (SP4PHC) project, which supports improvements in how governments purchase primary health care (PHC) services, focusing on FP and maternal, newborn, and child health (MNCH). The project, supported by the Bill & Melinda Gates Foundation and implemented by ThinkWell, is working in five countries that include Burkina Faso, Indonesia, Kenya, the Philippines, and Uganda. Working closely with the MOH, SP4PHC in Uganda assists efforts that improve coherent approaches to strategic purchasing, including anticipated demand-side financing mechanisms.

This report is structured in four parts. Section II summarizes the methodology used for the study. Section III reviews the Ugandan context highlighting key FP, MNH, and health system issues. Section IV provides a brief introduction to vouchers as a demand-side financing mechanism designed to address FP and MNCH access barriers. Section V provides a detailed technical review of the two latest voucher projects analyzing the main functional components, including demand creation, voucher production and distribution, poverty targeting, health service providers, the benefits package, quality assurance, claims management, and performance. Finally, section VI summarizes the conclusions from this study and discusses recommendations for the future.

II. RESEARCH OBJECTIVES, METHODS, AND LIMITATIONS

In this study, the joint ThinkWell and MOH team analyzed the latest two voucher projects in Uganda based on a review of available literature, project documentation, and key informant interviews. The desk review focused on publications directly related to Uganda and specific voucher experiences in the country.

The team searched Google Scholar, JSTOR, and PubMed and bibliographic references found in relevant articles. Each potential reference was systematically reviewed by research team members screening for pertinent information related to this study's goals, voucher system functional components, MOH involvement, integration into the health system, and sustainability. The team sought relevant contextual literature and data from publicly available sources, including the MOH, the Uganda Bureau of Statistics, and the Office of the Auditor General. The team also collected extensive documentation from both the URHVP-II and UVPA, including project descriptions, work plans, quarterly and annual reports, technical briefs, and standard operating procedures used to implement the voucher schemes.

The research team conducted key informant interviews (KIIs) with relevant project implementers and stakeholders. Senior staff from both Abt Associates and MSU generously sat for in-depth interviews to provide descriptions and insights into the function and challenges of implementing their voucher projects. These interviews were invaluable to the analysis of the project documentation mentioned above. Research team members also interviewed stakeholders of the voucher projects, including senior MOH officials, the World Bank, USAID, the Uganda Healthcare Federation, and the Uganda Catholic Medical Bureau. All interviews were recorded with consent and transcribed.

In collaboration with senior voucher project managers, the research team conducted field-level focus group discussions (FGDs) with district health officials, voucher service providers (VSPs), and voucher distributors. A systematic sampling process determined participants for FGDs. The sampling process started with selecting VSPs based on facility type (public, PNFP, private), the volume of deliveries per month, and baseline quality assessment scores. Based on the selected VSPs, relevant district health authorities and voucher distributors were selected. The research team used semi-structured interview guides for each focus group type (VSP, local authorities, and voucher distributors) covering voucher implementation topics. Each FGD included only one type of respondent to avoid any seniority issues from supervisory relationships that might inhibit responses.

In March 2020, the team conducted its first set of FGDs in the UVPA catchment area in Mbale and Soroti, located in the east of the country, but could not conduct additional FGDs due to the COVID-19 pandemic. The shutdowns prevented the research team from completing three further field-level data collection efforts in both the URHVP-II and UVPA catchment areas. The pandemic's all-consuming response also prevented the research team from interviewing additional senior leadership from the MOH.

The research team conducted an in-depth analysis of the key informant interview and FGD transcripts. Using the Dedoose package of qualitative research tools, all transcripts were coded using a system developed to inform this report. The team used cross-coder verification tools within Dedoose to improve the reliability of coding among team members. The analysis of code frequencies revealed common themes and facilitated the selection of relevant quotes.

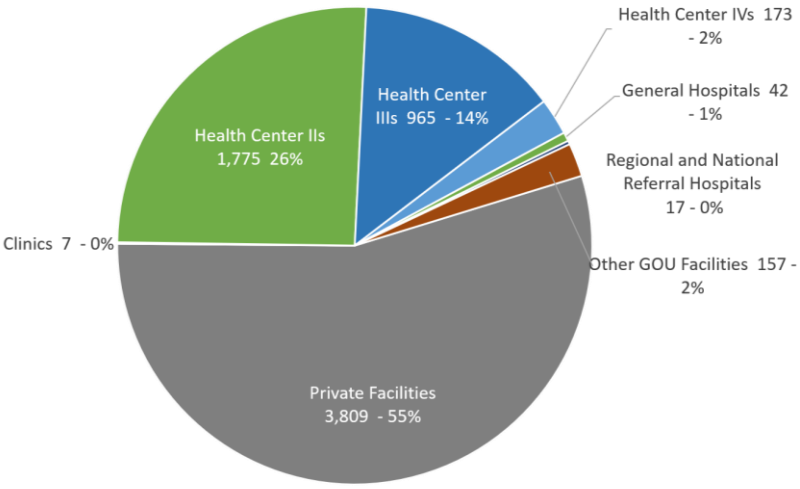
The senior management of UVPA and URVP-II were very generous in making operational data available for this research. Both projects' anonymized operational data were record-based and included voucher sales and redemptions, contracted provider details, provider payments, and quality assessment results. The research team analyzed the quantitative operational data provided by both the URHVP-II and UVPA to generate the relevant figures and graphs generated in Microsoft Excel presented in the report below.

III. THE UGANDA CONTEXT

Uganda's population is growing rapidly, and poverty is a concern. With the fourth highest population growth rate globally at 3.6% per annum (World Bank n.d.), Uganda is a young East African country of 42 million with an estimated 1.5 million births a year (Uganda Bureau of Statistics 2019; 2020). Three-quarters of the population live in rural areas, which have the highest poverty rates. Recent data (**Figure 1**) suggest that poverty is increasing following years of steady decline (Uganda Bureau of Statistics 2018).

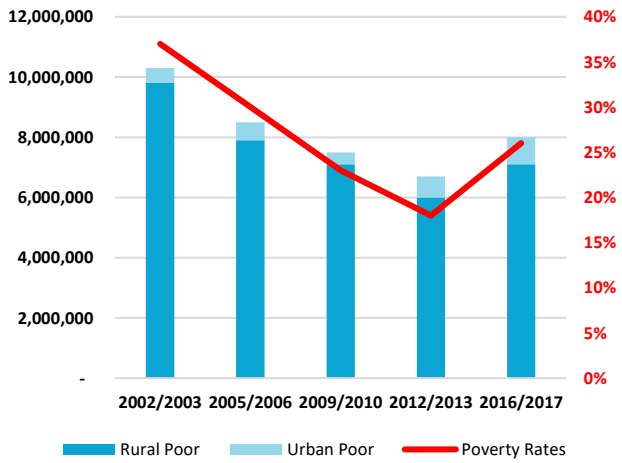
The public health system is designed to provide services to all Ugandans. Using an integrated service delivery model, the MOH owns and operates a multi-tiered network of government-financed facilities (**Figure 2**). In total, the MOH supports an estimated 43% of all facilities nationwide, with other GOU institutions managing an additional 2%, as shown in **Figure 3** (Uganda Ministry of Health 2018a). Managed by decentralized district-level authorities, the large majority of public health system facilities are Health Center (HC) II-IVs and general hospitals. The MOH directly manages higher-level regional and national referral hospitals that provide advanced care and specialized services. Complementing this network, the MOH also provides partial financing to networks of faith-based PNFP facilities that extend the coverage of the publicly financed health services (Uganda Ministry of Health 2019a).

Figure 3: Breakdown of Public Healthcare Facility Types



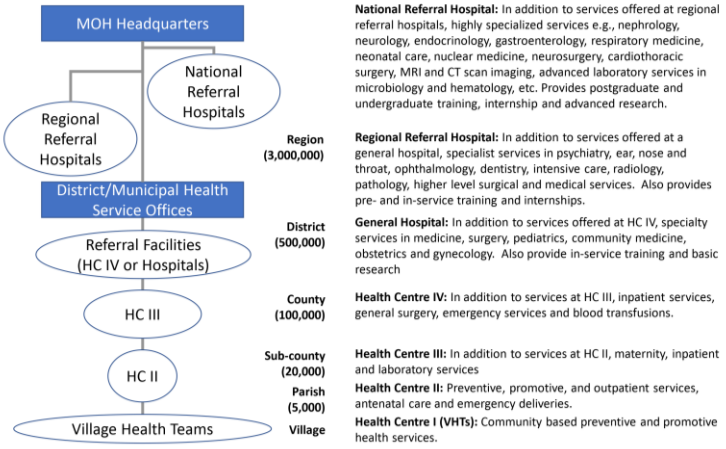
Source: Uganda Ministry of Health

Figure 1: Estimated Urban and Rural Poor Populations and Poverty Rates



Source: Uganda Bureau of Statistics and ICF International 2003, 2007, 2012, 2017

Figure 2: Health Service Delivery Structures



Adapted from: Uganda Ministry of Health 2016c

The public healthcare system is designed to provide equitable access to essential services. With nationwide coverage that is striving to ensure that at least an HC III facility covers every sub-county, the public healthcare system maintains the physical infrastructure to provide access to all Ugandans. Additionally, public facilities' services are (mostly) free, meaning patients are not officially charged service fees when seeking care. There are exceptions at some higher-level public facilities where private wings charge service fees for shorter waiting times and

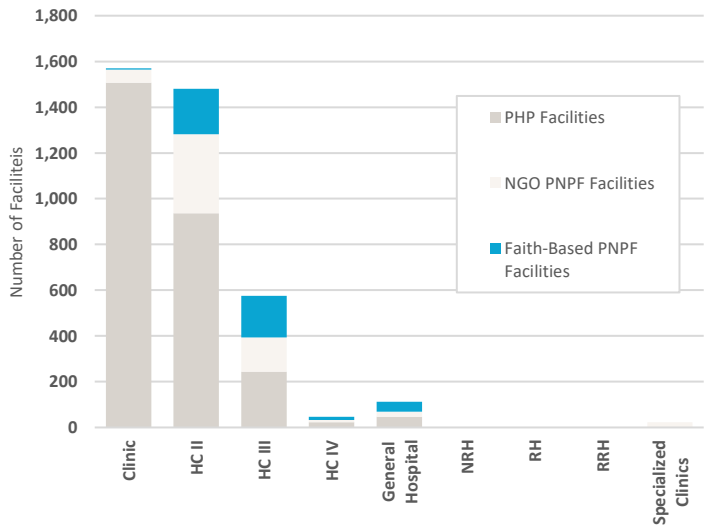
amenities (Uganda Ministry of Health 2010a). The MOH has purchasing arrangements with networks of faith-based PNFP facilities (an estimated 6.4% of facilities nationwide) that provide partial funding for operational expenses as well as essential medicines and health supplies (EMHS) in exchange for limits on fees for essential services (Jordanwood et al. 2020; Uganda Ministry of Health 2018a).

The Uganda public health system is guided by a philosophy that emphasizes PHC. From the overarching strategic plan for the country, Uganda Vision 2040, down through the health sector's policies and strategic plans, there is a consistent focus on preventive and PHC services (Uganda National Planning Authority 2013). In this regard, a guiding policy is the Uganda national minimum health care package (UNMHCP), which prioritizes and defines the services that address the leading causes in the burden of disease. First established in 1997 as the Package of Basic Health Services, it was designed to guide the provision of a minimum package to all Ugandans, with an emphasis on the poor, women, and children, and has served as a focus of health sector policy ever since (Uganda Ministry of Health 1997). Renamed as the UNMHCP in the 2000 National Health Policy, it is organized into four clusters of interventions: 1) promotion, prevention, and community health, 2) maternal and child health, 3) communicable diseases, and 4) noncommunicable diseases (Uganda Ministry of Health 2000; 2010b). Designed to improve efficiency, access, and equity to priority services, the UNMHCP is intended to serve as a cardinal reference in allocating government resources.

While the UNMHCP has proven a useful reference, the public system is often unable to provide the package's full range of services. Soon after the UNMHCP was first established, a detailed costing exercise estimated that an annual US$28 per capita in financing would be required to deliver the package. These calculations were updated in 2009, resulting in a revised estimate of US$41.2 per capita (Kadowa 2017). Since establishing the UNMHCP, the GOU has been challenged to finance the delivery of the package fully. Over the last five years, it has only spent an average of between US$6 and US$8 per capita on the public healthcare system annually, far below needed estimates and global benchmarks (Uganda Ministry of Health 2018b; Stenberg et al. 2019). This level of funding within the public health system has resulted in service delivery gaps of essential services (Kadowa 2017).

Complementing government-financed health services is a robust private sector of both PNFP and PHP facilities. Where the public sector is unable to meet the demand for health services, a private sector of health providers has grown and now constitutes an estimated 54.9% of all facilities in the country. Included in the private sector are the faith-based PNFP facility networks (6.4%) noted above. The remaining 48.4% of PHP and NGO PNFP facilities are mainly clustered at the PHC levels of care, as shown in **Figure 4**. While public and faith-based PNFP facilities are more evenly distributed across the country, PHP facilities tend to be concentrated in urban areas (Uganda Ministry of Health 2018a).

