

**CURRENT STATUS AND FUTURE PROSPECTS FOR HEALTH  
INSURANCE AND PRE-PAID DELIVERY SYSTEMS IN INDONESIA**

**Prepared for:**

**Office of Population and Health  
United States Agency for International Development  
Jakarta, Indonesia**

**Prepared by:**

**Paul H. Torrens, M.D., MPH  
School of Public Health  
University of California, Los Angeles**

**and**

**Mary Wongsarahaaja, DDS, DDPH  
Faculty of Public Health  
University of Indonesia, Jakarta**

**September 1986**



JOHN SNOW, INC.

CURRENT STATUS AND FUTURE PROPECTS FOR HEALTH  
INSURANCE AND PRE-PAID DELIVERY SYSTEMS IN INDONESIA

Prepared for:

Office of Population and Health  
United States Agency for International Development  
Jakarta, Indonesia

Prepared by:

Paul R. Torrens, M.D., MPH  
School of Public Health  
University of California, Los Angeles

and

Mary Waharharja, DDS, DDPH  
Faculty of Public Health  
University of Indonesia, Jakarta

September 1986

## TABLE OF CONTENTS

	<u>Page</u>
1. BACKGROUND/SCOPE OF WORK	1
2. METHOD OF STUDY	3
3. FACTORS INFLUENCING HEALTH INSURANCE DEVELOPMENT IN INDONESIA	4
(a) Decrease in Ministry of Health Budgets	4
(b) Proposed Expansion of Present Government-Sponsored Health Insurance Plan	5
(c) Change in Business Tax Laws	6
(d) General Increase in Health Care Prices, Costs, and Expenditures	7
4. FINDINGS	9
(a) Public Health Insurance Programs	9
(1) Husada Bakti	9
(2) ASTEK	15
(b) Government-Related (but not Government-Sponsored) Health Insurance	16
(1) Pertamina	16
(2) Dana Sehat	21
(c) Private Health Insurance Plans	23
(1) Insurance Companies	24
o Timur Jauh/Aetna	24
o Asuransi Nasuha/Blue Cross	25
o Lippo Life	25
(2) Provider-Sponsored Plans	26
o Dr. Damayanti and Associates	26
o Dr. Sukardi	27
o Indonesian Doctors Association	
-- Ikatan Dokter Indonesia	28
o St. Carolus Hospital	29

(3) Health Insurance Plans by Other Types of Organizations	30
o The Medical Scheme	30
o P.T. Unilever Indonesia	31
o Plantations/Large Farms	32
5. FUTURE DEVELOPMENTS	34
(a) Principles Shaping Future Health Insurance Developments in Indonesia	34
(b) Most Appropriate Configuration for Future Health Insurance Developments in Indonesia	39
6. USAID OPTIONS AND OPPORTUNITIES FOR THE FUTURE	44
(a) Development of the Central Government Insurance Plan (Commission)	46
(b) Development of Model Health Insurance Plans	49
(c) Development of an Accurate, Current Health Economics Data Base and Analytical Capacity	58
7. URGENT TASKS FOR THE NEXT TWELVE MONTHS FOR USAID	62
APPENDIX	65

## 1. BACKGROUND/SCOPE OF WORK

In January and February 1986, a full-scale assessment of the activities sponsored by the Office of Population and Health, USAID, Indonesia was conducted by outside consultants at the request of the Office. One section of the assessment pointed out that large amounts of national financial resources for population and health were beginning to be drawn towards curative health care services. At the same time, it was noted that the budgets of the Ministry of Health were being drastically reduced because of the drop in governmental revenues from international oil sales, and that the activities of the Ministry's family planning and child survival programs will probably be affected in an increasingly negative fashion as they strive to meet program targets with less funds.

The assessment's authors also found that the developments taking place with regard to the organization and financing of health care in Indonesia could significantly affect this deteriorating condition. In a positive sense, some of the developments might lead to increased funding for health from the private sector, thereby possibly releasing public sector funds for more public health and family planning activities. On the negative side, it was apparent that many of these developments might lead to an even greater emphasis on curative care, particularly in hospitals, thereby drawing off even more financial resources from the country's ultimately more pressing tasks of public health, family planning, and child survival.

The assessment team recommended that the Office of Population and Health become more actively involved in all the issues relating to the organization and financing of health care in Indonesia, not only because of these issues' importance to the health of the people of Indonesia but also because of the possible important impacts on USAID-assisted programs in public health and family planning. In addition, USAID/Washington had expressed considerable interest in encouraging private sector initiatives in all sectors world-wide.

This central-level interest, together with the assessment team's recommendations, encouraged the Office of Population and Health to seek expert advice in the summer of 1986. For this study, one U.S. consultant and one Indonesian counterpart were asked to review the country's current situation with regard to health insurance and pre-paid health delivery systems. Their specific scope of work instructed them to:

- (a) conduct a comprehensive review of current experience in Indonesia with various types of pre-paid health delivery systems. The analysis was to be broken down into:
  - .... public and private sector health insurance,
  - .... institutional schemes for employees,
  - .... village/rural cooperatives or prepaid schemes;
- (b) suggest the most appropriate configurations of health insurance and pre-paid provider schemes for Indonesia;
- (c) suggest operations research designs to evaluate demonstration projects of the various configurations which can answer major theoretical and operational questions and which can contribute quality information regarding what types of pre-paid schemes are advisable and possible in the Indonesian setting;
- (d) recommend other analytical studies that will need to be done prior to introducing pre-paid health service delivery schemes in Indonesia; and
- (e) identify specific problem areas or obstacles that should be avoided in developing this concept operationally.

On June 30, 1986, Doctor Paul Torrens from the faculty of the School of Public Health at the University of California, Los Angeles, arrived in Jakarta to begin that assignment and was joined by Doctor Mary Wengsarharja from the Faculty of Public Health, University of Indonesia as his counterpart. The study period extended until August 9, 1986.

## 2. METHOD OF STUDY

Doctors Torrens and Wangsaraharja first met with USAID health staff, various Ministry of Health representatives, and other persons knowledgeable about health and health care organization in Indonesia. From these people, a list was made of important organizations, programs, and agencies to be contacted; in each of these organizations and agencies, key individuals were identified to be interviewed.

At the same time, many basic background documents were identified and obtained, and an additional search for other background data was started. (See the list of documents and references, Appendix A.)

An extensive series of formal and informal interviews was then conducted which ultimately involved almost 50 persons. Visits were carried out at a number of locations in Jakarta, Cirebon (one day), Bali (three days), and Ujung Pandang (three days). Repeat visits and/or cross-interviews were also held to document or confirm certain points or opinions. Finally, a draft report was written and circulated, either totally or in part, to certain knowledgeable observers for their overall review and/or confirmation of the accuracy and appropriateness of certain observations.

In general, all parties were quite cooperative and willing to provide information when approached. In certain cases, conflicting information was obtained, largely because different viewpoints were held on certain key points.

It should be noted that Doctor Torrens is not an expert on Indonesia in particular and is not fluent in Bahasa Indonesia, although he has worked in Indonesia twice before and is generally knowledgeable about the Indonesian culture and health care system. The participation of Doctor Wangsaraharja tended to counterbalance the lack of fluency and depth of specific Indonesian experiences of her partner, however.

### 3. FACTORS INFLUENCING HEALTH INSURANCE DEVELOPMENT IN INDONESIA

A number of factors have stimulated considerable interest in the development of health insurance in Indonesia and will continue to play important roles in any future policy developments. These include: (a) a decrease in Ministry of Health budgets; (b) the proposed expansion of the present government-sponsored health insurance plan to include employees of private concerns; (c) the recent change in the tax laws affecting business and industrial concerns in Indonesia; and (d) a general increase in health care prices, costs, and expenditures.

#### (a) Decrease in Ministry of Health Budgets

With the drastic drop in international oil prices and the subsequent decrease in revenues to the Government of Indonesia, the Ministry of Health has had to drastically reduce its budgetary goals. There has already been an almost 50% reduction in certain Ministry budgets for 1986 and further reductions may still be coming.

With these reductions in mind, the Ministry is naturally exploring other sources that might be used to make up the budgetary shortfall and/or relieve the Ministry of some of its current service obligations (thereby possibly freeing up internal resources for reallocation among programs).

Among these alternative sources, the Ministry is interested in various health insurance schemes for two reasons. First, the development of a new government-sponsored health insurance plan or an expansion of the already-existing plan might bring increased revenues to the public treasury, much or all of which might become available to the Ministry of Health to finance its various obligations. Second, the development of an expanded private health insurance sector might add funds to the country's

total health expenditure and might encourage citizens to increase their use of private facilities and services, thereby possibly reducing the load on some public facilities. The Ministry might then be able to shift funds away from certain public services and towards other services that have had their funding reduced in the present budget cuts.

(b) Proposed Expansion of Present Government-Sponsored Health Insurance Plan

At the present time, all civil servants are covered by a government-sponsored health insurance plan (Husada Bakti) which is funded by a 2% levy on their salaries. This plan allows civil servants and their families to use Ministry of Health services free of charge. Recently, a tentative law (DUKM) has been proposed that would require all private employers to enroll their employees in this same plan, which would be financed by a similar type of levy on salaries (the percentage is still to be determined, but probably will be more than 2%); the private employees would then also be able to use the Ministry's services free of charge.

This proposed plan has stimulated great interest in both the public and private sectors for a number of differing reasons. The Ministry of Manpower Development, which currently operates a series of social insurance programs (ASTEK), would participate fully in the new plan. This Ministry is very interested because of its expanded revenue collection requirements and the possible impacts on its already-existing social insurance programs. The Ministry of Health is interested not only because of the possible enhanced revenues this plan might bring to the Ministry but also because the plan could generate greater demand on its services. Private sector companies that are already using their own resources to provide extensive health services to their employees are also concerned because the new proposal would

require that all employees contribute to the government fund and utilize government facilities, thereby effectively putting those portions of the private sector out of business. Finally, private health insurance plans that have identified a potential new market for private health insurance (as will be described in the next section) realize that the all-inclusive government plan will have some effect on the development of any significant private insurance enterprises in Indonesia.

(c) Change in Business Tax Laws

A third major force stimulating interest in health insurance has been a recent change in the tax laws for businesses and corporations in Indonesia. Previously, many companies simply let their employees seek medical care as needed, and would either pay the bills as presented or would reimburse their employees for out-of-pocket expenditures. All of these expenditures on the part of business were tax deductible as legitimate operating costs.

With the recent change in tax laws, this type of expenditure would apparently no longer be allowed as a normal operating cost to the company. Instead, it would be shifted to the after-tax sector, thereby coming directly from a company's profits. The purchase of health insurance for employees, however, would apparently still be considered a normal part of the cost of doing business and would thus still be included in the pre-tax sector.

In many companies, this expenditure can be quite considerable, even though exact data are difficult to obtain. P.T. Unilever Indonesia, for example, spends approximately 5% of its \$25,000,000 annual personnel costs on health care, or about \$30.00 per month per employee for its 3,000 employees. For an even larger enterprise like Pertamina, which has extensive

health care personnel and facilities of its own, the amount is proportionately much greater.

