PROQ

SOFTWARE
USER'S MANUAL

DELIVER
No Product? No Program.   Logistics for Health

JSI

USAID

DELIVER

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Implemented by John Snow, Inc. (JSI), (contract no. HRN-C-00-00-00010-00), and subcontractors (Manoff Group, Program for Appropriate Technology in Health [PATH], Social Sectors Development Strategies, Inc., and Synaxis, Inc.), DELIVER strengthens the supply chains of health and family planning programs in developing countries to ensure the availability of critical health products for customers. DELIVER also provides technical support to USAID's central contraceptive procurement and management, and analysis of USAID's central commodity management information system (NEWVERN).

Abstract

ProQ is a software tool that quantifies HIV test requirements based on realistic forecast demand, assessment of existing supply chain capacity, and availability of resources for procurement. This manual explains how to use the ProQ software. It includes an introduction to ProQ and quantification, in general; instructions for installing the software on the user's computer; navigation techniques and conventions; instructions for conducting a quantification, and printing reports. To use ProQ, the user conducting a quantification must have some experience with the logistics of HIV test kits.

CONTENT

OVERVIEW

INTRODUCTION

ProQ is a software tool that quantifies HIV test requirements based on realistic forecast demand, assessment of existing supply chain capacity, and availability of resources for procurement. This software can help program managers—

- forecast quantity of HIV tests needed to meet demand
- compare demand with service capacity
- adjust quantity needed to balance the supply pipeline
- assess storage capacity relative to shipment volumes
- estimate cost of HIV tests required
- compare cost with available funding
- adjust quantities to procure to match budget allocation.

Why use ProQ?

ProQ offers four methodologies for quantifying HIV tests for national programs, and the software lets you compare different forecasts. Methodologies can be adapted to specific country settings, and can be used in both data-poor and data-rich situations. You can use ProQ to forecast for national, local, or NGO programs. Guidance is provided for quantification in countries where a variety of HIV test kit brands exist and are used for various purposes.

The quantification methodologies include—

- logistics projections
- morbidity/population projections
- service statistic projections
- target projections.

The Advantages of ProQ

Accurate quantification of commodity requirements is crucial to the success of any health program. Without a systematic and realistic quantification of commodity needs, clients are not served, commodities are wasted, and funding agencies are unable to justify allocation of resources. For large-scale programs, HIV test quantification is time-consuming and difficult. Therefore, program managers need a practical, easy-to-use way to quantify these requirements.

ProQ ensures that you can collect and document data and assumptions throughout the quantification process. It helps program managers continually modify their assumptions and make corresponding changes in procurement and shipment scheduling decisions.

Program success also depends on the ability to locate and coordinate the required funding to ensure uninterrupted and the timely supply of commodities before funds are depleted.

ProQ provides program managers with an analysis of commodity requirements, supply chain capacity, cost estimates, and currently available funding, which enables managers to advocate and mobilize resources for effective HIV test procurement. Over time, this will ensure the required supply of HIV tests and enhance the achievements of HIV/AIDS program goals.

PROQ SOFTWARE FUNCTIONS

Quantifying HIV Test Requirements

Quantification is the general term used for the process of estimating quantities of specific drugs, laboratory reagents, and consumable medical supplies needed to serve customers in a health program, for a given period. Quantification is accomplished in the following seven steps or stages—

- Define the program you are quantifying.
- Collect the data required to complete the remaining steps.
- Forecast demand and adjust for quality control, wastage, and service capacity.
- Estimate quantities required.
- Calculate financial requirements.
- Reconcile available funding and quantities required.
- Present findings to decision makers to determine quantities to procure.

Financial Requirements and Budget Reconciliation

After you determine the number of each test kit brand you need to procure, ProQ will help you calculate the financial requirements for those tests and reconcile the findings with your available funding. This helps you—

- Get a big picture of financial needs and funding situations for HIV tests.
- Negotiate with funders to ensure adequate funding.
- Allocate available funding according to program priorities.
- Adjust the number of tests to procure to ensure testing protocols can be followed in cases of underfunding.
- Systematically determine financial needs for funding proposals.

HOW TO OBTAIN PROQ

ProQ and its documentation are free of charge and available from the following sources-

Order the CD

Send requests for the ProQ CD to—

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DELIVER
John Snow, Inc.
1616 North Fort Myer Drive, 11th Floor
Arlington, VA 22209 USA
Phone:  703-528-7474
Fax:  703-528-7480
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Download from the Internet

Download ProQ from the DELIVER web site using the following link—

http://www.deliver.jsi.com/2002/Software/ProQ/index.cfm.

INSTALLING PROQ

INTRODUCTION

This section explains how to install and run ProQ. For questions about ProQ, contact the ProQ Program Associate at the following address—

> DELIVER
> John Snow, Inc.
> Attention: ProQ Team Leader
> 1616 North Fort Myer Drive, 11th Floor
> Arlington, VA 22209 USA
> Phone: (703) 528-7474
> Fax: (703) 528-7480

RECOMMENDED SYSTEM REQUIREMENTS

The following resources are recommended for use with ProQ

CPU	Pentium or equivalent
Operating system	Windows 9x, ME, 200, NT4 (service pack 6 or later)
Memory	32 MB
Hard drive space	100 MB
Video adapter	SVGA with 800x600 resolution

Minimal computer skills and an understanding of Microsoft® Windows® are all that is needed. You need an Internet browser (i.e., Internet Explorer, Netscape) to view, print, and save ProQ reports. You do not, however, need an Internet connection.

HOW TO INSTALL PROQ

Installing ProQ from a CD

You can install ProQ from a CD:

1. Start Microsoft Windows.

2. Insert the ProQ CD into your CD-ROM drive, and click on "Start" on the Windows Taskbar.

3. Click on "Run" from the pop-up menu.

4. In the Command Line box, type *x:setup* (*x* is the letter of your CD-ROM drive).

5. Click on OK.

A message box is displayed (see below).

6. Click on Next to continue.

The screen, similar to the sample below, is displayed. Continue with the installation.
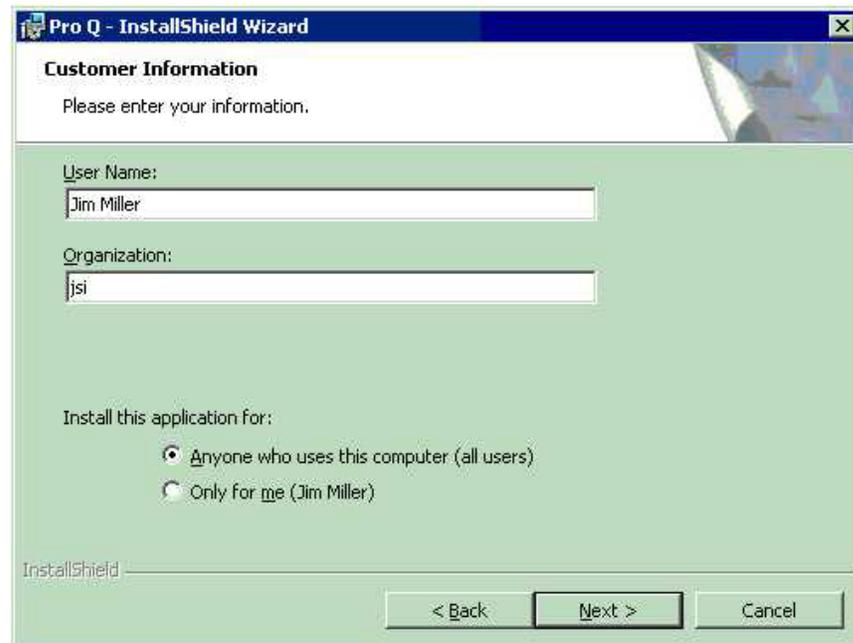
Type your name in the User Name field. This field may be filled in for you, because ProQ collects certain user information during initial installation. If the field displays the wrong user name or you want to change the user name—

7. Highlight the name in the User Name field.

8. Type your name (or the name of the computer's primary user) in the field.

9. Press Tab to move to the next field, Organization.

This field lets you identify your company or organization. Some of the information collected during initial installation may already be completed. If the field has the wrong organization or you want to change the organization—

10. Highlight the name in the Organization field.

11. Type the name of your company or organization in the field.

The options under "Install this application for:" allow you to choose if you would like ProQ to be available to everyone who has access to the computer of if you would like to restrict access to ProQ and its data. The default is to allow access to anyone who uses the computer. You can leave this field marked or you can change it, which enables you to restrict access to ProQ and its data.

To do this—

12. Click on the "Only for me" field.

ProQ is now available only to the person whose name appears in the user name field.

For example, the sample shows that only Jim Miller can use ProQ.

⊙ Only for me (Jim Miller)

After you enter the username and organization, and decide whether or not to make ProQ available to all users or just one-person—

13. Click on Next to continue with the installation.

Now, you can choose the type of installation you want to perform: a complete install or a custom install.

Complete (for complete install) is marked by default as shown in the sample below. This option will install everything you need to run ProQ. The complete installation option is preferre, because this is the easiest way to install ProQ.
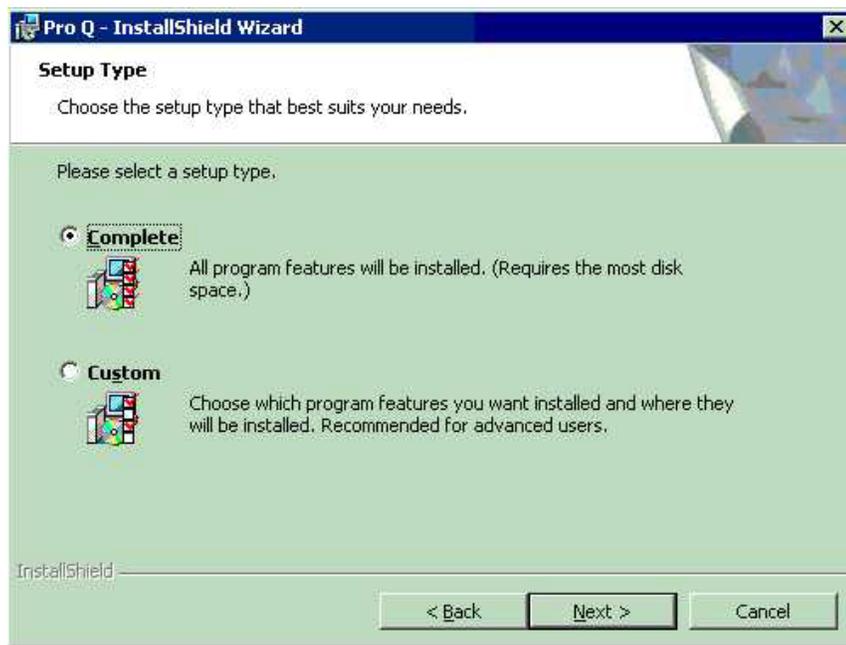
Because a custom install is complex, this manual only covers the complete install.

14. Click on Next to continue the installation.

When the Ready to Install message is displayed—
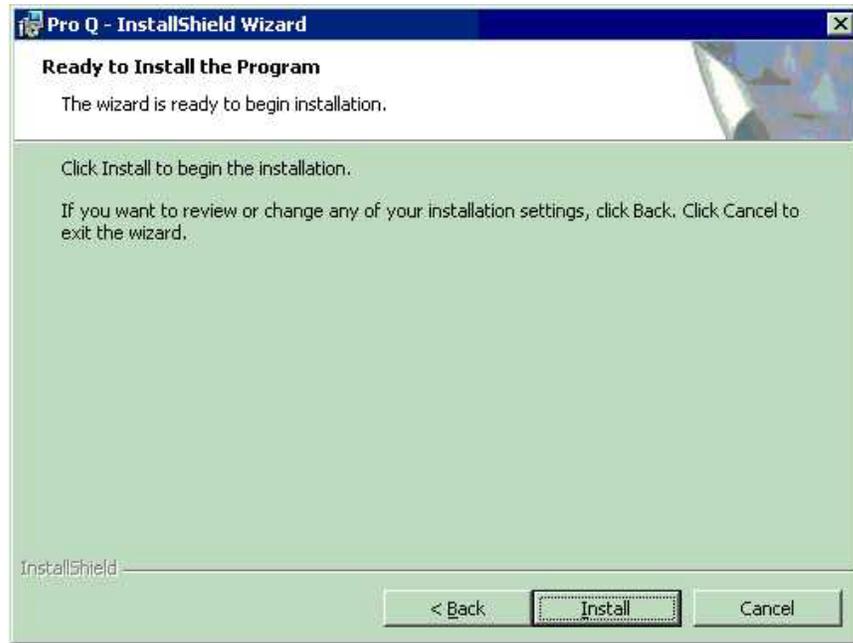
15. Click on Install to install the ProQ program files.

