



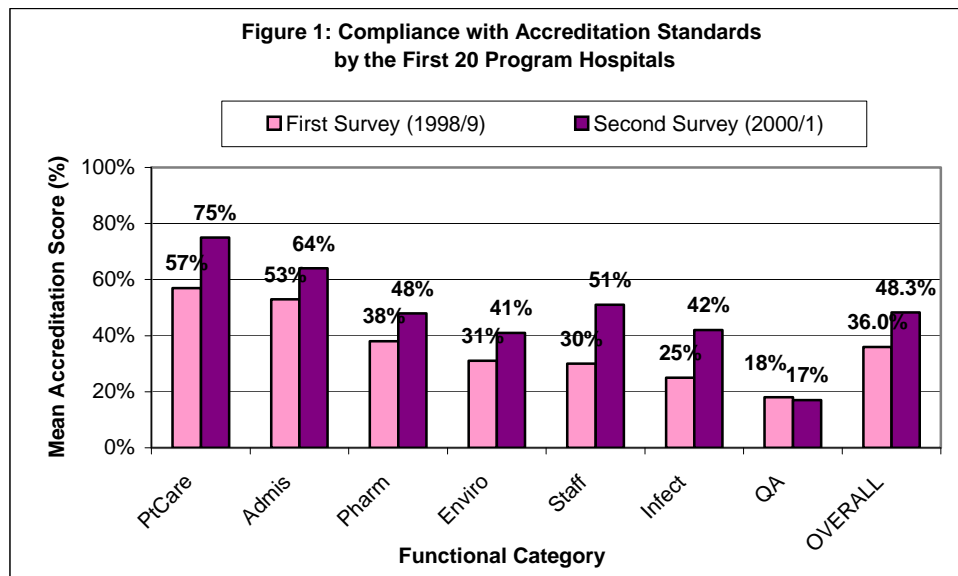
OPERATIONS RESEARCH SUMMARY

Evaluation of Zambia’s Hospital Accreditation Program

To address documented shortfalls in its hospitals, the Government of Zambia (GOZ) launched an ambitious national hospital accreditation program in 1997. The program defined 35 standards of good hospital practice, grouped into seven functional categories, such as patient care and admission procedures. External review teams measured the compliance of participating hospitals with the standards in a sequence of surveys, judging the hospitals to be compliant, partially compliant, or non-compliant in each category. GOZ planned to phase 20 hospitals into the program each year, but the number varied from year to year. The goal was for the survey results, including progress towards better performance, to stimulate the hospitals to comply with the standards and provide better care. After several years, the program was phased out due to changing priorities and termination of funding. The program, implementation, and phase-out are described elsewhere.¹

The Evaluation

The evaluation² investigated whether the accreditation program improved hospital practices and patient outcomes. It included a program group (the first 20 hospitals in the program) and a comparison group (six hospitals scheduled to join the program later). The evaluation performed its own external “accreditation surveys” in the comparison hospitals, but gave them no feedback on results. It also defined and collected data on eight important indicators of hospital performance and patient outcomes in both types of hospitals.



Compliance with Accreditation Standards: The first 20 hospitals substantially improved their performance on accreditation standards. Overall compliance jumped from 36% to 48% between the first and second surveys, which were one to two years apart (Figure 1). The improvements were fairly consistent across hospitals and functional areas. Although all types of hospitals (district, mission, and general) started the accreditation program at about the same level of performance, general hospitals improved far more than the other types. With regard to variability, performance in patient care started high and went higher; environmental scores started low and remained relatively low; while the staffing and infection control categories started low but nearly doubled. At the second survey, the program hospitals had higher

accreditation scores than the comparison hospitals in all seven functional areas. Overall, program hospitals averaged 48.4% compliance versus 38.0% compliance in the comparison hospitals, a difference significant at the 0.02 level (Table 1).

Performance on Research Indicators: However, the difference between the program and comparison hospitals on the eight research indicators was less conclusive. Health outcomes were better in the program hospitals: Deaths within two days after admission (as a percentage of all hospital deaths) and C-section infections were clearly lower in program hospitals. The table shows little difference in staff or patient satisfaction. Lab test availability was better in comparison hospitals, emergency drug availability better in program hospitals, and essential drug availability the same in both.

Table 1: Program versus Comparison Hospital Scores at Second Surveys

Mean Scores: Compliance with Accreditation Standards, by Functional Area								
	Patient Care	Admission	Pharmacy	Environment	Staff	Infection Control	Quality Assurance	OVERALL
Program group	76%	64%	48%	41%	51%	42%	17%	48.4%
Comparison group	70%	56%	35%	30%	39%	30%	6%	38.0%

Mean Scores: Research Indicators								
	Deaths < 2 days	No C-sec infection	Emergency Drugs	Essential Drugs	Lab Tests	Sanitation	Staff Satisfaction	Patient Satisfaction
Program group	48%	67%	52%	76%	85%	73%	56%	62%
Comparison group	38%	53%	42%	75%	93%	60%	54%	63%

In further analysis, the 20 program hospitals were separated into groups on the basis of their accreditation scores in the second survey (2000–2001). The four hospitals with scores over 60% were in the high-performance group, the 12 with scores from 45–60% were in the mid-performance group, and the four with scores under 45% the low-performance group. All six comparison hospitals would have been assigned to the low-performance group. The difference between the high- and low-performance groups was minimal, except by type of hospital. Of the eight hospitals in these two groups, all general hospitals were high-performers (two), and all district hospitals were low performers (two). Mission hospitals were equally split with two each in high and low.

Discussion

These findings suggest the accreditation program had a positive impact, but do not provide incontrovertible evidence because the study was plagued with methodological problems. The program hospitals self-selected to join the program first. Five program hospitals were general hospitals (generally good performers), while none of the comparison hospitals were. Many accreditation standards are not evidenced-based and may not be causally linked to outcomes or important process standards. Because changes in research indicators probably lag changes in accreditation scores, the measurement of research indicators may have been too soon to demonstrate gains in accreditation standards. Also, while compliance scores went up, they were still very low.

Still, hospital managers thought the program had merit, saying the feedback motivated them to improve, which they did if possible. However, they added that they were unable to take actions that required funds, which they normally did not have, or required expertise that was not available.

¹ Bukonda N, Abdallah H, Tembo J, Jay K. 2000. Setting up a National Hospital Accreditation Program: The Zambian Experience. *Operations Research Results* 1(8). Published for USAID by the Quality Assurance Project (QAP), Bethesda, MD. Available at www.qaproject.org.

² This summary is based on a study reported in: Quality Assurance Project (QAP). 2005. The Zambia Accreditation Program Evaluation. *Operations Research Results*. Published for USAID by the Quality Assurance Project (QAP), Bethesda, MD. Available at www.qaproject.org.

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