As a further factor, a number of private insurance companies have recognized how this important change in the tax laws will affect corporate behavior, and have decided that a considerable market may now exist for private health insurance. A number of large general insurance companies in Indonesia, other types of insurance companies, and business entities are therefore keenly interested in what happens both in the government health insurance plan and in potential private plans. Many of them are preparing for their organizations to enter the private health insurance market or are already actively marketing various types of health insurance products.

(d) General Increase in Health Care Prices, Costs, and Expenditures

Although accurate data are difficult to obtain, it is clear that health care prices, costs, and expenditures have increased markedly over the past five years, perhaps as much as 20% per year. This increase is due to increased utilization of services and products. For a number of different reasons, this has stimulated interest in various types of health insurance (including health maintenance organizations, as discussed below) as a means of controlling the increase in health care costs.

On the one hand, private employers who have been reimbursing employees on an item-by-item basis after a health care service has been provided are now starting to search for more orderly payment methods that will allow them to control the rise of health care costs more effectively. They reason that providing employees with health insurance plans would limit the employer's risk to an amount known in advance and would perhaps give them a vehicle by which they could more effectively influence prices (by setting limits on what health insurance would actually pay).

On the other hand, both private employers and experts in government realize that any fee-for-service health insurance system has a natural tendency to increase the number of individual services provided, thereby increasing total health care costs. They note that the experience with health maintenance organizations in the United States (in which a per capita payment is made to an organization to provide a total package of services) acts to reverse the incentives to the provider and in fact encourages a reduction in the number of services provided. Although this has the danger of reducing the quality of care, it also serves as an effective way to control or limit the rise in health care costs.

#### 4. FINDINGS

In general, health insurance efforts in Indonesia can be divided into solely public programs, programs that are a mixture of public and private involvement, and solely private programs.

##### (a) Public Health Insurance Programs

###### (1) Husada Bakti

The primary public health insurance program in Indonesia is Husada Bakti,\* which covers all civil servants and their dependents, and retired civil servants. Husada Bakti was implemented in 1968 and until recently has been operated as a badan (legislative body) under the general supervision of the Ministry of Health.

All civil servants are required to join Husada Bakti and "contribute" 2% of their salaries into the Husada Bakti program; retirees must contribute 5% of their pensions. (It is not clear whether the money contributed comes into a special Husada Bakti fund or whether it comes into the Ministry of Finance and is mixed with other funds, either partially or totally. It is also not clear how much of the funds collected for Husada Bakti are transferred to the Ministry of Health, who does the transfer, and how the Husada Bakti-generated funds are used within the Ministry of Health.) What is clear is that Husada Bakti collects large sums of money, 60.4 billion rupiah in contributions in 1986 and 6.1 billion rupiah in interest.

---

\* In the past two decades, this program's name has changed from ASKES to Badan Penyantun Dana Pemeliharaan Kesehatan Masyarakat (BPDPKM) to Husada Bakti.

At the present time, 2.5 million civil servants and 1 million government pensioners belong to Husada Bakti, together with their dependents, bringing the total coverage to about 12.5 million people (about 9% of the total Indonesian population), for a total per capita income for 1986 of 5,500 rupiah (\$4.93) per person.

In return for their 2% percent of salary contributions, Husada Bakti beneficiaries are allowed to use the puskesmas (health clinic) and government hospitals free of charge for all services. Previous work has shown that the Husada Bakti members make up a significant portion of those served by the puskesmas, ranging anywhere from 10-40% in different regions, but probably averaging about 30% of all puskesmas visits. According to Ferster, on average in 1982/83, 17% of all Husada Bakti members (1.6 million) sought care monthly, of which 1.4 million (95%) were treated as out-patients (91% were treated in health centers and polyclinics); the remainder received in-patient or other care. Previous work has also suggested that Husada Bakti members tend to visit the puskesmas six or seven times more than non-Husada Bakti members. This work also posits that it actually costs the Ministry of Health about two to three times more to provide the services to Husada Bakti members than the Ministry actually receives in financial support from Husada Bakti, although the figures are not entirely clear or reliable.

Again according to Ferster, the estimated 1986 Husada Bakti budget assigns approximately 50% of its funds to drugs and medications, 17% to in-patient care, 11% to out-patient care, 10% to medical practitioners in government facilities as a supplement to their salaries, and 2% for maternity care. Administrative costs account for the remaining 11%.

Very recently the Husada Bakti program was changed into a perum (government-owned general company) and is now operated under the

joint supervision of the Ministry of Health and the Ministry of Manpower Development, under the terms of a joint decree issued by their Ministers earlier this year. This change was made in preparation for the expansion of the Husada Bakti mechanism into the private sector.

Under the expanded program, all private employers with a minimum number of employees (unspecified at this time) would have to enroll their employees with Husada Bakti (or its new successor organization). The employees in return would use the puskesmas and the government hospitals in the same fashion as civil servants and their dependents do at present.

The details of this new program (Husada Bakti or its successor) are included in a set of regulations/directives/decrees (it is unclear exactly which) that are currently being drafted and forwarded to higher levels of government for approval; these more detailed directives have the general title of DUKM (Funds for Community Health Care). The general public health law of the country itself is currently being revised and was passed on to the Cabinet Secretary approximately nine months ago; these revisions apparently contain a short clause that would authorize and create the DUKM. The detailed statutes/directives/decrees would provide the substance of the program itself under this general authorization. At the present time, it seems clear that the general revision of the country's public health law that would authorize the DUKM will probably become law, but it is not at all clear what its exact details will be. Many people in the Ministry of Health and those directly involved with the DUKM seem to want DUKM to be an entirely government-operated program, with DUKM (or some other government agency) collecting the contributions and providing the services through solely governmental health services. Other interested parties, however, hope that the actual implementation of DUKM will be more permissive in nature, allowing private health insurance

organizations and private health care providers to participate. It is impossible to determine how this difference of opinion will be negotiated and what the actual outcome will be.

In anticipation that the DUKM will become law and that Husada Bakti or its successor agency will be authorized to proceed, the staff involved with the planning and implementation of DUKM have launched a pilot project in Jakarta. It is generally described as an "HMO pilot project," although it is really not an HMO in the way this term is used in the United States.\*

Thirty-five companies have been enlisted to voluntarily enroll their employees in the pilot project; about 7,500 employees and dependents are enrolled. Employers can apparently choose (or their employees themselves can choose; it is not clear) to pay either 7% of the total salary to provide coverage for the employee and all dependents or Rp. 2,500 per month just for the employee. The employer (or employee) is apparently able to enroll or disenroll on a month-to-month basis, which probably has led to some confusion over who is enrolled at a particular time. It has also probably led to some "adverse selection" (that is, employees signing up when they feel sick or think they are going to get sick and need care).

---

\* The term HMO crept into common use in Indonesian health care circles, but it is not clear that everyone really knows what an HMO is, that everyone is using the term in the same fashion, or that all of the organizations and plans variously described as "HMOs" are really that. In order to avoid confusion by interested parties in the future, extreme caution should be employed in using the term HMO to describe an organized health program, and when it is used, an attempt should be made to determine what exactly the speaker is describing.

When they enroll, the employee and family get materials explaining how the plan operates and where the services are available (which puskesmas). The employee chooses a puskesmas of the Jakarta municipal health service where he or she would like to receive services, usually one that is near his or her home. This specific puskesmas location is entered on the employee's membership card, which also lists the names and shows the pictures of all covered beneficiaries.

After enrollment, members get their medical care and medications free of charge at the puskesmas. They can come during regular hours or during several special two-hour sessions that are set aside at the end of the day solely for pilot project members. The medical and nursing staff who care for them during these "members only" sessions are the same ones who staff the puskesmas during regular hours. They are, however, paid extra by the pilot project for extending their working period to see pilot project members. Although all of the 42 Jakarta municipal puskesmas are theoretically open to selection by any member, in practice, the patients generally are clustered around five to seven particular puskesmas that serve the employee members' residential district.

When the pilot project is paid by the employer, it takes 20% of the fee to hold for administrative costs and hospital payments, then turns 80% over to the Jakarta municipal health authorities, which provide the services. (Members use the government hospitals when beds are available; when they are not, the members use private hospitals, but the charges are about three times as high.) When the Jakarta municipal health authorities get their 80% of the fees, they take 10% for their administrative costs and turn the remaining 70% over to the puskesmas (in some fashion that is not clear at this time). This 70% of the initial fee is apparently supposed to cover the staff of the puskesmas for the extra hours they give to patients

of the pilot project. The Jakarta municipal health authorities also provide the puskesmas with extra drugs and medications for pilot project members.

At present, the pilot project can only be described as modestly successful. Enrollment has not increased despite significant marketing efforts and may even have decreased somewhat. The employees are apparently not particularly enthusiastic about seeking care at the puskesmas and utilization has been lower than expected. Due to some confusion over the transfer of funds, the staff have apparently not been regularly paid the money due them for the extra hours they spend at the puskesmas treating pilot project patients. Everyone involved with the pilot project and with the broader plans for DUKM in general is very concerned, because this project is meant to serve as a model of what DUKM might be throughout the country. A less-than-successful outcome with the pilot in the national capital, where the greatest resources of personnel and organizational skill are available, would reflect very poorly on DUKM as a whole.

One would assume that because the people involved in DUKM are interested in using an HMO model to deliver services in the pilot project, they would also be interested in the plans of Pertamina (see description below) to develop an HMO nationwide. In fact, the opposite is true: the people in charge of Husada Bakti (or its successor and/or DUKM) are very concerned that Pertamina's plans will be much too expensive and will set too high an average level of service for the Ministry of Health services to match. They feel that it is probably impossible for such a system to exist within the planned government framework.

(2) ASTEK

ASTEK is the system of social insurance for employed workers sponsored by the Ministry of Manpower Development. It now covers about 2 million people, about 1/3 of the country's estimated 6 million company employees. It offers the usual range of beginning social security insurance programs for death benefits, disability, retirement, workmen's compensation, and the like (the details are not completely clear and the actual pay-out of benefits is also unclear; it has a big surplus, apparently, which may mean that premiums are collected well but benefits are paid out slowly or partially).

In the 1950s before the Ministry of Manpower Development came into being, a social security "foundation" was established to begin contributory schemes of social insurance for employed persons. The early program offered by the foundation included a small health insurance plan. When ASTEK started in 1969, it was decided to leave health out, even though there was (and apparently still is) a portion of the ASTEK law that authorizes it to offer "sickness insurance." ASTEK apparently does pay some medical bills (to an unknown degree) when there are industrial accidents or other workmen's compensation-type incidents, but aside from that, it has no major role in health insurance. It is participating fully now in the development of plans for the national DUKM, as a result of both the agreement between the Ministers of Manpower and Health, and their joint decree with regard to DUKM. A representative of the Ministry of Manpower Development is the Vice-Chairman of the planning and supervisory committee for the development of the DUKM.

