

Quality Design: A Planning Methodology for the Integration of Refugee and Local Health Services, West Nile, Uganda

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In an emergency, the international community responds to the immediate health needs of refugees through the establishment of action-oriented, life-saving services. Health-care delivery is often managed with limited, if any, coordination with local health management structures. In situations where refugees remain in the host country for many years, sustainability issues inevitably arise. Refugee-hosting governments may ultimately be called upon to assume the management and funding of refugee services. Planning for service integration, while protecting against declines in service quality, is a challenge in the typically resource-poor host environments. This paper discusses these issues by presenting the experience of the West Nile districts in northern Uganda, and describes quality design as a relevant planning methodology. Quality design is a systematic planning approach that documents and directly incorporates the service users' self-defined expectations and needs.

Keywords: Uganda, quality design, health services.

Introduction

The forced migration of Sudanese to Uganda began in 1986, with subsequent waves of refugees entering in 1988 and 1993/4. Health services for refugees in the Arua, Moyo and Adjumani districts have been provided by a variety of NGOs, including both international and regionally based organisations. These services had run in parallel with district health services which generally had fewer resources. There have been few formal links between district and refugee health services. In 1999, UNHCR and the government of Uganda (Office of the Prime Minister) introduced the Self-reliance Strategy to decrease the dependence of refugees on outside assistance (Government of Uganda, 1999). This approach envisions elimination of parallel service systems for refugees and the district population. Implementing this integration was left to local district government with little guidance from central government, creating considerable

confusion and misunderstandings. We describe here the use of quality design methods to help district and NGO management staff plan for the integration of health services in Adjumani district.

Quality design methods

Quality design is an approach that brings user expectations together with technical standards to design a new product or process. Its emphasis is on the design of a new product or process that produces a quality outcome, rather than the more conventional quality improvement methods which focus on strengthening existing processes. The approach draws on principles of continuous quality improvement, quality assurance and quality function deployment (Massoud et al., 2000; Chaplin et al., 2000; Akao, 1990; Leebov and Ersoz, 1991).

The Johns Hopkins Bloomberg School of Public Health and the Center for Human Services in the USAID-funded Quality Assurance Project (QAP) have developed quality design approaches suitable for improving health services in developing countries. This is a facility-level approach used to improve obstetrical services in Guatemala and Honduras and family health services in Jordan (Durán et al., 2000; Lin, 2000; QAP, 2000). Experience from these applications suggested the approach could be adapted for other health system problems. From this initial work a 10-step process was created with further refinements carried out as the project moved forward. The quality design approach, in common with quality function deployment, involves an extensive planning process. Allocation of resources in planning reduces those needed at implementation. This contrasts with the typical management practice of limited resources for the planning process and extensive resources for problem solving following implementation.

Background

Close to 120,000 southern Sudanese refugees currently live in the West Nile districts of Arua, Moyo and Adjumani. These three districts share borders with southern Sudan to the north and the Democratic Republic of Congo to the west, and are among the most resource-poor in the country. There are few formal sector employment opportunities and the economy is largely based on subsistence agriculture. While not strictly food insecure, the region does not produce significant buffer stocks. In addition, trade is limited by geographic isolation and poor road and transport infrastructure. Health indicators for the three districts fall below national averages in many areas such as per-capita health spending, numbers of health staff and health units per capita, infant mortality and maternal mortality.

The forced migration of Sudanese to Uganda began in 1986, with subsequent waves of refugees entering in 1988, and 1993/4. In 1997, the combination of local rebel attacks in West Nile and the opening of key towns in southern Sudan prompted the return of several thousand Sudanese. The vast majority of refugees, however, have stayed, and many have lived in West Nile for nearly 10 years. As Table 1 indicates, refugees comprise a substantial portion of the population in Adjumani and Moyo districts in particular.



Figure 1 Map of Uganda highlighting Arua, Moyo and Adjumani districts

Refugees officially registered with the government of Uganda and UNHCR are eligible to live in settlements which offer opportunities that have given Uganda a reputation as one of the most generous host countries in Africa. The settlements resemble villages in areas of rural subsistence agriculture, and are 'open' insofar as refugees are allowed to travel freely between the camps and surrounding villages. They are allocated land to cultivate while in Uganda based on the number of household members and assisted with seeds and tools when they first arrive. Although they are not landowners per se, and though there are complaints that the soil is not ideal for sufficient crop yields, the practice of land allocation for refugees is not common in many other countries. Traditionally, UNHCR has catered for food distributions to newly arrived refugee households, with a staggered reduction in allocation depending on the length of time they have been in the camp and the cycle of harvest seasons.

