

Hospital Autonomy in Indonesia

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Executive Summary

Indonesia initiated a program of hospital autonomy (Unit Swadana) in 1991 to encourage hospitals to recover some of their costs. Indonesian Unit Swadana hospitals are still government-owned with a high level of supervision and control by both the Ministry of Health and by local authorities at the provincial and district levels which depend on the centralized Ministry of Interior. Nevertheless hospital directors are given some control over the portion of their total revenues that comes from the fees they collect at the facility. Unlike many other countries, the fees collected by Indonesian hospitals have been significant — 30-80% of total income — the rest coming from subsidies from the national and local governments. Prior to being certified as Unit Swadana, a hospital was required to turn over all of the own source revenues to the governmental level which administered them.

Under the new Swadana system, hospitals are allowed to retain their fees, and they can, within some percentage limits, use these funds for salary incentives, operations (drugs, spare parts), and hiring of contract personnel. Fee revenue cannot be used for equipment or construction; however, the autonomous hospitals are allowed to use the funds to contract services such as food service and laundry. Hospital managers may set fees for all charges except those charged for beds reserved for the poor (Class III beds). While these fees must be approved by higher authorities, in almost all cases, they are approved.

There still is a degree of centralized control over the planning/budgeting process for the revenue from fee collection. The hospital management is required to submit a yearly plan for the use of their own source revenues, incorporating them into the planning-budgeting exercise that includes the government subsidies from national, provincial and district sources. The hospital management in the newly autonomous hospitals indicate that this supervision of their budget is not a major obstacle to their ability to decide how to use their funds.

The management structure of the hospital is a decision that can be made at the hospital level — changing the uniform norms of the centralized system, and allowing a variety of organizational forms. However, the Hospital Director continues to be appointed by the central Ministry of Health (DEPKES) and not by any locally accountable authority.

The hospital management can also change some of the services provided. They

can reallocate beds among different classes of services, except for Class III beds which are reserved for the poor and by law must be at least 50% of the beds.

The DDM Study

The DDM study evaluated a sample of ten hospitals which included: five Swadana hospitals with 2-3 years experience of hospital autonomy (two in Jakarta, one in West Java and two in Central Java); three public provincial or district non-autonomous hospitals — one in Central Java and two in Jakarta; and two private hospitals one large and one small — one in Jakarta and one in Central Java.

A survey instrument was prepared to evaluate process and impact changes in financing, equity, quality, and efficiency that could be attributed to hospital autonomy. A series of hypotheses on the likely effects of autonomy on process and impact and the results of these tests are reported below.

This methodology allowed us to evaluate trends in budgets, personnel, utilization, bed class assignments, bed occupancy rates, length of stay for autonomous public hospitals, non-autonomous public hospitals and private hospitals. The survey also gathered interview data on management changes, incentive structures, and budgetary processes. Attempts to gain data on quality were not successful.

Conclusions

Funding for all public hospitals has increased — both government subsidies and retention of fee revenue. This finding was somewhat surprising since, although we expected fee revenues to increase, we also expected subsidies to drop when hospitals were allowed to retain fee revenue, especially for provincial or district hospitals where local governments depended on hospitals for local government revenue. However, there was no identifiable relationship between Swadana status and funding trends. We found that Swadana status alone provided little incentive to shift from dependence on subsidy to dependence on their own fee revenue.

Equity issues appear to have worsened in general and in some cases — especially in the increase in fees, Swadana status may have contributed to this inequity. There was a recent trend of doubling, tripling, and in some cases more than quadrupling of fees among all types of hospitals. The autonomous hospitals however, charged higher fees and had greater increases than did the non-autonomous public hospitals. The fees of the Swadana hospitals were approaching the fees collected by the private hospitals at both the high and low ends of the fee schedules.

Among the hospitals in our sample, there was a general reduction in access for the poor — regardless of autonomy — with a decline in the absolute number of beds reserved for the poor. In addition, the fees charged for the Class III beds in Swadana hospitals were approaching those charged by the private sector for the same type of beds. As expected, the non-Swadana hospitals were less likely to increase fees than the autonomous hospitals. While national, provincial and district authorities have control over the allocation of Class III beds, they appear to have an inconsistent requirement for their hospitals to maintain the number or percentage of beds allocated to the poor.

Although data on unit costs in the hospitals is of questionable validity, the data available suggested that public hospitals could be subsidizing the VIP beds that are used by wealthier patients and hardly subsidizing the beds for the poor. It is the beds with modest tariffs (for the near poor) which appear to be charged more than unit costs. By contrast the private hospitals were more successfully using fees to cross-subsidize the beds for the poor. Public hospitals might examine the fee schedules and costing structures of private hospitals which allow them to achieve this kind of cross subsidy.

We did not find evidence that hospital autonomy had an impact on personnel decisions. The numbers of personnel in each staff category remained relatively stable over the period studied. Since autonomy did not allow the management to hire or fire the permanent salaried staff, this finding is not unusual.

We measured efficiency by length of stay and bed occupancy rate and again found little indication of change in any type of hospital. We were unable to evaluate the impact on quality — data on intra-hospital infection rates and patient satisfaction was not available. There was no apparent difference between centrally controlled hospitals and those controlled by local authorities (provinces and districts).

The only clear evidence of improvements that have occurred from hospital autonomy were that management systems improved in autonomous hospitals. Incentive systems for physician payments in these hospitals appear to have improved physician attendance. These changes have not yet demonstrated an impact on our indicators of efficiency as noted above, however they suggest that more refined measures of efficiency and quality might show this impact.

These findings should be taken with caution. The sample of hospitals is still quite small and the experience with autonomy relatively recent. In addition, since many hospitals are now engaged in a process of obtaining autonomy, there may be a halo effect in the non-Swadana hospitals in our sample. However, the trends toward limiting access and higher fees suggest that some mechanisms should be put in place to assure that autonomy can be compatible with maintaining access for the poor.

Objectives

This study is part of a comparative study of hospital autonomy sponsored by the Data for Decision-Making Project (USAID Cooperative Agreement No: DPE-5991-A.00-1052-00). Based on a concept paper and general methodological outlines — *Improving Hospital Performance Through Policies to Increase Hospital Autonomy*, by Mukesh Chawla and Peter Berman — the study in Indonesia focused on four principal issues:

- describing the decision-making process of creating hospital autonomy (Unit Swadana) through decrees and implementation;
- specifying the legal range of choice allowed by autonomy;
- defining the range of choice that autonomous hospitals actually experience in a sample of hospitals; and
- evaluating the short-term impact that the sampled hospitals have experienced since formal certification as Swadana hospitals.

Framework of Analysis

The central definition of autonomy for this study focuses on the dimensions of choice that are exercised by the management of the hospital staff. The Chawla and Berman framework presents two nesting levels of analysis. The first level defines the **authority** and **ownership** of hospitals. This level identifies the global authority or power (centrally controlled, high supervision/control, low supervision/control, and total independence) that is allowed to the hospital management. Ownership is defined by the territorial level of government control (central, state, local government) or non-government/private. These two dimensions can be presented as a matrix in which the “zero case” defining a near lack of autonomy would be in the cell defined by “centrally controlled” and “central government”.

The second level of analysis looks within the hospital to define the functions over which the hospital management has authority. These **functions** are administration, finance (subdivided into recurrent, capital, resources, revenue) and inputs (personnel, drugs, equipment, supplies). Each dimension is to be measured on a continuum ranging from no-autonomy to full autonomy.

