



Botswana: Condom Programming

National Condom Quantification and Supply Chain Strengthening



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National Condom Quantification and Supply Chain
Strengthening

USAID | DELIVER PROJECT, Task Order 4

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Abstract

In December 2012, the Ministry of Health of Botswana—with technical assistance from the Supply Chain Management System (SCMS) project and the USAID | DELIVER PROJECT, Task Order 4—conducted a supply chain strengthening exercise of the national condom program. The team also trained a group of stakeholders on the basic principles of quantification and on considerations for quantifying condoms, in particular. This report includes the results of the quantification, as well as the short- and long-term recommendations to improve the condom logistics system in Botswana.

Cover photo: Popular condom brands in Botswana: *Bliss* female condoms; *Lorato* public condoms; *Sekwata* defense force condoms; and *Trust*, a socially marketed brand.

USAID | DELIVER PROJECT

John Snow, Inc.
1616 Fort Myer Drive, 16th Floor
Arlington, VA 22209 USA
Phone: 703-528-7474
Fax: 703-528-7480
Email: askdeliver@jsi.com
Internet: deliver.jsi.com

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Acronyms

AMC	average monthly consumption
BAIS	Botswana AIDS Impact Survey
BDF	Botswana Defense Forces
BOFWA	Botswana Family Welfare Association
BONELA	Botswana Network on Ethics, Laws and HIV/AIDS
CMS	Central Medical Stores
CSO	Central Statistics Office (Botswana)
DHMT	District Health Medical Team
FSW	female sex worker
GOB	Government of Botswana
IDCC	Infectious Disease Control Clinic
LMIS	logistics management information system
M&E	monitoring and evaluation
MARPs	most-at-risk populations
MOH	Ministry of Health
NACA	National AIDS Coordinating Agency
NGO	nongovernmental organization
PLHA	people living with HIV and AIDS
PMP	Project Management Plan
PSI	(uses acronym only; formerly Population Services International)
RTI	Research Triangle Institute
SMC	safe male circumcision
SDP	service delivery point
SRH	Sexual and Reproductive Health Department
TRaC	Tracking Results Continuously
UNFPA	United Nations Population Fund
USAID	U.S. Agency for International Development
WRA	women of reproductive age

WHO World Health Organization

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Background

In Botswana, with one of the highest HIV and AIDS infection rates in the world, and with a government that supports all efforts to curb the epidemic, condoms are essential for HIV prevention. Effective supply chain management is important to ensure that condoms are always available when and where the public needs them. National condom quantification estimates the total amount of condoms required in the country and develops a logistics plan for procurement, storage, and distribution. Strengthening the coordination of condom logistics and programming addresses the link between demand and use of condoms and their availability. These activities are key to improving the availability of condoms.

Figure 1. Map of Botswana



Country Profile

Botswana is a southern African country, with a sparsely distributed population of approximately 2.1 million people; in total land mass, Botswana is approximately the size of the state of Texas or the country of France. The Kalahari Desert covers approximately 87 percent of the land. Botswana, led by a stable and democratically elected government, is a middle-income country and it is often cited

as an African success story. Profits from the diamond trade and beef exports have enabled the country to invest in infrastructure and social services, including providing universal healthcare to the Botswana population. A primary health concern in Botswana is HIV and AIDS, with the second-highest infection rate in the world. The Government of Botswana and civil society mobilized to address this challenge by focusing on public prevention programs and antiretroviral (ARV) treatment at primary public-health facilities.

The MOH is transitioning from a centrally administered health services model to one where health administration in the districts is primarily the responsibility of District Health Management Teams (DHMTs). The DHMT system was set up in 2010, but it is not fully implemented. Primary health care is available to citizens at mobile stops, health posts, clinics, primary hospitals, district hospitals, and referral hospitals. Botswana has 16 primary hospitals, 10 district hospitals, and three national referral hospitals. The health post is the smallest permanent unit for healthcare provision; they serve an area with fewer than 500 people, while clinics serve 500 to 10,000. Countrywide, Botswana has about 720 public health facilities. Primary hospitals, with a bed capacity of 30–70, provide both primary healthcare for a range of outpatient and general inpatient care services. Finally, district hospitals, referral hospitals, and private hospitals also provide primary care. Currently, more than 90 percent of Botswana's population lives within easy reach of a healthcare facility.

HIV and Condom Programming

The goal of condom programming is to ensure that sexually active populations are motivated to consistently and correctly use and have access to condoms that meet quality standards. Despite considerable gains in the battle against HIV in Botswana, its prevalence rate remains high. Its health system, however, has mobilized to address the problem. Botswana was the first country in the world to provide free ARV treatment to its citizens.

The 2011 *Second Generation HIV/AIDS Antenatal Sentinel Surveillance Technical Report* estimated a prevalence rate of 30.4 percent in the 15–49-year-old antenatal population (Botswana MOH 2011). The 2008 *Botswana AIDS Impact Survey III (BAIS III)* data (GOB CSO 2008) showed a national HIV prevalence rate of 17.6 percent, while the rate of new infections (incidence) was estimated at 2.9 percent. In the Ministry of Health's *National Strategic Framework*, (ROB NACA 2009) the Government of Botswana (GOB) set a target of achieving, *zero new infections by 2016*. Condoms are a central part of plans to achieve this target. The government, with support from partners, initiated a robust condom distribution program, accompanied by social marketing, and articulated in the *National Condom Strategy* (GOB and MOH 2012).

Botswana's recent graduation to a middle-income country status resulted in a reduction in international development assistance. The United States (U.S.) government—through USAID and the Department of Defense and the United Nations Population Fund (UNFPA)—are now the largest condom donors in Botswana. The local condom manufacturer, Latex Medical, manufactures the *Lorato* brand of condoms and supplies the condoms purchased by the GOB. PSI



PSI's *Trust* brand condoms and Botswana Defense Force's *Sekwata* brand condoms.

estimates that approximately 60 percent of the condoms available in Botswana are supplied free to the public through the public sector (health facilities) and about 35 percent through PSI social marketing initiatives (Lovers Plus and Trust brands). The private sector meets less than 5 percent of the condom demand. Condoms for the public sector come into the country through the Central Medical Stores (CMS); DHMTs or health centers can place orders from the CMS. Although it is a past practice, PSI no longer plans to use CMS as a warehousing and distribution site for socially marketed condoms. The CMS also acts as a cross-docking facility for the Botswana Defense Forces (BDF), which primarily distributes condoms to members of the military services, plus their families and civilians who live on the military bases. Non-military organizations and private citizens frequently approach BDF for condoms to ask for its popular *Sekwata* brand, which the U.S. Department of Defense donates.

According to CMS records, approximately 20,000,000 male condoms were distributed from the CMS in 2009. Male condom distribution increased in 2011 to a little over 22 million. In 2011, the CMS distributed 225,832, female condoms, which represents about 1 percent of the male condoms distributed. Information gathered from interviews with PSI, as well as data from Research Triangle Institute (RTI), suggests that female condoms are about 1 percent of the total condoms distributed in Botswana. Table 1 summarizes the quantities of male and female condoms distributed from different sources.

Table 1. Condom Distribution from All Sources—Quantities in Pieces

Source	2009	2011
CMS (male condoms)	19,815,800 (59%)	22,352,600
CMS (female condoms)		225,832
PSI (male condoms)	9,741,346 (31%)	
Private sector (male condoms)	1,555,639 (5%)	
Total estimated Botswana need	31,112,785	

Activity Objectives and Scope

The Botswana Ministry of Health and USAID Mission asked the Supply Chain Management System (SCMS) field office in Botswana to assist with the assessment of the “condom demand creation capacity and supply chain capacity at the service delivery points, district warehouses and health district levels in Botswana” (Badubi, Endailalu, and Shioso 2012). In April 2012, SCMS conducted a comprehensive condom situational analysis and survey. Their report, *Condom Logistics and Programming: Report of technical assistance on condom logistics and program management survey* (Badubi, Endailalu, and Shioso 2012) identified challenges in the condom logistics system, such as—

- poor warehouse conditions
- inadequate transportation
- non-adherence to inventory control systems
- few logistics reporting tools at service delivery points (SDPs)
- lack of central coordination