Refugees have been encouraged to establish local councils based on the Ugandan district local council model, through which refugees can voice their opinions to UNHCR, NGOs implementing programmes or local authorities. Refugees do not, however, have the right to participate in local politics and do not have voting rights. The refugee councils do not have any official legal standing but function well for

Table 1 National and refugee populations in West Nile*

<i>District</i>	<i>Nationals</i>	<i>Refugees</i>	<i>Total pop</i>	<i>Refugees as % of total pop</i>
Arua	704,937	38,007	742,944	5.1
Moyo	100,195	23,944	124,139	19.3
Adjumani	121,505	57,567	179,072	32

*Notes: Refugee population figures are taken from official UNHCR/Uganda Programme estimates as of 10/01 and do not include 'self-settled' refugees not registered with UNHCR; national population figures were provided by the government of Uganda, Ministry of Health as estimates of year 2000 populations.

administrative purposes within the camps. Refugee and local populations are composed of the same or related ethnic groups in many cases, and the relationship between the two communities is generally stable. Sudanese and Ugandans in this area have a long history of reciprocity, as many West Nile Ugandans were themselves received as refugees in southern Sudan during Uganda's violent civil conflict from 1979 to 1986.

Social services — including health, education, agriculture extension, water and sanitation and community services — have been provided to refugees through NGOs with funding primarily from UNHCR. Health services and education, which refugee and national populations both consider to offer better quality than district services, are open to nationals living in the area but they have usually been required to pay user fees. UNHCR has provided this support in Adjumani and Moyo districts since 1986 and in Arua district since 1993. In terms of health services particularly, refugee health services have enjoyed better equipped facilities, and generally better staffing in terms of the per-capita availability of more highly skilled staff. Major differences between refugee and district health services also exist in terms of drug procurement, referral services and salary structures for health-care providers.

It is important to note that the UNHCR-funded refugee health services have been managed in parallel to district health service systems in Arua, Moyo and Adjumani districts. This is to say that there has been separate funding, planning, reporting and management of refugee and local health services, with limited interface between the two. In some locations there has been better coordination than others but overall the two have operated separately — as was certainly the case in Adjumani district where quality design was introduced.

The Self-reliance Strategy

In 1998, UNHCR decided to phase out financing for refugee programmes in the West Nile area. This was because of both a shrinking global resource base, and the fact that the West Nile region was no longer considered an emergency and therefore did not fall directly under the agency's mandate. Figure 2 shows the UNHCR funding requests for Uganda (all programmes), 1998–2002, and the actual allocations.

The plans for phasing out UNHCR assistance, through the handover of services to the local governments of each district, are outlined in a document called The Self-reliance Strategy, introduced in 1999 by UNHCR and the Ugandan Office of the Prime Minister. On the government side, there was a desire to eliminate the existence

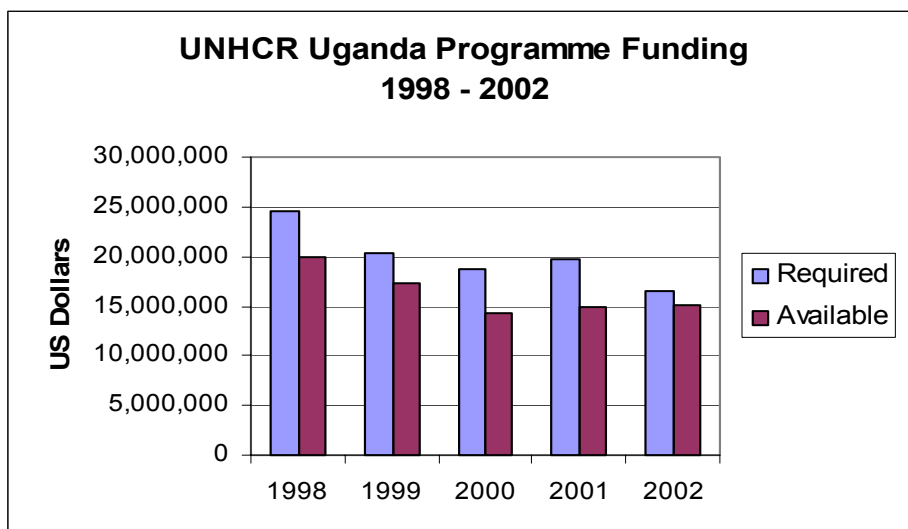


Figure 2 UNHCR Uganda programme funding appeals and commitment levels, 1998–2002

Sources: Information for years 1998 and 1999 are based on budget and expenditure figures provided by UNHCR. Information for years 2000, 2001 and 2002 is available through UN/OCHA under the 'UN Consolidated Inter-Agency Appeal for Uganda' for each year.

of parallel service systems for refugees and the inequitable resource allocation that those services represented. At the same time, UNHCR wished to redirect resources from a stable, long-term refugee situation to evolving emergencies elsewhere.

The Self-reliance Strategy is a conceptual document and as such has little to say about implementation methods or funding. Theoretically, there may be a number of different ways to achieve systems integration. For example, before starting quality design activities in Adjumani district, project staff observed the handover of health services from an NGO at the Imvepi refugee camp to the office of the district director for health services in Arua district. Stakeholders there did not use a specific planning methodology and a number of sticking points arose. These included the lack of a common vision among stakeholders, confusion over leadership roles and the tendency for ad-hoc planning done with neither data nor explicitly researched knowledge of user needs and expectations. It was on the basis of this experience that project staff helped district health management and other stakeholders in Adjumani district to develop planning methods based on quality design.