Taking the functional level of analysis further, we have developed the concept of “**decision space**”. Decision space is an attempt to define the dimensions of control exercised by hospital managers over specific areas of decision-making, such as budgets, fees, personnel, and types of service delivered. The range and scope of decision-making is limited by legal and regulatory specifications which specify the “space” that is already defined by law or which is to be determined by higher authorities and that which is allowed to the hospital management. These controls may be exercised as stated in the first level of analysis (Chawla and Berman), by different levels of government or by private entities. However, some of the functions in the second level of the Chawla and Berman framework could be restricted by governmental regulations or directives, regardless of ownership of the hospital. There are a variety of mechanisms that are used to define decision space. They may include specific norms for hospital services or personnel distributions, required percentages of budgets assigned to specific tasks (promotion and prevention) or levels (e.g. primary care); civil service limits on hiring and firing; access requirements for the poor; bed allocations, etc. In some countries, requirements for matching categorical grants may be a mechanism for limiting decision space, although categorical grants to hospitals has not yet been used in Indonesia. In keeping with the Chawla and Berman

framework, we have defined decision space along the functional dimensions of financing, inputs and services and allowed a range from “no autonomy” to “full autonomy”, although there may be other methods of defining decision space.

General Background on Indonesian Health Sector

Indonesia is the fourth largest country in the world, with 190 million people in a long archipelago of islands between the Pacific and Indian Oceans. Despite a long period of relatively steady economic growth, maintained by a stable and centralized authoritarian government, the GDP per capita US\$ 880 (1994 U.S. Dollars) remains among the lower-middle-income countries.¹

Epidemiological changes have followed the general trend of shift toward more chronic degenerative diseases, however infectious diseases and infant and maternal mortality still remain major health problems.

Health sector total spending is estimated at around 2.5% of GDP (US \$12 per capita) of which government contributes only 30%.² Although significant primary health care and family planning programs have been initiated in Indonesia, the hospital sector remains the largest portion of government and total spending.

In the 1980s Indonesia's government decided to limit new construction of hospitals until the year 2000 in order to control public expenditures. To meet anticipated increases in demand the government has adopted a policy to deregulate and encourage private investment in hospitals. This policy has resulted in a major growth in private hospitals and hospital beds.³

Public hospitals are owned by five types of public institutions as shown in Table 1. In 1994, the public sector owned 63% of the hospitals and 68% of the beds. DEPKES directly owned only 15 "vertical" hospitals and the provincial and district governments together owned 321 hospitals and 39,732 beds. (See Table 1a.)

Government Hospitals are classified into categories A, B, C and D according to the services and facilities provided. The classification ranges from Class A, which represents the largest and most technical, to Class D, which represents the smallest and most basic. The following is a brief description of each class⁴:

Class A: There are two class A teaching hospitals with approximately 1450 beds each. These hospitals have specialized staff and technical equipment.

Class B: There are 15 class B hospitals ranging in size from 300 to 800 beds

1/ World Development Report, *From Plan to Market*. Oxford University Press: Oxford, England. June 1996. p. 188.

2/ Ascobat Gani. *Mobilizing Private Resources for Public Health Services: Impact on Utilization and Quality of Services*. Paper prepared for Second Regional Conference on Health Sector Reform, Manila, Philippines, Asian Development Bank. March 5-7, 1996. p.3.

Table 1
General Hospitals by Type of Ownership (1989-1994)

	1989	1990	1991	1992	1993	1994
MOH	13	14	15	16	16	15
Prov. Gov't	48	48	48	48	41	41
District Gov't	268	269	269	271	280	280
Armed Forces	112	110	110	109	110	110
Other Ministry	81	82	82	84	84	78
Public Total	2511	2513	2515	2520	2524	2518
% Public	69%	68%	66%	65%	64%	63%
Private	231	251	272	282	299	311
% Private	31%	32%	34%	35%	36%	0.37
Total Hospitals	2,742	2,764	2,787	2,802	2,823	2,829

with an average of 625 beds. While lacking the most technical services available in Class A hospitals, Class B hospitals are also highly differentiated by function with about 10 specialty departments and some teaching hospitals.

Class C and C+: There are 79 class C hospitals ranging in size from 50 to 390 beds with an average of 190 beds. These are specialty hospitals.

Table 1a
Hospital Beds by Type of Ownership (1989-1994)

	1989	1990	1991	1992	1993	1994
MOH	8,232	8,547	8,636	9,089	9,296	9,081
Prov. Gov't	12,949	12,786	12,723	12,559	11,365	11,799
District Gov't	25,465	25,664	25,823	25,966	27,328	27,933
Armed Forces	11,458	11,341	11,356	11,190	11,125	10,822
Other Ministry	8,017	7,921	7,841	7,851	7,541	7,273
Public Total	66,121	66,259	66,379	66,655	66,655	66,908
% Public	72%	71%	70%	69%	69%	68%
Private	25,217	26,747	28,283	29,370	30,542	32,044
% Private	28%	29%	30%	31%	31%	0.32
Total Hospitals	91,338	93,006	94,662	96,025	97,197	98,952

3/ Gani, p. 9.

4/ Barnum, Howard. June 1987. *Hospital Expenditure in Indonesia. Population, Health and Nutrition Department*, World Bank. PHN Technical Note 87-17: pp.3-4.

Class D: There are 217 class D hospitals averaging 70 beds per hospital. Class D hospitals provide only general services, there are no specialty services.

The governmental structure of Indonesia is highly centralized and authoritarian. Although there are elections and party competition, these formal structures are significantly constrained by legal and informal processes to enforce consensus. The health sector is dominated by the central Ministry of Health (DEPKES), although other ministries — especially the strong Planning Ministry, and the Family Welfare, Interior and Finance Ministries— are also important. Territorial governments at the provincial, district, and municipal levels have separate health offices, however, these governments in turn are responsible to the centralized Ministry of Interior. Decentralization processes have not transferred significant central control from the Ministries in Jakarta to the province, district and municipal levels.⁵

5/ Bambang Hartono, et. al. *Decentralization and Health System Change in Indonesia: A Descriptive and Analytical Study*. National Institute of Health Research and Development, Ministry of Health, Republic of Indonesia, Jakarta, 1996.

Background on Hospital Autonomy in Indonesia

Indonesia initiated a program of hospital autonomy (Unit Swadana) with the primary objective to encourage hospitals to recover costs by allowing them to control and manage the fees they collect, within some boundaries. Following a Presidential Decree in 1991 which encouraged the development of autonomous institutions for all public services which serve social functions, the Ministry of Health established standards for public hospitals to become more autonomous. These standards included demonstrating a level of cost recovery of at least 50% of operating costs. First four, then eleven, hospitals were granted autonomy in 1991-3. These hospitals were mainly "vertical" hospitals that were operated by the national level of the Ministry of Health (DEPKES), but included at least two Provincial or District hospitals that are partially administered by the provincial and regency governments under the direction of the Ministry of the Interior. Since 1993, more hospitals have been granted official status as autonomous hospitals, including more provincial and some district hospitals. Recently the Directorate of Autonomy of the Ministry of Interior (which is responsible for overseeing the provincial and district authorities for all sectors) has selected a new group of 26 facilities to become autonomous.

Autonomy means that the facility directors are given some control over the often significant portion of their total revenues that comes from the fees they collect at the facility. Hospitals receive subsidies from the national and local governments, plus cost-recovery from their own fees. It is only for their own sources that the Swadana hospitals have received new authority to manage. Prior to being certified as Swadana, a hospital is required to turn over all of the own source revenues to the governmental level which administers them (national for vertical hospitals and province and districts for the others). The non-Swadana hospitals have little incentive to collect the fees, and in many districts and provinces the local government subsidy is less than the own source revenues that are turned over to them. In these cases, the hospital acts like a tax collector for the local government. Unlike many other countries, the fees collected by Indonesian hospitals have been significant — 30-80% of total income.

Under the new system, hospital managers not only retain their fees, they can, within some percentage limits, use these funds for salary incentives and

operations (drugs, spare parts). They are not allowed to use these funds for equipment or construction and reconstruction. The hospital management is required to submit a yearly plan for the use of these funds, incorporating them into the planning-budgeting exercise that includes the government subsidies from national, provincial and district sources. The national planning exercise involves hospital directors, district and provincial directors presenting proposals to national officials at a formal yearly meeting. In the past these budgets have been based on percentage increases in historical budgets. Now more justification is needed for specific budgetary items, and the hospitals in general have gained significant expectation that their proposals will not be frivolously cut or ignored. The new bank accounts allow directors direct access to their funds, reducing the long delays in payments from central and provincial accounts.