It is fair to say that ASTEK program managers are very concerned about the development of DUKM outside the already-existing framework of social security insurance. Although they will have to collect the money for the program from employees and

employers, and will be seen as being the responsible collection agency, the details of the program itself will be carried out by another branch of government. People in this ministry are also very concerned about any mandatory national law that requires all employees to use only Ministry of Health personnel and facilities for their care, because many companies have already established fairly good employee health services of their own. These services might simply be put out of business as a result of a mandatory DUKM law. Some people in the Ministry of Manpower Development would clearly see this as a major retreat because they have been trying to foster the idea of better occupational safety and employee health services at the work site.

(b) Government-Related (but not Government-Sponsored) Health Insurance

There are two other major planned or operating health insurance programs in Indonesia that are somehow connected with the government but are not actually government-sponsored or offered directly by the ministries. One is a health insurance plan that is being considered by Pertamina, the state-owned (but privately operated) industrial concern. The other is the dana sehat, the small village-based cooperative schemes that are often operated in relation to the local puskesmas or posyandu.

(1) Pertamina

Pertamina is by far the largest industrial enterprise in Indonesia. Originally involved only in oil production and marketing, it has now diversified into many other activities, including insurance.

At present, Pertamina employs approximately 50,000 people at various locations throughout Indonesia. These employees,

together with their 200,000 - 250,000 dependents, are provided health care by a fully salaried staff of physicians, nurses, and other health professionals working in Pertamina-owned and operated clinics and hospitals. Pertamina spends about \$200 per employee per year in direct costs and probably spends considerably more in indirect costs. Its medical care is considered among the best in Indonesia, in that its medical staff is very well paid and its facilities are among the best equipped in Indonesia. Pertamina's medical staff are full-time, do not have outside private practices, and feel fortunate to work for Pertamina because of the salary and other general fringe benefits it offers.

Because of the change in the business tax laws, Pertamina is considering separating its health care personnel and facilities in some fashion, probably as a separate corporate entity associated with its insurance company Tugu Mandiri. Although a number of variations have been proposed, this new organization would function as a real health maintenance organization, offering a complete package of outpatient and inpatient services to a clearly-defined enrolled population on a per capita premium basis. The same organization collecting the premiums would also provide the services and all physicians and hospitals would join in the risk directly in some fashion.

Once their HMO is established, Pertamina intends to offer coverage to the employees of other state-owned corporations in the government ministries dealing with national resources (e.g., tin) and power (e.g., electricity). Although it is not known how many members these corporations would contribute, it is estimated that they might as much as double the number being cared for by Pertamina's current program. It is felt that Pertamina's medical facilities and personnel can absorb most of the added load without a great deal of new capital investment or major personnel costs.

Pertamina's HMO program would clearly become a major factor in health care in Indonesia, and not just because of its size. It has a reputation of being an aggressive, "no nonsense," comparatively well-managed business corporation with a high standard of performance. It is extremely well-connected in government and private circles of power and influence. It has an already-existing establishment of well-paid personnel and well-equipped facilities which could become a functioning HMO virtually overnight. Finally, it would operate within a single, closed risk-pool which would force it to become efficient over time or go out of business.

The developments in Pertamina are being monitored closely by in Ministry of Health circles for a number of reasons. First, it could create a huge "for profit" business involved in health care, a concept to which Ministry of Health staff are justifiably concerned. Second, it would establish a separate health care network of programs and services throughout the country. This would mean that there would be two major health care "systems," one (Pertamina) serving a selected, enrolled, well-financed, lower-risk group, and the other, (Ministry of Health) serving everyone else. This would be essentially divisive to the development of a single national health system in Indonesia and make it difficult to have a unified national public policy for health care. Third, the Pertamina system would operate with high levels of salary, facilities, and services -- standards that the Ministry of Health with its greater responsibilities and fewer resources (compared to the job it must do) could never meet; this would immediately make the Ministry of Health services second-rank, which would be quite disturbing to the personal morale of the Ministry's employees and patients alike.

Probably the most important Ministry of Health concern (from the USAID Office of Population and Health point of view) about the

Pertamina program is the greater emphasis it would place on high-technology, hospital- and clinic-based "sickness" care. At a time when public health and family planning problems are still the most important ones for the country to solve, the introduction of a well-financed and well-managed high-profile concern like Pertamina could seriously divert attention and energy away from these more important and more cost-effective programs, and towards the less important, less cost-effective programs of illness treatment.

In turn, those planning the Pertamina efforts need to learn more about the Ministry of Health's desire to have all DUKM members receive care only from Ministry of Health personnel and facilities. First, it would force the dismantling of the present system of health facilities throughout Indonesia; in a country with scarce health resources, this would be a great waste. Second, it would add patients to the already-strained Ministry of Health personnel and services; also, these patients would be high-utilizers, because they are accustomed to the high level of access and responsiveness provided by the present system. Third, the development of an all-inclusive Ministry of Health system would prevent Pertamina from developing an HMO that would be a unique model of health care for Indonesia and all of the developing world. Pertamina's HMO would be the largest of its kind outside the United States and would serve as an important "laboratory" and "academy" where much could be learned about the organized delivery of health care services in developing countries.

Pertamina also points out that it is the Indonesian government's general policy to include and encourage private sector involvement in all aspects of national life, not just health care. Pertamina's proposed HMO would bring considerable private sector energy, experience, and finance to help solve the country's health problems. It would generate considerable tax

revenues for the government as its business expands, and it would relieve already-crowded Ministry of Health facilities, thereby allowing the Ministry to shift some of its internal resources to other priorities.

With regard to the claim that the Pertamina project would be treatment-oriented rather than prevention-oriented, Pertamina staff say that their HMO is intended to keep their employees healthy rather than treating them after they are sick, and that the HMO model lets Pertamina do this very well. Indeed, they say with some justification that their HMO model provides an ideal model for the future generations of Indonesians and that by developing a prevention-minded HMO now, the country would be avoiding the fate of the United States and other countries that have allowed high-technology treatment systems to become dominant and have effectively prevented the development of a public health and family planning-oriented health care system.

Finally, a major concern of the Pertamina planners is that the Ministry of Health simply cannot deliver adequate health care to many of the sites where Pertamina workers are now located, such as the off-shore oil rigs. The Ministry would have to develop new services to provide care at these sites, something that they are probably not able to do at the present time.

(2) Dana Sehat

The second large sector of government-related health insurance programs are the small village-based health care purchasing cooperatives called dana sehat. There is no organized system or structure for the dana sehat. Each is an independent entity and each may be quite different. The basic principles governing all the dana sehat throughout the country, however, are quite similar.

In general, a dana sehat is a small, voluntary purchasing cooperative in a village. It may have received its initial emphasis from a number of sources: the puskesmas doctor or staff, the posyandu cadre, the village chief, the village BKKBN acceptor group, etc. Once organized, the dana sehat collects a small amount of money (for example, 100 rupiah a month per family) or produce (for example, a small amount of rice set aside by each family each day) and holds it for the group. In return, the dana sehat may use the money to purchase medications, finance a water system, finance care at a puskesmas, etc. It may also hold the money for loans or more general investment, with the proceeds being used for health-related activities. (One dana sehat in East Java is said to have built up resources of 16 million rupiah in this fashion.)

A key element in the success and longevity of a dana sehat is the leadership of the group. If a leader is well-placed in the community, trusted, and energetic, the dana sehat may succeed. If not, the money may disappear or the people may get very little back for their contributions, and the dana sehat eventually fades away.

At present, the Ministry of Health is encouraging the creation of dana sehat in several ways. For example, all physicians in the highest stratum of puskesmas are being told to help develop

dana sehat in their area; they are also told that the results of their efforts in stimulating the dana sehat will be included as part of their evaluations.

The Directorate of Community Participation in the Ministry of Health has put together a small brochure that describes how a dana sehat can be started in a village. It is stressed that the initiative for the dana sehat must come from the people themselves and that it must take a form that is comfortable for them; the Ministry is not trying to impose a shape or size on the dana sehat and is definitely not trying to develop a standard dana sehat that must be replicated all over the country.

It is not known how many dana sehat exist in the country, what they do, or what relationship, if any, they have with the posyandu in their village or the puskesmas that serves their area. A survey is underway, under the auspices of the Division of Community Participation, which should provide interesting information when it is complete. Thus far, approximately 600 dana sehat have been identified in Indonesia and the returns are only partially complete. Indeed, the area with the largest numbers of dana sehat, Java, has only recently begun to respond.

One exciting potential of the dana sehat is to somehow link it with the planned nationwide DUKM insurance scheme. One proposed mechanism is that, if all the dana sehat in a kecamatan agree to join the DUKM, perhaps by paying a bit more or using all their collected revenues to purchase memberships, then those dana sehat would possibly be able to use the specialist services and the hospital services beyond the puskesmas. At the least, they could certainly use the puskesmas free of charge the way Husada Bakti beneficiaries are able to do now. This development might bring the national health insurance scheme down to the smallest rural village level, making it one of the first plans of its kind in the world to link a national social security health

insurance plan for employed persons to the needs of rural, agricultural, non-employed populations.

For the present, it must be said that the dana sehat are potentially important parts of the health care/health insurance system, but the realization of that potential is certainly many years away.

(c) Private Health Insurance Plans

There are a considerable number of existing or planned private health insurance plans in Indonesia. Their history is quite brief, and even though some of them are well-financed, they all have the sense of being very early-stage organizations.

It is interesting to note that there is currently no law that either allows or requires the registration of health insurance companies. Thus, the only way that a health insurance plan can be developed and marketed, is as a subsidiary of a life insurance or general insurance company which must be registered with the Ministry of Finance. In this case, the health insurance plan is sold as a "rider" to some other type of insurance for the sake of formality. In some cases, a plan's organizers don't really consider that they are actually operating a formal health insurance plan, so they don't worry about registration or anything of that kind.

There are many different types of plans but they can generally be classified as: those offered by commercial insurance firms, those offered by providers of health care services, and those offered or managed by some other type of organization.

(1) Insurance Companies

o Timur Jauh/Aetna

In March 1985, Timur Jauh, an Indonesian life insurance company, invited Aetna, a major U.S. commercial insurance company, to join it in offering a health insurance product in Indonesia. A small staff was provided by Aetna and a comparatively small amount of capital was provided.

At first, the company wanted to offer a variety of different kinds of policies, but had some difficulties in developing and marketing anything but a standard indemnity policy. There are approximately 1,000 enrollees in the plan at the present time, almost all drawn from companies that are already related to Timur Jauh. The plan hopes to enroll up to 2,000 people and then take stock of the situation, study the utilization rates, and the like.

The plan offers a complete package of in-patient, dental, eye-glass, and out-patient services, and has developed a kind of preferred provider network of hospitals and doctors to which their enrollees are referred. The plan has had a difficult time negotiating regular rate schedules with physicians and per diem rates with hospitals, as is the case in the United States, either because the providers are unwilling to be pinned down to a definite rate schedule or because they don't know what an average per diem rate might be. As a result, the plan now simply pays for the charges as billed, and is watching them closely to see how a rate schedule might be established.