This will take a few minutes. A progress bar, similar to the sample below lets you know how the installation is progressing.

The finished window is displayed when the installation is complete.
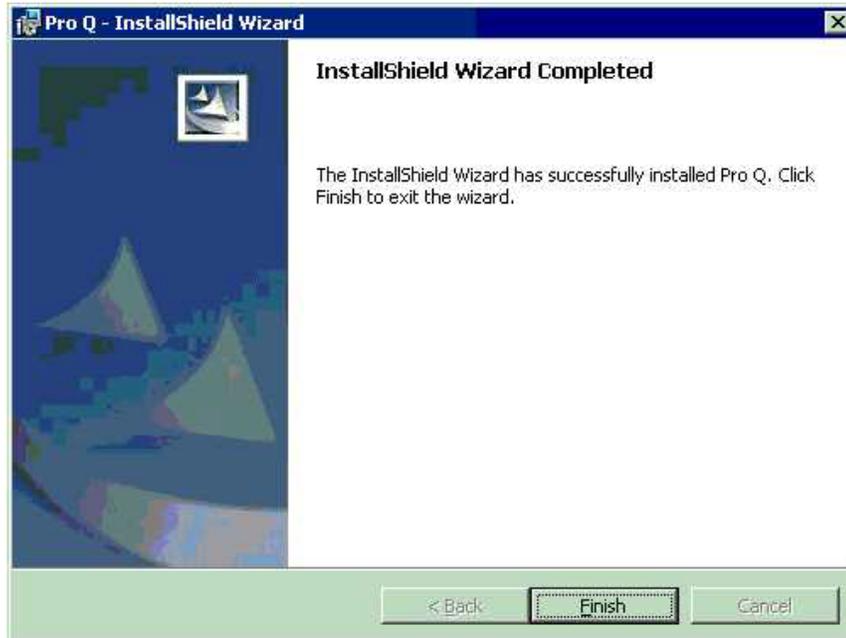
16. Click on Finish to close the window.

ProQ is installed and ready for use. The ProQ shortcut will be displayed on your desktop.

Installing ProQ from the Internet

ProQ can be downloaded from the DELIVER web site at the following address—

      http://www.deliver.jsi.com/2002/Software/ProQ/index.cfm.

1. Start Microsoft Windows.

2. Access the Internet and enter the following web address—

    http://www.deliver.jsi.com/2002/Software/ProQ/index.cfm.

3. Click on the download link.

4. Follow the on-screen instructions.

> You must have a valid email address to receive the password required to install the software.

After you download ProQ—

5. Click on the downloaded executable file.

6. Follow the on-screen instructions.

The setup program leads you through the installation process the same way it does for a CD install (see How To Install ProQ on page 8 for detailed information on installing ProQ).

GETTING STARTED

HOW TO RUN PROQ

After ProQ is loaded on your computer, you can start the program.

From the Windows Desktop

1. Locate and double-click on the ProQ desktop icon.

This starts ProQ and displays Aggregation Manager window.

From the Windows Taskbar

1. Click on Start.

2. Click on Programs.

3. Locate and click on ProQ.

This starts ProQ and displays the Aggregation Manager window.

When using ProQ, you must know the meanings for aggregations and quantifications.

- A *quantification* is determining the HIV test kit needs for one use of HIV tests within one program or supply chain.
- An *aggregation* is a collection of quantifications.

For example, if a Ministry of Health needs to procure HIV test kits for blood safety, voluntary counseling and testing, and prevention of mother-to-child transmission programs, the ProQ user must do separate quantifications for each user, within an aggregation.

The aggregation is the total number of test kits needed for each program that is added or aggregated. See appendix A for more detailed explanations of quantifications and aggregations.

NAVIGATION TECHNIQUES AND CONVENTIONS

ProQ has the following buttons.

BUTTON	ACTION
Add	Adds a new record or data to the database—for example, an additional size test kit.
New	Enables you to enter a new aggregation.
Open	Opens an existing aggregation.
Select	Enables you to select a highlighted entry.
Delete	Enables you to delete an entry
Cancel	Cancels an operation.
Edit	Enables you to modify an entry.
OK	Accepts an entry.
Next>>	Saves data and moves to next data window. When you reach the last associated data window, Click on Next to return to the beginning.
<<Prev	Returns to the previous data window.
Print	Prints a report of that the current page, which opens in your Internet browser.
Review Answers	Displays answers to the questions that were used to determine the numbers on the current page.
Add Notes	Opens a window where you can add notes that explain an answer to a question.
Split	Use in the configuration wizard to assign more than one HIV test to a step in the protocol.
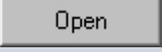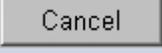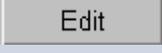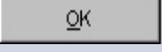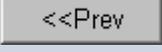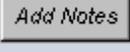
Pull-Down Menus

Pull-down menus, similar to the sample at the right, enables you to select from a list.

To use a pull-down menu—

1. Click on the arrow next to the menu to display its associated list.

2. Double-click on the item you want to select.

The selected item is displayed in the associated field. The sample shows that Afghanistan was selected from the country pull-down menu of the Add/Edit Aggregation window.

> You can also select an item from a pull-down menu by clicking on the menu and typing the first letter of the item.

Keys for Editing Records

The table lists keys you can use when editing records in ProQ.

KEYS FOR EDITING PROQ RECORDS	
Backspace	Deletes selection or character to the left of the cursor.
Delete	Deletes selection or character to the right of the cursor.
Tab	Moves the cursor from one field to the next. Also moves the cursor from one button to another without activating buttons.

ProQ Menu Tree

ProQ's menu tree is a quick and easy way to navigate through the system. You can use the menu tree, which stays open on the left side of the screen at all times, to navigate to a particular set of questions associated with the current quantification. You can also use the menu tree to navigate around ProQ while entering information to create a quantification or aggregation.

To use the menu tree—

1. Click on the plus sign (+) next to any option on the menu tree to open that section of the menu.

2. Click on the option you need to display its associated screen or question window.

3. Click on the minus sign (-) next to any option on the menu tree to close that section of the menu.

ProQ's color scheme

ProQ has an at-a-glance color scheme that displays an assessment of the state of an existing quantification or aggregation, as explained below.

- A green check mark next to a menu tree option means that the option and its associated elements are completed.
- A green dot identifies a completed group of questions.
- A yellow dot next to a menu tree element means the element is only partially complete (one or more questions have not been answered).
- A red dot next to an element means that none of the associated questions have been answered.

Question Marks

Questions marks identify the question windows where the data for the quantification is entered.

- If a question mark is green, the associated question has been answered.
- If a question mark is red, the associated question has not been answered.
- If a question mark is dark gray on a light gray background, the associated question does not need to be answered (these questions are identified by "<disabled>" on the ProQ information screens).

PREPARING TO CONDUCT A QUANTIFICATION

Before you can use ProQ to conduct a quantification, you must enter some basic data. This section explains how to enter the information.

Brands

In ProQ, a Brand refers to a specific HIV test, such as Determine or Oraquick, which can be a rapid, ELISA, or Western Blot. ProQ can help you determine how many test kits you need, but you must enter information about every HIV test for which you are quantifying.

1. Open ProQ.

The Aggregation Manager window is displayed, showing existing aggregations (if any).

2. Click on the Cancel button to close the Aggregation Manager window.

> The following subsection discusses how to create an aggregation data set. As a example, only one HIV test kit will be added.

4. Click on the Tools option of the ProQ menu bar, and select the Brands option.

The Brand Manager window is displayed below. The screen does not show data because no brands have been entered.
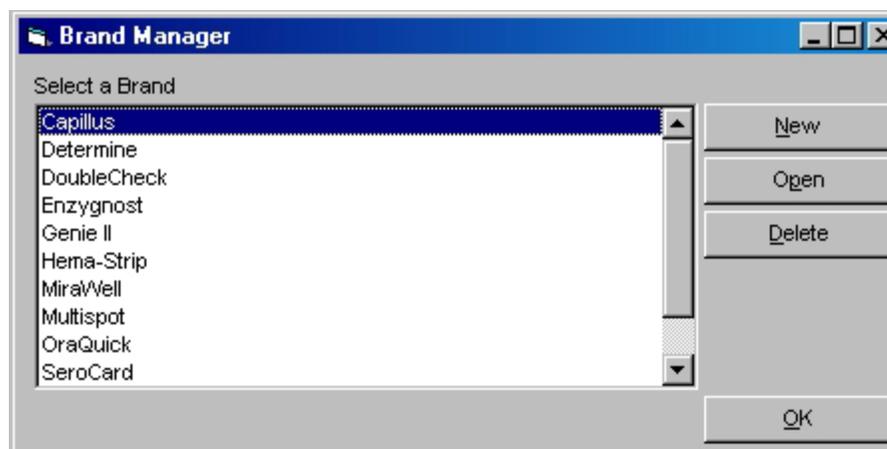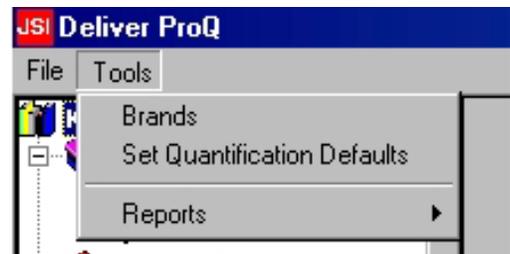
5. Click on the New button to add information about a brand of the HIV test kit you plan to use.

The Brands form below lets you enter information about the HIV test for which you want to quantify.

The information will probably come from the manufacturer of the test kit(s).

6. Highlight the text in the Brand field, and type the name of the HIV test.

7. Highlight the text in the default entry in the Supplier field, and type the name of the company that supplies the test.

8. Click on the arrow next to the Type field.

9. Select the type of test from the pop-up list, and click the left mouse button.

You can use the Cold Storage field to indicate that the tests need to be stored in cold storage, rather than at room temperature. Cold storage usually means refrigeration at 2-8°C.

If the test brand requires cold storage—

    a. Click on the arrow next to the Cold Storage field.

    b. Select Yes from the Cold Storage pop-up list, and click the left mouse button.

If the test brand does not require cold storage—

    a. Click on the arrow next to the Cold Storage field.

    b. Select No from the Cold Storage pop-up list, and click the left mouse button.

10. Highlight the default entry in the Shelf Life field, and enter the test's shelf life in months.

11. Click on the Temperature field, and enter the manufacturer recommended storage temperature. This can be a range of temperatures.

12. Click on the Materials Required field, and enter any additional materials or equipment needed to conduct the tests that are not included with the kit.

13. Click on the Notes field, and enter any additional information about the test kit.

14. Click on the Add button to enter data about the size of a multiple test kit package.

The Kits form is displayed, and you can enter the information.

15. Highlight the Length field, and enter the length of the kit in centimeters.

16. Highlight the Width field, and enter the width of the kit in centimeters.

17. Highlight the Height field, and enter the height of the kit in centimeters.

18. Highlight the Weight field, and enter the weight of the kit in kilograms.

19. Highlight the Cost field, and enter the cost of the kit.

20. Highlight the Number Per Kit field, and enter the number of tests contained in each kit.

21. Click on the Add button to display the Add/Edit Kit Carton form.

Enter information about the cartons used to ship the test kits in the Add/Edit Kit Carton form.

22. Click on the Length field, and enter the length of a carton in meters.

23. Click on the Height field, and enter the height of a carton in meters.

24. Click on the Width field, and enter the width of a carton in meters.

25. Click on the Weight field, and enter the weight of a carton in kilograms.

26. Click on the Kits Per Carton field, and enter the number of test kits in a carton.

ProQ calculates the volume of the shipping carton and displays the result in the Volume field.

27. Click on OK.

General carton information is displayed as shown by the sample below.

Cartons	Kits Per Carton	Dimensions	Weight
	25	53.3 x 43.2 x 43.2	11.8

To enter different sized kits for this brand, click on the add button and enter the kit information, as you did earlier. Use this option when there is more than one size kit for this brand of test.

28. Click on the OK button to save the brand data and return to the Brand Manager window.

29. Click on New to enter another test kit. Repeat this process for all the kits that will be used in the programs you are quantifying.

Creating an Initial Aggregation

After you start ProQ, the Aggregation Manager window is displayed. Use this window to select an aggregation or create a new aggregation.