The quality design project

Quality design is one of the key components of quality assurance and a focal point of the QAP, an ongoing research and training programme managed by the Center for Human Services (CHS) with funding from USAID. The QAP has adapted various quality assurance methods and techniques from the private sector to address the challenges of health service management in developing countries.

On the ground, quality design project staff from the Johns Hopkins Bloomberg School of Public Health coordinated activities with Save the Children (UK) Uganda

Programme, which had a five-year capacity-building project with district health management. Project staff worked in the field for 18 months between September 1999 and September 2001. The purpose of the project was to offer technical support to district health managers specifically in planning for the integration of refugee health services into the district system. Project staff also sought to modify known quality design principles and techniques based on the expressed needs of local health managers, thereby further developing quality design as part of the QAP. District health managers themselves, and the reality within which they work, directly shaped the adapted quality design steps. In this way, the exercise was a dynamic process, promoting innovation and flexibility in approach.

The development of quality design steps outlined in the following section are based on experiences across all three districts: Arua, Moyo and Adjumani. However, the majority of activities were focused in Adjumani district, which in many ways faced the largest challenges of health service integration given the large number of refugees in the district and poor local resource base and health infrastructure.

Application of quality design methodology

Quality design, as adapted for this project, built heavily on identifying the users and stakeholders, documenting their needs and understanding the organisational environment in which services are provided. The first challenge was developing a vision among district and NGO health managers — and among the political stakeholders for integrated health services. Building consensus among users and stakeholders on priorities was at the heart of the process. The planning was then carried out within the systems approach of inputs, processes, outputs and outcomes. In this, the use of standard quality assurance tools such as flow charts and Ishikawa diagrams were used. As with quality improvement methods, there was a strong emphasis on collection and use of data in the quality design process.

The following paragraphs identify the quality design steps used to plan for the integration of immunisation services in Adjumani district specifically, although the methodology is applicable to any health service administrative or service delivery system. Each step is introduced in concept, and then further explained through the example of experience in Adjumani district.

Step 1 Create a common will and vision for change

Inherent to quality design is the concept of change. Either a new system is introduced, or an existing system is redesigned — that is to say, changes are made. The first step in quality design is promoting the will and vision to begin the process of change. Without investing time and effort in this area, it is not possible to create objectives for further activities. In situations where quality design is focused on more than one system (for example, district and refugee health services each representing a distinct system), it is especially important to lay the groundwork for change with this step. Promoting will and vision for the process can occur in many different ways depending on the specific setting and circumstances in which quality design is applied. In the case of Adjumani district, issues which had to be considered included:

- Consensus among those responsible for leading change about the need for change.
- Support for change at higher management levels.
- Effective communication about change concepts to the wider stakeholder group, including service users, and the active participation of stakeholders in discussing change concepts whenever possible.

The Self-reliance Strategy had set out the vision and the will to begin the process of integrating district and refugee services. Communicating that will and vision to the district level was an essential part of this first step. Unfortunately, this communication was problematic given the fact that the strategy had been developed by stakeholders at the Kampala level with limited input from district administrative and political leadership. This led to reluctance and distrust among various local-level stakeholders and the entire integration process had stalled. The quality design project took an active role in getting the integration of services back on the agenda for district health managers and local government. In Adjumani this began as a series of informal but consistent meetings between project staff, district authorities and other stakeholders. The necessary political and organisational commitment of stakeholders was ultimately formalised later in Step 3.

Step 2 Understand and document current situation

In situations where quality design is used to plan a single integrated system out of two different systems, it is important that all parties to the change understand each other's systems and concerns before further quality design activities are introduced. It is likely that the managers of parallel health systems, with different funding sources, different reporting mechanisms, different planning cycles and different monitoring and evaluation activities, do not have the opportunity to learn about each other's systems to the extent necessary to work together on a new system design. Without this mutual understanding as a basis for further collaboration, other quality design steps can easily hit stumbling blocks. Although the local setting will naturally direct how this step is carried out, one way is through a formal presentation meeting, as the following example from Adjumani illustrates.

The integration of health services in Adjumani district involved a large number of stakeholders with a wide range of opinions about the politically contentious Self-reliance Strategy. Specific stakeholder parties included the government of Uganda (Office of the Prime Minister, Bureau for Disaster Preparedness and Refugees), the Ministry of Health, UNHCR and refugee health NGO offices at both the Kampala and field levels, district politicians, administrators, technical managers, health unit staff and service users within both the refugee and local populations. In order to apply quality design within such a complicated environment, it was important for facilitators to identify accurately the stakeholders most directly involved and to understand their concerns. It was crucial for all parties to understand where perceptions were aligned, and from where ongoing and potential conflicts were arising. Documenting how the two parallel health services were working provided the necessary background for progress in the integration process. This was achieved during a consensus meeting, the Adjumani Health Coordination Forum, during which district health management and refugee NGO health management each made presentations about their current systems, the challenges they faced and the concerns they had about the integration of their systems.