This joint Indonesian-American effort could be a formidable force in the private health insurance field, if such a field develops in Indonesia. The Indonesian part of the effort is extremely well-connected in business and

political circles, and the U.S. part has great technical knowledge and experience.

o Asuransi Nasuha/Blue Cross

Asuransi Nasuha is a major Indonesian insurance company that has joined forces with Blue Cross Insurance to offer a standard indemnity health insurance plan. (This Blue Cross has no relation to plans with similar names in the United States. It is a commercial organization that operates health insurance plans in Hong Kong, Manila, Singapore, and Bangkok, and is expanding into Jakarta with the help of its Indonesian partner.)

There are about 20,000 people enrolled in the plan, and membership is constantly increasing. They market their health insurance plan to companies that already deal with Asuransi Nasuha for other forms of insurance, but they are also being approached directly by companies that want health insurance only. One of their greatest problems is to get hospitals and doctors to agree to accept their patients, because often the hospitals are full and the physicians don't want to be tied down to a formal payment system that uses regular fee schedules. The plan has concentrated thus far in Jakarta, but has recently opened a branch in Bandung. They feel that they may have as many as 100,000 members in just a few years.

o Lippo Life

This large commercial life insurance firm is not now offering a health insurance product, but is watching the situation very closely. (It has several people in training with Asuransi Nasuha, learning how to operate a plan in case they do decide to move into the field.) An actuary with Lippo Life said that the company is very concerned because there is no way they can obtain utilization data

and claims experience data that would be adequate for establishing premium levels, reserve levels, and the like. The company is under a good bit of pressure to develop a health insurance product from its field representatives who are in turn receiving requests from the companies they work with. Lippo Life is convinced that there is a market for high-quality private health insurance in Jakarta, but it is moving slowly because of the lack of an appropriate data/experience base and because of their uncertainty about the final form of the DUKM law and whether private health insurance will be allowed.

(2) Provider-Sponsored Plans

A variety of small and somewhat informal plans have been created (or are being proposed by) health care providers in Jakarta. These are really more like contractual arrangements for service rather than formal health insurance mechanisms, but a few are included here to give a sense of the range of activities taking place.

o Dr. Damayanti and Associates

Doctor Damayanti started her medical group about 10 years ago to provide coverage to hotel guests and injured employees. Gradually, the hotels asked her to take on all out-patient services for their employees and dependents, including pre-employment physicals, control of sick leave, and the like.

Doctor Damayanti's group is now responsible for approximately 5,000 hotel employees plus about 15,000 dependents. Her group also cares for employees from other types of companies, but her major clientele are hotel employees. Her group provides all out-patient services, but not in-patient; payment is a per-capita lump sum. She

has about 30 full- and part-time physicians, and has 9 clinic locations (5 in Jakarta and 4 outside Jakarta, mostly in or near hotels. One special clinic is being planned for the Kemang area in suburban Jakarta to offer services to expatriate families). The medical group has a set formulary of drugs and medications that can be prescribed by its physicians, and the group conducts a rough kind of utilization review on a regular basis.

Although there is considerable pressure on Doctor Damayanti to expand rapidly, she would prefer to do so slowly so that she can maintain the level of quality of service that she would like. Although her group does not take care of hospital in-patients, she is developing a list of specialists to whom she refers more regularly. She has also been approached to build or operate a hospital of her own, but she does not want to do that yet because it would mean a major capital investment and would absorb a good deal of her time and energy.

o Doctor Sukardi

Doctor Sukardi is a psychiatrist who works in the government hospital in East Jakarta and who offers several kinds of private plans to different groups in Jakarta. His first plan has different levels of payments and different levels of benefits. For 25,000 rupiah per month, he covers a whole family for total outpatient care and gives them up to two home visits per month. For 10,000 rupiah per month, he covers a family for all outpatient services during two office visits per month and provides emergency consultation by telephone. For 5,000 rupiah per month, he will provide all office care to one employee during two out-patient visits per month. He did not say how many are enrolled or how the plan is doing, but he suggested that this type of arrangement has considerable fluctuations. He reported

that at one time, he had an extensive plan for parking attendants and had up to 50 physicians working in his group (not all full-time), but the "boss" of the parking attendants decided to take back the contract and set himself up in business, effectively ending Doctor Sukardi's venture with that group.

In his second plan, for 1,500 rupiah per month, people living in Perumnas Depok (public housing of Depok) could sign up for care and could come to one of his clinics located near Depok. He reported that this plan is not going well at all because people have a tendency to sign up for a month when they think they will get sick. They also have a tendency to greatly over-use the service, expect antibiotics at each visit, etc. He feels that this plan will probably close down soon.

Doctor Sukardi is thinking about opening a private psychiatric hospital some time soon, because he perceives that there is a great need for this kind of service and a great shortage of beds. However, he seems weary of organizing and trying to run health plans and programs, and does not seem anywhere near as confident and expansive as Doctor Damayanti.

o Indonesian Doctors Association -

Ikatan Dokter Indonesia (IDI)

The Indonesian Doctors Association (IDI) is getting involved in organized health plans in several ways. First, the Jakarta chapter of IDI has opened clinics in several locations and is offering a type of fee-for-service group practice at the locations. It is not clear just where this will go, but the national organization is watching it to see what can be learned.

Second, the leadership of the national IDI feels that private health insurance is coming and that IDI should be involved in it. It would like to start a Blue Shield-type of health insurance plan to cover medical services. (Blue Shield in the United States is health insurance offered in many states by state medical societies; in many areas, the state Blue Shield plan links up in some way with the previously hospital-sponsored Blue Cross plan to offer a Blue Cross/Blue Shield combination.) IDI also feels that physicians are increasingly being pushed into contractual arrangements that are very much to their disadvantage. Thus, IDI would like to develop an insurance product that it would control and which would treat physicians better.

o St. Carolus Hospital

As might be expected, some hospitals are looking at organized health plans as well, and one of them, St. Carolus Hospital, has some quite interesting aspirations for the future.

St. Carolus wants to set up an integrated system of care that would use the present hospital as a referral center and would create several new smaller (150 bed) hospitals in the suburbs. Each of the smaller hospitals would have several health centers attached to it, to which people would come for out-patient care. The hospital would like to link all these together in an HMO type of structure, with per capita payments. This HMO structure would stress health promotion and disease prevention as its primary priority.

The hospital tried to get the Timur Jauh/Aetna group to offer the HMO to its clients, but apparently the marketing staff found that the product wouldn't sell because the companies wouldn't pay extra for health promotion and

disease prevention. St. Carolus would not budge from its strong conviction about the necessity to offer a health promotion plan, so nothing went further. St. Carolus does participate in the present Timur Jauh/Aetna fee-for-service plan, and apparently has a separate agreement with one large employer to provide out-patient services to 1,000 of its employees in the hospital's clinics.

(3) Health Insurance Plans by Other Types of Organizations

o The Medical Scheme

This cooperative, non-profit foundation is owned by its 6,000 members. It was started more than 10 years ago by an expatriate physician connected with one of the embassies, but because he was not Indonesian, he was not allowed to continue and it was converted into a foundation.

The Medical Scheme hires a group of doctors and maintains a very modern office practice with high standards in Jakarta. The members are mainly expatriates who work for large companies or are higher-level Indonesian managers. It costs \$160 per person per year for an entire package of out-patient care, including medications. It does not include in-patient care, because most of the expatriates prefer to go to Singapore for hospital care if they can and their companies usually purchase separate hospital insurance plans to pay for in-patient care. In emergencies or when someone chooses to be hospitalized in Jakarta, the Medical Scheme uses St. Carolus Hospital or Pertamina Hospital which are the best in town.

The medical director says that the Scheme's quality of care is probably too expensive for a much wider clientele than it has now and it probably will not grow further. Indeed, its membership has decreased somewhat as a result of the

drop in oil prices and the reduction of expatriate staff in Indonesia.

o P.T. Unilever Indonesia

Many large companies operate their own health services for their employees and families and many also pay for services obtained in the community using something of an informal self-insurance scheme. The larger employer, Pertamina, has already been discussed. But because it is unique, it is not possible to generalize from its case. P.T. Unilever Indonesia, on the other hand, is a large employer that represents much of what happens in other large companies.

P.T. Unilever has over 3,000 employees in Indonesia, and including dependents, it is responsible for the health care of approximately 15,000 people. It has three systems of care, divided according to the level of employee: senior manager, middle management, and staff.

For the senior management group, Unilever provides some care in its own facilities, but for the most part, the managers get their care from private physicians of their choice and Unilever pays the bills. Unilever maintains a list of physicians with which it is associated and to which it would like its managers to go, but it is not clear if managers are restricted only to the physicians on this list. (For managers in Jakarta, Unilever uses St. Carolus Hospital for care.)

The middle management group is also allowed to go to private doctors, but are more limited to the use of certain physicians selected by Unilever. These physicians are supposed to serve Unilever middle managers living in the particular area or region.

For the staff, who comprise 90% of Unilever's employees, the company provides complete out-patient care at the work-site in the company's own clinics. They do not have their own hospitals, but use government hospitals whenever hospitalization is necessary.

Unilever spends about 5% of its \$25,000,000 payroll on health care (or about \$1,250,000 per year; this is equivalent to about 29,000 rupiah per family per month for each of its 3,000 plus employees). The company keeps computerized records of its employee and dependent population, and has good records of employee utilization of services and the cost. Employees (except certain technical levels) generally remain with Unilever for a long time, so the company has had the opportunity to follow a significant cohort of employees and dependents for a considerable period of time. The company is watching both the implementation of the new tax law and the new DUKM regulations with great interest, because both developments will clearly have considerable impact on what Unilever does for its health services in the future.

#### o Plantations/Large Farms

One possible type of organized health care plan that the consultants were not able to visit (but hopefully will be visited by others) is located on large farms and plantations, primarily in Java. It is reported that many of the larger sites employ several thousand workers and that they take responsibility for an employee/dependent population that can sometimes number up to 20,000. Usually the managers of these large agricultural holdings arrange for medical care with a salaried medical staff providing care in clinics that are built by the plantation itself and located on its grounds. There is apparently one such large plantation health scheme operating in East Java that has a

relationship with the Department of Community Medicine and Public Health at Udayana University at Denpasar; this might provide a suitable site for a more detailed evaluation or even a formal study/demonstration project in the future.

## 5. FUTURE DEVELOPMENTS

What will be the next stages in the development of health insurance in Indonesia? What will the public policy be regarding health insurance in the next few years? Within that policy framework, what would be the most appropriate configuration of health insurance and pre-paid provider schemes for Indonesia?

