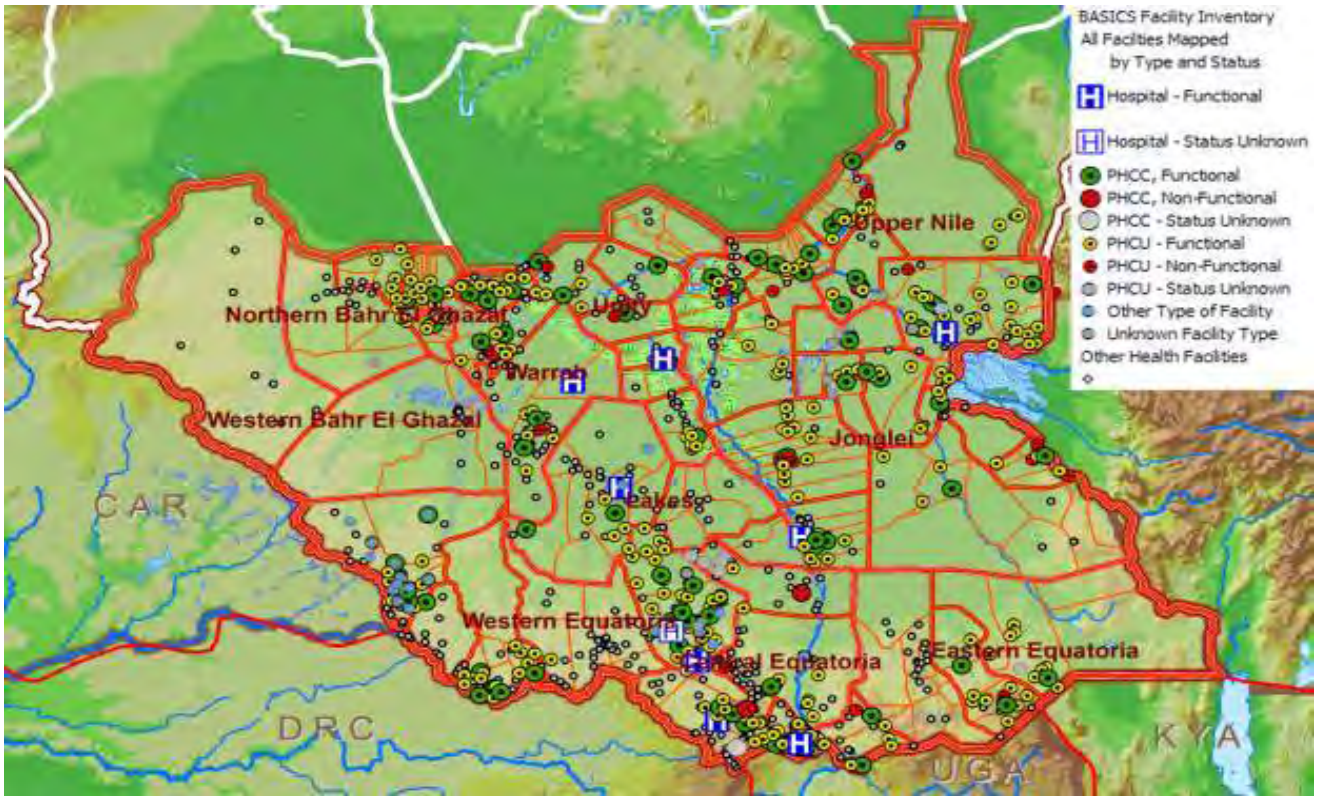
The Health Sector Relief to Development Transition Gap Analysis: Southern Sudan

March 2008



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EXECUTIVE SUMMARY

Purpose

The United States Agency for International Development's Office for Foreign Disaster Assistance (USAID/OFDA) commissioned USAID's BASICS Project to develop a process and key evidenced-based resources to support the Government of Southern Sudan and its health partners identify gaps and minimize the decline of health services during the relief to development transition period.

Objectives of the transition gap analysis:

1. Consolidate a database of health facilities to include information about US Government donors, implementing partners, and phase out of assistance.
2. Complete an analysis of the database and represent the findings through tables, charts and maps, to demonstrate potential transition gaps.

Facility transition database and general findings

BASICS developed a health facility transition database using information gathered from US Government-funded health implementing partners. The database contains information about 451 facilities (409 functional facilities) in Southern Sudan (estimated 44% of all functional facilities in the region), including information about almost 100% of USAID-funded health facilities. Based on information contained in the database, it is estimated that USAID funds over 40% of all functional facilities in Southern Sudan. Data variables consist of facility name, location (GPS points are available to varying degrees of precision), operational status, award end date, donor, and implementing partner. BASICS also requested information about services, equipment/supplies, and human resources. However, much of this information was not available and is less reliable.

The transition database examines facility-level networks as opposed to a set of individual programs to understand the impact of facilities on the health system and better define the role of facilities in the context of an emerging state and county focused system.

Facility mapping

BASICS developed digital maps of the majority of facilities in the database (98%) based on GPS coordinates. Coordinates reflect varying degrees of precision and are based on facility, town, payam, and county level GPS points. The maps also portray facility-level implementing partners, donors, award end dates, and facility type and operational status. BASICS also designed a series of charts and graphics illustrating variables such as facility type, operability, donor and implementing partner. Examples of these products are contained in the annexes of this report.

Future database use

1. Provide a foundation for upcoming MOH-directed facility mapping initiative.
2. Serve as a health sector planning tool through the analysis of existing strengths, gaps, and resources in an effort to preserve access to care and minimize the deterioration of health indicators in Southern Sudan
3. Provide initial evidence-base for future health sector transition activities, such as the Transition Workshop, and the development of a national health sector implementation plan, through the provision of sector-wide data about service delivery and funding.

Purpose of report and informational parameters

This report details the database development process, data collection parameters and methods, the mapping process, limitations, data analysis findings, and recommendations. There are several informational parameters that must be considered to ensure accurate interpretation of the data.

1. The majority of database entries correspond to facilities supported by the USG. Therefore, the database does not provide a complete listing of facilities supported by other donors or a comprehensive understanding of the health sector funding gap in Southern Sudan.
2. The information contained in the database is based on 2007 funding levels does not take into consideration contracts awarded with 2008 funds. It is possible that the resource gap is less critical than portrayed in this report because many implementing partners will continue to receive funding in 2008.

