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**FINAL REPORT**

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**MIDTERM EVALUATION OF THE  
HEALTH SECTOR FINANCING PROJECT  
(497-0354)**

**Delivery Order No. 6  
under  
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**Prepared for:  
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Jakarta, Indonesia**

**David W. Dunlop  
Roselyn C. King  
L. A. Lolong  
Samsi Jacobalis**

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**TvT Associates**

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503 Capitol Court, N.E. ☐ Washington, D.C. 20002 ☐ (202) 547-4550 ☐ Telex 1440730 ITS UT

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## ACRONYMS

<b>ADB</b>	The Asian Development Bank
<b>AKEK</b>	Analisa Kebijaksanaan Ekonomi Kesehatan (HE & PAU)
<b>ASKES</b>	Civil Servant Health Insurance Program, now abbreviated PHB
<b>BAPPENAS</b>	Badan Perencanaan Pembangunan Nasional (National Planning Bureau)
<b>BPS</b>	Biro Pusat Statistik (Central Bureau of Statistics)
<b>BUMD</b>	A governmental or corporate entity, often a type of parastatal, which could be used as the type of legal entity for a health sector regulatory body for insurance or service delivery.
<b>CHIPPS</b>	Comprehensive Health Improvement Project - Province Specific (A.I.D-funded health project)
<b>DEPKES</b>	Department Kesehatan (Department of Health) Dana Upaya Kesehatan Masyarakat (Community Financing Programs)
<b>DG</b>	Director General (A title of senior rank in the GOI)
<b>DUKM</b>	Indonesian principles of health insurance as promulgated by the MOH
<b>EDI</b>	The Economic Development Institute of the World Bank
<b>GDP</b>	Gross Domestic Product
<b>GOI</b>	Government of Indonesia
<b>HE</b>	Health Economics
<b>HE &amp; PAU</b>	Health Economics and Policy Analysis Unit (AKEK)
<b>HE/PAU-AKEK</b>	(Same as above)
<b>HF</b>	Health Financing
<b>HMO</b>	Health Maintenance Organization

<b>HSF</b>	Health Sector Financing [project]. (Refers to USAID project in Indonesia)
<b>HSFP</b>	Health Sector Financing Project
<b>HSFP/P</b>	May be reference to the pharmaceutical component of the HSF project.
<b>HSRRCC</b>	Health Sector Research Review and Coordinating Committee
<b>IDI</b>	Ikatan Dokter Indonesia (Indonesian Doctor's Association)
<b>IDP</b>	May be Indonesian Pharmaceutical Association
<b>IFPMA</b>	International Federation of Pharmaceutical Manufactured Associations
<b>ILO</b>	International Labor Organization (part of the UN family of organizations)
<b>IMF</b>	International Monetary Fund
<b>ISTI</b>	International Science and Technology Institute
<b>JPKM</b>	Jaminan Pemeliharaan Kesehatan Masyarakat (Health Maintenance Assurance Program for the Community, a nationwide initiative)
<b>KAP</b>	Knowledge, Attitude, and Practice
<b>LAN</b>	(A type of computer software in use, in the hospital components of the HSF project)
<b>MIS</b>	Management Information Systems
<b>MM</b>	Ministry of Manpower
<b>MO</b>	Ministry of
<b>MOF</b>	Ministry of Finance
<b>MOH</b>	Ministry of Health
<b>NTT</b>	Nusa Tenggara Timur

<b>OPH</b>	Office of Population and Health, USAID
<b>P</b>	Pharmaceutical
<b>PACD</b>	Project Agreement Completion Date
<b>PAU</b>	Policy Analysis Unit as in HE/PAU
<b>PELITA</b>	A five-year planning period
<b>PHB</b>	Perum Husada Bakti (A Ministry of Health, Health Insurance parastatal for government workers)
<b>PIO</b>	Project Implementation Office
<b>PIO/H</b>	Project Implementation Office - Hospital
<b>PIO-P</b>	Project Implementation Office - Pharmaceutical
<b>PKTK</b>	Pemeliharaan Kesehatan Tenaga Kerja (Health Insurance for Private Employees)
<b>PMU</b>	Project Management Unit
<b>POM</b>	Pengawasan Obat dan Makanan (Food and Drug Administration)
<b>PROAG</b>	Project agreement, a USAID document initiating project
<b>QA</b>	Quality Assurance
<b>Rp</b>	Rupiah (The Indonesian Monetary Unit of Account)
<b>SF</b>	Social Financing
<b>SK</b>	Surat Keputusan (letter of decree)
<b>SKN</b>	Sistim Kesehatan Nasional (The National Health System)
<b>SUSENAS</b>	Survei Sensus Nasiona (National Health Survey)
<b>UCLA</b>	University of California at Los Angeles
<b>UPP-RS</b>	Unit Pelaksanaan Proyek Rumah Sakit (PIO/H)

<b>USAID</b>	United States Agency for International Development
<b>USD</b>	United States Doctor
<b>YANMED</b>	Pelayanan Medis (The Bureau of Medical Service)

## EXECUTIVE SUMMARY

### THE PROJECT

The Health Sector Financing Project (HSFP) is a seven-year collaborative effort between the Ministry of Health of the Government of Indonesia (GOI) and USAID. The project grant agreement was signed on April 12, 1988, and PACD is April 30, 1995. The project's purpose is to develop the institutional and policy context needed to ensure financial sustainability of child survival programs. The purpose is to be achieved through structural reforms in the public hospital and pharmaceutical sectors which shift public sector budgets from those sectors toward child survival programs and by mobilizing more resources for health by developing socially financed and managed care schemes.

The project has segmented its support into four technical areas of focus called components: public hospitals, pharmaceutical, social financing and health economics, and policy analysis. Administratively, there also is a project management unit, staffed by an international contractor (International Science and Technology Institute or ISTI) with three component offices whose management is structured to focus on: social financing, hospitals and pharmaceuticals. A Health Economics and Policy Analysis Unit was intended to be institutionalized within the Bureau of Planning of the Ministry of Health.

### PROJECT HISTORY

Concern over falling government revenue during the mid-1980s, in part due to declining oil revenues and a reduction in the rate of economic growth, led to the GOI interest in a health sector financing (HSF) project. The services provided by the public health sector had their budgets cut and the share of government resources available for funding the sector has dropped as well to low levels of less than two percent of total GOI spending.<sup>1</sup> Finally, funding for child survival (CS) health services had not kept pace with other health spending and A.I.D. was interested in insuring the financial sustainability of these services. By financing this project, it sought to increase real government spending on such services by at least 35 percent over the life of the project.

During the two years prior to the signing of the project, the MOH and USAID/ Jakarta commissioned a series of studies on the economics of health care delivery in the country. In addition, the Bureau of Planning of the MOH had developed a regular working group on health economics and financing in order to address the serious financial problems facing the sector.

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<sup>1</sup>See the World Bank, *Indonesia: Issues in Health Planning and Budgeting*, Report No. 7291-IND (Washington, D.C.: World Bank, February 28, 1989) for a full treatment of health sector and related macro-economic issues.

In February 1988, the project paper was finalized. It commenced in April 1988, upon the signing of the project agreement (PROAG) between the GOI and USAID. The project was designed for implementation over a 7-year period, 1988-1995, as a \$20 million effort, with about \$15 million from USAID, split equally between mission resources and Washington-based child survival resources, and the remainder being in-kind assistance from the GOI.

A \$13.2 million technical assistance contract was awarded to ISTI as the implementing organization working in partnership with the MOH. This contractual mechanism was the principal source of capital for implementing this project. Small amounts of counterpart travel funds were made available by the GOI through the MOH development budget.

### **PURPOSE OF MIDTERM TECHNICAL EVALUATION**

The scope of work for the midterm evaluation of the HSF project clearly articulated three objectives. These can be stated as follows, to:

1. measure the degree of progress the project has made toward meeting the established benchmarks in each component;
2. assess the:
  - a. administrative arrangements established for this project;
  - b. project management systems established by the PMU;
  - c. expenditure rates for different project elements; and,
  - d. progress in implementing the recommendations of the external management review (conducted in May and June of 1991); and,
3. concentrate on the technical aspects of the project.

### **APPROACH**

This evaluation seeks to respond to the scope of work with emphasis on measuring the degree of progress and the needed recommendations to achieve project objectives within the remaining life of the project. The team has concentrated on the technical aspects of the project components in relationship to the achievement of project milestones and desired outcomes, with secondary discussion of management, since those were addressed in an earlier evaluation conducted in May and June 1991. In addition, a thorough review of project funds was not conducted as part of this evaluation as this was not incorporated into the scope of work and an audit of the project was underway during this same period. However,

conducted as part of this evaluation as this was not incorporated into the scope of work and an audit of the project was underway during this same period. However, as has become very clear to this team, it has been necessary to assess many managerial, contractual and administrative issues to make practical and feasible technical recommendations for the achievement of project objectives.

No attempt has been made to provide an in-depth quantitative and/or qualitative review of specific activities. Within the timeframe allotted for the review, it is intended to be a broad review based on the stated goals of USAID and the MOH for health care services and delivery in Indonesia. Recommendations are made within the constraints of time available to accomplish an expansive scope of work.

## **METHODS**

The team has used three principal sources of information from which technical progress of the project could be assessed and recommendations could be formulated. These sources include: (a) a review of documents related to the project; (b) interviews with knowledgeable people affiliated with the government of Indonesia and especially the Ministry of Health, the technical assistance contractor, ISTI, and USAID; and, (c) site visits to locations in Indonesia where project activities have occurred.

Project documents included the Project Paper and PROAG, A.I.D., contractor and MOH project documents and correspondence, and other related reports and technical analyses. (See Annex A on methodology and the bibliography (Annex C) for a full listing of documents reviewed.) The complete list of persons interviewed is contained in Annex B. Site visits by evaluation team members occurred in areas near Surabaya and Yogyakarta, in several locations in Bali province, and two locations in the Jakarta metropolitan area (See Annex A (Methodology), for a listing of all locations.)

In conducting interviews, team members focused attention on addressing a number of broad policy issues regarding health financing, health sector resource use, technical accomplishments of each project component, project management, and project priorities during its remaining life. In the conduct of assessing technical progress in each major project component (social financing, hospitals, pharmaceuticals, and health economic and policy assessment), members of the team asked many more detailed questions to assess focus, performance on contracts, product quality, and how specific products were related to an overall project goal. The nature of these questions can be best understood in reviewing technical assessment annexes to the evaluation report.

## KEY FINDINGS

### Policy Achievements

The project has achieved a number of important policy and technical project "benchmarks and milestones." In addition, the project has begun to implement an integrated field test of the set of proposed interventions by its three implementation components. Finally, the ultimate project outcome measure was a sustainable thirty-five percent real increase in GOI child survival expenditures by 1994/95, that is, by the end of the project. This target was achieved after the first two years of the project and real CS expenditures have increased by nearly 100 percent since the initiation of the project.