### (a) Principles Shaping Future Health Insurance Developments in Indonesia

It is impossible to predict with any degree of certainty what exactly will happen with regard to health insurance in Indonesia in the next few years, but whatever does happen, certain basic principles will probably play a strong role in shaping the kind of system that eventually emerges. These basic principles are:

- o greater private sector participation in health care financing for the country;
- o greater public/private joint efforts in the provision of health care to the people;
- o significant governmental role in controlling developments in health care and health insurance;
- o great need to concentrate on the primary care needs of rural people who comprise the majority of the population;
- o increasing demand for high-technology, hospital-based health care;
- o rapidly-rising cost of health care and greater needs to develop systems to control the rise in health care costs;
- o greater need to concentrate more on "outcomes" and "outputs" of health care, rather than concentrating on "inputs"/"throughputs" as is now the case; and
- o rapid advance in the social sophistication and in the aspirations of the Indonesian people.

With regard to the principle of greater private sector participation in the financing of health care, it seems clear that government budgets will remain the same or will decrease over the next few years as a result of the country's economic dilemmas. Given that fact and given the rapidly-rising demand for health care in the country, it seems clear that the only place from which more finances for health services can be raised will be the private sector. Therefore, any future health insurance efforts in the country will clearly be directed towards raising more money from the private sector.

At the same time, it seems clear that there will have to be greater public/private joint efforts in the delivery of health care services to the Indonesian people. There is simply no way that either party can do the job alone, even though many in the country would like a predominantly public health care system in the form of an expanded national health service of some type. This also raises the challenge of establishing a means to ensure that the public/private "mix" spreads the work and the responsibility evenly, so that all the poorest, sickest people in the rural areas do not become the sole responsibility of the public sector, while all the easier, more lucrative cases in the cities go only to the private sector.

A third basic principle for the future will be a significant governmental role in controlling developments in health care and health insurance. The form of government and public affairs in Indonesia, which has served the country well in recent years, has been the governmentally-controlled and directed society. The Indonesian society has been fortunate to have had a strong, stable central government for many years. There is no indication that this situation will change markedly in the near future. Indeed, as the pressure grows to identify health care needs more exactly and to focus resources more sharply so that they can be used to meet these priority needs, there may be even

greater emphasis on central governmental planning, control, and direction.

With regard to priority needs, it is apparent that future efforts in health care and health insurance will have to concentrate increasing efforts and resources on Indonesia's rural people. It is here that 80% of the the population still lives and the greatest needs for services (particularly primary health care services) will continue to be found. Any future system of health care or health insurance that is intended to be relevant to the real needs of the people must, almost by definition, be a basically rural health care system.

While acknowledging the priority of primary health care for rural people, however, the increasing demand for high-technology hospital-based care must also be recognized. It is inescapable that there will be greater interest in and demand for specialist services in hospitals in the cities, at increasingly higher cost. It is also inescapable that this will become an increasingly important focus of health insurance activity, because this is where the financial hazard to people and the need for economic protection is greatest.

This increasing sophistication of health care services, together with increasing utilization of those services (at least partially caused by the expansion of health insurance itself) will inevitably lead to higher health care costs and to greater total health care expenditures for the country. Also, the focus of health insurance will inevitably move away from primary protection of the insured from economic hardships and towards the creation of a means of restraining health care cost increases. Just as health insurance is eventually recognized as one of the primary reasons for the rise in health care costs, sooner or later it will be seen as a major means for controlling the rise in health care costs.

A special subset of this cost-containment principle deals with the containment of costs for drugs and medications. At present, the country spends approximately one-quarter of its entire health expenditure for drugs and medications (45% of all private expenditures and 50% of all Husada Bakti expenditures). Given the fact that most developed countries operate their health care systems utilizing only 8 - 12% of national health resources for drugs, a great opportunity for cost-containment and resource reallocation exists in Indonesia. The single greatest opportunity for internal health cost reallocation exists in the area of drugs and medications, and this will probably be a major area of concentration for cost control efforts in the years ahead.

Interestingly enough, this need to cut down on drug expenditures could be very strongly assisted by the government's desire to see the growth of pre-paid HMOs and other organized programs to manage total packages of care. HMOs could have a controlling influence on drug expenditures in two different ways. First, they could insist on a more limited formulary of drugs for their doctors to use and could further insist on the use of generic drugs rather than brand names; this means that plans would purchase a narrower range of drugs, but in much greater volume, thereby increasing their ability to obtain lower purchase prices. At the same time, the ability to buy generic drugs rather than a wide variety of higher-priced brand names, provides further savings. Second, HMOs and other forms of organized medical practice can take a more active hand in viewing physicians' prescribing practices and can educate or discipline physicians whose use of drugs and medications is improper or too costly. For example, a recent study showed that 85% of all children treated for diarrhea received expensive antibiotics, even though antibiotics did absolutely no good for the viral disease in question; indeed, 10% of the time, chloramphenicol derivatives were prescribed which can potentially

be extremely harmful to patients. If organized programs of health services were to review this type of practice in a routine review of quality of care, they could discover this prescribing practice, and could educate physicians not to prescribe antibiotics (the wrong treatment, in fact) and to prescribe oral rehydration therapy (the right treatment). Not only would this be better patient care but it would also reduce drug expenditures enormously.

As part of this greater emphasis on cost control in general and drug cost control in particular, there will clearly be more emphasis on "outputs" and "outcomes" in health care. No longer will the main questions be "How much are we spending for this or that category of care," but rather, it will begin to be "What are we actually getting back for our investments in health? Which particular investments in health have the greatest capacity to produce major improvements in the health status of the people?" In order to answer these questions, more attention will have to be paid and better data will have to be obtained about outputs and outcomes of specific health expenditures.

The final principle that will be shaping the future of health care in Indonesia is a rapidly-advancing social sophistication and level of expectation of the Indonesian people. They have seen their country move rapidly ahead on many fronts, and rather than make them more satisfied with what has been done, it has probably only whetted their appetites for more advances in the future. If Indonesia's future health care or health insurance systems are successful, they will also be setting the stage for greater expectations in the future.

(b) Most Appropriate Configuration for Future Health Insurance Developments in Indonesia

Given these basic principles, what will be the most appropriate configuration of health insurance and pre-paid provider schemes for Indonesia in the future? Clearly, it will have to be a system (or set of systems) of health insurance that:

- o increases private sector financial contributions to health care;
- o encourages greater public/private joint efforts in the provision of care;
- o encourages a strong central government role in the planning and social control of the entire health care system, both public and private;
- o focuses on the primary care needs of the rural majority;
- o is aware of the rising interest in hospital-based, high-technology care and that plans for its controlled expansion;
- o recognizes the central role and power of health insurance both to increase the total cost of care and to control the rise in the total cost of care, depending upon the configuration of the insurance plan itself; and
- o keeps in mind the continuously growing aspirations and expectations of the Indonesian people and provides a vehicle for gradual, planned growth and development of the health sector for future generations.

What will the system look like? What will be the probable configuration of the health insurance system in the future, given the probable strengths of these basic assumptions? It is impossible to say exactly what will happen, but even more important, it is impossible to describe how the public policy decisions regarding the health insurance are being made and how they will be made in the future. Although there are many very

important parts of the Indonesian public and private sectors that have a vital interest in how health insurance develops in the country, most of them are not clear on how important policy decisions are being made. Most important, the Ministry of Finance and BAPPENAS have yet not been directly involved in the major policy discussions, and until they are, it is not clear what the final details will be. There are some hints of what the future program will most likely resemble, however.

First, there will very probably be an expansion of the present social security type of health insurance for civil servants (Husada Bakti) to include employees from the private sector. It is not clear whether membership will be mandatory for all employees, but it will probably be voluntary at least in the beginning, as the forces against a mandatory, universal social security health insurance system seem to be too strong to overcome at this time. Even ASTEK, for example, which has been in operation since 1968/69, only enrolls one third of the workers eligible for its program of benefits, even though the law is clear that everyone must join.

Second, it is most likely that the government will bend to pressure from employers who want to continue operating their own health insurance plans and company health services. The quid pro quo, however, will probably be the requirement that these company plans meet certain minimum standards, that the company plan and all its employees be registered with the central health insurance plan or commission, and that the companies pay a small fee per employee (for example, the 2% that present Husada Bakti members pay) to the government plan. They will, in effect, be required to join the plan, but in a different category of membership, if they wish to continue to operate their own plans.

Third, and following this principle of government supervision and control, the government insurance commission (plan) will most likely eventually exert a great deal of control over these semi-independent plans' budgets, benefit packages, and levels of payment to physicians, hospitals, and pharmacies. If the government is interested in ensuring that the gap between the quality of private and public services does not get too wide, it will most probably have to insist on the power to set and control most of the country's prices for health services and commodities by controlling levels of payment through insurance mechanisms.

Fourth, as a further means of controlling costs and influencing the direction of health care in the country, the governmental insurance commission will demand an even greater quid pro quo from any private employer plans that wish to be certified as acceptable. This will most probably include the requirement that their services be delivered by an approved health maintenance organization-type of provider that takes responsibility for all health care needs and services for the employee, and which in return is paid a single per capita annual premium. It seems unlikely that the government health insurance plan with its great need to organize health services into a system and to control health care costs, will be able to allow more traditional fee-for-service payments and the provision of service under a government-sponsored plan.

Fifth, the government health insurance plan will have to establish a national organization, but whether this would be a separate structure or part of the Ministry of Health/Ministry of Home Affairs' structure in the provinces and regions is unclear. If the plan itself is only an insurance mechanism and continues to "contract" (in a sense) with the Ministry of Health facilities and personnel for service, it would most likely remain a separate entity. If the plan is seen primarily as a

service-delivery system (a sort of national health service), it will most likely be operated as an integral part of the Ministry of Health structure. Whatever happens, the government health insurance plan will have to determine how to manage a national program, what type of provincial and regency structures and personnel are needed, and how the flow and transfer of finances will be handled.

Sixth, with regard to the need to emphasize services for rural people, the government will need to do several things (and probably it will eventually do them, although the timing is unclear). The first will be to make a deliberate attempt to enroll an increasing number of rural people, both through the individual dana sehat and through the inclusion of employees on the large farms and plantations." Although these two groups will call for different types of arrangements for payment (those in the dana sehat through their village cooperatives and the farm workers through their employers) and different types of service delivery systems (the dana sehat at the posyandu and the puskesmas, and the farm employees at the employer-provided clinics), there should be a natural linkage of these two groups. It may be possible to pool finances in a region or to share services either at the puskesmas or the employer's clinic.

Government health insurance (and possibly the Ministry of Health itself) will also eventually have to make a preferential reallocation of funds (on a per capita basis) away from urban areas and towards rural areas. The problem here is that the urban areas tend to "pull" or attract much more funds than the rural areas because there are more expensive treatment facilities in the urban areas: Existing urban hospitals attract patients, further services are developed to care for these patients, more financing is needed, and finally, more money flows to the urban areas.

Although there has been no formal discussion of this problem yet, it is clear that if the government policy of giving priority to the primary health care needs of rural people is to be carried through, sooner or later it will have to face this problem of the internal reallocation of funds. A national health insurance mechanism can actually make this reallocation easier in many ways. For example, if urban employers are given the opportunity to "opt out" of complete participation in the national health plan by paying a partial premium, their partial premiums can be ear-marked to subsidize rural populations' participation in the program. In another way, if the general funds of the insurance plan are used to "contract" with or reimburse the Ministry of Health for providing services, the internal allocation of those funds within the Ministry of Health itself might be more heavily weighted towards the rural sectors of the Ministry's service network.