Health sector resource gap

The analysis from the database highlights a potential resource gap over the next few years that could threaten existing health care access. From a review of the database, BASICS found that a large majority of current awards (77%) are scheduled to end by June 2008. However, it is likely that many of the awards will be extended by 2008 funding and this is not reflected in the current version of the database. It is important to note that the health sector landscape is dynamic and changes are constant. The above figure portrays a static picture as of September 30, 2007. Many awards due to end could be renewed and would thereby mitigate the scenario described above. However, because donor contracts are finite and the post conflict transition period could lead to a shift in priorities, it is important to examine and understand this scenario so that the Government of Southern Sudan and health sector partners can collaborate and avoid a potential post conflict transition funding crisis that threatens health care access for the most underserved.

Recommended next steps

1. Expand the database to include all facilities in Southern Sudan. This will provide a more comprehensive understanding of the Southern Sudan health sector and the potential resource gap.
2. Gather more precise facility location information using updated, established geographical information and facility-level GPS points.
3. Continually update the database to ensure that the information reflects the actual resource gap and the current contract end dates. Create updated maps demonstrating actual and anticipated funding levels over time.
4. Create a detailed donor and NGO-specific funding timeline to provide additional insight about contract end dates and the need to engage additional resources.
5. Develop a collaborative, operational transition framework (national health sector implementation plan) through the Transition Workshop with heavy emphasis on maintaining resources for the health sector to ensure that funding for health services is preserved in the post-conflict period.

I. OVERVIEW

The health system in Southern Sudan has been seriously compromised by decades of conflict and neglect. Prior to the war, isolation prevented the establishment of an effective, accessible health system and the recent two decades of conflict rendered the delivery of health services to the majority of the population almost impossible. The UN estimates that NGOs, financed by international donors, are responsible for 86% of all health care delivery in Southern Sudan. There are an estimated 750-800 functional health facilities in Southern Sudan (see Database section, page 3). Despite this, only an approximate 25 to 30% of the population has even minimal access to health care. As a result, morbidity and mortality burdens are among the highest in the world throughout the 10 Southern Sudanese states and the 3 Areas; Southern Kordofan, Abyei, and Southern Blue Nile. The infant mortality rate is estimated at 150/1,000 live births and the under-five mortality rate is 250/1,000 per live births (Joint Assessment Mission -- JAM).

For decades, Southern Sudan has depended on humanitarian relief donors to support the delivery of health services. However, with the signing of the Comprehensive Peace Agreement (CPA) and the establishment of the Government of Southern Sudan (GOSS), funding for humanitarian relief is decreasing while resources for longer-term development assistance are growing. The transition from relief to development presents a challenge to countries recovering from conflict, as populations are suddenly faced with the potential for reduced access to vital health services that had previously been supported by humanitarian relief agencies.

The goal of humanitarian assistance—to provide life-saving support to the most vulnerable during complex emergencies—differs significantly from that of development—to ensure the establishment of sustainable systems to enable countries to provide for their own needs. Bridging the gap between the two has long been a challenge for providers of both types of assistance. If relief funding declines before development programs are established, an interruption in services could potentially harm populations in critical need.

The BASICS Project developed an approach to assess a similar post-conflict "transition gap" in Liberia to minimize the decline of health services and strengthen the health system, with a special focus on assessing its impact on mothers and children, the most vulnerable members of the community. The US Government's Office for Foreign Disaster Assistance (USAID/OFDA), the humanitarian assistance arm of the United States Agency for International Development (USAID), requested BASICS assistance in undertaking a similar effort in Southern Sudan. The purpose of this analysis is to create a data-driven platform on which to understand the potential implications of the shift from relief to development in the health sector.

BASICS built on existing data and used information gathered from US Government-funded health implementing partners to develop a facility transition database. The data was analyzed to delineate the US Government's (USG)[1] contribution to the health system in Southern Sudan and support strategic planning priorities. The analysis revealed a potential resource gap that could threaten existing health care

[1] Note that in this case USG donors include primarily USAID/DA through their SHTP Project and USAID/OFDA. The BASICS database does not have a complete listing of all of the State Department's Bureau for Population and Refugee Migration (BPRM) facilities.

access. Outcomes include an analysis of the relief to development resource gap and a geographic mapping of health facilities in Southern Sudan.

The process developed here and the outcome of the analysis can be used to build a post conflict health transition framework to preserve access to care and minimize the deterioration of health indicators in Southern Sudan. Finally, the database can serve as a baseline for MOH-directed efforts to maintain updated health sector information, and eventually, once sufficient facility location information is acquired (see Mapping Precision section, page 6), the database can serve as a health sector planning tool.

II. OBJECTIVES

The objectives of the transition gap analysis are to:

a. Consolidate a database of health facilities to include information about US Government donors, implementing partners, and phase out of assistance.
b. Complete an analysis of the database and represent the findings through tables, charts and maps, to demonstrate potential transition gaps.

III. METHODOLOGY

A. Data Collection

Facility Inventory Tool
The BASICS team adapted the facility inventory tool used in Liberia to address the local context in Southern Sudan. Like other mapping tools, this survey tool examines facility operations and service provision. However, BASICS framed information collection around a set of public health significance criteria, such as service utilization and reach and USG (US Government) organizational priorities, such as reaching vulnerable populations. The tool also focused on gaps, such as funding, access to services and referral systems.

BASICS Southern Sudan Database information collection criteria:

a. Facilities funded by USAID/OFDA in Southern Sudan (7 out of the 10 states in Southern Sudan) as of September 30, 2007
b. Facilities funded by USAID/DA (Development Assistance) through the Southern Sudan Health Transformation Project (SHTP) in Southern Sudan as of September 30, 2007
c. Facilities supported by the State Department Bureau for Population and Refugee Migration (BPRM) as of September 30, 2007
d. USAID/DA and USAID/OFDA funded water projects, such as CRS (Catholic Relief Services)
e. Externally (outside USG) funded activities that are of particular interest for examining resource gaps, such as Medecins Sans Frontiers (MSF)

Data collection methodology
BASICS requested that all USG partners submit information about the facilities they currently support using USG (US Government) funds. Questionnaires were introduced to all USG partners during face-to-face meetings and then sent electronically with a corresponding Excel data string. Partners were asked to send completed surveys or Excel data strings via email or postal mail to BASICS team members.