While the Swadana process has created a wider "decision space" at the hospital level, the central manager of the hospital continues to be appointed by DEPKES and not by any locally accountable authority.

In terms of the analytical framework of the DDM methodology, Indonesian Swadana hospitals are still government owned with a high level of supervision and control by the central, provincial and district levels of the Ministry of Health and by local authorities at these levels which in turn are under the control of the Ministry of Interior. Nevertheless the Swadana hospital management has gained significant increase in autonomy over the following functional areas:

- hiring and firing of non-permanent, contracted hospital staff;
- setting most fees;
- assigning beds for all fee levels, except Class III which must be available to the poor;
- purchasing drugs and supplies;
- selecting incentive systems for use of a specified portion of the own source revenue; and
- contracting with private sector services and investors.

Table 2
Decision Space in Swadana Hospitals

<i>Type of Decision</i>	<i>No Autonomy</i>	<i>Major Restrictions</i>	<i>Key Areas Restricted</i>	<i>Partial Restrictions</i>	<i>Full Autonomy</i>
Finance Area					
Recurrent Allocations	subsidy budgets fully controlled by DEPKES or local authorities			autonomy for own source revenue, restricted by annual planning budget	
Investment Allocations	investment budgets fully controlled			contracts with private investors for equipment	
Charges and Fees				set own fees subject to higher review	
Inputs					
Human Resources		civil service regulations for permanent staff		autonomy for hiring and firing of contract staff	
Incentives				set incentives for 60% of own source revenue	
Drugs	some subsidies are fully controlled from source			autonomy for own sources within essential drug list	
Services Area					
Services Provided	Class III (poor and near poor) bed allocation controlled from DEPKES or local authorities			can change bed allocation for VIP and Class I and II beds	

Process to Establish Unit Swadana Policy

The policy process was an incremental process in which problems were first identified within the health sector, followed by specific proposals for hospital autonomy which were later incorporated into a general government decree for autonomy of major public sector facilities.

In 1974 a hospital survey implemented by Faculty of Economics at the University of Indonesia found serious problems at hospital level and proposed changes in incentives at the facility level in order to improve efficiency and quality of service. This proposal was ignored for years. In the mid 1980s, USAID initiated a series of consultancies on health financing and studies of hospitals — the Barnum Study in 1987 and Rukmono study in 1989.⁶ These studies also recommended management and incentive changes in hospitals.

Following these studies, a team of officials within DEPKES, headed by Dr. Broto Wasisto, developed specific proposals to promote hospital autonomy. These proposals were circulated in the government and eventually were adopted by the Presidents office and included in a general decree in 1991 (Presidential Decree No. 28) which allowed all public sector social services to establish a policy for the creation of autonomous institutions.

The central objective of the institutional autonomy initiative was to increase revenue in hospitals to reduce the financial burden on the central budget.

DEPKES then established criteria for selecting hospitals which could be granted autonomy. These included levels of own source revenue and some standards of efficiency. The program was to be implemented in stages, with a pilot program and a small sample of hospitals which met the initial criteria. Additional hospitals have been approved in subsequent stages that are ongoing.

6/ Dr. Rakmono, 1989. *Summary of Hospital Diagnosis Study. Hospital Sector Project Implementation Unit. Health Resources Study Project.* MOH Republic of Indonesia. Jakarta. p. 1-61.

Key Issues of Implementation

The central questions of this study attempt to address the impact of the limited range of autonomy allowed to Swadana hospitals to see if it has changed the funding and operation of the hospitals and if these changes in turn have affected the access, efficiency, and quality of service at the hospitals.

A. Hospital Funding and Operations

1. Funding Flows and Trends

One of the central objectives of the Unit Swadana policy was to encourage hospitals to generate additional new revenue by allowing them to retain all own service revenues. Since one of the problems of the prior system was that the fees collected were turned over to national (in the case of vertical hospitals) or provincial governments, there were little incentives for the hospitals to generate this revenue. Indeed, in some cases hospitals turned over more in fees than they received back in subsidies from provincial governments. In other countries the experience of fee collections suggests that even when hospitals are allowed to retain their fees, if government authorities know how much these hospitals are retaining they may reduce subsidies and shift funding to the hospitals which have not been successful in generating revenue. While this may satisfy a principle of equity, it also undermines the incentives for hospitals to generate more revenues in fees. Since the budgets of Swadana Hospitals are strictly planned with local DEPKES and provincial authorities, the opportunity for these officials to reduce subsidies does exist.

The funding of hospitals is a complex flow of several sources:

Provincial and district hospitals receive subsidies from 5 accounts, plus cost-recovery from their own fees:

- routine national budget for most salaries (SBBO);
- provincial assignment of local and national resources (APBDI);
- district assignment of local and national resources (APBDII);
- national development funds through Provincial Kanwil for training and equipment (APPN);

- operational and maintenance funds from national level (OPRS); and
- own source fees (hospital “revenue”).

“Vertical” Hospitals receive funds from several national funding accounts:

- routine budget for salaries;
- operational and maintenance budget;
- investment budget; and
- own source fees.

Our study therefore had to examine hospital revenues from a variety of sources to see if Swadana hospitals actually increase their own source revenue and to see if that increase is related to a concomitant decrease in subsidies from other sources — especially those which depended on hospitals for some of their provincial revenues.

While investment budgets continue to be controlled by higher level officials, hospitals are assuming the right to enter into joint ventures with private capital. This practice, however, may be a breach of regulations that is tolerated as a pilot experiment and could be halted by explicit enforcement of the regulations.

2. Fee Setting and Cross Subsidies

Swadana hospital management is allowed some discretion over setting of fees, however it is always subject to the approval of DEPKES or the provincial authorities.

Fees for three classes of hospital bed service (VIP, First and Second) are officially at the discretion of the hospital (within some limits) and the Third Class (for the poor) were established by the national DEPKES (for vertical hospitals) or provincial authorities.

Table 3 shows quite a range of fees being charged by hospitals in the DDM study (see below for study description). Fees ranged from rp 400 (US\$=.18) per day for Class IIIb beds (for the poor) in a public hospital to 225,000 (US\$=97.49) for VIP beds in a large private hospital. Within the public sector fees have been rising in recent years, as much as triple for both VIP and for Class III beds.

One of the justifications for fee setting has been the argument that VIP beds should generate income for cross subsidies for the poor. A further assumption is that hospital management will attempt to get as much revenue from the higher fee beds than for the beds of the poor.

Table 3
Inpatient Charges of Sampled Hospitals by Class and Year (in 1000 rupiah)+

	Hospital	1991/92	1992/93	1993/94	1994/95	1995/96
Swadana	RSUP Persahabatan					
	VIP		*	100.0	100.0	125.0
	Class I		22.5 *	32.5	32.5	45.0
	Class II		13.0 *	15.0	20	20.0
	Class III a		5.0 *	10.0	10.0	5.0
	Class III b		*	5.0	5.0	5.0
	RSU Tegalyoso					
	VIP	27.5	27.5 *	27.5	27.5	45.0
	Class I	16.0	16.0 *	16.0	16.0	25.0
	Class II	10.0	10.0 *	10.0	10.0	15.0
	Class III a	3.1	3.1 *	4.5	4.5	7.5
	Class III b	1.0	1.0 *	2.0	2.0	3.0
	RSU Pasar Rebo					
	VIP					
	Class I					
	Class II		*	14.0	14.0	27.0
	Class III a	5.2	5.2 *	5.2	5.2	9.0
	Class III b					
	RSUP dr. Kariadi					
	VIP	35.1	39.0	39 *	95.0	95.0
	Class I	21.1	27.0	27.0 *	55.0	55.0
	Class II	10.6	15.0	15.0 *	35.0	35.0
	Class III a	2.7	3.0	3.0 *	5.0	5.0
	Class III b	0.9	1.0	1.0 *	3.5	3.5
	RSU Tangerang					
	VIP I					
	Class I	80.0	80.0	80.0	80.0 *	70.0
	Class II	12.0	12.0	12.0	12.0 *	42.0
	Class III a	8.0	8.0	8.0	8.0 *	24.0
	Class III b	4.0	4.0	4.0	4.0 *	4.0

* Year Autonomy Granted

Blank Space = no data

Note: Shaded area indicates period of autonomy.