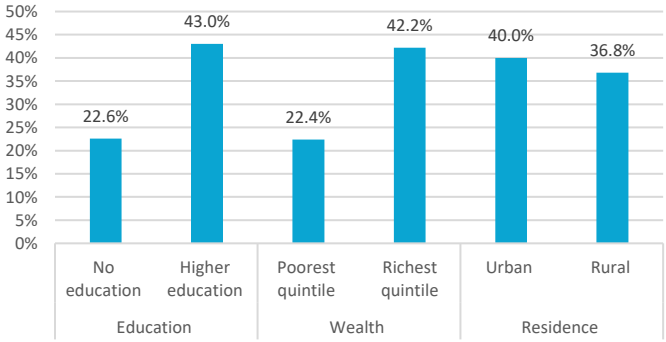
Figure 4: Distribution of Private Facilities by Type and Level of Service



Source: Uganda Ministry of Health 2018a

Despite fiscal challenges, Uganda has improved its modern contraceptive prevalence rate (mCPR), with FP services being delivered predominantly in the public sector. In 2000-01, 18% of all women used a modern contraceptive method, which steadily improved to 35% in 2016. Many FP clients are accessing modern contraceptives in the public sector, increasing from 35.8% of users in 2000-01 to 58.5% in 2016. While the private sector's role has decreased, 38.8% of women still access modern contraceptives from private providers. Although 99.4% of women in the poorest quintile report that they have heard of a modern contraceptive method, only 22.4% report using a modern method in 2016 (**Figure 5**) (Uganda Bureau of Statistics and ORC Macro 2001; Uganda Bureau of Statistics and Macro International Inc. 2007; Uganda Bureau of Statistics and ICF International 2012; Uganda Bureau of Statistics and ICF 2018).

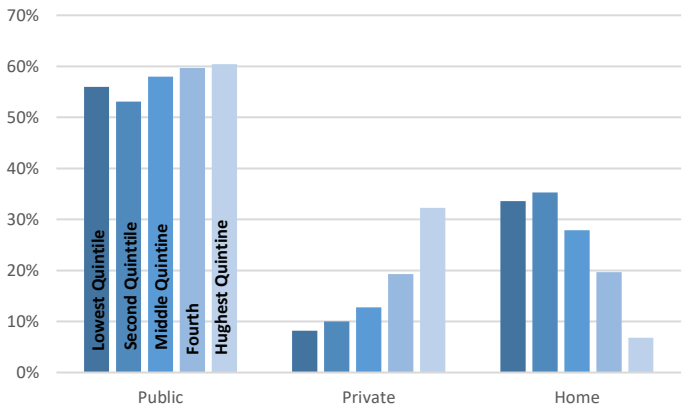
Figure 5: Percentage Use of Modern Contraception Across Key Domains



Source: Uganda Bureau of Statistics and ICF 2018

The utilization of MNH services has also seen steady improvements with the corresponding improvement in health outcomes. The use of antenatal care (ANC) in Uganda is strong, with 97.3% of all pregnant women aged 15 to 49 reporting that they received ANC from skilled providers, up from 92.4% in 2000-01. Deliveries taking place in health facilities have also seen dramatic increases. In 2000-01 only 37% of deliveries took place in a facility. By 2016 this increased to 73%. Not surprisingly, deliveries at home dropped during the same period, from 62% in 2000-01 to 25% in 2016 overall. However, 34.5% of women in the lowest two wealth quintiles still report having their delivery at home in 2016. This is shown in **Figure 6**, which details the place delivery by wealth quintile as of 2016, just before the voucher projects started. In 2000-01 only 5.8% of newborns received postnatal care (PNC) within two days. By 2016, dramatic increases saw 55.9% of newborns receive a PNC checkup within two days of birth. However, 47.4% of babies born to women in the lowest wealth quintile did not receive any PNC 48 hours after birth. There have been steady but slow improvements in the maternal mortality ratio (MMR), which has declined from an estimated 505 in 2000-01 to 336 per 100,000 live births in 2016. Improvements in the neonatal mortality rate (NMR) have been positive but less dramatic, reducing from an estimated 33.2 per 1,000 in 2000-01 to 27 per 1,000 in 2016 (Uganda Bureau of Statistics and ORC Macro 2001; Uganda Bureau of Statistics and ICF 2018). The Sustainable Development Goals include targets of only 70 maternal deaths per 100,000 live births and neonatal deaths to 12 per 1,000 live births by 2030, making efforts to reduce maternal and neonatal deaths in Uganda a high priority (World Health Organization n.d.).

Figure 6: Place of Delivery by Wealth Quintile



Source: Uganda Bureau of Statistics and ICF 2018

In pursuit of UHC and to improve FP and MNCH outcomes, the MOH has embraced results-based financing (RBF) reforms that include vouchers as a demand-side purchasing mechanism. The second MOH Health Financing Strategy articulates a range of health finance reforms to support the achievement of UHC by 2025

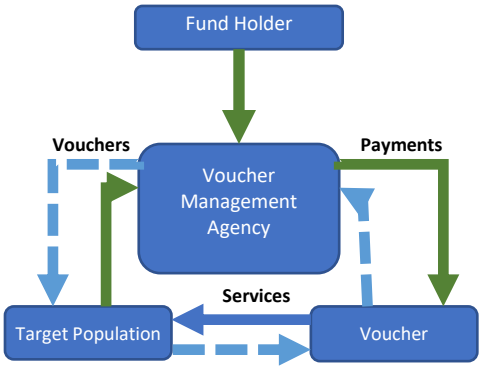
(Uganda Ministry of Health 2016a). An important set of these strategies is detailed in the MOH RBF Framework for the Health Sector (Uganda Ministry of Health 2016b) that outlines a path to institutionalize RBF initiatives that include supply-side performance-based financing (PBF) and demand-side voucher schemes, as part of the national system. These financing mechanisms are meant to complement the input-based financing for priority services such as FP and MNCH and increase access by engaging PNFP and PHP providers.

Beyond RBF approaches, the MOH has been working on designs for an NHIS. From the Uganda Vision 2040 to the MOH's second Health Financing Strategy and in draft legislation approved by the Cabinet in 2019, Uganda has been developing plans for the establishment of an NHIS (Uganda Ministry of Health 2019b). Through a series of iterative designs discussed over the last two decades, there has been consistency in the idea of an NHIS as a national demand-side purchaser of health services on behalf of its members. The experience from the voucher programs provides examples of the core functions necessary to establish such an NHIS. These include the realization of a purchaser-provider split, contractual instruments for providers, a benefits package and provider payment rates, approaches to demand creation, and a robust claims management system that can ensure providers are paid for their verified outputs on time.

IV. INTRODUCTION TO VOUCHER SCHEMES

Vouchers are a demand-side purchasing mechanism designed to mitigate financial barriers and promote access to priority health services for specific population groups. In a typical scheme, printed vouchers are distributed or sold to clients within underserved populations, who can then redeem them at accredited facilities for priority health services. As noted by Gorter and others (2012), beginning in the 1960s, voucher programs were first introduced in Taiwan and Korea to increase the use of FP. These programs successfully increased the use of FP over a 25-year period until the establishment of national health insurance schemes that included FP as part of the benefits package. In their systematic review of over 40 voucher programs, they documented how voucher programs in other countries have continued to focus on the areas of sexual and reproductive health and have grown to include MNCH services. While voucher programs vary in scope and size, they share key attributes in their functional design and implementation structures, as shown in **Figure 7** (Gorter et al. 2012).

Figure 7: Typical Voucher Structure and Functions



Adapted from: Gorter et al. 2012

Funding	Governments or donors.
Implementers	A distinct implementing body dedicated to the effort, often called a Voucher Management Agency (VMA), that distributes vouchers, contracts providers, manages claims, and pays providers.
Providers	Contracted facilities deliver a specific set of services at agreed levels of quality to the target population. Providers collect vouchers and then submit them for reimbursement from the VMA.
Target population	Defined and identified by the VMA and given vital health information, they are given or sold a voucher which they can redeem for services from a VMA accredited provider.

Vouchers typically use a contract-based approach to purchase services from facilities. By purchasing on an output basis and paying fair rates for services, voucher schemes can incentivize providers to deliver client-centered care. Providers who respond to these incentives generate greater client flow, increasing their revenues that can be used for staff salaries, drugs and supplies, and facility improvements. This mode of

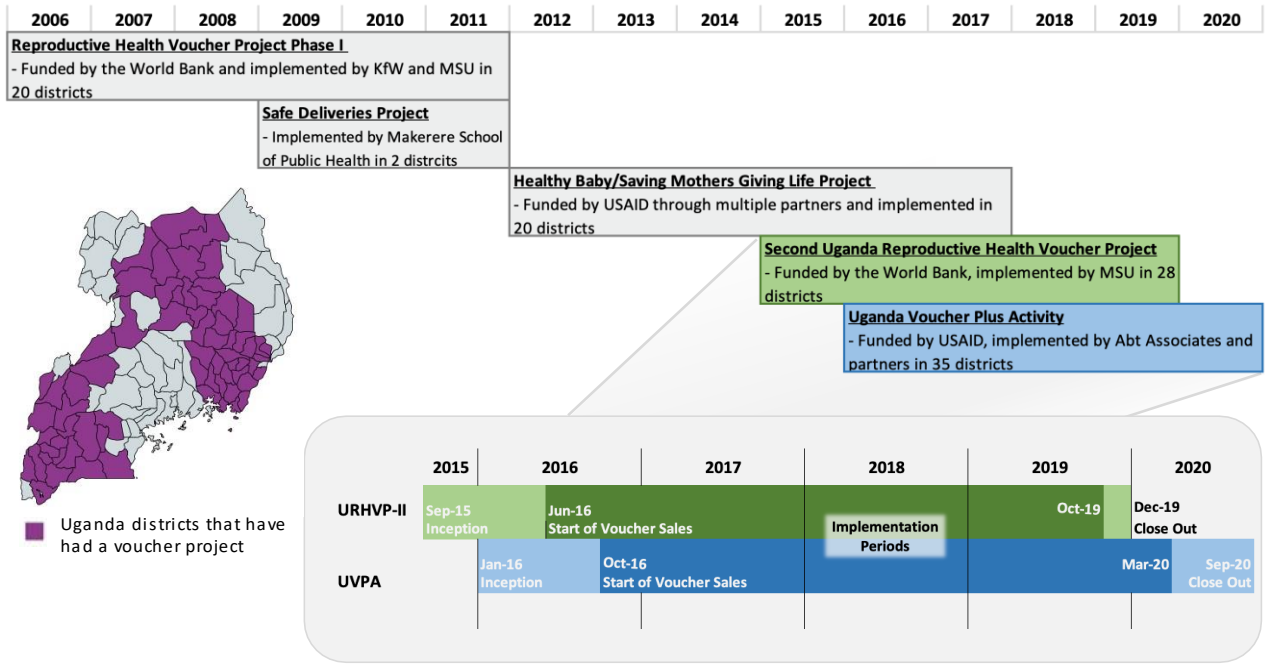
output-based purchasing is applicable in both public and private facilities, as long as they are able to enter into service provision contracts.

Contract-based purchasing creates a dynamic platform for quality improvement that can result in positive behavior change by providers. Critical to a voucher program's achievement of its larger health goals is the ability to ensure that robust systems are in place to measure and improve the quality of care being purchased. As described below, the voucher programs in Uganda demonstrated that minimum quality standards enforced through contracts in combination with timely reimbursements create a strong motivation for providers to make rapid and lasting quality improvements.

V. VOUCHER PROJECTS IN UGANDA

Over the past 12 years, Uganda, with the support of donors, has experimented with voucher programs to increase access and utilization of FP and MNH services. The timelines in **Figure 8** summarize the sequence and coverage of the three previous and most extensive voucher programs in Uganda with additional details of the URHVP-II and UVPA projects. The experiences built across these projects were shared and iterative and covered increasingly large parts of the country, as shown in the embedded cumulative coverage map.

Figure 8: Timeline of Voucher Projects in Uganda



Source: (Namayanja, 2019; Ssengooba et al., 2015; World Bank, 2014)

The URHVP-II was initially financed by a US$13.3 million grant from the Swedish International Development Cooperation Agency (SIDA) through the World Bank Global Partnership on Output-Based Aid (World Bank 2014)**.** Started in September 2015, it was approved by the World Bank as an MOH-implemented project, with MSU contracted as the VMA. The project aimed to increase access to skilled care during pregnancy and delivery among poor women in rural and disadvantaged areas by contracting service delivery from public, faith-based PNFP and PHP facilities. The project had two components. The first (funded at US$9.5 million) provided a "Package of Safe Delivery Services to Poor Pregnant Women," with an initial goal of supporting 132,400 safe deliveries over a three-year implementation period. Additional financing from the World Bank and United Nations Population Fund (UNFPA) totaling US$4 million brought the total funding for

component one to US$13.5 million, expanded the benefits package to include FP services, and increased the project target to 156,400 deliveries. The first component only covered the cost of service fees paid to contracted providers. The second component of the project, "Capacity Building and Project Management," was funded for a total of US$3.8 million and covered the costs of MSU, the IVEA, and the MOH, bringing the overall total cost to US$17.3 million (World Bank, 2017).