Informational Interviews
BASICS conducted face-to-face interviews with almost all USG primary health service implementing partners (sub-grantees and local partners were not interviewed) and other health sector stakeholders

during two visits to Southern Sudan and Nairobi, Kenya. The BASICS Team also met with health partners, visited facilities and observed health service delivery in Juba and Lainya Counties in Central Equatoria State and Northern Bahr el Ghazal State. Health sector actors included officials from the central and state-level MOH, county-level health officials (County Medical Officers, County Health Teams, and County Commissioners), community leaders, health workers, donors, UN partners, bilateral funding mechanisms, and agencies involved in hospital administration.

Information verification and validation

BASICS used several verification and validation methods to check for internal consistency and enhance data quality. First, once all the information had been entered into the database, BASICS reentered a number of variables to check for data inputting errors. The data entry team found few errors attributed to data entry.

BASICS also conducted intensive follow up with partners and donors between October 2007 and March 2008 to clarify information and request additional or missing data to complete gaps and ensure that the data analysis team interpreted information correctly. During a second round of data collection in November 2007, BASICS received a significant number of additional facility-specific GPS coordinates that enhanced the precision of facility mapping. BASICS then reviewed and updated coordinates for 282 of the 494 records.

In addition, BASICS submitted draft maps and facility listings to USAID/DA and USAID/OFDA and requested that they identify discrepancies between the information on the maps and their own records so that those inconsistencies could be addressed.

Finally, as another means of validation, the BASICS Team visited 10 USAID/OFDA supported facilities and 3 non USG Government-funded facilities in November, 2007. The team verified USAID/OFDA-funded facility information by completing specific variables on the facility inventory survey for each of the 10 facilities visited, reviewing patient records and talking with facility staff. BASICS compared the information gathered by the BASICS Assessment Team during these facility site visits with the information submitted by corresponding implementing agencies and determined that there were some discrepancies. This finding was of concern to the BASICS team as they did not have the opportunity to validate all of the results and it potentially calls into question the accuracy of some of the information provided by implementing NGO partners. Note that discrepancies are common in resource constrained environments when data is collected through organization self reports.

Limitations

a. Information was only requested about USG-funded facilities. In some cases NGOs submitted information about facilities supported by non-USG donors, such as ECHO, Dfid, CHF (Common Humanitarian Fund), and MSF, and this information was included in the database. However, the majority of facility entries correspond to those supported by the USG and the database does not provide a comprehensive listing of facilities supported by other donors. As a result, the information from this database provides a comprehensive understanding of the funding gap among USG-funded facilities as opposed to all facilities in Southern Sudan.
b. As noted above, there is some concern about the reliability of the data given the discrepancies between the information collected by BASICS during the site visits and information submitted by

implementing NGOs. The assessment team also noticed during follow up data collection that conflicting information was sometimes received from NGOs about items on the facility survey. Throughout the process, steps were taken to ensure data quality, but given the circumstances, and resource constraints in particular, it is likely that some of the data reported by the sites, such as services offered, number of health workers, or service utilization, may be inaccurate. While discrepancies are common and expected among self reported data, the outcome of any data analysis should be interpreted with care. At the same time, the database does provide an important foundation for solid health sector mapping as it identifies the name and location of a significant number of facilities in Southern Sudan and this information has been checked against both donor and NGO records.

c. The information contained in the database reflects 2007 funding levels. Therefore, it does not take into consideration contracts awarded in 2008. It is possible that the resource gap is less critical than portrayed because for example, many USAID/OFDA funded facilities, will continue to receive funding in 2008.
d. BPRM supports NGOs to construct, rehabilitate, operate, and supply facilities in Southern Sudan. BASICS was unable to obtain a comprehensive listing of the names and specific locations (county or payam) of all facilities supported by the State Department. Therefore, BASICS was unable to determine what additional information was needed. As a result, the figure given above does not fully account for all USG supported facilities.
e. Information collection guidelines were provided within the body of the tool in the electronic format and via face to face interviews with NGO representatives. However, in many cases the NGO representatives with whom the BASICS team met did not complete the survey form.
f. It is important to state that, at this stage, the facility survey tool should not be considered a scientific instrument. It is not a clinical or administrative facility inspection report and its purpose is not to assess quality of services. In addition, the tool was not pre-tested in Southern Sudan prior to use in the field.

B. Database

BASICS collaborated with CHAS (Christian Health Association of Southern Sudan) in the initial defining of the database format and some key variables. By comparing the BASICS and MOH/CHAS facility listings, it was possible to estimate the number of operational facilities in Southern Sudan. As of November 26, 2007, the combined Southern Sudan facility listing from the BASICS and MOH/CHAS databases included 950 facility records. These records included facilities whose status was listed as functional, nonfunctional or unknown. It also included duplicate records for many facilities and records for some facilities that may be considered outside of Southern Sudan, e.g., in Blue Nile.

After removing duplicate records (based solely on removing records with the same facility name) it is estimated that there are around 826 unique facilities. This includes facilities whose functional status is listed as functional (742), non-functional (50) or unknown (34).

The significant majority of the information in the current BASICS database was gathered by BASICS from USG implementing partners and donors. In a few instances facility-level GPS coordinates were not provided by the USG implementing partner, but had been collected by CHAS. In these cases, GPS points collected by CHAS were included in the BASICS database. This includes GPS coordinates for 40 facilities (>9%).

Based on NGO and donor-provided information contained in the BASICS Database, USG supports at least 339 facilities functional facilities in Southern Sudan.

Table 1: USAID support to Southern Sudan facilities

USG Donor[2]	**Number of total facilities** *(estimated total in Southern Sudan based on CHAS/MOH and BASICS databases: **826**)*	**Number of functional facilities** *(estimated total in Southern Sudan based on CHAS/MOH and BASICS databases: **742**)*
USAID/OFDA (Humanitarian Assistance)	234	214
USAID (Development Assistance)	101	100
BPRM (State Department)[3]	4	2
TOTAL	339	316
Percentage of total estimated facilities	339/826 = 41%	316/742 = 42.5%

USAID/OFDA records for 2007 awards indicate support for 234 facilities. BASICS received completed surveys for 232/234 facilities with information about facility operations. Therefore, BASICS received information to varying degrees of detail for about 99% of these facilities. However, the facility names, locations, implementing partners, and donor of all 234 facilities are included in the database. Those without survey information are indicated by an NR (not received) in the survey number column. The information about these facilities was obtained from USAID/OFDA records. Due to the nature of fluctuating on-the-ground realities, it can be difficult to identify one specific facility funding source. Therefore, the actual number of USAID/DA-funded facilities is unclear. BASICS received completed information for 101 facilities whose funding is attributed to USAID/DA through SHTP. This closely approximates the estimated number of SHTP-supported facilities provided by USAID/DA.