With respect to policy achievements, the project has assisted the MOH in its efforts to introduce a set of policies, which, when implemented, can achieve the restructuring and refinancing objectives of the GOI for all sectors of the Indonesian economy. The principal policy changes towards which the HSF project has contributed include the a) introduction of DUKM social financing principles into a managed care form of health care delivery called JPKM in Indonesian;<sup>2</sup> b) the development of the concept and principles of implementation of Swadana, or self-management and financial responsibility at the facility or unit level for all public hospitals; c) the introduction of the use of generic drugs and more rational prescribing practices; and d) the development of alternative shorter term contractual arrangements with physicians other than those prescribed by the civil service system in Indonesia.<sup>3</sup>

While the project did not originate the initial idea of any of the policy breakthroughs, the project provided the technical assistance necessary to articulate the concept in a precise and implementable manner, contributed resources to develop the legal documentation necessary for the policy to become legally recognized, and ensured that the policy advances were implemented in a timely manner from the perspective of the national planning process of the GOI. These contributions to health policy have enabled the MOH to reach a point where it can now seriously address the question of how these policy changes might be implemented to improve the quality of health services, enhance the possibility of efficiencies which might be realized in the delivery of care within public facilities, and refinance the health sector.

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<sup>2</sup>See Annex D.1, Social Financing Component Assessment for a detailed definition of DUKM and JPKM.

<sup>3</sup>Additional information regarding all of the policy achievements are presented in section IV.A.1 below.

## Technical Achievements

The HSF project has made significant progress toward the development of systems and other necessary "building blocks" required for implementation.<sup>4</sup> Particularly noteworthy has been the a) work on quality assurance standards of care guidelines; b) developments of improved management information systems (MIS) within the various types of JPKM program schemes, including PHB, PKTK, Swasta and Dana Sehat, and within the pharmaceutical sector for drug registration and monitoring side effects; c) establishment of special technical task forces to come up with workable solutions to specific technical implementation problems and related training materials in such areas as benefits package design and premium pricing, market development, organizational development, quality assurance, and MIS; and d) the development of implementable methods for ensuring pharmaceutical efficiencies.

While the project has had many accomplishments, several key technical issues have yet to be seriously addressed and remain high priorities for the project's second phase. First, while some guidance has been provided by project consultants and technical contracts with Indonesian subcontractors about regulatory and management systems development, there is little discernible progress available regarding what should be reported, how the regulatory procedures should be configured, what performance targets should be established, how information will be obtained regarding performance targets, and where within the structure of the GOI these regulatory activities should reside.

Second, little substantive work has been completed regarding benefits package design and pricing, actuarial systems development, and premium or fee collection procedures. Without a full independent review of the present work in progress on these issues, it is unclear whether the proposed approaches will accomplish their intended objectives.

Finally, the project has initiated several field tests of the various project components singly and in conjunction with other components. The evaluation team views the effort to implement the policies enacted and under final consideration by the GOI, especially in an integrated field test situation, as comprising the most vital and important activity focus for the remaining life of the project. While the project's implementation team has made plans to conduct such an integrated field test of project activities, considerable integrative work remains to be completed before such a test can be successfully implemented and independently monitored for accomplishments and lessons learned.

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<sup>4</sup>See section IV.B for a more complete discussion of the project's technical accomplishments.

## OTHER IMPORTANT FINDINGS

Given the history of the project's inception and approval by the GOI, it has not been given formal recognition or approval by key actors within BAPPENAS. Thus, it is generally thought that to sustain the project's achievements for the MOH, the project must obtain formal status by BAPPENAS, and, thus, the GOI. To obtain a new status with BAPPENAS, it is important to establish the pre-financing mechanisms for the processing of external assistance project funds.<sup>5</sup> These pre-financing mechanisms are under the jurisdiction of BAPPENAS and the relevant ministry, the MOH. Apparently, USAID, BAPPENAS and the MOH are in agreement that these standard procedures for implementing this project should begin in April 1992 for the FY 1992/93 budget year of the GOI.

The policy issues underlying the restructuring and refinancing of the health sector are a consequence of GOI policy action taken in 1988 to decentralize and privatize many previous GOI activities. Since other entities of the GOI also have, as a consequence of their jurisdiction, a say in financing health care at present, it seems to be wise for the MOH and other entities with such jurisdiction to come together to further establish the procedures by which the sector might best be reconfigured and refinanced. It is acknowledged that the Secretary General, by decree, has established a Task Force of other GOI actors with health sector financing jurisdiction. However, it is known that this entity has not realized its potential in addressing the coordination and regulation issues involved to accomplish the desired refinancing and restructuring objectives of the project.

The team has learned that the role and function of AKEK is unclear within the MOH, with questions raised about its present location within MOH in the Planning Unit of SEC/GEN, and discussion has occurred regarding the possibility of its relocation to some other part of the ministry. This lack of clarity has been exacerbated by the fact that AKEK was established by the project to serve a larger policy analysis mission for the MOH than that prescribed by the project itself.

The HSF project via the social financing component has made a number of contributions to the development of private health insurance plans in Indonesia. These contributions are detailed in other parts of this report.<sup>6</sup> It has been clear to

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<sup>5</sup>Project pre-financing refers to the process in which an external donor, such as USAID, provides assistance to the GOI only on a reimbursable basis. The GOI, via BAPPENAS, allocates GOI funds to the implementing GOI entity, such as a particular line ministry, to engage in a specific development activity via various development budgeting mechanisms, typically known as DIP budgets. After spending a certain amount of funds, the ministry accounts for the funds, and through BAPPENAS and the Ministry of Finance, makes a request to the donor for reimbursement to the GOI.

<sup>6</sup>See section IV.B, "Technical Achievements," and the "Social Financing Component Assessment" (Annex D.1) for details.

the team that USAID views these accomplishments with great interest and favor and it is understood that the GOI is not unaware of the project's activities in this area as well. Perhaps one of the most noteworthy accomplishments of the private-sector initiatives in the health insurance industry is that the only full exemplars of the JPKM-managed care health insurance programs are presently private health sector entities within the Jakarta metropolitan area.

Many of the project's important systems and conceptual developments which the project has produced can also be utilized by private actors in the health sector. The team is also aware of the "social marketing" which has been undertaken by project staff to inform those in the private sector about the principles of JPKM and the status of the related government decree in establishing the legal basis for managed health care programs in the country.

These and other observations suggest that the private sector has received important and continued support by the project. Thus, it has facilitated in leveling the health sector playing field for private actors.

## RECOMMENDATIONS

While all of the specific recommendations are contained in section V of this report, this brief summary highlights the important recommendations by the midterm evaluation team. The team encourages the reader to review section V and other sections to obtain the rationale and background analysis for these recommendations.

### Technical Recommendations

1. The evaluation team finds the JPKM concept sound and one which can be used as a strategic approach for restructuring and refinancing the health sector in Indonesia. In order for it to continue to guide the thinking of the GOI and MOH, it must be subjected to an empirical test during the remaining life of the project. Thus, the team recommends that the top priority of the project for GOI and USAID is to use the remaining LOP to conduct an empirical test of the concept in conjunction with the other complementary policy achievements to date, including the implementation of Unit Swadana and pharmaceutical efficiencies, within the realities of economic and social life of at least one region where the political will exists to support its implementation. Further, the team recommends that in order to clarify the project goal and objectives for the project's remaining life to that of implementing the JPKM approach for restructuring and refinancing the health sector, via an integrated empirical test of the project components in a given locality, a PROAG amendment is required to reflect this revised project purpose. It is anticipated that the integrated field test will be conducted utilizing a "learning-by-doing" approach.

2. In order to fully sustain an integrated field test of the JPKM strategic approach for restructuring and refinancing the health sector, the team acknowledges the importance of completing the building block development work in such areas as management information systems, regulatory systems and controls, quality assurance, pricing, premiums and actuarial studies, personnel training, etc., initiated by the several project components so that an integrated field test can be successfully implemented and technically sustained. The team recommends that support be extended to the further development of these supporting institutional or managerial tools for use in an evolving field test situation. The team further recommends that such investments be made with all components involved to encourage an integrated scope of work for subcontractors and with clear responsibilities delineated regarding which component will manage the performance of the work on behalf of the entire integrated field test effort.

3. The shift from policy and intervention design to the installation of an integrated intervention must be made in an orderly and well thought-out manner in which the MOH and other ministries of the government negotiate an agreement regarding the characterization and features of the JPKM model and its application in the field. Staff work is required to conceptualize and coordinate the building block integration of the model and a multiministerial committee with representation from those ministries involved with the financing of the health sector should be established to provide policy guidance and more complete oversight to this phase of the project (see recommendation eight, "Managing Project Transition," for further detail regarding this recommendation). The multi-ministerial committee should use the MOH and the project staff as part of the secretariat involved in developing this management implementation plan in a period of no longer than six months.

4. Finally, the team is aware of considerable assistance provided to the private health sector (see section IV and Annex D.1 for a review of that assistance). The health sector playing field has been materially leveled by the technical assistance provided. While the team views this assistance to the private sector as important, the team takes the position that the primary responsibility of this project remains in implementing a fully integrated field test of a JPKM program at the regional level where all actors, both private and public, are fully involved. Thus, we see the predominant focus of resources and effort being involved in such an implementation activity.

### **Managerial and Administrative Recommendations**

1. Communication between the three principal parties involved in the implementation of the project, the MOH, ISTI and USAID, appear to have been strained during the first three plus years of project implementation. Thus, the many achievements and difficulties of the project do not appear to have been fully

appreciated by all involved parties. To rectify this communication problem, the team recommends: (a) the project's technical implementation personnel develop and use self-assessment tools and methods every three months and report the results to the other two involved parties, preferably in writing and in an open meeting; (b) an independent team of experts regularly review progress and problems with the technical implementation team and the other two parties involved, and discuss options for resolving them in a timely manner; and (c) USAID strengthen its technical capacity to regularly monitor progress toward the revised project goals and provide additional guidance where necessary on a regular and timely basis.

2. The project must be formally recognized by the GOI. Efforts to implement this are underway. When completed, BAPPENAS, the ministry of the GOI involved with establishing pre-financing mechanisms for processing external assistance project funds, in conjunction with the MOH and USAID, must establish and locate project budgets. The team urges consideration of the following principals in establishing these budgets. First, money must back up recommended action. If an integrated field test of the concept of JPKM and related policy initiatives is to occur, we think it wise to have the regional authority in charge of the integrated field test implementation activity have an important share of the pre-financing funding. Second, the team recommends that the MOH and other entities involved in financing the health sector meet together to further establish the procedures by which the sector might best be reconfigured and refinanced, and that the remaining pre-financing funds be allocated through such a committee and administered by the MOH.

3. In order to implement an integrated field test of JPKM and related policies, the technical project implementation staff must principally reside in the locality of the test. Further, the skills necessary for field implementation will differ from those which are necessary for the development of policy documents and related building block conceptualization and development. Thus, the skill mix of the future technical assistance team will differ from the presently configured one. We would urge the parties involved in this project to review the present technical staff with these considerations in mind.