In 2016, the US$24.5 million, five-year, USAID-funded UVPA project was awarded to a consortium of partners led by Abt Associates. The project was designed to "provide measurable improvements in safe motherhood services" by engaging private providers to deliver high-quality MNH and FP services to pregnant women identified as poor. The project had ambitious goals to support 250,000 safe deliveries, with 50% of supported women accessing four ANC visits, PNC, and FP, and 100% of women who tested HIV-positive enrolled in the MOH elimination of mother-to-child-transmission (EMTCT) program. The project sought to demonstrate a demand-side purchasing mechanism in Uganda that could inform longer-term health financing options for the MOH (Namayanja 2017).

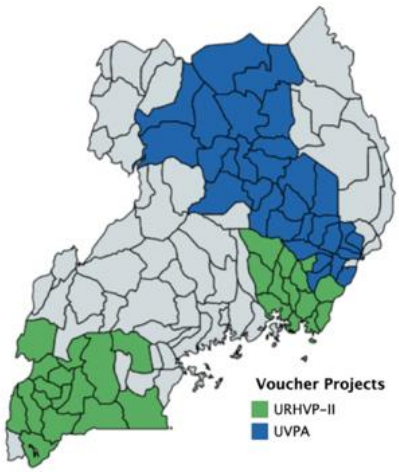
There was a deliberate decision to plan and coordinate the design and implementation across the two projects. Both projects established centralized VMAs that functioned as purchasers, though there were differences in how these were structured. The similarities (with minor differences) in voucher scheme design included the contracts for providers, the benefits package, use of the voucher management information system (VMIS), printed voucher designs, poverty-targeting tools, and the claims management process. There were also large cadres of voucher distributors[1] within each scheme who were tasked with community mobilization, voucher sales, and client follow-up at the village level.

> *"At the country level, the idea was developed by talking with the World Bank. We agreed that we should as much as possible have a uniform design of these projects because we were adopting a system that existed before being used by MSU for the World Bank and the same one we were going to use to manage the project. So, it was natural that we would adopt the design to harmonize the projects"* (Dennis Buluma, Abt Associates)

CATCHMENT AREAS

The URHVP-II project catchment areas were centered on the initial pilot area in the southwest region and in districts with high levels of need in the eastern region. The URHVP-II project was a direct follow-on to the original URHVP pilot project implemented in Mbarara district in the country's southwest. The original pilot area was included in the follow-on project's design and expanded into the nearby contiguous districts. Following receipt of additional funding from the United Nations Population Fund and the World Bank, the MOH added catchment districts in the east of the country. The selection of additional target districts was based on a combination of maternal mortality data, facility-based delivery levels, and poverty rates (KIIs with representatives of the World Bank and MSU).

Figure 9: Catchment Areas of the URHVP-II and UVPA Voucher Projects



Source: URHVP-II and UVPA utilization data

[1] Under the UVPA, village-based voucher distributors were referred to as voucher community-based distributors (VCBDs), and under URHVP-II they were known as the village health team (VHT), an MOH term for the cadre from which many were recruited.

The UVPA catchment areas were within USAID target districts; specific districts were chosen to avoid overlaps with URHVP-II, contributing to national coverage of output-based financing mechanisms. Based on an agreement between Abt Associates and USAID that took into account existing voucher projects, priority areas for expansion included the northern and eastern regions of the country to extend voucher coverage. These areas were selected due to their low maternal health indicators and high poverty rates based on data obtained from the Uganda Bureau of Statistics (KII with a representative of Abt Associates). The catchment areas of both projects are shown in **Figure 9.**

IMPLEMENTATION STRUCTURES

Both voucher schemes established independent purchaser agencies that selectively contracted providers. Both the URHVP-II and UVPA projects set up VMAs as purchasers of services for rural poor pregnant women. The VMAs' essential functions were to define a voucher benefits package, contract providers, set up quality assurance mechanisms, create demand through voucher distribution, review claims, and pay providers.

While mostly similar, the internal VMA structures established by the two voucher projects were different. The World Bank worked in close cooperation with the MOH to establish the URHVP-II as an MOH-led project. This approach was a sustainability strategy designed to clear a path to institutionalization within government systems following the project period (KII with a representative of the World Bank). The MOH selected MSU to serve as the VMA, and they managed all of the voucher scheme functions through its existing in-house departments. This work added to its already broad portfolio of related FP voucher programs (KII with a representative of Marie Stopes Uganda).

In contrast, the UVPA was managed by a consortium of nongovernmental organizations. The VMA functions were delegated to consortium members with overall coordination and leadership provided by Abt Associates, who managed the general contract with USAID (KII with a representative of Abt Associates). Both voucher projects engaged BDO East Africa[2] as the IVEA to the project, responsible for verifying project processes and reporting accuracy, which robustly monitored for potential fraud. **Figures 10** and **11** illustrate the institutional arrangements of both projects.(Namayanja, 2017; World Bank, 2014)

Figure 10: URHVP-II Implementation Structure

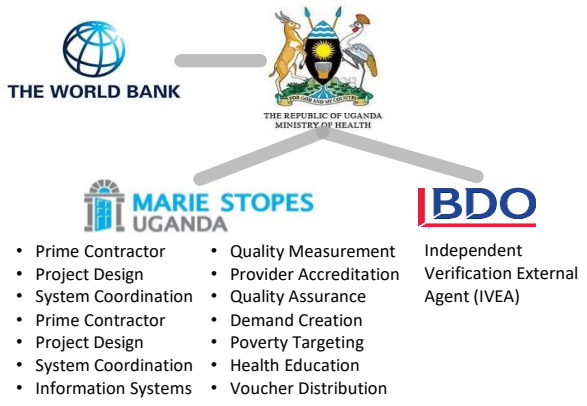
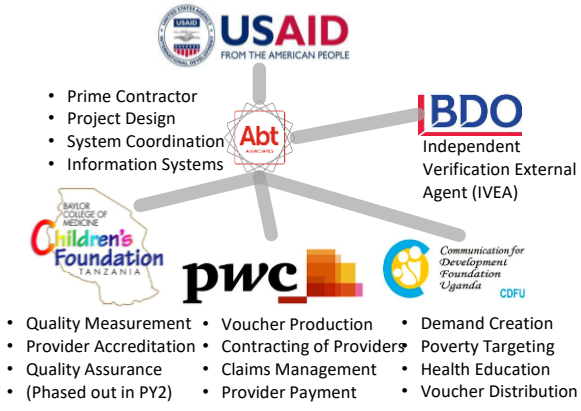


Figure 11: UVPA Implementation Structure



Sources for Figures 10 and 11: World Bank 2014, Namayanja 2017, KII interviews with URHVP-II and UVPA project managers

[2] Formerly known as Binder Dijker Otte & Co, BDO is an international audit and accounting firm that has been active in Uganda since 1999. See https://www.bdo-ea.com/en-gb/about-us/bdo-east-africa.

The MOH established national coordination mechanisms for both voucher projects, but its utility was limited. With nearly simultaneous implementation periods, both projects worked with the MOH to coordinate activities and establish a joint learning agenda through an Interagency Coordinating Committee for RBF. However, the committee rarely met and did not become the platform for coordination as intended (Namayanja 2017). After a couple of years with little activity, the committee folded into the existing Budget Sector Working Group. As noted by representatives of both projects, their needs and the Budget Sector Working Group mandate were not well aligned. At a later time following the establishment of the RBF Unit within the MOH to manage the PBF component of the Uganda Reproductive, Maternal, and Child Health Services Improvement Project, a National RBF Implementers Forum (which included voucher implementers) was established to share monthly updates. However, meetings were irregular and eventually stopped altogether.

DEMAND CREATION

Demand creation activities were vital to the success of both projects. During the initial roll-out phases, both projects engaged local authorities and religious, cultural, and opinion leaders to sensitize them to the voucher scheme and enlist their support in community engagement activities (Namayanja 2017; Marie Stopes Uganda 2016).

> *"Politicians had to be sensitized first as they were skeptical of project objectives, then they became ambassadors of change."* (Voucher Distributor in Soroti)

Hundreds of community sensitization meetings reaching thousands of people were held during the initiation of both programs to explain the voucher scheme, eligibility, and benefits of purchasing a voucher. Specific smaller group meetings targeted men and youth with specifically tailored messages. For example, encounters with men would emphasize the importance of their support for a safe delivery and encourage them to provide their wives with enough money to purchase a voucher. In FGDs for this study, many voucher distributors reported that these types of activities were successful.

> *"It has increased male involvement; at first, men didn't escort their women to the facilities but not now since the CBDs are male and are sensitizing men to get involved. They continuously talked to the men in the drinking places, in church, and anywhere they would find them."* (Voucher Distributor in Soroti)

Both projects used mass media and printed materials throughout their project implementation periods. Hundreds of radio talk shows were held at local district radio stations, often inviting local authorities, voucher distributors, health providers, and satisfied clients to answer call-in questions. Local radio spots were played multiple times a day, and disc jockeys mentioned the project during their radio programs. Supporting these messages, posters, birthday cards, prescription pads, umbrellas, and other items were printed with project information (**Figure 12**). These efforts were not entirely successful, given that many poor pregnant women did not have access to a radio or would not regularly visit a public area where a community meeting might be taking place. In some cases, a local health official in Mbale noted, they encountered women in rural areas who had not heard information about the voucher projects.

> *"We used radios, and most of the poor don't have, and those public places, they don't reach there."* (District Health Official in Mbale)

By far, the most effective method of communicating with potential voucher beneficiaries was the direct door-to-door work done by the voucher distributors to sell vouchers. The voucher distributor role included not only voucher sales but also health education and follow-up of voucher clients. This role allowed them to speak directly with poor pregnant women, answer their questions, and build their trust level to use vouchers. Multiple voucher distributors reported that the most effective way to reach poor pregnant mothers was to visit them in their homes.

Both programs also established hotline toll-free phone numbers. The toll-free numbers were printed on the vouchers and advertised through various communication methods. The hotline served as a platform to answer questions and also collect complaints. The questions asked over the hotline and the complaints received were used by the clinical support teams in their efforts to improve the quality of service provision and by the project monitoring and evaluation teams to conduct investigations of reported abuses.

Figure 12: A URHVP-II Demand Creation Poster

Source: Marie Stopes Uganda 2016

Demand creation required the concerted and continuous efforts of community-level agents to sensitize and mobilize target populations. To be a successful output-based purchasing mechanism, an understanding of entitlements and demand for services had to be created among the target population. Radio announcements, posters, and community meetings were not enough. Both projects relied heavily on large numbers of village-based agents to communicate key messages directly with potential patients, clarify what was available, and instill confidence that the benefits were real. Going forward with potential schemes like the NHIS, a motivated cadre of community-level agents will be critical to building the demand for coverage among the population.

VOUCHER PRODUCTION AND DISTRIBUTION

The VMIS was used to manage the production and distribution of vouchers by both projects. The VMIS is an online relational database owned by the MOH that was initially developed during the initial URHVP pilot project to manage voucher-based programs that support access to FP and MNH services. MSU developed a closely linked SMS system, known as Marie-text, for field-level data collection at critical points in the distribution, sales, and redemption of vouchers. The MOH also provided the VMIS database to the UVPA project, and Abt Associates developed a similar linked SMS based for field use. In the URHVP-II project, voucher production and distribution were managed by MSU, while in the UVPA project, PricewaterhouseCoopers handled voucher production, and Communication for Development Foundation Uganda managed distribution.

The vouchers produced by each project were similar in content and design and included several security features. To ensure the validity of vouchers and prevent them from being traded, sold, or duplicated, both projects included security features in the production and distribution process as well as the physical vouchers themselves. The VMA assigned each voucher a unique code, printed as a barcode (**Figure 13**), that linked to relevant entries in the VMIS. Each of the service coupons within a single voucher also included separate, unique barcodes printed on peelable stickers. Additionally, the multi-colored vouchers were printed on laminated card stock not readily available in Uganda.

Figure 13: Example Voucher from UVPA

Source: Correspondence with Abt Associates

The VMIS was used to track vouchers from the initial production through submission as a service claim. The distribution process, from printing through warehousing and on to voucher distributors, was tightly controlled. Every person who had official possession of a voucher throughout the chain to distribution was held accountable until submission to the VMA as a service claim. The management of vouchers was similar to currency control, with signed hard copy receipts and corresponding entries into the VMIS. The tracking system used by both projects efficiently managed the pipeline supply of vouchers (KII interviews with MSU and Abt Associates).

Both projects sold vouchers to poor, pregnant rural women for 4,000 UGX (approximately US$1.10) a piece. This purchase price was highly subsidized. Based on standard payment rates for a full set of the intended services,[3] the total cost of services to a single pregnant mother was approximately US$52 under the UVPA and US$56 under URHVP-II. This made the voucher's purchase price only 2% of the benefits associated with normal delivery. The level of subsidy associated with each voucher went up substantially if the benefits included a cesarean section.