The Resource Allocation Working Party (RAWP) formula for the central allocation of funds within the National Health Service in England is a good example of what might be developed regarding the blending of economics with epidemiology. The RAWP formula merely says that those areas with more people, more poverty, higher morbidity and mortality, and more retired people, will get proportionately more funds per capita than other areas because they are clearly worse off and need intervention more acutely. As health conditions and indicators of sickness and disability begin to improve, preferential treatment begins to diminish for these geographic areas and shifts to other areas of need. The RAWP formula has a number of intrinsic difficulties and critics, but the necessity to establish a system for the orderly internal reallocation of funds derived from health insurance is a valid point.

## 6. USAID OPTIONS AND OPPORTUNITIES FOR THE FUTURE

There is no way to predict which scenario will unfold or what specific developments will take place for health insurance in Indonesia. It is clear, however, that USAID can play two important roles in this series of events. One is related to policy development and the other to policy implementation.

Although important policy development decisions are being discussed and perhaps made, the process by which they are taking place is obscure. A well-organized body of data and facts upon which policy assumptions can be based is also lacking and it is clear that policy options are not being vigorously discussed in a way that tests their usefulness and validity. Although there seems to be some consideration of major new governmental endeavors in health insurance, a careful analysis of the fiscal and patient care impacts of this rather massive new effort has not been launched to the degree that would be appropriate for an undertaking of this magnitude and importance.

The most useful role that USAID should take at this point is to assist in the development of the public policy process, in order to help assure the government that the most appropriate public policy is being developed and that the appropriate degree of planning and preparation have been carried out before the policy is implemented. The role USAID should play can best be described in terms of the usual steps for the development of any significant national policy: (1) identification of all parties, both within and outside government, that will have a major part in the outcomes, either through initiating actions or being effected by them; (2) development of a coordinated, cooperative process of discussion and deliberation among interested ministries and groups, with a clear understanding of the process by which major national policy will be settled; (3) accumulation of appropriate background data and facts to approach the policy decision in question; (4) identification of all the major

policy options and alternatives that need to be considered; (5) careful costing and estimating of the finances necessary to carry out each policy option or alternative; and (6) selection of the most appropriate policy option for the country and development of a long-range plan for its implementation.

Probably the most useful way for USAID to help in this process is to provide financial support for the studies that will be needed to evaluate the alternative policy options that are developed. USAID should not attempt to steer the ultimate policy decisions towards one option or another. Rather, its active support should include technical assistance and research funding for studies sponsored by important parties, particularly those studies that cannot be carried out at the present time using local funds. USAID might also take the lead in bringing together the various external donor organizations and agencies (many of whom are individually talking about funding one major health economics study or another) so that their efforts can be better coordinated and integrated into a more clearly delineated public policy process. Because many of the ministries and planning bodies that must be involved in a decision of this magnitude are already overloaded and are utilizing already-strained resources, USAID might provide funding for additional staff to work on this project, either domestic, foreign, or both.

Once this important phase of policy development is completed and a rational, thoughtful, well-defended national policy for health insurance has been decided upon, numerous activities that will deal with policy implementation will be launched. Although it is impossible to know the exact type of public policy that will be developed, three basic areas will need further assistance. For each, a project or program of USAID assistance is outlined. These basic areas are:

- o the development of a central health insurance organization to operate the government health insurance plan and to supervise/regulate private plans;

- o the development of multiple "model" plans throughout the country in order to learn which type of plan (or which mixture of plans) will best serve the goals of the previously-agreed upon public policy; and
- o the development of an accurate, current health economics data base and analytical capacity, so that current events can be effectively monitored and future development can be effectively planned.

(a) Development of Central Government Insurance Plan (Commission)

Whatever form the government health plan takes, it will be necessary to have a strong, well-managed central insurance organization. This organization may be located directly in the Ministry of Health or it may be a separate body (as Husada Bakti is now). But whatever its form, it will have to carry out a number of major tasks and will need assistance with all of them. These tasks are: (1) development and operation of the government-sponsored health insurance plan (Husada Bakti and its expansion); (2) development of standards and means of registration for privately-sponsored health insurance plans; and (3) maintenance of accurate data systems on costs, utilization, and outcomes for all those insured in the country, whether under the government or private plans, in cooperation with the broader health economics institute described below.

In the first function, the current management and operation of the Husada Bakti program will have to be considerably expanded and strengthened if it is to take on a nationwide role for private employees as well as civil servants. Extensive reviews of other countries' central national health insurance organizations will have to be conducted to determine which structure fits Indonesia's needs best. Considerable on-site working experience with these various organizations will have to be obtained by key managers on both a "crash" basis, and through

longer-range training programs to develop future management skills. Also, numerous short-term technical experts will have to be brought to Indonesia to help solve specific problems that may arise in the early phases of the expanded plan's operations.

With regard to its regulatory functions, the government health insurance agency will have to establish standards for private insurance plans and a means of certifying and registering them, as well as a means of monitoring their performance. The idea here is that the agency retains the right to expect compliance with certain standards before a license or a permit to operate is given to a particular health insurance plan. It is a common procedure in many countries, including the United States, and is a relatively simple way by which the agency can be sure that all health insurance efforts in the country are supportive of and fit into the national health system plan.

What should those standards be? Basically, any aspect of the financing or provision of health care can be included, as well as all aspects of the organization of the company itself. For example, the government health insurance agency can retain the power to review all the finances of the health insurance plan, to review its use of resources internally and externally, and approve any changes in the premium structure. In this sense, the health insurance plans become something like a regulated public utility, in which all aspects of the business, including the product being offered, the charge for that product, and the amount of profit taken, can be subject to regulation.

If a less controlled situation is desirable, the standards can deal more with the content of the insurance function itself, and not so much with the way in which the company is organized or the amount of finance it accumulates. In this situation, the standards would deal, for example, with minimum packages of benefits to be offered, standards of performance for the

insurance company (for example, how quickly does it pay claims, what percent of claims are rejected by the company, and the existence of a clearly-described appeals process, whereby the insured can have some ability to contest an otherwise unilateral decision on the part of the plan to deny benefits). The standards can insist that the plan maintain certain levels of financial reserves in order to assure their long-term viability and it can require the approval of premium rates as well as rates of payment to the various providers. It can insist that the insurance company have a means of reviewing the quality of care being provided, even if that only means that the insurance company requires that approved providers have such systems in operation in order to become a qualified provider for the plan. The standards can require insurance companies to have written agreements with various providers, such as hospitals, that clearly state the plan's obligations to the providers and the hospitals' obligations to the plan and its beneficiaries. Finally, the standards-setting capacity of the government health insurance agency can require that only health maintenance organizations be allowed to participate, or that every health insurance plan, regardless of its origin and its main insurance package also offers a health maintenance program option. In a word, this regulatory function can make the government health insurance agency into a public utility commission (regulating), a licensing commission (setting organizational standards), a rate-setting agency (controlling the premiums and the amounts and kinds of payment to providers), or some mixture of all three. Each of these regulatory sub-functions can be extremely complex in its own right and can require a great deal of sophisticated technical assistance from USAID if the function is to be done well.

With regard to the maintenance of an accurate data-base (in cooperation with a national institute of health economics to be described below), the central health insurance body will

eventually have to: develop standards for information for all insurance plans in the country; be able to gather and integrate the required data; monitor and analyze trends of expenses, utilization, and outcomes; and report back in timely fashion to policy-makers needing this kind of information. This task will require considerable assistance for developing and maintaining adequate information systems, as well as analytical skills for reviewing the data and making relevant policy decisions. (This task is by nature a longer-term and probably later-phase task than the previous one for the central insurance plan or commission; the others are more urgent in that they involve the initial creation or expansion of the plan or commission.) Again, short-study tours, longer-term overseas training and experience, and in-country technical assistance will be required. In addition, assistance will probably be required for the purchase of computer equipment and support systems.

(b) Development of Model Health Insurance Plans

A second major areas of potential USAID involvement would be assistance in the development of several different types of health insurance plans throughout the country, with the subsequent comparison and analysis of their results. The major types of plans requiring assistance, in order of priority, are: the DUKM pilot project in Jakarta, the dana sehat in rural areas, a plan for a large plantation or farm, Pertamina's HMO, private employer plans (e.g., P.T. Unilever), the Indonesian Doctors Association proposed plan, and St. Carolus Hospital's health maintenance organization plan.

The most important aspect of the creation or support of these plans is that they be developed within a general framework of research and evaluation. It is not simply the creation or support of an individual plan that is important here. Rather, it is important that the experience be well documented, that

information be gathered in a uniform fashion that allows comparison, and that analytical comparisons can be made of their relative strengths and weaknesses for different populations or subpopulations.

What types of information should be gathered on the models? First, there should be a complete description of the population being served, so that there are ways to adjust the outcome data according to differences in the population. Next, there should be complete data on the financial inputs, that is, the premiums that are paid or the various additional funds that are made available to the plan, from whatever source and for whatever purpose. Then there should be complete data on the internal activities of the plan itself, both with regard to its resources and the way in which its health services are provided. Finally, there should be detailed data about both "outputs" and "outcomes"; that is, about the utilization of the various kinds of services by individuals and families, together with some consideration of the impacts of those services on the real health status of the people being served. (Here, for example, it might be advisable to document the amount of family planning services provided within the framework of the plan, and to monitor the birth rate of women of child bearing age among the various plans, to see which one does a better job.)

At this early point, the research and evaluation design should not be too complicated, and there should not be active consideration of special substudies of a very elaborate or sophisticated nature. The first step is rather to establish a solid data base that accurately describes the general experience of the plan and the population in the various models; the research model would thus be more descriptive than experimental in nature. Later, after a solid base of general descriptive data is established, the government health insurance plan can begin to alter the experimental models in different ways to

provide different stimuli or incentives for certain behavior, either on the part of patients or providers, and then document the results.

What are the major individual models that should be developed and what will be needed for each? The most urgent need for assistance rests with the DUKM pilot project in Jakarta. Originally planned to cover almost a million people, it now has fewer than 10,000 people enrolled and by all accounts is doing rather poorly. There is a need for powerful short-term assistance in marketing, financial flow management, and quality of patient care, the three areas of major deficiency at the present time. Unfortunately, there is no time for the luxury of short-term or longer-term overseas training and experience; the emphasis must be on immediate, highly-skilled, on-site technical assistance in Jakarta if this rapidly-deteriorating situation is to be turned around in time. The failure of this pilot project would destroy the credibility of the government's plan for expanded health insurance for many years to come; hence, the need for expert short-term technical assistance.

The DUKM pilot project in Jakarta has been described as an HMO, but it should be clearly understood that it is not an HMO. It does not have an enrolled population in a closed-risk system that operates facilities that are directly tied with the insurance function by some sort of risk-sharing mechanism. Instead, it is a rather loose union of a publicly operated, contributory social security insurance system for taking in revenues with the standard governmental system for providing health services through government health facilities. The model is very useful from that point of view, but it should be described as what it is, not as an HMO. Like all other models, it should document carefully which people are enrolled, how they utilize the services, and what the outcomes/outputs really are, but before all else, it must be accurately described as a model.