4. Finally, USAID should continue to contract with the U.S.-based contractor, ISTI, for expatriate personnel only, and, where necessary, on a subcontracting basis. All other project funds would flow through the pre-financing process established by BAPPENAS for the procurement of local personnel and other project items and costs. These funds would then be allocated into two funds for project implementation following the normal procedures of the GOI. In addition, since the project has been "on hold" for about one year due to managerial and other problems, the technical implementation of many aspects of the project could not continue as planned. According to the yearly planning documents available to the evaluation team, much of the planned activities of this past year were to strengthen

the technical building blocks necessary for the implementation of an integrated field test of the JPKM and related policies. Thus, the team recommends to USAID to provide for an additional four person years of external technical assistance into the remaining four years of the project's life, in addition to that which is presently left in the ISTI contract.

## I. INTRODUCTION

### A. THE PROJECT

The Health Sector Financing Project (HSFP) is a seven-year collaborative effort between the Ministry of Health of the Government of Indonesia (GOI) and USAID. The project grant agreement was signed on April 12, 1988, and PACD is April 30, 1995. The project's purpose is to develop the institutional and policy context needed to ensure financial sustainability of child survival programs. The purpose is to be achieved through structural reforms in the public hospital and pharmaceutical sectors which shift public sector budgets from those sectors toward child survival programs and by mobilizing more resources for health by developing socially financed and managed care schemes.

The project has segmented its support into four technical areas of focus called components: public hospitals, pharmaceutical, social financing and health economics, and policy analysis. Administratively, there also is a project management unit, staffed by an international contractor (International Science and Technology Institute or ISTI) with three component offices whose management is structured to focus on: social financing, hospitals and pharmaceuticals. A Health Economics and Policy Analysis Unit was intended to be institutionalized within the Bureau of Planning of the Ministry of Health.

### B. PROJECT HISTORY

Concern over falling government revenue during the mid-1980s, in part due to declining oil revenues, led to the GOI interest in a health sector financing (HSF) project. A decline in the rate of economic growth during this period also led to a reduction in other sources of GOI revenue. The services provided by the public health sector had their budgets cut and the share of government resources available for funding the sector has dropped as well to low levels of less than two percent of total GOI spending.<sup>1</sup> Finally, funding for child survival (CS) health services had not kept pace with other health spending and A.I.D. was interested in insuring the financial sustainability of these services. By financing this project, it sought to increase real government spending on such services by at least 35 percent over the life of the project.

During the two years prior to the signing of the project, the MOH and USAID/ Jakarta commissioned a series of studies on the economics of health care delivery in the country. In addition, the Bureau of Planning of the MOH had developed a regular working group on health economics and financing in order to address the serious financial problems facing the sector.

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<sup>1</sup>See the World Bank, *Indonesia: Issues in Health Planning and Budgeting*, Report No. 7291-IND (Washington, D.C.: World Bank, February 28, 1989) for a full treatment of health sector and related macro-economic issues.

In February 1988, the project paper was finalized. It commenced in April 1988, upon the signing of the project agreement (PROAG) between the GOI and USAID. The project was designed for implementation over a 7-year period, 1988-1995, as a \$20 million effort, with about \$15 million from USAID, split equally between mission resources and Washington-based child survival resources, and the remainder being in-kind assistance from the GOI.

A \$13.2 million technical assistance contract was awarded to ISTI as the implementing organization working in partnership with the MOH. This contractual mechanism was the principal source of capital for implementing this project. Small amounts of counterpart travel funds were made available by the GOI through the MOH development budget.

### **C. PURPOSE OF MIDTERM TECHNICAL EVALUATION**

The scope of work for the midterm evaluation of the HSF project clearly articulated three objectives. These can be stated as follows, to:

1. measure the degree of progress the project has made toward meeting the established benchmarks in each component;
2. assess the:
  - a. administrative arrangements established for this project;
  - b. project management systems established by the PMU;
  - c. expenditure rates for different project elements; and,
  - d. progress in implementing the recommendations of the external management review (conducted in May and June of 1991); and,
3. concentrate on the technical aspects of the project.

### **D. THE MAIN ACCOMPLISHMENTS OF THE PROJECT**

The project has achieved a number of important policy and technical project "benchmarks and milestones." In addition, the project has begun to implement an integrated field test of the set of proposed interventions by its three implementation components. Finally, the ultimate project outcome measure was a sustainable thirty-five percent real increase in GOI child survival expenditures by 1994/95, that is, by the end of the project. This target was achieved after the first two years of the project and real CS expenditures have increased by nearly 100 percent since the initiation of the project.

With respect to policy achievements, the project has assisted the MOH in its efforts to introduce a set of policies, which, when implemented, can achieve the

restructuring and refinancing objectives of the GOI for all sectors of the Indonesian economy. The principal policy changes towards which the HSF project has contributed include the a) introduction of DUKM social financing principles into a managed care form of health care delivery called JPKM in Indonesian;<sup>2</sup> b) the development of the concept and principles of implementation of Swadana, or self-management and financial responsibility at the facility or unit level for all public hospitals; c) the introduction of the use of generic drugs and more rational prescribing practices; and d) the development of alternative shorter term contractual arrangements with physicians other than those prescribed by the civil service system in Indonesia.<sup>3</sup>

While the project did not originate the initial idea of any of the policy breakthroughs, the project provided the technical assistance necessary to articulate the concept in a precise and implementable manner, contributed resources to develop the legal documentation necessary for the policy to become legally recognized, and ensured that the policy advances were implemented in a timely manner from the perspective of the national planning process of the GOI. These contributions to health policy have enabled the MOH to reach a point where it can now seriously address the question of how these policy changes might be implemented to improve the quality of health services, enhance the possibility of efficiencies which might be realized in the delivery of care within public facilities, and refinance the health sector.

Finally, the HSF project has made significant progress toward the development of systems and other necessary "building blocks" required for implementation.<sup>4</sup> Particularly noteworthy has been the a) work on quality assurance standards of care guidelines; b) developments of improved management information systems (MIS) within the various types of JPKM program schemes, including PHB, PKTK, Swasta and Dana Sehat, and within the pharmaceutical sector for drug registration and monitoring side effects; c) establishment of special technical task forces to come up with workable solutions to specific technical implementation problems and related training materials in such areas as benefits package design and premium pricing, market development, organizational development, quality assurance, and MIS; and d) the development of implementable methods for ensuring pharmaceutical efficiencies.

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<sup>2</sup>See Annex D.1, Social Financing Component Assessment for a detailed definition of DUKM and JPKM.

<sup>3</sup>Additional information regarding all of the policy achievements are presented in section IV.A.1 below.

<sup>4</sup>See section IV.B for a more complete discussion of the project's technical accomplishments.

## II. CONTEXT OF FINANCING THE HEALTH SECTOR

### A. RAPID ECONOMIC GROWTH

During the mid-1980s, Indonesia experienced its most serious economic downturn since the mid-1960s. While the rate of economic growth was never negative during this period, it declined to a low of 2.5 percent in 1985 and was below 4.8 percent over the 1985-1988 period.<sup>5</sup> Per capita GNP during this period was only about 2.7 percent per year. This was due to several factors, one of which was the drop in the price of oil such that export earnings from this important export declined by over fifty percent over the 1985-1987 period in comparison to the previous three years. Related government tax revenue from oil exports also fell dramatically between 1985 and 1986. Earnings from non-oil exports also fell significantly during this same period.

In addition, the economy of Indonesia was heavily controlled by the central government and little private initiative was encouraged. Thus, the GOI in the mid-1980s began to relax a set of policies which discouraged private initiative, and in 1988, began to implement policies aimed at decentralization and privatization. Earlier policy reforms regarding exchange rates, fiscal and monetary policy, and trade policies also facilitated an improved economic climate in the country for private activity to flourish.

For the last three years, 1989-1991, the economy has grown at over 7 percent per year, but for the next 2 years it is expected that the growth of the economy will be at a much slower rate, perhaps less than 5 percent, since the previous rate had overstimulated the economy. Balance of payment deficits during this year will be over \$2 billion and are expected to reach \$6 billion next year. Credit expansion has been very rapid in the last several years and inflation has grown and is expected to remain high for the next several years. International observers are of the view that government expenditures must be curtailed during at least these next two years, and especially for foreign exchange, using items, including such health sector items as high technology medical equipment and certain pharmaceuticals, to ensure adequate capital for expansion of private investment initiatives throughout the economy.

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<sup>5</sup>During the 15-year period from 1973-1988, the economy of Indonesia grew at an average annual rate of over 6.1 percent per year in constant prices, and during the last three years, 1989-1991, the economy has grown at over 7 percent per year. See the IMF, *International Financial Statistics Yearbook*, various years, and the World Bank, *Indonesia: Developing Private Enterprise*, Report No. 9498-IND (Washington, D.C.: World Bank, May 9, 1991.)

## B. ROLE OF GOVERNMENT IN HEALTH CARE FINANCING AND DELIVERY: MAJOR POLICY CHANGES IN THE SECTOR

Until recently, that is, prior to the policy changes of decentralization and privatization, government had primary responsibility for financing the delivery of health services, both preventive and curative. However, during the mid-1980s, health expenditures by all government sources (central, regional and local) and public funding for health actually declined in real terms by about 10 percent over 1982/83 - 1988/89, and the share of GDP publicly allocated to health was about 0.6 percent throughout the period.<sup>6</sup> Thus, in spite of this traditional responsibility, it is acknowledged that over 50 percent of the expenditures for health care were privately arranged between consumers and providers of care and service, and this share has been increasing over time to about 63 percent today (1991).

In addition, starting in 1983/84, there was a decline in public funding of child survival services and the share of public resources allocated to CS dropped to a low of about twelve percent of total public health expenditures.<sup>7</sup> Given this concern over financing basic preventive child survival services, which in part created the *raison d'être* for the project, efforts have been sought by GOI via the MOH to find the necessary alternative mechanisms for increasing financial resources for health care, with one option being to expand the implementation of health insurance (Repelita V).

During the fifth Pelita, 1988-1992, as the GOI has sought to decentralize and privatize the Indonesian economy, it has also sought to find ways to further reduce its responsibility for the financing and delivery of all health care services for the people of Indonesia where private options may be available. In the case of those health services where most of the benefits accrue to the individual, as in the case of most curative care, this concern over public funding responsibility is warranted on traditional public finance grounds where social positive externalities are generally lacking.

In order to assist in creating a demand for various forms of social financing, it was also important for publicly-owned health facilities such as hospitals to undergo a financial and organizational restructuring in order for them to be held responsible for their own financial well-being. It was fortuitous when GOI policy evolved the concept of Swadana which embodied these ideas for a number of different types of

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<sup>6</sup>See AKEK, *Analysis of Health Financing in Indonesia 1982/83 - 1988/89, (Updating)*, Monograph No. 10 (Jakarta: MOH and USAID, in collaboration with ISTI, 1991), and AKEK, *Analysis of Health Financing in Indonesia, 1982/83 - 1988/89*, Monograph No. 4 (Jakarta: MOH and USAID, in collaboration with ISTI, 1990).