Step 3 Build consensus among stakeholders on priorities

One of the cornerstones of quality design is the identification and prioritisation of health service user needs and expectations. Because quality design is a systematic methodology, it is not usually possible to address all aspects of the entire health service system at once. It may be necessary to identify one to three distinct subsystems (for example, prenatal care, emergency obstetrics, infectious disease control) on which to first concentrate efforts. Where there are diverse and numerous stakeholders, this must be done in a consensual manner. Quality assurance offers various tools to assist in the identification of priorities which may assist the quality design facilitator in promoting this step. However, as with the preceding steps, the local realities will inform the facilitator how best to guide the process of priority area selection. Later, more detailed information about health-care manager, provider and user perspectives on each of the priority areas selected will be collected (Step 6).

As noted in Step 2, a consensus meeting of the Adjumani Health Coordination Forum, was held early in the quality design process. The forum was facilitated by respected health managers from the national level and involved key personnel from the Ministry of Health, as well as UNHCR and NGO national offices. The consensus meeting was given a high profile to encourage participation and public commitment to implement decisions reached by stakeholders, who included local health-care managers, providers and users. One of the key outcomes of this two-day meeting was the identification of priority areas where stakeholders would concentrate efforts through the remaining quality design steps. The facilitators directed the meeting towards areas where broad consensus was already evident (from Step 2) and avoided areas where it was unlikely that agreement could be easily reached, with the understanding that more contentious issues could be tackled later by building on earlier successes. Stakeholders decided to concentrate on immunisation, health information systems and support supervision as priority areas.

Step 4 Establish a quality design team to follow up priorities

Quality design as a planning technique requires a team approach. When it is applied to the integration of two different systems, the team must be able to function well together and reach consensus on key decisions that may require change in the way in which the systems operate. It is also important that the overall stakeholder body be confident in both those representing them on this team and their work. The team should be composed of individuals who represent all of the major stakeholder groups, and they should be able to take decisions on behalf of their groups as necessary. After receiving further orientation and training on quality design (Step 5), the quality design team members will actively undertake the remaining steps in the process, with the ongoing collaboration of quality design project staff. The remaining steps include data collection (Step 6), feedback of research results to the wider stakeholder group (Step 7), analysis of stakeholder perspectives and incorporation of key issues into a new system (Steps 8 and 9) and implementation and monitoring of the new system (Step 10).

Stakeholders at the Adjumani Health Coordination Forum created the Adjumani District Integrated Health Coordinating Committee as the quality design team and mandated it to direct the planning of integration activities. The team was composed of managers from the core stakeholder groups, including the district director

for health services, the district local council secretary for health, the district assistant chief administrative officer for health, the UNHCR field-level programme officer and the refugee health NGO field manager. The district director for health services served as the chair of the team, and Save the Children Fund (UK) field staff provided technical advice through the quality design project. Although health-care providers and service users were not formally included in the team, their opinions and perspectives were researched and reflected at various points in the team's work (see Step 6). The team carried out critical steps in the quality design process from that point onwards, including data collection and analysis, the creation of work plans and indicators and feedback to the larger stakeholder community.

Step 5 Provision of training and tools to the team

Planning through a systems approach involves looking at health services in what may be a new way to many managers. It is important that all members of the quality design team be familiar with the benefits of using this approach, as well as the outline of quality design steps and the tasks ahead of them. The extent of training and the order in which it may be best provided will depend on the previous experience of team members. In general, however, training should focus on: viewing health services from the systems approach; research and identification of user needs and expectations; and problem identification and mapping of user needs within the system to be designed. Figure 3 below provides an example of how health services may be viewed from the systems approach. Although immunisation is used as an example, the same approach can be applied to any other health system.

The quality design project staff introduced the basic concepts of quality design to the stakeholder group at the Adjumani Health Coordination Forum. Once the quality design team had been formed (Step 4), more detailed information was provided in problem identification and problem solving. Key aspects of the training were the focus on quality design as a systems approach, and the importance of identifying the needs and perspectives of health-care users, service providers and managers. Figure 3 illustrates the key components of the immunisation system at a general level. In later steps, each of the components is broken down further for more detailed analysis. Although immunisation is used as an example, the same was done for the other two priority areas identified: health management information systems and support supervision. Having looked at health services through this systems approach, the team began to consider what data they needed to collect, and how to do so, for each of the priority areas.