+ exchange rates:

1991	US\$1 =1992.6 rup
1992	=2060.5
1993	=2109.9
1994	=2199.9
1995	=2307.9
1996	=2357.0

n

Table 3

Inpatient Charges of Sampled Hospitals by Class and Year (in 1000 rupiah) (Continued)

	Hospital	1991/92	1992/93	1993/94	1994/95	1995/96	
Non-Swadana	RSU Abdul Moeloek						
	VIP I	20.0	20.0	40.0	40.0	40.0	
	Class I	5.0	5	25.0	25.0	25.0	
	Class II	1.0	1.0	15.0	15.0	15.0	
	Class III a	0.8	0.8	3.0	3.0	3.0	
	Class III b	0.4	0.4	1.0	1.0	1.0	
	RSU Magelang						
	VIP II					25.0	
	Class I					12.0	
	Class II					6.0	
	Class III a					2.0	
	Class III b					1.0	
	RSU Tarakan						
	VIP						
	Class I						
	Class II			18.0	18.0	27	27.0
	Class III a			5.4	5.4	9.0	9.0
	Class III b						
	Private	Large Private Hospital					
		VIP			120.0	150.0	225.0
Class I				40.0	50.0	80.0	
Class II				20.0	25.0	30.0	
Class III a				10.0	12.5	17.5	
Class III b							
Small Private Hospital							
VIP		66.0	72.0	90.0	105.0	125.0	
Class I		40.0	46.0	55.0	65.0	77.0	
Class II		19.0	21.0	25.0	30.0	40.0	
Class III a		5.0	5.0	6.0	7.5	10.0	
Class III b							

* Year Autonomy Granted
Blank Space = no data

Fee setting however is a complex issue for Swadana hospitals because it involves assessment of what the market will bear and what competitors are charging (especially for the VIP beds).

3. Incentives and Hiring

Salary levels in Indonesian hospitals are notoriously low. A general physician makes a government salary of less than US\$100 per month. Physicians supplement their income in their private solo practices and sometimes by working in private facilities part time.

Hospital autonomy has provided hospital management with significant control of their own resources (which in our sample were 30-80% of total income) to upgrade operations and maintenance and for hiring contract workers and for use as salary incentives for staff. Each hospital is allowed significant flexibility in contract hiring and in design of incentive mechanisms (within an upper limit of 60% of the own source income allowed to be allocated to salaries). Since public sector hiring is “frozen”, hospitals are allowed to use these own source revenues only to hire staff on contract — without benefits and job security. They do not have control over permanent government staff.

The assumptions behind the incentive system is that local control of intra-hospital salary incentives and contract hiring will allow hospital management to reward staff for improvements in efficiency and quality by designing appropriate incentive systems. However, it is not clear that the hospitals have been given guidance for productivity or quality incentives. Many of the hospitals appear to be using a democratic process of collective decision-making for assigning incentives. This process tends to encourage across the board percentage increases in salaries, unrelated to indicators of productivity or quality.

Furthermore, since many hospitals had an informal (and “illegal”) system of incentives in which usually specialists were granted a salary supplement from the own source revenues, the regularized process was reported to create conflict in some hospitals since the new official incentives were lower than the informal incentives had been for some staff.

It was also assumed that local hospital managers will be able to change their staffing patterns to promote more efficient use of resources, and perhaps to increase the administrative staff needed to generate more fees and to promote the hospitals through marketing. It is not clear whether hospital autonomy and responsibility to generate more income would encourage a change in hiring to reduce specialists and increase reliance on less costly paraprofessionals. While specialists may have higher salaries and higher costs, they are also seen as important indicators of quality, attractive to patients, and sources of higher fees. Specialists may also be major actors in the hospital management itself.

4. Administrative Structure Changes

The autonomous hospitals have been encouraged to restructure their management to creating medical committees accounting units and medical records departments. Physicians are to form the Functional Medical Staff under the Medical Committee.

These administrative changes in the Swadana hospitals were supported by technical assistance and training provided by USAID to develop methodologies and skills in unit cost analysis, inventory control, and accounting systems.

We expect that Swadana hospitals will have greater administrative structural changes than both non-Swadana public hospitals, which have not benefited from the technical assistance and additional equipment that Swadana hospitals have, and private hospitals, which are likely to already have developed these systems and more autonomous administrative structures.

5. Management Training and MIS

Management training in the Swadana hospitals for continuous quality improvement (CQI), and new MIS systems were provided by donors.

We would expect that Swadana hospitals are more likely than non-Swadana public hospitals to have adopted CQI and new MIS. Private hospitals are likely to have had these systems and may have adopted CQI approaches independently.

6. Complementary Insurance Schemes

In some areas insurance mechanisms were developed to assist in payment of hospital fees. The RSU Tangerang has participated in a USAID sponsored model program to develop an insurance plan to cover fees for low income patients.

B. Impact: Access, Efficiency, Quality

1. Access of the Poor

Recognizing that hospital autonomy has a risk of reducing access to the poor, since it places pressure on the hospital management to generate additional revenue from paying patients, the Swadana policy has retained DEPKES and provincial control over the number of beds assigned to the poor, which by law must be at least 50% of the beds for public hospitals. The poor often do pay a charge for these beds, unless they can obtain a certification of indigence. However, the charges for these beds are also controlled and have been quite low. The hospitals are supposed to be reimbursed by the governments for the indigents but again this obligation is not often honored by local governments.

The assignment of hospital beds to the poor is an inadequate means of assuring access. There are many ways that hospitals have been able to discourage poor patients from even entering the buildings and from using the assigned beds. Without major enforcement capabilities, local authorities cannot monitor the availability of these beds, let alone their occupancy rates. However, without a population based survey of hospital utilization there is currently no available indicator of access of the poor other than the bed assignments. While utilization of outpatient services is not limited to the poor, it might be used as a second proxy since surveys do suggest that wealthier patients tend to use private practitioners more for outpatient services.

2. Efficiency

A fundamental assumption of hospital autonomy is that local management will have incentives to and be more capable than distant managers to improve the efficiency of each hospital. Unit Swadana hospitals have been encouraged to become more cost-conscious and efficient in the use of their resources. They have been trained in a basic unit cost analysis methodology which they are expected to apply to analysis of beds and other cost centers. This analysis is also supplemented by improved inventory control so that investment decisions can be made on a more rational basis.

3. Quality

As noted above, Swadana hospitals have also been encouraged to improve the quality of care through the management techniques of CQI, TQM, etc. Again it is an expectation of advocates of hospital autonomy that local management will be more effective in promoting quality than distant centralized management.

Assessing quality of care is extremely difficult even in context with wealth of information. In Indonesia an accurate assessment of changes in quality is not possible. There is no reliable and consistent data on even the simplest process indicators of quality — like intra-hospital infection rates — and no means of assessing outcome indicators like mortality rates for specific interventions controlled for case mix.

Some hospitals however do have some surveys of patient satisfaction which gives an indicator of one aspect of quality. Sumedang hospital has a series of yearly patient satisfaction surveys since 1993 which show a steady increase in patient perception of quality.⁷

7/ Gani, p.17.

C. Decentralization

The difference in management of central government “vertical” hospitals and those under provincial government control might allow investigation of the problematic relation between decentralized government authorities and hospital autonomy. Provincial and district authorities which rely more on revenue from the hospital fees for their own budgets have been resisting hospital autonomy in control of their own funds. Although most literature on decentralization suggests that central authorities tend to be more concerned about equity of access than local authorities, in Indonesia local governments have a reputation of being more committed to limiting hospital choice of bed distribution among the three classes so as to maintain access of the poor to Class III beds.⁸

8/ Dr. Thomas Bossert. 1996. *Decentralization in Health Policy and Systems Development: An Agenda for Research*, edited by Katja Janovsky. WHO, Geneva. p. 147-160.