<sup>7</sup>See Table 6, p. 25, AKEK, *Analysis of Health Financing in Indonesia, 1982/83 - 1986/87*, Monograph No. 4, *op. cit.*, 1990.

public entities, from universities to parastatal companies and even hospitals. MOH thinking about how to implement the national policy of Swadana within the health sector has evolved into the recently announced MOH policy of Unit Swadana which represents the underpinning of hospital decentralization and local management. It is envisioned that over time, if this policy is implemented, the GOI via the MOH might reduce its financial and managerial involvement in government-owned hospitals throughout Indonesia.

To improve efficiency of service provision, and, thus, reduce the financial obligations of the government, it developed the policies of Swadana and pharmaceutical policies to rationalize the use and acquisition of commodities. In addition, the concept of JPKM, which has an element of risk sharing between the providers, financiers and consumers, has served to provide a policy underpinning for restructuring economic incentives which are designed to yield efficiencies in service delivery in both the public and private health sectors. The changes recently introduced in physician contracting to provide for more limited labor contract periods than previously allowed via civil service regulations, which generally provide for life-time tenure arrangements, have also provided additional efficiency incentives in the provision of medical care.

The JPKM concept for the financing and restructuring of health care provision in Indonesia also has elements of health insurance embodied, such as prepayment and capitation. It is in the final stages of formal approval as a national policy government decree.

These changes have occurred during the last few years and have been supported by the HSF project. They have been introduced during a period of relative economic adversity in Indonesia and now provide an opportunity to restructure and refinance the health sector in ways not previously considered possible.

### C. THE ACTIVITY OF OTHER DONORS

A number of international donors provides assistance to the GOI in the health sector. Several have an interest in and have provided various forms of technical assistance toward the resolution of the financing of the sector. While none of the other donors have provided project assistance to the MOH for the purpose of addressing financing reform, as is the case of USAID via the HSF project, others have been involved in assisting the MOH and the GOI generally to resolve the financing problems of the sector.

Perhaps the most notable other donor at the present time working with the GOI to address the financing problem is the World Bank. In sector work conducted several years ago, it analyzed the economic feasibility of the PHB, PKTK, and Dana

Sehat health insurance schemes.<sup>8</sup> It has remained continuously interested in the issue of the role of health insurance in financing the health sector and has held an EDI seminar on that topic one year ago in Bali for a number of countries in Asia, including Indonesia. The papers from that meeting provided useful insight and guidance to countries of the region regarding the possibilities and problems of other more affluent countries about assessing their own financing problems and resolving whether health insurance can play a constructive role in their particular milieu.<sup>9</sup> It followed up this seminar by conducting a GOI seminar on health insurance, led by Professor William Hsiao in 1991, and is completing a further analysis of GOI options regarding the use of this financing mechanism.

Finally, World Bank health projects have had analytical components addressing various issues regarding cost recovery, and have sought to determine in the price elasticity of demand for several types of health care services. Finally, its projects have been generally provided assistance in the eastern provinces of the country, with an eye to assist the country in redressing geographic access inequities in the provision of health care at this time in Indonesia.

While UNICEF is not directly involved in health financing issues in Indonesia, it has become more interested in this issue over the last several years and has become very active in Africa on this topic via its Bamako Initiative. This program of activity is focusing on the possibility of financing a larger share of the cost of service delivery via user charges, on pharmaceutical products.

The Asian Development Bank has been involved in Indonesia in the health sector, most recently to provide assistance to improve the physical plant of hospitals. In addition, they have sponsored seminars on health financing in the region and have an increasing interest in the role of health insurance as an option for addressing the financing problem.

The World Health Organization has been assisting the Planning Unit of the MOH in the area of health economics and financing for some time, and continues to provide technical and conceptual input. In addition, HE/PAU-AKEK co-sponsored a meeting on a set of health economics topics with WHO/Geneva during 1990. WHO's Drug Action Program (DAP) also collaborated with POM to review progress made by the national essential drugs program. Finally, the Geneva office of the

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<sup>8</sup>See pp. 89 - 103, in World Bank, *Indonesia: Issues in Health Planning and Budgeting*, Report No. 7291-IND, *op.cit.*, 1989.

<sup>9</sup>For further information regarding these papers, see David W. Dunlop and Jo Martins, eds., *An International Assessment of Health Insurance: Lessons for Developing Countries* (Washington, D.C.: EDI for the World Bank, 1992, forthcoming).

WHO has also been increasing its analytical capacity to address health financing problems, including the role of health insurance.

Finally, the ILO has and continues to provide technical assistance, especially to the MOH and Ministry of Manpower insurance parastatals, PHB and PKTK respectively, on health insurance matters. They have recently released a report on their understanding and views regarding this matter in the context of Indonesia.

#### D. SUMMARY OF PROJECT CONTEXT

As the team has thought about the health financing situation in Indonesia, Figure 1 emerged to depict in a graphic way how the HSF project has evolved. At the point of project launching in 1988, project resources appeared to be plentiful and possibly greater than the resource requirements to: (a) restructure the sector to improve efficiency, and (b) refinance it to mobilize additional resources. Now, in late 1991, however, the situation is reversed, with many resource needs having been identified by the project implementation staff to implement the policies and technical requirements of the social financing and the three other project components. These identified resource requirements have been estimated to be approximately in the neighborhood of \$14 million (U.S.) as of July 31, 1991, and such estimates exceed presently committed project resources by nearly 100 percent.<sup>10</sup> Finally, Figure 1 suggests that by the end of the project, which according to the PROAG is in 1995, the required resources to accomplish health sector restructuring and refinancing (according to the original objectives defined in the PP) are likely to be even greater than the estimates of today, with the project's financial resources being more fully used than today.<sup>11</sup>

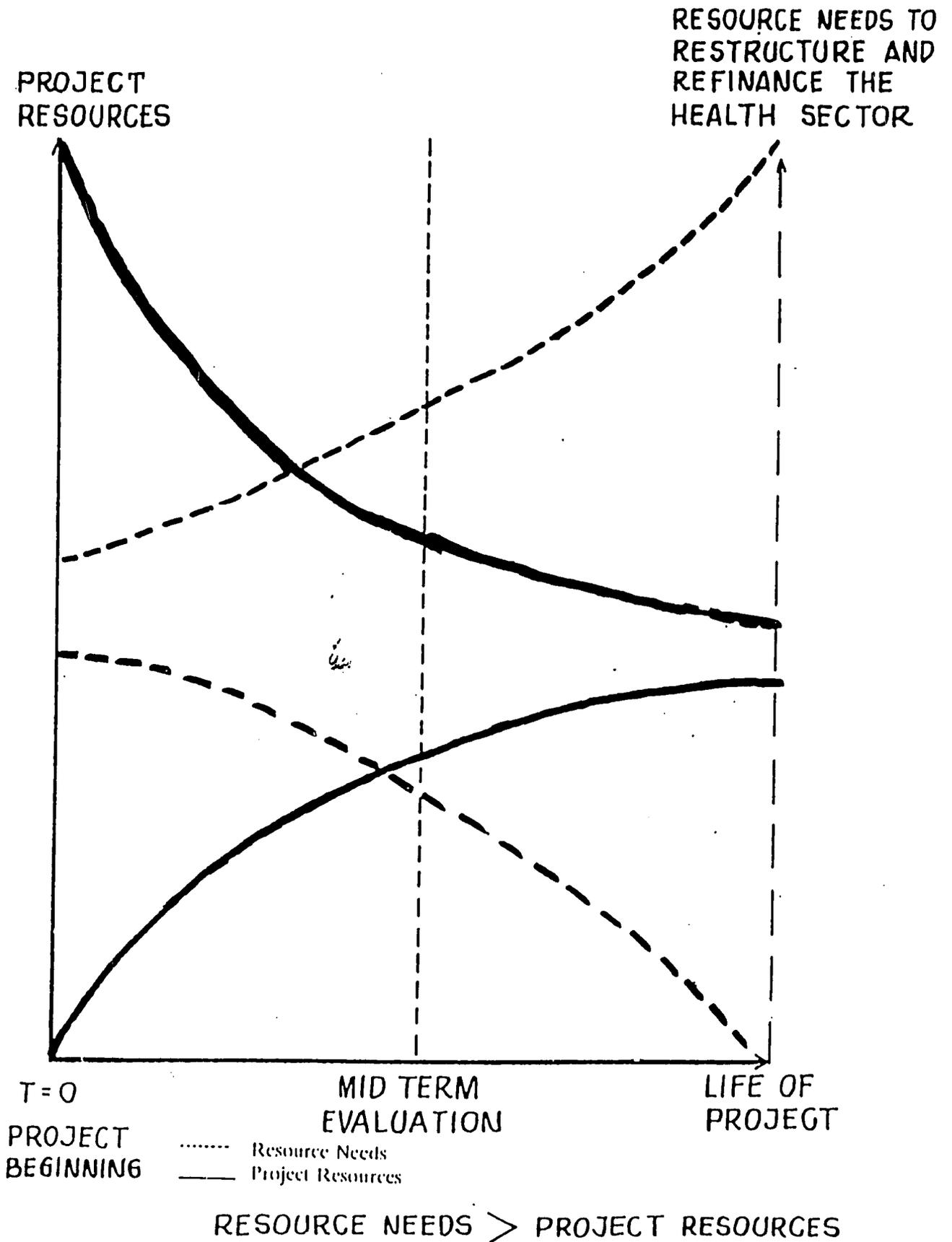
The issue at this time is what to do? The team recognizes at least three options implicit in Figure 1. The first is to add more resources to the existing project. However, present needs to complete sector restructuring and refinancing appear to be greater than resources available from the present donor, and certainly given present project resources of somewhere between five and eight million U.S. dollars.

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<sup>10</sup>For the specifics of this estimate, see p. 224 of the ISTI/MOH, *Final Report on the Results of an Internal Mid-term Evaluation of the Health Sector Financing Project* (Jakarta: MOH/ISTI, October 21, 1991).

<sup>11</sup>End of project resources are depicted in Figure 1 as having a positive value. This is due to the fact that the physical and human capital assets invested in by the project will not be fully depreciated by the end of the project.

Figure 1  
EVALUATION OF THE HEALTH SECTOR FINANCING PROJECT



A second possibility is to scale back the resources required to restructure and refinance the sector. This option, however, does not appear feasible as national needs have become clarified and political imperatives for restructuring and refinancing reform have grown.

Third, it may be possible to focus the remaining activities of the project to test the generic building blocks developed by the project in a specific location so that at least one integrated exemplar of a restructured and refinanced system actually exists. By so doing, additional resources from both domestic and international sources, including, possibly the present source, might be attracted to further extend the substantial progress made during the first three years of the project. The team finds this third option the most attractive for the project to adopt.