Step 6 Gather data on priority services and assess the health services resource base

One of the most important features of quality design is its emphasis on the needs and expectations of those involved in health systems, including health system managers, health-care providers and health service users. This is because 'quality' is best defined by those interacting with the system at those levels. In many cases, there is insufficient information on the perspectives of these health system stakeholders. Therefore, it is necessary to conduct a focused exercise to gather data on the priority areas that have been previously defined (see Step 3). The results from this exercise may then be

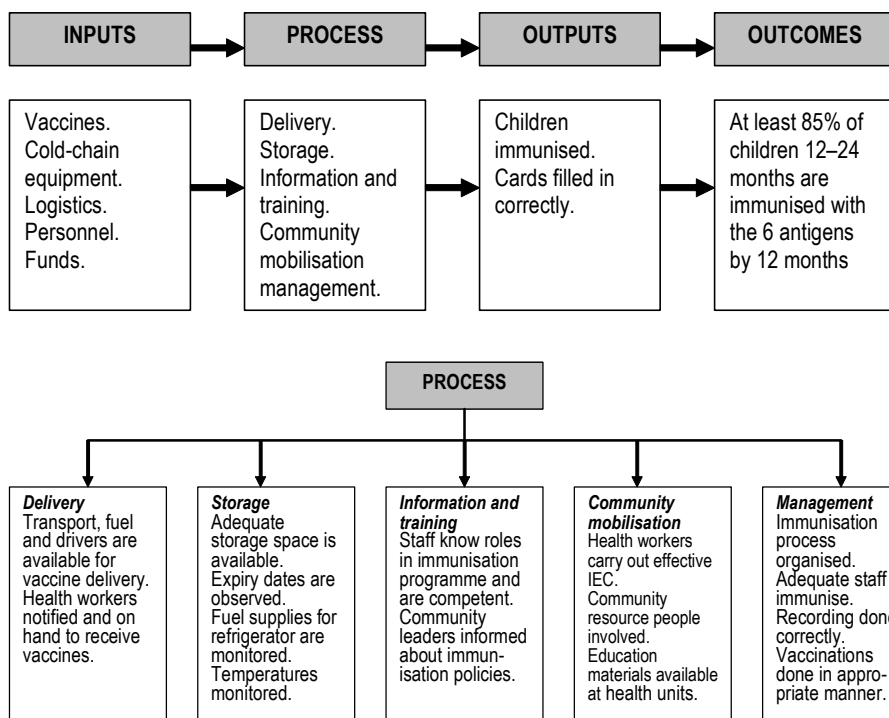


Figure 3 The systems approach to integration of services

Source: The Adjumani District Integrated Health Coordination Committee.

applied in the development of the new system design (see Step 8). There are many ways of collecting this information, including both qualitative and quantitative. As in all data collection, the quality design team must weigh the costs and benefits of each assessment method and together decide which is the most appropriate for their situation, balancing the level of detail needed with the availability of time and other resources.

The Integrated Health Coordination Committee decided what it needed to know about immunisation, health information systems and support supervision to begin integration. Together, they developed questionnaires that looked in depth at qualitative and quantitative indicators for each of the three subsystems. The data collection exercise included all three key stakeholder groups in health services: users, providers and managers, with separate questionnaires for each stakeholder group. Team members tested pilot questionnaires, trained interviewers, carried out the surveys in both local and refugee settings and analysed the data. A second level of assessment focused on an inventory of health resources for the district and refugee services. This step was important for the team in that it facilitated an understanding of resource availability before integration, and looked at financial resources, human resources and key capital investments.

Figure 4 illustrates the data collection for the immunisation system. Each major system block, identified as inputs, processes and outputs, has specific components. For each component, questions were developed to identify the concerns of each group — managers, providers and users. Although the diagram shows

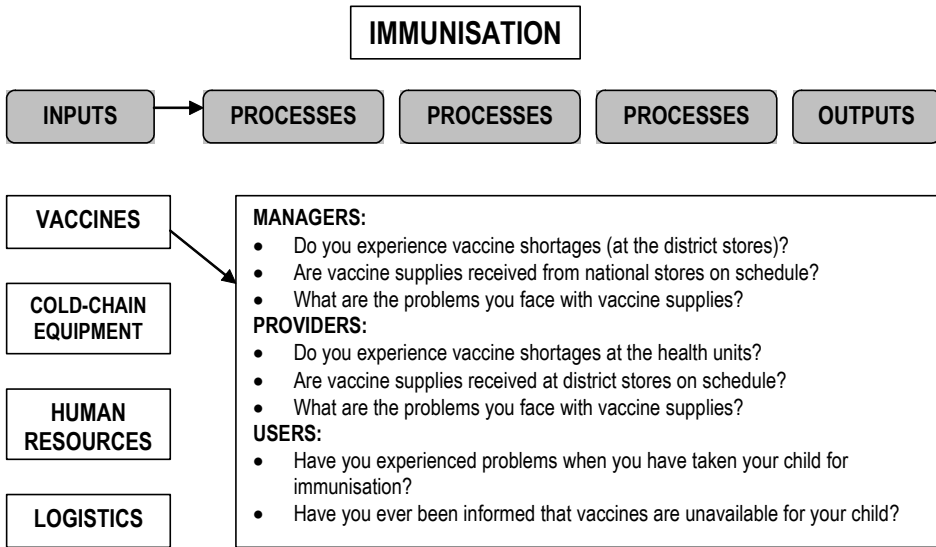


Figure 4 Data collection

questions about vaccine inputs as an example, the questionnaires covered all of the other components as well, thereby systematically ensuring that user needs were incorporated into the system.

