Implementing a national hospital accreditation program: the Zambian experience

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Abstract

Objectives. This study describes the development of the Zambia Hospital Accreditation Program from 1997 to 2000. Ten major milestones are presented and discussed, as are challenges to the program.

Design. Data were collected through a review of written documents, interviews with major stakeholders, hospital visits, and discussions with implementers.

Main outcome measures. Zambia has successfully developed hospital standards that are relevant and potentially achievable by its hospitals. Half of Zambia's 79 hospitals have received educational surveys, and 12 have also received the full accreditation survey. Significant improvement in compliance with standards occurred in overall scores, and in seven out of 13 functional areas. However, the program has stalled due to lack of sufficient funds, lack of legal standing for the Zambia Health Accreditation Council, difficulties in retaining qualified surveyors, and indecision on how to handle accreditation results. In addition, serious resource constraints in hospitals and the need for ongoing facilitation have hindered their full participation in the program. It is estimated that the program costs about US$10,000 per hospital to complete the cycle.

Conclusions. Having a developing country sustain an accreditation program requires dedicated funds, government and donor commitment, continual adaptation, ongoing technical assistance to hospitals, and a functioning accreditation body. In Zambia, the accrediting council was stymied by a heavy workload, lack of legitimacy and budget authority, and the government's indecision on incentives and feedback. Long delays arose between accreditation surveys and feedback of written results. Zambia has now begun to include some accreditation standards in performance audits and is considering decentralizing survey functions.

Keywords: accreditation, developing countries, hospitals, quality assessment, Zambia

In the past decade, interest has surged in establishing national programs for assessing health facilities [1]. Most of these programs have been started in industrialized and newly industrializing countries. In sub-Saharan Africa, Zambia is the first and only country to have begun laying the groundwork for a national hospital accreditation program. The Council for Health Service Accreditation of Southern Africa (COHSASA), based in South Africa, was formed earlier but does not yet operate on a national scale [2]. This article documents the Zambian program’s major milestones and challenges, so that other developing countries can learn from Zambia’s pioneering experiences.

Zambia began planning for hospital accreditation in early 1997. In mid-2000, the Quality Assurance (QA) Project, which had provided considerable technical assistance to Zambia from 1997 to 1999, assembled a research team to describe the progress made by the Zambian accreditation program and to discuss some of the hurdles it continues to face. The team was headed by an independent consultant and included representatives from the main organizations that had assisted Zambia in setting up and implementing the program. This team collaborated with Zambian colleagues from the Central Board of Health (CBoH) to review relevant documents and budgets, interview numerous policy-makers and stakeholders (including hospital personnel and patients), and examine accreditation survey data. Because of the composition of the
team, this article should not be perceived as an evaluation, but more as an insiders’ examination of the program and a reflection on what challenges still remain.

This article has two sections. The first section describes each major step in implementing the accreditation program. The second discusses various aspects of the program. To organize our discussion, we use Donohue and O’Leary’s [3] framework of the seven elements critical to an accreditation program’s success:

1. Mission and philosophy
2. Infrastructure and authority
3. Published performance standards
4. Management of field operations
5. A framework for accreditation decision making
6. Accreditation database
7. Accreditation program sustainability

Research design

The objective of this study was to document the development of the Zambia Hospital Accreditation Program from 1997 onwards. This documentation included the major milestones, key players, co-founders, and sequence of events. The resource outlays and financial requirements to complete a full cycle of accreditation were also estimated. The data were collected in four ways: (1) a review and analysis of written documentation; (2) a field visit to Zambia in May/June 2000 to interview major stakeholders in the accreditation program, including focus groups with hospitals; (3) interviews with consultants who had assisted in designing the program; and (4) communication with key implementers.

Major milestones of the Zambia accreditation program

The research team identified 10 milestones in the development of the Zambia Hospital Accreditation Program to date (Figure 1). This section describes each of these milestones.

1. Recognizing the need to improve hospital quality and choosing accreditation to address this need

Zambia, a landlocked country in Southern Africa, has a population of ~ 10 million and an estimated GNP per capita of US$300 [4]. Its tertiary health services consist of 79 hospitals: three central hospitals, nine general hospitals, 36 district hospitals, five specialized hospitals, 20 mission hospitals, and six industrial hospitals [5]. After the election of a new president in 1991, Zambia started a comprehensive reform of its health sector. The main goal of health reform, according to the Health Services Act of 1995, was to provide ‘equity of access to cost-effective, quality health care to all people’ [6]. Reform was particularly urgent in the hospital sector, which had experienced setbacks due to the political and economic crises in Zambia in the 1980s and 1990s. By mid-1990, nearly two-thirds of Zambian hospital buildings were >30 years old, and more than half of the government hospitals had sanitary systems characterized as poor or worse [7].

