

TECHNICAL BRIEF

Quantimed



USAID
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SIAPS
Systems for Improved Access
to Pharmaceuticals and Services



A QUANTIFICATION AND COST ESTIMATION TOOL

Quantimed is a quantification and cost estimation tool used in the procurement of pharmaceutical commodities. The tool standardizes, organizes, and simplifies the data needed to make sound supply planning, programmatic, and policy decisions.



CHALLENGE

Determining how many medicines and health products to purchase is fundamental to managing an effective health program. Successfully planning and budgeting for these pharmaceutical supplies requires precise and accurate data that can be difficult to collect, time consuming to analyze, or based on flawed information. Additionally, estimating the quantities of pharmaceutical products needed for programs that are scaling up services can add another layer of difficulty.



A SOLUTION

Quantimed is designed to improve the accuracy of supply planning and budgeting by providing a systematic approach to organizing and analyzing data on pharmaceutical commodities. The tool facilitates the calculation of commodity needs using either a single method or a combination of any of the three primary quantification methods: past consumption, morbidity patterns, and/or proxy consumption. The program also includes an option for scaling up morbidity-based estimates, which is key for programs that are working to scale up services.

Depending on the availability of data, Quantimed can be applied at the local level with one facility, the regional level with several facilities, or at the country level for a national control program.

Helping users to improve supply planning, training, and management practices, the program also allows users make sound fiscal and policy decisions by analyzing the financial implications of different purchases and medicine-use patterns.

Quantimed can also directly relate medicines to priority health problems and disease patterns through the analysis of standard treatment protocols.



FEATURES

Quantimed is designed to—

- Estimate the amount, calculate cost, and place orders for medicines, medical supplies, laboratory supplies, and reagents needed to provide services for a given population, or for an estimated number of patients in a new or expanding program
- Compare the costs of alternate treatment regimens and pharmaceutical products
- Develop caseload estimates for each type of service or intervention for a given target population using morbidity-based, consumption-based, and/or proxy consumption-based methods
- Compare different program models to determine how fast and to what extent program scale up is feasible
- Provide cost estimates in local currency and foreign currencies, as well as up-to-date conversions rates

Other features include—

- Database format that can be exported to Microsoft Excel
- Customizable medicines and supply list with median prices from MSH's annual International Drug Price Indicator Guide
- User-friendly data entry through "look-up" tables and lists

- Standardized data collection forms and reports
- Comprehensive user guide
- Accommodation of single user or multiple users, either on a stand-alone computer or a local area network



SIAPS EXPERIENCE

Quantimed was originally field tested in Namibia in 2003, and since then national and programmatic applications of Quantimed have been implemented in Botswana, Côte d'Ivoire, Ethiopia, Guyana, Haiti, Mozambique, Namibia, Nigeria, Rwanda, Tanzania, Uganda, Vietnam, Zambia, and Zimbabwe. National antiretroviral (ARV) therapy programs in over a dozen countries have used Quantimed to prepare regular, multi-year quantifications of ARV commodities, facilitating resource mobilization and providing the foundation for procurement activities that allow for an uninterrupted supply of medicines.

The Ministry of Health (MoH) in Guyana has endorsed Quantimed as the standard quantification tool for all MoH programs. Since the implementation of Quantimed, there have been no national stock-outs of antiretrovirals or test kits.



IMPLEMENTATION

Approximately four days are required to train users in general quantification practices, quantification considerations specifically related to HIV/AIDS treatment (if applicable), and how to use the Quantimed tool.

Quantimed users should have experience in data entry, a clinical background (or access to clinical advisors), and an understanding of both procurement and quantification practices.

Quantimed has often been used to estimate the amount of ARVs needed for a particular program. A

national ARV quantification exercise typically requires approximately 10 days of training for a local user working with support from SIAPS staff. The length of time required for ARV quantification also depends on data availability and the scope of the exercise. A large-scale quantification often requires several weeks to complete. The methods in Quantimed are normally used to forecast needs for an annual or semiannual procurement, rather than for a routine order.

Limitations

Like most tools, Quantimed relies on the sound analysis, judgment, and interpretation of data by its users. While Quantimed can help support the quantification activities of a program, its results are limited if flawed or inaccurate data are included in the analyses. Additionally, while Quantimed can expertly assess different supply planning scenarios, it will not make recommendations on which procurement decisions should be made. Instead, Quantimed enables program managers to make their decisions based on the best evidence available.

Equipment

Component	Minimum Requirement
Computer CPU	3.0 GHz
Memory	1 GB of RAM
Hard Disk Space	100 MB available
Additional Drive	DVD/CD-RW, USB flash drive for backups
Operating System & Accessories Configuration	Windows XP and MS Office 2003 or Windows Vista and MS Office 2007 Both versions of Office should have the latest Service Pack installed for maximum operability
Network	Network adapter card and cabling or wireless network facility required if Quantimed is to be used by multiple users on the same network
Printer	Windows-compatible printer

SIAPS TECHNICAL BRIEF SERIES | This document is part of a series describing the technical approaches and tools used to implement SIAPS work in Pharmaceutical Systems, Pharmaceutical Services, and Supply Chain Management. The information provided does not reflect or represent the position or views of the US Agency for International Development or the US Government.

ABOUT SIAPS | The Systems for Improved Access to Pharmaceuticals and Services (SIAPS) program works to assure access to quality pharmaceutical products and effective pharmaceutical services through systems-strengthening approaches to achieve positive and lasting health outcomes. SIAPS is funded by the US Agency for International Development (USAID) and is implemented by Management Sciences for Health. For more information, visit www.SIAPSprogram.org.