> If the Aggregation Manager is not displayed—
>   A. Click on the File option of the ProQ menu bar.
>   B. Click on Open and select Open Aggregation to display the Aggregation Manager.

If ProQ is already opened, as it will be if you just entered test kits into the brand manager, follow the directions in the box above.

In ProQ, every quantification must be part of an aggregation. Aggregations may use one quantification for each use of test kits that ProQ quantifies. When you use ProQ for the first time, you will need to create an aggregation.

With the Aggregation Manager window displayed—

1. Click on the New button to create a new aggregation.

The Add/Edit Aggregation window is displayed.

The Name field identifies the aggregation.

2. Click on the name field, and type the name of the new aggregation.

The Prepared By field identifies the person (or entity) that conducted the quantification.

3. Click on the Prepared By field, and type the name of the person (or entity) that is conducting the quantification.

> Press the Tab key to move from one field to the next.

The country field identifies the country where the program is located.

4. Move to the Country field, and select a country from the pop-up list.

> To select an item from a pull-down menu, click on the menu and type the first letter of the item you need.

You can select a country in one of three ways.

METHOD ONE–WITH A SINGLE LETTER

1. Type the first letter of the country you want.

The first country in the list that begins with the letter you typed is displayed. For example: Type the letter B, and Bahamas is displayed in the Country field. This is because Bahamas is the first country in the list. Every time you type the same letter (B in this example), the next country beginning with that letter is displayed.

METHOD TWO–SELECTING FROM THE POP LIST

You can select a country from the pop list—

1. Click on the arrow next the Country field.

2. To select a country from the pop-up list, scroll down to find the country you want.

3. Click the left mouse button.

METHOD THREE–ADDING A COUNTRY

1. Click on the Add Country button to display the Add/Edit Country window.

2. Type the country's name in the Country Name field, and press Tab to move to the Notes field.

3. Type any relevant notes about the country (optional).

4. Click OK to save the new country in the Country pop list.

After you select a country, you can continue.

The Program field identifies the program or organization for which you are quantifying. This is the government, organization, or other body that will be procuring the test kits. Examples of programs might be the National Ministry of Health or the name of a nongovernmental or other organization conducting HIV tests.

One or more program type may be listed in the Program pop list.

5. Click on the arrow next to the pop-up list. ▼

6. Select the program you want, and click the left mouse button.

If your program is not in the pop-up list, you can add it (see below).

   a. Click on the Add button next to the Program field.
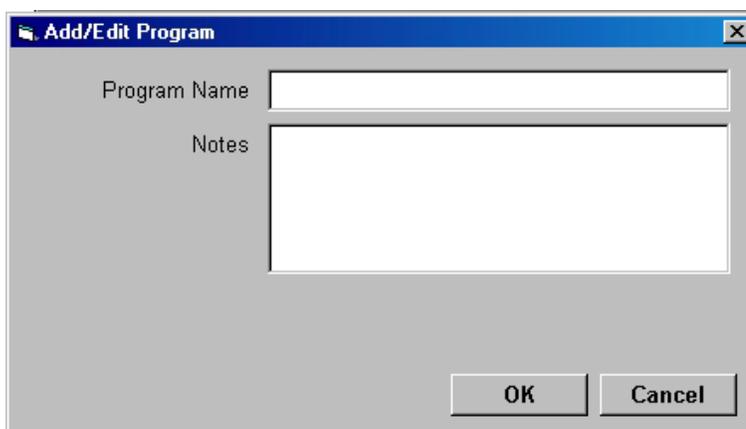
   b. Type the program's name, and press Tab to move to the next field.

   c. Type any relevant notes about the program (optional).

   d. Click on the OK button to save the program in the Program pop-up list.

7. Enter any notes about the aggregation in the Notes field.

Now that you have entered all the information required to configure the aggregation, you are ready to begin to configure the initial quantification.

8. Click on Next to begin to configure the first quantification.

CREATING A QUANTIFICATION

You can use aggregations to combine results of specific quantifications. For example, a national Ministry of Health might need to quantify test kits for VCT, PMTCT, blood safety, and clinical diagnosis programs. In this case, the aggregation will add the number of HIV tests that the entire MOH needs to procure.

Each ProQ quantification is conducted for a specific use of HIV tests.

When you create an aggregation, ProQ asks for information about the initial quantification. After you complete the add/edit aggregation box—

1. Click on Next.

Keep the date shown in the Date field because it reflects when the quantification was created. If the date in the Date field is not correct, you can change it.

2. Highlight the entry in the Date field.
3. Enter the date.

> You do not need to enter the time when entering a new date.

The Use field lets you select the use for the test kits you are quantifying.

4. Click on the arrow next to the Use field.
5. Select a Use and click the left mouse button.

Currently, the uses for HIV tests ProQ can be used to quantify are—

Blood safety
Testing blood and blood products for HIV to ensure safe transfusions.

Voluntary counseling and testing (VCT)
Voluntary HIV Counseling and Testing (VCT) is the combination of counseling and testing as a preventative measure and a diagnostic tool.

Prevention of mother-to-child transmission (PMTCT)
HIV testing of pregnant women in programs that provide services to prevent vertical transmission of the virus.

Testing HIV-exposed babies
All babies born to HIV-positive mothers are HIV-exposed.

Clinical diagnosis
HIV testing for clinical diagnosis is conducted when an inpatient or outpatient shows signs and symptoms of AIDS, and the healthcare provider wants to confirm the diagnosis. This category also includes cases when post-exposure prophylaxis is needed, such as when health workers and care providers are exposed to needle sticks or bodily fluids of a known HIV-positive person, and when a person is a victim of sexual assault.

Sentinel surveillance
HIV testing is conducted on select population subgroups to enable health officials to describe the prevalence and incidence rates of the HIV/AIDS epidemic in a country, to plan and advocate for responses, and to evaluate the effectiveness of the responses.

Other uses
Includes training and special studies, e.g., Demographic and Health Survey (DHS).

> For detailed information about primary uses of HIV test, see Primary Uses of HIV Tests Kits in the Guide For Quantifying HIV Test Requirements.

6. Enter any relevant notes in the Note field (optional).

7. Click on Next to display the Protocol window of the Configuration Wizard.

Next, select a HIV testing protocol. The testing protocol is a guide for those who administer HIV tests.
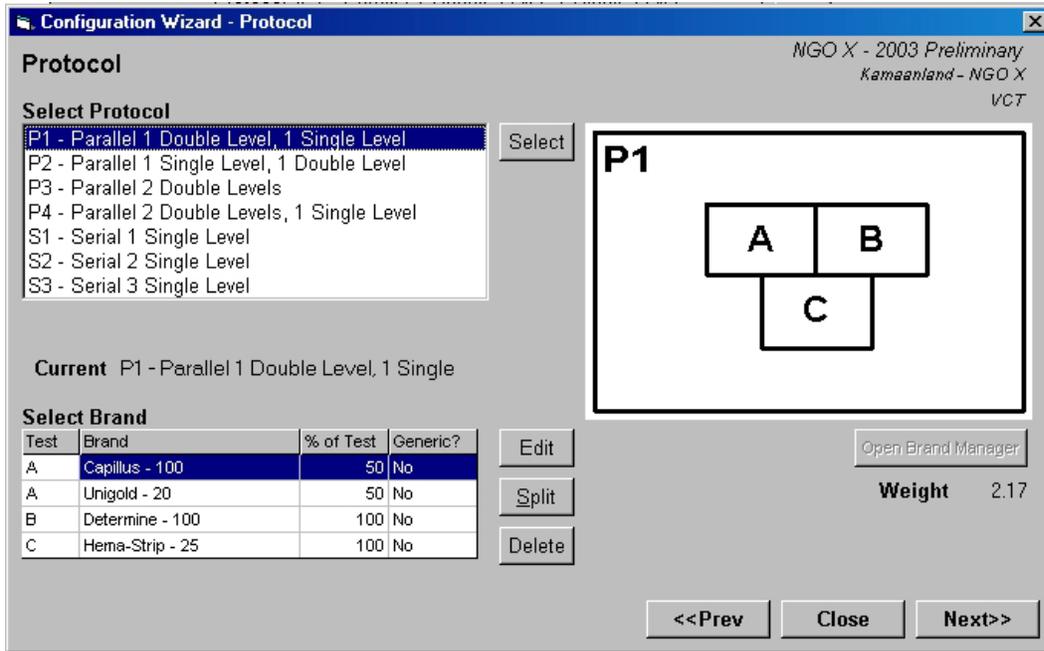
For example, the protocol shown in the image above is one type of parallel testing protocol. On the left is a written description of the protocol. In this case, the protocol is P1-Parallel 1 double level, I single level. This means that for all clients, the first two tests are run simultaneously (in parallel), and the third test is used to confirm positive results. To the right, a graphic represents the protocol.

> ProQ enables the user to select any protocol for any use of HIV test kits. While some protocols may be more common for some uses, ProQ enables the user to quantify according to what is actually taking place in their program, rather than prescribing a specific protocol.

8. Select the protocol used by the program you are quantifying.

9. Click on the Select button.

The Select Brand section of the Protocol window becomes active, and you can select the test brand(s) to use in the protocol.
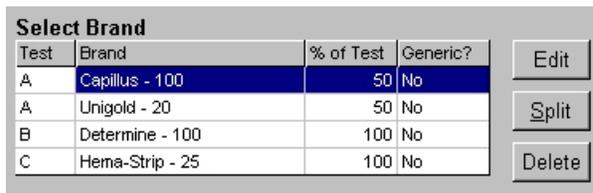
Programs should have standard guidelines for the test brands used for each level of a protocol. If there are no guidelines, you need to determine which tests are being used. If you are conducting this quantification in a situation where guidelines have yet to be determined (i.e., you are quantifying HIV tests as a part of a funding proposal), select a different test for each level of a selected HIV testing protocol.

In this example, you need to select a brand for tests A, B, and C of the protocol. To do this—

10. Click on a test in the Select Brand section.

11. Click on the Edit button to select the brand test that will be used for this step of the protocol.

The Edit Test Brand window is displayed. This window shows each test brand that has been entered into ProQ. It also shows the number of tests per kit.

12. Select the brand you want to use.

13. Select the size kit you want to use.

The percentage field is used when more than one brand is used for a particular step of the protocol within the program you are quantifying. In this sample, for this program, half the sites are using Capillus for step A in their protocol. The second half are using a different brand of test for step A.

Example: You might be quantifying for all VCT sites run by the MOH. They may all use the same test protocol, but urban sites may be using a brand that requires cold storage, and rural clinics may be using a brand that does not. In this case, enter the percentage of the program that uses the selected test brand.

14. Click on the Percentage field and enter the percentage of the program using this brand in this step of the protocol, usually 100 percent.

The Generic feature lets you quantify using all the characteristics of a particular brand without showing the brand name on reports. You can use this when you conduct quantifications for funding proposals and the brands have not been determined.

15. Select No for Generic if you want the brand name to appear in the quantification and on reports.

16. Select Yes if you do not want the brand name to appear.

If you show the test as generic, ProQ will use the characteristics of the test that you select and assign a name such as Generic Rapid ZZ or Generic ELISA YY. To avoid confusion with steps A, B, C, etc., in the protocol, the generic name assignments will begin with Z and go through the alphabet in reverse.

17. Click on OK.

> Use the Split button to assign brands to the protocol in cases where the percentage for a test is less than 100 percent. If you have a situation when more than one test for a step in the protocol, ensure that the percentages of the tests for each step equal 100 percent. You cannot proceed with the quantification until tests assigned to all the protocol.

18. Repeat this procedure until you have assigned tests for 100 percent of the tests in the selected protocol.

!! IMPORTANT !!

Later, when you enter data, remember that questions about specific test brands will be asked in alphabetical order by the test brands names, rather than in the order they appear in the protocol or the order in which they were entered. The test brands also appear alphabetically in the tree menu.

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19. Click on Next to proceed to the next window.
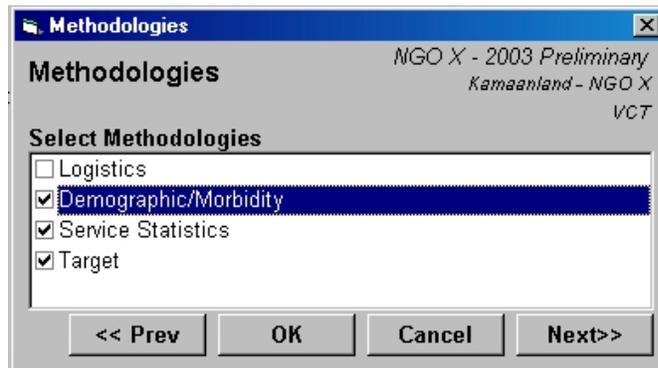
You can use the Methodologies window to select the forecasting methodology. You can use ProQ to quantify using four different methodologies.