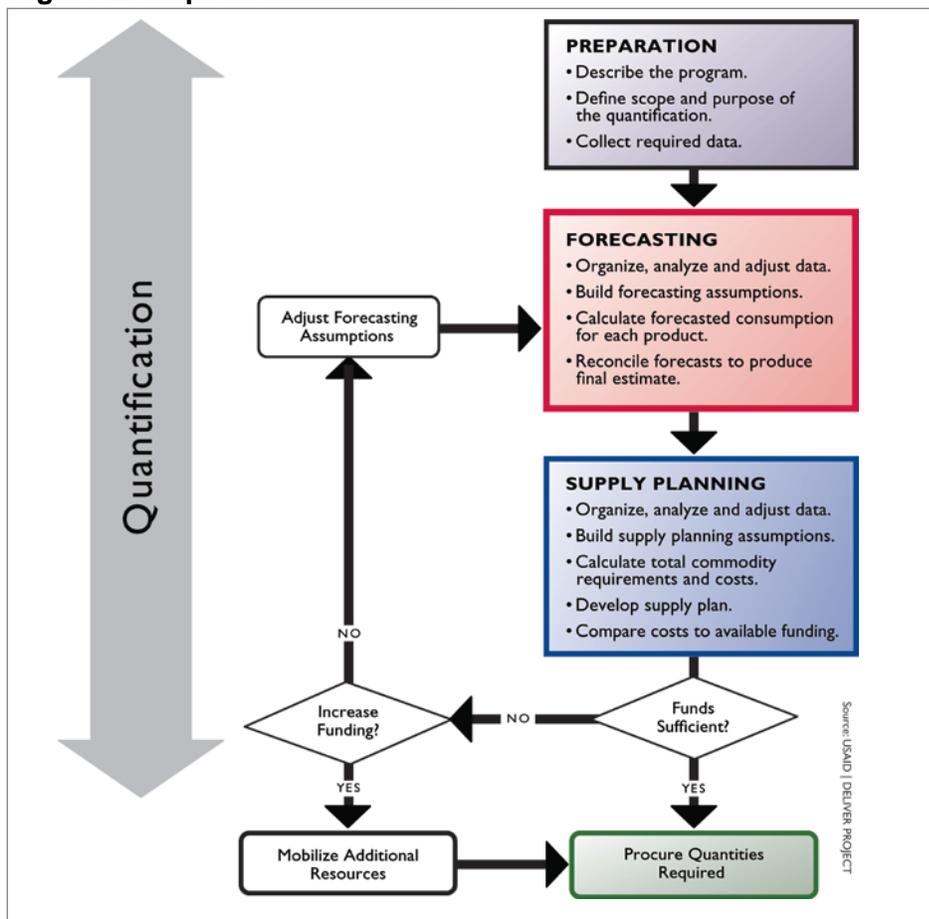
- limited logistics skills among healthcare workers
- limited educational materials on condoms at SDPs.

With the ultimate objective of helping the Botswana MOH improve condom availability, this activity aimed to build on the SCMS analysis by quantifying the national condom requirements in Botswana and by building local logistics capacity. The team conducted a national condom forecasting and supply planning exercise and provided guidance on how the distribution system can capture accurate condom distribution and consumption data for decisionmaking. The team met with stakeholders and visited facility sites during the first week of the activity; during the second week, they led a quantification and assumption-building workshop. Personnel involved in condom programming were trained to use forecasting and supply planning tools, such as PipeLine software; they also learned the steps required to complete this exercise in the future. A final presentation at the MOH, with other stakeholders, summarized the findings of the quantification, identified system challenges, and offered recommendations. See appendix B for a list of the quantification team members.

Quantification Methodology

Quantification involves three main steps—preparation, forecasting, and supply planning—as outlined in figure 2. Key informant interviews revealed a high level of financial commitment for condoms; the GOB and donors guarantee funding for condoms in Botswana. The quantification team, therefore, omitted the funding gap analysis steps for this exercise.

Figure 2. Steps in Quantification



Scope of the Quantification

The team aimed to forecast the national male and female condom requirements in the public sector for three years; the focus was to develop the 2013 forecast and to understand the factors that may change the forecast in the coming years. This quantification includes condoms required for any purpose, including sexually transmitted infection prevention and family planning services.

Collecting Required Data

The methodology used for this quantification incorporated background document reviews, group discussions during the workshop, and key informant interviews at the central level and lower levels within the condom supply chain in Botswana. Appendix D summarizes some of the service delivery points and lists the key informants contacted for information relevant to the quantification—from MOH officials, to healthcare workers, to members of civil society. The lack of timely, reliable, and consistent condom consumption information at SDPs and at the national level posed a significant challenge. As a proxy for national consumption, the quantification team used data from both orders made to and the issues from the central level. The team collected this data from the Central Medical Stores (CMS); this information was used for the consumption-based forecast.

The quantification team also collected demographic and morbidity information relevant to the quantification from surveys and key informants. The *2008 Botswana AIDS Impact Survey III: Statistical Report* (GOB CSO 2009), the *2011 Botswana Population and Housing Census* (GOB CSO 2009), and PSI's 2012 *Tracking Results Continuously* (TRaC) study (PSI Research Division 2012) provided the primary information for this level of condom use; and, therefore, the total population in Botswana that is likely to require condoms. This information was used for the demographic-based forecast.

To predict the annual requirement for condoms in the public sector in Botswana, the quantification team organized and analyzed the data collected from various key informants, surveys, and the CMS. See the reference section for a list of the documents reviewed.

Quantification Workshop

The quantification team convened a three-day workshop during December 4–6, 2012, to generate assumptions and validate results. The objectives of the workshop were the following:

- Build the capacity of participants in techniques for quantifying health commodities, in general, and condoms, in particular.
- Introduce and familiarize participants with the tools used for routine quantification of health commodities in the public health sector; for example, PipeLine.
- Review and have participants agree about the scope for the quantification.
- Propose and validate a series of assumptions to estimate the male and female condom requirements for one year for Botswana's public-sector condom program.
- Establish participants' agreement about the interventions necessary for condom programming in Botswana and propose ways to implement the interventions.

During this workshop, participants were introduced to the three critical steps in the quantification process: preparation, forecasting, and supply planning. Participants were trained in how to forecast commodities using demographic/morbidity data, services data, and consumption data. Participants

practiced using PipeLine 5.1 for supply planning and they prepared a draft supply plan based on draft quantification figures that were determined at the workshop. Finally, workshop participants outlined recommendations for improving the system in the future. Summary results from the quantification process were compiled and presented at the joint out-brief for the MOH, USAID Mission, and other stakeholders on December 7, 2012.

See appendix A for a list of quantification workshop attendees.

Data and Assumptions

Three different quantification methodologies involving three different data types—consumption data, demographic data, and services data—were used. For each method, the team reviewed the available information and created assumptions to fill the gaps. Quantification workshop participants compared the results of each analysis and determined the most appropriate final figure.

Consumption Estimate

Using the consumption method for a forecast requires a review of past consumption to predict future consumption or needs. Typically, average monthly consumption is used for these calculations. In Botswana, the quantity of condoms consumed—dispensed to patients or to nongovernmental organizations (NGOs)—are not consistently and reliability recorded and reported to the central level; therefore, the team used central-level data supplied by the CMS.

Because SDPs report that the CMS does not consistently fill all their orders, it was important to review both the quantity of condoms being ordered from the CMS *and* the quantities being issued to the SDPs; and to identify gaps. The order fill rate—the extent to which the quantity of orders requested were being filled—was also reviewed. Several sources of this information were available at the CMS; they are documented in table 2. Two of the three sources included both the orders from SDPs and the issues to SDPs. The team reviewed both the average of the last three months—typical calculation of average monthly consumption (AMC)—and the average of the last 12 months.

Table 2. Varying Average Monthly Consumption Figures from Central Medical Stores

Source	Review Period	Male Condoms		Female Condoms	
		Average monthly consumption in boxes <i>(annual figure in pieces)</i>	Order fill rate	Average monthly consumption in boxes <i>(annual figure in pieces)</i>	Order fill rate
CMS: Procurement unit: Stock and Usage Report	12 months	32,367, <i>(38,840,642)</i>	n/a	577 <i>(691,885)</i>	n/a
	3 months	24,694 <i>(29,632,400)</i>		861 <i>(1,033,200)</i>	
CMS: LMU: Stock Movement Report generated from PULSE system	12 months	Ordered: 26,800 <i>(32,160,300)</i>		Ordered: 1,409 <i>(1,691,200)</i>	
	3 months	12,321 <i>(14,785,200)</i>	12 months: 65%	98 <i>(117,200)</i>	12 months: 24%

Source	Review Period	Male Condoms		Female Condoms	
		Average monthly consumption in boxes <i>(annual figure in pieces)</i>	Order fill rate	Average monthly consumption in boxes <i>(annual figure in pieces)</i>	Order fill rate
	12 months	Picked: 17,481 <i>(20,977,000)</i>		Picked: 332 <i>(398,600)</i>	
	3 months	6,607 <i>(7,928,400)</i>		40 <i>(48,400)</i>	
CMS: data presented at Project Management Plan meetings generated from ORACLE system	April to July (4 months)	Ordered: 28,264 <i>(33,916,800)</i> Issued: 19,224 <i>(23,069,100)</i>	4 months: 64%	Ordered: 3,527 <i>(4,232,100)</i> Issued: 723 <i>(867,300)</i>	4 months: 57%

Traditionally, AMC is calculated as the average quantities dispensed, or issued, during the last three months:

$$(\text{total dispensed month 1} + \text{total dispensed month 2} + \text{total dispensed month 3})/3$$

The procurement unit at the CMS, however, uses the following formula:

$$(\text{total orders during a 12-month period} + \text{total issues during a 12-month period})/24$$

This version of the AMC calculation combines both the orders and the issues figures, and then averages them, so it is impossible to understand either function. The AMC from the Stock and Usage Report is calculated in the same way; therefore, it is understandably higher than the AMCs from the other sources.