Several key informants explained that charging poor women for vouchers meant they were much more likely to value and utilize the services. As stated in the URHVP-II World Bank Project Appraisal Document:

> *"User contribution is important as it makes getting a voucher an 'active' exercise—the price is discussed, money is found and payment made—and this makes the voucher 'valuable' and not just a 'giveaway', and it also provides a mechanism to pay distributors who take a percentage of the money received as a form of output-based payment."* (World Bank 2014)

[3] Four ANC visits, a normal delivery, two PNC visits, and the choice of an Implant for FP.

A recent evaluation of the URHVP-II project by the Initiative for Social and Economic Rights (ISER) found that not all poor women could afford the voucher's purchase price (Initiative for Social and Economic Rights 2020)**.** Participants in FGDs for this study confirmed the same finding. Many voucher distributors in the UVPA catchment area reported that they would regularly give away vouchers out of compassion to poor pregnant women who could not afford the voucher's purchase price. By gifting vouchers to destitute pregnant women, voucher distributors were essentially paying out of their own pockets through a loss of income. Voucher distributors also reported accepting partial payments in installments from expectant mothers who had difficulty raising the necessary 4,000 UGX.

Voucher sales directly financed the work of voucher distributors. At the start of the UVPA, voucher distributors purchased vouchers at a rate of 2,000 UGX each. Upon selling a voucher for the standard 4,000 UGX, the voucher distributor would retain the full sale price of 4,000 UGX, realizing a commission of 2,000 UGX per voucher sold. Given the daily needs of voucher distributors to cover the costs of working in the field and providing for their families, they often used significant amounts of their money from voucher sales, leaving them with insufficient funds to buy more vouchers. Within the first year of implementing this system, it became clear that this arrangement created a bottleneck that limited voucher sales and hence utilization. After extensive consultation, Abt Associates instituted a revised system in year three of the project, in which the VSPs paid the upfront cost of 2,000 UGX per voucher and then gave those vouchers to the voucher distributors at no charge (Namayanja 2018). This change to the system meant that voucher distributors had much greater access to a supply of vouchers that increased sales and created dramatic increases in utilization. Voucher distributors were also greatly incentivized with this new arrangement that allowed them to earn a full 4,000 UGX as their commission on each voucher.

POVERTY TARGETING

Both projects employed the same poverty assessment tool and process to identify poor pregnant women eligible to purchase a voucher. Household poverty targeting was used extensively by both voucher projects using the same poverty grading tool (PGT) originally adapted from the Grameen Foundation under the World Bank-funded URHVP pilot project (KII with a representative of Marie Stopes Uganda). The tool used a proxy-means approach based on seven questions asked or easily observed of a possibly poor pregnant woman. Each question had three potential answers that correspond to increased wealth and had a scoring system of 1 to 3 points. A household that scored between 7 (the absolute minimum) and 12 (out of a possible maximum of 21) was deemed eligible to purchase a voucher.

There were efforts across both projects to use a geographic poverty-targeting approach. In addition to the intensive household-level poverty identification process, both projects explored geographic targeting for use in districts where more than 60% of households are poor by official government measures. Geographic targeting of a poor district meant that any pregnant woman living in that district was eligible to purchase a voucher without being screened for poverty using the PGT. Geographic targeting is much less labor-intensive than the household-level targeting approach. The URHVP-II identified three districts in which they used geographic targeting—Buyende and Luuka in the eastern region and Buhweju in the western region (KII with a representative of Marie Stopes Uganda). The UVPA did not use geographic targeting after experiencing delays accessing the necessary Uganda Bureau of Statistics poverty data. Instead, the UVPA relied solely on household-level poverty assessments (Namayanja 2017).

Both projects closely monitored and experienced challenges during household poverty targeting. Voucher distributors were strictly limited to conducting poverty assessments while physically at the household of a potentially poor pregnant woman. Each poverty assessment was documented by the voucher distributor, with the assessed pregnant woman retaining a carbon copy. The information recorded on the PGT would then be used to triangulate information from the report of the voucher sale entered by the voucher

distributors through their SMS link to the VMIS. When first seeking care from a VSP, a pregnant woman was required to bring her carbon copy of the PGT along with her actual voucher to the facility to confirm her eligibility. Both voucher projects experienced some irregularities in the distribution of vouchers, with some mothers receiving vouchers who would not qualify according to the PGT standards. These irregularities were, in part, the result of the political influence of the village council on voucher distributors to identify poor pregnant women who would not qualify otherwise (KII with a representative of the World Bank). There were robust mechanisms in place to mitigate against these practices; they identified cases and took corrective actions that included disciplinary measures against offending voucher distributors.

> *"You could get a mother coming with a voucher, and this person didn't deserve it. Someone would even come with all the documents, and you could see she was an able mother, and she had the card. And when you look at the history, someone will tell you, 'You know Uganda.' In between the distribution channels, there was some kind of corruption."* (District Health Officer, Mbale)

The Office of the Auditor General found that poverty targeting by the URHVP-II was identifying significant numbers of non-poor pregnant women. In the ISER assessment of the URHVP-II, they noted the *Report of the Auditor General to Parliament for the Financial Year Ended 30th June 2019,* which found that only 32% of mothers reached could be classified as poor, while the remaining 68% were classified as medium or rich. Unfortunately, the report provides no background information on the Auditor General's methodology to support this finding (Uganda Office of the Auditor General 2019). Given that poverty identification by the voucher programs used a relatively simple 12 question proxy means test, even if the verification by the Office of the Auditor General was done by using the same tool, low levels of inter-rater reliability could be expected. Given the current lack of a poverty targeting mechanism in Uganda and interest in establishing a national approach, the voucher projects' experience at a large scale deserves additional and concerted research.

Poverty identification as a way to target subsidies may not be the most efficient. In many countries, similar efforts using proxy means poverty assessments have been found to have low levels of reliability and significant issues with gaming; in many communities, they are viewed as lotteries, are difficult to implement, and have high costs (Kidd, Gelders, and Baily-Athias 2017). Alternatives include making highly prioritized choices about services included in a benefits package designed for specific vulnerable groups (women, children, the elderly, etc.) or geographic areas on a universal basis (Kidd and Wylde 2011). The choice of which health care providers are contracted to deliver services and the level to which they are reimbursed can also result in the non-poor self-selecting out of available benefits, effectively achieving the aims of targeting. Given the current lack of a national poverty-targeting mechanism in Uganda, future efforts to extend the planned NHIS to the poor and vulnerable could benefit from these global experiences.

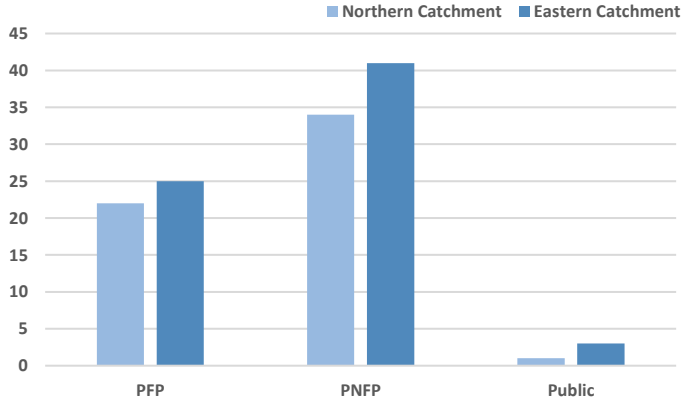
HEALTH SERVICE PROVIDERS

Both voucher projects contracted public, PNFP, and PHP facilities as VSPs in their catchment areas. Facilities were mostly selected at the HC III level and above based on their ability to meet the standards of Basic and Comprehensive Emergency Obstetric and Newborn Care (BEmONC and CEmONC). Both projects made conscious efforts to establish VSPs that had poor populations within a five-kilometer radius of their facilities. Contracted VSPs were organized into referral networks, or clusters, to facilitate efficient transfers to higher levels of care in case of complications. Both projects collaborated with District Health Offices to cluster facilities into referral networks (Marie Stopes Uganda n.d.). The URHVP-II set up clusters with a ratio of approximately 1:3 CEmONC to BEmONC facilities, and the UVPA had a ratio of 1:6. The UVPA also developed lists of multiple referral points for each VSP, both under and not under voucher contract, to

prepare for emergency cases. Additionally, they sought and contracted ambulance services from all sources to have pre-set arrangements that reduced delays in referral times to higher-level facilities.

The UVPA took a broad, all-inclusive approach to identify potential VSPs by initially searching and conducting assessments of all known private providers in their catchment areas. In the UVPA approach, public facilities were not initially considered as potential VSPs because they could not accept payment in return for services, having been set up as free public facilities. UVPA did eventually establish VSP contracts with four higher-level public hospitals through their private wings. The graph in **Figure 14** provides a summary of the facilities contracted by UVPA by provider type.

Figure 14: UVPA Contracted Facilities by Type

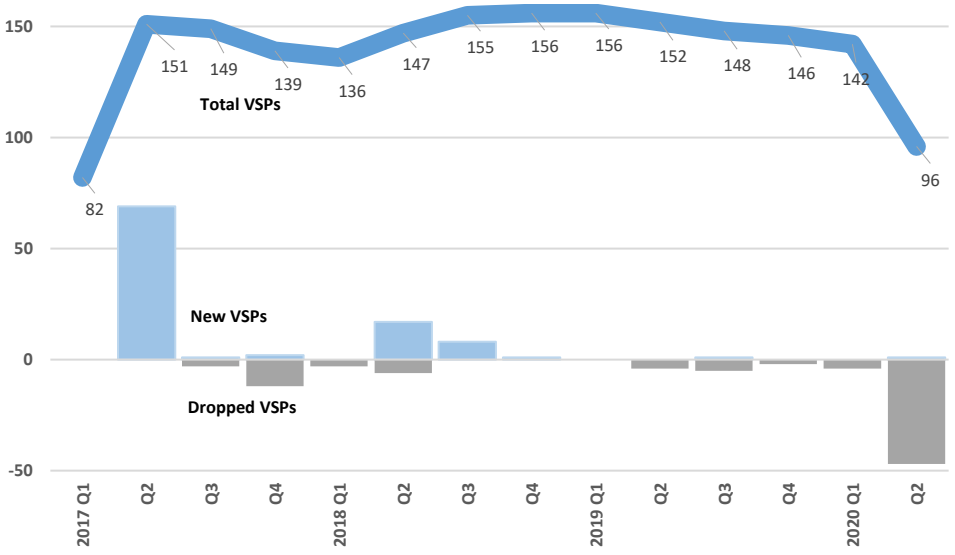


Source: UVPA operational data

After considerable effort to identify and assess potential VSPs in their catchment area, not all providers joined the project. The UVPA project found that some providers were not interested in entering into service contracts, primarily because the payment rates were lower than their standard service fees. The project made significant efforts to convince them that engaging with the project would be a good business decision. Despite the lower payment rates, the much higher patient volumes from new customer segments, combined with modest marginal increases in their facility costs, would make it worth their consideration. Despite these arguments, some private facilities declined to join the project, which created challenges with coverage gaps in certain catchment areas.

Throughout the UVPA project, the number of contracted VSPs remained stable, as shown in Figure 15.

Figure 15: UVPA Voucher Service Providers on Contract 2017-2020

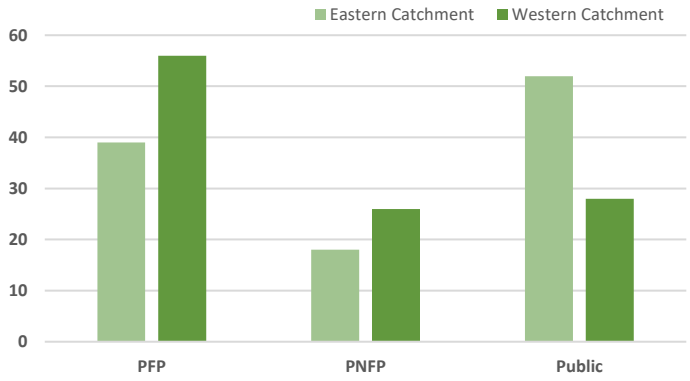


Source: UVPA operational data

The URVHP-II approached the identification of potential VSPs by requesting expressions of interest from public, PNFP, and PHP facilities. Widely published in local media and through stakeholder meetings, the

project invited facilities to express interest in joining the project. Following initial assessments, selections were made of providers with the capacity and quality to deliver the benefits package at either the BEmONC or CEmONC level. **Figure 16** provides a summary of the facilities contracted by URHVP-II by provider type. A key lesson was that this provider-initiated approach was more efficient, as it naturally already included providers who were more likely to join if they met the criteria. UVPA realized that they had wasted time with the approach of assessing all providers in a given area, only to have some providers determine that joining the project was not in their interest.

Figure 16: URHVP-II Contracted Facilities by Type



Source: URVP-11 operational data

Following the selection of providers, both programs used standardized service contracts to engage qualified providers. Both the URHVP-II and the UVPA issued contracts to VSPs that included extensive descriptions of the scope of services to be supplied. Annexes to the contracts included the voucher benefits package, relevant MOH guidelines and protocols, provider payment rates, claims procedures, reporting templates, and the anti-fraud policies (Marie Stopes Uganda n.d.; Abt Associates n.d.).