The database provides a picture of the US Government's contribution to service delivery in Southern Sudan (mostly through USAID/DA and USAID/OFDA) and will serve as a tool for the USG to work with GoSS to develop a clear post-conflict funding strategy over the next several years. The transition database examines facility-level networks as opposed to a set of individual programs to understand the impact of facilities on the health system and better define the role of facilities in the context of an emerging state and county focused system.

The following will be required to ensure the transition database remains a relevant planning tool in the future:

[2] Note that in this case USG donors include primarily USAID/DA through their SHTP Project and USAID/OFDA. BASICS does not have a complete listing of all of the State Department's Bureau for Population and Refugee Migration (BPRM) facilities.

[3] Not an accurate reflection of all of BPRM supported facilities in Southern Sudan

- This database will require regular annual updates to retain its validity and usefulness as a planning tool. The database could be housed in the central MOH and managed by the Research and Evaluation Directorate. Data collection could be organized at the state-level with strong collaboration with the County Medical Officers and other county-level officials.
- As possible, information contained in the database should be independently validated.
- Easily standardized, key variables that are relevant to strategic planning, such as contract end-date, referral facility, and access, should be included in future database versions. Another key variable will be prospective NGO withdrawal dates.
- The database should be expanded to include all facilities in Southern Sudan based on current administrative county, payam and boma boundaries and names.

C. Mapping Precision

The BASICS Team collaborated with IMA World Health and Global Mapping International to geographically map all facilities with GPS coordinates. Facility-level GPS coordinates (G-level precision) were obtained for as many facilities as possible. The primary sources were a survey of INGOs conducted by BASICS and the mapping efforts of Christian Health Association of South Sudan (CHAS) as part of their collaborative work with GOSS. "G-level" precision coordinates permit the most accurate mapping.

Where GPS coordinates were lacking, but a town name was available (T-level precision), a "Populated Places" database was consulted to match the health facility with the town where it is located. This is not an straightforward process because 1) the names of towns, payams and counties are not consistently reported and 2) digital maps for many of the newly created payams and counties are not yet available (see limitations). However, through "T-level" mapping, BASICS mapped more than one hundred additional health facilities in cases where facility-specific GPS coordinates were missing. This mapping precision is suitable for transition gap mapping and for state/county level health sector planning.

Finally, in cases where facility and town coordinates could not be found, facilities were mapped to a payam ("P-level" precision) or to a county ("C-level" precision). While this does not show the exact location of facilities, it is adequate for demonstrating transition gaps, but not for state/county level health sector planning. Facilities with only P or C level precision are flagged in the database for further scrutiny and updating. It will be necessary to acquire facility or town specific coordinates to use the information for state/county level health planning.

The November 2007 "Transition Gap Analysis" mapped 54% of 453 facilities with a "G" and "T" precision level. Since November the coordinates for 222 of the 453 records have been reviewed and updated. This has resulted in an improved combined "G" (GPS) and "T" (town linked) mapping precision of 65%. Additional GPS collection and clarification of towns will be necessary to further improve mapping precision.

Table 2: Mapping Confidence Levels

	Nov. '07	**%**	**Dec. '07**	**%**
Total	**453**		**452**	
G – GPS (BASICS + CHAS)	117	26%	201	44%
T – Town	128	28%	95	21%
P – Payam	159	35%	121	27%
C – County	38	8%	25	6%
Blank	11	2%	10	2%

D. Mapping Challenges

Current mapping for payams and counties is based on shapefiles (dated Jan. 2007) obtained from the SIM (Sudan Interagency Mapping). This is the best information available at this time. These shapefiles, however, do not yet reflect recent boundary changes for payams and counties. For example, shapefile maps are available for only 49 of the 77 county names reported in the BASICS database. Of the 223 payams reported, there are shapefiles available for 209.

In addition it is not always possible to know whether the payam and county names reported by INGOs are based on an "old" or "new" list of payam and county names. This results in difficulty identifying the payam or county in which a health facility is located, especially when GPS coordinates are lacking.

A further complication is that in some cases a payam appears to have changed status to become a county; however in some cases the new county does not retain the same boundaries as the old payam. The collection of additional information about current payam and county boundaries and names will clarify these discrepancies and further improve mapping precision.

There are a number of facilities for which there seem to be duplicate database records (for the same facility). This most commonly occurs when a facility is assisted by more than one INGO, e.g. where an INGO may be assisting the health facility while another INGO is drilling a borehole for the facility. For example, CRS is providing borehole assistance for water points for 12 facilities that appear to be assisted by IMC or AAH-I. These "duplications" will eventually be removed with the development of the permanent database structure.

F. Mapping the Transition Gap

The current status of the Southern Sudan health facility mapping may be summarized as follows:

- There are 451 health facility records surveyed and in the "BASICS" database. Of those there are 442 mapped (with varying levels of precision) and 9 unmapped due to missing coordinates.

- There are 339 USG-assisted health facilities in the database (USAID/OFDA, USAID/DA or BPRM). All of them have been mapped to some degree of precision.

Transition Gap Tables and Charts
Given the above observations, it is possible to develop Transition Gap tables, charts and maps based on all 451 records in the database or on a subset of those records, including:

- Tables and charts of all 451 facilities (USG and non-USG funded)
- Maps for 451 facilities (USG and non-USG funded)
- Tables and charts for all 339 USG-assisted facilities
- Maps for 339 USG-assisted facilities

In the future, all updated information for health facilities must be entered in the "BASICS All Facilities" worksheet in the Excel file format of the Database. Information in the tables and charts worksheets (Facility Charts and Donor Charts) will be updated automatically as changes are made in the "BASICS All Facilities" worksheet.

The following tables and charts summarize the current status for all 451 health facility records in the database with regards to type of facility, functionality, donor assistance, and end of contract dates (see Annex 1: Southern Sudan Health Facility Transition Gap charts and tables).

Transition Gap Maps
Consolidated database variables and GPS coordinates were imported into the GIS mapping program, ArcMap. The mapping setup includes several layers of information with regards to administrative boundaries, roads, rivers, towns and population that can be turned on (selected) or turned off (unselected). Additional mapping layers were created by importing and selecting specific health facility data to show facilities demonstrating a certain characteristic, e.g. type of facility.