As part of the reform effort, interest arose in developing a mechanism for linking hospital funding with performance. Launching an accreditation program emerged as a viable option to achieve the country’s objectives of improving quality in the hospital sector. As defined by Rooney and van Ostenberg, accreditation is ‘a formal process by which a recognized body, usually a non-governmental organization (NGO), assesses and recognizes that a health care organization meets applicable predetermined and published standards. Accreditation standards are usually regarded as optimal and achievable, and are designed to encourage continuous improvement efforts within accredited organizations’ [8].

After attending a conference sponsored by the International Society for Quality Assurance in 1996, several prominent CBoH officials expressed interest in setting up a hospital accreditation program. The United States Agency for International Development (USAID)/Zambia’s technical advisor supported the idea. Officials from the CBoH’s Quality Assurance Unit met representatives from the USAID-sponsored QA Project to discuss details. With concurrence from the Minister of Health, the CBoH submitted a request to the Health Services Commissioning Directorate that the QA Project assist Zambia in developing an accreditation program.

At this time, Zambia already had several mechanisms for evaluating, inspecting, or certifying certain aspects of hospital performance. However, these mechanisms were in limited areas, with different criteria for determining compliance, and often lacked educative and support components. Accreditation was considered to be an overarching, comprehensive, transparent program, with surveyors who used standardized procedures. Zambian officials believed that accreditation would be preferable to inspections because it provides consultation and education in addition to evaluation. Though the accreditation program could be perceived as an additional evaluator of hospital performance, the program’s vision was to integrate the efforts of the different ‘examiners’ at any given hospital and to provide a global assessment. For this vision to be realized, Zambia would need to introduce a national policy or procedures to facilitate the integration of different examiners, which has not yet been done.

2. Choosing the appropriate accreditation configuration

In January 1997, a consultant for the QA Project conducted an initial assessment of existing Zambian structures for evaluating health care, as well as stakeholder interest. Stakeholders initially consisted of the main governmental bodies involved in health care delivery [the CBoH and the Ministry of Health (MOH)] and the donor funding the activity (USAID). The consultant suggested to these stakeholders
several possible configurations for the accreditation program, which were not mutually exclusive and seemed feasible in Zambia:

(1) A partnership approach, in which a private organization evaluates the hospitals and the government participates in policy formulation and decision making. This is a public–private partnership between the government and a private organization.

(2) An integrated approach, in which an accreditation council—comprising representatives from government regulatory agencies, professional organizations, practitioners, and the public—was created to govern the accreditation program and provide overall direction, structure, and guidelines.

(3) A phased approach, in which all hospitals first seek licensure to stay open and then apply for accreditation in order to qualify for the annual grant. The government would administer licensure for hospital infrastructure, and a quasi-governmental or private organization would conduct accreditation surveys and make decisions on the quality of hospital functional areas, such as admissions.

During a meeting with stakeholders, participants voiced their views and support for the accreditation program. They critiqued the different approaches presented by the consultant. Ultimately, they determined that the partnership approach would be difficult to set up because no suitable private organization was available, and the phased approach would entail considerable delays because it would require legal changes to the current licensure arrangements. The stakeholders and the MOH therefore determined that the integrated approach was best suited for Zambia, because it would involve the widest spectrum of people, would be guided by the government, and could be set up relatively easily. The main pitfalls with this approach were that the new council would be composed of people who had full-time responsibilities elsewhere, would not have independent funding, and would lack a legal mandate. These pitfalls had some deleterious effects on the program’s functioning, as described below.

3. Setting up the formal structure to advise and manage the accreditation program

Agreeing on the organization and structure of the accreditation program was a critical milestone, given the existing, albeit disparate, organizations that were already legally mandated to oversee certain aspects of the licensing, inspection, and evaluation of hospitals. These organizations included the CBoH, the Medical Council of Zambia, and the General Nursing Council. Since representatives from each of these organizations would be involved in standards development, it was important to clearly delineate who would be responsible for conducting the surveys and overseeing the accreditation decision process. To ensure full participation, the Zambia Health Accreditation Council (ZHAC) was developed. The ZHAC comprised 12 members selected by the CBoH from names submitted by Zambia’s major professional associations, including: the Zambia Medical Association, the Zambia Dental Association, the Zambia Nurses Association, the Medical Council of Zambia, and the General Nursing Council; specialists in nutrition, laboratory, pharmacy, and environmental services; and a community representative. While ZHAC did select a chairperson, major decisions were reached
by consensus of the members. The CBoH was responsible for calling meetings of the ZHAC and meeting ZHAC's operating expenses, using funds from USAID.

At the start, the ZHAC had an executive committee and three subcommittees. The subcommittees were to have the following ongoing responsibilities: (1) standards development and modification; (2) surveyor training and skill maintenance; and (3) accreditation status decision-making. The subcommittees were to meet periodically to discuss and refine aspects of the accreditation program. In practice, however, they were active only in the first 2 years of the program.