### III. THE HEALTH SECTOR FINANCING PROJECT DESCRIPTION

#### A. GOAL AND PURPOSE OF THE PROJECT

##### 1. Background and Rationale, Mid-1980s

As has been indicated, the USAID Project Paper, *Indonesia: Health Sector Financing (497-0354)* (February 1988), was prepared in the mid-1980s. Situational analyses leading to the rationale for the project at that time were based on the following assumptions and predictions:

- a) Falling world oil prices would severely curtail revenues from Indonesia's largest source of income and foreign exchange.
- b) Projections for future growth in the Indonesian economy were not encouraging. Economic growth was estimated at only 2.6 percent per year for the period 1986-1988, and 3.4 percent for the period 1988-1990.
- c) Austerity measures were imposed on all government sectors and profoundly affected their performance. The MOH's ability to provide those preventive and primitive health services which most directly improve child survival was especially affected.

Based on this rationale, the project's purpose was defined as: "... to develop an institutional and policy context needed to ensure financial sustainability of child survival programs."<sup>12</sup> This was further quantified into a projected end-of-project status as being a "... 35 percent increase in total government spending on child survival programs in real terms compared to total government spending on child survival in 1987. . ." (p. 10, PP, 1988), to be achieved in 1994/1995.

It was intended that the purpose would be achieved through structural reforms in the public hospital and pharmaceutical sectors which would enable a shift of public sector budgets from those sectoral activities towards child survival programs, and by mobilizing additional resources for health through the development of socially-financed managed care schemes.

Subsequent to this "sectoral frame of mind," the project was divided into four components where envisioned major project outputs were expected:

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<sup>12</sup>Pg. 1, USAID, *Project Paper, Indonesia: Health Sector Financing (497-0354)* (Jakarta: USAID, February 1988), p. 1.

- a) **Social financing component**, which promotes development of public and private sector managed care schemes;
- b) **Hospital component**, which seeks to improve hospital efficiencies, and thereby reduce government subsidies to public hospitals;
- c) **Pharmaceutical component**, which seeks an internal allocative shift away from specialized curative drugs to public sector pharmaceutical expenditures emphasizing child survival pharmaceuticals and by promoting generic drugs and more rational drug use; and,
- d) **Policy analysis component**, which seeks to develop and institutionalize a health financing policy analysis capacity within the MOH or, if deemed appropriate, within another suitable institution.

In order to implement this project, a Project Management Unit (PMU) and three subsidiary Project Implementation Offices (PIO-Hospitals [PIO-H], PIO-Pharmaceutical [PIO-P] and PIO-Social Financing [PIO-SF]) were established. A Health Economics and Policy Analysis Unit (HE/PAU-AKEK) was formed within the Bureau of Planning (MOH) to provide the policy analysis support. A technical assistance contract was awarded to ISTI to provide the necessary personnel to staff the project management structure, to provide technical consultants to the project, and to finance many of the activities necessary to implement the project.

## 2. **Background and Rationale, 1991**

The implementation of the HSF Project was started in 1988. The project has generated positive results, although there are certain aspects that should be improved or corrected. However, in its third year of implementation, the general background and situation have changed and are considerably different from predictions in the mid-1980s. For example:

- a) because of the Gulf War and its aftermath, oil prices have remained relatively high;
- b) Indonesia's economic growth in 1986-1988 and 1988-1990 was considerably higher than predicted, as a result of timely deregulatory policies by the government; and, consequently,
- c) government health budgets were not jeopardized, as predicted. In fact, the 35 percent increase in total government spending on child survival

programs compared to 1987 has already been surpassed, albeit not as an output of the HSF project per se.<sup>13</sup>

Because situation and background in 1991 turned out to be very different from those predicted by the Project Paper in the mid-1980s, and considering also the **lessons learned** from implementing the project (see report of the External Management Review Team, June 1991), a new rationale should be developed for continuation of the HSF Project.

The evaluation team has concluded that the project, while being titled appropriately, has outlived its original purpose of ensuring child survival financing and that it must be refocused to a broader mission of providing the technical backup required for testing the implementation of the newly enacted health sector policies of JPKM, Unit Swadana and pharmaceutical efficiencies designed to restructure, reduce the cost and financially sustain quality health services provided by both private and public entities throughout the country.

This revised project focus is also consistent with the goals and objectives of other donors, such as the World Bank and the ADB, who are assisting the GOI in the health sector and are concerned with the financial sustainability of those child survival, other preventive and promotive health services, and family planning services which can improve the health status of the entire nation.

Thus, the evaluation team is of the view that the HSF project should be amended to reflect the "new" contextual reality and actual project goals. The "old" rationality of the project misleads<sup>4</sup> and focuses managerial attention on goals and objectives which no longer guide the strategic development objective of sectoral restructuring and refinancing.

## **B. REDEFINITION OF PROJECT STRATEGY AND POLICIES TO ACHIEVE PROJECT PURPOSE**

Instead of focusing on child survival, which is only one aspect of the total national health development issue, strategies and policies should be directed toward developing the building blocks necessary to conduct an implementation test of the viability of a restructured health care system which includes the a) principles of DUKM and JPKM, that is, one with managed health care as an underlying principle as is the case via the implementation of JPKM, and b) policies of Unit Swadana and pharmaceutical efficiency.

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<sup>13</sup>See ISTI/MOH, *Final Report on the Results of an Internal Evaluation of the HSF Project*, op. cit., 1991.

Figure 2 provides a pictorial perspective on how this refocused project might be recast. Ultimately, the project focus is to implement an empirical test of the concepts embodied in the policies of JPKM, Unit Swadana, and pharmaceutical efficiencies. However, in order to achieve that ultimate objective, it may be necessary to continue to invest in the development of at least some of the building blocks identified in Figure 2 which provide a technical basis for achieving the technical implementation of an integrated field test.

In developing an integrated field test of the set of proposed restructuring reforms, it is important to understand the larger context of this reform. In the case of Indonesia, the basis of that reform is embodied within the concept of JPKM and the managed health care system which that concept seeks to develop. Thus, reform in hospitals and other health care facilities, and improvement of the management and rational use of drugs, should be implemented along with the JPKM health care system.

Appropriate health policy analysis and evaluation activities should also continue. While much has been accomplished during this Pelita in the area of policy reform, a renewed emphasis must be placed on the development of the regulatory framework and the necessary institutional mechanism required to implement and monitor performance of the enacted policy. In addition, a careful evaluation, including a comprehensive baseline survey of the field test site of the set of proposed integrated interventions, must be implemented to ensure that Indonesian policy makers may learn from this comprehensive experiment.

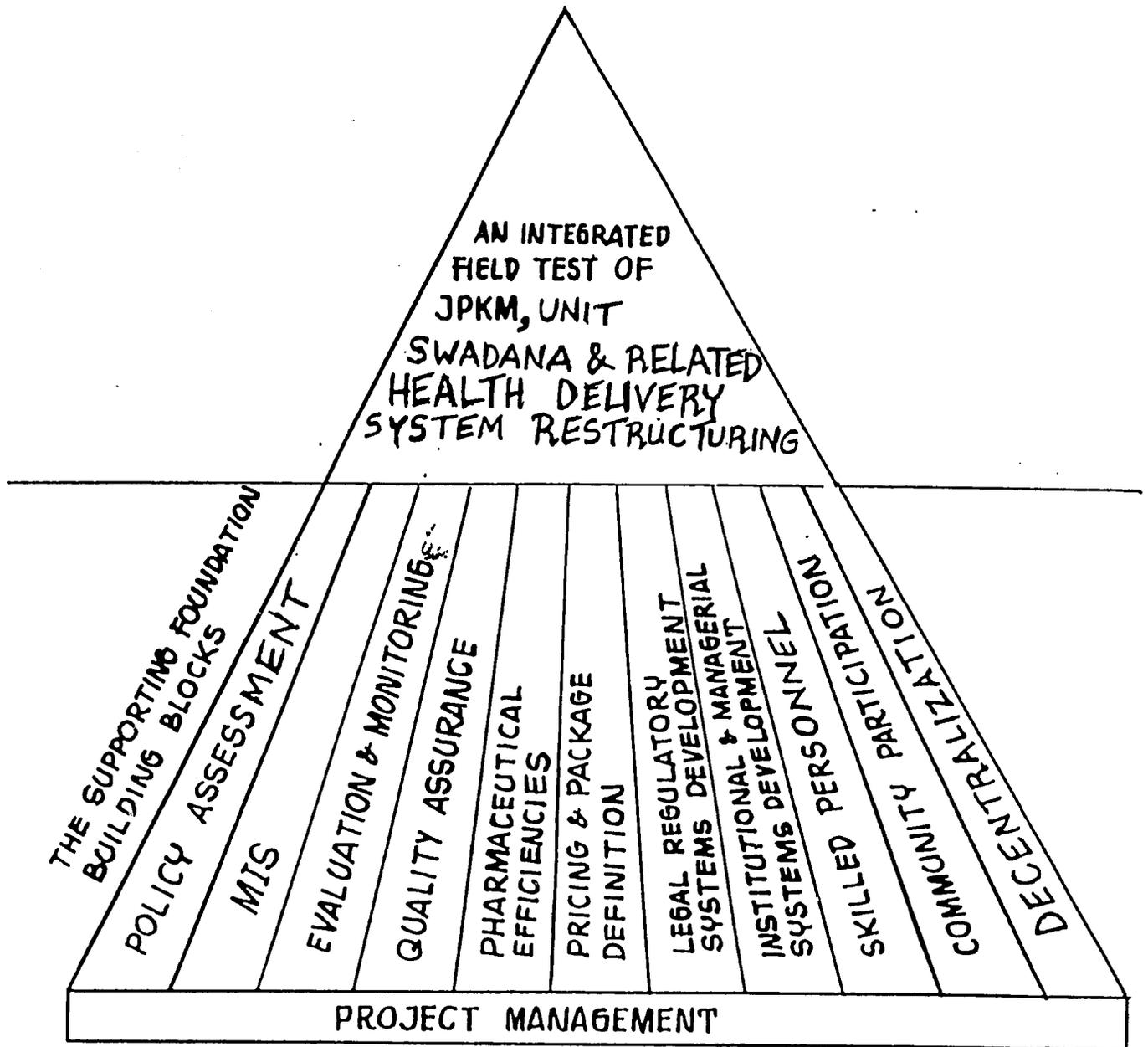
The team is of the view that USAID financial support should be continued and recalculated in accordance with the amended purpose and strategies. In light of the many building blocks required to implement a fully integrated field test of these proposed reforms, it is conceivable that as the details of implementation are carefully reviewed by MOH, USAID, ISTI, and perhaps other entities of the GOI, such as BAPPENAS, it may be recognized that additional resources would be required.<sup>14</sup>

Because the project has a potential nationwide coverage and impact, it should be brought in line with the Ministry of Planning's (BAPPENAS) regulations and policies and within the context of Indonesia's five-year plans (PELITA).