The two other sources of data—generated from the Pulse and the Oracle systems—which include both quantities ordered and issued (or picked), confirmed information from the interviews that orders for condoms are not always or completely filled—orders filled usually range from 24 percent to 64 percent.

Both quantities ordered and issued were larger earlier in 2012 than in the most recent months.

Figure 3 and figure 4 represent the monthly orders and issues from the Stock Movement Report; the volume of orders and issues are compared over a two-year period. These data show a spike in demand for male condoms between January and March 2012 and a spike in demand for female condoms between October 2011 and March 2012.

Throughout the time period, the CMS did not consistently meet the demand being requested by the SDPs.

Figure 3. Comparison of Quantity Ordered and Quantity Picked (male condoms)

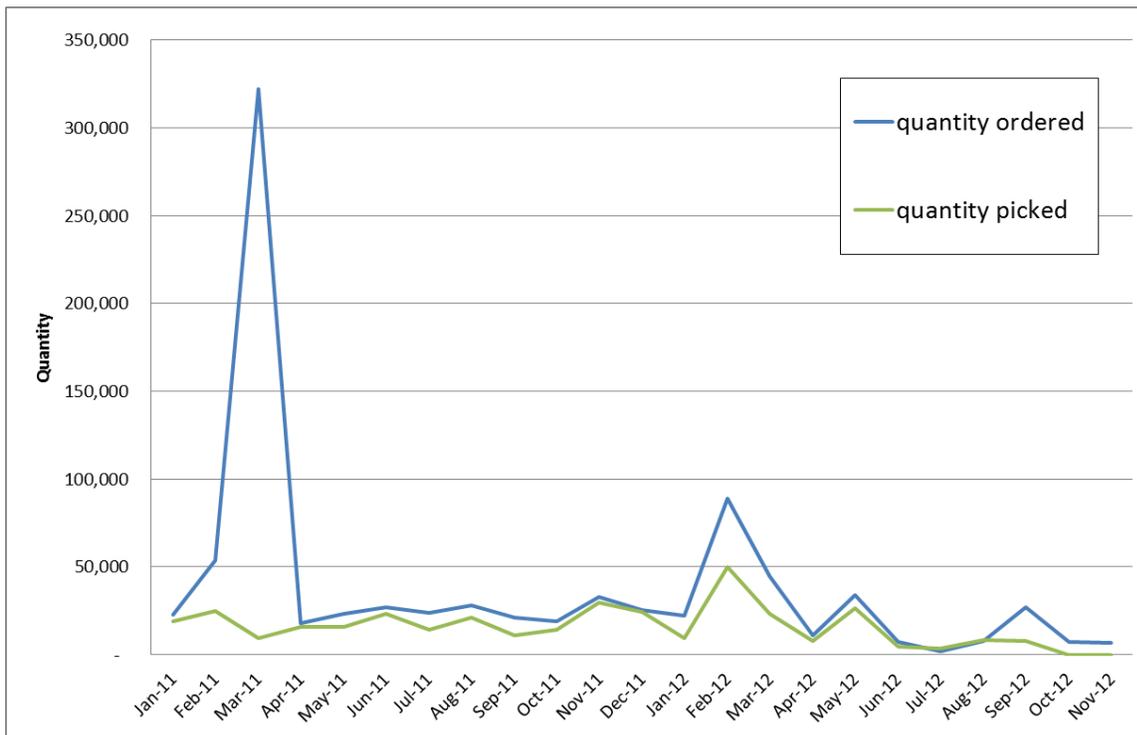
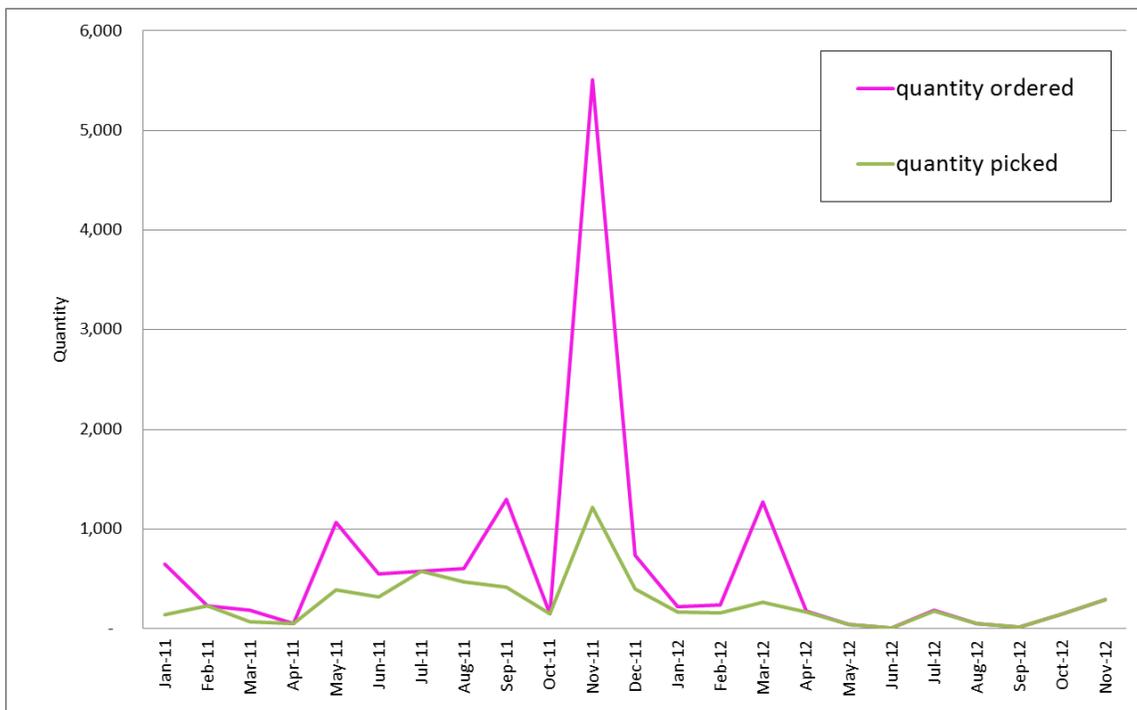


Figure 4. Comparison of Quantity Ordered and Quantity Picked (female condoms)



The team shared this information with the workshop participants; the two groups discussed how to determine a consumption figure from these data. The team decided that the quantity ordered at the CMS by facilities would be a better estimate of consumption than the quantity issued from the CMS, or the combined number from the Stock and Usage Report.

In the CMS procurement report and the data in the Performance Management Plan (PMP) report, it is unclear if the quantities of male condom boxes used in the AMC are all in groups of 100, as assumed and as calculated in table 2. Item numbers, and, therefore, pack sizes were available for the Stock Movement Report, to ensure that the number of *pieces* issued versus number of *boxes* issued could be validated.

It is also possible that unmet need from the SDPs would result in inflated quantities ordered. Given the information above, the participants decided to use the annual figures represented by the LMU (32,160,300) and the CMS PMP (33,916,800). The final figure was determined to be 33,000,000, pieces of male condoms after rounding; 1 percent of this figure, or 330,000, was estimated for female condoms.

Adjusted Consumption

The team investigated using an adjusted consumption method of quantification. The adjusted consumption method uses the SDP consumption data of one or more facilities that have reliable data and extrapolates this data to estimate the quantities of commodities needed at all other similar facilities. This method requires consumption data or population data from the representative sites to determine the number of commodities needed per all facilities or per capita.

The team collected SDP consumption data from several sites in the Gaborone, Francistown, Kweneng West, and Ngamiland/Okavango districts; but they were unable to determine if the sites represent all public sector SDPs. Because of the lack of a statistically relevant sample, quantification workshop participants decided not to use the adjusted-consumption method for the national quantification.