4. Developing and testing standards and designing the survey process

Developing standards
With the assistance of two QA Project consultants, the CBoH oversaw the development and approval of a set of draft performance standards for hospitals through a group consensus process. The consultants toured two hospitals and a district health center to obtain baseline information about the structure, processes, and quality concerns at various levels of the health system, in anticipation of eventually expanding the accreditation program to include all health facilities in Zambia. They then held a 4-day workshop to develop a first draft of performance standards for hospitals. Twelve people participated in this workshop, including several members of the newly proposed ZHAC, the Zambia Medical Council, the General Nursing Council, several health professionals selected by the CBoH because of their interest in QA and standards, a community representative, and several providers from local hospitals. The consultants first presented an overview of the accreditation and standards principles. Next, they facilitated the group in identifying key patient and organizational functions (e.g., patient rights, continuity of care, leadership) and problem areas in Zambian hospitals.

Once the key functions were identified, the participants worked in small groups to develop standards in each functional area. The full group devoted the final day of the workshop to review and revise the draft standards. This set of 55 standards and more than 300 measurable characteristics was sent to all Zambia hospitals and key stakeholder associations (e.g., Churches Medical Association of Zambia) for comments and feedback. Fifteen hospitals sent back comments, which were incorporated into the draft standards. The final accreditation program addresses 13 functional areas that were considered relevant to Zambian hospitals and would bring significant improvements in the quality of care (see Table 1). It has 49 standards and 281 measurable characteristics (see Appendix for an example of one standard and its measurable characteristics). The intent was that the standards would require some effort to achieve, but would be attainable with limited resources. It was expected that at the completion of an accreditation cycle (i.e., after 3 years), the standards would be reviewed and upgraded in difficulty, depending upon how the hospitals performed. The CBoH called a meeting of the ZHAC to review, revise, and approve the draft standards. The Council approved the use of functional standards and recommended a number of revisions, which were incorporated into the final standards document.

Testing standards
As soon as draft accreditation standards are developed, it is important to pilot test them to determine their feasibility, applicability, surveyability, and sustainability. Depending on the test results, the standards could be introduced nationally, withdrawn, or sent back to the standards development stage for modifications. In Zambia, four hospitals were selected for pilot testing the standards, representing different sizes and ownership types. After the testing, several meetings were held to agree on revisions to the standards. The revisions mostly entailed removing or recasting certain standards to reduce ambiguity and to make the survey more feasible to conduct.

Developing the survey process
Once the standards had been modified, the consultants developed specific recommendations for the survey and surveyor composition. The ZHAC agreed that even the smallest hospitals, an on-site survey team would include at least two surveyors to ensure objectivity and reliability. The team was to reach consensus on a rating for each measurable characteristic. The council also determined that each survey would last for at least 2 days in order for the team to complete the survey activities, compile its findings, and complete the scoring document before leaving the hospital. From April to June 1998, surveys were piloted in eight hospitals, and the survey process and scoring methodology were finalized. The standards themselves were also further refined. The entire process of standards development, obtaining feedback, pilot testing, refinement, and final printing took ~14 months (from April 1997 to June 1998).

Zambia accreditation program study tour
In addition to the preparatory activities listed above, five Zambian health representatives from the CBoH and ZHAC traveled to the United States in January 1998 for a study tour focused on standards development, standards testing, and survey process development. The representatives were introduced to the standards development process used by the Joint Commission on Accreditation of Health Care Organizations. The team also studied other aspects of accreditation program development, such as scheduling, survey activities, legal activities, field education issues, and surveyor education and management. At the end of the tour, the team observed actual hospital accreditation surveys being conducted.

5. Recruiting, hiring, and training surveyors
Having a cadre of trained professionals capable of conducting surveys in a standardized manner is critical for an accreditation
Zambian hospital accreditation

Table 1  Mean accreditation scores and standard deviations (SDs) for all functional areas assessed in Zambian hospitals over time