Logistics
This methodology, based on consumption rates, is the preferred methodology if reliable data is available. Only use it in a system if prior consumption can be determined or extrapolated. Remember that data on past consumption of HIV tests may not be predictive of future use (past testing may have been done on a small-scale, and often by nongovernmental organizations.).

Demographic/Morbidity
In this methodology, the forecast is based on the population of the program service areas and the HIV prevalence rates in these areas. The demographic/morbidity methodology is often used for new programs where little or no historical logistics or service statistics data is available. It can be used for forecasting demand for blood safety, VCT, PMTCT, and clinical diagnosis.

Service Statistics
This methodology is based on the projection of past levels of testing.

Target
This methodology is based on the number of tests program managers believe are necessary (e.g., for sentinel surveillance, special studies, training) or on the number of tests that program managers believe the program can conduct given the available resources.

> For detailed information about methodologies, see the Guide for Quantifying HIV Test Requirements.

20. Click on the methodology(ies) you want to use.

> You must select at least one methodology, and you can select any number up to four. We recommend that you use more than one methodology. The results are then compared after the initial demand is calculated, and you can select which results to use when completing the quantification.

21. Click on Next to go to the next window.

The Demand Calculation screen is displayed after you select a methodology. This screen summarizes the raw demand for each HIV test after you enter the data. It is covered in the following section.

Configuration

This branch of the menu tree covers HIV test uses, testing protocols, and methodologies. These points were covered in section 3, as the data was needed before you could begin using ProQ. As shown by the screen below, the Configuration screen summarizes the data you entered when you created your initial quantification.

Configuration

Use: PMTCT

Protocol: P1 - Parallel 1 Double Level, 1 Single Level

Brands:

Test	Brand	% of Test	Generic?
A	Determine - 20	100.00%	No
B	Unigold - 20	100.00%	No
C	Hema-Strip - 25	100.00%	No

Methodologies: Service Statistics
Target

After you configure a quantification and begin to enter data, you can go back and change some choices in the configuration, but some choices you cannot change.

You **cannot** change the use because the use determines all the demand questions. If you need to quantify for another use, start a new quantification—go to the File menu, select New, and click on New Quantification.

You **cannot** change the protocol selected because this affects the number of tests required.

You **can** change specific test brands or kit sizes assigned to a step in the protocol. However, if you do this you must go back and answer all questions pertaining to that test even if the answers are the same as they were for the previous test.

You **can** add or delete methodologies used in the quantification. However, if you delete a methodology, you will lose any data you entered for the methodology you delete.

QUANTIFYING HIV TEST REQUIREMENTS

INTRODUCTION

After you enter information about the tests you are quantifying and have configured an initial aggregation and quantification, you can begin to quantify your test requirements.

What Is Quantification?

Quantification is a general term for estimating quantities of specific drugs, laboratory reagents, and consumable medical supplies needed to serve customers in a health program for a given period.

To quantify, follow these seven steps—

1. Define the program you are quantifying.

2. Collect data required to complete all remaining steps.

3. Forecast demand and adjust for quality control, wastage, and service capacity.

4. Estimate quantities required.

5. Calculate financial requirements.

6. Reconcile available funding and quantities required.

7. Present findings to decision makers to determine quantities to procure.

> For detailed information on quantification, see the quantification section of the Guide for Quantifying HIV Test Requirements.

Define Your Program

Before beginning the actual quantification, you must clearly define the program(s) you are quantifying.

From a logistics perspective, a program is all HIV testing activities that have a common distribution pipeline. HIV tests may be provided from the same or different funding source. If they go into the same distribution pipeline, that is considered one program and they require one quantification.

Test kits can be provided from one funding source or multiple funding sources. If they are distributed through separate distribution pipelines (e.g., MOH distribution system, Mission sector distribution system), each pipeline is considered a different program. Quantification must be conducted for each program.

Data Collection

After you have defined the program you are quantifying, you will need to collect the data required to conduct each quentification. These data are collected from key informants and program documentation.

To help with data collection, ProQ enables the user to print a questionnaire with all the data items that will be needed for a quantification. See To Print a Report in the Administration section for details on how to print the questionnaire.

The following short list provides some ideas about where you can acquire the data you need. For a comprehensive list, see Collecting Required Data of the Guide for Quantifying HIV Test Requirements.

Key informants to interview include but are not limited to head(s) of—

- national laboratory services
- blood safety/transfusion services
- national AIDS control program
- national hospital services
- tertiary care hospitals
- local blood collection facilities (in decentralized environment)
- HIV/AIDS NGOs doing HIV testing
- donors involved in HIV/AIDS support
- VCT, sentinel surveillance, blood collection/transfusion, and mother-to-child transmission (MTCT) program field units
- private sector suppliers and testers of blood.

Program documents include but are not limited to—

- national HIV/AIDS/STI policy papers
- MOH annual reports
- MOH list of sites collecting/transfusing blood
- reports from local blood testing facilities
- AIDS Commission reports
- national AIDS control program annual reports and project plans
- national AIDS control program VCT/sentinel surveillance plans and reports
- Demographic and Health Surveys
- national essential drugs list (laboratory reagents, supplies, and materials)
- HIV testing protocols
- standard treatment guidelines
- logistics records and reports on HIV test kit procurement, distribution, consumption, and balances
- special reports and studies from other cooperating agencies and donors (e.g., FHI, PSI, CDC, etc.).

QUANTIFYING WITH PROQ

Now that you know what is needed to quantify HIV test requirements, you can enter the data into ProQ:

1. Start ProQ.

When the Aggregation Manager window is displayed—

2. Select the initial aggregation you created in section 3.

As shown in this example, the quantification is for a voluntary counseling and testing program.
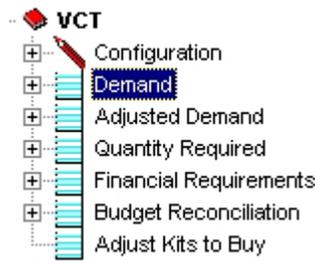
This manual will go through the steps in conducting a quantification in a linear manner. However, the menu tree enables you to move to any part of the quantification at any time. This function is helpful for revising data and also enables you to complete as much as possible without stopping because you don't have particular data item.

To skip ahead to any section of the ProQ menu tree—
1. Click on the cross to display associated options. ⊞
2. Click on the any one of the revealed options.

Navigating Within a Quantification

In the screen below, the tree menu on the left side of the screen in ProQ shows where you are in the quantifying process and what part of the quantification is shown in the window to the right. It also shows what has been completed and what is not yet complete. In this example, the aggregation for the MOH of Kamaanland contains a quantifications for PMTCT, VCT, and blood safety. The check marks indicate that the user has completed most of the quantifications for PMTCT and blood safety, but has not completed any of the quantification sections for VCT. The selected line in the tree menu shows what screen is displayed on the right. In this case, the user has opened the page summarizing the results of the logistics methodology in the quantification for blood safety.
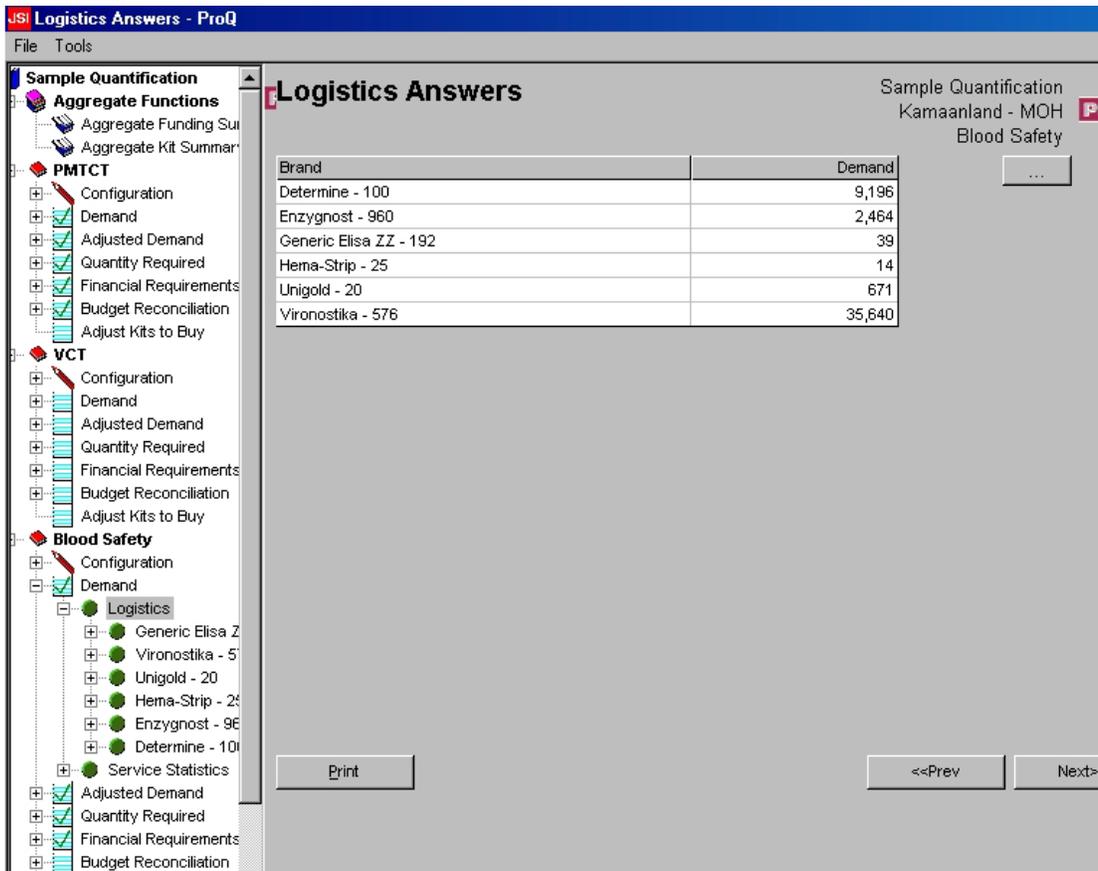
- ■ If the user selects the item below Logistics, in the tree menu (Generic ELISA ZZ) Generic Elisa ZZ, the screen on the right would show a summary of the answers that were given to the logistics questions for that specific HIV test.
- ■ If the user selects Service Statistics, the screen to the right would show the demand for each of the test kits that were calculated using the Service Statistics methodology.
- ■ If the user selects the Demand window, the screen on the right would show a summary of the demand for each of the test kits calculated using each of the methodologies.

That screen would also enable the user to select the methodologies they think produced the most accurate or reasonable results. ProQ would use those results to complete the rest of the quantification.
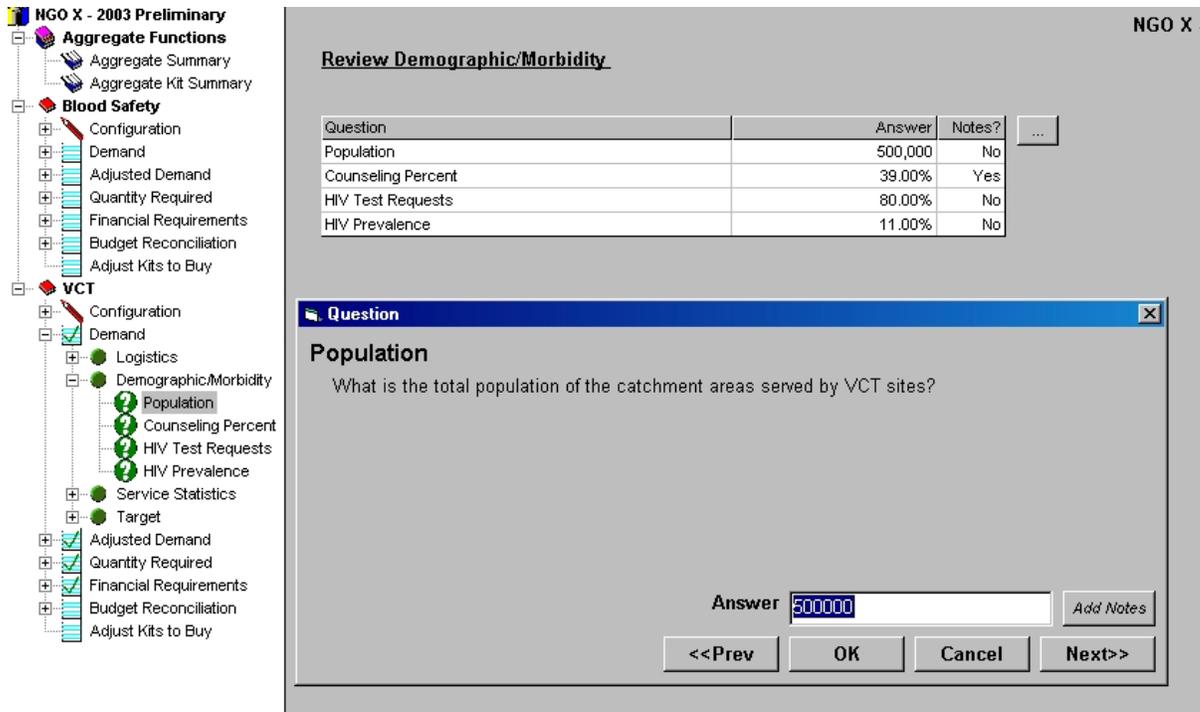
The screen above illustrates how you enter data into ProQ. In this example, the user is answering the Demand questions for the VCT program using the Demographic and Morbidity methodology. The Review Demographic and Morbidity screen is behind the question window. Any item on the tree view preceded by a question mark is a question where you need to enter data.