Using the *2011 Botswana Population and Housing Census* (GOB CSO 2009), the team determined the total population of Botswana and the population breakdown for each census administrative district. However, determining district populations of health districts was a challenge. The census lists 28 administrative districts in Botswana, but the MOH provided a different list of 27 DHMT districts (see appendix C). Using maps, census collection information, and information from interviews, the team attempted to reconcile the two district lists; they uncovered name discrepancies (for example, Ghantsi versus Ghanzi) and instances where administrative districts were combined into a DHMT district (for example, Sowa Town is an independent administrative district, but it is also the capital city in the Tutume region; the DHMT district of Tutume was reconciled to comprise the population of two administrative districts—Sowa Town and Central Tutume). However, workshop participants were uncomfortable with the reconciled list; they found that it created districts with higher or lower overall populations than expected, or that seemed inconsistent with commodity orders and deliveries by the CMS. Without verified information on district populations accessing SDPs, a per capita condom use rate for each district could not be determined, or used to project national needs.

Demographic Estimate

A demographic forecast determines the needs based on a given population and their particular requirement for a medicine or product—based on the occurrence of a disease, morbidity, or desired

treatment and care—over the specified time period. The method involves estimating the number of customers expected to need a product, and the number of episodes, during the forecast period.

The work group started the demographic forecast by reviewing populations in Botswana and asking about their specific needs and their sources for condoms. The total population of Botswana, 2,024,904, was from the Government of Botswana’s 2011 census. Although a higher total population figure than reported by the United Nations, workshop members determined this was the more accurate number. All other breakdowns of this population came from BAIS III (GOB CSO 2009)—percentage of male and female and age groups.

Traditional Method

Typically, a demographic forecast for contraceptive methods uses only the first group—women of reproductive age—to forecast for condom needs. Discussions with the participants revealed that this would underestimate the total condom needs, because men may be using condoms for disease prevention or contraception more than women; therefore, the traditional method was adjusted to include the additional population groups. Data from BAIS III, outlined in table 9 (presented later in this document), supported this assumption; in most age groups, condom use was higher for men than for women.

The female population was determined to be 51.15 percent of the total population, 60 percent were estimated to be women of reproductive age (15–49). Table 3 shows the calculation for their estimated need.

Table 3. Calculation of Condom Needs for Women of Reproductive Age

Data Point	Value	Source
A. Women in total population, ages 15–49	636,257	Botswana 2011 census, extrapolated from health survey
B. Contraceptive prevalence rate	52.80%	2008 family health survey
C. Method mix (% women using male condoms)	50.00%	MOH Monitoring and Evaluation Report 2007
D. Couple-years of protection (CYP)	120	International CYP figure
E. Source mix = Public sector	61%	PSI reported value
Total need (A × B × C × D × E)	12,295,537	

Next, the team estimated condom needs for the male population. They used a mix of data sources from PSI’s TRaC report and BAIS III; the men were divided into three separate groups: (1) men who are married, (2) men who are living with a partner, and (3) men not in a union.

Tables 4, 5, and 6 show the data and the calculations for the populations’ needs.

Workshop participants chose the CYP figure of 150 because it was used in previous forecasts. However, traditional CYP figures in other countries are usually around 120. Except for previous forecast use, the team did not find any indication about how this was calculated and no evidence to suggest why Botswana’s CYP would be higher. A post-workshop analysis adjusted the CYP figure to 120, as shown on the tables.

Table 4. Condom Needs for Married Men

Data Point	Value	Source
A. Male population 15–59	581,070	Botswana 2011 census
B. Percentage of sexually active males	64.88%	BAIS III
C. Percentage of men married	20.52%	BAIS III (10-64)
D. Percentage of males reporting having used a condom in the last sex act	72.20%	BAIS III for (men 15–49)
E. Couple-years of protection	120	
F. Source mix = public sector	61%	PSI reported value
Total need for this population (A x B x C x D x E x F)	4,088,509	

Table 5. Condom Needs for Men Living With a Partner

Data Point	Value	Source
A. Male population 15–59	581,070	Botswana 2011 census
B. Percentage of sexually active males	64.88%	BAIS III
C. Percentage of men living together with partner	28.49%	BAIS III (10–64)
D. Percentage of males reporting having used a condom in the last sex act	79.90%	BAIS III for (men 15–49)
E. Couple-years of protection	120	
F. Source mix = public sector	61%	PSI reported value
Total need for this population (A x B x C x D x E x F)	6,281,879	

Table 6. Condom Needs for Men Not In a Union

Data Point	Value	Source
A. Male population 15–59	581,070	Botswana 2011 census
B. Percentage of sexually active males	64.88%	BAIS III
C. Percentage of men not in union	51%	BAIS III (10–64)
D. Percentage of males reporting having used a condom in the last sex act	87%	BAIS III for (men 15–49)
E. Couple-years of protection	120	
F. Source mix = public sector	61%	PSI reported value
Total need for this population (A x B x C x D x E x F)	12,244,464	

It is important to note that there is an overlap between female and male population groups. The total male needs for condoms using this calculation was 22,614,852. With female needs only a little over 12 million, we can assume that about 10 million condoms are being used for purposes other than family planning. After much discussion, workshop participants decided that, about one-third of

the male quantities should be subtracted from the total of the two requirements. The total, minus the estimated overlap, equals 27,372,105, as shown in table 7.

Table 7. Total Traditional Demographic Forecast (without female sex workers needs)

Female Requirements		Male Requirements		Estimated Overlap		Total Requirements
12,295,537	+	22, 614, 852	-	1/3 (22, 614, 852)	=	27, 372, 105

Even with a higher quantity than past forecasts, workshop attendees thought that the condom needs of the most at-risk populations (MARPs), such as sex workers, were still not being addressed. Further calculations were done to cover the needs of the MARPs. Based on information from PSI and RTI, workshop participants assumed that there were 20,000, female sex workers (FSW) in Botswana. Calculations were done for both estimates because the USAID mission in Botswana estimates there are 15,000, FSWs. RTI estimates that each FSW requires 100 condoms per month; it is assumed that the clients provide about 20 of these condoms and the FSW provide the remaining 80. The additional requirement for this group totals 19,200,000, condoms per year, for an estimated 20,000, FSWs; and 14,400,000, for an estimated 15,000, FSWs. See table 8 for new totals for the FSWs.

Table 8. Total Traditional Demographic Forecast with Female Sex Workers Needs Added

No. of Female Sex Workers	Total Requirements from Table 9	Total Requirements for Female Sex Workers	Total Demographic Requirement (traditional)
20,000	27,372,105	19,200,000	46,572,105
15,000	27,372,105	14,400,000	41,772,105

New Method: Using Only Male Needs to Estimate Requirements

After the workshop, the team adjusted the demographic calculations using a new method being tested by USAID | DELIVER PROJECT staff that only considers the male population when forecasting for condoms. Because men are the direct users of male condoms, this demographic quantification method uses only the male population, not WRA to calculate condom requirements. This estimate covers all uses of condoms (contraceptive use; disease prevention, both in and outside partnerships). This eliminates any duplication, which was not possible in the method described earlier. This method is supported by data from BAIS III, shown in table 9; that males, in all but one age group, use condoms more frequently than women.

Table 9. Male and Female Responses in BAIS III for Use of a Condom in the Last Sex Act

Age Group	Table 115a: Males who used a condom in the last sex act of those who had sex in the last 12 months who are not in a committed relationship (table 115a)	Table 116a: Females who used a condom in the last sex act of those who had sex in the last 12 months who are not in a committed relationship
15–19	95.6%	83.3%
20–24	90.7%	81.4%
25–29	88.7%	81.4%
30–34	86.7%	77.6%
35–39*	76.2%	79.7%
40–44	80.8%	73.6%
45–49	73.9%	63.6%

*Only age group that condom use was higher for females than males.

The total quantity of condoms needed is calculated by determining the annual demand of men ages 15–65 who had sex in the last month and used a condom during the last sex act. Missing from this figure are men under 15 and over 65 who are engaging in sex and using condoms. See table 10 for the data and the results.

Table 10. Calculation for the New Demographic Method with Four Possible Results

Data Point	Value		Source
A: Men 15–65	588,728		Botswana 2011 census
B: Percentage of sexually active	last year	last month	Table 106 of BAIS III
	53.78%	45.90%	
C: Condom used in last sex act	87.70%		Table 115a in BAIS III
D: Condoms needed per year	120	120	
E: Total condom needs	33,321,108	28,436,947	Calculated
Public sector needs (61%)* (A × B × C × D × E)	20,325,876	17,346,538	Calculated

Table 10 includes two estimates. The first is the number of men who reported having sex in the past 12 months, which is slightly higher than the number of men who reported having sex in the last month. In other forecasts where this calculation has been tested, the figure from the last month is assumed to be more reliable; therefore, the estimate assumed most accurate for this method is 17,346,538, pieces of condoms.

This method does not calculate the needs for female condoms, but the assumption of 1 percent of male condom needs in Botswana can also be applied to this method as well. The total for female condoms using this method is 173,465.

