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VERIFICATION OF SAFE BLOOD KITS

DELIVER PROJECT

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Monitoring and Evaluation Program (MEP)

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ACRONYMS

| | |
|-------|----------------------------------------------------|
| AJK | Azad Jammu and Kashmir |
| BMC | Bolan Medical College |
| COP | Chief of Party |
| CPIR | Commodity Procurement Information Request |
| CSPRO | Census and Survey Processing System |
| CWS | Central hub and Supply |
| DG | Director General |
| DHO | District Health Officer |
| ELISA | Enzyme-linked Immunosorbent Assay |
| EPI | Expanded Program on Immunization |
| FATA | Federally Administered Tribal Areas |
| FGPC | Federal Government Polyclinic |
| GDN | Goods Delivery Note |
| GRN | Goods Receiving Note |
| GOP | Government of Pakistan |
| HbsAg | Hepatitis B Surface Antigen |
| HCV | Hepatitis C Virus |
| HIV | Human Immunodeficiency Virus |
| HMC | Hayatabad Medical Complex |
| ICT | Islamabad Capital Territory |
| JSI | John Snow, Inc. |
| LOI | Letter of Intent |
| KP | Khyber Pakhtunkhwa |
| LMIS | Logistics Management Information System |
| MEP | Monitoring and Evaluation Program |
| MSD | Medical Service Depot |
| MSI | Management Systems International |
| NIH | National Institute of Health |
| PFSCM | Partnership for Supply Chain Management |
| PIMS | Pakistan Institute of Medical Sciences |
| POD | Proof of Delivery |
| SACP | Sindh AIDS Control Program |
| SBTP | Safe Blood Transfusion Program |
| SCMS | Supply Chain Management System |
| SDP | Service Delivery Point |
| TOP | Task Order Plan |
| UPS | United Parcel Service |
| USAID | United States Agency for International Development |

EXECUTIVE SUMMARY

USAID/Pakistan's DELIVER Project, implemented by John Snow, Inc. (JSI), is supplying hepatitis and human immunodeficiency virus (HIV) testing kits to the national provincial, and regional blood transfusion programs in Pakistan over a two-year period from 2012 to 2014.

USAID/Pakistan's Health Office tasked the Monitoring and Evaluation Program (MEP) to conduct monitoring of the hepatitis and HIV kits procured by the Partnership for Supply Chain Management (PFSCM)/Supply Chain Management System (SCMS) in 2012. This verification assignment covers the first two installments of kits to Pakistan, which are being treated as a one year supply. In this context, MEP conducted site visits to the seven distribution points (hubs) at the national and regional level and 21 blood banks all over Pakistan. These site visits were completed between April and June 2013.

The MEP monitoring team collected data using four different methods to triangulate information to enhance data reliability. The methods used included interviews with staff members of the hubs and blood banks, record verification, observation, and photographs. A comprehensive instrument incorporating all these methodologies was used to verify commodity receipts and number of kits in stock. Data collected were verified against records supplied by the DELIVER Pakistan prior to data collection.

Receipt of the first two tranches of the hepatitis and HIV kits procured by PFSCM/SCMS was verified in this monitoring exercise. The quantities distributed by the Safe Blood Transfusion Program, which serves as the national distribution point, to the six provincial and regional hubs matched the distribution plan provided for four out of six locations. For the fifth location, the Balochistan hub, the second installment of the rapid and Enzyme-linked Immunosorbent Assay (ELISA) kits was sent directly to Bolan Medical College instead of the provincial hub in Quetta. There were minor discrepancies in the paperwork and the actual quantities supplied to the sixth location, the Azad Jammu and Kashmir (AJK) hub.

Of the 21 blood banks visited, complete commodity verification and matching was possible at eight sites. There were major discrepancies in nine sites and minor discrepancies in four sites. As agreed upon with USAID, branding was visible on the cartons of all commodities and not on the individual items. For the twenty eight sites visited, just over 30 percent (9) had complete records of goods received and distributed as well as stock registers for the USAID-funded commodities, more than 60 percent (17) had partial records, and 7 percent (2) had no records. The kits were in good condition and stored as required in almost all locations. At one site, 28 Hepatitis B Surface Antigen (HbsAg) rapid kits expired in April 2013. One hundred twenty-nine HIV rapid kits expired in February 2013 at nine sites, and 1,620 kits expired at seven sites in May 2013. Fifty-six HbsAg ELISA kits expired at seven sites in April 2013.

INTRODUCTION

MEP was tasked with verifying that the USAID–procured HIV and hepatitis kits have reached the intended destinations from the central distribution point (SBTP) in Islamabad as mandated by the agreed arrangements. The kits are sent from SBTP to regional and provincial distribution points (hubs) and blood banks. Kits are also sent from these hubs to local blood banks. The verification exercise sought to cover all aspects of the distribution chain to discern whether there are any issues in the delivery, storage, and distribution of the USAID–procured HIV and hepatitis kits. This included visits to the central hub, provincial, and regional hubs as well as a sample of blood banks located in the provinces.

Project Background

The USAID–funded Health Supplies Distribution Project, known as DELIVER, began operations in Pakistan in August 2009. The project is focused on improving and enhancing the Government of Pakistan’s in-country distribution and health commodity supply chains. Implemented by John Snow, Inc. (JSI), DELIVER aims to help the Planning Commission of Pakistan, provincial and regional departments of health, and non-government organizations determine the correct amount of health commodities to order each year, establish a modern storage and tracking system, and improve the distribution system throughout the country. The project also aims to ensure multilevel coordination on the delivery of health commodities by working closely with the Government of Pakistan (GOP).

DELIVER provides extensive technical support to the GOP in the areas of contraceptive forecasting, procurement planning, warehouse management, supply chain strengthening, and automation of warehouse and logistics management information systems. The overall project goals are to:

- a) Improve central hub and supply (CWS) operations;
- b) Improve procurement capacity and contraceptive supplies;
- c) Establish the logistics management information system (LMIS); and
- d) Build capacity and enhance means of quality assurance

DELIVER is responsible for providing commodities to the central distribution point in Islamabad. Onward distribution to the provincial and regional governments is under the purview of the GOP through the Safe Blood Transfusion Services Program (SBTSP). When SBTP was unable to do this, DELIVER supported in-country distribution through Task Order 5.

Purpose of the Assignment

The purpose of this task is to verify that the USAID–procured HIV and hepatitis testing kits have reached the intended destinations at the provincial and regional level hubs and select blood banks. In this assignment the MEP monitoring team verified the quantities directly supplied by the Safe Blood Transfusion Program (SBTP) in coordination with DELIVER to the provincial and regional hubs and select blood banks. The scope of the assignment was to track the commodities distributed under the responsibility of JSI (i.e., those sent directly from the SBTP to either the provincial and regional hubs or blood banks). This verification exercise will provide feedback to USAID to improve the supply chain of DELIVER–procured commodities in Pakistan.

Assignment Overview

USAID/Pakistan's Health Office made a request to MEP to conduct monitoring of four sets of commodities procured by JSI/SCMS in late 2012. Set up as individual task order plans, each one was designed specifically to meet the purpose of the assignment.

Under task order plan (TOP) 38, MEP was tasked to conduct monitoring of hepatitis and HIV testing kits. In this context, MEP conducted site visits to the central hub, six provincial and regional program offices, and 21 blood banks. The output of the verification exercise is presented in this report.

Work on this assignment began in January 2013 when MEP held initial meetings with the Health Office and DELIVER. In March the monitoring team began collecting documents and additional information pertinent to the assignment, conducted initial site visits, and designed and pretested instruments. Fieldwork began in April. TOP 38 was resubmitted in response to comments from USAID and approved on April 5, 2013. It is included as Annex 3 in this report.

Data were collected over a six-week period. MEP presented initial findings to USAID during a mid-term debrief on May 14, 2012. As planned, the draft report is being submitted on June 17, 2013 and the final report incorporating feedback from USAID will be submitted July 15, 2013.

MONITORING DESIGN AND METHODOLOGY

The design of the monitoring approach, management of the task, review of documents, design of data collection instruments, content analysis of data, and report writing was completed by MEP staff.

Preparation for Fieldwork

At the outset, MEP scheduled meetings with DELIVER staff and the USAID/Pakistan Health Office to discuss the monitoring plan. MEP also obtained a letter of introduction from the DELIVER Country Director addressed to the Director Generals and Directorates of Health Services at the federal, provincial and regional levels of the GOP, which was circulated by DELIVER to the different provinces and regions. The letter was used to facilitate field visits, meet the relevant personnel at each location, and use a monitoring tool to verify the commodities.

A visit was conducted to the SBTP site in Islamabad to understand the commodity distribution process. This aided greatly in the development of the monitoring instrument. After conducting an initial visit and collecting relevant information, an instrument was prepared and pretested at the Pakistan Institute of Medical Sciences (PIMS) in Islamabad. After the pre-test, the team shared the revised instrument with USAID. The final data collection instrument is attached as Annex 2.

Some additional information on how goods were distributed from the provinces to the blood banks was obtained through phone calls and emails before the commencement of field activities.

Sampling Plan

The sample size for the assignment was agreed with USAID/Pakistan in the TOP. A list¹ of approximately 40 blood banks and provincial and regional hubs was provided by DELIVER from which a sample was drawn. The total sample size originally consisted of the central hub in Islamabad, 6 provincial and regional hubs, and 20 blood banks. One blood bank was added during fieldwork since one of the installments for Balochistan was received by the Bolan Medical College blood bank in Quetta and stored there. Hence this blood bank was incorporated into the final sample of 28 sites.

TABLE I: SAMPLE FOR FIELD VISITS

| Provincial/Regional Hubs | City/District-level Sites | Safe Blood Transfusion Program (Islamabad) | Total Sites Visited |
|--------------------------|---------------------------------------------|--------------------------------------------|---------------------|
| 6 | 20+ 1 | 1 | 28 |
| (100 percent) | (50 percent of list provided in March 2012) | (100 percent) | |

MEP monitors visited SBTP, the central hub in Islamabad; three provincial hubs in Sindh, Punjab, Quetta; the hub in Peshawar for the Federally Administered Tribal Areas (FATA); and two regional hubs in Gilgit and Muzaffarabad. The provincial blood program office is not yet established in Khyber Pakhtunkhwa (KP) so supplies for KP are sent directly to the various blood banks.

To select sites for blood banks, a random sample was drawn to have a geographical spread that covered all provinces and regions where the commodities are being supplied by the SBTP in coordination with

¹A list was provided by the DELIVER Project on behalf of SBTP and this was subsequently updated to include more blood banks.

DELIVER. Since the purpose was to verify commodities to the provincial and regional levels which are the responsibility of JSI, the MEP monitoring team did not sample beyond this point. Fifty percent of the 40 sites (or 20 in total) where the SBTP sent kits directly in coordination with DELIVER were randomly selected.

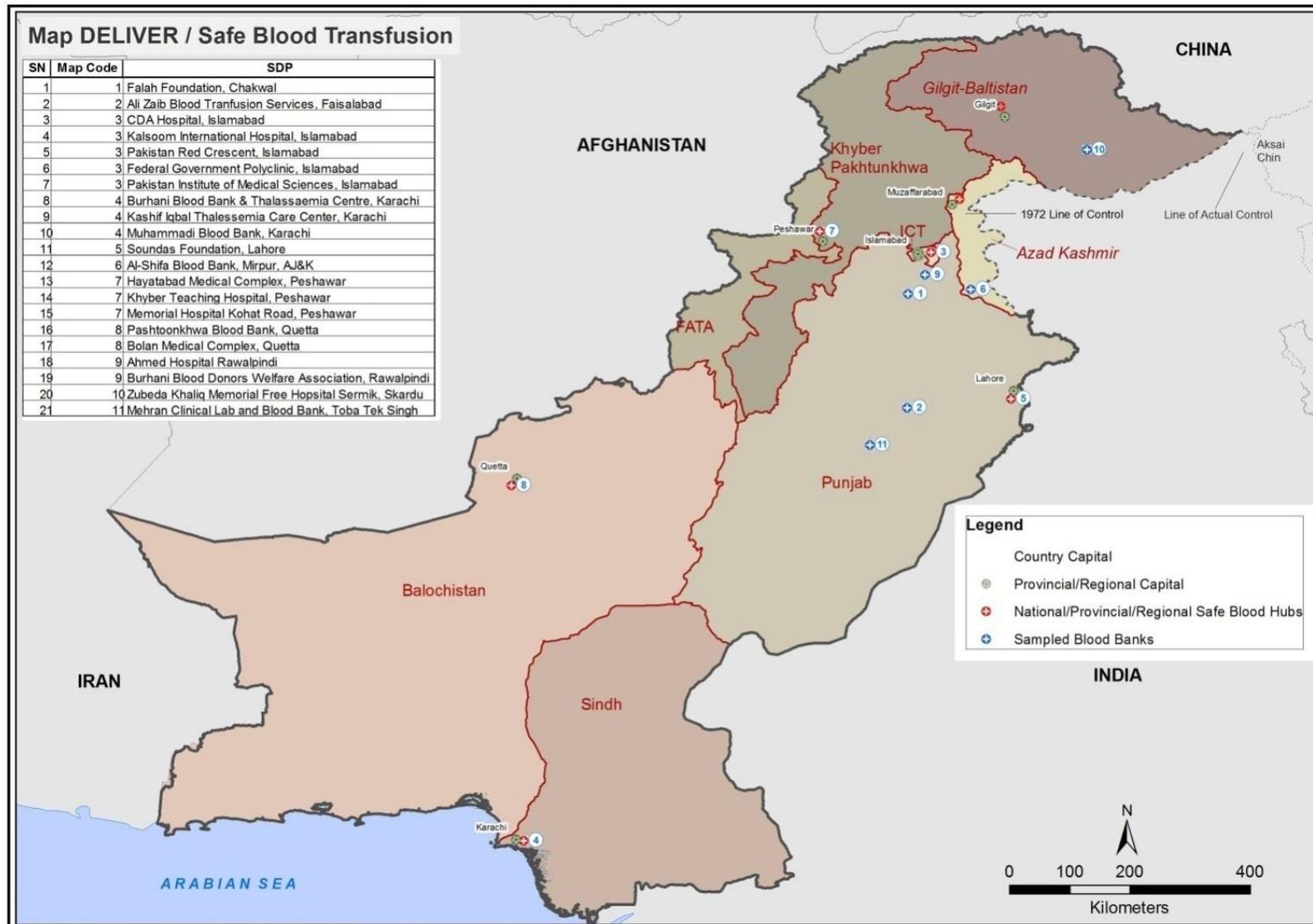
Monitoring visits were conducted at 28 sites as shown below in Table 2. The sites by name and location are listed in Annex 4.

TABLE 2: SUMMARY OF SITE VISITS

| Location | National and Provincial Hub | Blood Bank | Total Sites |
|----------------------------|------------------------------------|-------------------|--------------------|
| Islamabad, ICT | 1 | 5 | 6 |
| Lahore, Punjab | 1 | 1 | 2 |
| Hyderabad, Sindh | 1 | | 1 |
| Gilgit, Gilgit-Baltistan | 1 | | 1 |
| Muzaffarabad, AJ&K | 1 | | 1 |
| Peshawar, KP | 1 | 3 | 4 |
| Quetta, Balochistan | 1 | 2 | 3 |
| Rawalpindi, Punjab | | 3 | 3 |
| Toba Tek Singh, Punjab | | 1 | 1 |
| Karachi, Sindh | | 3 | 3 |
| Skardu, Gilgit-Baltistan | | 1 | 1 |
| Faisalabad, Punjab | | 1 | 1 |
| Mirpur, AJK | | 1 | 1 |
| Total Sites Visited | 7 | 21 | 28 |

These 28 sites that were visited for the monitoring exercise are shown on the map under Figure 1 below.