The Sample

The sample of 10 hospitals include:

- Five Swadana hospitals with 2-3 years experience (2 in Jakarta —, and one in West Java and 2 in Central Java). Two of these hospitals are vertical hospitals controlled by DEPKES (RSUP Persahabatan and RSUP Kariadi), one is a provincial hospital and two are owned by district governments. Four of these hospitals were members of the initial group of 11 hospitals granted Swadana status;
- 3 public provincial or district non-Swadana hospitals — one in Central Java and two in Jakarta; and,
- 2 private hospitals one large and one small — one in Jakarta and one in Central Java.

The methodology of the study combined an in-depth financial analysis of hospital records implemented by an on-site visit by our financial analyst team, and an in-depth structured interview with hospital directors and senior staff.

Table 4
Places and Location of Sampled Hospitals, Hospital Autonomy Study 1996

<i>Hospital</i>	<i>Province</i>	<i>Type</i>	<i>Status</i>	<i>Year Begin Autonomy</i>	<i>Total Beds</i>
RSUP Persahabatan	DKI Jakarta	B	Swadana (Vertical)	1992	525
RSU Tegalyoso	Central Java	B	Swadana (District)	1992	330
RSU Pasar Rebo	DKI Jakarta	C	Swadana (Province)	1992	157
RSUP dr. Kariadi	Central Java	B	Swadana (Vertical)	1993	850
RSU Tangerang	West Java	B	Swadana (District)	1994	326
RSU Abdul Moeloek	Lampung	B	Non Swadana		555
RSU Magelang	Central Java	C	Non Swadana		147
RSU Tarakan	DKI Jakarta	C	Non Swadana		75
Large Private Hospital	DKI Jakarta	B	Large Private		458
Small Private Hospital	Central Java	C	Small Private		240

Findings

A. Funding Changes

1. Total Income

Hospital financing data is of varying quality. It took several visits to collect and confirm data on all sources of income — own source revenues and the various government subsidy sources. What is presented here is the best data available, however, some of the non-Swadana hospitals did not have sufficient data for our analysis. In addition, the accounting methods for the private hospitals are different from the public accounting systems, making comparisons between the two ownership types difficult.

Our data showed a general increase in revenues for all hospitals for which we had complete data. As Table 5 shows, since 1992/3 all but one hospital had steady increase in total income. Swadana status did not seem to be related to the direction nor the magnitude of the trend.

2. Total Expenditures

The trends for expenditures were more varied and may reflect the difficulties of management within a system that is still so centralized. The consistent trend in increase of income was not automatically translated by management into increase in expenditures. Many hospitals actually decreased their expenditures during the period. In any case, there was insufficient data for the non-Swadana hospitals to see if there were different trends for Swadana and non-Swadana public hospitals.

Surplus and Deficits

With the increase in income and lack of consistent increase in expenditure, there was a tendency for hospitals to generate growing surpluses. These surpluses can be carried over to the next year budget.

Table 5
Percent Change in Income in Constant 1995 Prices by Year

<i>Hospital</i>	<i>Percent Change in Income</i>			
	<i>1991/92- 1992/93</i>	<i>1992/93- 1993/94</i>	<i>1993/94- 1994/95</i>	<i>1994/95- 1995/96</i>
Swadana Hospitals				
RSUP Persahabatan	3.48% *	-1.74%	6.45%	28.47%
RSU Tegalyoso	-6.19% *	1.42%	6.07%	19.15%
RSU Pasar Rebo	-4.11% *	21.21%	24.51%	20.37%
RSUP dr. Kariadi	-9.96%	8.29% *	8.02%	-3.65%
RSU Tangerang	-1.27%	1.77%	12.59% *	45.39%
Non-Swadana Hospitals				
RSU Abdul Moeloek	-14.31%	17.67%	12.66%	0.26
RSU Magelang				
RSU Tarakan			32.05%	39.39%
Private Hospitals				
Large Private Hospital	-1.48%	2.50%	6.56%	48.05%
Small Private Hospital	34.22%	5.66%	3.84%	38.81%

|* Year Autonomy Granted
 Note: Shaded area indicates period of autonomy.

Expenditures Per Bed

Expenditures per bed might be a means of controlling expenditures for growth in hospital size, but it is also a potential measure for efficiency. Over time, in constant 1995 rupias, most hospitals are experiencing an increase in expenditure per bed.

Expenditures per bed show wide variations among hospitals with a range of 9.10 million rupiah to 63.35 million rupias. Public hospitals have remained within a more narrow range of 9.10 to 30.61. However, there is no clear trend arising from Swadana status, either over time or compared to other public hospitals.

Collections

As expected, it appears that Swadana hospitals significantly increased their own source revenues in the first year of autonomous operation. However, except for Pasar Rebo, they were unable to sustain the growth in income in subsequent years and all appeared to be having problems generating growth in 1995/6

Table 6**Percent Change in Expenditure in 1995 Prices by Year**

<i>Hospital</i>	<i>Percent Change in Expenditure</i>			
	<i>1991/92- 1992/93</i>	<i>1992/93- 1993/94</i>	<i>1993/94- 1994/95</i>	<i>1994/95- 1995/96</i>
Swadana Hospitals				
RSUP Persahabatan	19.55% *	3.70%	-2.20%	24.50%
RSU Tegalyoso	7.36% *	17.81%	-5.80%	-7.62%
RSU Pasar Rebo	-5.23% *	-5.62%	46.32%	17.40%
RSUP dr. Kariadi	-6.24%	1.59% *	-2.81%	39.42%
RSU Tangerang	-32.12%	-15.04%	0.00% *	60.25%
Non-Swadana Hospitals				
RSU Abdul Moeloek	-1.29%	-4.78%	13.36%	-9.67%
RSU Magelang				
RSU Tarakan				
Private Hospitals				
Large Private Hospital	3.14%	-1.95%	16.08%	43.03%
Small Private Hospital	18.84%	11.04%	-11.90%	30.83%

|* Year Autonomy Granted

Note: Shaded area indicates period of autonomy.

period.

However, the data do not allow us to attribute revenue growth to granting of Swadana. The three non-Swadana hospitals and the two private hospitals also show growth in revenues during the four year period. This finding may be a sort of halo effect, since two of the non-Swadana hospitals (Abdul Moeloek and Tarakan) are preparing to become Swadana in the future and must demonstrate that they can achieve the minimum criteria for own source revenue.

Government Subsidies

All public hospitals for which we had complete data experienced declines in government subsidies both before (during the period 1991-4) and after (1994-6) the period of gaining Swadana status. In the 1994-6 period three of the Swadana hospitals experienced greater declines compared to non-Swadana hospitals; however two Swadana hospitals experienced increases in subsidies. The lack of a consistent

Table 7
Surplus (Deficit) in 1995 Prices by Year (in million rupiah)

<i>Hospital</i>	<i>Type</i>	<i>Surplus (Deficit)</i>				
		<i>1991/92</i>	<i>1992/93</i>	<i>1993/94</i>	<i>1994/95</i>	<i>1995/96</i>
RSUP Persahabatan	Swadana	3,536	1,947 *	1,221	2,441	3,648
RSU Tegalyoso	Swadana	828	139 *	(686)	(22)	1,473
RSU Pasar Rebo	Swadana	(72)	(39) *	641	270	430
RSUP dr. Kariadi	Swadana	7,739	6,462	7,854 *	9,888	4,095
RSU Tangerang	Swadana	3,133	5,073	5,896	7,105 *	9,779
RSU Abdul Moeloek	Non-Swadana	(99)	(784)	268	266	2,397
RSU Magelang	Non-Swadana					
RSU Tarakan	Non-Swadana			3,501	5,008	6,997
Large Private Hospital	Private	5,117	4,243	5,141	3,815	5,656
Small Private Hospital	Private	161	636	497	1,084	1,757

* Year Autonomy Granted
 Note: Shaded area indicates period of autonomy.

trend suggests that at least during this initial period, hospital autonomy has not necessarily caused governments to reduce their subsidies as anticipated.