VMAs paid providers based on their claims for individual cases at calculated rates sufficient to cover the cost of care. **Table 1** summarizes the rates paid to providers by both the UVPA and URHVP-II voucher projects. The rates were based on previous voucher programs and detailed calculations of individual service elements. The URHVP-II project established separate rates for private and public facilities; since public facilities receive budget support from the government, they were paid at rates equivalent to 75% of the rates paid to private providers.

Table 1: UVPA and URHVP-II Provider Payment Rates

Service	UVPA All facilities	URHVP-II PHP Facilities	URHVP-II Public rates
Antenatal care			
ANC #1	40,900	35,000	26250
ANC #2	13,800	20,000	15,000
ANC #3	13,800	19,000	14250
ANC #4	13,800	19,000	14250
Severe malaria	60,000	80,000	60,000
Malaria	23,000	23,600	17700
UTIs	25,000	20,000	15,000
Delivery			
Normal	70,000	70,000	52,500
Complicated/Assisted	80,000	90,000	67,500
Caesarian section	400,000	400,000	300,000
Emergency Referral Transport			
Ambulance services /km	2,000	2,000	2,000
Family Planning & PNC			
PNC Visit	10,000	15,000	11250
FP Short term methods	10,000	2,000-3,000	1,500-2,250
Moon beads	15,000		
Implants	20,000	16,000	
IUD Insertion	25,000	19,000	
Tubal Ligation	50,000		
Management of side-effects	5,000		
Removal of IUD or Implants	10,000		

Source: Abt Associates n.d.; Marie Stopes Uganda n.d.

Establishing a contract-based purchase of health services required significant administrative changes for many providers. Before being contracted by the voucher schemes, both PHP and PNFP facilities had financial management systems that were premised on a cash-for-service system. The invoice and payment system for vouchers initially required that VSPs provide services for two weeks before submitting a claims invoice. Facilities would then wait an additional month (in some cases much longer) to receive payment. In effect, this system required providers to extend credit to the voucher projects in the form of services delivered while waiting for reimbursements. Both projects sub-contracted the Uganda Healthcare Federation (an umbrella organization of private provider associations in Uganda) to provide administrative and financial capacity building to PHP and PNFP providers to support their ability to manage this new financing arrangement. In an

effort to make the system more efficient, invoice submission periods were shortened by encouraging VSPs to submit claims as often as possible.

In both projects, there was a bias toward the contracting of private facilities. In the UVPA, this preference for private providers was an explicit part of the design. After initially only contracting with private facilities, the UVPA eventually contracted with the private wings in four public regional referral hospitals as referral points, paying the same service fee rates as paid to private providers. In the URHVP-II, the project was designed to work with all types of facilities, although there was a bias toward private facilities. This finding was noted in both the ISER assessment of URHVP-II and in key informant interviews conducted as part of this study.

The ISER assessment of the URHVP-II criticized the project's inability to reach underserved and hard-to-reach populations. They noted that many poor communities located within the catchment areas of the URHVP-II were not living within the standard five-kilometer radius of a VSP. As stated above, many VSPs were PHP facilities that tended to be clustered near population centers that could afford their services. This limited the ability of the project to extend benefits to the poor living in hard-to-reach areas. Given that the UVPA shared the same definition of a five-kilometer radius catchment area of each VSP, it can be expected that there were poor populations similarly excluded from the reach of the project by design. In fairness, deliberate efforts were made to contract VSPs that served poor populations to the extent possible, and it was not within the project designs or resource envelopes to establish new providers in areas with poor populations that lacked coverage by a potential VSP. In general terms, this is a limitation of voucher mechanisms: Benefits cannot be extended to areas that lack service providers through voucher schemes alone. A potential strategy that could have been employed by the voucher projects would have been an enhanced transportation benefit to facilitate identified poor pregnant women living outside the standard five-kilometer radius to travel to their closest VSP.

BENEFITS PACKAGE

In response to access barriers for poor women in rural areas, the voucher projects defined a benefits package that focused on a set of FP and MNH services. Based on the MOH's clinical guidelines and standards, the benefits package of both voucher projects included four ANC visits, a safe delivery, PNC,[4] and access to postpartum FP for one year following delivery (Uganda Ministry of Health 2016c). In addition, the benefits included an emergency referral to higher-level facilities for emergencies and complications to reduce any delays in care. The primary benefits were printed on the vouchers themselves, and detailed definitions were included as annexes to the contracts signed with VSPs. The design of the voucher benefit package was iteratively built on previous projects.

> *"This was not a new project in design. Voucher projects have been in the country for 16 years. The design has remained the same. We adopted the service package that had existed before in the other projects and very similar to what the World Bank was offering. The only thing we added (which by then they hadn't added) was FP, which of course, the World Bank added later. We thought it important to have FP, especially that we are dealing with the poor."* (Dennis Buluma, Abt Associates)

Each category of visit (e.g., ANC, delivery) included all routine services as defined by MOH policy and additional services to prevent and manage complications harmful to the mother or child. The services covered included the necessary medicines and supplies, diagnostic procedures, and laboratory tests to avoid

[4] The UVPA benefit package included two PNC visits, one at six days and another at six weeks. The URHVP-II benefit package only included one PNC visit.

any out-of-pocket payments by the mother beyond the initial 4,000 UGX purchase price of the voucher. The benefits packages also included testing and treatment for HIV of the pregnant woman as part of the MOH EMTCT program. The URHVP-II benefit package included testing and treatment of STIs, including syphilis, for the spouse, whereas the UVPA counseled spouses to pay for the service or referred them to nearby free public services.

A key challenge faced by both projects was the lack of FP services at faith-based PNFP facilities operated by the Uganda Catholic Medical Bureau (UCMB), which was resolved through dialogue and coordination with nearby facilities. There was some apprehension with staff at UCMB facilities at the beginning that required clarification regarding the provision of FP services. To address the situation, UCMB clarified its position, best described by a UCMB representative during a key informant interview for this study.

> *"… Abt invited some staff to go for training on FP, and some of our staff didn't go. I found this abnormal, and I talked to some of our in-charges and DHCs [Diocesan Health Coordinators] that the participation in FP training is for all. And training should be on all methods which we encouraged. You are counseling a couple on all FP methods; the difference comes in the service provision. So, when they say, "You have told me about the coil, do you have it?" … then we would say, "We don't have it here," but as a health worker, we expect them to talk with people about all methods. We expect them to do so. We train them to do so. We tell them to do so. Talk to them about all methods, and if they want something we don't provide, we refer them to where they can get it."* (UCMB Representative)

The voucher benefits package was well designed, although there was concern about co-morbidities and the lack of transport support for women to access their delivery. Nearly all key informants stated that the package of services was sufficient for client needs. Many of these informants also acknowledged that the uptake of postpartum FP was not as high as expected, a finding supported by the analysis of utilization data in the section below and an area that deserves further research. One key informant also noted that there was not enough focus on pre-eclampsia, a common cause of maternal death. Another issue was the lack of transport for poor women to reach a voucher-contracted facility for their delivery. Many felt that this would have improved the numbers of poor women redeeming their vouchers for this key service, which was the basis of both projects' key performance measures.

> *"Yes, we had transport, but the transport we offered was emergency referral. We did not have transport from home to the facility. If you ask me what we would want to have the project be more successful, it would need to have a transport benefit from home to facility added. Because there were many women who reported that when their pregnancy advanced, they were not able to walk to the facilities for delivery."* (Dennis Buluma, Abt Associates)

QUALITY ASSURANCE

Both voucher projects chose to use a modified version of the MOH QAP facility assessment tool. The relevant FP and MNH portions of the MOH QAP facility assessment tool were augmented with additional indicators from Marie Stopes International and used by both projects. The tool was used onsite at VSP facilities by project-employed doctors and midwives working with respective district health offices. The tool focused on clinical governance, technical competence, and the status of the facilities and supplies.

Both projects undertook baseline assessments of identified facilities using the modified MOH QAP tool to determine which had sufficient quality and capacity to be contracted as VSPs. The URHVP-II, based on submitted expressions of interest, conducted baseline assessments of potential facilities from January through March 2016 using four assessment teams and in coordination with the local district health team (DHT). In total, URHVP-II assessed 212 possible facilities in the project catchment areas. Similarly, the UVPA

conducted baseline assessments of all potential facilities within the project's catchment area using six assessment teams that assessed 249 facilities in July and August of 2016. Each facility assessment resulted in a percentage score that was 65% or greater. The graphs provided below in **Figure 17** and **18** provide a summary of the baseline assessment results.

Figure 17: UVPA Baseline Provider Quality Assessment Results

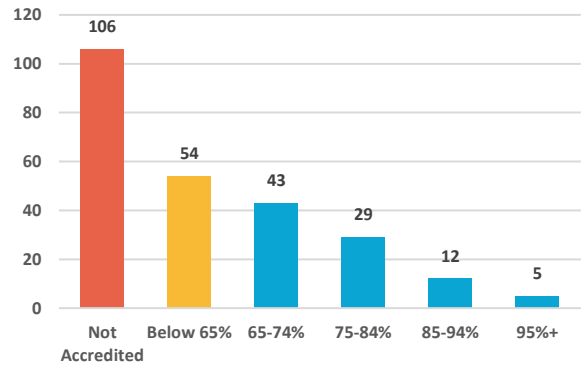
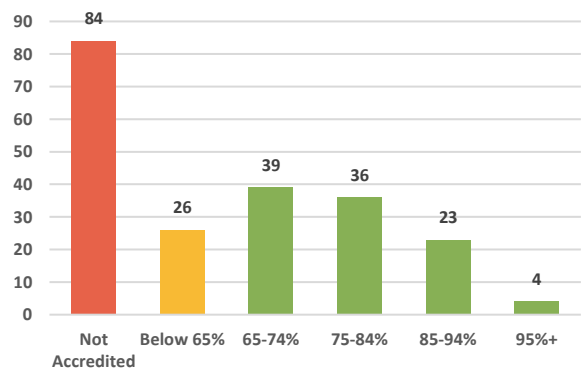


Figure 18: URHVP-II Baseline Provider Quality Assessment Results



Sources for Figures 17 and 18: UVPA and URHVP-II operational data

In hard-to-reach areas with substantial poor populations, both projects made exceptions to the required minimum score of 65%. The selection process of VSPs by both projects was not based on facility quality assessment scores alone. Out of concern for hard-to-reach populations, exceptions were made for facilities that had the potential to provide voucher services but did not meet the minimum quality score. Before these facilities could begin providing voucher-supported services, the projects identified specific areas for improvement to close critical gaps.

Following the selection of VSPs, both projects provided standardized training in B/CEmONC and FP. MOH-certified trainers provided selected VSPs with a two-week off-site training in emergency obstetrical care, EMTCT, FP, and the MOH health information system that included one week of classroom theory followed by one week of observed clinical practice at high-level referral hospitals in the project catchment areas. This training was designed to ensure all selected VSPs were oriented to MOH standards of care.

Both projects chose to employ alternative quality improvement (QI) strategies to the MOH standard approach. Both projects employed teams of midwives to provide supervision and mentoring to VSPs to work on core competencies and improvement of their skills. Within the UVPA consortium, Abt Associates initially delegated the responsibility for provider accreditation to Baylor-Uganda, who posted two senior midwives to cover the project catchment area. Following initial efforts, Baylor-Uganda realized that more staff capacity was required and increased the number of field-based senior midwife mentors to four. Following further struggles to gain traction on QI, Abt Associates determined that the partnership with Baylor-Uganda was not working and took on the QI role within the project directly. Realizing that QI was critical to increasing voucher-supported services, Abt Associates greatly expanded the approach, eventually posting seven senior midwives and two doctors as field-based mentors supporting VSPs.

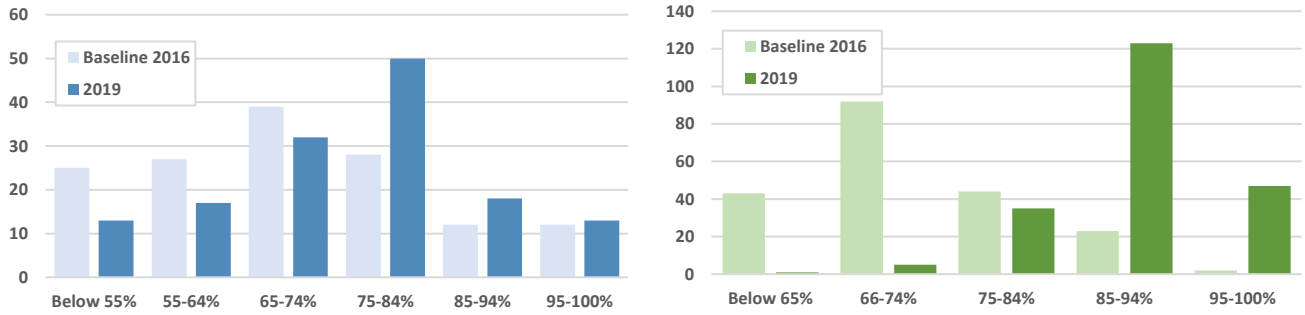
The Uganda Healthcare Federation (UHF) was contracted by both projects to support QI efforts using a standardized self-assessment process well-liked by providers. Initially contracted by the World Bank to support URHVP-II and later by Abt Associates, UHF supported QI by introducing to VSPs the Self-Regulatory Quality Improvement System[5] (SQIS). As an MOH-endorsed tool for the private sector used in addition to the

[5] For a more detailed description of the SQIS please see https://www.uhfug.com/sqis/.