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<sup>14</sup>A detailed analysis of the project budget was not included in the evaluation team's terms of reference. Annexes D.1 - D.4 include some information and analysis of project component budgets and expenditures through mid-November 1991 and the Internal Evaluation document produced by MOH and ISTI, dated October 21, 1991, have additional information about additional resource requirements for use by those involved in resolving further budgetary matters.

Figure 2  
HSF PROJECT FOCUS AND OBJECTIVE PYRAMID



Finally, given this restructured purpose of the project, that is, to provide the technical backup to test the feasibility of implementing an integrated set of policy reforms of JPKM, Unit Swadana and related pharmaceutical reform as the rational use of essential pharmaceutical supplies for financially sustaining health services, the team considers that the full attention of the remaining technical assistance available under the HSF project should be targeted to assure that a full integrated test be conducted and evaluated for use by both the MOH and BAPPENAS in assessing the additional steps to restructure and finance health care for the entire population of the country. It views all other activities not directly related to such a test as less essential. Where competing claims on the scarce human and financial resources required for the conduct of this vital integrated test appear, other important, though less essential activities must be curtailed to ensure the integrity of this vital task.

## IV. HSF PROJECT ACHIEVEMENTS

### A. POLICY ACHIEVEMENTS

#### 1. Introduction

The HSF project has participated in the health development policy process initiated in Repelita V. Dr. Adhyatma, the Minister of Health, indicated in his meeting with the evaluation team that the HSF project has most notably contributed to the strategic development of the health sector by providing the staff assistance necessary to focus and develop such key policy initiatives as Swadana and JPKM. He further indicated that he sees this project contributing to the strategic development of the sector for the next 25-year period. In order to accelerate the development of the health sector, he recently indicated that there are ten areas where policy breakthroughs must occur.<sup>1</sup> These ten areas are:

- use of generic drugs and developing rational drug use prescription standards;
- publication of the Unit Swadana policy for hospital management and financial reform;
- development of JPKM-managed care policy;
- reallocation of health sector resources away from hospitals to eastern or other undeserved areas of the country (geographical equity);
- development of the policy of physician contracting for three years after medical school instead of becoming government civil servants;
- implementation of the policy that trained midwives are located in every Indonesian village;
- job analysis of all health sector positions in public service, including at the central and local levels;
- introduction of civil service reform to include a promotion ladder for technical specialists outside the line management career structure;
- introduction of further deregulatory measures for the (a) pharmaceutical and (b) hospital sectors; and,
- development of increased managerial controls within all health facilities operated by the government of Indonesia.

In Table 1, the team presents a review of the contributions of the HSF project toward these ten policy areas established by the Minister of Health. For taxonomic purposes the team has established five attributes of policy contribution. These include: (a) initial policy concept idea development; (b) contributing to the further

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<sup>1</sup>These issues were originally spelled out by the Minister in a document to the Vice President of Indonesia. See MOH, *Report to the Vice President, Republic of Indonesia by the Minister of Health* (Jakarta: MOH, April 10, 1991).

**Table 1**  
**ASSESSMENT OF ISF PROJECT TO MOH POLICY INITIATIVES**

Attributes of Policy Contribution (Breakthroughs)									
Existing Policies	Break Through	1 Develop Initial Policy Concept	2 Contribute to the Articulation of the Concept in a More Precise and Implementable Manner	3			4 Product of Contribution to the Policy Initiative "Output"	5 Timeliness of Output In	
				Nature of "Input" Contribution				Repelita VI 1993-97	25-Year Plan 1993-2010
				Resources	Expertise	System Production			
1. Generic Drug and Rational Use	NO	YES	Contributed TA	YES	YES	Completion and Circulation of Policy Statements	YES	YES	
2. Unit Swadana Publication	NO	YES	Provided TAE & Other Resources	YES	In Process YES	Presidential Decree No. 38, 1991, with Operational Guidelines, under Preparation by MOH	YES	YES	
3. JPKM	NO	YES	TA + Other Resources of Soc. Financing Component	YES	In Process	Government Decree in Approval Process	YES	YES	
4. Resource Reallocation of Hospital Service Cost to Eastern Part of Country (Equity - Geographic)	NO	NOT YET	None yet	None yet	None yet	Swadana Policy (#2) Could be Helpful	Could be timely	Could be if Swadana Concept is analyzed in this manner	
5. Contracting Doctors	NO	HE/PAU-AKEK Assisted	Minor TA	Some AKEK Time	None yet	Some Contribution	YES	YES	

**Table 1 (cont'd)**  
**ASSESSMENT OF HSF PROJECT TO MOH POLICY INITIATIVES**

6. MWs in Villages	NO	NO	None	None	None	None. World Bank Assisted	NA	NA
7. Job Analysis (Central and Local)	NO	POM Drug Management Study. Project staff recommends further exploration of this issue in a new project.	POM Study	NA	NA	NA	NA	NA
8. Civil Service Reform to include Technical Job Progression	NO	NO	NA	NA	NA	NA	NA	NA
9A. Deregulation in Pharmaceuticals	NO	Significant Pharmaceutical Registration	Computer and Software	YES	Computer Reg. Process.	Pharmaceutical Registration	YES	YES
9B. Deregulation of Hospitals	NO	Some via Swadana Development	TA + Other Assistance	YES	Some Assistance Provided	As it Relates to Unit Swadana	YES	YES
10. Managerial Controls at Local and Central Levels	NO	Indirectly Some for Project Component System Development	TA + Other Assistance	YES	Some Systems have been Assisted by Project	An Indirect Contribution	Some	YES

articulation of the policy concept in a more implementable manner; (c) implementation systems development, (d) the product of the contribution to the policy initiative in an "output" sense, and (e) the timeliness of the contribution to the national and health sector specific five- and twenty-five year plans, to begin in 1993.

In brief, the tabular analysis presented in Table 1 suggests that the HSF project has contributed in many ways to at least eight of the ten policy areas presented, with only civil service reform policy and midwife dispersion not addressed by one or more activities of the project. In the four areas of pharmaceutical efficiencies, (generic and rational use) policies, Unit Swadana, JPKM and physician contracting, significant staff work has contributed to the development of the policy into an implementable form, though there is no available evidence that policy ideas were initiated by project staff. Finally most contributions were timely with respect to the planning process of the GOI. These policy contributions are more fully delineated in the sections below.

## 2. Social Financing

### a. JPKM Policy

#### i) Development of Initial JPKM Policy Concept

According to trends in health expenditures relative to other countries in Asia, the government of Indonesia has spent a relatively small share of its GNP on health. According to a recent study conducted by Griffen,<sup>2</sup> Indonesia was in the lowest third of the thirteen countries in Asia included in his study in terms of the share of GNP spent on health, and below the median share in terms of public spending. In addition, private funding for health has increased as a share of total health expenditures from 46.5 percent (1976-1977) to 64 percent in 1982-1983. These expenditure trends mean that public resources must be used efficiently and additional resource mobilization is needed for financing health services, especially those provided in GOI facilities.

Since 1981, the MOH has been involved in developing alternative approaches for financing health services. Two foci of this effort are to increase (a) community participation, and (b) private sector involvement in paying for the use of health care providing resources. Further, it was felt that a method of health financing based on insurance principles and on a close relationship between health service providers and financial management is required. The evolving JPKM concept is seen as the approach for increasing community involvement, integrating insurance principles and

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<sup>2</sup>See p. 60, Charles Griffen, *Health Sector Financing in Asia*, Report No. IDP 68 (Washington, D.C.: World Bank, August 1990).

for developing more efficient health care delivery services, in conjunction with strong financial management systems.

ii) Contribute to Articulating the JPKM Concept in a Precise and Implementable Manner

At present, DUKM/JPKM is still in its early stages of development. In the long run, the potential for its successful implementation is more promising when the population will have higher incomes to support the cost of the comprehensive set of benefits identified in the JPKM benefits package. At present, there are several public and private social financing schemes based on various principles of insurance. It is hoped in the future that schemes will be based on the DUKM/JPKM prepayment principles. The HSF project is engaged in assisting at least two regions, NTT and Bali, to develop and implement JPKM in a more workable way in a non-urban situation and several urban-based programs in Jakarta have received project assistance and provide exemplars to others about what is required to successfully implement this managed health care approach.

iii) Contribution

Some concepts and systems have been developed, such as:

- (a) the principal components of a comprehensive health care benefits package;
- (b) in some instances, approximate prices/price ranges for specific services and benefits packages;
- (c) what is required to establish precise premiums via the completion of certain actuarial studies;
- (d) the development of scopes of work and contracts to design the necessary MIS systems to manage information flow requirements;
- (e) outlining and establishing the processes for establishing quality of care standards; and,
- (f) initiating work on the vital regulation and cross-subsidization systems necessary for consumer protection, equity of access across income and risk groups, and from general public revenue sources.

At the moment, a government decree on JPKM and its regulation is being processed. Expatriate and domestic consultant staffs have been employed to assist in developing the JPKM concept and designing systems support manpower

development activities of JPKM; further manpower development activities are required if a national JPKM program is to be launched. However, to fulfill the total manpower training requirements for launching a national program, including the social marketing aspect of training, a much larger effort than is possible via this project is required.

iv) Product of the Contribution to the Policy Initiative

In November 1991, the JPKM concept was sent in the form of a government decree to the President's office for his endorsement into Indonesian law. This law will enable private and public entities to develop specific types of health benefits packages and market them to various segments of the community. It also imposes certain economic risk sharing discipline on health care providers to provide a package of comprehensive care to the beneficiary population within a specified budget constraint.

v) Timeliness of Contributions

The output of JPKM policy contribution activities for Repelita VI is not clearly defined. However, if the outputs are clearly defined, they represent an essential input for national long-term planning of the future national health care system.

b. **Managerial Controls and Personnel Performance**

At the policy level, the development of the JPKM concept will over time add critical control and personnel performance features to the delivery of health care in Indonesia. At the only location where the team was able to learn about the outcomes of an implemented model JPKM program, in Jakarta, the St. Carolus program has reduced average lengths of stay among enrollees by one-third in two years and ambulatory visits also fell by one-sixth. Not as striking but still identifiable progress of a similar nature was also noted at the PHB test JPKM site in Kulon Progo in Central Java.

3. **Hospital Component**

a. **Unit Swadana**

The concept of Unit Swadana Hospitals was initiated by the MOH. It is one of ten policy initiatives in the last few years within the MOH based on the Presidential Decree, No. 38, issued August 1991, establishing the Unit Swadana concept such that all government institutions will become Unit Swadana, and, thereby acquire the right to utilize their revenues directly for their own operational purposes. These purposes include operational and maintenance expenditures, manpower development (including personnel incentives), and investments (with MOF approval).