How do you enter data?

1. Click on the plus sign (+) in the tree view for the section you want to answer.

2. Click on the first question in that section.

3. Enter your answer in the question window that pops up.

4. Click Next.

Continue answering questions in that way until you complete that section. When you finish, the question window will close, and the summary page for that section will be displayed. You can then go to the next section where you want to enter data.

At any time during the process, you can click on Prev to navigate back to the answers you've already given; click OK to save that answer and close the question window; or click Cancel to close the question window.

Adding and Editing Notes
The Add Notes button enables you to include relevant notes related to the question you are answering. When you click on the Add Notes button in a question window, a window pops up where you can enter text, as show below. Later, when you print reports of your quantification, you can display the notes by next to the data items on the report.

It is important to document presumptions made during the quantification process. This will help other users understand the quantification, and will permit easy adjustments. should any become necessary. To add a note—

1. Click on the Add Notes button in the relavent question window.

2. Enter your notes relevant to that data item.

3. Click on the OK button when finished.

After you click OK in the Notes page, you will return to the question window where you were entering the notes.
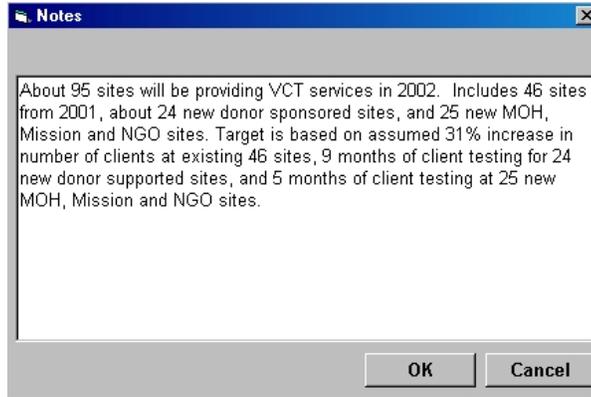
You can go back and add notes to any data item at any time. Open the relevant question window through the tree menu, and click on Add Notes. When you open the question window, if notes are already entered, the button will say Edit Notes instead of Add Notes. To edit your notes, click on that button.

All the tables that summarize data you have entered, such as the Review Demographic/ Morbidity, will have columns indicating if there are notes entered for that question. If you are reviewing a quantification done by someone else, you can see if they entered notes and view them on-screen by following the directions for editing notes described earlier to view their notes, print the reports, and choose to show the notes on the report.

This process for answering questions and entering notes applies to all portions of the quantification. You will need to answer the demand questions for all the methodologies you are using, as well as for the Adjusted Demand and Quantity Required sections.

!! IMPORTANT !!

When answering questions pertaining to losses/adjustments in the logistics methodology, you must enter all losses as a negative number (i.e., -200, -8,000, etc.).
Failure to do this will result in inaccurate calculations.

Demand

The Demand screen summarizes your demand for HIV tests based on all the methodologies you selected when configuring the quantification. Each methodology has a different list of associated questions that are used to calculate the demand. All the methodologies used in your quantification are shown on the Demand screen (see below).

In the screen above, the user has completed a quantification for PMTCT using the Demographic and Morbidity, Service Statistics, and Target methodologies. The average of the demand for each test kit among all the methodologies shows for each quantification as a basis for comparison.

If you have used multiple methodologies, you need to select which of the methodology's results to use to complete the quantification. This is based on your judgement in selecting which demand results are the most accurate or reasonable. In the example shown above, the user compared the results of each methodology and decided to use the needs based on the Service Statistics methodology to complete the quantification.

1. Click on the arrow next to the Selected Methodology field to open its associated pop list.

2. Select the methodology you think is the most reasonable to be used in the quantification, and click the left mouse button.

Adjusted Demand

After you select which calculated demand to use for the quantification, you calculate adjusted demand. Adjusted demand is the number of tests needed for all clients adjusted for the program's service capacity, quality control method, and wastage factor.

Adjust Demand:

Review Answers

Brand	Demand	Service Capacity	SC Adj. Demand
Determine - 20	75,670	42,283	42,283
Hema-Strip - 25	27,620	15,434	15,434
Unigold - 20	75,670	42,283	42,283

Brand	SC Adj. Demand	Quality Control	Wastage	Adj. Demand
Determine - 20	42,283	5.00%	15.00%	50,740
Hema-Strip - 25	15,434	0.00%	5.00%	16,206
Unigold - 20	42,283	5.00%	15.00%	50,740

In the Service Capacity section of ProQ, you can override certain questions. For example, if you don't have answers for the specific service capacity, but you do have a general idea of what the service capacity is for the program, then you can select Yes to the override question and directly enter the service capacity. If you override the questions, the questions will appear on the screen as disabled,(see the screen below.

Service Capacity Answers

Sample Quantific
Kamaanland -
PN

Question	Answer	Notes?
Override Service Capacity	No	No
Service Capacity	<disabled>	No
Number of Counselors	40	No
Days Per Year	140	No
HIV Test Requests	95.00%	No
Counselor Conduct Tests	Yes	No
Clients Per Day while Testing	4	No
Clients Per Day	<disabled>	No
Override Technician Capacity	Yes	No
Technician Capacity	40,000	No
Number of Technicians	<disabled>	No
Technician Days Per Year	<disabled>	No
Tests Per Day	<disabled>	No

Quantity Required

The Quantity Required section helps you calculate the quantity of test kits required to fill the commodity pipeline to meet demand and ensure a continuous supply of HIV test kits. The Quantity Required sections ask you to enter the lead time and buffer stocks in months, the quantity of each test already on hand and on order, and the shipment frequency. It then calculates the quantity of tests required to fill the pipeline. It also shows the volume per shipment (using the data on package dimensions you entered in the brand manager) so that you can ensure that there will be enough storage space for the test kits when they arrive. This is particularly important for test kits that require cold storage.

The following screen is the Quantity Required screen.

Financial Requirements

The Financial Requirements option helps you calculate costs for the quantity of HIV test kits required.
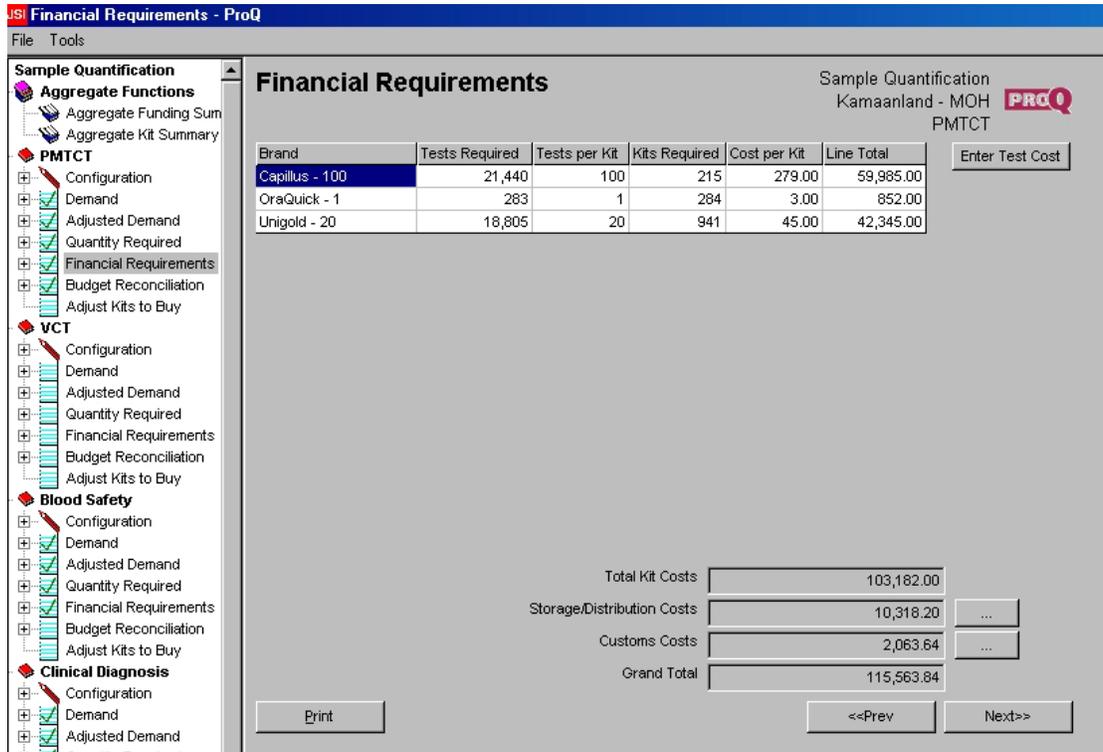
When you first open the Financial Requirements screen, the Cost per Kit field will be filled in with the cost per kit you entered in the brand manager. If there are different costs for the same kit for different quantifications (or uses of the kits), which is likely to happen as costs can vary, you can override that kit cost and enter a new price for just this quantification.

1. Highlight an HIV test kit brand in the table.

2. Click on the Enter Test Cost button to enter a cost for the kit.

The Override Kit Cost window opens. This window lets you override the default cost information with your current costs.

3. Click on the Individual Kit Cost field, and enter the cost.

4. Click on OK.

Pro will calculate costs based on the entry in the Individual Kit Cost field. This, in turn, produces a calculated cost value that can be used as a reference during budgeting and funding negotiations.

5. Rpeat this process, as necessary, for each brand of tests in your quantification.

Thelower half of the Financial Requirements screen helps you calculate additional costs associated with HIV test kit procurement (i.e., storage fees, customs costs, etc.).

Fo Customs and Storage and Distribution costs—

1. Click on either the Customs or Storage/Distribution Costs option under Financial requirements in the tree menu.

2. Click on your selection to enter either the costs as a percentage of the total kit costs or as a monetary figure.

3. Click on the OK button to save your entry and close the window.
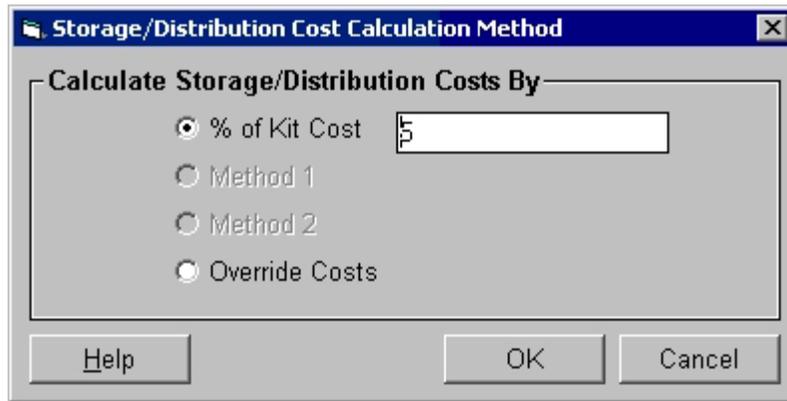
ProQ calculates your total costs based on your entries.

The method for entering Customs and Storage/Distribution Costs are the same.

Budget Reconciliation

The Budget Reconciliation option helps you reconcile available funds with the quantity of kits required.

The screen below is the Budget Reconciliation screen. This screen helps you reconcile the number of HIV test kits you require with your available funding.

The top part of the screen pertains to your HIV test kit budget. It shows the total amount of funding required to procure all the tests you need.