By selecting for "end of contract dates" it was possible to create a mapping layer for each six month period, e.g. a map showing facilities whose contract would be phased out by Dec. 2007. By layering maps for each year in a series it is possible to create an "animated" picture of assistance being phased out. An example of the maps is included in Annex 2. This map is based on the Jan 4th, 2008 version of the database and does not reflect the recent updates. The purpose of the example is to demonstrate the mapping technology and how those maps can be used to better understand the relief to development transition by providing a graphical depiction of the gap in health service delivery (lack of geographical access) and resources (funding gap).

IV. FINDINGS: HEALTH SECTOR TRANSITION GAP ANALYSIS

1) Total facility records in BASICS database: 451. Of those records 409 facilities are categorized as functional. Based on the total functional facility estimate provided above (742) based on the combined BASICS and MOH/CHAS databases, it is estimated that the BASICS database contains information about over half (55 %) of all functional facilities in Southern Sudan.

2) Total records for USG facilities in database: 339

3) Estimated percentage of all facilities in Southern Sudan supported by USG: at least 41% (does not include some facilities funded by BPRM)

4) Estimated percentage of functional facilities in Southern Sudan funded by USG: 42% (does not include some facilities funded by BPRM)

5) Based on agency records, USG donors support facilities in 9 states and 39 counties. USG does not currently support any health facilities in Western Bahr el Ghazal State.

6) Percentage of facilities in BASICS database funded by USG: 75%

7) Percent of facilities in BASICS database categorized as functional: 91% (409 facilities)

8) Facility type (based on 409 functional facility entries in BASICS database):
    a. PHCU: 314 (77 %)
    b. PHCC: 78 (19%)
    c. Hospital: 8 (2%)
    d. Other (i.e. Water points at facilities): 9 (2%)

9) Award End Dates based on total of 430 facilities (451 facility entries in BASICS database minus 21 entries without contract end dates that are not included in these figures):
    a. 29% (132 facilities) of all current facility-level awards were scheduled to end by December 2007.
    b. 77% (347 facilities) of all current facility-level awards are scheduled to end by June 2008.

c. 82% (370 facilities) of all current facility-level awards contracts are scheduled to end by December 2008.

Many of the NGOs whose USAID/OFDA-funded contracts were due to end in December 2007 received no cost extensions and others have submitted proposals that are under review. In addition, in 2008 USAID/OFDA will continue to support the large majority of facilities funded in 2007. Therefore, it is probable that transition funding gap through 2008 is less critical than portrayed by the information here.

Based on the figures above, if additional funding were not secured by June 2008, 77% of facilities listed in this database (and almost half of all functional facilities in Southern Sudan) could lose funding. Currently, only 25% of the population in Southern Sudan has access to health care and any loss of funding could have a negative impact on health care access. Currently, the MOH does not have the resources to support additional facility operations and in recent cases when NGOs have withdrawn without engaging a viable partner (in many cases there are no viable partners to engage), some facilities have not continued to operate.

The health sector landscape is dynamic and changes are constant. The above figures portray a static picture as of September 30, 2007. Many awards due to end could be renewed and would thereby mitigate the scenario described above. However, because donor contracts are finite and the post conflict transition period could lead to a shift in priorities, it is important to examine and understand this scenario so that the Government of Southern Sudan and health sector partners can collaborate and avoid a potential post conflict transition funding crisis.

V. RECOMMENDATIONS

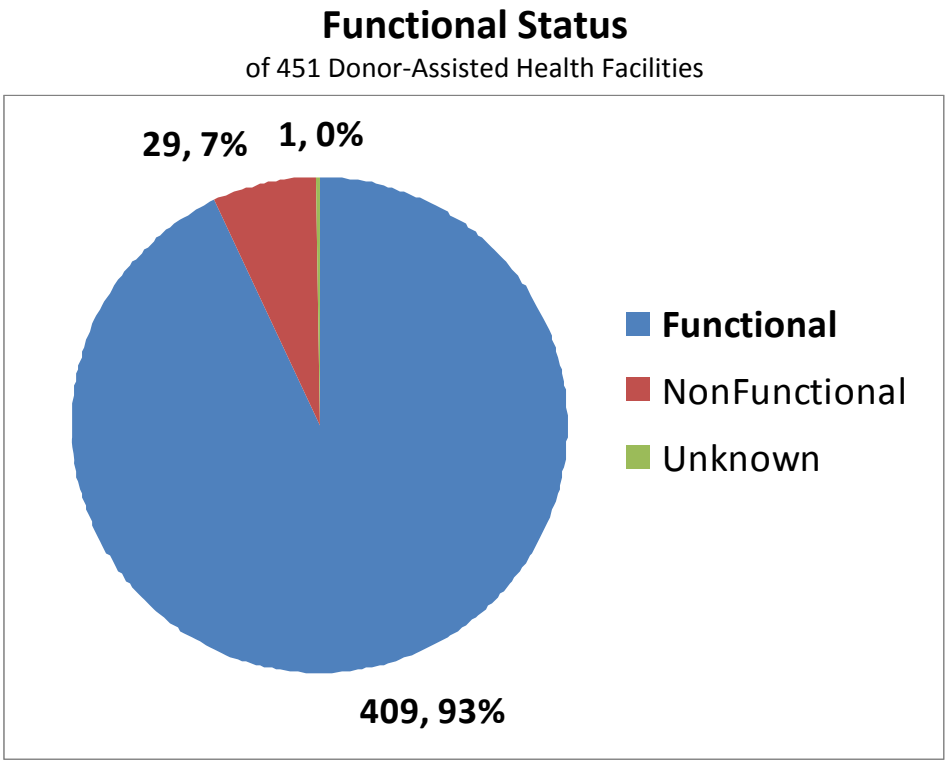
1. For a more comprehensive understanding of the Southern Sudan health sector and the potential resource gap, expand the database to include all facilities in Southern Sudan.
2. Gather more accurate facility location information using updated, established geographical information and facility-level GPS points.
3. Ensure accuracy of data by validating results through facility site visits and service delivery observation, as possible.
4. Continually update the database to ensure that the information reflects actual resource gap and the current contract end dates. Create updated maps demonstrating actual and anticipated funding levels over time.
5. Create a detailed donor and NGO-specific funding timeline to provide additional insight about contract end dates and the need to engage additional resources.
6. Develop a collaborative, operational transition framework (implementation plan) through the transition workshop with heavy emphasis on maintaining resources for the health sector to ensure that funding for health services is preserved in the post-conflict period.
7. Ask health partners in each county to produce hand drawn county-level maps that plot the location of each health facility in that county. Hand-drawn maps can illustrate facility location and provide key information, such as nearest populated area, to greatly enhance mapping precision and the usefulness of the database as a tool for state/county level planning.