Table 8
Total Expenditure Per Bed in 1995 Prices By Year (in million rupiah)

<i>Hospital</i>	<i>Type</i>	<i>Expenditure/Bed</i>				
		<i>1991/92</i>	<i>1992/93</i>	<i>1993/94</i>	<i>1994/95</i>	<i>1995/96</i>
RSUP Persahabatan	Swadana	20.51	24.20 *	25.09	25.11	30.61
RSU Tegalyoso	Swadana	11.30	12.43 *	18.67	16.97	15.68
RSU Pasar Rebo	Swadana	21.80	18.43 *	17.27	25.27	26.46
RSUP dr. Kariadi	Swadana	18.64	15.30	15.27 *	14.84	20.69
RSU Tangerang	Swadana	20.83	13.96	11.87	11.35 *	18.20
RSU Abdul Moeloek	Non-Swadana	9.68	9.56	9.10	10.32	9.32
RSU Magelang	Non-Swadana					
RSU Tarakan	Non-Swadana			16.97	17.28	23.86
Large Private Hospital	Private	45.68	47.12	45.98	54.23	63.35
Small Private Hospital	Private	16.65	13.52	15.01	13.23	17.53

* Year Autonomy Granted
 Note: Shaded area indicates period of autonomy.

Table 9
Percentage Increase of Hospital Own Source Revenues in 1995 Prices By Year

<i>Hospital</i>	<i>Type</i>	<i>1992/93</i>	<i>1993/94</i>	<i>1994/95</i>	<i>1995/96</i>
RSUP Persahabatan	Swadana	41.20 *	18.40	23.50	(10.50)
RSU Tegalyoso	Swadana	67.20 *	27.90	15.70	(5.60)
RSU Pasar Rebo	Swadana	40.50 *	50.50	55.60	11.40
RSUP dr. Kariadi	Swadana	(8.80)	18.70 *	59.10	(11.30)
RSU Tangerang	Swadana	13.20	19.80	24.10 *	10.80
RSU Abdul Moeloek	Non-Swadana	(10.50)	46.80	78.80	(17.30)
RSU Magelang	Non-Swadana	32.20	11.20	16.10	2.80
RSU Tarakan	Non-Swadana			29.10	13.00
Large Private Hospital	Private	11.10	15.40	18.90	24.90
Small Private Hospital	Private	27.00	16.80	14.70	22.50

|* Year Autonomy Granted

Note: Shaded area indicates period of autonomy.

Table 10
Percent Change in Government Subsidy in 1995 Prices By Year

<i>Hospital</i>	<i>Type</i>	<i>Percent Change in Government Subsidy</i>			
		<i>1991/92- 1992/93</i>	<i>1992/93- 1993/94</i>	<i>1993/94- 1994/95</i>	<i>1994/95- 1995/96</i>
RSUP Persahabatan	Swadana	-5.15% *	-6.25%	3.44%	6.81%
RSU Tegalyoso	Swadana	-19.66% *	29.98%	7.03%	-9.70%
RSU Pasar Rebo	Swadana	-27.95% *	8.00%	-0.90%	-33.66%
RSUP dr. Kariadi	Swadana	-6.78%	8.11% *	-2.95%	-14.88%
RSU Tangerang	Swadana	-2.39%	-2.00%	14.37% *	19.56%
RSU Abdul Moeloek	Non-Swadana	-13.48%	14.10%	1.42%	-2.50%
RSU Magelang	Non-Swadana				
RSU Tarakan	Non-Swadana			52.22%	-4.06%
Large Private Hospital	Private				-9.09%
Small Private Hospital	Private	-2.42%	14.94%	17.69%	0.41%

|* Year Autonomy Granted

Note: Shaded area indicates period of autonomy.

Incentives for Reducing Dependence on Subsidy

Table 11 shows no consistent increase in own source revenues generated over total income. All Swadana hospitals, except RSU Tangerang, show increases, and RSU Pasar Rebo shows a significant increase in own source revenues from 51% to 81% of total income. However, one non-Swadana hospital also showed a slight increase in own source revenue as a percent of total income. Again this may be due to the halo effect of this hospital preparing to become Swadana in the future. While Swadana status may encourage a slight increase in reducing dependence on subsidies, the effect, except for RSU Pasar Rebo, has not resulted in major shifting in dependence away from public subsidy and toward own source revenues.

Table 11
Own Source Revenue as Percent of Total Income By Year

<i>Hospital</i>	<i>Type</i>	<i>Revenue/ Total Income</i>				
		<i>1991/92</i>	<i>1992/93</i>	<i>1993/94</i>	<i>1994/95</i>	<i>1995/96</i>
RSUP Persahabatan	Swadana	35.68%	41.04% *	43.74%	45.33%	39.40%
RSU Tegalyoso	Swadana	22.56%	33.16% *	29.93%	29.30%	28.55%
RSU Pasar Rebo	Swadana	51.21%	63.34% *	56.49%	74.00%	80.90%
RSUP dr. Kariadi	Swadana	28.10%	26.50%	25.69% *	33.24%	38.27%
RSU Tangerang	Swadana	47.67%	47.21%	50.18%	49.39% *	44.51%
RSU Abdul Moeloek	Non-Swadana	31.67%	29.92%	32.05%	44.38%	37.05%
RSU Magelang	Non-Swadana					
RSU Tarakan	Non-Swadana				17.05%	16.27%
Large Private Hospital	Private	100.00%	100.00%	100.00%	99.89%	99.90%
Small Private Hospital	Private	79.67%	81.45%	79.82%	79.20%	77.94%

* Year Autonomy Granted

Note: Shaded area indicates period of autonomy.

B. Payments

1. Incentive Systems

In general the incentive systems have been developed by hospital committees and have been across the board incentives by professional category, rather than incentive systems for productivity or individual performance. [additional analysis of the survey results should have specific data on this]

Table 12

Ratio of Hospital Staff Per Bed By Year

Hospital	Type	1991/92		1992/93		1993/94		1994/95		1995/96	
		A	B	A	B	A	B	A	B	A	B
RSUP Persahabatan	Swadana	1.7	0.8	1.8	0.8]*	1.8	0.8	1.7	0.8	1.8	0.9
RSU Tegalyoso	Swadana	1.2	0.8	1.2	0.8]*	1.2	0.8	1.3	0.8	1.3	0.8
RSU Pasar Rebo	Swadana	1.8	0.6	1.6	0.6]*	1.8	0.7	1.9	0.6	1.9	0.6
RSUP dr. Kariadi	Swadana	1.5	1.1	1.8	1.3	1.8	1.3]*	1.9	1.3	1.8	1.3
RSU Tangerang	Swadana	1.2	0.8	1.1	0.7	1.1	0.8	1.2	0.8]*	1.4	0.8
RSU Abdul Moeloek	Non-Swadana	0.9	0.6	1.0	0.6	1.1	0.5	1.1	0.5	1.1	0.5
RSU Magelang	Non-Swadana	1.0	0.7	0.8	0.6	1.7	0.8	1.0	0.7	0.9	0.7
RSU Tarakan	Non-Swadana	2.5	1.2	2.7	1.2	2.4	1.3	2.8	1.3	2.8	1.2
Large Private Hospital	Private	1.8	2	1.7	2.0	1.6	2.0	1.7	2.1	1.7	2.3
Small Private Hospital	Private	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.9

]* Year Autonomy Granted

Note: Shaded area indicates period of autonomy.

A = Clinical Staff per Bed

B = Nonclinical Staff per Bed

C. Personnel Staffing Changes

1. Staffing Ratios

The granting of Swadana status did not cause a significant shift in staffing. Even in the areas where contract workers could be hired — non-clinical staff — if there were new hiring as reported by the hospitals, it did not cause a major change in staffing patterns. Table 12 showed that no consistent changes were apparent in staffing per bed ratios.

2. Recruitment

Hospital managers report increased flexibility in hiring contract workers has allowed them to hire some specific administrative categories that had not been part of the civil service allotments. This flexibility appears not to have affected overall staffing ratios but is seen as a significant improvement in management capacity. There appears to be little change in recruitment of clinical personnel.