Step 7 Provide feedback to stakeholders and solicit responses

While the quality design team may be mandated by the larger stakeholder group to undertake the actual planning activities for the creation of the new system(s), there should be a regular circle of feedback from that team to the rest of the stakeholders. This is particularly important when there are multiple stakeholder groups, and when the system under design has been a point of contention between the stakeholders. The participation of the wider stakeholder group is crucial at this point so that they may understand the work of the quality design team, contribute their opinions and later be in a better position to support the changes laid out in the new design. There are a number of ways for the quality design team to communicate this feedback. It may be outlined in a report, a presentation, individual discussions or all of the above. As with the other steps, the local situation will dictate the most appropriate mechanism.

Findings from the surveys offered stakeholders the first concrete information on how the parallel health services were providing services to the two populations. These data also facilitated an understanding of the resources available, and provided an indication of the additional resources which would be required for the districts to extend their services to the refugee population. This information was provided to the District Health Management Team, UNHCR, local government and the NGOs managing refugee health services. Through the UNHCR, this information was available to representatives of the refugee community.

Step 8 Analyse data to determine common and divergent areas

The systems approach, a central feature of quality design, facilitates the application of data results to the decision-making inherent in the creation of a new system. More specifically, by looking at each of the components within a system, and matching feedback from data collection to points within those components, it is easy to see where there are differences between the systems and where there are special problems noted by the users. Moving from the macro view of the system — inputs, processes and outputs — the quality design team can look at each of these in detail, systematically checking the data results to see where they best apply. Ideally, the quality design team can make decisions themselves about how to handle differences between the two systems and problem areas. If not, they may need to consult with other stakeholders through an appropriate discussion mechanism.

Members of the District Integrated Health Coordinating Committee constructed a systems model for each of the selected priorities and identified basic activities for the integrated system. They then examined data collected about both the district and refugee services for each system (see Step 6) to determine where the two functioned in a similar manner and where the processes differed substantially. It became evident that in many areas the processes were very similar in the three systems examined. These could be combined with little additional effort, and in most cases this would result in a saving of resources. However, in some areas there were substantial divergences in the processes. The survey information used in this step helped delineate the nature and the size of these differences. Figure 5 presents examples from the immunisation system to highlight this exercise.

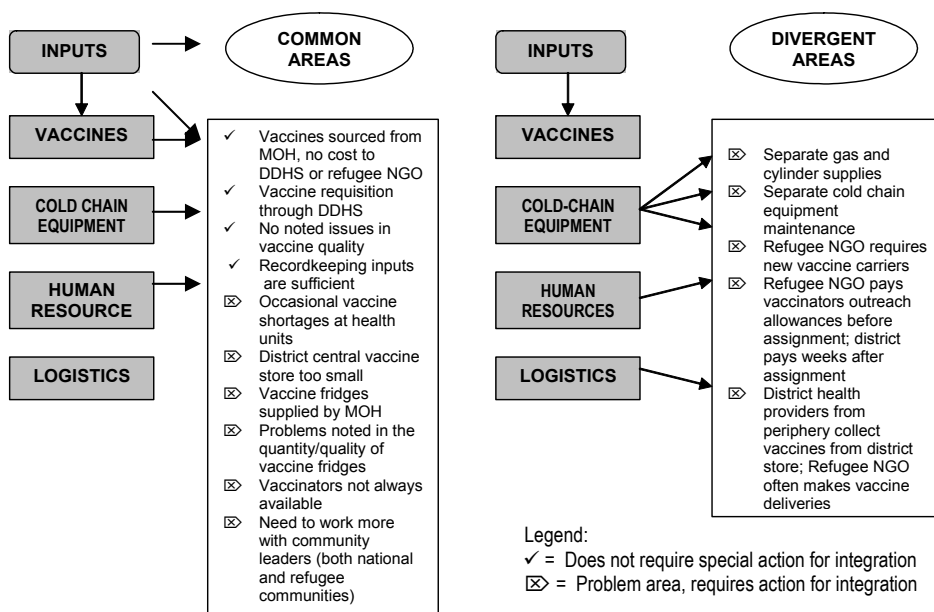


Figure 5 Identify common and divergent areas

Step 9 Establish work plans to bring divergent processes together

Having completed the previous steps, it is now a relatively straightforward task to create an action plan for the integration of each of the identified health system priority areas. From Step 8, the quality design team has identified divergent areas where some action needs to be taken in order to harmonise systems. Each of these should be included in the action plan. While the format of the action plan may be modified to fit the needs of the health system managers who will ultimately be responsible for implementing it, the action plan should include at a minimum: a listing of each action point; the responsible party; indicator(s); any budget costs; and the funding source anticipated to cover that action point. Because this action plan is driven by a systematic analysis of the needs and perceptions of health system managers, providers and users, as well as the explicit step of identifying common and divergent areas, it will cover all of the points necessary for the creation of a successful new system.