FIGURE I: MAP OF SITES VISITED BY THE MEP MONITORING TEAM



Data Collection Methods

Four different methods were used to collect data in the field. These methods are as follows:

1. **Interviews:** Key informant interviews using a semi-structured questionnaire were conducted with groups of individuals responsible for the record keeping, storage, or usage of the kits. Interviews were pre-arranged before the site visit. (A list of those interviewed is found in Annex 1.)
2. **Record Verification:** This is critical to the entire verification process. MEP monitors visited the sites at a time when not all of the commodities were available at each site. Some of the commodities might have been used and others might have been moved to the next level. Verifying records for delivery receipts (goods delivery note or proofs of delivery), stock records, and delivery transactions (goods receipt note) were important to the entire distribution process. All documentation pertaining to the supply chain for each site was photographed.
3. **Observation:** MEP monitors conducted physical inspections of the kits to verify the total number of kits received. This method also allowed MEP to verify that appropriate temperatures were maintained where required. The expiry dates were also checked to record the life of each kit type. Observation combined with record verification was helpful to determine the quantities of kits and missing kits.
4. **Photographic evidence:** In addition to documenting records, MEP monitors took photographs of the packaging, branding, and, most importantly, expiry dates for the commodities.

The different data collection methods were used to triangulate information to enhance data reliability. Data collected were verified against records supplied by DELIVER Pakistan to check if they match, and this was checked against initial tables generated from the database in which the field data was collected for analysis. For example, the goods receiving note (GRN) at the blood bank was checked against the good delivery note (GDN) at the provincial program office, after which the commodities delivered were physically checked and counted.

Notification

The MEP monitoring team contacted the relevant persons at the provincial and regional program offices and the selected blood banks to apprise them of the verification exercise that would be conducted. Appointments were made once dates of travel were finalized. The Chief of Party of DELIVER sent a letter of introduction to the Director General's Departments and Directorates of Health Services at the federal, provincial and regional levels of the Government of Pakistan to facilitate the exercise.

Instrument Design and Testing

Based on the document review and initial visits to SBTP which is the central hub in Islamabad, MEP designed a comprehensive instrument to verify commodity receipts and quantities that incorporated all methodologies required for the assignment.

The initial instrument was tested at the PIMS in Islamabad. Minor changes were made to the instrument after the pre-test. The revised instrument was shared with USAID on March 23, 2013. The instrument included an introduction, instructions for each section, and prompts for skipping as needed. The guidelines on each question provided notes for the field monitor to go through the questionnaire. (The data collection instrument is found in Annex 2.)

MEP monitors were required to substantiate all of their observations related to the record or stocks with supporting documentation and pictures. In cases where copies of the required documentation were not available, monitors took photos of the supporting documents.

The instrument was administered in English and was used at all 28 locations. Interviews were conducted in Urdu and/or English. Responses were recorded in English.

Database and Analysis

The field data were moved to the MEP office in both paper and electronic format. The database for the assignment was developed by the IT department at MEP using a software package called the Census and Survey Processing System (CSPro). All data from the instruments were entered into the database, and photographic evidence was also coded for easy retrieval.

The data were tabulated and used for analysis. Hard copies of the instruments, supporting documentation, and photographs are kept on file at the MEP office.

Data Quality Limitations

The data collection is subject to a few minor limitations. First, there may be some subjectivity in judging room temperatures and store conditions as these were based on the respondents' feedback and the monitors' estimates in these situations. Second, at the Punjab hub, stores were not accessible and a complete store count of commodities could not be conducted because the store was locked and the store keepers were not available until July 2013. Third, at both the Punjab and Sindh hubs, commodities distributed by these offices could not be verified since stock registers were not updated and all the receipts for goods distributed were not provided. Fourth, it was not possible to see the contents of cartons that were sealed. This was the case with some items not being used currently. It was also not possible to check kit contents for working condition/functionality. Lastly, the condition of the equipment was based on the judgment of those interviewed at the start of the site visit and the monitors conducting the store checks.

INTERVENTION OVERVIEW

With the coordination of DELIVER, hepatitis and HIV testing kits procured by the Partnership for Supply Chain Management (PFSCM)/Supply Chain Management System (SCMS) are being supplied to the national, provincial and regional hepatitis programs as well as blood banks operating under respective Department of Health programs. These kits are being provided semi-annually over a two year period from 2012 to 2014.

The project's interventions around this procurement are centered on two key objectives: 1) improving the performance of the health system by redressing weak supply management systems; and 2) improving the availability of hepatitis and HIV testing kits in the country. This is being achieved by working in partnership with the relevant government departments to control the spread of these diseases in Pakistan.

The kits are being procured and supplied in four equal installments over a two-year period. The first two installments were treated by DELIVER as a first-year supply. The MEP monitors verified these quantities which were delivered in July and August 2012. The third and fourth installments are expected to arrive in Pakistan in July 2013 and January 2014 respectively.

Commodity Types and Specifications

Six HIV and hepatitis testing kits were distributed by DELIVER for conducting tests. Three of these kits are used for rapid tests which are manual: Hepatitis B Surface Antigen (HBsAg) rapid tests, Hepatitis C Virus (HCV) rapid tests and HIV 1+2 rapid tests. The other three kits are for Enzyme-Linked Immunosorbent Assay (ELISA) tests: HBsAg ELISA, HCV ELISA, and HIV 1/2 ELISA. The rapid HBsAg and HCV kits each contain 40 individually pouched devices, and the HIV 1 +2 rapid kit contains 100 tests. The ELISA kits for HBsAg, HCV and HIV each contain 96 tests. The details are shown in Table 3 below.

TABLE 3: KITS BY TEST (TYPE)

| Commodity Type by Quantity | | | |
|-----------------------------------------------------------------|------------|---------------------------------------|-------------|
| RAPID KITS | | ELISA KITS | |
| Type of Test | Quantity | Type of Test | Quantity |
| Hepatitis, HBsAg, Rapid Test kit, 40 tests | 1,278 kits | Hepatitis, HBsAg, ELISA Kit, 96 Tests | 22,412 kits |
| Hepatitis, HCV, Rapid Device Serum/Plasma/Whole Blood, 40 tests | 1,278 kits | Hepatitis, HCV, ELISA Kit, 96 Tests | 22,412 kits |
| HIV 1+2, Determine Complete Kit, 100 tests | 8,968 kits | HIV 1/2, Ag-Ab, ELISA Kit, 96 Tests | 1,278 kits |

Rapid kits can be stored at room temperature. ELISA kits require a temperature of 2 to 8 degrees Celsius and are therefore refrigerated.



Rapid Kits at Al Shifa Blood Bank - Mirpur

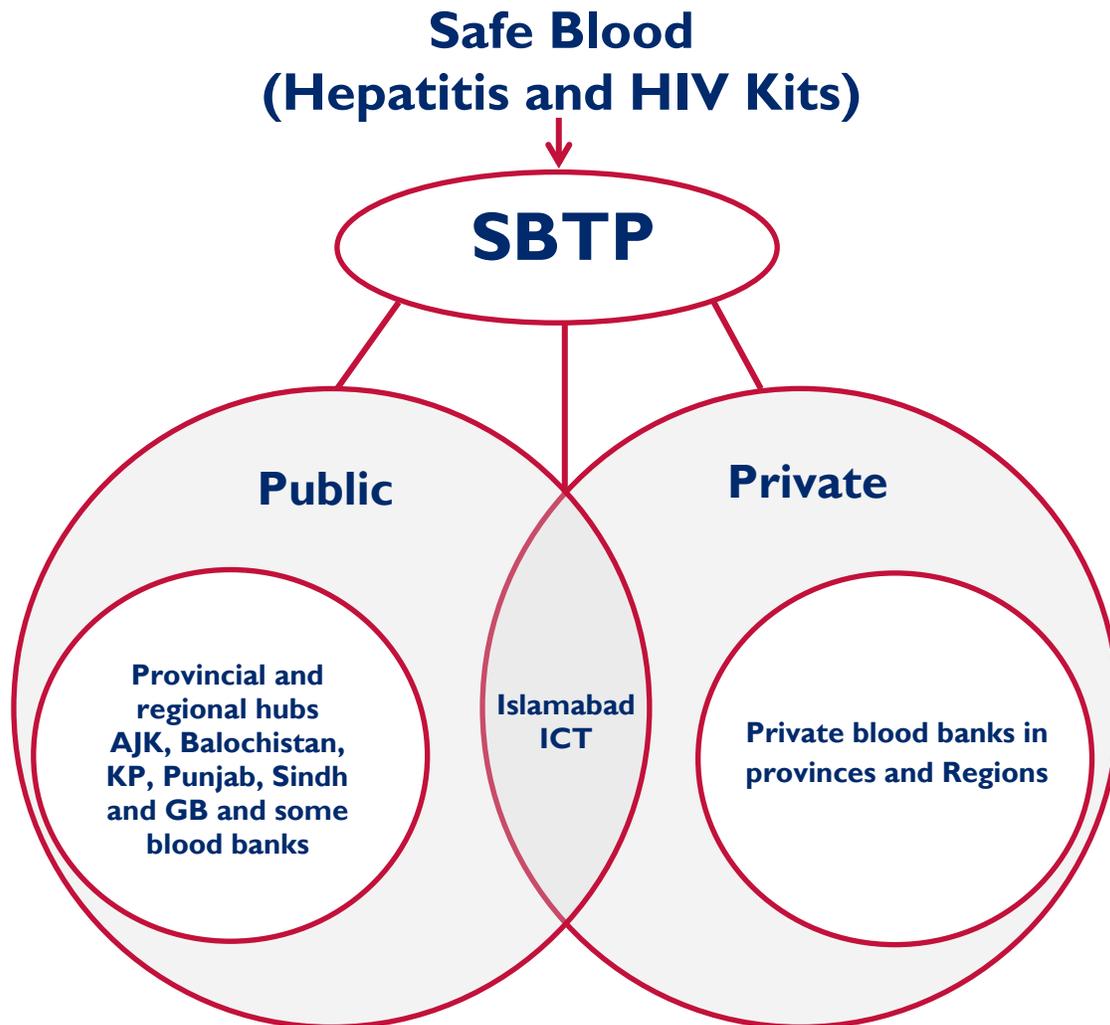
Commodity Distribution Process

Upon arrival in Pakistan, supplies are delivered to the SBTP in Islamabad by UPS from the airport. SBTP is responsible for distributing the procured commodities to the provincial and regional blood transfusion hubs by Marshal Packers and Movers. They also supply kits directly to public and private blood banks in Islamabad and to some blood banks in the provinces and regions.

The provincial and regional hubs are responsible for the onward distribution of kits to the blood banks in their cities and districts.

This commodity distribution process is illustrated below in Figure 2.

FIGURE 2: COMMODITY DISTRIBUTION PROCESS



After SBTP received both the installments, the kits requiring cold storage were stored in Expanded Immunization Program (EPI) Warehouse (within the EPI Complex in the National Institute of Health). Some rapid kits were also stored in the SBTP office and at the warehouse of the courier.

The six rapid and ELISA kits were distributed by Marshal Packers and Movers directly from Islamabad to the three provincial and three regional hubs. The hubs distributed the kits to the public sector blood banks in the provinces themselves and the list for this distribution is with the respective provincial and regional hubs. SBTP also supplied public and private blood banks in the Islamabad-Rawalpindi area. The Islamabad blood banks function independently and are not under the control of any single office.

In some cases, SBTP also sent the kits directly to blood banks in the different provinces and regions.

FINDINGS

The MEP monitoring team shared initial findings with USAID at mid-term debrief on May 14, 2013. A detailed summary of findings is presented below by commodity and by site, as applicable. The categorization of the findings follows the format used in the monitoring tool. Commodities received were verified, records at the site were examined, and commodity quantities, branding, temperature maintenance, and expiration dates were observed through store visits.

The first section presents the verification of commodity quantities both at the central, provincial and regional hubs as well as a sample of blood banks to which they are sent for use. This is followed by findings on USAID branding on packaging and commodities. An outline of record-keeping at all 28 sites follows and then a section summarizing commodity packaging, temperature maintenance, and the expiration dates of all the kits. Overall store organization and commodity utilization and demand are also presented along with a section on other findings.

Verification of Commodity Quantities

The verification of the quantity delivered was carried out at two different levels: 1) the national hub at Islamabad and the six provincial and regional program offices where the commodities were first dispatched, and 2) a sample of 21 public and private blood banks where shipments were directly received from the SBTP.

The quantities were verified by comparing the quantities indicated in the reference documents (the SBTP distribution plan and the proofs of delivery²) vis-à-vis the stock currently available, the stock record for use, and quantities dispatched to the next level if applicable. The equation below illustrates the method of verification used in tables 4 and 5.

Quantities according to proof of delivery = Quantity in store + Quantity used + Quantity dispatched to the next level

Table 4 shows the differences between the quantities of commodities as outlined in the distribution plan/goods received note/goods distribution note, the quantities located at the facilities, the amount of commodities recorded as being used to-date, and the total number of commodities distributed to the blood banks. The number is presented in the table along with the percent difference between what was expected to be present and what was verified by the MEP monitoring team. It was not possible to verify the entire quantities at the Sindh and Punjab hubs. The reasons for this are explained below.

²Goods delivery notes (GDNs) are considered as goods received notes (GRNs) if a recipient provides a signature on the same document. GDNs and GRNs are both considered as proof of delivery.

TABLE 4: QUANTITIES VERIFIED³ AT THE NATIONAL, PROVINCIAL, AND REGIONAL HUBS

| SITE | | RAPID | | | | | | ELISA | | | | | |
|------------------------------------------|----------|--------|------|--------|------|-------|------|-------|------|-------|------|-------|------|
| | | HbsAg | | HCV | | HIV | | HbsAg | | HCV | | HIV | |
| SBTP Islamabad | GDN | 22,412 | - | 22,412 | - | 8,968 | - | 1,278 | - | 1,278 | - | 1,278 | - |
| | Verified | 22,412 | - | 22,412 | - | 8,968 | - | 1,278 | - | 1,278 | - | 1,278 | - |
| Hepatitis Control Program Sindh | GDN | 6,401 | - | 6,401 | - | 2,572 | - | 120 | - | 120 | - | 120 | - |
| | Verified | 2,850 | -55% | 2,760 | -57% | 1,503 | -42% | 120 | - | 120 | - | 93 | -23% |
| Hepatitis Program Punjab | GDN | 9,260 | - | 9,260 | - | 3,713 | - | 508 | - | 508 | - | 508 | - |
| | Verified | 5,760 | -38% | 6000 | -35% | 0 | 100% | 191 | -62% | 178 | -65% | 169 | -67% |
| Central Blood Program AJK | GDN | 980 | - | 980 | - | 392 | - | 48 | - | 47 | - | 51 | - |
| | Verified | 980 | - | 980 | - | 392 | - | 48 | - | 47 | - | 51 | - |
| Safe Blood Program Gilgit | GDN | 350 | - | 350 | - | 140 | - | 33 | - | 33 | - | 33 | - |
| | Verified | 115 | -67% | 115 | -67% | 11 | -92% | 13 | -61% | 13 | -61% | 13 | -61% |
| Safe Blood Program for FATA | GDN | 1,308 | - | 1,308 | - | 523 | - | | | | | | |
| | Verified | 1,308 | - | 1,308 | - | 523 | - | | | | | | |
| Safe Blood Program for Balochistan | GDN | 84 | - | 84 | - | 34 | - | | | | | | |
| | Verified | 54 | -36% | 90 | +7% | 34 | - | | | | | | |

³ Verification was conducted by doing a store check where possible and matching records with the GDN which was the base document for the visits.