Service Estimate

The service statistics method is similar to the demographic morbidity method because it is based on the needs of the population. In this case, however, the population refers to the patients/persons accessing a service at an SDP. Service statistics (historical data on the number and type of visits recorded at an SDP where condoms are dispensed) are used to determine this group. The standard dispensing/treatment protocol—in this case, the quantity of condoms dispensed—is then included with the service statistic figures, and assumptions on any future changes to either figure, to determine the future number of product needs.

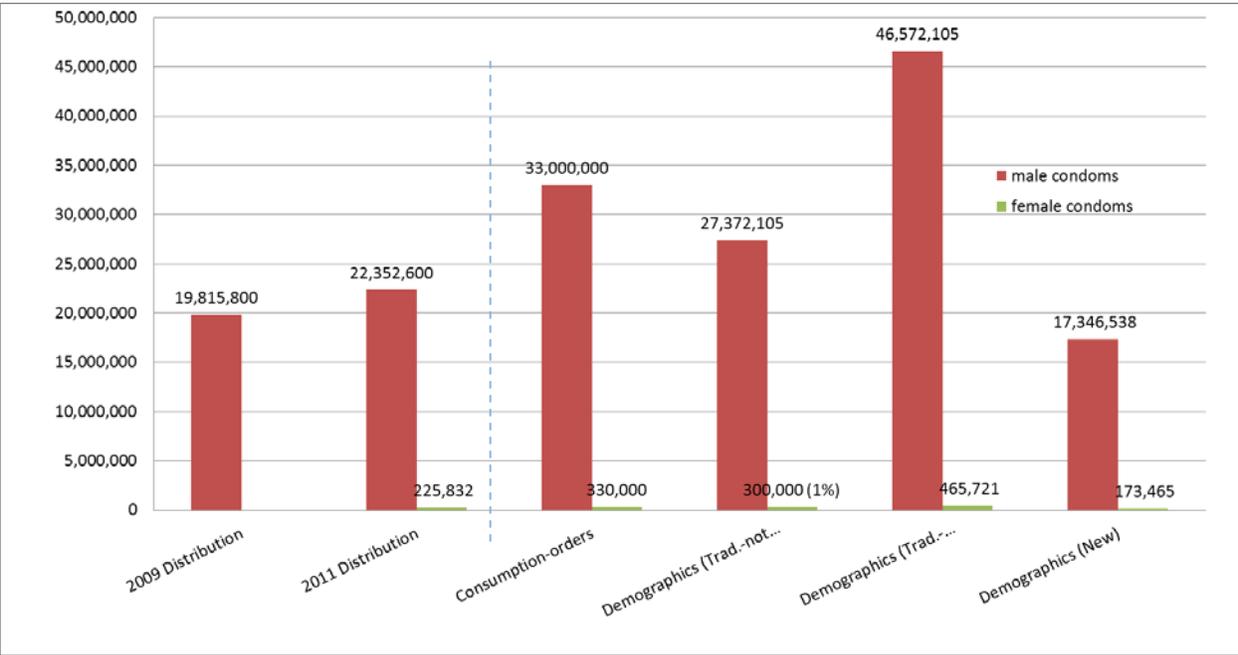
During data collection and preparation activities, to complete this method, the team collected this information but they were ultimately unsuccessful. Services determined to dispense/distribute condoms in Botswana were the MOH through the safe male circumcision (SMC), HIV Testing and Counseling, Sexual and Reproductive Health Department (SRH), Infectious Disease Control Clinic (IDCC), primary care, Sexually Transmitted Infection unit, preventing mother-to-child transmission programs; distribution to universities and other places of education, BDF, RTI, other NGOs, hotels, shebeens (unlicensed drinking establishment), bars, and workplaces.

It was difficult for the team to determine the number of clients that accessed the SDPs listed above and/or the total number of visits by the target population to the SDP, and/or percentage of visits when condoms were available. It was also difficult to assume that all dispensing points would follow the same dispensing protocol for all their clients, because universal guidelines did not exist and each venue had different procedures. At some sites, condom distribution is not controlled; condoms are available in a public area for clients to access, as needed. Information on publicly distributed condoms was often unavailable.

Results

After reviewing the initial forecast result options, workshop participants decided they had more confidence in the consumption figure (orders) than the demographics estimates. The demographic estimate of about 46.5 million is twice the number of condoms reportedly distributed by the CMS in 2011 (see figure 5); and condom programs have not changed significantly in the past year, which could influence the demand to this extent.

Figure 5. Comparison of Past Distribution and Various 2013 Future Forecasts



The quantification workshop yielded final 2013 national forecast quantities of—

- 33,000,000 male condoms needed
- 330,000 female condoms needed.

The exercise determined that a consumption-based forecast is the best method for quantifying condoms; several factors must be considered when the forecast is revised.

From information collected in this exercise, the team identified several condom supply challenges:

- policy, implementation, and leadership
- information flow
- general supply chain issues (storage, requisitions, inventory management, etc.)
- CMS inconsistencies

- DHMT coordination
- promotion and perception of condoms.

The results from the quantification and the system analysis are discussed below.

Condom Forecast

At the end of the workshop, everyone agreed that a system is needed to monitor consumption of male and female condoms and to track performance, and that AMCs and supply plans must continue to be monitored. Adjustments to forecasts in table 11 must be made as more information is available and the implementation of programs and supply chain design continues.

After they completed all the options for forecasting condom requirements the group reviewed factors that may influence any future increases or decreases. The following factors were noted as being influential; they should be reviewed in the future:

- The population growth rate is currently calculated to be 2.38 percent.
- The strategy is to combine prevention efforts, like voluntary counseling and testing, a Combination Prevention Program—in which condom distribution will increase condom demand.
- The cluster of differentiation 4 (CD4) cells threshold is increasing from 250 to 350; more PLHA will receive treatment and will be seen in clinics; therefore, increasing their access to condoms.
- Increased testing and counseling increases access to condom distribution points.
- Implementation of social marketing strategy by PSI and other NGOs will increase awareness about condom use and access points, and will probably increase demand.
- The implementation of the Kazungula bridge project from Botswana to Zambia will increase FSWs in these border areas; distribution groups that cater to their needs may increase.
- BDF plans to procure more condoms annually to respond to the increased demand for their Sekwata brand by non-military personnel. This might change the amount to be procured by CMS.
- An increase in the percentage (market share) of the population served in the public sector may be needed.

The factors above were considered; the only factor the group felt should be included in the forecasts for the next five years was the population growth rate—this was increased to 3 percent to account for any other changes. See table 11 for these figures.

Table 11. Forecasts for 2013–2017 for Male and Female Condoms

	2013	2014	2015	2016	2017
Male condoms	33,000,000	33,990,000	35,009,700	36,059,991	37,141,791
Female condoms	330,000	339,900	350,097	360,600	371,418

For any supply planning, the stock on hand as of January 1, 2013, must be subtracted. Based on the information received at the time of the workshop, the CMS had nine months of stock on hand. Also, all new orders must be considered before additional condoms are procured. The team was informed that UNFPA will send orders in 2013. The quantities coming into the CMS from the UNFPA will need to be considered.

Condom Logistics System

Overall, the team found a good political environment for securing condom availability in Botswana, but they also found many challenges in coordination and supply. Policies and systems that support the condom supply chain are in place—such as the national condom strategy, the DHMT structure, guaranteed funding, and political commitment from the MOH and the GOB. In interviews, the team also found open dialogue at all levels—from government officials, to health workers, to the public—about condoms and any self-identified challenges. Commitment to and knowledge of the use of condoms for preventing HIV was seen throughout the country—on public signs and on radio shows. Unfortunately, the operationalization of the condom strategy is insufficient and some of the institutions lack coordination or authority. Most stakeholders were unclear about their role in implementing the condom strategy or, sometimes, they did not understand their roles and responsibilities within the overall condom supply chain. This challenge was particularly evident in non-traditional condom distribution outlets; these facilities are not fully integrated into the condom distribution system and they do not have procedures for accessing condoms. When information was shared, communication silos existed between different departments and supply chain levels, which prevented information from being routinely shared. A coordination unit for condoms—which collects and coordinates all information and activities relating to condoms—did not exist; there was no single accountable source for a nationwide system to collect and share information and address challenges.

The information flow—which feeds both policy coordination and supply chain operations—was ambiguous. Orders, reports, and data were sent from different levels of the supply chain to different decisionmaking bodies; for instance, sometimes SDPs only sent reports to the CMS, sometimes to the MOH, sometimes only to district-level officials, or sometimes not at all. The introduction of the DHMT level—implemented differently and inconsistently throughout the country—further confused systems for reporting, ordering, and decisionmaking. In some cases, SDPs ordered directly from the CMS, while others would only communicate with the DHMT office, and still others with both. One healthcare worker reported that he knew consumption information was important, but because he did not know where to send it, he sent reports to every supply chain level where he had a contact—at the DHMT, the CMS, and the MOH—and kept an additional copy of his latest report in his car, just in case someone important came by who needed the information and could help him sort out the supply issues at his facility.