With these baseline data in hand, the quality design team planned how to redesign processes to facilitate integration. Team members jointly identified action points where change was necessary to align the two systems. On the basis of these action points, plans were created to implement the changes. Divergent areas were addressed in the action plan. In the immunisation system, action points included joint training of district and refugee health-care staff in newly established national guidelines, development of common immunisation support supervision activities and protocol, harmonised vaccine delivery from the district stores to both district and refugee health units and coordinated outreach programmes, including the development of locally relevant IEC materials in both local and refugee languages.

Step 10 Implement and monitor work plans for integration of processes

Having completed an action plan, quality design team members must finally incorporate the agreed-upon points into any other planning mechanisms which they may each have. This will ensure that the change process, and thereby the new system, is streamlined into their overall programme activities. Generally speaking, these points will be reviewed and accepted by upper-level management as part of each manager's own planning mechanisms. Because the wider stakeholder group has already been consulted about the process through both the early stage of consensus-building, and the later step of feedback, there should not be problems in approving the points for action. Monitoring of these points should occur both within each system's own mechanisms as well as jointly through the continued work of the quality design team. In addition to monitoring progress on the inputs and processes, health managers must also continue to monitor health outcomes as usual. In the case of immunisation, health managers agreed to identify the common output (health outcome) based on the national standard for Uganda: 'At least 85 per cent of all children under five years to be immunized against the six preventable diseases.'

To implement these action plans, district and NGO managers need to incorporate the action points into their regular management systems. Therefore they both agreed to streamline the action plan into their respective annual work plans for the following year. They further agreed that monitoring of the implementation process should be part of the management information system at the district level. The

<i>System area</i>	<i>Action point</i>	<i>Responsible party</i>	<i>Indicators</i>	<i>Budget</i>	<i>Funding source</i>
INPUT Human resources	Recruitment of substantive personnel. District health visitor (responsible for central vaccine requisition, etc.).	District Health Service Commission.	DHV ensures vaccine supply needs are filled at both district and refugee health units, verified by orders and stock records.	Position is included in district health budget.	Adjumani District/MOH.
INPUT Cold-chain equipment	Conduct detailed inventory of immunisation equipment and replacement as necessary.	District and refugee health management staff.	Inventory completed. All equipment replaced as necessary.	No cost for inventory exercise; equipment costs to be determined through inventory.	Replacement costs are covered through the national immunisation programme.
PROCESS Cold-chain maintenance	District cold-chain assistants to include refugee health units in their maintenance reviews.	District health services.	Number of preventive maintenance visits per quarter. Percentage of functional fridges in the units.	No additional costs noted.	District health services (regular budget).

Figure 6 Develop an action plan

Integrated Health Coordination Committee itself, as well as the larger stakeholder group, each have a role to play in this function.

Discussion

The quality design approach proved to be a valuable paradigm in creating a process for planning the integration of refugee and district health services in Adjumani district. The structure it provided was key in charting a direction through a vague policy environment that was highly charged with emotions and misperceptions. Using this approach helped bring together the various stakeholders in the district to consider not only the health of the Sudanese refugees, but the health services for the Ugandan population as well. The importance of allotting adequate time to the initial steps must be emphasised. These include creating a common will for change (Step 1); understanding and documenting the current situation (Step 2); building a consensus

among stakeholders on priorities (Step 3); and establishing a quality design team (Step 4). Without undertaking these first four steps as the foundation to the process, the remaining quality design activities would have been difficult if not impossible to implement.

An important lesson was the consideration and adaptation of design processes to meet local circumstances. The quality design template previously used in Latin America had to be heavily adapted for Uganda (Durán and Fuentes, 2000). The process of integrating health services in West Nile is hampered in several areas. The very low resource base available to districts means that the national essential health package will not be immediately achievable in an integrated system (Hutchinson, 1999). Without doubt, the Self-reliance Strategy itself caused a considerable degree of confusion. In terms of planning, key ministries including the Ministry of Health were not actively involved. At the district level, activity was also slow since it lacked the details needed for implementation. In the decentralised administrative environment of Uganda, district technical staff are simultaneously faced with many new management challenges, and in some cases require ongoing support in planning major policy changes. The failure of the designers of the Self-reliance Strategy to communicate effectively to the refugees themselves was also a problem (Matsumara, 2001). These issues all contributed to unnecessary confusion about how integration was to occur.