<table>
<thead>
<tr>
<th>Functional areas</th>
<th>Educational survey (6/98–12/98) Mean (SD)</th>
<th>Accreditation survey (11/99–9/00) Mean (SD)</th>
<th>P value&lt;sup&gt;1&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management of information&lt;sup&gt;1&lt;/sup&gt;</td>
<td>6.9 (2.8)</td>
<td>8.8 (0.7)</td>
<td>0.030</td>
</tr>
<tr>
<td>Leadership&lt;sup&gt;1&lt;/sup&gt;</td>
<td>5.4 (2.9)</td>
<td>8.5 (1.7)</td>
<td>0.004</td>
</tr>
<tr>
<td>Patient care&lt;sup&gt;1&lt;/sup&gt;</td>
<td>5.8 (2.6)</td>
<td>8.2 (1.5)</td>
<td>0.011</td>
</tr>
<tr>
<td>Continuity of care</td>
<td>7.0 (1.3)</td>
<td>8.1 (1.3)</td>
<td>0.063</td>
</tr>
<tr>
<td>Admission and assessment&lt;sup&gt;1&lt;/sup&gt;</td>
<td>5.6 (1.9)</td>
<td>7.9 (1.0)</td>
<td>0.002</td>
</tr>
<tr>
<td>Laboratory services&lt;sup&gt;1&lt;/sup&gt;</td>
<td>5.5 (2.4)</td>
<td>7.9 (2.0)</td>
<td>0.013</td>
</tr>
<tr>
<td>Human resources&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3.2 (2.5)</td>
<td>6.9 (1.2)</td>
<td>0.000</td>
</tr>
<tr>
<td>Radiology services&lt;sup&gt;1&lt;/sup&gt;</td>
<td>5.2 (1.2)</td>
<td>6.2 (1.3)</td>
<td>0.050</td>
</tr>
<tr>
<td>Pharmaceutical services</td>
<td>3.9 (2.9)</td>
<td>6.1 (2.4)</td>
<td>0.061</td>
</tr>
<tr>
<td>Patient rights</td>
<td>3.7 (2.7)</td>
<td>4.8 (2.3)</td>
<td>0.295</td>
</tr>
<tr>
<td>Environment of care</td>
<td>3.3 (1.4)</td>
<td>4.0 (2.1)</td>
<td>0.365</td>
</tr>
<tr>
<td>Infection control</td>
<td>2.9 (2.2)</td>
<td>4.1 (2.9)</td>
<td>0.257</td>
</tr>
<tr>
<td>Quality assurance</td>
<td>2.0 (3.0)</td>
<td>4.1 (3.9)</td>
<td>0.175</td>
</tr>
<tr>
<td>Overall&lt;sup&gt;1&lt;/sup&gt;</td>
<td>4.8 (1.8)</td>
<td>6.6 (1.2)</td>
<td>0.010</td>
</tr>
</tbody>
</table>

<sup>n</sup> = 12 hospitals. Mean scores are on a 0–10 scale (higher is better).

<sup>1</sup>Significant change over time.

program. Consistent with the Zambian program’s approach to involve stakeholders in all major aspects of the establishment of the accreditation program, the first group of 11 surveyors was formed through a process of nomination and selection by the ZHAC. All organizations represented in the ZHAC were responsible for nominating individuals from their respective organizations. The criteria for appointing surveyors included professional competence, personal motivation, and expertise in various technical areas (e.g., pharmacy, medicine, nursing, radiology). Nominees were professionals with full-time job commitments who would conduct surveys on an <i>ad hoc</i> basis and receive a nominal payment for their efforts (e.g., transportation and per diem). From these nominees, ZHAC selected the most qualified individuals, based on their professional background, hospital experience, general knowledge, and work ethics.

In the past 2 years, the program has experienced significant attrition among surveyors. The attrition arose from several factors: the temporary nature of the work, which meant that surveyors who had permanent jobs without much flexibility had to opt out; the inability of the CBoH and ZHAC to set a firm schedule for surveys due to uncertain funding; long hours and pay that was not commensurate with private sector salaries; and deaths of several surveyors. These factors led ZHAC to use other channels, such as media advertisements, to identify and recruit surveyor candidates who met the same criteria as surveyors who had been nominated.

Survey training was conducted by the five Zambian representatives from CBoH and ZHAC who had toured the United States. Training sessions generally had two parts: (1) a formal didactic component containing presentations on accreditation and developing surveyor skills (such as interviewing, critical thinking, and standards interpretation, with extensive use of case studies); and (2) a series of practice surveys over a 2-month period to give surveyors experience of the survey process. QA Project consultants assisted with the initial training.

Training surveyors and maintaining their skills is one of ZHAC’s main duties. To assist ZHAC in this function, consultants developed a competency assessment form. This form provides feedback on surveyor performance, pointing to opportunities for further skill development and training. Two-day training updates for surveyors have been performed several times.

6. Conducting educational surveys

After surveyors were trained, Zambia performed 20 educational surveys in the remainder of 1998. Educational surveys are essentially accreditation surveys, except that no accreditation decision is made. Educational surveys are intended to familiarize the hospital with standards for accreditation and to enable staff to appreciate how their hospital functions. While no accreditation decision is made, the hospital receives feedback on the improvements needed to achieve accreditation. It also receives a formal report of its scores from the ZHAC. According to one surveyor: ‘[The educational survey component of the accreditation program] is more appreciated than the previous inspections and performance audits which are secretive and subjective… Hospital teams seemed to appreciate the program because it is more educative and supportive; it encourages teamwork among staff from all departments; it is an open one giving the chance for a hospital to avail information which will be used to advise the hospital on how to use limited resources.’
Educational surveys were to be linked with field education to raise awareness of the accreditation program. Because of limited funds, most field education consisted of a 3-hour informational session led by the CBoH Quality Assurance Unit immediately prior to conducting an educational survey. Hospitals were asked to invite interested local stakeholders and community representatives, as well as hospital department heads, to attend the session. The field education introduced the accreditation program and the categories of standards. Often field education included other topics of general interest, such as the new health information management system.