3. Attendance and Staff Motivation

Hospital directors in four of the five swadana hospitals reported that attendance and staff motivation had improved after swadana status was achieved, due mainly to the improved incentive system. Two of the three non-swadana hospitals and both private hospitals reported no change in attendance and staff motivation.

4. Management Improvements and MIS

Hospital managers of swadana hospitals all reported improvements of management and information systems. The hospital autonomy program was accompanied by a program of donor assistance which provided specific training modules in Quality Management of Hospital Services, Financial Management (budgeting, accountancy and fee setting) and Management Information Systems. All swadana hospitals had trained their personnel in the accrual method of accounting to replace the cash basis method. Both systems were in operation at the time of the study and only two hospitals had sufficiently progressed to show preliminary results of the accrual method. Only one hospital had computerized its financial management system. The four of the five swadana hospital directors also reported improvements in maintenance and supplies due to the use of the upgraded information system. Only one non-swadana hospital, RSU Abdul Moeloek, reported management improvements because it was preparing to become a swadana hospital. The two of the three non-swadana hospitals and the two private hospital did not receive these training modules and MIS upgrading.

E. Equity and Access

1. Charges

As Table 3 above shows, the fees collected reflected a recent trend of doubling, tripling, and in some cases more than quadrupling of fees among all types of hospitals. Swadana hospitals however, in general, charged higher fees and had greater increases than did the non-Swadana public hospitals. The Swadana hospitals were charging fees that were approaching those collected by the private hospitals at both the high and low ends of the fee schedules (for instance for Class IIIa beds — for the poor — RSUP Persahabatan charged the same as the small private hospital and RSU Tarakan and Pasar Rebo charged only rp.1,000 less; while RSUP Persahabatan charged the same price as the small private hospital for VIP beds), in the middle range, the Swadana hospitals generally charged half the private charges. It was the non-Swadana public hospitals which retained lower fees for all services. It was also the “vertical” Swadana hospitals owned and controlled by DEPKES which had the greatest increase in fees.

Although we have no direct data on the impact of higher rates on access, the general trend to increase charges to the poor to the point where both Swadana and private hospitals are charging similar rates is likely to reduce access to the poor.

2. Charges/Unit Costs

Table 13 shows the relationship between the charges and costs for hospital services in different classes of beds for three hospitals — two Swadana hospitals and one small private hospital. The VIP, class I and II charges are under the authority of the Swadana management. The tables suggest that the public hospitals have not been consistent in generating cross subsidies from the higher status beds to the beds for the poor. The fees for VIP beds at RSUP Persahabatan hospital has just barely covered costs while the other class beds not only do not generate surplus they require significant subsidy. The situation appears to be even more regressive in RSUP Tegalyoso where the Class III beds (those of the near poor), are indeed subsidizing the other beds and the VIP beds are close to the most heavily subsidized. On the other hand, the data from the small private hospital suggest a significant cross subsidy from higher status and higher fee beds to the Class III beds that are reserved for the poor and near poor. The findings must be taken with caution since the validity and reliability of unit cost analysis is questionable.

3. Class III Beds

Even though there was evidence that both Swadana and non Swadana hospitals

Table 13

Room Charges Per Unit Costs By Class and Year*

Hospital	1993/94 Class					1994/95 Class					1995/96 Class				
	VIP	I	II	IIIa	IIIb	VIP	I	II	IIIa	IIIb	VIP	I	II	IIIa	IIIb
RSUP Persahabatan	-	-	-	-	-	0.97	0.39	0.34	0.29	0.11	1.11	0.49	0.31	0.20	0.10
RSU Tegalyoso	0.48	0.69	0.75	1.13	0.50	-	-	-	-	-	0.66	0.90	0.94	1.57	0.63
Sm. Prvt. Hospital	0.69	-	-	-	-	-	-	-	-	-	3.58	2.21	1.86	0.52	-

* ("-" = Missing Data)

were allowed to reduce the absolute number of beds available to the poor, the trend toward decreasing availability of beds for the poor appears to be a phenomenon related to the granting of Swadana status. Three of the five Swadana hospitals (RSUP Persahabatan, and Kariadi) and one non-Swadana hospital which is preparing to become Swadana (RSUP Abdul Moebolek) showed a combined decline of 365 out of 1559 Class III beds. Only RSUP Tangerang — a Swadana hospital — significantly increased the number of Class III beds.

The other public hospitals and the one private hospital which reported this data, retained the same absolute number of beds available to the poor. The one private

Table 14
Total Class III Beds of Sampled Hospitals by Year

Hospital	Type	Class III Beds					% Change		Ownership and Control
		1991/92	1992/93	1993/94	1994/95	1995/96	1991-1996		
RSUP Persahabatan	Swadana	347	329]*	329	269	280	-19.31%	Vertical	
RSU Tegalyoso	Swadana	195	196]*	196	196	196	0.51%	District	
RSU Pasar Rebo	Swadana	124	139]*	120	120	122	-1.61%	Provincial	
RSUP dr. Kariadi	Swadana	731	606	606]*	606	606	-17.10%	Vertical	
RSU Tangerang	Swadana	145	149	149	167]*	167	15.17%	District	
RSU Abdul Moeloek	Non-Swadana	481	440	350	300	308	-35.97%		
RSU Magelang	Non-Swadana	77	77	77	77	77	0.00%		
RSU Tarakan	Non-Swadana	60	60	60	60	60	0.00%		
Large Private Hospital	Private	107	107	107	107	107	0.00%		
Small Private Hospital	Private	-	-	-	-	-	0.00%		

*] Year Autonomy Granted
 Note: Shaded area indicates period of autonomy.

hospital that reported this data retained a quarter of its beds for the poor compared to 50-80% for the public hospitals. We found that the decentralized authorities at provincial and district levels were more likely than centralized authorities to retain bed access for the poor in the Swadana hospitals.

Table 15
Bed Occupancy Rate of Sampled Hospital by Class and Years

Hospital	Type	BOR																			
		1991/92 Class				1992/93 Class				1993/94 Class				1994/95 Class				1995/96 Class			
		VIP	I	II	III	VIP	I	II	III	VIP	I	II	III	VIP	I	II	III	VIP	I	II	III
RSUP Persahabatan	Swadana	59	73	60	79	55	2	49	85	68	5	51	74	55	7	53	84	30	43	69	75
RSU Tegalyoso	Swadana	10	15	70	77	49	43	57	73	20	52	49	79	53	52	45	77	-	-	-	-
RSU Pasar Rebo	Swadana	-	-	-	71	-	-	-	72	-	-	74	74	-	-	78	75	-	-	-	-
RSUP dr. Kariadi	Swadana	35	17	29	78	31	17	28	72	47	16	30	71	34	15	40	55	32	37	54	79
RSU Tangerang	Swadana	57	71	75	71	66	77	72	72	73	81	70	81	81	65	76	70	71	70	75	68
RSU Abdul Moeloek	Non-Swadana	78	-	75	71	66	77	72	72	73	81	70	81	81	65	78	70	71	70	75	68
RSU Magelang	Non-Swadana	-	-	-	75	72	-	31	54	73	17	31	60	46	42	85	95	39	45	36	77
RSU Tarakan	Non-Swadana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Large Private Hospital	Private	71	50	56	96	60	24	37	81	64	22	35	80	65	27	32	80	66	23	36	96
Small Private Hospital	Private	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Shaded area indicates period of autonomy.

4. Bed Occupancy Rate

Bed occupancy rate might justify a shift in the number of beds available to the poor. If the bed occupancy rate for Class III beds were low, a hospital manager might be justified in reducing the number of Class III beds, unless there were other barriers to access of the poor. However, the bed occupancy rate for the Class III beds appears to have held constant for both Swadana and non Swadana hospitals — ranging between 69% and 78% among hospitals but remaining relatively constant for each hospital. It is the VIP beds that appear to have had difficulties — with occupancy rates dropping from 58% to 30% in Swadana RSUP Persahabatan, and 78% to 38% in non-Swadana RSUP Abdul Moeloek, for instance. Again these trends do not appear to be related to Swadana status. They nevertheless do suggest some of the difficulties of the assumption that VIP beds can subsidize the poor.