QAP health facility assessments, SQIS provided digitized results and automated analysis to identify priority improvements or technical assistance needed most by each facility to improve quality.

Quality improvement efforts by both projects were successful in raising quality scores, largely driven by private provider investments in facility improvements. As shown in **Figures 19 and 20**, there were significant improvements by the end of both voucher projects in the quality assessment scores among contracted VSPs from initial baselines.

Figures 19 and 20: UVPA and URHVP-II Baseline versus End-of Project Quality Assessment Score Distributions



Source for Figures 19 and 20: UVPA and URHVP-II operational data

With contractual engagement, systematic measurement, and continued support through field-based mentorship, engaged VSPs were capable and motivated to improve. Both projects demonstrated through regular standardized facility assessments that their approach to quality assurance resulted in improvements. Three dynamics in the design of the voucher schemes drove these improvements:

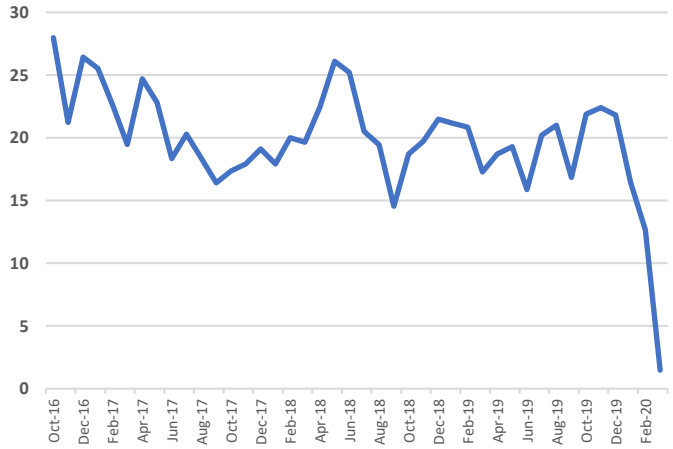
1. The purchase of services was linked to maintaining minimum quality standards, with non-compliance resulting in contract termination.
2. Purchasing services at the full cost of care ensured providers could afford the necessary human resources, EMHS, and equipment to provide high-quality care.
3. Providers were eager recipients of technical support through mentoring to guide their efforts to improve quality. Together, these three dynamics led to providers using their income from vouchers to invest in their facilities to increase capacity and improve quality.

CLAIMS MANAGEMENT AND PROVIDER PAYMENT

The URHVP-II and UVPA voucher projects established robust claims management systems for invoices from contracted providers. VMAs paid VSPs based on the submission of claims invoices that included services provided to beneficiaries in exchange for vouchers. Initially, VSPs made claim submissions bi-weekly; however, both projects accepted more frequent submissions as total volumes of clients increased. Each claim was reviewed for completeness, triangulated with VMIS data for validity, and then reviewed by senior midwives and doctors for clinical validity. After this extensive review process, claims that were approved resulted in payments to providers made through bank transfers. Claims that lacked sufficient information or raised questions were quarantined for further investigation by the VMA, and confirmed fraudulent claims were rejected.

During both projects, VSPs submitted their claims in an effective and timely manner. As shown in the graph in **Figure 21** from the UVPA project, the average number of days from when a voucher client received services to submission of a claim by a VSP remained at less than 28 days for the entire project period.

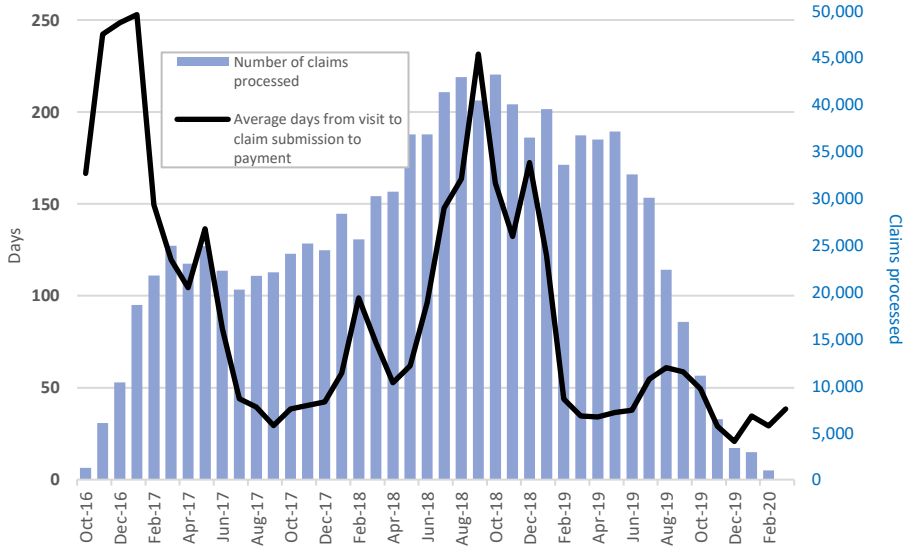
Figure 21: UVPA Average Number of Days from Client Visit to Claim Submission



Source: UVPA operational data

A key challenge was the time it took from invoice submission to provider payment. There were significant delays at the beginning of the UVPA project reviewing claims due to the complicated task of establishing and refining the claims management processes. Initial claims from VSPs, also new to this process, required more effort to review and verify. As VSPs improved their claims invoice quality, the number quarantined for further investigation was reduced. After initial success reducing the provider invoice to payment time, a further challenge was managing the increased volume of claims as the project approached maximum voucher redemption rates in August 2018. This required hiring additional staff, which necessitated contract modifications with consortium members, resulting in further delays. The graph presented in **Figure 22** illustrates the average time from invoice submission to payment during the project alongside the total numbers of claims being processed. By the last full year of the project, the claims management process within the UVPA project was refined to the point that it could manage high volumess of claims and make provider payments within a reasonable timeframe.

Figure 22: UVPA Claim Submission to Payment Times and Total Claim Volumes



Source: UVPA operational data

"The challenge is paying on time. It was not always delayed, but there were times when it was. Like one time, the system had gone down, and it was causing delays for three to four months. This was difficult as the landlord, the workers, they all want their money. But we don't know where the delays usually come from. They don't communicate why there are delays at all, even when you call Kampala." (Voucher Service Provider from Mbale)

Both projects established robust systems to control fraud. All contracts made by the voucher projects with service providers included clear language that any evidence of fraudulent claims would result in the termination of a provider's contract. An essential function within both schemes was the engagement of BDO East Africa as an IVEA to ensure the accuracy of voucher client identification, claims management systems, project reporting of outputs, and client satisfaction. The IVEA process included a review of 25% of all annual claims, verification of quarterly and annual reports, random site visits to VSP facilities, and systematic surveys of clients to assess their eligibility to receive services and the content of the services they received.

The COVID-19 pandemic and subsequent lockdown of the country created new provider payment challenges and solutions. Under the UVPA scheme, before the country-wide lockdown, VSPs submitted their claims to regional project offices, which would conduct a preliminary review before sending the hard copies of the claims invoice documents via courier services to the central UVPA VMA. With the interruption to transport, the project directed VSPs to scan their invoice documents and submit them electronically. For those not able to scan their documents, summary details of services provided were submitted on a daily basis using the SMS system linked to the VMIS. Additionally, anticipating that the claims invoice review process of the VMA would be slowed, the UVPA project agreed to pay providers 30% of their total submitted claim immediately upon submission. With partial prepayments, VSPs had some financing to continue their services while their invoices were being reviewed. After the standard VMA review of the claims invoice, the calculated balance was then paid to the VSPs. This innovation kept providers from over-extending their abilities to continue their services to voucher clients while maintaining the robust claims invoice review without significant financial risk to the project.

Demand-side purchasing mechanisms must ensure that the claims management process is adequately staffed, well-motivated, and properly supervised. A clear lesson from the voucher project experiences is that smooth administrative management in the processing of invoices is critical to the success of these systems delivering to providers on time. If done thoroughly and diligently, invoice and claims verification processes create a nearly constant stream of work that must be well managed to avoid slowdowns that delay provider payments and affect their ability to deliver timely and high-quality health care. Understaffing or low motivation within a future claims management department could erode adherence to full transparency and accountability and lead to the system's possible corruption.

A lesson learned during the onset of the COVID-19 pandemic was that (at least partial) prepayment of providers before the full vetting of their invoices could reduce the harmful effects of payment delays. While it is understandable that providers should not be paid unless their claim invoices are complete and accurate, front-loading a full verification process before payment has often led to delays. In extreme cases, as happened with the voucher schemes, long delays in payments to providers left them without sufficient financing to pay their staff, purchase required EMHS, or simply pay the rent for their clinics that directly impacted their ability to deliver services. In addition to reducing providers' abilities to deliver services, not receiving their due compensation in a timely way reduced their trust in the system.

VOUCHER SCHEME PERFORMANCE

Combined, the URHVP-II and UVPA projects supported access to safe delivery services for nearly 400,000 women. Figures 23 and 24 illustrate the total number of voucher redemptions under each voucher project. Both projects generated significant demand for ANC and delivery services, with less effect on PNC and FP. The URHVP-II project exceeded the project target of supporting 156,400 safe deliveries. The UVPA project did not meet its goal of 250,000 deliveries, mainly because it did not fully estimate the costs of improving

VSP quality, which led to a slowdown of voucher distribution earlier than expected (July 2019) due to projected budget shortfalls.

Figure 23: Overall URHVP-II Voucher Redemptions 2016-2019

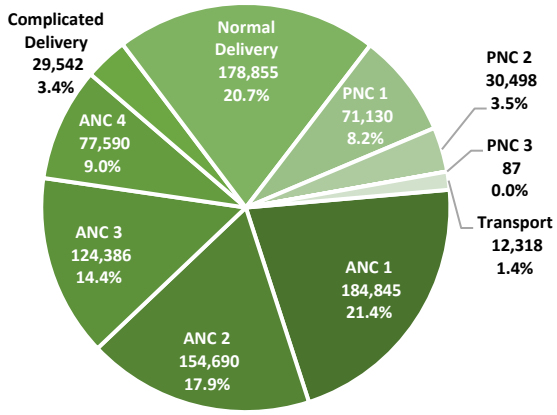
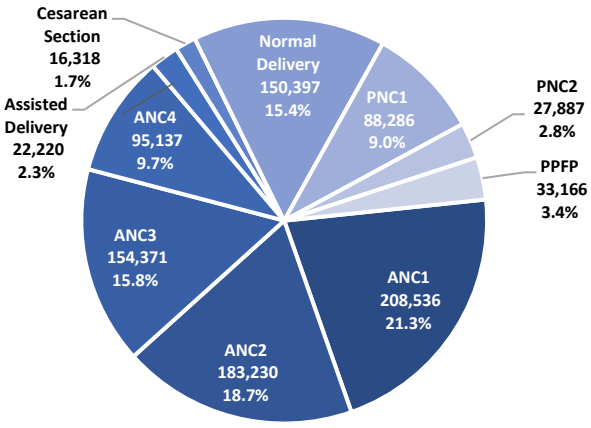


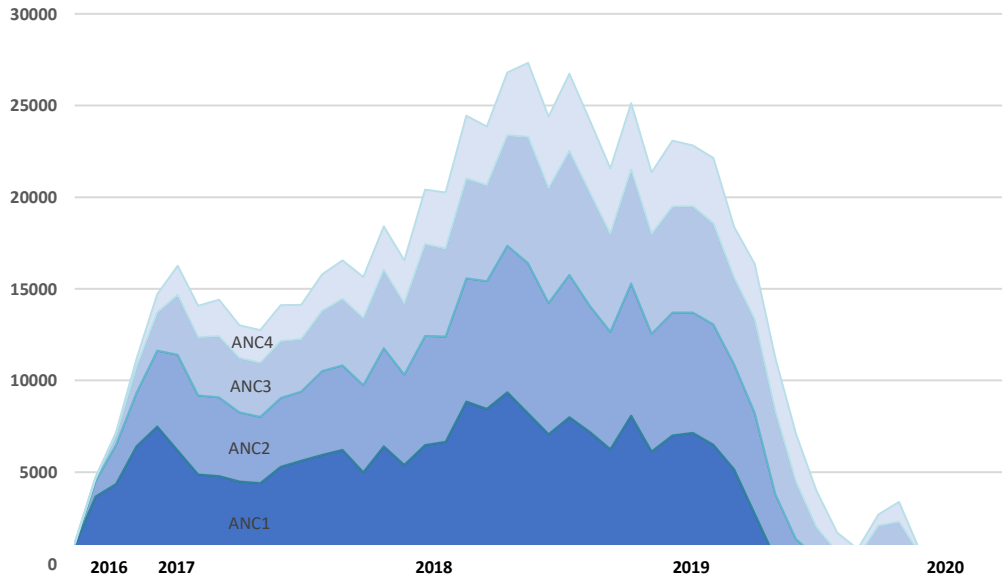
Figure 24: Overall UVPA Voucher Redemptions 2016-2020