One year was expected to elapse between a hospital’s educational survey and its formal accreditation survey. The average time for the first eight hospitals to receive the full accreditation survey has been close to 1 year, although written communication of results from educational surveys also took ~1 year. Originally, only verbal feedback from the educational surveys was planned; however, hospitals receiving these surveys requested written feedback as well. Unfortunately, the lack of a ZHAC secretariat and bureaucratic inefficiencies delayed the communication of results to hospitals.

One goal of the educational surveys was to use the resulting experience to develop scoring and decision rules for the formal accreditation program. Hence, the initial group of hospitals to receive educational surveys was randomly selected after being stratified by hospital ownership, size, and location. Educational surveys also afforded newly trained surveyors an opportunity to practice surveying under the guidance of more senior surveyors, ensuring mastery of the accreditation standards and survey process.

While it was planned that 20 hospitals would receive educational surveys each year, as of mid-2000 only 35 hospitals had received one. For district-level hospitals, surveys generally require three or four surveyors and last 3 days. For larger, central hospitals with multiple departments and units that are often scattered, up to six surveyors are required for 4–5 days. Reasons for the delay in conducting the educational surveys included logistical challenges of arranging transportation to distant locations, scheduling conflicts among surveyors, surveyor attrition, and insufficient or erratic funding.

### 7. Refining policies, procedures, and rules for accreditation

In developing the accreditation program in Zambia, it was necessary to devise a number of rules, policies, and corresponding procedures. Rules were needed particularly for making accreditation decisions and standardizing the deliberation process, managing surveyors and surveys, and addressing the consequences of an accreditation decision. The drafting of initial decision rules for accreditation began in early 1999 during the pilot testing of the surveys. Policies and procedures were then developed and reviewed by the ZHAC.

ZHAC used results from the pilot and educational surveys to determine which standards would need to be met for accreditation. For ‘basic’ accreditation, ZHAC set a threshold score of 4 (out of 10) for each functional area, with the intent of encouraging incremental improvements over time. In addition, ZHAC decided that hospitals needed to have scores of 6 (or higher) in four ‘critical’ functional areas—patient care, infection control, quality assurance, and management of the environment—to attain basic accreditation. ZHAC chose these areas because it felt that they were most closely associated with favorable patient outcomes and well-being.

### 8. Developing the accreditation database format

To achieve consistency in survey scoring, a scoring form was developed, which lists each standard, its intent statement (i.e., its purpose), and the characteristics that would be used to measure it (see Appendix for an example). During the survey, the surveyors collect information through document review, interviews, and observation. They then examine each standard and reach a consensus as to whether its measurable characteristics were met, partially met, or not met. The surveyor must write a brief explanation for any characteristics scored as partially met or not met.

To calculate standard scores and an overall score, a database and decision algorithm were developed using Microsoft Access software. The database assists with report writing, decreases the amount of labor required to compile survey findings, and produces an individual hospital report, which is to be shared with the hospital. The report summarizes the survey findings, the function scores, and the overall score. The database stores the findings from each survey and calculates the standard scores, function scores, and overall score for each hospital, and it gives the ZHAC the ability to compare survey results for one hospital over time or several hospitals in a variety of ways. It also generates a numerical report, which can be sent to the hospital along with comments and recommendations from ZHAC.

### 9. Conducting full accreditation surveys

Unlike the educational surveys, formal or full accreditation surveys precipitate an accreditation decision. Like the educational surveys, the full accreditation surveys cover 13 functional areas and involve an intensive process of reviewing documents and conducting site tours, observations, and staff and patient interviews. Trained surveyors perform the surveys, and an effort is made to include at least one physician and a nurse on the team. Generally, surveys have required limited or no resources from hospitals, except for staff time to respond to surveyor questions.

Between November 1999 and June 2000, 12 full surveys were completed, about one-third of the hospitals that received educational surveys in 1998. Two of the 12 hospitals achieved
accreditation status. As Table 1 shows, hospitals achieved significant improvement in seven of 13 functional areas. During the accreditation surveys, the functional areas that scored the highest were management of information, leadership, and patient care. The functional areas that showed the least change also scored the lowest: patient rights, environment of care, infection control, and quality assurance. Interviews with hospital staff members suggest that they had difficulties achieving infection control and QA standards without external capacity building. Environment of care required some financial outlays, such as for the purchase of fire extinguishers, which many hospitals could not afford.