Probably more important for the longer term is the development of a pilot project in one of the provinces involving the dana sehat. Here the emphasis should be on learning how to develop the dana sehat themselves as contributory schemes for national health insurance and how to link these dana sehat with the posyandu and the puskesmas. Considerable effort should be devoted to community development and marketing, dues collection and financing, and developing a system of primary care services that is equal to or better than what now exists. As with all the other models to be described, a good system of data collection that would allow for accurate monitoring and evaluation will also be necessary.

What would a model dana sehat project look like? For example, according to current government plans, a province that is interested in trying something with the dana sehat might be singled out. The provincial authorities would contact all the districts and particularly the bupati in each district to see if they are interested in developing their dana sehat. Resources could then be put together to develop a standard package of benefits that somehow parallels the national model standards. (In the provinces and the kabupatens, these would clearly involve the posyandu, the puskesmas, and the district hospitals in some fashion). Then, some of the kabupatens could be selected as pilot areas, while others would be held as "controls." In the experimental areas, a major effort at marketing and community organization might be launched through the area's puskesmas. This might eventually lead to a population of 10,000 to 20,000 or more being enrolled in a village-based cooperative purchasing scheme, the object of which is to enroll everyone in a village, and as a result of that participation, enroll them in the national health insurance plan itself. As with all the other plans, data would have to be collected carefully, both on the mechanics of setting up and operating the plans, and on financing, utilization, and

outcomes. Depending upon the degree of cooperation, the size of the province, and the amount of resources available, it might be advisable to try the scheme in a number of districts or kabupatens so that the total enrolled population in the entire province might reach as much as 50,000 or more; more than that might stretch the capacities of the research team, and even that number might prove to be too many to deal with, certainly at first.

Again, it should be realized that this model is not a test of an HMO, as it is not really a health maintenance organization that is being developed. Rather, it is a linking of a village-based, cooperative purchasing fund with the already-existing government health services in the posyandu, puskesmas, and district hospitals, with the connecting link being the national health insurance structure.

A simpler but equally important pilot project would involve two or more large farms or plantations. Because many of Indonesia's plantations employ thousands of workers and care for thousands of dependents, the availability of a suitable population would not be a problem. One plantation or farm might serve as a control, with a full-time, completely-salaried health service providing services in plantation-owned facilities using plantation-provided drugs. In another setting, the plantation or farm managers might be interested in contracting out the responsibility for these services to private providers in the surrounding area, so that the plantation or farm is setting up a sort of "preferred provider" system for its employees. Finally, in a third setting, the plantation management might be encouraged to contract with an outside health maintenance organization (such as Pertamina) to provide a complete package of services, under contract and under a per-capita reimbursement scheme. As a result of using the plantation/farm organizational base and population, it might thus be easy to test three

different types of systems (employer-operated, fee-for-service under contract, and HMO under per capita payment) on three similar populations.

The opportunity to work with the developing Pertamina HMO represents a different type of activity. Here the facilities already exist, as does the basic population to be served. What is needed is technical assistance in converting the present facilities and personnel into a real HMO, and more important, to document the population's actual experience under the HMO system. While it should be apparent that the Pertamina situation does not represent the average Indonesian condition, it does represent an excellent opportunity to observe the development and operation of a nationwide HMO and to learn about costs, utilization, and outcomes in a long-term enrolled population.

In the same fashion, USAID should try to seek out one or two other large employers (such as P.T. Unilever Indonesia) to study their experiences in contrast to Pertamina and other private insurance plans. Although these companies employ large numbers of people, they are nowhere near the size of Pertamina nor would they have a well-organized HMO providing services to them; their groups would be smaller and would include more traditional forms of company medical services mixed with fee-for-service care. By linking up with the ongoing data-base of a few large companies, it might be relatively easy to obtain another important comparison population for study.

In many ways, the experience with these large company models would be similar to the models developed on the farms or plantations, but the difference would be that these companies would more likely serve urban populations living in scattered private accommodations and not grouped together in company housing. They might much more easily develop relations with

many physicians and hospitals, since there are more likely to be many providers in cities. In many ways the situation might be similar to the farms and plantations, but in a number of significant ways they might also be quite different.

If possible, two final groups should be assisted in their interest in developing health insurance plans because they are both potentially quite influential in the development of Indonesian health insurance and because each is talking about developing a quite different type of plan.

The first group is IDI, the Indonesian Doctors Association, which would like to sponsor and operate a Blue Shield type of fee-for-service health insurance plan for physician services. This plan would actively involve physicians in the field of health insurance, both individually and through their medical associations. This would provide them with a great deal of badly-needed education and practical experience in the mechanics of health insurance and would assure the involvement of one of the major professional forces in the country in the development of health insurance in general. Since the eventual plan would probably be a fee-for-service type of plan, it would also allow for considerable cross-comparisons with other types of plans organized along HMO lines.

St. Carolus Hospital, on the other hand, represents the major private hospital provider in the country, and would like to set up a private, non-profit hospital-operated HMO. Because of its considerable prestige, its great emphasis on health promotion and disease prevention, and its hospital-sponsored HMO nature, this plan would provide another very different type of experience from which Indonesian policy-makers could learn a great deal. While this proposed plan is probably the least important of all those previously mentioned, it represents such a unique situation in Indonesia (private non-profit hospital

sponsor) that it may be worth a study in order to broaden the "mix" of model programs.

Each of the model programs taken individually provides a new insight into the health insurance situation for the future of Indonesia, and each provides valuable information both about populations and about systems of service, as well as practical experience in the establishment of individual programs. Taken together, they would provide a rich and varied framework of programs and payment schemes, as shown on the next page.

Each of these situations will be slightly different, as will be each of the populations, certainly different enough so that the overall picture is not one of a carefully-controlled and designed research effort, with similar populations receiving the same experimental stimuli in the same fashion. Rather, what would develop would be a group of different types of programs caring for different populations in slight to markedly-different fashions. Each population, however, would be documented by the same data base, as would the financial information and the output/outcomes data. They would not be perfectly comparable situations and populations, but as a first-stage description of the situation in Indonesia, as a first exploratory phase of what is possible, what might work, and what doesn't, it could be a very useful contribution to Indonesia, laying a solid foundation upon which future generations might build in an orderly, thoughtful, and well-planned fashion.

Program Model	Population being Served	Means of Financing the Services	Means of Providing the Services
Husada Bakti	Civil servants	Social security collection of 2% of salary	Ministry of Health standard facilities
DUTM (expanded Husada Bakti)	Private employees	Social security collection of 7% of salary per family or Rp2,500 per person	Ministry of Health facilities (perhaps with special hours or accommodations)
Dana Sehat	Rural village dwellers	Village-based, cooperative purchasing funds	Ministry of Health facilities (PosYandu, puskesmas)
Large farms and plantations	Rural, employed populations working on large farms and plantations	Employer-paid (perhaps with employee contributions)	(1) Employer-provided services (2) Employer-contracted services (fee-for-service) (3) Employer-contracted services (HMOs on a per capita reimbursement basis)
Pertamina	Pertamina employees and employees of other perums	Employer payments, perhaps with employee contributions or participation	Well-organized "real" HMO
Large urban employers	Employees of urban companies living in dispersed housing	Employer payments, again perhaps with employee sharing or participating	(1) Employer-provided services (2) Employer-contracted services (fee-for-service) (3) Employer-contracted services (HMOs on a per capita basis)
IDI (Indonesian Doctors Association)	Private enrollees, possibly employees of companies, probably urban	Employer contributions to insurance premiums with or without employee participation	Fee-for-service payments to individual, independent physicians and hospitals
St. Carolus Hospital	Private enrollees in Jakarta, probably more middle class and suburban	Employer contributions to insurance premiums with or without employee participation	Hospital-sponsored HMO

(c) Development of an Accurate, Current, Health Economics Data Base and Analytical Capacity

Before any major health insurance effort is undertaken in Indonesia, it will be essential to establish a centralized system for monitoring the health economics of the country. Without up-to-date, accurate means for monitoring the flow and utilization of financial resources for health, the development of a health insurance mechanism will provide a major vehicle for increasing health care costs and expenditures, without having any means of monitoring current developments or of appropriately planning for future developments in the health sector.

At present, many government agencies and international and donor groups are studying various parts of the health economics picture in Indonesia, but there is no one central coordinating body where all this diverse information is brought together. Further, there is not yet a clear way to feed existing health economics information into the country's policy development apparatus. It is not clear whether a central collection and analysis unit should be located in BAPPENAS, the Ministry of Health, the University of Indonesia, or somewhere else, but there clearly is a need for such a function. This unit should have the power to require mandatory reporting of certain necessary information, and to be clearly seen as an integral part of Indonesia's health policy development apparatus.

Basically, three kinds of information are necessary for an adequate health economics and monitoring system: inputs (revenues), throughputs (expenditures), and outputs (outcomes). In the past, whatever information has been collected in Indonesia has concentrated on the first two categories, with little time or energy spent on outputs and outcomes. It must be stressed that if any health economics data are to be collected, the most important are ultimately the output/outcome data, even

though the immediate pressures are to know what current expenditures are.

For "input" (revenue) data, the health economics center should monitor how much finance is coming into the health sector from taxes of various kinds, insurance premiums (both public and private), foreign aid, expenses for health made by employers, and direct cash payments (out-of-pocket) made by individuals. It should be stressed that this basic information is quite different from the expenditure/budgetary/"throughput" data that are usually collected. "Input" (revenue) data reveal how much finance is coming into the health sector; "throughput" (expenditure) data tell what the money was eventually spent on.

For "throughput" (expenditure) data, the expenditures of various governmental agencies connected with health, broken down by organizational units, by types of program (immunization, improved sanitation, etc.), and by function (training, construction, travel, purchase of supplies, etc.) must be collected. These data must then be broken down by level of government, with specific accounting for total health expenditures (public and private) at the provincial level and eventually at the regency level.

For "output" (outcome) data, information on the results of the workings of the health care system in the country, and the results of the investments of financial resources in certain places and in certain ways must be collected. An accurate accounting of the specific items of service delivered is essential, but perhaps even more important (although infinitely more difficult to obtain) is outcome data (that is, data that measure what happened to the health status of the people as a result of the "outputs" or services delivered). This type of data must be able to be disaggregated in the same fashion and along the same lines as the expenditure data, so that they

become relatively easy to measure (for example, the amount of money invested in communicable disease control in a particular province or district, and at the same time to relate that investment directly to the "outputs" and outcomes for that effort in the same geographical or organizational unit). This last step, the ability to disaggregate gross "input" and "throughput" data so that they can be easily related to particular program objectives, population subgroups, or disease conditions, should be the ultimate objective of the monitoring efforts of this health economics data center, wherever it is located.