Further confusing the information flow were the methods of reporting information. Many sites lacked tools for reporting, or were confused by too many tools—stock cards, new DMPM tools, MOH reports, etc. Many of these tools included inadequate markers of condom availability, for instance, reporting generally *condoms available*, instead of specifying months of stock on hand or quantities. There were no standardized tools or reports for non-traditional condom outlets.

To highlight some of the coordination problems, the team mapped out the commodity and information flow of condoms in the Botswana logistics system. Figure 6 outlines the logistics system designed in the *Standard Operating Procedures Manual for the Logistics Management of Medicines and Related*

Supplies in Botswana (ROB MOH 2011). In this system, the DHMTs are a level between facilities and the CMS or MOH. Reports are sent at all levels, one-by-one, with aggregated information finally reaching the MOH for decisionmaking purposes.

Figure 6. Logistics Management Information System, Designed in Botswana LMIS Standard Operating Procedures Manual

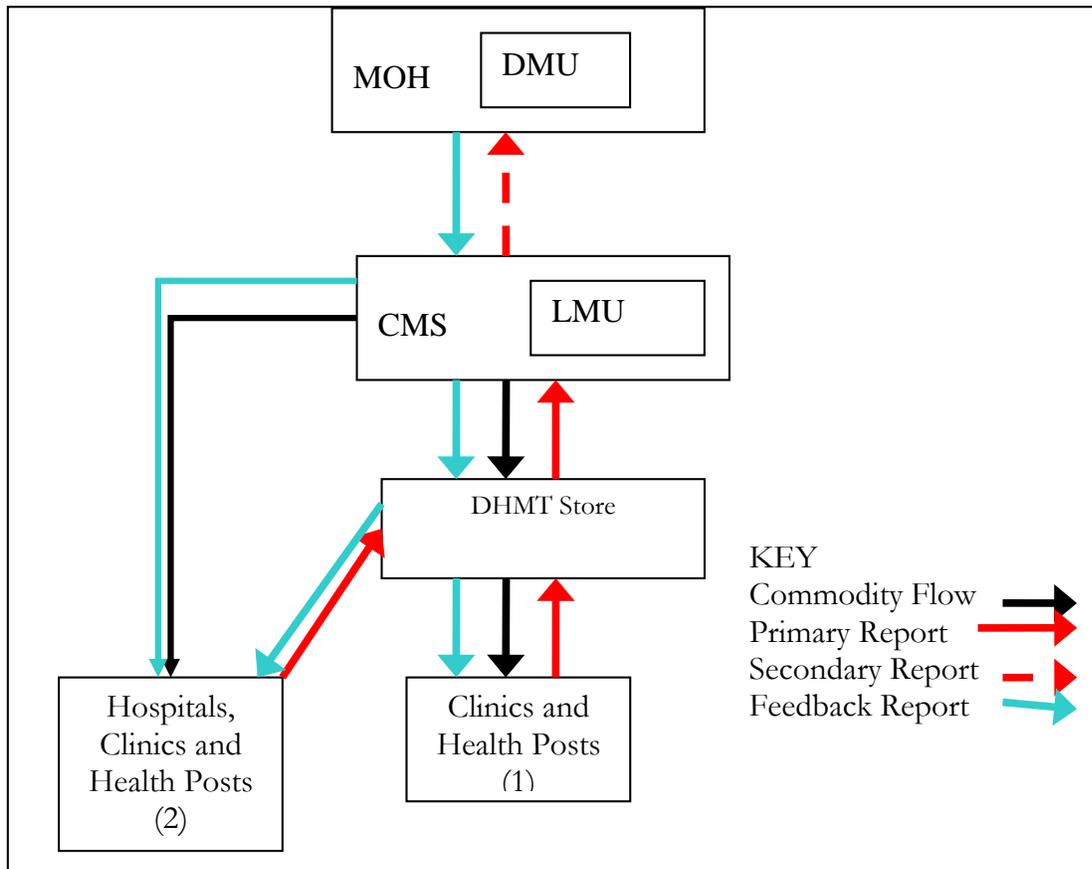
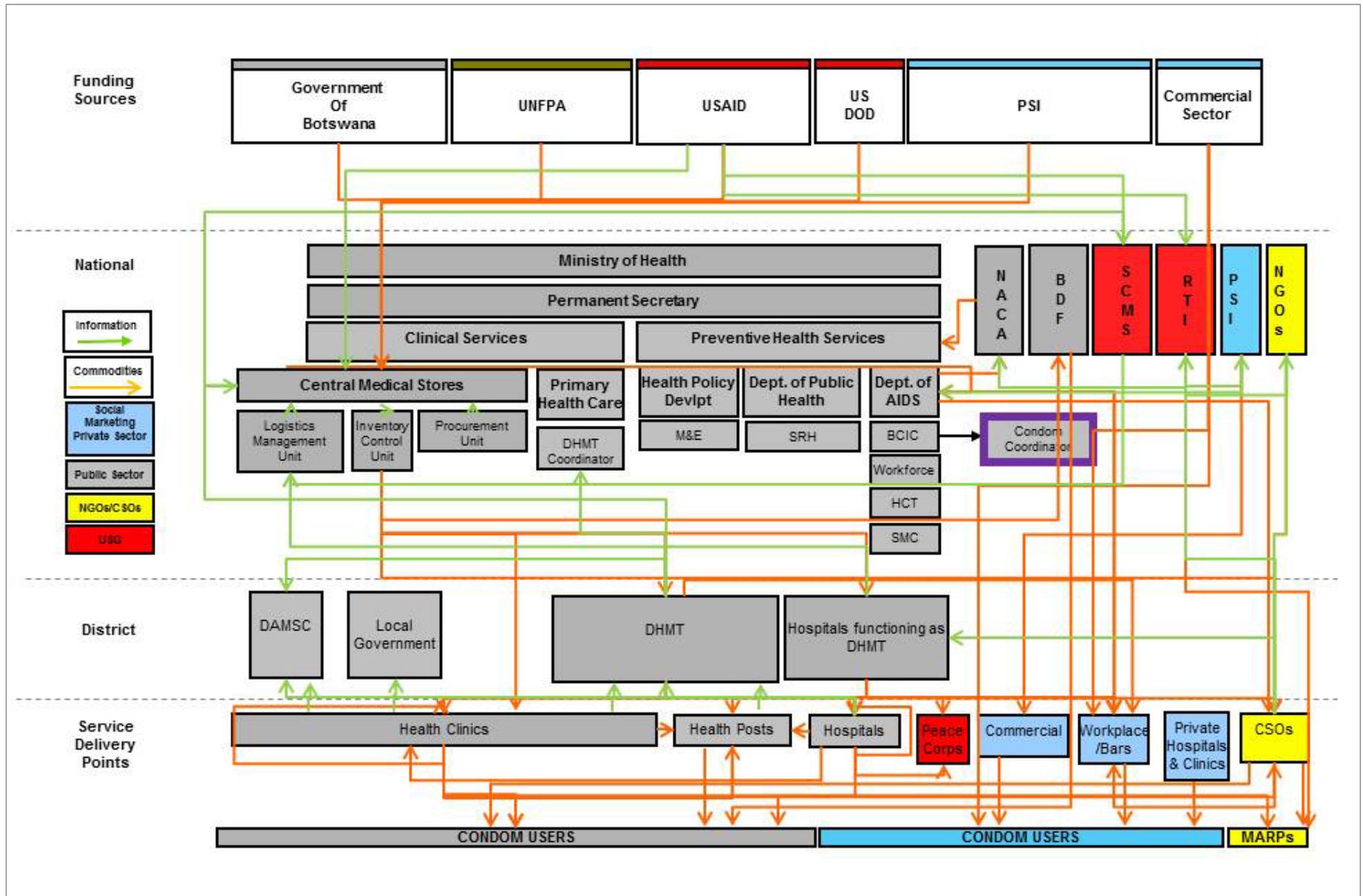


Figure 7, outlined by the team, reflects how the system currently functions. More stakeholders are added to demonstrate that, within certain groups, not all information is shared; also, of importance, previously overlooked stakeholders are added to the condom distribution system: non-traditional condom distribution outlets, such as civil society organizations. This map illustrates the confusion in reporting (information flow) and in commodity orders and delivery. It also highlights the lack of a designated condom focal person to whom all information on condoms is sent. Within the MOH, the position of Condom Coordinator (outlined in purple) is housed under a series of bureaucratic layers and receives no regular reports or information about the national supply of condoms, so her role and responsibilities and her decisionmaking authority are unclear in the present system.