Safe Blood Transfusion Program

The distribution plan created by SBTP matched the actual distribution for four of the six hubs where kits were sent. Of the two installments destined for Balochistan, the second installment was sent to the Bolan Medical College (BMC) instead of the provincial hub in Quetta. (This may have been intentional as the MEP monitoring team found a signed goods delivery note at BMC which matched the proof of delivery provided by SBTP). There were minor discrepancies in the goods received note for quantities dispatched to the AJK hub.

At the SBTP, the distribution process was ongoing and the physical verification at the store on the site matched the balance from the distribution list at the time. There were 185 HbsAg rapid kits and 212 HCV rapid kits in the store at the time of the site visit.

Provincial and Regional Hubs

The verification conducted at each of the provincial and regional hubs is discussed below.

FATA and AJK

In the case of the regional hubs for FATA and AJK, the quantities were verified through store checks and all supplies were matched. Every kit dispatched from the two hubs was verified and all supplies in both places were according to plan.

Sindh

The store count of commodities showed large discrepancies with the numbers in the distribution plan created by SBTP. Only in the case of the HIV rapid kits did the stock register balance and the distribution documentation match. The store did not match the balance expected after distribution according to the information provided by the site staff. It was not possible to verify distribution to other centers as some receipts were not available, and there were only partial records for HbsAg and HCV ELISA kits.

Punjab

The verification of the first supply of rapid kits was incomplete as storage conditions were not feasible to count these kits. According to the stock register at the hub there should have been 117 HIV rapid kits in the store but it was not possible to verify any. In the case of HCV rapid kits there should have been 437 kits in the store but only 240 were verified. The second installment containing HbsAg, HCV and HIV rapid kits was sent to a different site at the Medical Service Depot. This was verified through the stock register and receipts and the quantities in the depot were found to match. The second installment is also stored there.

Similarly for ELISA kits only the second installment was checked and the quantities in the store did not match for all three kits. According to their stock register, there should have been 80 HBsAg kits, 82 HCV kits and 92 HIV kits as opposed to 191 HbsAg kits, 178 HCV and 169 HIV kits verified. The first installment could not be verified as there was no stock entry. The quantities for the ELISA kits in the store were probably a combination of both the installments.

Gilgit/Baltistan

There was no record available at the site for the ELISA installment of 20 HBsAg kits, 20 HCV kits and 20 HIV kits listed in the SBTP distribution plan. The onward distribution from the Directorate of Health for the second installment shows a total of 245 rapid kits for HBsAg, HCV and HIV, yet the distribution plan provided by SBTP shows 225 HBS, 225HCV and 90 HIV rapid kits being sent to Gilgit/Baltistan. However there were no delivery receipts at the regional hub for both the installments that were distributed to other facilities. Hence these quantities could not be verified.

Balochistan

The provincial hub received one installment of rapid kits of which there were 84 HBsAg kits, 84 HCV kits and 34 HIV kits. Store verification at the provincial hub showed a shortage of 30 kits for HBsAg, an excess of six HCV rapid kits and only the number of HIV kits matched. In this case, they were asked to hold the rapid kits in their store but had no distribution plan in place.

Also the second installment for Balochistan was not dispatched according to the SBTP distribution plan and was sent directly to the blood bank of Bolan Medical College.

Blood Banks

Table 5 outlines the distribution of these commodities to the end-user level—the blood banks, where different tests are conducted. The table compares what was recorded in the proofs of delivery notes against the number of units that were either in storage, had already been used, or were in use. The percent difference between the goods delivery notes, goods received note and the items verified by monitors is listed in addition to the number of kits. In some cases, it was not possible to verify the commodities because of a missing stock register or unavailability of delivery receipts. In other cases, such as CDA Capital Hospital and Al Shifa, commodities verified exceeded what was found in the GDN. One possibility is that commodities from different suppliers may have been mixed in the storage.

TABLE 5: QUANTITIES VERIFIED⁴ AT THE BLOOD BANKS

| SITE | GDN/ Verified | RAPID | | | | | ELISA | | | | | |
|------------------------------------------------|------------------|-------|-------|-----|-------|-----------------|-------|----------------|-------|-----|--------|----|
| | | HbsAg | | HCV | | HIV | HBsAg | | HCV | HIV | | |
| Capital CDA Hospital | GDN | 78 | | 77 | | 10 | | | | | | |
| | Verified | 75 | - 4% | 79 | +3% | 10 ⁵ | - | | | | | |
| Kalsoom International Hospital | GDN | 30 | | 30 | | 12 | | | | | | |
| | Verified | 30 | - | 30 | - | 12 | - | | | | | |
| Pakistan Red Crescent Islamabad | GDN | 30 | | 30 | | 12 | | 13 | | 13 | | 13 |
| | Verified | 30 | - | 30 | - | 12 | - | 13 | - | 13 | - | 13 |
| Ahmad Hospital | GDN | 10 | | 10 | | 4 | | | | | | |
| | Verified | 8 | -10% | 8 | -20% | 0 | -100% | | | | | |
| Burhani Blood Donors Welfare Association Pindi | GDN | 43 | | 43 | | 17 | | 8 | | 8/ | | 8 |
| | Verified | 23 | -47% | 23 | -47% | 13 | -24% | 5 | -38% | 5 | -38% | 0 |
| Falah Foundation | GDN | 20 | | 20 | | | | 3 ⁶ | | 3 | | |
| | Verified | 20 | - | 20 | - | | | 3 | - | 3 | - | |
| Federal Government Polyclinic | GDN | 120 | | 20 | | 51 | | 50 | | 50 | | 50 |
| | Verified | 0 | -100% | 4 | -97% | 19 | -63% | 8 | -84% | 9 | (82%) | 0 |
| Pakistan Institute of Medical Sciences | GDN | 10 | | 0 | | 4 | | 10 | | 10 | | 10 |
| | Verified | 0 | -100% | 0 | -100% | 0 | -100% | 0 | -100% | 0 | (100%) | 0 |
| Ali Zaib | GDN | 201 | | 173 | | 472 | | | | | | |
| | Verified | 201 | - | 173 | - | 472 | | | | | | |
| Mehran Clinical Lab and Blood Bank | GDN | 15 | | 5 | | 12 | | | | | | |
| | Verified | 15 | - | 15 | - | 12 | - | | | | | |
| Sundas Foundation | GDN | 30 | -100% | 30 | -100% | 12/ | -100% | | | | | |

⁴ Verification was conducted by doing a store check for kit quantities and kits in use and matching records with the GDN which was the base document for the visits.

⁵ At CDA hospital, MEP monitors were able to verify 9 complete kits and one open box of 50 tests.

⁶ Received from Burhani welfare bank and have acknowledgment note.

| SITE | GDN/ Verified | RAPID | | | | | | ELISA | | | | | |
|----------------------------------------------------|------------------|-------|-------|-----|-------|------|-------|-------|-------|-----|-------|-----|-------|
| | | HbsAg | | HCV | | HIV | | HBsAg | | HCV | | HIV | |
| | Verified | 0 | | 0 | | 0 | | | | | | | |
| Hayatabad Medical Complex | GDN | 250 | | 250 | | 100/ | | 33 | | 33 | | 33 | |
| | Verified | 250 | - | 250 | - | 100 | - | 33 | - | 33 | - | 33 | - |
| Khyber Teaching Hospital | GDN | 620 | | 620 | | 102 | | 13 | | 13 | | 13 | |
| | Verified | 587 | -5% | 637 | +3% | 98 | -4% | 13 | - | 13 | - | 13 | - |
| Memorial Hospital | GDN | 190 | | 90 | | 75 | | 13 | | 13 | | 13 | |
| | Verified | 55 | -71% | 43 | -77% | 34 | -55% | 20 | +35% | 20 | +35% | 24 | +69% |
| Kashif Iqbal Thalassemia Care Center | GDN | 30 | | 30 | | 12 | | | | | | | |
| | Verified | 30 | - | 30 | - | 12 | - | | | | | | |
| Burhani Blood Bank and Thalassemia Center, Karachi | GDN | 25 | | 25 | | 10 | | 20 | | 20 | | 20 | |
| | Verified | 25 | - | 25 | - | 10 | - | 20 | - | 20 | - | 20 | - |
| Muhammadi Blood Bank | GDN | 30 | | 30 | | 12 | | 20 | | 20 | | 20 | |
| | Verified | 0 | -100% | 0 | -100% | 0 | -100% | 20 | - | 20 | - | 20 | - |
| Zubeda Khaliq Memorial Free Hospital Skermik | GDN | 30 | | 30 | | 14 | | | | | | | |
| | Verified | 23 | -23% | 25 | -17% | 10 | -29% | | | | | | |
| Al-Shifa Blood Bank ⁷ | GDN | 5 | | 5 | | 2 | | | | | | | |
| | Verified | 4 | -20% | 4 | -20% | 3 | +50% | | | | | | |
| Pashtoonkhwa Blood Bank | GDN | 120 | | 20 | | 48 | | 30 | | 30 | | 30 | |
| | Verified | 28 | -72% | 24 | -80% | 6 | -88% | 0 | -100% | 0 | -100% | 0 | -100% |
| Bolan Medical College | GDN | 190 | | 90 | | 76 | | | | | | | |
| | Verified | 190 | - | 190 | - | 76 | - | | | | | | |

⁷ The Al-Shifa Blood Bank also got a supply of 30 HBsAg, 30 HCV, and 12 HIV rapid kits from the regional hub in Muzaffarabad for which they did not have documentation but for which records were verified at the AJK hub.

The sites for which there were huge discrepancies in the commodity quantities are presented below.

Burhani Blood Donors Welfare Association - Rawalpindi

An illustration of a mismatched distribution plan, goods received note and stock check is provided below. In the case of Burhani Blood Donors Welfare Association, there is no match between the SBTP distribution plan and the receiving record that is available at the site, and hence there is no way to corroborate store findings.

| Burhani Blood Donors Welfare Association | | | | | | |
|-------------------------------------------------|--------------|-----|-----|--------------|-----|-----|
| | RAPID | | | ELISA | | |
| | HBV | HCV | HIV | HBV | HCV | HIV |
| SBTP Distribution Plan | 43 | 43 | 17 | 8 | 8 | 8 |
| Stock Managers Records | 28 | 28 | 5 | 4 | 4 | 0 |
| Store Count | 0 | 0 | 0 | 5 | 5 | 8 |

The store check showed a stock out for all the rapid kits. For the ELISA kits, there were five HBsAg kits, five HCV, and eight HIV kits remaining in the store after Burhani distributed kits to Falah Foundation, Wajih Thalassemia, and another Burhani Blood Bank located in Karachi.

Burhani sees itself as a volunteer based organization and not a service delivery point (SDP). In liaison with SBTP, staff interviewed said it helped provide kits to five blood banks in the area. Information on distribution of kits to two of these blood banks is not included and may account for some of the discrepancies in the numbers in the table.

Federal Government Polyclinic - Islamabad

This is the only blood bank for which there was no record available of either a goods received note or stock register. The verification done on this site was a store count of commodities available. The staff said that the kits had been used and had no other explanation for the discrepancy.

Pakistan Institute of Medical Sciences PIMS - Islamabad

The MEP monitors were unable to verify any of the quantities of kits at PIMS. For the rapid kits, there was no record for the numbers received on site nor was there was any record of use. In the case of ELISA kits, there were differences between the SBTP distribution plan and the good received note at the blood bank. In addition to having marked differences between the numbers of kits, staff at PIMS reported returning 75 of 80 HBsAg kits, 73 of 78 HCV kits, and 75 of 80 HIV kits to SBTP. (It should be noted that USAID Health Office disputes this claim and in an email to MSI dated June 24, 2014 stated “On the request of the consignee (to provide QA) DELIVER requested their HQ/Vendor to check the lot numbers in question. They found no issues with the product supplied.” Moreover, in a January 15, 2013 email to SCMS in Washington DC, PFSCM noted that samples from the concerned lots were tested and no evidence of any performance issue was found.

There were several reasons given for returning the kits. The staff person at the PIMS blood bank said that the specific problem was that in the case of ELISA kits the positive controls were beyond the maximum capacity of the ELISA reader. In the case of the rapid kits there were high rates of false negatives, and the HCV kits were considered to be particularly unsatisfactory. The staff at the PIMS medical store apprised MEP that the ELISA machine at PIMS is rented and requires that the kits used on it be those of the organization providing the machine. Another person interviewed said that PIMS was unable to run the kits since they need blue tips which are too expensive to purchase. When the kits were returned, the staff at the PIMS store indicated that

DELIVER had said that these tips would be provided with the kits in the future. (USAID/Pakistan's Health Office responded in a June 24, 2013 email to MSI that JSI/DELIVER has not received any request from the consignee or from PIMS to provide blue tips.)

Sundus Foundation - Lahore

The Sundus Foundation reports that despite the fact that they requested ELISA kits from SBTP, they were sent rapid kits instead—30 HbsAg kits, 30 HCV kits, and 12 HIV kits. A goods received note verifies that they were sent these rapid test kits. The Sundus Foundation reports that they are unable to use the rapid kits they were sent at this blood bank. There were no commodities in the store. MEP monitors were informed that these had been dispatched to their centers in Gujranwala, Gujarat, and Sialkot. However, there was no documentation or record of these kits being distributed at these locations.

Memorial Hospital - Peshawar

The boxes at Memorial Hospital Peshawar were badly stored, and some of the stock received could not be accounted for. Lack of proper documentation also rendered it impossible to account for the commodities supplied. The amounts verified are the kits that were available in the stores on site. There was no stock register to check use or verify the remaining quantities.

Muhammadi Blood Bank - Karachi

The ELISA kits were verified through a store check as well as a stock register. Although there was a goods received note for the rapid kits supplied to this site, it was not possible to verify these quantities because there was no stock register at the blood bank and there were no kits available in the store.

Burhani Blood Bank and Thalassemia Center - Karachi

At the Burhani Blood Bank in Karachi, the goods received note and stock register from SBTP show that 10 HIV rapid kits were provided to the blood bank. However, the blood bank noted that the number of HIV rapid kits supplied by SBTP was 25. There is a discrepancy of 15 kits in the record which cannot be explained. The store check matched the distribution plan.

Zubeida Khaliq Memorial Free Hospital - Skardu

The quantities were verified through a store count as well as a count of the kits in use. Since no records were available such as the proof of delivery or the stock register, quantities verified through a store count as well as the kits in use. It was not possible to verify the kits that had already been used as all the cartons and boxes had been discarded.

Al Shifa Blood Bank - Mirpur

In addition to the quantities verified at the site, Al Shifa Blood Bank also received a supply of 30HBsAg, 30 HCV and 12 HIV rapid kits from the regional hub in Muzaffarabad for which they did not have documentation but for which records were verified at the AJK hub. This was the only blood bank in the sample which received a supply from the AJK hub in addition to supplies sent by the SBTP.