To reconcile the budget, you must first enter all your available funding.

1. Click on the Aggregate Summary option on your tree menu.

2. Click on the Add/Edit Available Funds button next to the Available Funds field.

The Available Funds window will open. This window is used to assign funds from different sources across all the quantifications in your aggregation.

Adding Funding Information
The Add button lets you enter funding sources for the current aggregation.

3. Click on the Add button to add information about a funding source.

The Add/Edit Funding Source window will open. Use this window to enter funds by funding sources, allocate those funds by the uses for the tests, and allow those funds to be used for kits, storage, and distribution costs and/or customs costs.

4. Enter a name for the funding source, the description, and the amount of funds available from that source.

5. Click on the Add Notes button to add notes about that funding source.

If the funds from this source are available only for specific uses of test kits—

6. Click in the box next to Allocate Funds by Use.

7. Click on the line for which these funds are allowed.

8. Click on the Open Adjacent Button to the right of the Uses table.

9. Enter either the percentage or amount of funds from that funding source allocated for that use.

10. Click OK.

11. Click on the associated boxes to allow those funds to be used for kits, storage/distribution, and customs costs.

You must check these boxes to allocate those funds.

12. Click OK.

13. Repeat this process for all your funding sources.

14. Click on Close.

Note: You only need to complete this process once per aggregation. The funds are then available to reconcile for all quantifications in the aggregation, as long as there are sufficient funds.

To complete the budget reconciliation for the quantification—

15. Click on Kit Budget in the Budget Reconciliation part of the quantification in the tree menu.

The Available Kit Funding Window will open (see below).
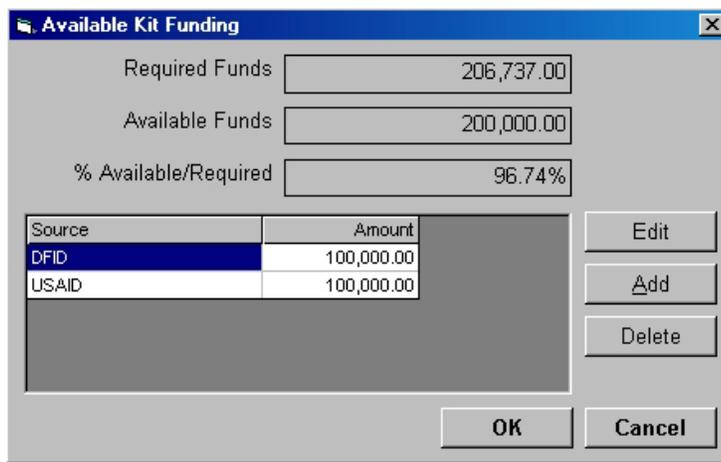
16. Click on the Add button to assign a funding source for this quantification.

The Add/Edit Fund window will open (see below).
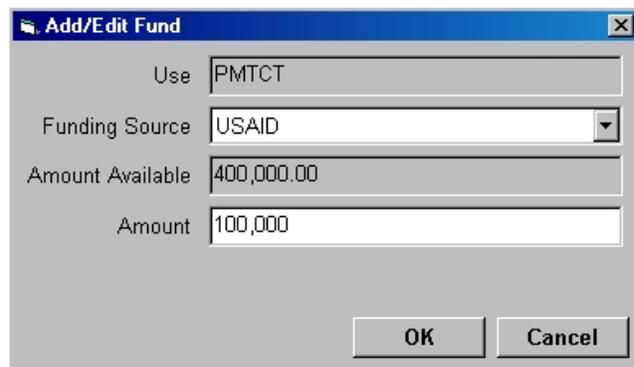
17. Use the pull-down button to select a funding source.

Only the funding sources that allowed those funds to be used for this use will appear in the menu.

After you select a funding source, the amount of funds available from that source is displayed in the Amount Available field.

18. Enter the amount of funds from that source that will go toward this use.

> Note: You should not assign more than the amount of funds required, because those excess funds will not be available for other uses. If you aren't sure how much is required, click on the title bar of the Add/Edit Fund window and move that window down on your screen to show the Available Kit Funding window behind it. The Available Kit Funding window displays the full amount of funds required.

19. Click OK.

The Add/Edit Kit Fund window will close, leaving the Available Kit Funding window open.

20. Repeat the steps 16–19 above to enter all your funding sources for this quantification.

21. Click OK.

Deleting a Funding Source

Should a funding source become unavailable, you can delete it from the Available Kit Funding window as follows—

1. Highlight the funding source you want to delete.

2. Click on the Delete button.
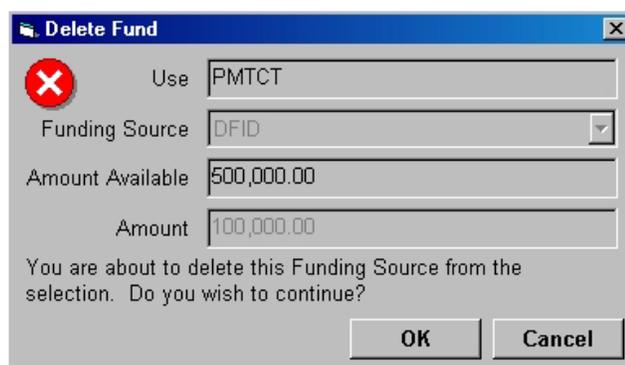
The Delete Fund window opens, and displays the details of the fund you selected for deletion.

If you are certain that the selected fund can be deleted—

3. Click on the OK button to delete the funds, and close the Delete Fund window.

4. Click on the OK button on the Available Kit Funding window to close this window.

Customs and Storage and Distribution Budgets
The Customs and Storage and Budget options help you determine how much will be re-
quired for customs and storing, and distributing the test kits. The method for completing
each is the same as those used to add, edit, and delete kit funding information.

1. Click on Customs Budget in the Budget Reconciliation part of the quantification in the tree
    menu.
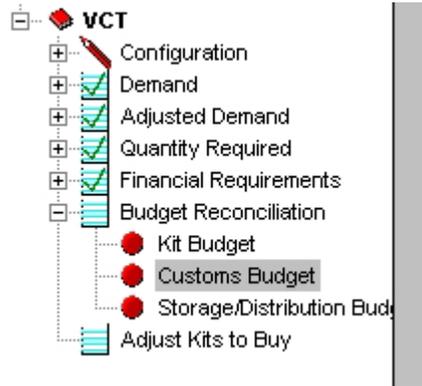
The Customs Budget Window will open (see below).
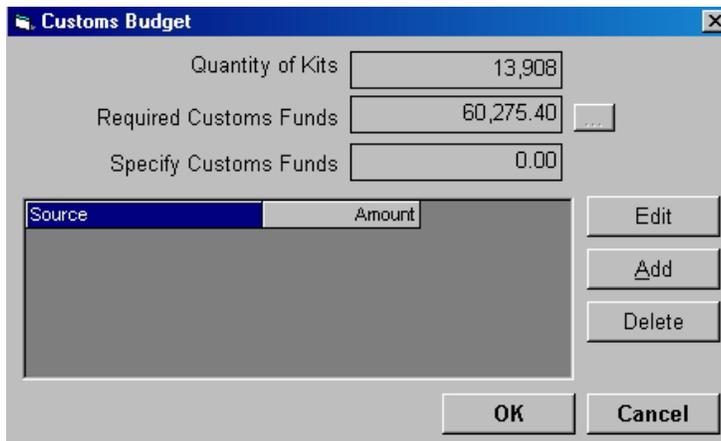
2. Click on the Add button to assign a funding source for the customs required for the test kits in
    this quantification.

The Add/Edit Fund window will open.

3. Use the pull-down button to select a funding source.

Only funding sources that will allow those funds to be used for this purpose will be displayed in the menu. The MOH has been selected in the example above.

After you select a funding source, the amount of funds available from that source will be displayed in the Amount Available field.

4. Enter the amount of funds from that source that will go toward the customs costs.

> Do not assign more than the amount of funds required, because those excess funds will not be available for other uses. If you aren't sure how much is required, click on the title bar of the Add/Edit Fund window and move that window down on your screen to show the Customs Budget window behind it. The Customs Budget window displays the required customs funds.

5. Click OK.

The Add/Edit Kit Fund window will close, leaving the Available Kit Funding window open.

6. Repeat the steps above to enter all your funding sources for the customs costs.

7. Click OK.

To reconcile the budget for storage and distribution costs, repeat the same process you used to enter the customs costs.

Adjust Kits To Buy

The following screen shows a basic summary of the quantification, and helps determine the number of kits to buy in cases of insufficient funding. This is important because if you are unable to procure the full amount of test kits required, it is important to reduce your numbers to procure in such a way as to purchase the right proportion of kits needed to complete the testing protocol.

On the screen, there is sufficient funding to purchase the full amount of kits needed (526).

There may be a time when you have enough funds to purchase all the kits needed, but you do not have enough funds to pay the customs or for the storage and distribution of those kits. In those cases, you would click in the circle next to the option that is the limiting factor to determine the number of kits to buy. If you only have 50 percent of the funds needed for storage and distribution, only buy that number of kits, not the full amount.

In the screen above, the Kits budget is selected, because there is complete funding. If you did not have complete funding, you would click on the button for either Customs or Storage/Distribution, depending on which budget was the most limiting.

AGGREGATIONS

INTRODUCTION

This section builds on the initial aggregation you created in section 3. If you have started a quantification, then you have already set up an aggregation. This section discusses aggregations in more detail and explains how to manage your aggregation(s).

What is an Aggregation?

An aggregation is a collection of quantifications that you can use to total your HIV test requirements. This, in turn, helps with your procurement planning.

The screen to the right shows the menu tree for an aggregation containing quantifications for PMTCT and VCT. The menu tree options under PMTCT are the individual elements of the PMTCT quantification. Each option has individual sub-options.

There are two screens that show the details of an aggregation, the Aggregate Funding Summary and the Aggregate Kit Summary. Those two screens will be discussed in more detail in the next section.
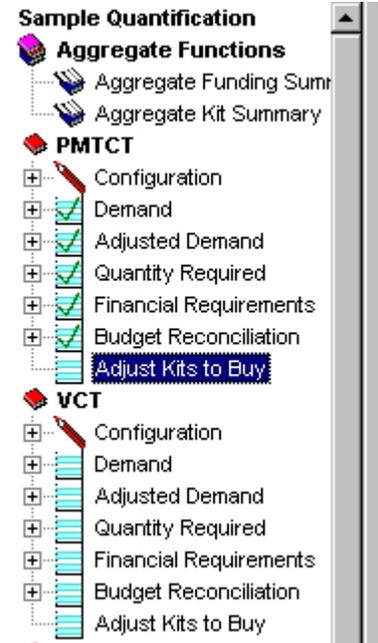
AGGREGATE FUNDING SUMMARY

Aggregate Funding Summary

Sample Quantification
Kamaanland - MOH **PROQ**

	Required Funds		169,916.60	
	Available Funds		650,000.00	Add/Edit Available Funds
	Balance		480,083.40	

View By
- ○ Use
- ○ Funding Source

Use	Funding Source	Amount	Percent
	DFID	0.00	0%
	USAID	47,997.40	98.21%
Blood Safety	WB	0.00	0%
	Shortfall	872.68	1.79%
	Total	48,870.08	100.00%
	DFID	0.00	0%
	USAID	0.00	0%
Clinical Diagnosis	WB	0.00	0%
	Shortfall	5,482.68	100.00%
	Total	5,482.68	100.00%
	DFID	0.00	0%
	USAID	0.00	0%
Other Uses	WB	0.00	0%
	Total	0.00	0%
	DFID	0.00	0%
	USAID	0.00	0%
PMTCT	WB	42,106.40	36.44%
	Shortfall	73,457.44	63.56%

Print

As shown in the screen above, the top of the Aggregate Funding Summary screen displays a summary of all the required and available funds for the aggregation, and the balance. The Add/Edit Available Funds button next to the available funds field enables you to enter funding sources for the aggregation. This function was discussed in in the section on Budget Reconciliation.

The table on the Aggregate Budget Summary screen summarizes the amount of funding allocated for each quantifications in the aggregation and the percentage of needed funds for each that has been allocated.

There are two options for sorting this table. It can be sorted by Use (see as shown in the above figure, to show the different funding sources for each program, such as VCT or PMTCT or by Funding Source, to show each funder and the amount they have allocated for each use of the test kits.

When sorted by Use, the table shows—

- ■ the amount of money allocated to each use by each funder
- ■ what percentage of funds required for that use that each funder is providing
- ■ any funding shortfalls for that use and the percentage of required funds that are lacking
- ■ total required funds for each use (this will always equal 100 percent).