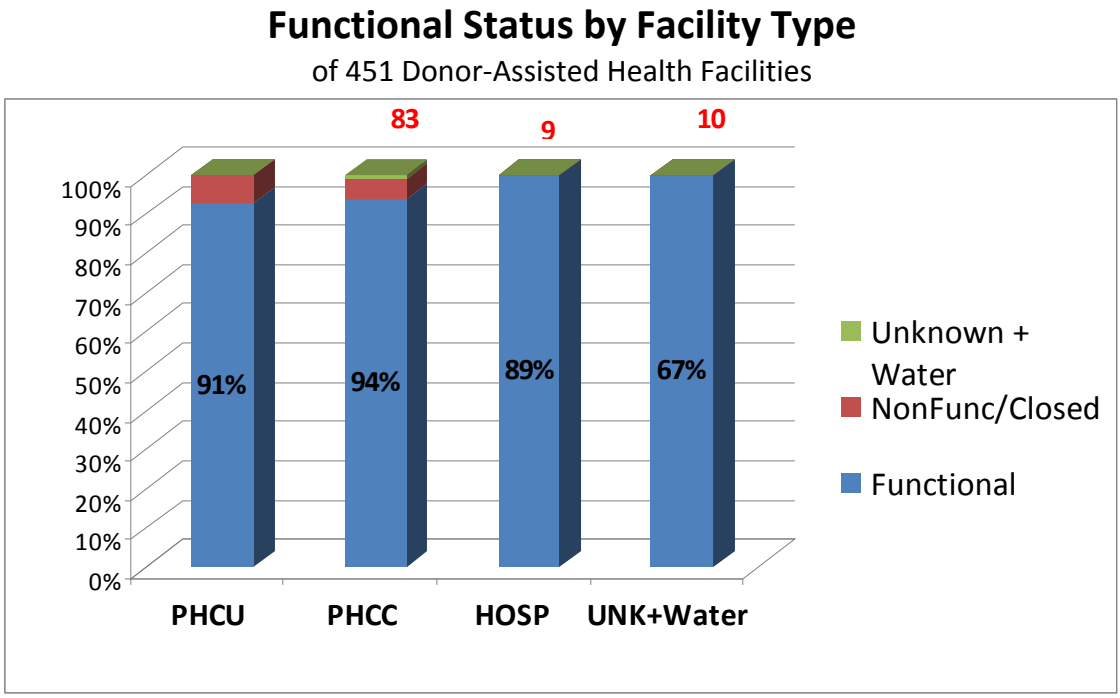
VI. MAPPING PRODUCTS

- Health Transition Gap in Southern Sudan Power Point presentation
    - Regional maps showing facilities by type and status, assistance by donor and implementing partner, and resource gap over time.
- State-level maps by facility name and type

Annex 1: Southern Sudan Health Facility Transition Gap Tables and Charts

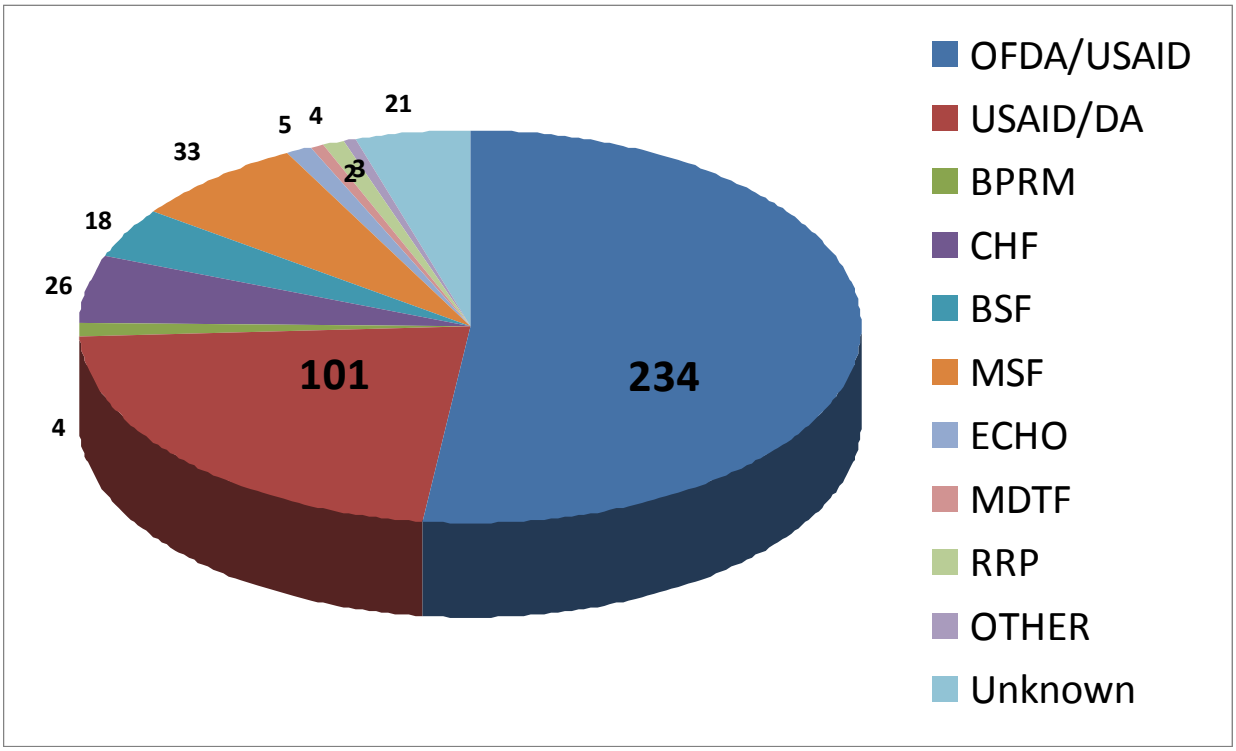
Note: all data is based on 2007 awards and does not include information about 2008 awards.