With regard to health insurance specifically, this center should be able to require that all insurers in the country provide uniform data about their inputs, throughputs, and outputs. It is to be expected that most private concerns will be unwilling to provide these data, but it is essential that they be made to do so as a condition of being allowed to register as an acceptable health insurance plan in the national health system. Without this information, the country would be missing at least half of its available health economics data, and the most vigorous, rapidly-moving, and powerful half of the data at that. If there is to be a health insurance effort in the country and if it is to involve the private sector at all, it is essential that these data be included.

A final source of input and output data would be some type of household survey carried out from time to time throughout the country, probably on a small, but select sample of the population. In this type of activity, information can be captured with regard to the actual amount that individuals spent out of pocket on health care during the preceding week or two, as well as information about what portion of the family's total income this represents. This household survey can also gather information about the number and type of health care services

received by the family in the previous week or two. This household survey might well lead itself to on-going market survey research efforts being carried out by private commercial enterprises throughout the country.

Obviously, the creation of this type of center will call for a tremendous amount of assistance and support from USAID and others. The tasks to be accomplished in establishing this center are:

- o identification of the country's policy-making process for health and the decision on where the new center should be located within that process;
- o identification of already-existing streams of data that can be used as they are or with modification, and the identification of new streams or items of data that need to be collected;
- o establishment of regulatory guidelines to enable uniform collection of needed data from various sources;
- o establishment of the center itself, together with computer equipment and support services as necessary;
- o creation of the analytical capacity to review and monitor data as they arrive, in order to determine current activities and trends over time;
- o development of a system for the publication and wide dissemination of both the data and the results of analytical studies of the data; and
- o development of a capacity to commission special studies for specific, "one time" data that might not be readily available without such special efforts. The degree of support for this particular center and its activities is immense, and will probably have to be shared with other sources of support such as the Ministry of Health itself, the World Bank, the World Health Organization, and other agencies and international groups.

## 7. URGENT TASKS FOR THE NEXT TWELVE MONTHS FOR USAID

There are specific areas that will only be amenable to influence within the next twelve months. These areas require USAID's immediate attention and involvement over the next year. They are:

- o assisting the government to open up the policy process so that all appropriate options can be considered, costed, and evaluated against other options;
- o assisting in the operation and management of the DUKM pilot project in Jakarta; and
- o cooperating and assisting with the Pertamina HMO so that it develops appropriately, so that its data and experience are available to the rest of the country, and so that it develops within the general framework of total health planning for Indonesia.

It cannot be stressed enough that the present policy process is not including all the participants who will be necessary for the eventual development and survival of a national health insurance scheme. All possible options are not being considered in an orderly and rigorous fashion, nor are the financial and patient care implications for the country being documented or projected. USAID can play a vital role in opening up this process to all the involved and affected participants, and in insisting that the appropriate evaluation of options and planning of programs be conducted. Indeed, USAID may be one of the few agencies that can assume this role, because it (together with WHO and World Bank) is a neutral "outsider," with no vested interest in one particular solution or another, and whose only interest is that the best option for the country be selected and planned as carefully and thoughtfully as a project of this magnitude should be.

It is also essential that the DUKM pilot project in Jakarta be turned around quickly, certainly within the next twelve months. At present,

it appears to be going badly and if it continues on this present course, it probably will not survive. A very visible failure of an important pilot project, taking place within full view of everyone important in the country, would be a major setback to the prestige of the Ministry of Health, which has been seen to be sponsoring the pilot project, at least in part.

If possible, USAID should get the present DUKM managers to agree that without well-organized, vigorous, expert technical assistance, the pilot project will most likely not succeed.

USAID should become involved with Pertamina for the purpose of accomplishing two specific objectives. First, it is clear that Pertamina will probably develop its plan and that the plan itself will become a major force in the country. It will (or at least, it can) also be a major source of information about the health needs of the population over the long-term, the costs of providing care to a large population in Indonesia using a pre-paid health plan, and the ultimate effects on the health of that population. It must be made clear to the leaders of Pertamina at this time, when they are setting up their program, that they have a unique opportunity to provide a vital service to the country: the careful documentation over a long period of the health experience of a large population, together with careful documentation of the costs and outcome. No one else in Indonesia has the opportunity to do what Pertamina can for the country, not now and probably not for a long time in the future. If this opportunity is missed, for whatever reason, the country will be deprived of an important source of hard data upon which much future planning can be based.

USAID should also keep Pertamina involved and in partnership with the government's efforts for a national health system. Although it will be extremely difficult, USAID should carefully evaluate how these two vital forces might be brought together, both for the future of the two entities themselves, and more important, for the future of all the Indonesian people.

APPENDIX

Reference materials:

- (1) Dr. Damayanti and Associates Clinic, A Complete Health Care Program, Jakarta, 1985.
- (2) A-Pilot Scheme of DUKM for Jakarta (author and sponsor not listed), Jakarta, March 1984.
- (3) Abel-Smith, B. (1) Financial Health Planning, (2) Development of National Health Insurance, (3) Review of Budget for Long-Term Health Plans Indonesia, Assignment Report, WHO Project: 1NO MPN 001, November 21, 1985.
- (4) Abel-Smith, B. Development of Work on Health Economics, Development of National Health Insurance, and Review of Budget for Long-Term Health Plan Indonesia, Assignment Report, WHO Project: 1NO MPN 001, July 2, 1986.
- (5) Abel-Smith, B. "Funding Health for All -- Is Insurance the Answer?" World Health Forum, No.7, pp. 3-11, 1986 (with commentaries by Banerji, Gomas, Majnoni, D'Intignano, Midgley, Miranda Gutierrez, Muhr, Roemer, Wlodarczyk).
- (6) Abel-Smith, B. "Relation between DUKM and Private Health Insurance in Indonesia," mimeo, 5 pp., undated (early 1986?).
- (7) Asia Emergency Assistance/SOS Medika, "Description of Services," mimeo, May 23, 1986.
- (8) Asuransi Nasuha, "Worldwide Executive Health Plan," Jakarta 1986.
- (9) Chao, D., Ross, J. and Piet, D. "Public Expenditure Impact: Education and Health, Indonesian Family Planning," Research Triangle Institute, Chapel Hill, North Carolina, September 1985.
- (10) Direktorat Bina Peran Serta Masyarakat, Direktorat Jenderal Pembinaan Kesehatan Masyarakat, "Buku Pedoman Penyelenggaraan Dana Upaya Kesehatan Masyarakat (DUKM) di Pedesaan/Dana Sehat," mimeo, Jakarta, Summer 1986.

- (11) Directorate of Financial Institutions, Directorate General of Domestic Monetary Affairs, Ministry of Finance, "Key Indicators, Indonesian Insurance Industry, 1980-1984," Jakarta, 1984.
- (12) Ferster, Geoffrey, "Notes on Health Sector Financing and Economic Issues in Indonesia: A Brief Overview and Future Aspects," mimeo, 18 pages, March 1986.
- (13) Gani, Ascobat, "Financing and Delivery of Primary Health Care in Rural Indonesia," mimeo, Faculty of Public Health, University of Indonesia, Jakarta, undated (sometime in 1985).
- (14) Health Development Planning and Management Project (Johns Hopkins University), Health for All by the Year 2000 in Indonesia, Publication No. 11, Faculty of Public Health, University of Indonesia, Jakarta, 1982.
- (15) Ministry of Health, "Item 9: Resource Mobilization and Utilization," pages 15 - 18 in draft of Ministry of Health response to WHO 1986 Evaluation of Progress (Annual Report of the World Health Situation), mimeo, Jakarta, 1986.
- (16) Myers, C., Monghosmai, D. and N. Causino, Financing Health Services and Medical Care in Thailand, prepared for USAID Thailand, April 1985.
- (17) Norris, J., Rosenberg, R., Wood, M. "Trip Report," USAID Jakarta, June 6 - July 3, 1986 (draft), mimeo, July 3, 1986.
- (18) Office of Population and Health, USAID, Jakarta, New Project Description: Private Sector Health and Family Planning Project FY 1987-1992, (draft), Jakarta, 1986.
- (19) Planning Bureau, Ministry of Health, "Result of Evaluation on Utilization of Health Service Facilities in the Regencies," mimeo, undated (late 1985/early 1986?).
- (20) Prescott, N., "Expenditure and Financing Issues in the Health Sector in Indonesia," (draft), mimeo, World Bank, December 5, 1983.
- (21) Petunjuk Pelayanan Medis Bagi Peserta, Pemeliharaan Kesehatan Tenaga Kerja, (Jenis Pelayanan; Prosedur; Peraturan; Fasilitas), ASTEK/DUKM, Jakarta, 1986.

- (22) Sarwono, S., Study on Community Participation in Primary Health Care in Indonesia, Indonesian Public Health Association in cooperation with the Canadian Public Health Association, undated (early 1986?)
- (23) Wheeler, M., Financing Health Services (Sectoral Study No. 2, Central-Local Financial Relations Review, Government of Indonesia), Development Administration Group, University of Birmingham, December 1980.

References Sought but Not Obtained; Probably Useful for Future Analyses

- (1) referred to in Myers, et al.
  - (a) Mills, Anne, Health Services for Low Income Groups: Access to Free Medical Care, World Bank, 1984.
  - (b) a PRICOR - supported study of community financing of primary health care that was conducted by the Social Project Divisions of the National Economic and Social Development Board (of Thailand), a national survey of 4,631 primary health care funds and detailed case studies of 72 funds.
  - (c) Youngyut Kajornpadungkiti, "The Fate of Noh Ten's Drug Cooperative," mimeo, Harvard School of Public Health, MPH Thesis 266D, 1984.
  - (d) Michael Mills, "Health Sector Financing: An Introduction to the Issues," in National Council for International Health, Alternative Health Delivery Systems: Can They Serve the Public Interest in the Third World Setting?, Washington, DC, August 1984.
- (2) referred to by Prescott
  - (a) Volpati, J.B., "Financing the Health System in Indonesia," 1976/77.
  - (b) Ferster, G., "Financing the Health Sector in Indonesia and Preliminary Estimates for 1980/81."

(3) referred to by Wheeler

- (a) Volpati, J., Djafar, M., Koesniah, A., Meliala, A., and Tobing, A., "Financing of Kabupaten Health Services" (surveys of Jawa Barat, Jawa Timur, Sumatera Utara, Sulawesi Tengah), Bulletin Penelitian Kesehatan Vol. III, No. 2, 1975.
- (b) Ferster, G., "Estimates of Public Sector Expenditures on Health, All Indonesia," 1978/1979.
- (c) Ferster, G., Hapsara, G. and Pong Tengko, "An Economic Analysis and Estimates to Finance Health Care Development in Indonesia by the Year 2000," Planning Bureau, Ministry of Health, September 1980.

(4) referred to by Abel-Smith

- (a) Golladay, F.L. and Liese, B., "Paying for P.H.C. Mechanisms for Recurrent Financing," in Health Policies for Developing Countries, Royal Society of Medicine, International Congress and Symposium, Series No. 24, London, Academic Press, 1980.