The initial focus on understanding the system and the roles of the various stakeholders was critical to the success of the design process. This was a time-consuming undertaking, but proved to be important in the later problem-solving steps. Partnership with Save the Children (UK), which was respected for its management-strengthening efforts, played a vital role giving credibility at the start of the quality design process. These early discussions with the stakeholders prepared the ground for the Health Coordination Forum. Making this a high-profile event with national representation was important to its success. The process could have been further strengthened if ongoing monitoring of the integration process by the Ministry of Health could have been maintained. The Ebola outbreak in nearby Gulu occupied much of the attention of the MOH at the expense of their continuing involvement (Okware et al., 2002). Ideally, stronger engagement from UNHCR could have strengthened the follow-on process as well. However, as their Uganda activities are being rapidly reduced, this has proven difficult (UN OCHA, 2001).

In one way the quality design process can be criticised for not directly involving the Sudanese and Ugandans who use the refugee health units as primary system users, beyond researching their needs and perceptions as earlier discussed. However, the project identified its main customer segment as health managers and local government. The outcome sought was to establish a high-quality planning process to integrate two health systems despite the many challenges. Ultimately, managers within the district health services and political administration have the day-to-day responsibility for ensuring a smooth and equitable transition. To this end, project staff functioned as the facilitators of quality design, working directly with those leading the change.

Addressing the health systems problems using a systems framework was an approach easily understood by health managers. This approach helped ensure a comprehensive and organised review of all key issues so that important considerations were not neglected. Problems with integration of services which health managers saw as insurmountable became understandable when health systems were broken down into subsystems (such as immunisation) and further into inputs, processes and outputs. Stakeholders could then make separate inventories of materials, human resources and

activities included within each of these areas. A systems-based approach contrasts with ad-hoc planning that characterises less-organised attempts at integration.

Designing flow charts of activities with data about the individual steps within subsystems such as immunisation was eye-opening for many members; for some it was the first time they fully understood the functioning of each other's systems. This gave them an understanding of where refugee health services and those of the district were managed in either a common or divergent manner. Armed with this information, the new integrated processes could be designed and put on flow charts. The experience of using data-based methods gave team members the capacity to apply this approach to other subsystems. Although not pursued from a costing perspective, the similarities in services and outcomes from the survey data suggest that the increased per-capita costs for refugee health services may not necessarily result in a substantial improvement in the quality of services

In planning for change, stakeholders in the integration of district and refugee health systems wisely decided first to focus on immunisation, health information systems and support supervision. These were three less-difficult systems requiring integration, in contrast to others such as personnel management, referral and drug procurement — all of which require larger financial decisions and, in the case of personnel management, legal considerations. Dividing up the larger health system into subsystems and focusing on less-contentious areas encouraged teamwork, which could help when dealing with the more difficult areas later. It is easier and more efficient to build upon success, than to struggle in difficult areas with questionable outcomes.

Conclusions

The integration process reported here is in many ways incomplete since we were unable to follow this planning process through to the final integration of services. It was not clear when this will occur, given the uncertainties of continuing UNHCR funding for Uganda. We intend to follow developments in West Nile to assess how the quality design initiative fares with time. Since quality design was a new process in this setting, it required substantial technical assistance to achieve the objectives of implementing planning methods. However, having gone through the quality design cycle with outside technical assistance, the quality design team now has the tools and experience to move forward on their own. Because this was a new methodology being applied in a new environment, substantial adaptation and innovation were required at the field level. Nevertheless we feel that the quality design approach has been an effective planning tool for the integration of refugee and host-country services that can be applied in similar situations elsewhere.

The experience from Adjumani district shows that health managers can use the quality design principles to create practical plans for implementing successful change. Of the various components of the quality design approach, four seem key. Establishment of leadership in the change process was critical. A common vision (consensus) among all stakeholders about who should be involved in implementing change, and in which areas, had to be established at the beginning. A systems approach, viewing health service delivery in terms of inputs, processes and outputs, was quickly understood by health managers and put into use. Collection and use of data from the various levels of the district and refugee health services helped create a sense of confidence for planning.

Quality design should not be viewed as a rigid template for planning. The 10 steps developed in Adjumani proved very useful there, but would need to be adapted for other circumstances.

Acknowledgements

This work was undertaken by the Quality Assurance Project with funding from the US Agency for International Development through contract number HRN-C-00-96-90013 with the Center for Human Services, the non-profit affiliate of University Research Co., Ltd. Additional funding was provided by The Mellon Foundation. Project staff of The Johns Hopkins Bloomberg School of Public Health gratefully acknowledge the collaboration and support of Save the Children (UK) Uganda Programme, as well as the relevant district authorities, UNHCR and operating partners. In particular, project staff wish to express their thanks to R.M. Drabe (Adjumani district director for health services), Girma Kibret (African Humanitarian Assistance), Dominick Tibyampasha (UNHCR) and Martins Ovberedjo and Hussein Mursal (Save the Children (UK)), as well as Diana Silimperi, Bruno Bouchet, Barbara Kerstiëns, Stéfane Legros and the Quality Assurance Program. Project staff are also grateful for the support of Barbara Harrell-Bond and the Makerere University Institute of Social Research.

At the time of the project work detailed in this paper, Martins Ovberedjo was working for Save the Children UK in Uganda. He is now with the National Action Committee on Aids, Nigeria.

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