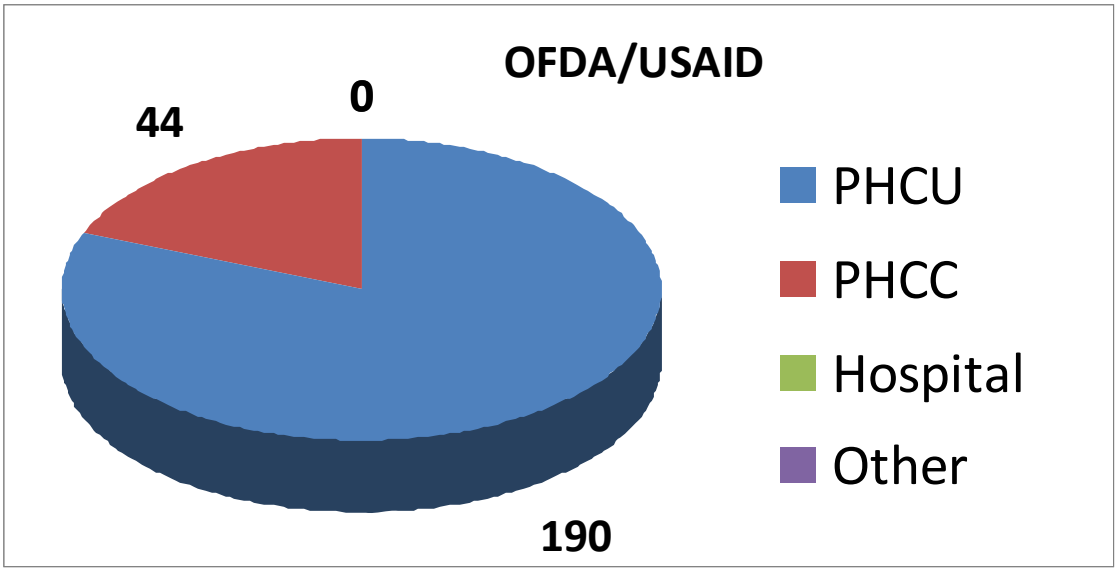
	Total	PHCU	PHCC	Hospital	Training Centers	UNK + Water
Totals	**451**	346	83	9	3	10
Functional	**409**	314	78	8	2	7
Non Functional	**29**	25	4	0	0	0
Unknown	**12**	6	1	1	1	3

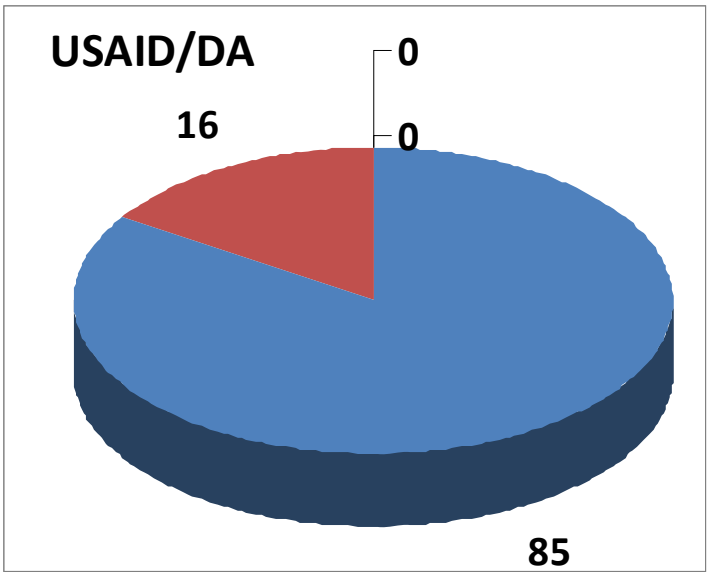
Number of Facilities assisted by Donor



Donor	Total	PHCU	PHCC	Hospital	Other
Totals	**451**	346	83	9	13
OFDA/USAID	**234**	190	44	0	0
USAID/DA	**101**	85	16	0	0
BPRM	**4**	3	1	0	0
CHF	**26**	20	5	1	0
BSF	**18**	10	8	0	0
MSF	**33**	17	5	4	7 Unknown
ECHO	**5**	2	0	3	0
MDTF	**2**	0	0	0	2 Training Center
RRP	**4**	3	1	0	0
OTHER	**3**	1	1	1	0 Unknown
Unknown	**21**	15	2	0	4 Unknown

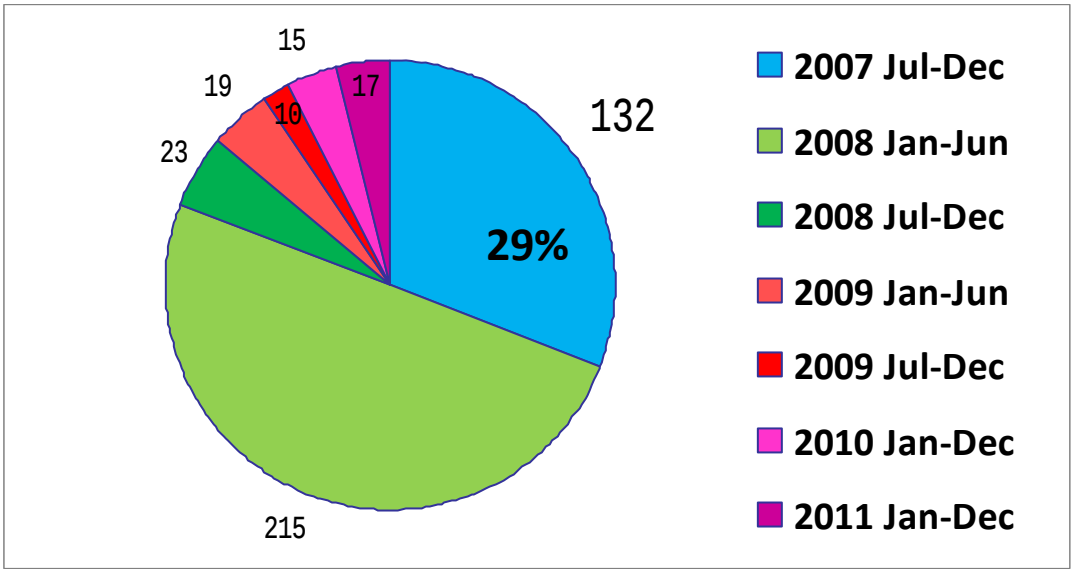
USG Donor-funded facilities by type





Donor	PHCU	PHCC	Hospital	Other
OFDA/USAID	190	44	0	0
USAID/DA	85	16	0	0

Facility-Level Contract End Dates as of September 2007



Contract End	Number of Facilities	Percentage
2007 Jul-Dec	132	29%
2008 Jan-Jun	215	48%
2008 Jul-Dec	23	5%
2009 Jan-Jun	19	4%
2009 Jul-Dec	9	2%
2010 Jan-Dec	15	3%
2011 Jan-Dec	17	4%
Unknown	21	5%
Total	**451**	**100%**