Figure 7. Currently Functioning Logistics Management Information System for Condoms in Botswana



DHMTs emerged as a central figure in the logistics system, with high levels of responsibility for coordinating district ordering, distribution, procedures, reporting, programming, and providing supervision and training to facilities. Currently, each DHMT functions differently. Some DHMTs service much larger areas than others; geographic boundaries are unclear. Many DHMT units are housed in hospitals or staffed by hospital staff (for example, using a Chief Hospital Pharmacist in the dual role of Chief DHMT Pharmacist). They may also use hospital storerooms or other resources for managing regional supply. This system organically grew from the way regions previously functioned, with the hospital providing ad hoc coordination and supply services to some facilities; and, in some cases, loose district management mechanisms already in existence. Most hospitals indicated that it was common practice for nearby facilities, civil society organizations, and other groups to informally collect condoms from the hospital, although this would artificially inflate the hospital's average monthly consumption. Although this hospital-centric system seems to work for well-supplied hospitals or DHMTs with smaller service areas; in other situations, it placed a large burden on hospitals, who felt they had added responsibility and storage pressures with the roll out of the DHMTs. Office, storage, transportation, and staff resources varied among DHMTs, often having inadequate resources. Human resources were a problem. In one area visited, the DHMT director served as the head of the hospital, the director of two neighboring DHMTs, and had additional responsibilities for DHMT regional management. He was also waiting for information (and receipt of a job description) from the MOH on hiring a vacant post on his team, another function he was temporarily covering. DHMTs reported inadequate oversight from the MOH, and poor communication about their roles and expectations—often not warned when their responsibilities were increased.

Smaller facilities reported having various levels of knowledge about the DHMT system. Some facilities changed their ordering and reporting practices to go only through the DHMTs, and some did not. Facilities reported receiving condom shipments in quantities they did not order. This could directly result from CMS errors, but could also be the result of DHMT errors. DHMT pharmacists were unclear if they were supposed to only aggregate facility orders for the CMS, or if they had a responsibility to review and adjust facility orders before sending them to the CMS. Further confusing the ordering process, a facility's AMC calculation and total order number could be changed by a DHMT pharmacist, then changed again by the CMS before delivery.

One DHMT initiated the role of a DHMT Condom Coordinator. This person was responsible for supplying condoms to all sites in the DHMT, including the orders, distribution, central storage, and condom programming at that DHMT level. Although the team did not investigate the effectiveness of having this role, or if it improved condom availability in the district, a central condom coordinator indicates increased attention for the commodity.

In several regions, DHMTs reported plans for constructing a designated DHMT warehouse as part of the system roll out. In most cases, improved warehouse space for condoms is desperately needed. However, before locations for warehouses are chosen, it is recommended that the geographic boundaries of DHMTs be established so the most efficient warehouse locations can be determined.

Recommendations

At the workshop, participants determined a series of recommendations that would improve the overall supply chain and the condom supply chain (see table 12). The team also provided recommendations to specifically improve condom availability, which are described below.

Table 12. Action Plan Developed at the Workshop

Issue Identified	Actions/Recommendations	Time Frame	Responsibility
Distribution challenges	Streamline condom distribution and assign roles and responsibilities at all levels.	Jan 2013	MOH condom program
	Analyze and simplify the condom pipeline.	Jan 2013	
Weak recording and reporting	Implement standardized tools at service delivery points. Record and capture information about quantities distributed through non-traditional sites. Create standard operating procedure and implement for non-traditional sites.	March 2013	MOH Monitoring and Evaluation department
Inadequate coordination at all levels (national, district, SDPs)	Define roles and assign duties to condom focal persons at all levels.	January 2013	MOH: Department of HIV/AIDS prevention & care
Inadequate quantification processes and storage of condoms	Initiate a permanent Botswana quantification team that meets semi-annually for forecasting, supply planning, and quantification review.	February 2013	MOH

The team would also like to add several other recommendations to the list in table 12 that may strengthen the condom supply program.

Create and Empower a Central Condom Coordinator

With concerns about coordination and information flow at every level of the supply chain and within the organizations, a central condom coordinator will benefit the entire condom logistics system. Providing a marked improvement for the system, this central agent can collect and share data, use data for making supply and programming decisions, and will be accountable for national condom availability. However, this person can only be effective in this role if their responsibilities are made clear to all stakeholders, and if they regularly receive all the information they need.

Furthermore, they must have a position in the system that empowers them to make decisions, which will enable them to take direct positive action for condom availability.

This person (or team) should also be able to address outstanding issues on condoms. Condom dispensers—a program initiated, then abandoned—are currently underutilized because they have no accountable manager. Different coordinating agencies have competing or duplicative programs, or programs that would be more effective if implemented jointly. These stakeholders would benefit from a central condom coordination in the MOH with whom to liaise.

Increase Condom Advocacy

Although there is wide public awareness and use of condoms, brand preferences that impact condom supply and programming should be addressed. Stakeholders stated the complaints were made about the quality of the domestically produced Lorato condoms, but the team did not find evidence of these complaints or of poor quality of the brand. In addition, reports and information from the National Drug Quality Control Laboratory did not show any quality problems with the Lorato brand. Further investigation is needed to either address quality issues that may occur after the condoms leave the CMS, or improve Lorato brand perceptions. The leakage of the BDF Sekwata condoms to the general public impacts the BDF supply of condoms and their distribution practices, as they prefer to provide fewer condoms to the public. Studies on public brand preferences and adjustments to nationally available brands can help this issue.

Most important, female condom programming needs to address low public demand. Many levels of the supply chain stored large quantities of female condoms, which based on current consumption trends, will likely expire. Efforts need to be increased to promote the use of female condoms. With an estimated of 330,000 female condoms—a bulky and expensive product—required in 2013, there is currently a national oversupply of female condoms that are about to expire. To supply female condoms past May 2013, a large procurement must be made soon.

Implement Condom Forecasting Methodology Adjustments

Some quantification methods and some figures used in previous condom forecasts in Botswana should be updated. The services statistics method for condom quantification is not recommended, (1) because data currently is not available to use this method; and (2) because, due to the nature of the commodity, data on condom services is not an appropriate data point. Because condoms should be widely available and health providers should not be the only distribution points, nor should they restrict the consumption of condoms, it is not beneficial to collect direct service consumption.

Using CYP (the number of condoms required by a couple for contraception for one year) is also questioned for condom forecasting. The original CYP calculation figure adds an adjustment of 83 percent for effectiveness. *Effectiveness* used in CYP calculations traditionally represents how effective the product is in preventing pregnancies. Because the CYP used in this male-only method is meant to be the number of sexual acts per month, the effectiveness factor must be subtracted. The factor to use for forecasting would then be 100, instead of 120 ($120 \times .83 = 99.6$), although, the calculations in this report use the 120 CYP. The team received data suggesting that Botswana's CYP is 150. If this figure is used and the adjustment factor is removed for this figure, the result is a CYP of 124 ($150 \times 0.83 = 124.5$), which is closer to the 120 figure being used.

Create a Permanent Condom Quantification Team

Workshop participants noted the need for a permanent condom quantification team that would meet regularly to review the results of the quantification; when more information becomes available, they could adjust the supply plan and future forecasts. The proposed membership includes stakeholders from all levels of the supply chain; it also includes non-traditional condom distributors, which are listed in the text box. The proposed MOH condom focal person would be the chairperson.

Proposed Members of the National Condom Quantification Team

MOH condom focal person
MOH Monitoring and Evaluation representative
Sexual and Reproductive Health (SRH) program
Nongovernmental organization representatives (Research Triangle Institute ; Botswana Network on Ethics, Laws and HIV/AIDS; PSI; Botswana Family Welfare Association
CMS (Procurement unit)
United Nations Population Fund
DHMT coordinator
Service providers
Experts in quantification.

Focus on Improving Information Flow within the Supply Chain

It was obvious during interviews that departments and agencies have communication's silos, including between departments of the CMS. Opportunities are urgently needed for information exchanges between the MOH and stakeholders; for example, through regular meetings to review logistics reports from all levels in the system. An information exchange would help the stakeholders prioritize their activities and coordinate efforts to ensure sustainable access to condoms in the country. In addition, disseminating and encouraging the use of the logistics management information system (LMIS) forms for the condom program is needed, especially at the lower levels. Training condom distributors—those working now and any future staff—to record and report quantities of condoms issued would clarify consumption patterns at lower levels. This training should also focus on increasing the capacity of practitioners to report on condoms. This information is currently inadequate, which makes it difficult to estimate the demand for forecasting.