Sources for Figures 23 and 24: URHVP-II and UVPA operational data

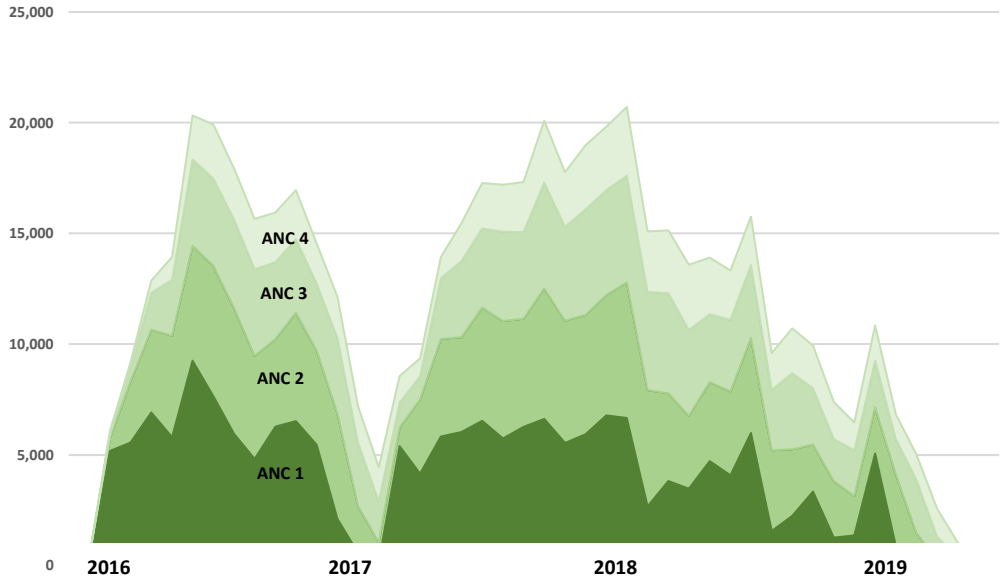
Following initial surges in demand, both projects saw significant declines in early 2017 due to a widespread rumor that the vouchers were a plot by the "Illuminati" to cause beneficiaries harm. Rumors spread in both project areas that the funding for the voucher projects was either from the devil or the Illuminati, which had been obtained under the water to kill mothers and steal children. Some respondents reported that the rumors were started by disgruntled health care providers who were not contracted to provide voucher services. The rumors spread through communities via cultural or religious gatherings and resulted in many women not using their vouchers to obtain services. In at least one case, women were encouraged to burn their vouchers. Following an intensive effort within both projects to reach out to community leaders, the rumors were eventually quelled, and demand returned to previous levels, or even higher in the UVPA areas. The graphs in **Figures 25** and **26** show the monthly numbers of vouchers redeemed for ANC and show the dip in demand in early 2017.

Figure 25: UVPA Vouchers Redeemed for ANC 2016-2020



Source: UVPA operational data

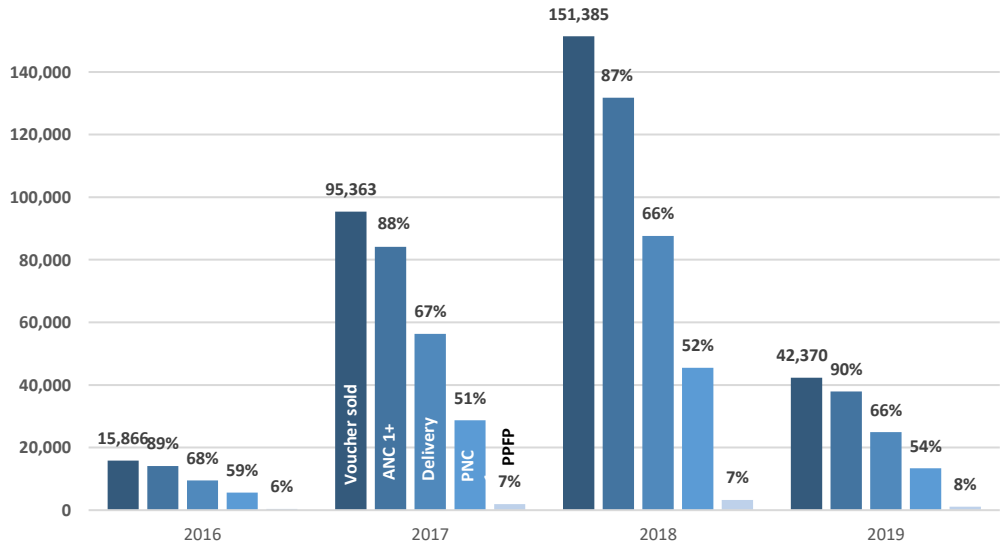
Figure 26: URHVP-II Vouchers Redeemed for ANC 2016-2019



Source: URHVP-II operational data

The design of the voucher benefits package around a continuum of maternity-related services created modest improvements over time in the use of key services. Figure 27 presents a cascade analysis of the UVPA voucher redemption data that analyzes the rates that women who purchased vouchers followed the sequence of ANC, safe delivery, PNC, and postpartum FP, as laid out in the benefits package. Of the women who purchased a voucher, at least 90% accessed at least one ANC visit, around two-thirds of voucher holders accessed both ANC and safe delivery services, and just over half completed a full complement of ANC, safe delivery, and PNC. Redemptions of vouchers for postpartum FP following a safe delivery were relatively low. Out of the 177,643 safe deliveries, only 6,600 went on to access postpartum FP.

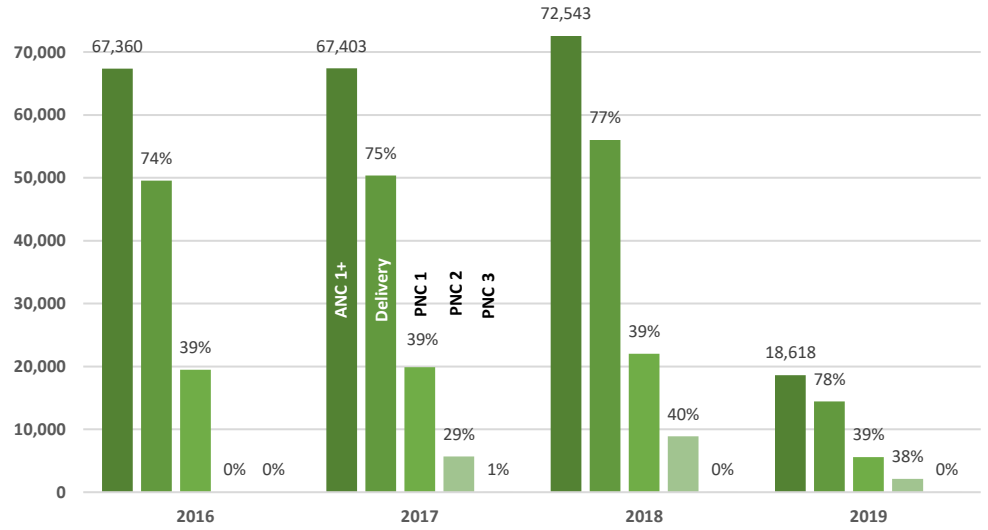
Figure 27: UVPA Voucher Redemption Cascade Analysis



Source: UVPA operational data

Likewise, for the URHVP-II, a cascade analysis was done, as presented in **Figure 28**. Unlike the UsVPA analysis, this cascade does not include total voucher sales and postpartum FP data, which were not made available for this study. Starting from the total number of women who accessed at least one ANC visit, more than 78% went on to access a safe delivery. This return rate improved slightly over the course of the project from 74% in the first year. Of the women who accessed ANC and safe delivery services, a steady 39% went on to access at least one PNC visit within improvements in return for subsequent second and third PNC visits, improving each year of the project. It is essential to note that these cascade analyses do not account for all vouchers redeemed as they only include vouchers redeemed in the intended sequence. Vouchers redeemed for services that did not follow the signals for sequential use were not counted.

Figure 28: URVHP-II Voucher Redemption Cascade Analysis



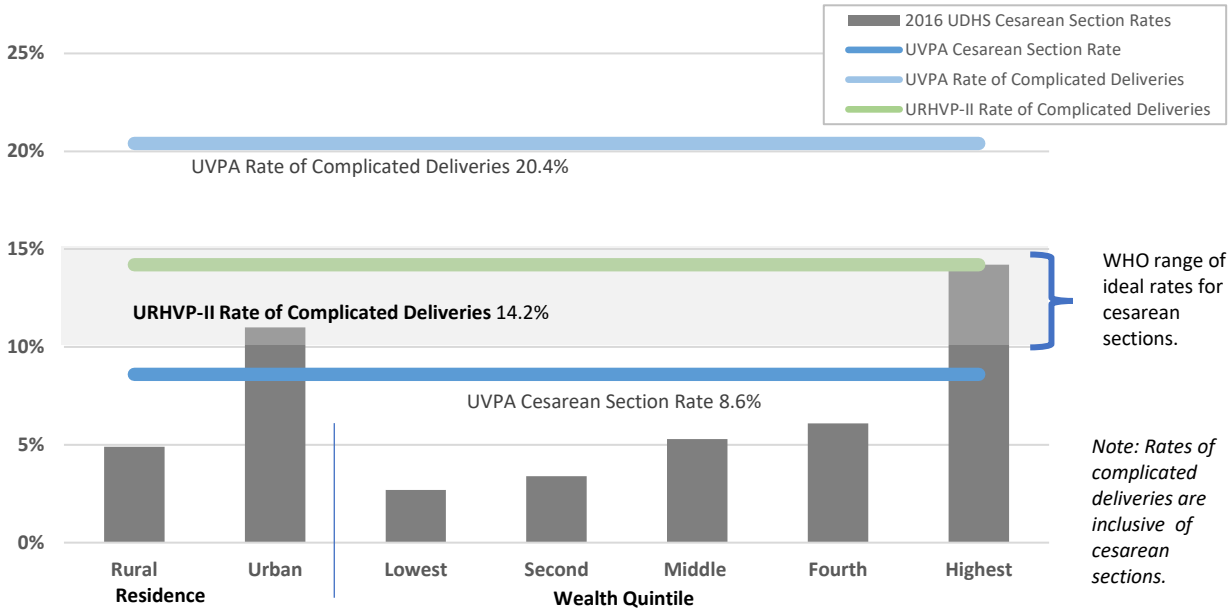
Source: URHVP-II operational data

The Uganda Demographic and Health Survey from 2016 found that approximately 35% of women in the lowest two wealth quintiles delivered at home (Uganda Bureau of Statistics and ICF 2018)**.** Given the large proportion of births supported by the voucher programs in nearly half of the country, it is not unreasonable to expect that vouchers will have contributed to significant improvements in reducing the percentage of poor women delivering at home. The authors of this study are approaching this question through an analysis of MOH utilization data in catchment areas served by the voucher schemes. Additionally, the anticipated Uganda Demographic Health Survey in 2021 will also provide evidence of voucher contributions to a reduction in home births among poor women.

Although provider payment rates for cesarean sections were significantly higher, project utilization data indicate that surgical delivery rates did not exceed WHO guidance. Within the URHVP-II data, 14.2% of voucher-supported deliveries were categorized as "complicated," including both deliveries requiring assistance and cesarean sections. The UVPA data for complicated deliveries includes a disaggregation of cesarean sections, with 20.4% categorized as "complicated," inclusive of the 8.6% which were cesarean sections. **Figure 29** places voucher scheme rates of complicated and cesarean section deliveries into the findings of the Uganda DHS from 2016 and WHO guidance. The official guidance from WHO states that "Every effort should be made to provide a cesarean section to women in need, rather than striving to achieve a specific rate" and considers the ideal rate to be between 10% and 15% (World Health Organization 2016). Based on this analysis, both voucher projects supported cesarean delivery rates that were higher than reported in the 2016 Uganda Democratic Health Survey for the poorest two wealth quintiles. However, the rates of cesarean sections experienced by UVPA were not exceedingly high by either Ugandan or international standards. In the absence of the specific rate at which URHVP-II-supported cesarean deliveries,

the inclusive rate of complicated deliveries also suggests that the project did not support excessive cesarean section rates.

Figure 29: UVPA and URHVP-II Complicated and Cesarean Section Delivery Rates Compared with the 2016 Uganda Demographic Health Survey (UDHS) and WHO Guidance



Source: UVPA and URHVP-II operational data; World Health Organization 2016

VI. CONCLUSION AND RECOMMENDATIONS

Both voucher schemes were successful and generated significant use of FP and MNH services in a relatively short period of time. In the context of the broader UNMHCP, the voucher scheme's benefits packages were concentrated on the high-priority needs of disadvantaged, rural poor pregnant women to improve their access to essential services. The combination of contracted providers, investments in quality, and demand creation realized led to large numbers of poor women accessing services that they likely would not have had otherwise.