Pashtoonkhwa Blood Bank - Quetta

Another instance where there was a significant discrepancy in the stock quantities is that of Pashtoonkhwa Blood Bank. The total number of tests recorded on the stock register was 4,030. To ascertain the total number of kits per type of test, the MEP monitoring team converted this figure by dividing the amount of tests recorded by the number of tests per kit. This would mean that there should have been 100 kits each of HBsAg and HCV rapid tests, 40 kits for the rapid HIV tests, and 42 kits each for ELISA HCV, HBsAg and

HIV tests. None of these amounts matched the quantities in the store or the quantities outlined in the SBTP distribution plan. Moreover, the blood bank did not have a goods received note. The quantities of kits MEP monitors were able to verify were quite small: 28HBsAg, 24 HCV and 6 HIV rapid kits were verified through observation and photographs. For ELISA kits, some empty boxes were observed in the store, but it was not possible to verify the kit quantities.

Conclusion

Physical commodity verification was completed in full and found accurate at two of the six hubs. The other four showed discrepancies and the details are provided above. In the case of blood banks, eight sites matched, there were major discrepancies at nine sites, and minor discrepancies existed at four locations. In some of the blood banks (such as Sundas Foundation, Muhammadi Blood Bank, and Memorial Hospital) and Federal Government Polyclinic, store checks and lack of proper documentation rendered it impossible to account for the full amount of commodities supplied.

Branding

Branding followed the requirements of agreement with USAID and the project's contract. At all locations where the commodities were still in cartons, the USAID logo⁸ was visible on the boxes. Branding was not provided on any individual kit boxes.



USAID logo on Cartons at the FATA Hub

Record Keeping

To verify the goods delivered through the supply chain, the monitoring team examined three sets of documents: a) the goods receiving notes, b) the stock registers, and c) the goods delivery notes. Tables 6 and 7 summarize findings on recordkeeping by site. For the 28 sites visited, just over 30 percent (9) had complete records, more than 60 percent (17) had partial records, and 7 percent (2) had no records.

⁸ As per an email from USAID/Pakistan's Health Office dated June 24, 2013 to MSI, the PFSCM/SCMS contract with USG does not require that the cartons be branded with the USAID logo. In response to a request from USAID Pakistan Mission, it was ensured that the USAID logo was placed on all the cartons.

FIGURE 3: RECORD KEEPING AT THE SITES



Of the total sites visited, 61 percent had a partial record—either missing goods delivery notes, stock registers showing the disbursements, or delivery vouchers from the places where these kits were sent.

National, Provincial and Regional Hubs

Only one of seven central, provincial and regional hubs had complete records—the provincial hub for FATA located in Peshawar. Table 6 summarizes record keeping at the seven sites.

TABLE 6: RECORD KEEPING AT HUBS

| Site | Record Keeping |
|------------------------------------------|----------------|
| Safe Blood Transfusion Program Islamabad | Partial |
| Hepatitis Control Program Sindh | Partial |
| Hepatitis Control Program Punjab | Partial |
| Central Blood Program AJK | Partial |
| Safe Blood program Gilgit | Partial |
| Safe Blood Program for FATA | Complete |
| Safe Blood Program for Balochistan | No records |

SBTP

The SBTP in Islamabad had incomplete records. The delivery memo for the second installment that was sent to SBTP was not available. SBTP also did not have a consolidated register with stock in and out by date. There was no proper receiving documentation for both the installments sent to them.

FATA

The FATA hub had a complete record with goods received notes, stock registers, and goods delivery receipts for each kit distributed.

AJK

The record keeping for AJK was not complete. The goods received notes for the installments varied slightly from the actual amount received. The first installment of ELISA kits was stored at the DHO office, and the stock register was not available for this installment.

Punjab

Delivery receipts for distribution to blood banks by the Hepatitis Program in Punjab were not available and there was an incomplete count of rapid kits because monitors were unable to access the storage. The second installment of rapid kits HBsAg, HCV, and HIV was stored at the Medical Service Depot which had excellent records and complete documentation.

RECEIPT OF KITS

Received by: Sajid Hussain Awan
Designation: Lab. Chief
Department (Full address with P/c No): CMH M2D

Detail of receiving Kits:

| S.No | Items | Qty |
|------|----------------------------------------------------------|-------|
| 1 | HCV Rapid Device, Serum/Plasma/Whole blood, 40 tests/Kit | 148 ✓ |
| 2 | HBsAg Rapid Kit, 40 tests/Kit | 150 ✓ |
| 3 | HIV 1&2 Ag/Ab, Rapid Device, 100 tests/Kit | 670 ✓ |

Date of receiving: 20/1/13

Signature with Official Stamp: [Signature]
DR. HAFIZ JAMAL

Delivery Receipt at AJK Hub

HCV Rapid Test Device

| Date | Received | Issued | Balance | Name & Signature | REMARKS |
|---------|----------|--------|---------|------------------|---------|
| 20/1/13 | 2000 | | 2000 | [Signature] | |
| 21/1/13 | | 100 | 1900 | [Signature] | |
| 22/1/13 | | 100 | 1800 | [Signature] | |
| 23/1/13 | | 100 | 1700 | [Signature] | |
| 24/1/13 | | 100 | 1600 | [Signature] | |
| 25/1/13 | | 100 | 1500 | [Signature] | |
| 26/1/13 | | 100 | 1400 | [Signature] | |
| 27/1/13 | | 100 | 1300 | [Signature] | |
| 28/1/13 | | 100 | 1200 | [Signature] | |
| 29/1/13 | | 100 | 1100 | [Signature] | |
| 30/1/13 | | 100 | 1000 | [Signature] | |

Stock Register at FATA Hub

Balochistan

The provincial hub for Balochistan had no records.

Sindh

In Sindh, the records were not organized and it made the task of verifying the kits extremely difficult. There was no goods received note available for the second installment of all six kits received in January 2013. There

were partial records for goods delivered to blood banks in the province. Although most of the kits were listed in the stock register, the second shipment of HBsAg rapid kits was not included.

Blood banks

Eight out of 21 (38 percent) blood banks visited had complete documentation available with which the commodities received could be verified. Fifty-two percent of the blood banks visited, corresponding to 17 blood banks, had partial records. The main document missing at most blood banks was a stock register or documentation for kits that were used.

TABLE 7: RECORD KEEPING AT BLOOD BANKS

| Site | Record Keeping |
|----------------------------------------------|----------------|
| CDA Hospital | Partial |
| Kalsoom International Hospital | Complete |
| Pakistan Red Crescent Islamabad | Complete |
| Ahmed Hospital | Partial |
| Burhani Blood Donors Welfare Association | Partial |
| Falah Foundation | Complete |
| Federal Government Polyclinic | No Record |
| Pakistan Institute of Medical Sciences | Partial |
| Ali Zaib Blood Transfusion Services | Complete |
| Mehran Clinical Lab and Blood Bank | Partial |
| Sundas Foundation | Partial |
| Hayatabad Medical Complex | Complete |
| Khyber Teaching Hospital | Complete |
| Memorial Hospital Kohat Road | Partial |
| Kashif Iqbal Thalassemia Care Center | Complete |
| Burhani Blood Bank and Thalassemia Center | Partial |
| Muhammadi Blood Bank | Partial |
| Zubeda Khaliq Memorial Free Hospital Skermik | Partial |
| Al-Shifa Blood Bank | Partial |
| Pashtoonkhwa Blood Bank | Partial |
| Bolan Medical College | Complete |

Conclusion

Overall for both the hubs and blood banks, just over half had partial records available. In terms of complete record keeping, two hubs and 11 blood banks had the necessary documentation in the form of goods received notes, proofs of delivery, and well-maintained stock registers. One site (Federal Government Polyclinic) had no records available.

Condition of the Commodities

The condition of the commodities at the different sites was checked by observing and noting packaging, temperature maintained, and expiration dates. The findings in regard to packaging, temperature, expiration dates, and use of expired kits are presented here.

Packaging

Overall, the packaging for all commodities at most sites was in excellent condition. Some exceptions were kits at the Memorial Hospital in Peshawar, the Federal Government Polyclinic (FGPC) in Islamabad and the Sindh hub in Hyderabad where kits were lying open and the packaging was damp and soggy.



Damaged Packaging of ELISA Kits at Memorial Hospital in Peshawar

Temperature

At all locations, the temperature was maintained. ELISA kits were refrigerated, and all efforts were made to ensure temperature is maintained despite power shortages and cuts.

Expiration Dates

The MEP monitoring team also checked the expiration date wherever possible through store check and photographs. Of the six types of kits being verified in this assignment, small quantities were found to be expired in various locations.

At nine sites, 129 HIV rapid kits expired in February 2013, including the Balochistan hub where all HIV rapid kits in stock were expired by this date. At seven other sites, of which four were regional and provincial hubs, a total of 1,620 HIV rapid kits expired in May 2013. MEP monitors were told that the Punjab hub threw out its expired stock, making it difficult for MEP monitors to count and verify the HIV kits here. In more than 40 percent (nine) of the blood banks visited by the MEP monitoring team, small amounts of HIV rapid kits were found to be expired.

HbsAg rapid kits were also expired at the Pashtoonkhwa Blood Bank in Balochistan. At one provincial hub (AJK) and six blood banks (about 28 percent of blood banks visited), a total of 56 HbsAg ELISA kits expired in April 2013.

The detailed breakdown by site may be seen in Annex 5. The denominations of the expired commodities by site are provided in Table 8 below.

TABLE 8: STATUS OF EXPIRED COMMODITIES

| Commodities | Date of Expiry | Quantity Expired | Number of Sites | Name of Sites |
|--------------------------------|----------------|------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HBs, Rapid Test kit, 40 tests | April 2013 | 28 | 1 | Pashtoonkhwa Blood Bank |
| HIV, Rapid Test Kit, 100 tests | February 2013 | 129 | 9 | Balochistan Hub, CDA Hospital, Pakistan Red Crescent, FGPC, Mehran Clinical Lab, Memorial Hospital, Kashif Iqbal Thalassemia Center, Zubeida Khaliq Memorial, Pashtoonkhwa Blood Bank |
| | May 2013 | 1,620 | 7 | Sindh Hub, AJK Hub, Gilgit Hub, FATA Hub, Burhani Blood Bank (Karachi), Al-Shifa, Bolan Medical College |
| HBs, ELISA Kit, 96 Tests | April 2013 | 56 | 7 | AJK Hub, Pakistan Red Crescent, Burhani Welfare Islamabad, Falah Foundation, FGPC, Burhani Blood Bank Karachi, Muhammadi Blood Bank |



Expired HbsAg kits at the AJK Hub



Expired HIV Kits at CDA Hospital in Islamabad

Use of Expired Kits

At some blood banks the expired kits were used after the date of expiry until recently.

Although the HIV rapid kits expired in February 2013, the Capital Development Authority Hospital in Islamabad continued using them until May 2013, as they told the MEP monitors that they used these kits with controls for about two months after expiry. At the FGPC, the staff has been using some kit contents in tests and told the MEP monitor that these can be used as controls.

Khyber Teaching Hospital informed MEP staff that they had returned the second installment of rapid HIV kits because of short expiry in February 2013. It is not included in the proof of delivery for the site, so the statement cannot be verified. In fact there was a stock out of HIV rapid kits at the blood bank, as they had finished their first installment, which also would have expired in February 2103.

Store Quality and Organization

According to staff at SBTP, storage space for the kits is a concern. They also reported that they do not have enough staff to handle the procurement. Coordinating the distribution of the current commodities is difficult.

The provincial and regional hubs had multiple stores on site where the kits were housed. For instance, the cold storage kits in Punjab were kept in the EPI store at the Director General (DG) Health's Office. An installment of rapid kits was stored at the Medical Service Depot, which was very well organized and stacked.

In AJK, an installment of ELISA kits was kept in a store on a different site because of space considerations. The stores of the Baluchistan hub were in particularly bad condition. The store was full of dust and damaged electric equipment, furniture, chemicals and used motor tires were kept there. It was hard to find the DELIVER kits which were also covered with cobwebs.

Overall the stores at the blood banks where kits were kept were in good condition. The blood bank at the Pakistan Red Crescent Society, for example, had good storage conditions and various refrigerators to maintain a temperature of 2 to 8 degrees Celsius for the ELISA kits. The exceptions were Memorial Hospital, Khyber Teaching Hospital, and FGPC, where the stores were difficult to navigate and also not very hygienic.



Store at the Balochistan Hub



Store at the Pakistan Red Crescent Society

Commodity Demand and Utilization

Commodities were being used at most locations, unless they were expired. The kits are provided for two types of testing: manual and ELISA. However, some locations informed the MEP monitors that both RAPID and ELISA kits were used to verify or validate the same result. This was mentioned by staff at two blood banks in Islamabad—at the CDA Hospital, and at PIMs where the few kits that were retained were used to validate the test results. At Pashtoonkhwa Blood Bank the staff pointed out that both rapid and ELISA kits are used to do testing simultaneously to yield better results.

According to a medical technologist at the Kulsum Hospital, “the quality of the HIV kits was very good. Specificity and sensitivity of the brand Determine was good. The strips were in aluminum foil and solution, and the pack could be used remotely. In comparison, the HBsAg and HCV kits manufactured by Biotec were not of the same standard. They were roughly packed and did not include accessories.”

When asked about sufficient quantities of kits being provided, most of the staff at blood banks said that they had not been asked how much was needed. There seems to be no formal mechanism in place for kits to be requested by the blood banks.⁹For the most part, the staff felt that the quantities provided met their demand. In a few sites, however, the quantities supplied were considered to be less than their needs - for example, at the FATA hub in Peshawar, the HMC, and PIMS all mentioned this to be an issue.

⁹As per an email from USAID/Pakistan’s Health Office dated June 24., 2013 to MSI, private blood banks always send a request to the consignee (GOP) requesting a certain quantity of kits that are required. GOP keeps a record of all the transactions.

The Sind hub did not want any HIV kits for rapid or ELISA testing as they already received these kits from the Sindh AIDS Control Program (SACP). However, they felt the other kits provided to them were less than their actual requirement. Staff at the Punjab hub stated that they had no idea that the kits were being sent and had no storage space to accommodate the installments. The Balochistan hub also had stock in storage but was not well informed about how to proceed and did not think they needed the supply.

Two sites, Sundus Foundation and Kashif Iqbal Thalassemia Care Center, requested ELISA kits but were supplied with rapid kits. These could not be used at these locations and were sent to their other centers for use.

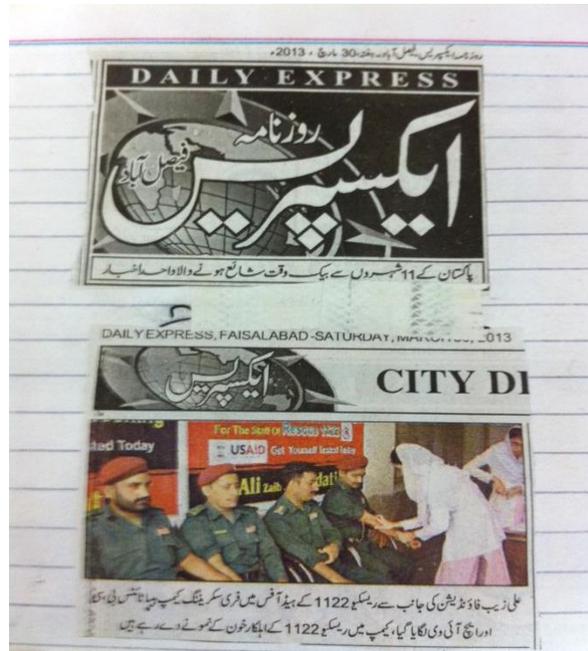
Although the provincial and regional hubs are informed¹⁰ about the time line for the installments of the rapid and ELISA kits, the blood banks informed MEP that they did not receive advance notice of the kits being sent from the supply provided by DELIVER to the provincial and regional hubs. Another concern expressed by officials pertained to their lack of clarity on how long they will be receiving supplies for, as a result of which they are unable to prepare their budget for stock accordingly. According to an official at the Al Shifa Blood Bank in Mirpur, “SBTP should arrange open forums for submitting requirements for commodities. They should also coordinate and communicate directly and check the requirement. Thanks to the Deputy Director at the AJK hub, if he had not known us we would not have received any assistance.”