The Aggregate Funding Summary (see below) is sorted by Funding Source.

Aggregate Funding Summary

Sample Quantification
Kamaanland - MOH   **PRO Q**

	Required Funds		169,916.60	
	Available Funds		650,000.00	Add/Edit Available Funds
	Balance		480,083.40	

View By

○ Use
◉ Funding Source

Funding Source	Use	Amount	Percent
	VCT	0.00	0.00%
DFID	Unprogrammed	50,000.00	100.00%
	Total	50,000.00	100.00%
	Blood Safety	47,997.40	48.00%
	Clinical Diagnosis	0.00	0.00%
	Other Uses	0.00	0.00%
USAID	PMTCT	0.00	0.00%
	VCT	0.00	0.00%
	Unprogrammed	52,002.60	52.00%
	Total	100,000.00	100.00%
	Blood Safety	0.00	0.00%
	Clinical Diagnosis	0.00	0.00%
	Other Uses	0.00	0.00%
WB	PMTCT	42,106.40	8.42%
	VCT	0.00	0.00%
	Unprogrammed	457,893.60	91.58%
	Total	500,000.00	100.00%

Print

When sorted by Funding Source this table shows—

■ how much money each funding source has allocated to each use
■ what percentage of the total funds provided by the funding source is allocated to each use
■ how much and what percentage of funds available from each funding source are unprogrammed (or not allocated to any use)
■ total amount of funds available from each funding source (this will always equal 100 percent).

To change how this table sorts, either sorted by use or funding source, click on the radio buttons next to Use or the funding source at the top of the table.

AGGREGATE KIT SUMMARY

Aggregate Kit Summary   Sample Quantification
                                                                 Kamaanland - MOH

View: ● Kits Required   ○ Kits Funded

Test Kit	Blood Safety	VCT	PMTCT
Capillus - 100			215
Determine - 100	107	143	
Enzygnost - 960	4		
Generic Elisa ZZ -	1		
Generic Rapid YY			
Hema-Strip - 25	0		
OraQuick - 1			284
Unigold - 20	43		941
Vironostika - 192			
Vironostika - 576	74		

Print

Aggregate Kit Summary   Sample Quantification
                                                                 Kamaanland - MOH

View: ● Kits Required   ○ Kits Funded

PMTCT	Clinical Diagnosis	Other Uses	Total
215			215
	36		286
			4
			1
			0
			0
284			284
941			984
	13		13
			74

Print

The Aggregate Kit Summary shows a summary of the number of kits required or funded for all quantifications in the aggregation. As shown in the example to the left, this table contains all the test kits used in the aggregation for any use and adds together the total for each kit across all uses.

When you review this table, remember that the numbers for each test kit are for kits, not tests. Each kit contains a different number of tests.

Also remember, if you have more than two quantifications in your aggregation, you need to use the scroll bar on the bottom of the page to view the totals. A report can also be viewed that displays the complete table. (See the section on printing reports.)

The default view for this table is to display the entire number of test kits required. This is the adjusted demand and is not affected by funding.

The other view for this table is to display the amounts of kits required. This view will display only the numbers of kits for which funding has been allocated.

To change the view, check the radio buttons to the left of the table indicating which view you would like to display.

ADMINISTRATION

INTRODUCTION

This section covers basic ProQ system administration, including adding, editing, and deleting information about the specific HIV test kits in your database. It also includes how to use ProQ's reports, and how to set the default values for the test discordance rate and the HIV prevalence rate.

The section on Preparing to Conduct a Quentification covers how to add an HIV test kit; it was helpful to have at least one HIV test kit brand in the system before you started using ProQ. See Brands for detailed information on adding different brands of HIV tests.

Editing Brand Information

As your HIV testing program matures, you may want to add new test kits or edit the information for existing test kits. You may even want to discontinue the use of particular test kit brands. Use the Brands option on the ProQ menu bar.

To access the Brands option (with ProQ already active)—

1. Click on the Tools option on the ProQ menu bar and select Brands.
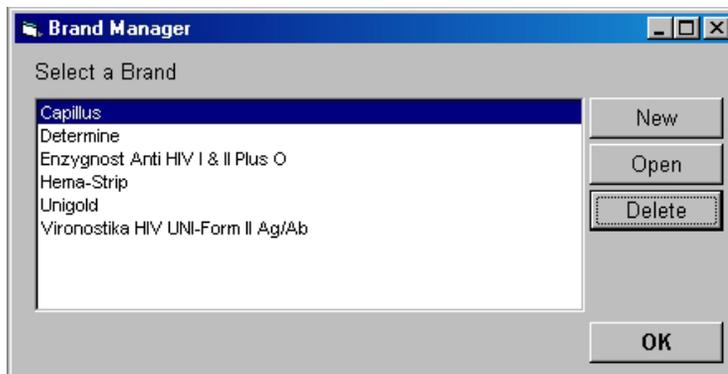
The Brand Manager window opens, showing the HIV test kits already entered into ProQ.

To edit data for a particular test kit-

2. Click on the brand you want to edit.

3. Click on the open button to display the Brands window.

The Brands window displays information about the selected HIV test kit.

4. To edit the fields, as needed, click on the field you want to change and type the new data.

5. Edit the kit and carton data, as explained in section XXX.

Deleting Carton Data

You can delete carton information—

6. Click on the carton data you want to delete, as shown in the sample below.

| Test Kits	Tests Per Kits	Cost	Dimensions	Weight
	30	5	2 x 3 x 4	11
	3	80	10 x 3 x 12	50

7. Click on the Delete button.

If the selected kit is used in a quantification, it cannot be deleted. You will, however, be able to hide the kit to prevent it from being used by future quantifications. A message window will be displayed explaining this and giving you the option to hide the data.

8. Click on the Yes button to delete the selected data; or, click on the No button to abort the operation.

9. Click on the OK button to close the Brands window and return to the Brand Manager window.

10. Click on Cancel to close the Brand Manager window.

Setting Defaults

The Set Defaults option lets you set default values for the HIV test discordance rate and HIV prevalence rate.

1. Click on the Tools option of the ProQ menu bar, then click on Set Quantification Defaults.

See the Set Defaults window below.

ADMINISTRATION
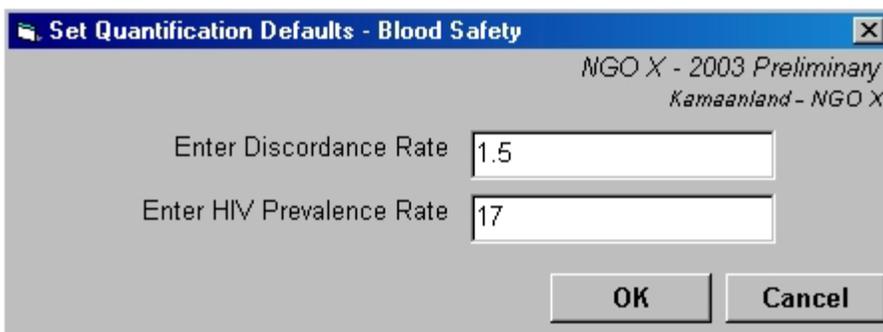
Discordance Rate
The discordance rate is used in calculations that determine how many tie-breaking tests are needed for protocols that use tie-breaking tests. Because it is unlikely that you will have data on the different discordance rates between the possible groupings of specific tests, ProQ uses one discordance rate in each aggregation.

HIV Prevalence Rate
There are questions about the prevalence rate for all the uses and in the Demographic/ Morbidity, Service Statistics, and Target methodologies. ProQ will use the prevalence rates you enter in each specific quantification in the calculations for that quantification. However, if the prevalence rate has not been entered, ProQ will use the default prevalence rate instead.

To change the default discordance and HIV prevalence rates—

2. Click in the Enter Discordance Rate field, and enter your default HIV test discordance rate as a percentage.

3. Click in the Enter HIV Prevalence Rate field, and enter your default HIV prevalence rate as a percentage.

4. Click on the OK button to save your entries, and close the Set Defaults window.

ProQ Reports

ProQ has a collection of reports, each associated with an individual summary screen. You can print a report on any screen except the question windows.

Reports available from ProQ include—

Aggregate Funding Summary

This report can be sorted in two ways: by Use or by Funding Source.

When sorted by Use, this report displays what funds and what percentage of the total each funding source is providing for each use. In this view, the percentage column displays the percentage of the funds needed for that use, which are provided by that funding source.

Total refers to the total amount of funds needed for that use to be fully funded. This amount will always equal 100 percent.

Shortfall refers to the amount needed for that use that has not been funded. If no funds are assigned to that use, the shortfall will be 100 percent.

When sorted by Funding Source, this report displays how much each funding source is providing for each use, and what percentage of the funds for that funding source is allocated for each use. In this view, the percentage column displays the percentage of the funds from the funding sources that are allocated to that use.

■ *Total* refers to the total amount of funds that funding source is providing for the overall program.
■ *Unprogrammed* refers to what available funds from that funding source for the overall program have not been allocated for any use.

Aggregate Kit Summary

The Aggregate Kit Summary can be sorted in two ways—by Kits Required and by Kits Funded. The Kits Required view displays the full amount of each test needed for each use and the total for each test for the overall program. The Kits Funded view shows the number of each test that can be procured with the amount of funding provided. In cases of insufficient funding, this view will show the number of tests to procure with the funding you have, ensuring sufficient quantities to complete each step of the protocol(s). Viewed together, these two reports will show what a lack of funding means in terms of numbers of kits.

Note: The following reports are all specific to a quantification.

Demand (per quantification)
Displays the raw (unadjusted) demand for each test for each methodology used.

Logistics
Displays the raw (unadjusted) demand for each test using only the Logistics methodology.

Demographic/Morbidity
Displays the raw (unadjusted) demand for each test using only the Demographic/Morbidity methodology.

Service Statistics
Displays the raw (unadjusted) demand for each test using only the Service Statistics methodology.

Target
Displays the raw (unadjusted) demand for each test using only the Target methodology.

Adjusted Demand
Contains two tables. The first table displays the Demand, Service Capacity, and the Service Capacity Adjusted Demand for each test. The second table displays the quality control and wastage factors for each test and the demand adjusted for those factors.

Service Capacity
Contains two tables. The first table is a summary of the Service Capacity. It shows the answers to the Service Capacity questions. The second table shows the service capacity for each test (allocated according to protocol and type of test).

Quality Control
Displays the quality control factor entered for each test.

Wastage
Displays the wastage factor entered for each test.

Quantity Required
Displays the Lead Time Stock, Buffer Stock, Quantity on Hand, Quantity on Order, Quantity Required, Shipment Frequency, and Volume of storage space required per shipment for each test.

Lead Time Stock
Displays the Lead Time Stock in months entered for each test.

Buffer Stock Answers
Displays the Buffer Stock in months entered for each test.

Quantity on Hand
Displays the Quantity on Hand entered for each test.

Quantity on Order
Displays the Quantity on Order entered for each test.

Shipment Frequency
Displays the number of shipments per year entered for each test.

Financial Requirements
Displays the total number of tests required, the number of tests per kit, the number of kits required, the cost per kit, and the total cost required for each test. It also displays the total cost for all the kits, costs for storage and distribution, and costs for customs.

Budget Reconciliation
Displays the amount of funds required for that use, the funds available, and the percentage of the required funds that are available. It also displays the number of kits required for each test, the required cost for each test, the number of kits of each test that can be procured given the amount of available funding, and the storage and distribution and customs costs for the number of kits that can be procured.

Adjust Kits to Buy
Displays a summary of all the parts of the quantification.