In the future, it is worth considering an initial benefits package that has a narrow set of high-priority services, including FP and MNCH. Large-scale national demand-side purchasing mechanisms covering a comprehensive benefits package will require many years of iterative efforts to establish and refine the required systems. By starting with a narrow, high-impact package of FP and MNH benefits, systems and capacity can be progressively realized before expanding the system toward comprehensive coverage of larger groups within the population.

By establishing a contractual relationship across a purchaser-provider split, the voucher schemes created flexible service delivery networks. In Uganda's diverse and fragmented health sector, the voucher scheme's contract-based approach to purchasing services created networks that included all types of public and private facilities. Providers were selectively contracted and networked-based on their ability to serve poor populations within specific catchment areas. This approach holds the potential to better coordinate the delivery of services throughout Uganda's fragmented health sector. Key to this approach is the development of systems and capacity of the MOH to expand the purchase services beyond current arrangements with PNFP networks to also include PHP facilities.

When engaged on a contract basis, providers had greater autonomy, leading to improved capacity, performance, accountability, and quality of care. The voucher projects demonstrated that by paying facilities fair rates for the output of services they provide, contracted facilities have the resources and autonomy necessary to ensure sufficient staffing, medical supplies, and equipment to meet demand. The projects also showed that in many cases, private providers would accept payment rates lower than their standard services fees, knowing that increased case volumes from new client segments were good for their facilities. Many providers even increased their facilities' capacity by using their voucher revenues. In response to contractual quality standards, providers also invested significant portions of their voucher revenues in improving their quality of care.

The purchase of services through contracts on an output-basis required the development of significant administrative capacity of both providers and purchasers. Having previously functioned on a cash-for-service basis, voucher providers had to adjust to the invoice/payment cycle. This could take weeks (or months) to complete, requiring advance financial planning to keep their facilities running. For the VMA as a purchaser, critical systems were needed to manage potential fraud in the process of poverty targeting, voucher distribution, service delivery, and management of provider performance.

Future claims management systems should be designed to prevent provider payment delays. Despite a strong focus on claims management, a key challenge faced by both voucher projects was the timely review of claims and provider payments. Delays in payments to providers directly impacted their ability to pay staff and purchase medical supplies, threatening their ability to ensure continuity of services to voucher clients. The unique pressures of COVID-19 led the UVPA to successfully trying prepayment of VSPs upon submission of the invoice and before the claims had been fully vetted. It is a valuable lesson to learn that providers in Uganda can be safely paid a portion of their invoiced claims before the vetting of their claim. Any problems found during the vetting process can be resolved through deductions or penalties applied to their remaining or future payments. If this approach is incorporated into future claims management systems, it could help prevent delays in provider payments that interrupt service delivery and erode provider and patient confidence in the system.

Demand creation was critical to the success of the voucher schemes and required significant effort and resources. Both projects put in place large field-based efforts to sensitize and mobilize their target populations through community meetings, mass media, and one-on-one meetings at the household level. These efforts were essential to creating awareness among potential voucher beneficiaries and instilling confidence to actually seek out services. In any future demand-side purchasing mechanism, such as the proposed NHIS, demand creation will be a necessary component to achieving desired health goals.

The use of household poverty-targeting mechanisms is expensive and challenging and may not be the best way to target subsidies. The process of identifying a person or a household as poor is fundamentally subjective and has the potential for abuse. To address these challenges, both voucher projects put in place large field-based teams of voucher distributors who were well-motivated, closely supervised, and generally perceived as capable of identifying the poor. However, household poverty targeting is expensive, and research from other countries has documented that it is often perceived by communities as unfair. Alternatives to poverty targeting include designing benefit packages for identifiable demographic groups (e.g., women, children, or the elderly) or purchasing services from providers that serve the poor or vulnerable. Within the plans for NHIS to extend benefits to the poor for free or for a reduced premium, a key question is whether resources would be better spent on poverty targeting or used as additional financing to a well-designed benefits package.

There are important concerns that the voucher projects were too expensive. The recent ISER assessment of the URHVP-II project referenced reports from the Uganda Office of the Auditor General that found the project's average administrative expenses were 51.5% during the first three years. These administrative

costs included not only the direct management by MSU of the scheme but also the costs of BDO as the IVEA and the MOH as the implementer of the project. To clarify these concerns, it is important to disaggregate the short-term project-based start-up costs incurred by these two voucher projects from likely long-term recurrent running costs. It is likely that had the voucher schemes operated for longer periods of time, past the point of initial investments, the ratio of administrative costs to the direct benefits provided to pregnant women would be lower. Critical to a full understanding of short- versus long-term costs will be research that disaggregates administrative overhead, recurrent management, and investment costs from both the URHVP-II and the UVPA. Separating out these cost categories would provide a reasonable basis to judge if voucher schemes are worth the costs in the long-term.

The voucher project experiences are vivid demonstrations of what is required to establish a demand-side financing mechanism in Uganda. The establishment of a new demand-side purchasing mechanism requires significant investments of time, effort, and resources. While the project periods of the URHVP-II and UVPA were relatively short, with only three full years of active implementation, they experienced many of the challenges to successfully establishing their systems in the Uganda context. In response, they developed solutions and built capacities that can be used to avoid similar mistakes in future efforts, such as the planned NHIS. This study has been an effort to document the voucher experiences and distill the lessons learned.

In conclusion, the GOU should continue efforts to establish a government-financed, demand-side purchasing mechanism. In keeping with the 2016 MOH Health Financing Strategy and plans for an NHIS, the investment and effort to establish a new demand-side purchasing mechanism can support the realization of broader health system goals. Functioning as an integral part of the current health system, it could contractually engage providers of all types to realize greater coordination and quality across the currently fragmented health sector. As evidenced by global experience, the effort will take years and even decades to achieve a vision that supports Uganda's UHC goals. When Uganda moves forward with the establishment of an NHIS, choosing the right place on a path of progressive realization will be a key set of decisions. In the present context, a focus on FP and MNH is an excellent place to start.

VII. REFERENCES

Abt Associates. n.d. *Agreement for the Provision of Maternal Health Services under the USAID/Uganda Voucher Plus Activity*. Unpublished internal service provider contracting document.

Gorter, Anna, Corinne Grainger, Jerry Okal, and Ben Bellows. 2012. *Systematic Review of Structural and Implementation Issues of Voucher Programs.* Nairobi, Kenya: Population Council.

Initiative for Social and Economic Rights. 2020. *Failing to Reach the Poorest? Assessment of the World Bank Funded Uganda Reproductive Voucher Health Project*. Kampala, Uganda: Initiative for Social and Economic Rights.

Jordanwood, Tapley, Angellah Nakyanzi, Anooj Pattnaik, and Nirmala Ravishankar. 2020. *How Primary Health Care Services Are Financed in Uganda: A Review of the Purchasing Landscape.* Washington, DC: ThinkWell.

Kadowa, Isaac. 2017. *A Case Study of the Uganda National Minimum Healthcare Package.* Kampala, Uganda: Regional Network for Equity in Health in East and Southern Africa.

Kidd, Stephen, Bjorn Gelders, and Diloá Baily-Athias. 2017. *Exclusion by Design: An Assessment of the Effectiveness of the Proxy Means Test Poverty Targeting Mechanism.* Geneva, Switzerland: International Labour Organization and Development Pathways.

Kidd, Stephen, and Emily Wylde. 2011. *Targeting the Poorest: An Assessment of the Proxy Means Test Methodology.* Canberra, Australia: Australian Agency for International Development (AusAID).

Marie Stopes Uganda. n.d. "URHVP Referral Protocol." Unpublished internal policy document.

———. n.d. *Reproductive Health Voucher Service Provision Contract.* Unpublished internal service provider contracting document.

———. 2016. *Uganda Reproductive Health Voucher Project: Project Year II, Quarter One Progress Report July -September, 2016*. Kampala, Uganda: Marie Stopes Uganda.

Namayanja, Christine. 2017. *Uganda Voucher Plus Activity Annual Report: Year 2 October 1, 2016 - September 30, 2017.* Kampala, Uganda: Abt Associates.

———. 2018. *Uganda Voucher Plus Activity Annual Report Year 3 October 2017 - September 2018.* Kampala, Uganda: Abt Associates.

Ssengooba, F., Ekirapa, E., Musila, T., & Ssennyonjo, A. 2015. *Learning from multiple results-based financing schemes: an analysis of the policy process for scale-up in Uganda (2003-2015)*. Makerere University School of Public Health and the Uganda Ministry of Health. https://www.who.int/alliance-hpsr/projects/Uganda.pdf. Accessed January 29, 2021.

Stenberg, Karin, Odd Hanssen, Melanie Bertram, Callum Brindley, Andreia Meshreky, Shannon Barkley, and Tessa Tan-Torres Edejer. 2019. "Guide Posts for Investment in Primary Health Care and Projected Resource Needs in 67 Low-Income and Middle-Income Countries: A Modelling Study." *The Lancet Global Health* 7 (11): e1500--e1510.

Uganda Bureau of Statistics. 2018. *Uganda National Household Survey 2016/2017 Report.* Kampala, Uganda: Uganda Bureau of Statistics. https://www.ubos.org/wp-content/uploads/publications /03_20182016_UNHS_FINAL_REPORT.pdf. Accessed on January 29, 2021.

———. 2019. *Population Projections 2018*. Kampala, Uganda: Uganda Bureau of Statistics. https://www.ubos.org/wp-content/uploads/statistics/Population_Projections_2018.xlsx. Accessed on January 29, 2021.

———. 2020. *End of Month Population Projections (2015-2040)*. Kampala, Uganda: Uganda Bureau of Statistics. 2020. https://www.ubos.org/wp-content/uploads/statistics/End_of_Month_Population_Projections_2015_2040(1).xlsx. Accessed on January 29, 2021.

Uganda Bureau of Statistics and ICF. 2018. *Uganda Demographic and Health Survey 2016.* Kampala, Uganda, and Rockville, MD: Uganda Bureau of Statistics.

Uganda Bureau of Statistics and ICF International. 2012. *Uganda Demographic and Health Survey 2011*. Kampala, Uganda, and Calverton, MD: Uganda Bureau of Statistics and ICF International.

Uganda Bureau of Statistics and Macro International Inc. 2007. *Uganda Demographic and Health Survey 2006*. Kampala, Uganda, and Calverton, MD: Uganda Bureau of Statistics and Macro International.

Uganda Bureau of Statistics and ORC Macro. 2001. *Uganda Demographic and Health Survey 2000-2001*. Kampala, Uganda, and Calverton, MD: Uganda Bureau of Statistics and ORC International.

Uganda Ministry of Health. 1997. *Package of Basic Health Services for Uganda*. Kampala, Uganda: Uganda Ministry of Health.

———. 2000. *Ministry of Health National Health Policy*. Kampala, Uganda: Uganda Ministry of Health.

———. 2010a. *Guidelines for Management of Private Wings of Health Units in Uganda*. Kampala, Uganda: Uganda Ministry of Health.

———. 2010b. *The Second National Health Policy*. Kampala, Uganda: Uganda Ministry of Health.

———. 2016a. *Health Financing Strategy 2015/16 - 2024/25.* Kampala, Uganda: Uganda Ministry of Health.

———. 2016b. *Results Based Financing Framework for the Health Sector*. Kampala, Uganda: Uganda Ministry of Health.

———. 2016c. *Service Standards and Service Delivery Standards for the Health Sector.* Kampala, Uganda: Uganda Ministry of Health.

———. 2018a*. National Health Facility Master List 2018*. Kampala, Uganda: Uganda Ministry of Health.

———. 2018b. *Uganda Health Accounts: National Health Expenditure Financial Years 2014/15 and 2015/16.* Kampala, Uganda: Uganda Ministry of Health.

———. 2019a. *Sector Grant and Budget Guidelines to Local Governments.* Kampala, Uganda: Uganda Ministry of Health.

———. 2019b. *The National Health Insurance Bill, 2019*. Kampala, Uganda: Uganda Ministry of Health.

Uganda National Planning Authority. 2013. *Uganda Vision 2040.*

Uganda Office of the Auditor General. 2019. *Report of the Auditor General to Parliament for the Financial Year Ended 30th June 2019: Summary Report on Uganda Census of Agriculture 2008/2009, Volume 1.* Kampala, Uganda: Office of the Auditor General Uganda.

World Bank. n.d. *Population Growth (Annual %).* https://data.worldbank.org/indicator/SP.POP.GROW?most_recent_value_desc=true. Accessed on January 29, 2021.

———. 2014. *International Development Association Project Appraisal Document on a Proposed Grant from the Global Partnership on Output-Based Aid (GPOBA) in the Amount of US$13.3 Million to the Republic of Uganda for a Scale Up: Uganda Reproductive Health Voucher Pro*. Washington DC: World Bank.

———. 2017. *Restructuring Paper on a Proposed Project Restructuring of Uganda Reproductive Health Voucher Project Approved on October 3, 2014 to Republic of Uganda*. Washington DC: World Bank.

World Health Organization. n.d. *Sustainable Development Goals (SDGs).* https://www.who.int/health-topics/sustainable-development-goals#tab=tab_2. Accessed on January 29, 2021.

———. 2016. *WHO Statement on Caesarean Section Rates.* Geneva, Switzerland: World Health Organization.