While all revenues can be used at the discretion of institutional decision makers, these resources are still managed as government property, and, as such, cannot be described as "privatization" of government institutions. (Rumoko, consultant presentation 11/5/91 at Tegalyoso Hospital). Consultants from the Hospital Component of the HSF project have contributed in further developing the initial concept. This contribution became so intensive that gradually the component's original objective was altered and became identical with preparing the implementation plan for the Unit Swadana concept.

The products of this contribution include:

- i) Studies;
- ii) Preconditioning of future Swadana hospitals;
- iii) Training modules (in preparation);
- iv) Technical manuals;
- v) Support for training programs organized by MOH; and,
- vi) Legislative and regulatory products:
  - Presidential Decree No. 38, 1991,
  - Joint Ministerial Decree between MOH, MOF, and,
  - other related ministries (draft).

These outputs are in line and supportive of the GOI's PELITA in the health sector and preparatory to the second national long-term development plan.

#### **b. Managerial and Personnel Performance**

The principal purpose of the Unit Swadana concept as pertaining to hospitals has been to promote efficiencies in resource use by establishing managerial incentives to be synonymous with more efficient use of resources within each component of the hospital. It is presumed that, over time, personnel decisions will in part be based on efficiency performance, given standards of care requirements and other indicators of quality.

#### **4. Pharmaceutical Policy Achievement**

The project can take no credit for assisting the ministry in initiating these policy concepts but information from the project assisted in articulation of the concept in a precise and implementable manner. The component provided resources, expertise, and, in the case of drug registration, an entire upgrade of the existing computerized system. Given that the ministry is in the process of preparing the next pelita and twenty-five-year plan, it seems that the output is timely.

**a. Generic Drug Store Prescribing Practices**

The MOH plans to make drugs more available to the general public by encouraging the wider use of generic drugs at public health facilities. It will also seek to increase the use of generic drugs within the private sector by providing further information in public and provider campaigns on their use.

To assist in achieving these breakthroughs, the pharmaceutical component of the project has, among other things:

- (i) conducted bioequivalence studies on 11 generic drugs and provided further information on the use of generic drugs for MOH use in its facilities to increase prescriber confidence in generic drugs;
- (ii) established a drug requirement planning and budgeting framework at the district level which focused on the description, procurement and use of drugs which are generically described;
- (iii) included a policy on the use of generic drugs within its plans for the rational use of drugs;
- (iv) developed training materials for use by public health personnel, primarily prescribers, incorporating generic nomenclature for pharmaceuticals; and,
- (v) planned to increase <sup>in</sup> community awareness on the characterization and use of generic drugs.

**b. Pharmaceutical Deregulation**

Deregulation is directed towards the production of drugs, the retail distribution of drugs, drug-related services through pharmacies, and registration of pharmaceuticals and traditional medicines. While the project has not been given the mandate to directly address many of these issues, it has focused its attention on one aspect of the larger topic. The project has identified one strategy to achieve deregulation objectives by simplifying procedures for pharmaceutical and traditional medicine registration. The pharmaceutical component of the project has assisted in the execution of this strategy by the wavered procurement of computer software and hardware which will, among other things, speed up and simplify the process of registering pharmaceuticals and retrieving information on those drugs which are already registered. Finally, a drug manpower study was conducted to review labor supply issues and other matters. It comprised one of the four "focused assessments" envisioned for this project component during its design.

## 5. HE/PAU-AKEK

While this particular project component did not have a unique policy role as was described for the other components above, according to the HSF project staff's own internal midterm review, it engaged in 5 policy analyses in FY 1990/91 and 15 health policy reviews during the first 3 years of the project. These analyses included assessments of the policy for contracting with doctors, medical technology assessment, and concern about regional equity in expenditure and service delivery.

AKEK has also developed a policy analysis research agenda. In that agenda the unit has proposed to conduct five policy analyses during the remaining LOP. The proposed policy topics include: a) the development of health policy in Indonesia, b) equity in health development, c) health policy on the development of the eastern part of Indonesia and less developed regions, d) the role of the government and private medical sectors, and e) social financing policy in Indonesia. The first proposed topic--the development of health policy in Indonesia--appears to be pertinent to all of the policy thrusts indicated in Table 1 and the last two have direct applicability for several of the policy efforts outlined in the separate project components described above. The extent to which these proposed policy research studies have been approved for inclusion in the workplan of the project remains unclear to the evaluation team and resides outside the capacity of the team to investigate fully.

It is known that members of AKEK have been involved in the development of the Swadana concept and have participated in the discussions regarding JPKM. However, since this unit did not take a direct lead role in the policy formulation process, it is difficult to assess the contribution of any AKEK member in this regard.

Finally, HE/PAU-AKEK has been helpful to the Planning Unit of MOH in actively participating in the design and development of policy-related studies funded by other donors, such as the World Bank study on the demand for health care in East Kalimantan. This work by the World Bank will have high policy relevance when completed since it will provide the first quantitative estimate of health consumers' responsiveness to price changes of health care services.

## 6. Summary

From the analysis of policy achievements and policy development, it is clear that the HSF project has contributed in significant ways to many of the ten policy areas of concern to the Minister of Health, Dr. Adhyatma. From the perspective of the evaluation team, the joint policy initiatives of JPKM in conjunction with Unit Swadana will provide for the opportunity of restructuring the publicly-provided health care services. The incentive structure for ensuring the restructuring by provider decision makers is in the process of enactment by developing and implementing these two policies jointly, and with the supporting pharmaceutical policy efficiency initiatives

of the use of generic drugs and improving provider prescribing patterns. In addition, these policies can realize sector efficiencies by reducing hospital use and economizing on the use of all other resources involved in the provision of health care.

In the case of the pharmaceutical efficiency policies of generic drugs and rational prescribing, progress has also been made in several test locations around the country to implement these policies and begin to realize their potential. Further, several examples exist where a JPKM type of health service approach is in the initial phases of being implemented. The site of St. Carolus represents the most complete version of a JPKM model of managed health care in place in the country, and there the potential for efficiencies is effectively demonstrated. Other private and public experiments of JPKM are also emerging throughout the country, most notably in Bali, though there are a number of important components not yet in place (see the assessment of the technical building blocks in section IV.B for a more complete understanding of the components not yet implemented).

Unit Swadana within the public hospitals appears to be on the verge of implementation testing in five government class B and C hospitals during the next year. It is the understanding of the evaluation team that over the remaining life of the HSF project, assistance will be forthcoming to implement Swadana in up to ten hospitals which were recently named by the MOH for beginning the implementation of this important policy. However, there has yet to be a specific site established where all three related policy components can be implemented and monitored in a joint and coordinated manner. The team believes that the establishment of such an integrated test site represents an important agenda item for consideration by those involved in implementing this project.

Whether these policy initiatives are sufficient to also refinance the delivery of health care services throughout Indonesia remains to be seen. The health insurance principles embodied in JPKM of risk pooling and prepayment of premiums, in conjunction with establishing the procedure of capitation as the basis for physician payment for services, can assist in the refinancing effort. However, the period of time required before many segments of the Indonesian public can be expected to pay the full premium cost of the envisioned basic benefits package of fully licensed JPKM managed care provider is open to question. If the JPKM program concept is to be rapidly extended throughout the country as some policy makers would like to envision, the systems necessary for integrating existing public subsidies into JPKM-type managed care delivery systems must still be worked out among the various ministries of the GOI, which presently provide direct subsidies to the government health facilities which are under MOH or local government ownership.

Given the short time in which this project has been in operation, however, the team concludes that the HSF project has contributed in many substantial ways to the

policy development of the MOH and the GOI regarding the changes which must now be implemented to restructure and refinance the sector.

## **B. TECHNICAL AND SYSTEMS DEVELOPMENT ACHIEVEMENTS**

Besides the policy achievements described above, the HSF project has also made many strides toward the achievement of identifying, designing, and testing the many building blocks required for a restructured and refinanced health care system in Indonesia. The achievements of the past three years on these building blocks are presented below.

### **1. Management Information System (MIS)**

This building block is vital for the implementation of the policy achievements discussed in the previous section. Each component of the project has been in the process of developing and implementing various types of MIS systems, depending on the specific nature of each project component.

#### **a. HE/PAU-AKEK**

In the case of HE/PAU-AKEK, data bases have been developed for the health expenditure analyses conducted by the unit. This has been particularly important in ascertaining whether the GOI would attain the child survival expenditure increase over the LOP beyond the thirty-five percent real increase set as a target for the HSF project. In addition, the unit expects that it will use the recently completed (1990) National Economic Survey (SUSENAS) data set in comparison with the 1986 information from the same source for policy research purposes.

At present, the unit has very little computer hardware and software capacity for large data base analysis as would be required to extend the health expenditure data base, other surveys which the unit might be asked to develop and manage, that is, a baseline survey of the integrated test of project components on Bali, and the SUSENAS data set. However, two Indonesian project staff members in the unit who have been providing analytical and programming support to the project may have the skills and/or potential which may warrant additional support in order to sustain this project component.

#### **b. JPKM**

This project component has procured hardware to all JPKM-type models, that is, PHB, PKTK, and Dana Sehat. In addition, technical assistance was provided to several swasta-type JPKM insurance entities in Jakarta, for example, PT Bintang and St. Carolus.

Hardware has been procured and software has been developed for the Bali field site experiment. It has been introduced into the emerging regulatory body in the regional government offices and some training has been conducted of those individuals within the regional government of Bali to use the information system. Additional training and further development work on this information system is expected early in 1992.

The social financing component of the project has provided technical assistance to the PHB in order to solve some of its software problems, particularly for using the vast data base compiled on the membership characteristics and their utilization profile. A final contract is required to finally solve all of the software problems so that the membership data base can be used to complete an important actuarial study for premium pricing and benefits package design purposes. In addition, the component has provided PHB fifteen computers for its use throughout its national system of offices to improve the management of the informational requirements of this organization.

Finally, the project has provided technical assistance to at least three Swasta insurance groups to ensure that the information system component of their JPKM programs is established on as technically sound footing as possible. As other Swasta entities express interest in such assistance, it is anticipated that they will also obtain such support as well.

**c. Hospital/Unit Swadana Component**

This component has not been able to obtain USAID approval to procure the hardware and software (LAN) for the identified Swadana test hospitals which are to receive technical assistance and other project support. The evaluation team requests that this problem be rectified as soon as possible to enable the full implementation of the important policy achievements realized by the MOH and the HSF project during its first three years.

Time was unavailable for the team to learn whether the LAN type of MIS software is appropriate for the "Swadanaization" of GOI hospitals. However, based on the record of the other project components in procuring software, it is believed that this software would be technically appropriate.

The evaluation team was unclear about the technical capacity of the present long-term expatriate consultant to the hospital component to help MOH officials implement the use of the above proposed hardware and software. It is thought that the project might be able to obtain more highly qualified assistance to aid individual hospital facilities in this technical subject.

There is a need to assess MIS requirements in light of the other component MIS activities and assistance in the MIS area so as not to duplicate hardware or software or the necessary training required for their use.