Contract End Dates by Implementing Partner as of September 2007

CONTRACT END DATE BY YEAR									
ALL FUNDED NGOs	Total	2007	2008		2009		2010	2011	UNK
AAH-I	40	39							1
ADRA	22	21							1
AMREF	9		7						2
ARC	58	52			4				2
CARE	14			14					
CMA	10	6	4						
CRS	32	30							2
GOAL	20	15	5						
IMC	47	25		1	15				6
IRC	24	15		2		1	1	4	1
Malteser	3	3							
MERLIN	3	3							
MSF-Belgium	5					2			3
MSF-Holland	27						14	13	
MSF-Switzerland	1								1
Samaritan's Purse	1	1							
SC-UK	1								1
SCUS	50	41				6			3
Tearfund	26	6	14	6					
World Relief	26		26						
World Vision	18	18							
ZOA	15	12							3
TOTAL	**452**	**287**	**56**	**23**	**19**	**9**	**15**	**17**	**26**

Implementing Partner Contract End Dates sorted by Donor as of September 2007: USAID/DA and USAID/OFDA

USAID/OFDA

CONTRACT END DATE BY YEAR

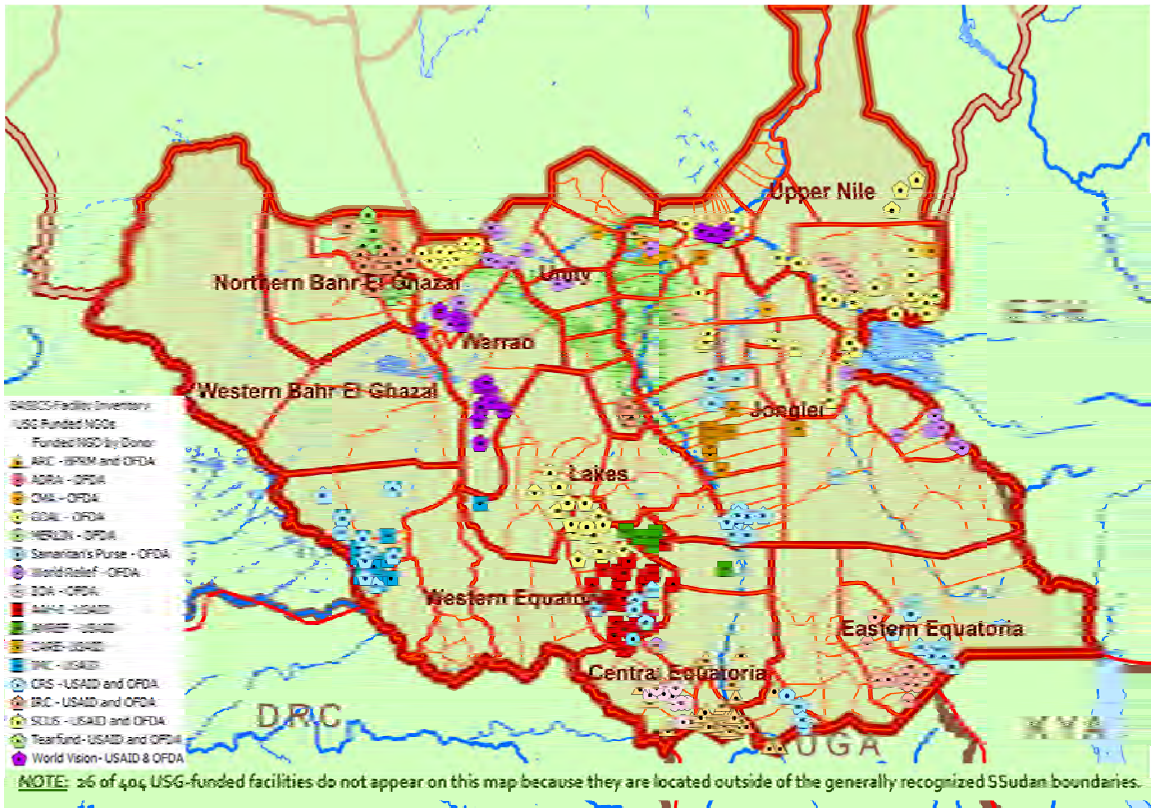
USAID/OFDA Funded NGOs	Total	2007	2008		2009		2010	2011	UNK
ADRA	22		22						
ARC	47		46						1
CMA	10	6	4						
CRS	32		32						
GOAL	16		16						
IRC	13	12		1					
MERLIN	3	3							
SCUS	30	1	29						
Tearfund	8		6	2					
World Relief	26		26						
World Vision	9	2	7						
ZOA	14	12							2
TOTAL	**230**	**36**	**188**	**3**					**3**

USAID/DA

CONTRACT END DATE BY YEAR

USAID/DA Funded NGOs	Total	2007	2008		2009		2010	2011	UNK
AAH-I	**34**	34							
CARE	**14**			14					
IMC	**20**				15				5
IRC	**9**	1		1		1	1	4	1
SCUS	**17**	10				6			1
Tearfund	**4**			4					
World Vision	**9**	9							
TOTAL	**107**	**54**	**19**		**15**	**7**	**1**	**4**	**7**

Annex 2: Southern Sudan Health Facility Map

This map is based on the January 4, 2008 version of the BASICS database and does not reflect the recent updates. This map is not meant to serve as an exhaustive facility listing in Southern Sudan. However, its accuracy can be improved as the database is updated and expanded. The purpose of presenting the map here is to illustrate how the database can be used to generate a graphical depiction of health sector gaps, including gaps in service delivery and funding.

BASICS has developed maps from each state based on the BASICS database. Maps can be developed to depict facility type, functionality status, supporting donor, and as the one below shows, implementing partner. In addition, BASICS has also developed a series of time sequenced maps to demonstrate funding levels over time. Graphical depictions can aid in government, donor and implementing partner planning efforts and contribute to avoiding loss of services during the critical relief to development transition.