Accreditation surveys were to occur every 2–3 years. However, lack of sufficient funding stymied the program and no accreditation surveys occurred in 2001. Should funding be available for surveys, the current frequency of ZHAC meetings (quarterly) would cause a bottleneck, since the time is insufficient for reviewing all accreditation reports in a timely manner and agreeing on appropriate feedback.

10. Interpreting survey data and making accreditation decisions

One of ZHAC’s primary responsibilities is to manage survey results. The process includes the review, discussion of, and agreement on survey results, the determination of accreditation scores based on criteria defined in ZHAC policies, and the writing of a formal report to hospitals informing them of their scores. To date, this process has been time-consuming, particularly writing the commentary to accompany the formal reports. ZHAC did not communicate the accreditation results to hospitals until late 2000. The research team discovered one looming difficulty: hospitals were expecting more than just to know their status (accredited or not accredited). Other expectations included: funding to correct deficiencies in areas where standards were not met, increases in education and training programs, new equipment, and even money for construction.

Hospital reactions to the program

When the research team conducted focus group discussions in hospitals, hospital staff expressed the need for technical assistance in meeting accreditation standards. They cited a lack of knowledge of solutions or activities that would allow them to pass accreditation standards. While staff agreed that surveyors provided some insight into how a hospital can institute quality improvement activities to meet specific standards, they also expressed the need for more continuous support. As one hospital executive director stated: ‘Accreditation opened our eyes, but the logistics are missing’.

Generally, hospital staff was satisfied with how accreditation surveys were conducted. They noted that accreditation surveys were more facilitative than supervisory visits, which they felt were generally oriented to fault-finding and blaming.

Discussion

This section assesses the Zambian program on the basis of how well it has achieved, to date, the seven critical elements outlined by Donahue and O’Leary [3], as listed earlier in this paper. In our view, for assessing a program in a developing country, the framework should probably include an eighth element: institutional resources or capacity. During this study, hospitals reported repeatedly that they needed certain basic resources, such as access to skills and information, to be able to participate effectively.

Mission and philosophy

From the start of the accreditation program, decision-makers foresaw the need for a participative approach, both in the design of the accreditation standards and in the development of the program. To ensure an ongoing commitment to holding hospitals accountable to standards for quality, key stakeholders such as Zambia’s professional medical and nursing associations have played an essential role in the formation and implementation of the program.

From the perspective of the hospitals, educational surveys have been the strongest feature of the program. The opportunity to receive constructive suggestions on how to achieve accreditation—and not just a report card of inadequate performance—has been well received, although hospitals have indicated the need for further technical assistance. The surveys have also afforded the CBoH a better understanding of the greatest challenges for hospitals, enabling it to design a support system for hospitals.

However, in hindsight, the underlying philosophy of the accreditation program may not have been entirely congruent with the Zambian context. The program had assumed that hospitals would be able to marshal the staff knowledge and resources necessary to meet the standards, but this may have been overly optimistic. The program had also assumed that results of the surveys would be shared with supervisors engaged in quality improvement activities at the hospitals, supervisors who would assist the hospitals in making progress. But the mechanism for involving supervisors is not automatic and has had to be forged. In general, in the absence of an overarching QA policy, the accreditation program has been operating largely in isolation from other quality improvement activities.

Furthermore, the program developers did not feel it was necessary to offer hospitals concrete incentives for achieving accreditation. Yet not articulating an incentives policy has caused confusion and frustration, because hospitals’ wishful thinking went unchecked. In the short term, the program needs to understand and address hospital expectations, which could threaten the program’s sustainability. Official policies from ZHAC need to be communicated to hospitals. Also, hospitals probably need a forum to discuss their grievances and aspirations. This would assist ZHAC in planning how to assist hospitals better in the future.
Infrastructure and authority

The ZHAC is a well defined entity with clearly delineated responsibilities and functions. These functions are distinct from those of other existing organizations involved in the inspection and certification of hospital functions. To have greater authority, ZHAC needs to be recognized as a legal entity, with its own source of funds and independence from the CBoH.

However, achieving legal recognition will take time. The challenge for the ZHAC is to define a working process in the interim, when it must depend on CBoH for distribution of funds for accreditation coming from external donors. ZHAC’s current structure and organization, while low cost, lacks a functioning independent secretariat. Its productivity depends on the voluntary participation and interest of members. While the motivation of members is exemplary, the level of participation has been waning due to constraints on resources and a lack of control over budgets.

ZHAC’s limited capacity to handle the load of accreditation surveys and decisions is also an issue. It currently meets only quarterly, which does not seem realistic to carry out all of its tasks. Moreover, it could not be expected to provide the technical support to hospitals with the most need.