Though each report covers a different aspect of the data entered into ProQ, each report is accessed as follows—

With a summary screen displayed—
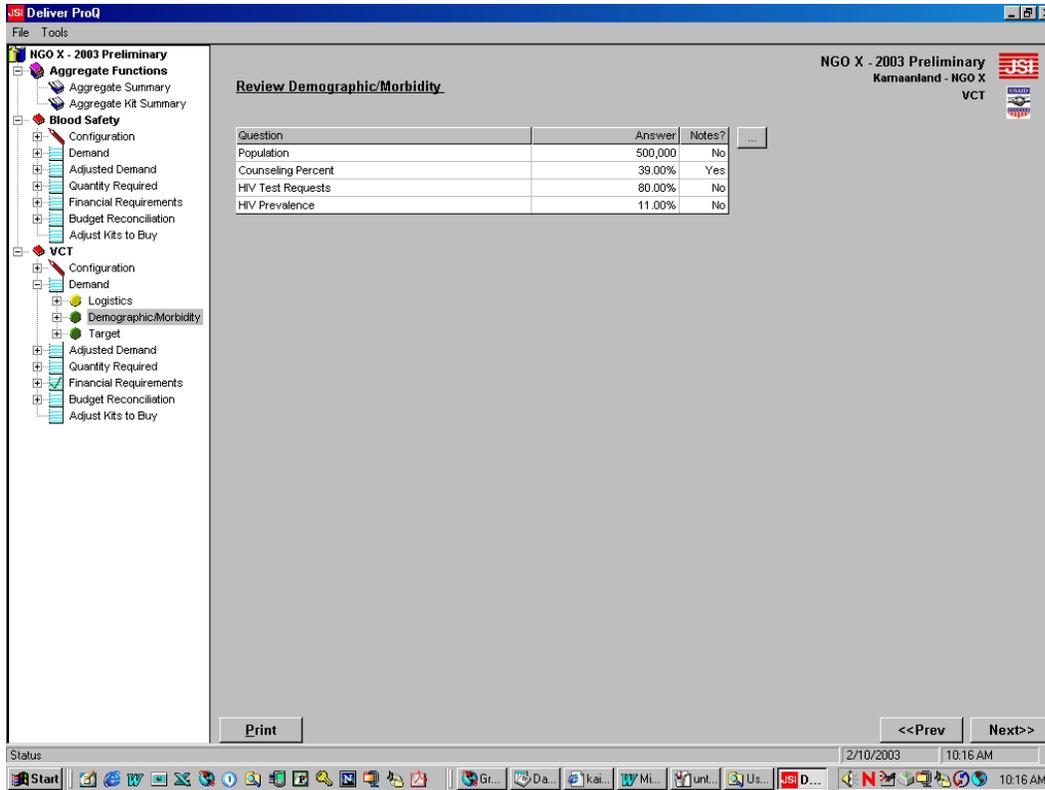
1. Click on the Print button at the bottom of the screen.

The Save As window is displayed, enabling you to name the report.

Each report has a default name (in the case of the sample to the right it is Review_Wastage.htm).

You can keep or rename the default report name.

2. Type the report name you want, following standard Microsoft Windows naming conventions.

> The report's extension must be .htm

3. Click on OK.

The report is generated and displayed by your Internet browser.

Although the report opens in your Internet browser, you do not need an Internet connection to view the report.

To Print a Report

4. Click on the Print button of your Internet browser's toolbar.

To Save a Report

5. Click on the File menu from your Internet browser.

6. Click on the Save As option.

The file will have a default name. You can keep or rename the default name. To rename, type in the name, following standard Microsoft Windows naming conventions.

7. Select the file on your computer where you want to save the report.

8. Click OK.

9. Reduce or close the Internet browser window to return to ProQ.

The ProQ Questionnaire

To assist with data collection, ProQ can create a questionnaire specific to your quantification. The questionnaire will have every question that will be asked in your quantification. You can use this feature after you have configured a quantification, as explained below.

1. Click on the Tools option of the ProQ menu bar.

2. Click on Reports, then click on Questionnaire.
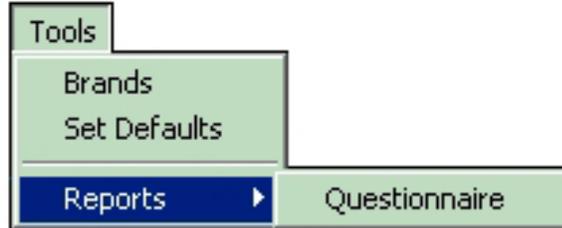
The Save As window is displayed, enabling you to name the report. You can keep the default name (Questionnaire.htm) or you can rename it.

3. Type the report name you selected, following standard Microsoft Windows naming conventions.

The questionnaire is displayed in you Internet browser, letting you view and print. The procedure for printing the questionnaire is the same as described in the reports section of this manual.

VCT

Questionnaire

VCT

Question	Answer
Demand	
Logistics	
Capillus - 10	
Please select which type of consumption you would like to use.	
How many of this brand of test were used for VCT during the most recent 12 month period for which data is available?	
What was the inventory for this brand of test at the start of the most recent 12 month period for which this data is available? (Note: please use the same 12 month period for the next three questions).	
What were the receipts for this brand of test during the most recent 12 month period for which this data is available?	
What were the losses/adjustments for this brand of test during the most recent 12 month period for which this data is available?	
What was the inventory for this brand of test at the end of the most recent 12 month period for which this data is available?	
What is the expected annual rate of change in VCT for the year for which you are quantifying? Please enter as a percentage.	
Determine - 100	
Please select which type of consumption you would like to use.	
How many of this brand of test were used for VCT during the most recent 12 month period for which data is available?	
What was the inventory for this brand of test at the start of the most recent 12 month period for which this data is available?	

APPENDIX A: TERMS AND DEFINITIONS

PROQ TERM DEFINITION

adjusted demand The forecasted demand adjusted to take into account existing service capacity, and quality control and wastage factors. After selecting the calculated demand to use for the quantification, the next step in ProQ is to calculate the adjusted demand.

aggregation A grouping of one or more quantifications. ProQ uses the aggregate function because there are many times when one procurement is done for more than one use of HIV tests. For example, a Ministry of Health might procure under one contract for all the VCT, PMTCT, blood safety, and sentinel surveillance sites in that country. In those cases, the staff handling the procurement would need to aggregate (or add up) the total quantities of HIV tests needed and their costs—in ProQ, all quantifications are contained within an aggregation; however, it is not necessary to have more than one quantification in an aggregation.

blood safety In blood safety programs, HIV tests are used to ensure that blood and blood products are free of HIV to prevent transmission of the virus during a transfusion.

Brandsrefers to specific HIV tests (such as Capillus or Oraquick). This avoids confusion with the tests (or steps) in a protocol. Any specific brand of HIV test can be assigned to any test (or step) in a protocol.

buffer stock Also known as safety stock, it is the reserve stock kept on hand to prevent stockouts caused by delayed deliveries or markedly increased demand. It is important to have a buffer stock, but it must be kept at the minimum possible level for HIV tests to avoid wastage from expiry because of their relatively short shelf life. Enter buffer stock into ProQ in number of months.

clinical diagnosis This is used when an inpatient or outpatient shows signs and/or symptoms of AIDS, when health workers and care providers receive a needle stick or exposure to bodily fluids of a known HIV-positive person (post-exposure prophylaxis), and when a person is a victim of sexual assault. Individuals requiring a certificate of HIV sero-status for employment, marriage, schooling, visas, etc., might also be tested in a clinical setting. Although this use of HIV tests may be difficult to quantify if data or standard protocols are missing, it is important to consider because tests intended for other uses may be diverted for diagnostic testing, resulting in a shortage of tests for the intended purpose.

demand In ProQ, the number of tests calculated to be needed to serve clients. This could also be called forecasting, which is the logistics management function that estimates the quantity of a commodity that will be dispensed to customers (consumed) during a future period. It is highly recommended that more than one of the four available methodologies be used to calculate the demand for each quantification. You would then compare the results and select one set of data. The demand you select is the basis for the rest of your quantification (adjusted demand, financial requirements, and budget reconciliation).

demographic/morbidity methodology The forecast is based on the population of the program service areas and the HIV prevalence rates in those areas. The demographic/morbidity methodology is often used for new programs where little or no historical logistics or service statistics data is available. It can be used for forecasting demand for blood safety, VCT, PMTCT, testing of HIV-exposed babies, and clinical diagnosis.

lead-time The time from when an order is placed until the tests arrive at the warehouse or storage facility and are available for distribution. If the tests are being imported, you must include time for customs clearance, inspection, and quality control inspections. To reduce stock levels and ensure the use of the tests before expiry because of the relatively short shelf life of most HIV tests, keep the lead-time as short as possible. Enter lead-time into ProQ in number of months.

logistics methodology The forecasted demand is based on past stock consumption rates, which is the preferred methodology if reliable data is available. However, it is useful only if prior consumption can be determined or at least extrapolated. Be aware that data on past consumption of HIV tests may not be predictive of future use during rapid program scale-up or unexpected changes in consumption.

methodologies The approaches in ProQ used to calculate expected demand. The four methodologies in ProQ use different types of data to calculate the demand (logistics, demographic/morbidity, service statistics, and target). Select the methodology to use based on the available data types, especially for new or expanding programs. It is recommended that you use more than one methodology when possible and compare the results.

Other Uses This category includes training and special studies, e.g., Demographic and Health Surveys (DHS) or large scale institutional testing of special populations such as military, police, prisoners, etc., who may not go to traditional VCT or clinical sites.

Parallel Testing Protocol A protocol in which two tests are conducted on one sample at the same time (simultaneously). A parallel protocol may run tests simultaneously as either a first step or a second step (or both the first and second steps).

PMTCT (prevention of mother-to-child transmission) HIV testing of pregnant women enables them to learn their sero-status. Women who test positive can take appropriate steps to reduce the chance of transmitting HIV to their child.

Protocol and others An algorithm that serves as a guide to the individuals administering the tests. Most established HIV/AIDS programs have defined testing protocols for each of the primary uses of HIV tests, and it is extremely difficult to quantify HIV test requirements without standard protocols.

Quality control Some HIV tests require additional tests for quality control procedures. This factor varies among brands of tests. Some tests have internal control features and do not require any additional tests; however, others require additional tests for quality testing. The number of tests required for quality testing is a proportion of the total number of tests conducted. The quality control factor should be entered into ProQ as a percentage.

Quantification The general term for the process of estimating the quantities required to serve customers for a given period of time. Quantification differs from forecasting or demand in that quantification considers not just the quantities needed for serving clients but also considers the quantities required to fill the commodity pipeline and meet the capacity of the system for consuming the commodities. ProQ is programmed to add (or aggregate) the results of more than one quantification. All quantifications in ProQ, therefore, must be part of an aggregation, although it is not required to have more than one quantification in an aggregation.

Quantity on hand The quantity of usable stock in inventory at all levels of the logistics system at a particular point in time.

Quantity on order The number of HIV tests already on order from the supplier at the time of the quantification. It is important to subtract from the quantity on order figure the number of tests on order that will probably expire before use at the current usage rates.

Quantity required The number of each brand of test that must be procured to fill the pipeline. Calculating the quantity required involves reconciling the adjusted demand with the required lead-time and buffer stock; storage capacity; quantity on-hand; and quantity on-order.

Sentinel Surveillance HIV testing is conducted on select population subgroups to enable health officials to estimate the trends in the larger population.

Serial Testing Protocol A protocol in which HIV tests are conducted on one sample in succession (one after another). Confirmatory and tie-breaking tests are conducted after the results are known for the previous test.

Service capacity ProQ adjusts for service capacity to help prevent program managers from procuring more HIV tests than their program can actually administer. Service capacity is the estimated number of tests that the program can conduct in the time period you are quantifying. It considers the number and qualifications of the technicians conducting tests, the counseling capacity for VCT and PMTCT programs, and the laboratory infrastructure. During a quantification, ProQ will compare the Demand with the Service Capacity and use the smaller of the two to continue the quantification.

Service statistics methodology This methodology projects future demand based on the past numbers of clients tested.

Shipment frequency The number of times in one year that you expect to receive shipments of HIV tests. ProQ uses the shipment frequency in the storage capacity calculation.

Storage and distribution costs The direct costs for the storage and distribution based on the volume or the value of the HIV tests. This can be entered as a percentage of the value or as an actual cost.

Storage capacity The amount of space in cubic meters (m3) that a program has available to store supplies of HIV tests at the level in which they will enter the system (the central warehouse, for example). ProQ asks the user for both the cold and non-cold storage capacity because many HIV tests require cold storage. Cold storage is defined as 2-8°C and non-cold storage is 8-30°C. The available storage capacity is compared to the amount of storage space required for the quantity required. The timing of shipments and the quantities received may need to be adjusted to accommodate available storage space.

Target methodology This methodology is based not on the need for the tests in a population, but on the number of tests program managers believe are necessary, e.g., for sentinel surveillance, special studies, or training; or for the number of tests that program managers believe the program can conduct.

Testing of HIV-exposed babies All babies born to HIV-positive mothers are HIV-exposed. Only HIV tests can determine if the babies are infected. The testing should be done at least three months after being weaned from breast milk, if a baby is breastfed. In ProQ the demand for testing HIV-exposed babies is based on the number of HIV-positive mothers in the PMTCT program. Therefore, a PMTCT quantification must be completed first to quantify the need for testing HIV-exposed babies.