Other Findings

In addition to the findings from the instrument, some information that came to light during the verification exercise may also be interesting and valuable.

To counter the issue of short expiry of kits and to ensure that they are not wasted, the Ali Zaib Blood Bank set up a blood camp March 30, 2013, in Faisalabad where these kits were used. The MEP monitor was shown the adjoining picture depicting a free camp held by the blood bank. They took this initiative, as they had many kits that were nearing expiry and they did not want these kits to be wasted. Hence this blood camp was held with USAID kits, and a banner was placed to show the donor.

One concern raised by the FATA hub was that of transport costs for supplying the kits to the blood banks. Staff interviewed said that the hub does not have the funds to pay the transport bills for the kits already sent to the blood banks in the region.



Free Camp held by Ali Zaib Blood Bank using USAID Kits

¹⁰ As per an email from USAID/Pakistan's Health Office dated June 24, 2013 to MSI, the consignee and all stakeholders know when the third and fourth installments are arriving (July 2103 and January 2 014).

CONCLUSIONS

- In general, the supplies being procured by PFSC/SCMS on behalf of USAID/Pakistan are reaching their intended destinations.
- Although commodities were largely distributed per plan to the provincial and regional distribution points, it is not clear how it is decided which blood banks will be supplied kits.
- Since blood banks feel removed from the ordering/decision-making process for commodities and do not seem to have clear information on ordering and supplies to better prepare their budgets, there is potential for a duplicate supply at the blood banks.
- Record keeping was better at the provincial/regional level but more than two thirds of the blood banks at the local level had poor or no records. This makes it difficult to have a transparent and sound distribution network and in the absence of a store check; it is also difficult to verify goods received, used and further distributed
- Though supplies were provided for a one-year period, short expiration dates for some HIV rapid test kits and some HBsAg ELISA test kits led to their quick expiration. This may be rectified soon, as the next installment is expected to reach Pakistan in July 2013.

RECOMMENDATIONS

- There is a need to improve communication and encourage better provision of information from the central hub to the provincial and regional hubs and from the latter to the blood banks regarding a schedule or anticipated timeframe of shipments,¹¹ and type of kits being procured so that the organizations can plan or seek commodities from another source if needed. Since this is a one-off procurement by USAID and not a long-term commitment to supply commodities, USAID should encourage the central hub to convey this information to the provincial and regional hubs, so in turn they can inform the blood banks.
- USAID should consider encouraging the Government of Pakistan to put in place an internal monitoring mechanism in a bid to better track and document the supply chain of donor-procured equipment and ensure complete transparency.
- To prevent any sale in the market or misuse, there should be USAID branding not only on the cartons but also on individual kits.

¹¹ As per an email from USAID/Pakistan's Health Office dated June 24, 2013 JSI/DELIVER always informs the consignee/SBTP and provincial programs as soon as there are changes in the schedule

LESSONS LEARNED FOR MONITORING

To reduce the margin for error, it is important that the information provided about the commodities and delivery points be complete and accurate. For this reason, the initial visit was deemed imperative and allowed MEP to develop an understanding of ground realities, particularly the commodity distribution process and the different temperature maintenance requirements for each type of kit and related commodities. Additional research and initial visits also yielded additional information that was integral for the development of a monitoring tool that effectively captures the various issues related to the delivery, receipt, and storage of Hepatitis and HIV kits. Fieldwork in itself was not difficult to coordinate and complete.

ANNEXES

Annex I: List of Individuals Interviewed

| SN | Staff Met | Site Name | Province | City | Site Type | Date Visited |
|----|---------------------------|----------------------------------|----------|----------------|------------|----------------|
| 1 | Deputy Director | Central Blood Transfusion Center | AJK | Muzaffarabad | Hub | May 8, 2013 |
| 2 | Store Keeper | Central Blood Transfusion Center | AJK | Muzaffarabad | Hub | May 8, 2013 |
| 3 | Data Entry Operator | Central Blood Transfusion Center | AJK | Muzaffarabad | Hub | May 8, 2013 |
| 4 | Assistant Director | PRCS | ICT | Islamabad | Blood Bank | April 19, 2013 |
| 5 | Laboratory Assistant | PRCS | ICT | Islamabad | Blood Bank | April 19, 2013 |
| 6 | Laboratory Supervisor | PRCS | ICT | Islamabad | Blood Bank | April 19, 2013 |
| 7 | Deputy Manager Laboratory | Kulsum International | ICT | Islamabad | Blood Bank | May 2, 2013 |
| 8 | Blood Bank Manager | Kashif Iqbal Thalassemia | Sindh | Karachi | Blood Bank | April 23, 2013 |
| 9 | Laboratory Technician | Kashif Iqbal Thalassemia | Sindh | Karachi | Blood Bank | April 23, 2013 |
| 10 | Medical Technologist | CDA Hospital | ICT | Islamabad | Blood Bank | May 4, 2013 |
| 11 | Laboratory Technician | Mehran Lab | Punjab | Toba Tek Singh | Blood Bank | April 18, 2013 |
| 12 | Laboratory Assistant | Mehran Lab | Punjab | Toba Tek Singh | Blood Bank | April 18, 2013 |
| 13 | Chief Executive | Ali Zaib Bank | Punjab | Faisalabad | Blood Bank | April 19, 2013 |
| 14 | Director | Ali Zaib Bank | Punjab | Faisalabad | Blood Bank | April 19, 2013 |
| 15 | Head of Pathology | Khyber Teaching Hospital | KP | Peshawar | Blood Bank | April 18, 2013 |
| 16 | Clinical Technologist | Khyber Teaching Hospital | KP | Peshawar | Blood Bank | April 18, 2013 |
| 17 | Blood Bank in charge | FGPC | ICT | Islamabad | Blood Bank | June 3, 2013 |
| 18 | Laboratory Technician | FGPC | ICT | Islamabad | Blood Bank | June 3, 2013 |
| 19 | Chief Pharmacist | PIMS | ICT | Islamabad | Blood Bank | June 4, 2013 |
| 20 | Manager Blood Bank | PIMS | ICT | Islamabad | Blood Bank | June 4, 2013 |

| SN | Staff Met | Site Name | Province | City | Site Type | Date Visited |
|----|-----------------------------|-------------------------------------------|----------|-----------|------------|----------------|
| 21 | Store Keeper | PIMS | ICT | Islamabad | Blood Bank | June 4, 2013 |
| 22 | Store Keeper | Directorate Health Services Store, FATA | KP | Peshawar | Hub | April 9, 2013 |
| 23 | Professor of Hematology | HMC | KP | Peshawar | Blood Bank | April 10, 2013 |
| 24 | Store Keeper | HMC | KP | Peshawar | Blood Bank | April 10, 2013 |
| 25 | Laboratory Technologist | HMC | KP | Peshawar | Blood Bank | April 10, 2013 |
| 26 | Laboratory Technician | Memorial Hospital | KP | Peshawar | Blood Bank | April 18, 2013 |
| 27 | Head of Pathology | Memorial Hospital | KP | Peshawar | Blood Bank | April 18, 2013 |
| 28 | Chief Laboratory Technician | Memorial Hospital | KP | Peshawar | Blood Bank | April 18, 2013 |
| 29 | Project Director | SBTP | ICT | Islamabad | Hub | March 18,2013 |
| 30 | Administrative Officer | SBTP | ICT | Islamabad | Hub | March 18,2013 |
| 31 | Acting Program Manager | Hepatitis Prevention and Control Program | Sindh | Hyderabad | Hub | April 24, 2013 |
| 32 | Logistics Officer | Hepatitis Prevention and Control Program | Sindh | Hyderabad | Hub | April 24, 2013 |
| 33 | Assistant Store Keeper | Hepatitis Prevention and Control Program | Sindh | Hyderabad | Hub | April 24, 2013 |
| 34 | Store Keeper | Hepatitis Prevention and Control Program | Sindh | Hyderabad | Hub | April 24, 2013 |
| 35 | Program Manager | Hepatitis Prevention and Control Program | Punjab | Lahore | Hub | April 11,2013 |
| 36 | Clerk | Hepatitis Prevention and Control Program | Punjab | Lahore | Hub | April 11,2013 |
| 37 | In charge EPI | MSD | Punjab | Lahore | Hub | April 11,2013 |
| 38 | President | Falah Foundation | Punjab | Chakwal | Blood Bank | May 30, 2013 |
| 39 | Laboratory Technician | Falah Foundation | Punjab | Chakwal | Blood Bank | May 30, 2013 |
| 40 | Patron in Chief | Al Shifa Foundation and blood bank | AJK | Mirpur | Blood Bank | May 30, 2013 |
| 41 | Blood Bank in charge | Al Shifa Foundation and blood bank | AJK | Mirpur | Blood Bank | May 30, 2013 |
| 42 | Administrator | Burhani Blood Bank and Thalassemia Center | Sindh | Karachi | Blood Bank | April 25, 2013 |
| 43 | Laboratory Technician | Burhani Blood Bank and Thalassemia Center | Sindh | Karachi | Blood Bank | April 25, 2013 |
| 44 | Screening in charge | Burhani Blood Bank and Thalassemia | Sindh | Karachi | Blood Bank | April 25, 2013 |

| SN | Staff Met | Site Name | Province | City | Site Type | Date Visited |
|----|----------------------------------------------|----------------------------------------------|-----------------|------------|-------------------------------|----------------|
| | | Center | | | | |
| 45 | Manager | Burhani Blood Donors and Welfare Association | Punjab | Rawalpindi | Blood Bank/ Liaison Office | May 31, 2013 |
| 46 | Owner | Burhani Blood Donors and Welfare Association | Punjab | Rawalpindi | Blood Bank/ Liaison Office | May 31, 2013 |
| 47 | Chief Executive Officer | Muhammadi Blood Bank | Sindh | Karachi | Blood Bank | April 30, 2013 |
| 48 | Administrative Officer | Muhammadi Blood Bank | Sindh | Karachi | Blood Bank | April 30, 2013 |
| 49 | Laboratory in charge | Muhammadi Blood Bank | Sindh | Karachi | Blood Bank | April 30, 2013 |
| 50 | Administrative Manager | Ahmed Medical Complex | Punjab | Rawalpindi | Blood Bank | May 8, 2013 |
| 51 | Manager | Ahmed Medical Complex | Punjab | Rawalpindi | Blood Bank | May 8, 2013 |
| 52 | Store in charge | ZKMFH | GilgitBaltistan | Skardu | Blood Bank | May 4, 2013 |
| 53 | Member Administration Committee (Operations) | ZKMFH | GilgitBaltistan | Skardu | Blood Bank | May 4, 2013 |
| 54 | Member Administration Committee (Finance) | ZKMFH | GilgitBaltistan | Skardu | Blood Bank | May 4, 2013 |
| 55 | Store Officer | Directorate of Health Services, Gilgit | GilgitBaltistan | Skardu | Hub | May 3, 2013 |
| 56 | Store Keeper | Directorate of Health Services, Gilgit | GilgitBaltistan | Skardu | Hub | May 3, 2013 |
| 57 | Store in Charge | Directorate of Health Services, Balochistan | Balochistan | Quetta | Blood Bank | May 31, 2013 |
| 58 | Laboratory Assistant | Bolan Medical College | Balochistan | Quetta | Blood Bank | May 31, 2013 |
| 59 | Laboratory Assistant | Bolan Medical College | Balochistan | Quetta | Blood Bank | May 31, 2013 |
| 60 | Laboratory Technician | Pashtoonkhwa Blood Bank | Balochistan | Quetta | Blood Bank | May 31, 2013 |
| 61 | Laboratory in charge | Pashtoonkhwa Blood Bank | Balochistan | Quetta | Blood Bank | May 31, 2013 |

Note: ICT stands for Islamabad Capital Territory

Annex 2: Data Collection Instrument

Safe Blood Transfusion Kits

Commodity Verification

(Verification Methods: Interview, stock check and stock records check)

[Please carry with you all the documentation that MEP has received with regard to safe blood testing kits from DELIVER; for example goods delivery notes, Shipment documents, Courier receipts etc.]

| | | | |
|--------------------------------|--|----------------------------------|--|
| Name of the Interviewer | | Date: | |
| Site Address | | Time Start | |
| Province | | Time Finished | |
| District | | Site Type (Store/SDP) | |
| Site Name | | | |
| Site Address | | | |

[Upon reaching the site, contact office in-charge or his/her designee]

| Staff at the site that participated during the verification process | | |
|---------------------------------------------------------------------|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Name | Designation/ Contact | Type of participation during the verification process (Interview/physical verification/ record keeping) |
| 1. | | |
| 2. | | |
| 3. | | |

Introduction (read verbatim):Assalam-o-Alaikum, My name is..... ; And we are from the USAID Monitoring and Evaluation Program; we are helping USAID in understanding the effectiveness of their projects in Pakistan. I am contacting you with reference to the notification letter sent to the Director Generals Health Services, by the USAID funded DELIVER PROJECT dated 8th February 2013.The objective of my visit is to verify that the USAID funded safe blood testing kits have reached you. For this purpose, on behalf of your institution/office, I will need to ask you a few questions, review the relevant record maintained at your office and visit the store to physically verify the commodities, if available. The findings of my visit will be shared with USAID to bring improvements to the supply chain of DELIVER procured commodities in Pakistan. Your assistance would be very much appreciated. May we proceed now? *[If yes, please proceed with the following questions.]*

Note for the Enumerators

For stores Q1 to Q14 are relevant; follow the instructions/ skipping pattern

For SDPs all questions are relevant, follow the instructions/ skipping pattern

1-

- Yes**
- No***[If No, discontinue the interview]*
- I don't know***[Inquire at least one other relevant staff who could possibly be aware of receipt of USAID DELIVER commodities and ask the same question again; otherwise discontinue the interview]*

2- **From which(Office/Store) did you receive/collect safe blood transfusion kits procured by USAID DELIVER PROJECT?***[Only names of the offices/stores along with their location is requested here]*

3- **Please name safe blood transfusion kits received through USAID DELIVER PROJECT?***[Name each item one by one to get response for each commodity; fill out the table below and note down any additional comments below in the comments field]*

Table Q.3. Commodities Received

| SN | Testing Kits and Commodities | Mark ✓ if received or Mark ✗ if not received |
|----|--------------------------------------------|-------------------------------------------------|
| 1 | HBS (40 tests/kit)—Rapid(room temperature) | |
| 2 | HCV(40 tests/kit)—Rapid(room temperature) | |
| 3 | HIV(100 tests/kit)—Rapid(room temperature) | |

| SN | Testing Kits and Commodities | Mark ✓ if received or Mark ✗ if not received |
|-------------------------------|-----------------------------------------|-------------------------------------------------|
| 4 | HBS (96 tests/kit)—ELISA(2–8 degrees C) | |
| 5 | HCV (96 tests/kit)—ELISA(2-8 degree C) | |
| 6 | HIV (96 tests/kit)—ELISA(2-8 degree C) | |
| Additional Information | | |
| | | |
| | | |