Management of field operations

The approach used for training surveyors seemed to be efficient and effective, including the train-the-trainer component. The selection process screened for and recruited talented surveyors with strong technical and managerial skills of direct relevance to the accreditation program. Educational surveys gave surveyors opportunities to obtain practical experience in using the survey tools. Additionally, the program had a mechanism for strengthening the performance of surveyors through frequent and regular assessment of competence.

Unfortunately, the program has experienced a high attrition of surveyors for multiple reasons, including low compensation relative to the level of work demanded and high opportunity costs for surveyors who have other jobs, mostly in the private sector. Whereas the initial selection of surveyors was through nomination, now the ZHAC is in a costly situation of recruiting through advertisements. This puts the program at risk of losing the commitment of ZHAC’s member organizations. It also raises the need to reconsider incentive and compensation packages for surveyors, and to consider how to make the survey process less demanding on surveyors. The program did achieve slight increases in per diem rates for surveyors, but rates remain below acceptable levels (even by government standards).

ZHAC currently has no control over the budget for surveys or for training additional surveyors to compensate for attrition. This erodes ZHAC’s authority and precludes its staying on schedule for educational and full surveys. With high turnover, a mechanism to ensure the consistency and reliability of survey results is critical. This underscores the importance of continual accreditation program assessment of inter-rater reliability by ZHAC, which has not been occurring.

Published performance standards and framework of accreditation decision-making

Due to the considerable effort put into the development of realistic and achievable standards in the first years, the accreditation program has a solid set of standards for hospital accreditation. The extensive testing and review/consensus process resulted in the establishment of appropriate goals for Zambian hospitals.

Still, the fact that most of the hospitals that received the full accreditation survey did not achieve accreditation is cause for concern, both in regard to achievability and the level of quality in hospitals. The program is now at a critical juncture, and there is a recognized need to understand better the reasons for this low performance and to address problems with appropriate solutions (e.g. revision of standards or assistance to hospitals trying to achieve standards). In retrospect, it would have been advisable to implement pilot testing not only of the standards, but also of the entire process of making and communicating accreditation decisions.

The delay in feeding back the results of educational surveys to hospitals (~1 year after completion of a survey) also raises questions regarding the feasibility of ZHAC’s policies and procedures. While some procedures have been applied (e.g. the completion of education workshops prior to educational surveys), other procedures still need to be finalized (e.g. maintaining and revising standards, or dealing with falsification of data or results).

Accreditation database

The database became functional in January 1999. At that point, 12 survey scoring forms from educational surveys were entered as test cases to demonstrate how the database and decision methodology functioned. Since then, several additional survey report forms have been entered. There has been some difficulty in tracking scoring forms and determining whether they have been submitted for entry, as well as ensuring the accuracy of data entry. However, most of these administrative issues can be addressed without additional resources. Since entry of survey data into the computer can be performed rapidly, double entry and discrepancy checking would improve accuracy. The basic structure of the database, and decision rules and methodology appear to be sound.

Accreditation program sustainability

Even though fewer than one in five hospitals has completed the accreditation cycle, questions of short-term funding and long-term sustainability have already arisen. The research team estimated that the program costs nearly US$10 000 per hospital for a full accreditation cycle, not including any technical assistance or resources to the hospital (see Table 2). Since this includes start-up costs and external consultancies, it would be expected that the cost per hospital would decrease in subsequent cycles to about US$7000. Zambia’s total health budget is approximately US$70 million per year [7]. If 25
Table 2  Estimated costs of the Zambia Hospital Accreditation Program for a complete cycle

<table>
<thead>
<tr>
<th></th>
<th>External assistance, US$ (USAID)¹</th>
<th>Zambian expenditures, US$ (CBoH)²</th>
<th>Program funds still required³, US$</th>
<th>Estimated total cost, US$</th>
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<tr>
<td>Advocacy to stakeholders</td>
<td>11 230</td>
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<td></td>
<td>11 730</td>
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<tr>
<td>Capacity building</td>
<td>66 700</td>
<td>2500</td>
<td></td>
<td>69 200</td>
</tr>
<tr>
<td>(and study tour)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training of trainers⁴</td>
<td>72 100</td>
<td>3750</td>
<td></td>
<td>75 850</td>
</tr>
<tr>
<td>Standards development</td>
<td>72 880</td>
<td>3250</td>
<td></td>
<td>76 130</td>
</tr>
<tr>
<td>and testing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training of surveyors⁵</td>
<td>23 190</td>
<td>300</td>
<td></td>
<td>23 490</td>
</tr>
<tr>
<td>Accreditation Council operations</td>
<td>69 050</td>
<td>6100</td>
<td></td>
<td>75 150</td>
</tr>
<tr>
<td>Educational campaigns</td>
<td>8000</td>
<td>2000</td>
<td></td>
<td>10 000</td>
</tr>
<tr>
<td>Surveys and feedback</td>
<td>92 450</td>
<td>251 550³</td>
<td>344 000³</td>
<td></td>
</tr>
<tr>
<td>Independent infrastructure for Accreditation Council</td>
<td></td>
<td>97 300</td>
<td>97 300</td>
<td></td>
</tr>
<tr>
<td>Data entry</td>
<td>1080</td>
<td>2930</td>
<td></td>
<td>4010</td>
</tr>
<tr>
<td>Total estimated cost</td>
<td>416 675</td>
<td>18 400</td>
<td>351 780</td>
<td>786 860</td>
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<tr>
<td>Per hospital estimated cost</td>
<td></td>
<td></td>
<td></td>
<td>9960</td>
</tr>
</tbody>
</table>