At the MOH level, it is necessary to accelerate the merging of the Monitoring and Evaluation (M&E) teams within the various departments and coordinating the compilation and dissemination of M&E data related to the condom program. At the DHMT level, markers of condoms on reporting forms need to be reviewed and updated to show the actual quantities of condoms, rather than just the adequate availability of condoms at the district level.

Finally, an official system for collecting information on the use of condoms by NGOs and non-traditional outlets should be created and collected.

Improve General Supply Chain Issues Especially at the CMS

The warehousing and other logistics processes for condoms at the CMS need to be revisited and updated. First, inadequate storage capacity and conditions at all levels (especially districts and SDPs) need to be addressed. The disposal of soon-to-expire female condoms would increase space availability at the CMS. At the district and SDP level, to open up space for other products, condoms are frequently the first item removed from storage. A policy is needed that designates permanent storage space for condoms at these levels. The CMS also needs to review its current application of the two enterprise resource planning systems in use for warehousing (Pulse) and procurement (Oracle). Currently, information is not uniform in either system, although they are used in the same store. Consequently, the data on stock on hand, order fill rate, and stock movements are unreliable.

Accuracy and consistency of information entered on these systems can be improved by allowing access only to designated individuals who are well trained. The methods used to calculate average monthly consumptions are also ambiguous and need to be reviewed. The implementation of the stock rotation principles of warehousing is also currently being undermined when pickers change the location of items to be picked. They should not be allowed to do this; this causes items to expire, or items are not available when a picker is directed to a location.

Furthermore, the policy of the CMS changing the quantities of commodities ordered by SDPs needs to be reevaluated and updated. Clarity on how these decisions are made would be very helpful for forecasting in the future. Also, urgently needed is a standard number of condoms per case (pack sizes) at the CMS. There are two different quantities per box (100 pieces or 144 pieces) and also multiple numbers of boxes per carton (30, 50, and 100). Five cartons picked up by an NGO or MOH one week may not be the same quantities of pieces the next week. Recording by units (pieces of condoms) in the system(s) used would eliminate confusion.

Accelerate and Clarify the DHMT Roll-Out Process

Current challenges with the roll out/integration of the new DHMT system for managing health-related issues at the district level have slowed down the implementation of the condom program at this level. The high level of responsibility on the DHMT team has led to less focus on condom issues. In one DHMT, the team found that the DHMT head had appointed a condom focal person, although this was not designated in the proposed DHMT structure. DHMTs should receive guidance and necessary resources for coordinating condoms at the district level. The jurisdiction of the DHMTs within district boundaries also needs to be clarified. At this time, the job descriptions of DHMT members and their expectations are not clear. As a consequence, there is inconsistent management and supervision. In some districts, DHMT teams are not formed through formal appointments. This has further increased the burden on neighboring district DHMTs that are offering ad-hoc management to fill the vacant positions in these districts. District warehouse locations and operations should be addressed to increase efficiency and maximize the use of limited resources. DHMTs also need to be advised on how to supply NGOs when they approach district stores for condoms. Barriers to access by NGOs at these points should be decreased. Finally, a supply chain point person needs to be designated in the structure at all DHMTs.

Improve Condom Access for Non-Traditional Distributors

An important aspect of streamlining the condom program in Botswana is to improve the way NGOs access condoms. It is important to eliminate any unnecessary processes. For instance, NGOs are not required to provide a letter explaining why condoms are needed. The NGOs must have a formal process in place with easy steps to follow when accessing condoms at both the central level and the DHMTs. NGOs should also regularly provide information to the CMS on the quantities of condoms they have distributed, especially at non-traditional sites, like bars and restaurants. This would help compile consumption patterns to better inform the quantification process.

Likewise, it is important to educate staff at the health facilities on their role to dispense to NGOs, as much as is needed. Health facilities should record the quantity of issues to NGOs as part of consumption reports to the central level and CMS.

Include All Groups in the Next Quantification

In the quantification workshop, participants briefly discussed the high rate of HIV infection in prisons. Because this is a politically sensitive issue, and because data was not available, this element of the population was not considered in the condom quantification process; they were also excluded from the public programming for condoms. The prison population should be incorporated into future efforts.

Include Lubricants in the Next Condom Quantification

Lubricants were not considered in this quantification, although it often accompanies condoms and it will be needed in the future.

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Appendix A

Quantification Workshop Participants

Name	Institution
Bagae Boitumelo	Ministry of Health, M& E department
Mmikanyana Busang	Ministry of Local Government
Gertrude Behane	Botswana Defense Forces
Kabo Ngombe	Ministry of Health, Condom Coordinator
Mohammed Younus	Central Medical Store
Josephine Phaladi	Central Medical Store
Emmanuel Mafoko	National AIDS Coordinating Agency (NACA)
Tshegfatso Maotwe	Ministry of Health, Sexual and Reproductive Health Department (SRH)
Tiro Roy Maruping	Research Triangle Institute (RTI)
Segolame Ramothwa	RTI
Izuagba Vitus	Princess Marina Hospital
Grace Moedi-Mabena	Princess Marina Hospital
David Kelapile	U.S. Embassy Department of Defense
Augustine BahatiShioso	SCMS
Stanley Mapiki	SCMS
Dr. Mark Ogbuabo	SCMS
Omphile L. Badubi	SCMS

Appendix B

Quantification Team

Name	Institution
Laila Akhlaghi	USAID DELIVER PROJECT
Brian Serumaga	USAID DELIVER PROJECT
Ashley Smith	USAID DELIVER PROJECT
KaboNgombe	Condom Coordinator, MOH
Mohammed Younus	CMS
Josephine Phaladi	CMS
Augustine BahatiShioso	SCMS
Stanley Mapiki	SCMS
Omphile Badubi	SCMS

Appendix C

Administrative District and DHMT District Comparison

Administrative Districts 2011	DHMT Districts
Barolong	Bobirwa
Central Bobonong	Boteti
Central Boteti	Charleshill
Central Kgalagadi Game Reserve (CKGR)/Molapo/Metsimanong	Chobe
Central Mahalapye	Francistown
Central Tutume	Gaborone
Chobe	Gantsi
Francistown City	Goodhope
Gaborone City	Jwaneng
Ghanzi	Kgalagedi North
Jwaneng	Kgalagedi South
Kgalagadi North	Kgatleng
Kgalagadi South	Kweneng East
Kgatleng	Kweneng West
Kweneng East	Lobatse
Kweneng West	Mabutsane
Lobatse	Mahapye
Ngamiland Delta	Moshupa
Ngamiland East	Ngamiland
Ngamiland West	North East
Ngwaketse	Okavango
Ngwaketse West	Palapye
North East	Selebi-Phikwe
Orapa	Serowe
SelebiPikwe	South East
SerowePalapye	Southern (Kanye)

Administrative Districts 2011	DHMT Districts
South East	Tutume
Sowa Town	

Appendix D

Sites Visited for Data Collection

Ministry of Health
Department of AIDS Prevention and Care (Behavioral Change Information and Communication and THC Heads) Director of Public Health Department of Health Policy Development, Monitoring and Evaluation Coordinator for Safe Male Circumcision Program Division of Sexual and Reproductive Health (SRH), and M&E Officer at SRH Coordinator for Sexually Transmitted Infections unit Director of Primary Health Care, local governments Department of Clinical Services, Chief Health Officer for Primary Health Care—DHMT Coordinator MOH store room Central Medical Stores (CMS), procurement, LMU and inventory management departments, Chief Health Officer, Primary Health Care, District Health Management Team Coordinator DHMT Coordinators, Chief Pharmacists, and M&E Officers at selected DHMTs
NGOs and Government Agencies
National AIDS Coordinating Agency (NACA) Local Government Division of Primary Health Care Botswana Defense Forces Botswana Network on Ethics, Law and HIV/AIDS (BONELA) Botswana Family Welfare Association (BOFWA)
Donors and Implementing Partners
USAID United Nations Population Fund PSI Research Triangle Institute (RTI) Matshelo Community Development Association (MCDA)
Health Service Delivery Points
Letsholathebe II Memorial Hospital Princess Marina Hospital Nyangabgwe Hospital, pharmacy, store room, and Infectious Disease Control Clinic Thamaga Hospital Scottish Livingstone Hospital Matlapana Health Post Maun clinic Molepolole Council Clinic Extension II clinic and Phase II clinic in Gaborone

District Health Management Teams
Kweneng East/West Francistown Warehouse Area W Clinic Ngami/Maun Gaborone DHMT at Extension II Masunga Warehouse

For more information, please visit deliver.jsi.com.

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John Snow, Inc.

1616 Fort Myer Drive, 16th Floor

Arlington, VA 22209 USA

Phone: 703-528-7474

Fax: 703-528-7480

Email: askdeliver@jsi.com

Internet: deliver.jsi.com