Note: From this point onwards, only selected commodities, as indicated under Table Q3, should be referred to when asking questions, making observations and reviewing records

4- How did your office rate the overall quality of each USAID DELIVER kits at the time of receipt? *[Name each item received to get rating for each commodity; ignore items that were not received; fill out the table below and note down any additional comments below in the comment field]*

Table Q.4. Overall Condition of Commodities on Receipt

| SN | Testing Kits and Commodities | Packaging (Poor/ Fair//Excellent/?) | Required Temperature Maintenance (✓ / ✗ / ?) | Expired (Yes / No/ don't know) |
|----|-------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------|-----------------------------------|
| 1 | HBS (40 tests/kit)—Rapid (room temperature)(2-30 degree C) | | | |
| 2 | HCV(40 tests/kit)—Rapid (room temperature)(2-30 degree C) | | | |
| 3 | HIV(100 tests/kit)—Rapid (room temperature)(2–30 degrees C) | | | |

| SN | Testing Kits and Commodities | Packaging | Required | Expired (Yes / No/I |
|-----------------|------------------------------------------|------------------------------|-------------------------------------------|---------------------|
| | | (Poor/ Fair//Excellent/?) | Temperature Maintenance (✓ / * / ?) | don't know) |
| 4 | HBS (96 tests/kit)—ELISA (2–8 degrees C) | | | |
| 5 | HCV (96 tests/kit)- ELISA (2-8 degree C) | | | |
| 6 | HIV (96 tests/kit)- ELISA (2-8 degree C) | | | |
| Comments | | | | |
| | | | | |

5- Was/Is each USAID DELIVER kits package and items marked with the USAID logo when received?*[Name each item to get response for each commodity; ignore items that were not received; fill out the table below and note down any additional comments below in the comment field]*

Table Q.5.Overall Branding of Commodities on Receipt

| SN | Testing kits and Commodities | USAID Logo (Mark ✓ / * / ? in the relevant cell) | |
|----|------------------------------|-----------------------------------------------------|--------------------------|
| | | Package | Items within package |
| | | 1 | HBS (40 tests/kit)—Rapid |
| 2 | HCV(40 tests/kit)—Rapid | | |
| 3 | HIV(100 tests/kit)—Rapid | | |
| 4 | HBS (96 tests/kit)—ELISA | | |

| | | USAID Logo (Mark ✓/*/? in the relevant cell) | |
|---------------------------------|------------------------------|-------------------------------------------------|--------------------------|
| SN | Testing kits and Commodities | Package | Items within package |
| | | 5 | HCV (96 tests/kit)—ELISA |
| 6 | HIV (96 tests/kit)—ELISA | | |
| Comments on the branding | | | |
| | | | |

6- Were/Are DELIVER safe blood kits/stock identifiable in the stock record?

- Yes, All commodities
- Yes but not all commodities *[request response by each commodity and fill out the table below]*
- No *[If No, skip questions 7 and 8]*

Table Q.6.Tracking of DELIVER Commodities

| SN | Testing Kits and Commodities | Mark ✓/*as applicable |
|----|------------------------------|-----------------------|
| 1 | HBS (40 tests/kit)—Rapid | |
| 2 | HCV(40 tests/kit)—Rapid | |
| 3 | HIV(100 tests/kit)—Rapid | |
| 4 | HBS (96 tests/kit)—ELISA | |
| 5 | HCV (96 tests/kit)- ELISA | |
| 6 | HIV (96 tests/kit)- ELISA | |

[For items where response is ✓, move to the next question; for the rest of items move to Q.9]

7- Did you receive/collect safe blood kits procured by the USAIDDELIVER PROJECT in more than one instalment? I would need to see relevant receipts in support of your answer.

Yes [If yes, (i) ask instalment dates and quantity for each commodity from “Goods Receive Note/Letter” and add in the table below (ii) Take pictures of all relevant commodity delivery and/or receipt notes] 

No [If No, (i) ask the date of receipt and quantity for each commodity from “Goods Receive Note/Letter” and indicate this under “1st instalment date” column; (ii) take pictures of all relevant commodity delivery and/or receipt notes] 

Table Q.7. Goods Received Record

| # | Kits and Commodities | 1 st Inst. | | 2 nd Inst. | | 3 rd Inst. | | 4 th Inst. | |
|-----------------|--------------------------|-----------------------|-----|-----------------------|-----|-----------------------|-----|-----------------------|-----|
| | | Date D/M/Y | QTY | Date D/M/Y | QTY | Date D/M/Y | QTY | Date D/M/Y | QTY |
| 1 | HBS (40 tests/kit)—Rapid | | | | | | | | |
| 2 | HCV(40 tests/kit)—Rapid | | | | | | | | |
| 3 | HIV(100 tests/kit)—Rapid | | | | | | | | |
| 4 | HBS (96 tests/kit)—ELISA | | | | | | | | |
| 5 | HCV (96 tests/kit)—ELISA | | | | | | | | |
| 6 | HIV (96 tests/kit)—ELISA | | | | | | | | |
| Comments | | | | | | | | | |
| | | | | | | | | | |

8- Did you register these commodities in your Stock Register / Stock Database?

Yes[If yes, (i) request to look at the stock register / stock database and note date of stock-in and quantity in the table below (ii) Take pictures of all relevant commodity delivered and/or receipt records] 

No [If no, skip Table Q.8]

Table Q.8. Stock-In Record

| # | Kits and Commodities | 1 st Entry | | 2 nd Entry | | 2 nd Entry | | 2 nd Entry | |
|---|-----------------------------|-----------------------|-----|-----------------------|-----|-----------------------|-----|-----------------------|-----|
| | | Date | QTY | Date | QTY | Date | QTY | Date | QTY |
| | | D/M/Y | | D/M/Y | | D/M/Y | | D/M/Y | |
| 1 | HBS (40 tests/kit)—Rapid | | | | | | | | |
| 2 | HCV(40 tests/kit)—Rapid | | | | | | | | |
| 3 | HIV(100 tests/kit)—Rapid | | | | | | | | |
| 4 | HBS (96 tests/kit)—ELISA | | | | | | | | |
| 5 | HCV (96 tests/kit)—ELISA | | | | | | | | |
| 6 | HIV(96 tests/kit)—ELISA | | | | | | | | |

9- Is your office/site expected to send/transfer any of the testing kits procured by USAID DELIVER PROJECT to the next level?

Yes [If yes, ask for all the recipient names as per actual distribution or distribution plan; take picture of the distribution list/plan]

| USAID DELIVER Safe Blood kits Recipients |
|-------------------------------------------------|
| |

No [If No, skip Q.10 and Q.12]

10- Have you delivered all USAID DELIVER commodities to the next level?(Not for SDP)

All of the commodities [(i) request to look at the “Goods Delivery Note (with recipient signature/seal or separate commodity receipt letter from recipient)” and “Stock Register/ Stock Database” and fill out the table below. (ii)Take pictures of all relevant commodity delivery notes and stock-out register (take printout of the database reports, if applicable]

[Skip Q.11] 

Some of the commodities [(i) request to look at the “Goods Delivery Note (with recipient signature/seal or separate commodity receipt letter from recipient)” and “Stock Register/ Stock Database” and fill out the table below. (ii)Take pictures of all relevant commodity delivery and/or receipt notes and stock-out register (take printout of the database reports, if applicable]



None

Table Q.10. Stock-out Record

For each commodity, mention Quantity, Date and indicate (Y/N) Discrepancy between Goods Delivery Note and Stock-out register, if any

| Recipient Office Name | HBS(40 tests/kit) | HCV(40 tests/kit) | HIV(96 tests/kit) | HBS (96 tests/kit) | HCV(96 tests/kit) | HIV (96 tests/kit) |
|------------------------------------------|-------------------|-------------------|-------------------|--------------------|-------------------|--------------------|
| All Recipient Offices (Aggregate) | QTY | | | | | |
| 1 | DATE | | | | | |
| | Disc(Y/N) | | | | | |
| | QTY | | | | | |
| 2 | DATE | | | | | |
| | Disc(Y/N) | | | | | |
| | QTY | | | | | |

| Recipient Office Name | HBS(40 tests/kit) | HCV(40 tests/kit) | HIV(96 tests/kit) | HBS (96 tests/kit) | HCV(96 tests/kit) | HIV (96 tests/kit) |
|----------------------------------------------|-------------------|-------------------|-------------------|--------------------|-------------------|--------------------|
| All Recipient Offices (Aggregate) | QTY | | | | | |
| 3 | QTY | | | | | |
| | DATE | | | | | |
| | Disc(Y/N) | | | | | |
| 4 | QTY | | | | | |
| | DATE | | | | | |
| | Disc(Y/N) | | | | | |
| 5 | QTY | | | | | |
| | DATE | | | | | |
| | Disc(Y/N) | | | | | |
| 6 | QTY | | | | | |
| | DATE | | | | | |
| | Disc(Y/N) | | | | | |
| 7 | QTY | | | | | |

| Recipient Office Name | HBS(40 tests/kit) | HCV(40 tests/kit) | HIV(96 tests/kit) | HBS (96 tests/kit) | HCV(96 tests/kit) | HIV (96 tests/kit) |
|----------------------------------------------|-------------------|-------------------|-------------------|--------------------|-------------------|--------------------|
| All Recipient Offices (Aggregate) | QTY | | | | | |
| | DATE | | | | | |
| | Disc(Y/N) | | | | | |
| 8 | QTY | | | | | |
| | DATE | | | | | |
| | Disc(Y/N) | | | | | |
| 9 | QTY | | | | | |
| | DATE | | | | | |
| | Disc(Y/N) | | | | | |

[Add additional sheets if required]

11- Do you have DELIVER specific kits in your store or are these used at this site?

Yes [If yes, visit the store/ installation points at site and randomly observe each commodity type for branding and condition; take pictures of all observations; fill out the table below] 

No [Skip the table below and provide reason below in the comments field] [go to Q.9]

Table Q.11.Commodity Store Count

| SN | Kits and Commodities | QTY | USAID | USAID | Packaging (Poor/ Fair// Excellent/?) | Required | Expired |
|----|------------------------------------------------------------|--------------|----------------------------------|-----------------------------|--------------------------------------------|-------------------------------------------|----------------|
| | | | Logo ✓ / * / ? (Packaging) | Logo ✓ / * / ? (Item) | | Temperature Maintenance (✓ / * / ?) | (✓ / * / ?) |
| 1 | HBS (40 tests/kit)—Rapid (room temperature) | In store | | | | | |
| | | In-use /used | | | | | |
| 2 | HCV(40 tests/kit)—Rapid (room temperature) | In store | | | | | |
| | | In-use /used | | | | | |
| 3 | HIV(100 tests/kit)—Rapid (2–8 degrees C, room temperature) | In store | | | | | |
| | | In-use /used | | | | | |
| 4 | HBS (96 tests/kit)—ELISA (2–8 degrees C) | In store | | | | | |
| | | In-use /used | | | | | |
| 5 | HCV (96 tests/kit)—ELISA (2–8 degrees C) | In store | | | | | |
| | | In-use /used | | | | | |
| 6 | HIV (96 tests/kit)—ELISA (2–8 degrees C) | In store | | | | | |
| | | In-use /used | | | | | |

Comments

12- How would you rate the overall quality of USAID DELIVER kits at the time of its delivery to the commodity recipients? *[Name each item one by one to get rating for each commodity; fill out the table below and note down any additional comments below in the comment field]*

Table Q.12.Condition of Commodities—Delivery

| SN | Testing Kits and Commodities | Packaging (Poor/ Fair// Excellent/?) | Required Temperature Maintenance (Yes / No/?) | Expired (✓ / ✘/?) |
|-------------------------------------------------------|---------------------------------------------|-----------------------------------------------------|------------------------------------------------------------------|--------------------------|
| 1 | HBS (40 tests/kit)—Rapid (room temperature) | | | |
| 2 | HCV(40 tests/kit)—Rapid (room temperature) | | | |
| 3 | HIV(100 tests/kit)—Rapid (room temperature) | | | |
| 4 | HBS (96 tests/kit)—ELISA (2–8 degrees C) | | | |
| 5 | HCV (96 tests/kit)—ELISA (2–8 degrees C) | | | |
| 6 | HIV (96 tests/kit)—ELISA (2–8 degrees C) | | | |
| Comments on the overall branding and condition | | | | |

13- Did you receive safe blood testing kits as per your requirement? *Mark ✓ for the relevant commodity*

Table Q.13. Commodities Requirement

| | HBS (40 tests/kit)– Rapid | HCV(40 tests/kit)– Rapid | HIV(100 tests/kit)– Rapid | HBS (96 tests/kit)– ELISA | HCV (96 tests/kit)– ELISA | HIV (96 tests/kit)– ELISA |
|--------------------------------------------------------------|------------------------------|-----------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| <input type="checkbox"/> Less than actual requirement | | | | | | |
| <input type="checkbox"/> More than actual requirement | | | | | | |
| <input type="checkbox"/> As per our demand | | | | | | |
| <input type="checkbox"/> There was absolutely no requirement | | | | | | |

14- Do you have any specific comments to improve the safe blood kits delivery and receipt process?

| Comments |
|----------|
| |

Note: The following section applies to Service Delivery Points Only

Service Delivery Points Only

15- Have you started using safe blood kits procured by the USAID DELIVER PROJECT?

- Yes, all of the commodities** *[Observe that all commodities being used and fill out table Q.15; take pictures (if possible), skip Q.16]* 
- Yes, some of the commodities** *[Ask names of the commodities, observe that the commodity provided is being used and fill out table Q.15; take pictures]* 
- No**

Table Q.15. Kits and Commodity Usage

| SN | Testing kits and Commodities | Quantity Used (✓ / ✖) (As per the interviewee response) |
|-----------|-------------------------------------|--------------------------------------------------------------------------|
| 1 | HBS (40 tests/kit)—Rapid | |
| 2 | HCV(40 tests/kit)—Rapid | |
| 3 | HIV(100 tests/kit)—Rapid | |
| 4 | HBS (96 tests/kit)—ELISA | |
| 5 | HCV (96 tests/kit)—ELISA | |
| 6 | HIV (96 tests/kit)—ELISA | |

16- Why are the safe blood kits provided by the USAID DELIVER PROJECT not being used?*[Provide reason for each item based on interviewee response]*

Table Q.16. Commodities Not in Use

| SN | Commodities | Reason as informed by interviewee <i>[This is mandatory for each item]</i> |
|-----------|---------------------------|-----------------------------------------------------------------------------------|
| 1 | HBS (40 tests/kit)—Rapid | |
| 2 | HCV(40 tests/kit)-Rapid | |
| 3 | HIV(100 tests/kit)-Rapid | |
| 4 | HBS (96 tests/kit)- ELISA | |
| 5 | HCV (96 tests/kit)- ELISA | |
| 6 | HIV (96 tests/kit)- ELISA | |

Annex 3: Task Order Plan

USAID/Pakistan Monitoring and Evaluation Program

Safe Blood Transfusion Services Program of Pakistan

Task Order Plan (TOP) # 38

- I. **USAID TOP Manager:** John Eyres, Deputy Director, Health Office
- II. **MSI TOP Manager:** Ahmed S. Shaikh, MEP- Director, Monitoring
Sarah Khokhar, MEP - Relationship Manager, Health
- III. **USAID/Pakistan Unit:** Health Office
- IV. **Start and End Dates:** February 1, 2013-July 15, 2013.
- V. **Purpose**

USAID has requested MSI to verify that USAID-funded medicines and commodities have reached the provincial, regional and district hubs from the central hub in Islamabad according to the agreed arrangements.