¹Total external technical assistance from January 1997 to May 2000: 150 person days.
²Estimated Zambian level of effort from January 1997 to May 2000: 266 person days.
³Funds needed to complete one full accreditation program cycle. A cycle is defined as an educational survey, a full accreditation survey, an accreditation decision, and feedback for all 79 hospitals in Zambia.
⁴Five trainers trained.
⁵Twenty-two surveyors.
⁶At the time of these calculations, 43 surveys had been conducted: 35 educational surveys and eight accreditation surveys. (In June–August 2000, an additional four hospitals received the accreditation surveys.)
⁷Estimated cost to perform an additional 115 surveys. (Unit cost of a survey is $1300 to $3000, depending on hospital size and distance from the capital.)

hospitals per year completed an accreditation program cycle, this would require about 0.4% of the current budget. With only about $7 per capita currently allocated to health, it is unlikely that the government could afford to maintain this program without donor assistance and possibly fees from hospitals.

While USAID/Zambia supported the program in its early years, personnel changes at USAID led to a realignment of priorities. No other donor has stepped in to assist, and because the government contribution was limited, the program is now stalled. A key program deficiency was that it never developed a plan for financial viability. Alternatives that were discussed include financial support from the MOH and the CBoH, as well as partial or complete payment of survey fees by the individual hospital participating in the accreditation process. Providing ZHAC or a comparable body with adequate financial, human, and information management resources to manage the accreditation program is essential. Hospitals also need timely guidance and access to resources. Creative approaches to assist hospitals, such as benchmarking, peer review, and on-the-job training should be considered.

In view of the uncertain financial situation, the CBoH has been considering options for continuing the accreditation effort in an altered form. One approach under discussion is to decentralize survey functions to the provincial level and focus on a subset of standards. This could save money and build more provincial commitment to the accreditation process, and provide continuous technical support through clinical supervisors. Funding might be drawn at least in part from local government sources, rather than exclusively from the national health budget. The CBoH has undertaken to include some accreditation standards in hospital performance audits, which are to occur regularly.

Conclusion

Now in its fifth year, the Zambia Hospital Accreditation Program has achieved notable progress in setting up and implementing an accreditation program. As of late 2001, the program was at a critical juncture in its development and needed to address urgently the following issues:

1. Achieving ZHAC’s legal recognition and funding to ensure adequate program management and financing
2. Managing surveyor attrition and ensuring inter-rater reliability among surveyors
3. Providing timely feedback to hospitals about the results of their surveys
4. Providing ongoing training and technical assistance to hospitals on how to meet the standards

The program has met and overcome many hurdles, and it
has achieved significant improvements in many important hospital functional areas. The next few years will test its creativity and resilience. It is a pioneering activity that deserves careful scrutiny from other countries interested in improving the quality of their hospital care.

Acknowledgements

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References


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Appendix: example of how a standard is measured by the Zambian Hospital Accreditation Program

Functional area: admission and assessment

Standard AA.1: there is an established process for admitting patients to the hospital which prioritizes care based on the assessed needs of the patient.

Intent statement: the order in which patients are seen for admission is determined by their degree of need. Patients with immediate needs are prioritized for assessment and intervention. The hospital designs and implements an effective and efficient process for admitting patients which considers the following elements (scored on the grid below):

- Registration process is completed
- Patients with immediate needs are prioritized for assessment and intervention
- There is a standard for checking waiting times of patients in the Outpatient Department and Admission
- Communication of information between departments and staff involved in the care
- Timely completion of requested diagnostic testing
- All of these processes are documented in policies and procedures and standardized within the hospital

<table>
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<tr>
<th>Scoring</th>
<th>Met</th>
<th>Partially met</th>
<th>Not met</th>
<th>Not applicable</th>
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<td>a.</td>
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<td>f.</td>
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</tr>
</tbody>
</table>

Sources of information:

1. Interview clinical and non-clinical staff and address the registration process.
2. Observation of the admitting area.
3. Interviews with patients/families.
4. Patient records.