4. Outpatients/Bed

Outpatients per bed, like bed occupancy rate for inpatients, is an indicator of utilization that could suggest changes in access. There is a tendency for all hospitals to have an increase in outpatients per bed. Swadana hospitals do not appear to have been more or less responsive to this increase in utilization.

Table 16

Number of Outpatient per Bed by Year

<i>Hospital</i>	<i>Type</i>	<i>Outpatient/Bed</i>				
		<i>1991/92</i>	<i>1992/93</i>	<i>1993/94</i>	<i>1994/95</i>	<i>1995/96</i>
RSUP Persahabatan	Swadana	545	538 *	543	520	679
RSU Tegalyoso	Swadana	221	224 *	242	257	-
RSU Pasar Rebo	Swadana	910	*	1,207	1,303	1,085
RSUP dr. Kariadi	Swadana	430	533	536 *	510	654
RSU Tangerang	Swadana	468	501	515	516 *	676
RSU Abdul Moeloek	Non-Swadana	290	290	368	256	328
RSU Magelang	Non-Swadana	245	277	289	295	377
RSU Tarakan	Non-Swadana	-	-	1,577	1,749	1,874
Large Private Hospital	Private	593	566	558	633	777
Small Private Hospital	Private	390	381	383	376	500

* Year Autonomy Granted

Note: Shaded area indicates period of autonomy.

F. Efficiency

1. Length of Stay

Length of stay (LOS) is often used as a proxy for efficiency. Long lengths of stay suggest either a case mix with chronic diseases or an inefficient use of hospital beds. One of the hospitals in our sample — RSUP Persahabatan — was a TB hospital which could explain a high LOS, however, the case mix of the other hospitals is not likely to justify high LOS. For this study it is a declining trend for the Swadana hospitals that would suggest that increased autonomy results in greater efficiency. As Table 17 shows, none of the hospitals appear to be significantly increasing in efficiency by this measure.

Table 17
Length of Stay by Years

<i>Hospital</i>	<i>Type</i>	<i>Los</i>				
		<i>1991/92</i>	<i>1992/93</i>	<i>1993/94</i>	<i>1994/95</i>	<i>1995/96</i>
RSUP Persahabatan	Swadana	7.1	7.1 *	7.1	7.6	7.2
RSU Tegalyoso	Swadana	5.8	5.9 *	5.6	5.6	0.0
RSU Pasar Rebo	Swadana	4.7	*	4.8	4.7	4.9
RSUP dr. Kariadi	Swadana	8.9	8.9	8.6 *	8.3	8.8
RSU Tangerang	Swadana	3.9	4.0	4.3	3.9 *	3.9
RSU Abdul Moeloek	Non-Swadana	6.7	5.7	6.0	5.9	5.7
RSU Magelang	Non-Swadana	5.0	5.0	5.0	5.0	5.0
RSU Tarakan	Non-Swadana	0.0	0.0	4.4	4.3	4.2
Large Private Hospital	Private	7.0	6.0	6.0	6.0	6.0
Small Private Hospital	Private	5.2	5.0	4.9	4.8	4.6

|* Year Autonomy Granted
Note: Shaded area indicates period of autonomy.

2. Bed Occupancy Rate

Bed occupancy rate is another proxy for efficiency. We expect an efficient hospital to have high bed occupancy rates — although some surplus should be available for peak demand so an acceptable range of 60-80% is often cited. Again, an increasing trend for hospitals with lower than 80% could suggest increases in efficiency. As Table 18 demonstrates BOR for all beds tends to be increasing for two Swadana hospitals — RSU Pasar Rebo and Tangerang— and one non-Swadana hospital — RSU Tarakan — but stable or declining for all the others, suggesting that autonomy has no consistent effect on this efficiency measure.

Table 18
Bed Occupancy Rate by Years

<i>Hospital</i>	<i>Type</i>	<i>Bor</i>				
		<i>1991/92</i>	<i>1992/93</i>	<i>1993/94</i>	<i>1994/95</i>	<i>1995/96</i>
RSUP Persahabatan	Swadana	72.3	70.2 *	66.0	65.9	68.4
RSU Tegalyoso	Swadana	68.4	63.0 *	66.6	62.7	0.0
RSU Pasar Rebo	Swadana	72.8	*	73.6	75.2	76.2
RSUP dr. Kariadi	Swadana	62.7	59.1	57.7 *	54.5	55.7
RSU Tangerang	Swadana	67.2	70.8	76.6	78.3 *	74.5
RSU Abdul Moeloek	Non-Swadana	76.1	52.1	45.4	66.9	49.1
RSU Magelang	Non-Swadana	57.2	54.2	57.9	58.5	59.0
RSU Tarakan	Non-Swadana	0.0	0.0	56.3	59.6	65.8
Large Private Hospital	Private	75.9	72.0	70.7	72.6	76.6
Small Private Hospital	Private	72.4	66.3	65.8	65.2	63.8

|* Year Autonomy Granted

Note: Shaded area indicates period of autonomy.

3. Unit Costs

Unit cost data was too sparse to analyze for increases in efficiency.

G. Quality

We were unable to get sufficient information on patient satisfaction for a comparison of hospitals and were unable to get clinical indicators of quality such as death rates or intra-hospital infection rates.

All autonomous hospitals experienced improvements in quality processes with the creation of committees on nosocomial infection, quality assurance processes using total quality management techniques, and improved standard operating procedures. However, these quality process improvements were also experienced by two of the three non-swadana public hospitals and the private hospitals. Only non-swadana RSU Abdul Moeloek did not report quality process improvements.

H. Decentralization

We found no clear evidence that provincial or district hospitals (RSU) which were subject to control of decentralized authorities, had more or less limitations on their decision space than did "vertical" hospitals (RSUP) that were controlled by central DEPKES. However, as noted in Table 3 and Table 14 above, the

provincial and district authorities appear to have been more effective than the central authorities in maintaining access for the poor. The vertical hospitals raised their fees more than the provincial and district hospitals and the locally owned hospitals retained or increased the absolute number of beds available to the poor in Swadana hospitals, resisting the trend of the vertical hospitals to reduce these numbers significantly.

Conclusion

The Unit Swadana process in Indonesia has granted a limited increase in the “decision space” available to hospital managers. Autonomous Swadana hospitals have greater control over setting their fees and budgeting their own source revenues and can apply these funds to incentives and other hospital expenses, like drugs and supplies. They have been able to contract with private investors for equipment investment in the hospitals. They have authority to hire and fire contract employees. They have operational control over assignment of beds, except for the Class III beds assigned to the poor.

The objective of this process was to increase the independent funding of the hospital through allowing the hospital management to retain and utilize the revenue from their own fees. There was also concern that greater autonomy improve efficiency and quality without reducing access to the poor.

This study found little evidence that Swadana was achieving its objectives. While it is early in the implementation of hospital autonomy, these initial findings suggest that Swadana hospitals, despite increases in own source revenues, are not reducing their dependence on government subsidies. There is no evidence that they are more efficient, although there are some indications that incentives have improved physician attendance and there are improved systems of management. Most troubling indications, however, are the increased fees and reduction in Class III beds — trends that are more evident in Swadana hospitals than in the non-Swadana hospitals — are restricting access to the poor. This trend was more pronounced for centrally controlled “vertical” hospitals than for Swadana and non-Swadana hospitals that were controlled by provinces and districts.

These findings should be taken with caution. The sample of hospitals is still quite small and the experience with autonomy relatively recent. Since many hospitals are now engaged in a process of obtaining autonomy, there may be a halo effect in the non-Swadana hospitals in our sample, which could have reduced the explanatory power of our comparisons. Our indicators of efficiency were crude and might not be sufficiently refined to capture changes that new management systems and incentives might have produced and we were unable to evaluate quality.