VI. Activities and Worksites

The USAID-funded Health Supplies Distribution Project known as USAID | DELIVER PROJECT started in August 2009. The project focuses on improving and enhancing Government of Pakistan's in-country distribution and health commodity supply chains. Implemented by John Snow, Inc., this project aims to help the Planning Commission of Pakistan, Provincial and Regional Departments of Health and non-government organizations etc. to determine the correct amount of health commodities to order each year, establish a modern storage and tracking system, and improve the distribution system throughout the country. It also aims to ensure multi-level coordination on the delivery of health commodities.

Under the DELIVER project, HIV and hepatitis testing kits are being supplied to the blood banks operated under respective Department of Health programs. The project's interventions focus on two key objectives: 1) improving the performance of the health system by redressing weak supply management systems, and 2) improving the availability of hepatitis & HIV testing kits in the country. This is being achieved by working in partnership with the relevant government departments to control the spread of hepatitis & HIV in Pakistan.

In addition to purchasing and supplying the commodities, DELIVER is responsible for assisting with tracking of commodities to the provincial hubs. (See Annex I for lists of kits purchased and provincial consignees.) The provincial hubs are responsible for distribution of test kits to the blood banks in the districts. A detailed distribution plan for the first and second tranche of the consignment is attached in Annex II.

The Monitoring and Evaluation Program (MEP) monitors will visit the Safe Blood Transfusion Program in Islamabad and six provincial distribution centers (one of the provinces has 2 hubs hence the total number of visits would be 7). MEP monitors will also visit approximately 50% of the 39 blood banks at the district level, or 20 site visits. The total number of monitoring visits will be to 28 sites. Since testing associated with the Safe Blood Transfusion Program is very sensitive, services are not available beyond district level blood banks and treatment centers.

| Safe Blood Transfusion Program At Islamabad | Provincial/ Regional Hubs | District Level Sites | Hospitals/BHUs | Total Sites Visited |
|---------------------------------------------|---------------------------|-------------------------------|----------------|---------------------|
| 1 (100%) | 7 (100%) | 20 of 39 blood banks (50%) | - | 28 |

The kits requiring cold storage are kept in the EPI warehouse in the main NIH building premises. Some rapid kits are also stored in the office of the Safe Blood Transfusion program as well as at the UPS warehouse. The kits are distributed in Islamabad (public and private sector) by the former.

The kits are distributed to the provinces through UPS courier services directly from Islamabad to the health departments and individual blood banks (public and private) in the provinces and regions. The health departments also distribute the kits to public sector blood banks in the districts.

The MEP will engage its staff to verify receipt of all commodities in the main hub in Islamabad, the stores of the Provincial Blood transfusion program / Health Directorate in Punjab, Sindh, Baluchistan, FATA, GilgitBaltistan, and AJK (8 stores in all) and 20 blood banks. The list of commodities is found in Table A. The distribution of commodities by area is found in Annex II.

The teams will examine stock registers, and use observation checklists for physical verification and photography to confirm receipt of supplies.

The tasks for the assignment include:

- Meet with DELIVER team and USAID to discuss the monitoring plan/visits and obtain letters of introduction for the central and regional hubs along with contact information for monitoring visits
- Conduct initial visits to the Safe Blood Transfusion Program
- Develop a notification procedure for contacting Safe Blood Transfusion Services Program and other blood transition centers about the monitoring visits
- Design survey instruments (verification checklists and interview guidelines)
- Develop data collection plan
- Pre-test survey instruments and finalize instruments
- Debrief with USAID staff on pre-test
- Deploy field teams for data collection
- Develop tabulation plan
- Data entry and cleaning
- Analysis and report writing
- Debrief with USAID

VII. Deliverables

- Mid-term Debrief with USAID
- Findings Debrief with USAID
- Draft Verification Report
- Verification Report

VIII Schedule

| Task | Dates | Revised Dates |
|------------------------------------------------------------|----------------------------|-----------------------|
| Preparation, document review and initial visits | February 1-March 1, 2013 | |
| Drafting of instruments | February 25- March 8, 2013 | |
| Pre-test and sharing of instruments with USAID | March 14-22, 2013 | |
| Data collection , cleaning and entry | April 6- May 7, 2013 | April 9- May 31, 2013 |
| Mid-term Debrief with USAID | on/about April 22, 2013 | May 14, 2013 |
| Findings Analysis and report writing | May 7-31, 2013 | May 31-June 14, 2013 |
| Debrief with USAID | on/about May 16 2013 | On/about June 7, 2013 |
| Submission of draft verification report to USAID | May 31, 2013 | June 14, 2013 |
| Comments received from USAID (2 weeks) | June 14, 2013 | June 28, 2013 |
| Submission of final verification report to USAID (2 weeks) | June 30, 2013 | July 15, 2013 |

IX. International Travel Information (On or About)

N/A

X. Staffing

This task order plan will involve MEP monitoring staff

XI. Anticipated Level of Effort

| Name of Person | Prep-Meetings | Prep-Travel | Prep-Site Visit | Travel | IPM - Instruments | Field-Testing | Code book | Training | Travel - Monitoring Visits | Monitoring Visits | Database | Data Entry | Report Writing | Mgt | TOTAL |
|---------------------------|---------------|-------------|-----------------|--------|-------------------|---------------|-----------|----------|----------------------------|-------------------|----------|------------|----------------|-----|-------|
| Jill Tirnauer | 1 | | | | | | | | | | | | 2 | 1 | 4 |
| Ahmed Shaikh | 2 | 2 | 2 | 1 | 1 | | 1 | | | | | | | 3 | 12 |
| MEP Staff Team Leader | 2 | | 2 | | 1 | 2 | 2 | | 9 | 0 | 1 | 2 | 5 | 6 | 42 |
| MEP Staff (Sindh, Blotch) | | | 2 | | 1 | 2 | | 1 | 2 | 6 | | | | | 14 |
| MEP Staff (Islamabad) | | | | | | | | 1 | 0 | 4 | | | | | 5 |
| MEP Staff (KP)* | | | | | | | | 1 | 7 | 7 | | | | | 15 |
| Wisal Muhammad (IT) | | | | | | | | | | | 4 | | | | 4 |

Note: Travel is based on estimates.

*Covering GB and AJK as well

XI IMEC Partner Implementing the TOP

Management Systems International

XII Attached Reference Documents

Annex I: Lists of Drugs Purchased and Provincial Consignees

Annex II: Distribution Plan for Screening Kits

XIII Authorizations

The undersigned hereby authorize the following items checked below for the Task Order Plan (TOP) described above (Cross out the items that do not apply):

- Completion of the TOP, as described above;
- TOP staffing, as described above.

COR to either sign below or indicate “approve” on a return email]

Contracting Officer’s Representative (COR)
Sherry Ward, or designate

Date

TOP ANNEXI: List of Drugs Purchased and Provincial Consignees

Table A- Explains the type of kits/drugs planned to be supplied to blood banks by quantity.

| Sr. | Types of Kits/Drugs | Quantity |
|-----|-------------------------------------------------------|-------------|
| 1 | Hepatitis, HCV, ELISA Kit, 96 Tests | 639 Kits |
| 2 | HIV 1/2, Ag-Ab, ELISA Kit, 96 Tests | 639 Kits |
| 3 | Hepatitis, HBsAg, ELISA Kit, 96 Tests | 639 Kits |
| 4 | HIV 1+2, Determine Complete Kit, 100 tests | 4,484 Kits |
| 5 | Hepatitis, HBsAg, Rapid Test kit, 40 tests | 11,206 Kits |
| 6 | Hepatitis, HCV, Rapid Device Serum/Plasma/Whole Blood | 11,206 Kits |

Table B-Consignees receiving drugs/kits in relation to table A by province/area.

| Type of Kits/Drugs | Consignee | Province/Area |
|--------------------|----------------------------------------------------------------------------|-----------------------|
| All | Directorate General Health Services 24 Cooper Rd, Lahore, | Punjab |
| All | Provincial Blood Transfusion Program, H#15, St. N, DHA Karachi | Sindh |
| All | Provincial Blood Transfusion Program, Hayatabad Medical Complex, Peshawar | KP |
| All | Provincial Transfusion Program, DHQ Hospital, Gilgit | Gilgit |
| All | Pak Red Crescent Society, PRCS sector, H8 Islamabad | Red Cross |
| All | National Blood Transfusion Program, H# 4/B, St#17, F8/3, Islamabad | ICT PIMS & Polyclinic |
| All | Provincial Blood Transfusion Program, Health services, Block H, AJK Sect., | AJK |
| No. 4,5,6 | Provincial Blood Transfusion Program, H#7, BDA colony, Kawari Rd, Quetta | Balochistan |
| No. 4,5,6 | Health Directorate, FATA Sect. Wasik Rd, Peshawar | FATA |

TOP ANNEX II: DISTRIBUTION OF FIRST AND SECOND INSTALLMENT OF SAFE BLOOD KITS

DISTRIBUTION OF BLOOD BANKS/HOSPITALS

A)

| S # | Name of Hospitals/stores | Rapid Devices (Kits) | | | ELISA Kits | | | Received By |
|-----|----------------------------------------------|----------------------|----------------|----------------|----------------|----------------|----------------|---------------------------------------------------------------------------------------------------|
| | | HBV (40 tests) | HCV (40 tests) | HIV (96 tests) | HBV (96 tests) | HCV (96 tests) | HIV (96 tests) | |
| 1. | Punjab | 3500 | 3500 | 1400 | 208 | 208 | 208 | Health Education Officer, DGHS, Punjab, Lahore. |
| 2. | Sindh | 2565 | 2565 | 1036 | 46 | 46 | 46 | Store Keeper, Hepatitis Prevention Control Programme, Sindh Chief Minister Initiative, Hyderabad. |
| 3. | JPMC | 60 | 60 | 28 | 100 | 100 | 100 | Assistant Professor, In charge Blood Bank, JPMC, Karachi.(021-9201300-27), 03232108790 |
| 4. | Balochistan | 84 | 84 | 34 | 0 | 0 | 0 | Store In charge, Health Directorate, Balochistan, Quetta. |
| 5. | Institute of Kidney Diseases, Peshawar (KP) | 240 | 240 | 98 | 14 | 14 | 14 | Blood Bank Technician, IKD, Peshawar. |
| 6. | Government Maternity Hospital, Peshawar (KP) | 32 | 32 | 14 | 0 | 0 | 0 | Store Keeper, Govt. Maternity Hospital, Peshawar (0345-9114992) |
| 7. | Lady Reading Hospital, Peshawar (KP) | 375 | 375 | 150 | 20 | 20 | 20 | Store Keeper, LRH, Peshawar (Mob: 03229196102) |
| 8. | Khyber Teaching Hospital, Peshawar (KP). | 260 | 260 | 102 | 13 | 13 | 13 | Store Keeper, Khyber Teaching Hospital, Peshawar. |
| 9. | Hayatabad Medical Complex, Peshawar. (KP) | 250 | 250 | 100 | 13 | 13 | 13 | Lab. Technician, Pathology Department, HMC, Peshawar (9217141-46 ext 2059) 03329753448 |
| 10. | Memorial Hospital Kohat Road, Peshawar (KP) | 90 | 90 | 35 | 13 | 13 | 13 | Lab. Technician, NBM, Hospital, Peshawar. 03339182663 |
| 11. | Gilgit Baltistan | 125 | 125 | 50 | 13 | 13 | 13 | Store Keeper, DHQ Hospital, Gilgit 05811-920252, 920253 |
| 12. | AJK | 450 | 450 | 180 | 21 | 21 | 21 | Deputy Director, SBTP, AJK 05822-921329 (0345-8828289) |
| 13. | FATA | 600 | 600 | 240 | 0 | 0 | 0 | Director Health Services, FATA, Peshawar (091-9210212, 9212110) |

| | | | | | | | |
|--------------|-------------|-------------|-------------|------------|------------|------------|--|
| TOTAL | 8631 | 8631 | 3467 | 461 | 461 | 461 | |
|--------------|-------------|-------------|-------------|------------|------------|------------|--|

B) Kits Delivered by SBTP to Federal Hospitals & private sector

| S # | Name of Hospital | Rapid Devices (Kits) | | | ELISA Kits | | | Received By |
|----------------------------------------|---------------------------------------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------------------------------------------------------------------|
| | | HBV (40 tests/kit) | HCV (40 tests/kit) | HIV (96 tests/kit) | HBV (96 tests/kit) | HCV (96 tests/kit) | HIV (96 tests/kit) | |
| FEDERAL | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1. | PIMS | 10 | 10 | 4 | 10 | 10 | 10 | Lab. Technician, PIMS. |
| 2. | FGPC | 30 | 30 | 15 | 15 | 15 | 15 | FG Services Hospital, lbd (9209123) |
| 3. | CDA Hospital | 78 | 78 | 10 | 0 | 0 | 0 | Blood Bank, CDA Hospital, lbd (051-9221334-5) |
| 4. | AFIP | 1 | 1 | 1 | 1 | 1 | 1 | |
| 5. | Pakistan Red Crescent, lbd | 30 | 30 | 12 | 13 | 13 | 13 | Lab Assistant, PRCS, lbd (051 9250412) |
| PRIVATE HOSPITALS FOR FEDERAL | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6. | Kalsoom International Hospital, Islamabad | 30 | 0 | 12 | 0 | 0 | 0 | KIH, Islamabad 051-8441008 |
| 7. | Med-ICSI, Blue Area | 10 | 10 | 4 | 0 | 0 | 0 | Manager, Med-ISCI 0343-5338454, 03215145148 |
| 8. | International Islamic Medical Centre, IIMC. | 20 | 20 | 8 | 0 | 0 | 0 | |
| 9. | Bilal Hospital, Rawalpindi | 50 | 50 | 20 | 1 | 1 | 1 | Incharge BH, Rawalpindi (0321-5302771) |
| 10. | Pakistan Thalassemia Welfare Society (Regd), Rwp. | 30 | 30 | 12 | 0 | 0 | 0 | Secretary General, Pak TWS, Rwp 051-5951269, 0334-5116941) |
| 11. | Jamila Sultana Foundation, Rwp | 20 | 20 | 08 | 10 | 10 | 10 | Director, JSF, Rawalpindi 051-5960546, 5153335 |
| 12. | Burhani Blood Donors Welfare Association | 30 | 30 | 12 | 0 | 0 | 0 | |
| 13. | Burhani Blood Donors Welfare Association, Rwp | 13 | 13 | 05 | 08 | 08 | 08 | Secretary General, BBD Welfare Association, Rawalpindi (051-5112203) 03465000692 |
| 14. | Falah Foundation, Rawalpindi | 20 | 20 | 0 | 0 | 0 | 0 | President, Falah Foundation, Rawalpindi (0333-5176333) |
| PRIVATE HOSPITALS FOR PROVINCES | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 15. | Citi Lab and Blood Bank, | 10 | 10 | 4 | 0 | 0 | 0 | Director Lab. Citi Lab & BB, Layyah |

| | | | | | | | | |
|--------------|---------------------------------------------------------------|------------|------------|------------|-----------|-----------|-----------|-------------------------------------------------------------------------------------------------|
| | Tehsil Karor, District Layyah | | | | | | | (060-6840962, 0334-8760962) |
| 16. | Paras Blood Bank, Tehsil Digri, Mir PurKhas (Sindh) | 5 | 5 | 2 | 0 | 0 | 0 | Clinical Pathologist, Paras Blood Bank, Digri, (0233-869345), 0300-3323221 |
| 17. | Al-Shifa Blood Bank, Mirpur (AJK) | 5 | 5 | 2 | 0 | 0 | 0 | Mirpur. AK. 05827-444114, 0333-9531566 |
| 18. | Waqar Lab & Blood Bank, District TT Singh | 5 | 5 | 2 | 0 | 0 | 0 | Lab. Technician, Waqar Lab and Blood Bank, District TT Singh (046-3416341, 03006513496) |
| 19. | Mehran Clinical Lab and Blood Bank, Rajana .TT Singh | 5 | 5 | 2 | 0 | 0 | 0 | Clinical Lab and Blood Bank, Rajana, District TT Singh 0301-7291218, 0334-6664064) |
| 20. | Hamza Foundation Welfare Hospital & Blood Services, Peshawar. | 60 | 60 | 24 | 0 | 0 | 0 | Founder/ Chairman, Hamza Foundation Welfare Hospital, Peshawar 091-5845553 (0321-9006003) |
| 21. | Ali Zaib Blood Transfusion Services, Faisalabad. | 70 | 70 | 28 | 0 | 0 | 0 | Director , Ali Zaib Blood Transfusion Services, Faisalabad, (041-8715997, 8722090) 0321-8666198 |
| 22. | Sundas Foundation, Lahore. | 30 | 30 | 12 | 0 | 0 | 0 | Administrator, SF, Lahore. (042-37568603) |
| 23. | Muhammadi Blood Bank, Karachi | 30 | 30 | 12 | 0 | 0 | 0 | CEO, MBB, Karachi (0321/0300 9254631) |
| 24. | Kashif Iqbal Thalassemia Care Centre, Karachi | 30 | 30 | 12 | 0 | 0 | 0 | Lab & Blood Bank Manager, KIT Centre, Karachi, 0333-3207360 021-34981190, 34814418 |
| 25. | Al-Mehboob Blood Bank, Barkhan, Balochistan. | 10 | 10 | 04 | 0 | 0 | 0 | CE, Al-Mehboob Blood Bank, BarkhanBalochistan (03342414591. 03003872799) |
| 26. | Zubeda Khaliq Memorial Free Hospital Sermik, Skardu. | 30 | 30 | 14 | 0 | 0 | 0 | |
| 27. | Haidri Blood Bank and Welfare Society | 30 | 30 | 14 | 0 | 0 | 0 | President Haidri Blood Bank and WS, Parachinar 0926-310016 (021-34589961-62) |
| TOTAL | | 692 | 692 | 255 | 58 | 58 | 58 | |

C) Kits Delivered & Balance (out of 1st installment):

| S# | Name of Hospital | Rapid Devices (Kits) | | | ELISA Kits | | |
|-----------------------------------------------|---------------------------|----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | HBV (40 tests) | HCV (40 tests) | HIV (96 tests) | HBV (96 tests) | HCV (96 tests) | HIV (96 tests) |
| 1. | Kits delivered as per "A" | 8631 | 8631 | 3467 | 461 | 461 | 461 |
| 2. | Kits delivered as per "B" | 692 | 692 | 255 | 58 | 58 | 58 |
| Total | | 9323 | 9323 | 3722 | 519 | 519 | 519 |
| Quantity of 1st Installment | | 11206 | 11206 | 4484 | 639 | 639 | 639 |
| Remaining | | 1,883 | 1,883 | 762 | 120 | 120 | 120 |

**DETAIL OF SCREENING KITS RECEIVED FROM USAID
(2nd Installment – August, 2012)**

A) 2nd Installment Placed at UPS Where house and EPI Cold Store

| | Rapid Devices (Kits) | | | ELISA Kits | | |
|---------------------------------------------------|----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | HBV (40 tests) | HCV (40 tests) | HIV (96 tests) | HBV (96 tests) | HCV (96 tests) | HIV (96 tests) |
| Quantity of 2 nd Installment | 11206 | 11206 | 4484 | 639 | 639 | 639 |
| Remaining Kits out of 1 st installment | 1,883 | 1,883 | 762 | 120 | 120 | 120 |
| Total | 13,089 | 13,089 | 5246 | 759 | 759 | 759 |

- | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> - HBV Rapid test kits (40 tests), lot No. 2012052101 & expiry date 05/2014 - HCV Rapid test kits (40 tests), lot No. 2012052102 & expiry date 05/2014 - HIV Rapid test kits (40 tests), lot No. 39252K100 & expiry date 4/2/2013 |
| <ul style="list-style-type: none"> - HBV ELISA test kits (100 tests), lot No. 102 & expiry date 16/5/2014 - HCV ELISA test kits (100 tests), lot No. 101 & expiry date 26/3/2014 - HIV ELISA test kits (100 tests), lot No. 86 & expiry date 15/5/2014 |

B) Kits Delivered by M/S Marshal Packers & Movers, Islamabad

| S# | Name of Hospital | Rapid Devices (Kits) | | | ELISA Kits | | | Received By and Contact No. |
|-----|-----------------------------------------|----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | HBV (40 tests) | HCV (40 tests) | HIV (96 tests) | HBV (96 tests) | HCV (96 tests) | HIV (96 tests) | |
| 14. | Punjab | 5,760 | 5,760 | 2,313 | 300 | 300 | 300 | <ul style="list-style-type: none"> • Senior Clark, DGHS, Lahore, Contract No 03234690903, Received rapid kits on 5/1/2013 • SK, DGHS, Lahore, Contract No 03234014628, Received Elisa kits on 11/1/2013 |
| 15. | Sindh | 3,836 | 3,836 | 1,536 | 74 | 74 | 74 | Store Keeper, Hepatitis Prevention & Control Programme, Sindh, Hyderabad, Contract No 022-2671693, Received rapid kits on 7/1/2013 |
| 16. | JPMC | 0 | 0 | 0 | 160 | 160 | 160 | Assistant Professor, JPMC, Karachi (Contract No. 9201300-27 & 0323-2108790) Elisa Kits received on 15.1.2013 |
| 17. | Institute of Kidney Diseases, Peshawar | 250 | 250 | 100 | 20 | 20 | 20 | <ul style="list-style-type: none"> • Lab Technician, IKD, Peshawar (Contract No. 091-927262, 0345-9090639. Rapid kits received on 5.1.2013. • , Lab. Technician, IKD, Peshawar (Contract No. 091-927262). Elisa kits received on 10.1.2013 |
| 18. | Government Maternity Hospital, Peshawar | 60 | 60 | 24 | 0 | 0 | 0 | GMH, Peshawar (Contract No. 2216639, 2215176). Rapid kits received on 5.1.2013. |
| 19. | Lady Reading Hospital, Peshawar | 480 | 480 | 0 | 0 | 0 | 0 | SK, LRH, Peshawar, Contract No. 03005960379). Rapid kits received on 5.1.2013 |
| 20. | Khyber Teaching Hospital, Peshawar. | 360 | 360 | 0 | 0 | 0 | 0 | KTH, Peshawar, (Contract No. 0333-9145764). Rapid kits received on 5.1.2013. |
| 21. | Hayatabad | 0 | 0 | 0 | 20 | 20 | 20 | Lab. Technician, HMC, Peshawar (Contract No. |

| | | | | | | | | |
|----------------------------------|---------------------------------------------------------------|---------------|---------------|--------------|------------|------------|------------|------------------------------------------------------------------------------------------------------------------------------------|
| | Medical Complex, Peshawar. | | | | | | | 03000700515. Elisa kits received on 10.1.2013 |
| 22. | Memorial Hospital Kohat Road, Peshawar | 100 | 100 | 40 | 0 | 0 | 0 | Lab. Technician, NBMH, Pwr Contract no. 091-9211468 Rapid kits received on 5.1.2013 |
| 23. | Balochistan | 190 | 190 | 76 | 0 | 0 | 0 | Lab. Assistant, Bolan Medical College Hospital, Quetta. Contract no. 9213032 ext. 347 & 339 Rapid kits received on 16.1.2013 |
| 24. | GilgitBaltistan | 225 | 225 | 90 | 20 | 20 | 20 | The Deputy Director, Health Services, GilgitBaltistan Contract No. 05811-920677 Rapid & Elisa kits received on 23.1.2013 |
| 25. | FATA | 708 | 708 | 283 | 0 | 0 | 0 | Store Keeper, DHS, FATA Contract No. 03339363071 Rapid kits received on 9.1.2013 |
| 26. | AJK | 530 | 530 | 212 | 30 | 30 | 30 | Deputy Director, BTS, AJK Contract no. 0582-2921329 Rapid & Elisa kits received on 18.1.2013 |
| 27. | Hamza Foundation welfare Hospital & Blood Services, Peshawar. | 0 | 0 | 0 | 30 | 30 | 30 | Chairman Hamza Foundation, Contract No. 0321-9006003 Elisa kits received on 10.1.2013 |
| 28. | Burhani Blood Bank &Thalassemia Centre, Karachi | 25 | 25 | 10 | 20 | 20 | 20 | Supervisor, BBB, Karachi Contract No.0321-2820725 Rapid & Elisa kits received on 28.1.2013 |
| 29. | Pashtoonkhwa Blood Bank, Quetta. | 120 | 120 | 48 | 30 | 30 | 30 | Karachi Contract No. 0300-3870315 Rapid & Elisa kits received on 22.1.2013 |
| 30. | Muhammadi Blood Bank, Karachi | 0 | 0 | 0 | 20 | 20 | 20 | Lab Incharge, MBB, Karachi Rapid & Elisa kits received on 15.1.2013 |
| 31. | Federal Polyclinic Services Hospital, lbd | 90 | 90 | 36 | 35 | 35 | 35 | , BBO, FGSH, lbd Contract No. 9209123 Rapid & Elisa kits received on 8.1.2013 |
| 32. | Ahmed Hospital, Rawalpindi | 10 | 10 | 4 | 0 | 0 | 0 | Director, Ahmed Hospital, 0321-504844 |
| 33. | Ali Zaib Blood Transfusion Services, Faisalabad. | 60 | 60 | 0 | 0 | 0 | 0 | |
| Total Kits delivered | | 12,804 | 12,804 | 4,772 | 759 | 759 | 759 | |
| Quantity of kits as per plan "A" | | 13,089 | 13,089 | 5,246 | 759 | 759 | 759 | |
| Balance | | 285 | 285 | 474 | 0 | 0 | 0 | |

Annex 4: Locations for Monitoring Visits

| Sr# | MONITORING SITES | CITY | PROVINCE |
|-----------------------------|----------------------------------------------|--------------------|------------------|
| Federal and Provincial Hubs | | | |
| 1 | Safe Blood Transfusion Program | Islamabad | ICT |
| 2 | Hepatitis Control Program | Lahore | Punjab |
| 3 | Hepatitis Program | Hyderabad | Sindh |
| 4 | Central Blood Program | Muzaffarabad | AJK |
| 5 | Safe blood program | Gilgit | Gilgit/Baltistan |
| 6 | Safe Blood Program for FATA | Peshawar | KP |
| 7 | Safe blood Program | Quetta | Baluchistan |
| Blood Bank | | | |
| 1 | CDA Hospital | Islamabad | ICT |
| 2 | Kaloom International Hospital | Islamabad | ICT |
| 3 | Pakistan Red Crescent Islamabad | Islamabad | ICT |
| 4 | Ahmed Hospital | Rawalpindi | Punjab |
| 5 | Ali Zaib Blood Transfusion Services | Faisalabad | Punjab |
| 6 | Mehran Clinical Lab and Blood Bank | Toba Tek Singh | Punjab |
| 7 | Sundas Foundation | Lahore | Punjab |
| 8 | Hayatabad Medical Complex | Peshawar | KP |
| 9 | Khyber Teaching Hospital | Peshawar | KP |
| 10 | Memorial Hospital Kohat Road | Peshawar | KP |
| 11 | Kashif Iqbal Thalassemia Care Center | Karachi | Sind |
| 12 | Burhani Blood Bank and Thalassemia Center | Karachi | Sind |
| 13 | Muhammadi Blood Bank | Karachi | Sind |
| 14 | Zubeda Khaliq Memorial Free hospital Skermik | Skardu | GilgitBaltistan |
| 15 | Al-Shifa Blood Bank | Mirpur | AJK |
| 16 | Pashtoonkhwa Blood Bank | Quetta | Balochistan |
| 17 | Burhani Blood Donors Welfare Association | Rawalpindi | Punjab |
| 18 | Falah Foundation | Rawalpindi/Chakwal | Punjab |
| 19 | FGPC | Islamabad | ICT |
| 20 | Pakistan Institute of Medical Sciences | Islamabad | ICT |
| 21 | Bolan Medical College | Quetta | Balochistan |

Annex 5: Expired Kits by Site

| SITE | RAPID | | | ELISA | | |
|----------------------------------------------|---------|---------|----------------------------------------|---------------------------------|---------|---------|
| | HBsAg | HCV | HIV | HBsAg | HCV | HIV |
| | Expired | Expired | Expired | Expired | Expired | Expired |
| Safe Blood Transfusion Program Islamabad | | | | | | |
| Hepatitis Control Program Sindh | | | 1503 (May 2013) | | | |
| Hepatitis Program Punjab | | | Expired in March 2013 and disposed off | | | |
| Central Blood Program AJK | | | 40 (May 2013) | 23 (April 2013) | | |
| Safe blood program Gilgit | | | 11 (May 2013) | | | |
| Safe Blood Program for FATA | | | 49 (May 2013) | | | |
| Safe blood Program for Balochistan | | | 34 (February 2013) | | | |
| CDA Hospital | | | 4 (February 2013) | | | |
| Kalsoom International Hospital | | | | | | |
| Pakistan Red Crescent Islamabad | | | 6 (February 2013) | 4 (April 2013) | | |
| Ahmed Hospital | | | | | | |
| Burhani Blood Donors Welfare Association Rwp | | | | 5 (April 2013) | | |
| Falah Foundation | | | | 3 ¹² (April 2013) | | |
| FGPC | | | 19 (February 2013) | 7 (April 2013) | | |
| Pakistan Institute of Medical Sciences | | | | | | |
| Ali Zaib Blood Transfusion Services | | | | | | |
| Mehran Clinical Lab and Blood Bank | | | 11 (February 2013) | | | |
| Sundas Foundation | | | | | | |
| Hayatabad Medical Complex | | | | | | |

¹² Received from Burhani Blood Donors and Welfare Association in Rawalpindi.

| SITE | RAPID | | | ELISA | | |
|-------------------------------------------|--------------------|---------|-----------------------|-------------------|---------|---------|
| | HBsAg | HCV | HIV | HBsAg | HCV | HIV |
| | Expired | Expired | Expired | Expired | Expired | Expired |
| Khyber Teaching Hospital | | | | | | |
| Memorial Hospital Kohat Road | | | 34 (February 2013) | | | |
| Kashif Iqbal Thalassemia Care Center | | | 6 (February 2013) | | | |
| Burhani Blood Bank and Thalassemia Center | | | 8 (May 2013) | 9 (April 2013) | | |
| Muhammadi Blood Bank | | | | 5 (April 2013) | | |
| ZubedaKhaliq Memorial Free hospital | | | 9 (February 2013) | | | |
| Al-Shifa Blood Bank | | | 2 (May 2013) | | | |
| Pashtoonkhwa Blood Bank | 28 (April 2013) | | 6 (February 2013) | | | |
| Bolan Medical College | | | 7 (May 2013) | | | |