**d. Pharmaceutical Component**

The HSF project has procured four computers for the PIO-P and POM. The project also has procured two software packages, one for general MIS use within the project as well for future use of POM, and one for use by the drug registration system and adverse drug reactions reporting system. These procurements have resulted in running systems and personnel have been trained to use these MIS tools.

**2. Personnel Training**

All project components have engaged in training and pedagogical materials development. HE/PAU-AKEK has had this building block added to its portfolio subsequent to the initial project design and has conducted a number of teaching sessions in health economics, assisted in organizing seminars and conferences on various aspects of this topic, and has translated papers and other pedagogical material on this topic into Bahasa, the principal language of Indonesia.

The social financing component has recognized the importance of training health personnel as well as those involved in the management and financing of the sector in the principles and skills required to develop and operate JPKM programs. This component has recognized that health provider and consumer understanding about JPKM has started to occur, however, large segments of both constituencies are not yet fully informed. The component has had two of its contracts during the first phase of the project which addressed health provider personnel training in an explicit manner, one which developed JPKM training for Dana Sehat personnel and one for PKTK personnel. In addition, the project has invested in five technical task forces on such topics as quality assurance, MIS, benefits package design, market development, and organizational development. One of the tasks for these technical task forces is to ensure that technical training material regarding its topic is developed and tested.

It has been proposed that some JPKM training address the informational gaps in the understanding of private (Swasta) insurance entities about JPKM. While the team recognizes the importance of such training, it is difficult for the team to ascertain whether the training is designed to improve the performance of certain personnel in such entities or whether it is a form of social marketing for the use of creating a new market for the services of the technical consulting firm.

### 3. Regulatory and Management Systems Development

In July 1988, the HSF project hired Professor Paul Torrens of UCLA, to outline a) how the organizational structure for a regulatory body of the JPKM program might best be configured, and b) what such an entity's scope of work should be.<sup>3</sup> He was also asked to provide guidance regarding where in the GOI these activities should be located. He concluded his consultancy report's executive summary with the telling paragraph which reads as follows:

By the end of the consultation, it seemed clear that there was general agreement about the need of the various functions and tasks to be carried out, but there seemed to be no agreement about the details of how these tasks would be carried out and what the pace of organizational development would be. These [are] important issues to be resolved, [and they require] several steps that need to be taken if the health insurance program is to go ahead strongly and actively.<sup>4</sup>

A Task Force has been established by the Secretary General of the MOH (component "Benchmark" number 1.5.1) to address this complicated set of issues, but no substantive systems development has been implemented as yet, especially at the central level.

It is noted with interest that in reviewing how most affluent nations have addressed their health financing problem, William Hsiao has recently remarked,

In order to provide social protection for their citizens and/or to promote solidarity among their peoples, all affluent nations have explicitly organized financing for health care. Such action changed the usual bilateral exchange relationship between consumers and providers into a trilateral relationship. In this trilateral model, the government must decide the locus of financial power, which will determine the allocation and use of resources. . .<sup>5</sup>

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<sup>3</sup>See Paul Torrens, *Organizational Structure and Placement for Coordinating Mechanism for Social Financing/Health Insurance Program and Social Financing/Health Insurance Law*, HSF Project Consultant Report Series No. 1 (Jakarta: MOH in collaboration with ISTI, December 1988).

<sup>4</sup>ISTI, *Indonesia Health Sector Financing Project Recommendation From Consultant Reports 1 Through 40* (Jakarta: ISTI/PMU, 1991), p. 2.

<sup>5</sup>William Hsiao, "Lessons for Developing Countries From the Experiences of More Affluent Nations About a Comprehensive Health Financing Strategy, in David W. Dunlop and Jo Martins, eds., *An International Assessment of Health Insurance: Lessons for Developing Countries* (Washington, D.C.: EDI for the World Bank, 1992, forthcoming), p. 45.

To date, the regulatory mechanisms referred to via this project component have not addressed this fundamental issue in regard to what and how the regulation of health care financing will be addressed by the GOI.

The principal work on this vital system remains for the second phase of the project. Preliminary work has occurred in Bali with the local government officials and one contract of 19 million Rupiah has been let to facilitate that work. It is expected that additional discussions will occur in early 1992 to develop a more comprehensive plan of action. The principal focus of these further discussions will be to ascertain what specific matters of JPKM will be under the jurisdiction of a regulatory body. For example, will a regulatory body oversee only quality assurance matters, or will it also become involved in monitoring the pricing and collection of benefits package premiums, benefits package composition, cross-subsidization of JPKM entities, reimbursement policies for each type of provider, financial performance or malfeasance of each JPKM and care provider, service delivery access or other problem, government subsidization policies and procedures, information sharing with government and other JPKMs, licensure, accreditation or certification of personnel and facilities, medical technology acquisition, etc.?

The work on the JPKM government policy decree suggests that quality of care and benefits packages will be monitored by a regulatory body. However, it is unclear what specific regulatory measures such an entity will employ. Further, the locus of each regulatory activity has not been discussed. The importance of each regulatory function at the village, kabupaten, regional, and central levels also has not yet been clarified. For example, should licensure of personnel take place at the kabupaten, regional or national level, or at all three levels? The level of information sharing between levels of government about each regulatory function has also not been addressed yet. Also, there is not a clear understanding of what procedures and sanctions may be imposed if non-compliance by a provider, insurer or consumer is observed regarding any of the above possible items which may be under the jurisdiction of the regulatory body. In addition, no substantive systems development, other than the development of some MIS software for the Bali field site, has occurred.

Finally, the locus of regulatory activity at the national level has yet to be addressed in a systematic manner. It is also not clear to the team what type of regulatory entity should be established, where it should be housed within the GOI structure, or what its procedures may be.

The concept of DUKM/JPKM has been initiated by the Ministry of Health. But it is essential for the Ministry to extend its own set of options of how this concept will be implemented. In addition, it is vital that it resolve the question of where DUKM/JPKM development will reside in the MOH. Will it be in a separate and "new" DG or within an existing DG? This question must also be resolved at the same

time as when the Unit Swadana hospital policy is undergoing an important implementation start-up phase, and where overlapping issues of the type outlined above are undoubtedly going to arise. Clearly, it will be necessary for any regulatory body to act as a coordination entity as well, since the integration of the various components addressed by the policy accomplishments have yet to occur. In addition, it will be important for such an entity to serve a coordination role since the few emerging JPKM programs are operating without adequate professional skills for managing the further implementation of the JPKM programs without additional technical know-how.

Finally, it is ironic that as this project is making an effort to assist the GOI via the MOH to develop an improved way of addressing financing problems in the health sector that the exemplar country providing this assistance is in the midst of a careful reexamination of its own health care system. Many of the problems which people in the United States face in health care relate to equity and fairness of access to care and rapidly rising costs. The U.S. government is now under extreme pressure by many, even experts of their own political persuasion,<sup>6</sup> to reform the health insurance industry in such a way that if a private health insurance industry is to survive in the U.S., it will be subject to stringent regulation as in the case in Germany or Australia ". . . so that different pieces of the system do not try to save money by fobbing off costs onto each other or onto the consumer." If the insurance industry is so reformed ". . . the private health insurance industry as we know it would cease to exist."<sup>7</sup>

#### 4. Quality Assurance System Development

There are two components in which quality assurance and standards of care activities have been programmed: hospitals and social financing. The Technical Task Force required to oversee these activities has been functioning and the Task Force has issued a concept paper which identifies the criteria for defining the contractor tasks necessary to develop medical standards of care for specific diagnoses and other aspects related to quality management.

The definition of the term "quality of care" is a broader one than that of "standards of care." The technical work carried out to date has focused on the more narrow concept of care standards and the Indonesian Medical Society, IDI, is the

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<sup>6</sup>See a recent set of papers presented at the Conference on "American Health Policy: Critical Issues for Reform," held in Washington, D.C., October 3-4, 1991, on how the government might address the many aspects of the U.S. health care crisis and its related cost implications. Among them are papers by Clark Havighurst and Mark Pauly, two apologists for the current administration. Mark Pauly is currently working on the proposals which will be included in the President's State of the Union Address to be presented to Congress in late January 1992.

<sup>7</sup>Robert Kuttner, "Health Care: A Gift to the Democrats," *The Washington Post National Weekly Edition* (November 18-24, 1991), p. 29.

contracting entity involved with ten of their medical specialties to define medical standards of care. The work being done on the broader concept of "Quality of Care" is being done by PQM, a subcontracting entity to the HSF project. The subcontractor is in the process of developing training modules for the implementation of quality assurance (QA).

The work on standards of care is being conducted by IDI and their ten specialist groups are in the process of completing the definition of at least 100 specific standards of care for the most prevalent diagnoses. Amongst medical professionals, the work has received high praise and other countries in the region are beginning to request IDI's findings. A second phase of this work is being initiated at the present time to add an additional 70 diagnoses to the original list of 100 diagnoses.

The team understands that a technical training plan has been developed to address nine specific problem areas in which a person must be trained in order to improve management of public hospitals. These topics include, among other items, quality assurance concepts and methods, MIS, accounting procedures, and medical records systems.

#### **5. Pharmaceutical Efficiencies**

The pharmaceutical component of the project PIO-P has learned that approximately 40 percent of government health expenditures is for drugs. Further, the major cost of the PHB insurance coverage for government workers is for drugs. Also, the predominant cost of hospital pharmacy services is for drugs. Finally, the largest share of expenses associated with the provision of medical/health services in pilot JPKM programs is for drugs.

These facts were obtained by the PIO-P by conducting a number of assessments designed to improve the economic and financial impact of how drugs are ordered, managed, prescribed, and used within publicly-managed health care entities. These assessments have also provided the information, techniques and strategies for implementing the proposed changes in a generic manner by the MOH via POM.

The future progress in some of the areas selected by the MOH for breakthroughs in the pharmaceutical area requires a view of the provision of pharmaceuticals as an integral building block for health care delivery rather than as a vertical, functioning system.

## **6. Benefits Package Design, Actuarial Systems, and Pricing Strategies and Collection Procedures Development**

A false dichotomy between health insurance and JPKM as an insurance mechanism has evolved in the writings regarding JPKM. The team is of the view that indemnity-type of health insurance has been established as a relevant comparator to JPKM, which in the team's view is misleading. The term health insurance has been implemented in many ways throughout history around the world with many different configurations of benefits packages (indemnity being but one type of benefits package), payment mechanisms, and risk pooling arrangements being tried or used. In the team's view, the managed care prepayment approach to health insurance embodied in the concept of JPKM is a good one but it must be viewed as but one option among many for the configuration of health insurance. The team would like to see the term health insurance used in a generic manner, with the managed care embodiment of JPKM as one possible option.

The real issue for the development of the social financing option is what the insurance mechanism should be insuring. Embodied in the JPKM concept, as the team understands it, is the notion that it is good medical care to provide "first rupiah coverage" of common events requiring ambulatory care or inpatient services. Others with an interest in addressing aspects of the health care cost spiral would tend to prefer to see health insurance used to insure the public against the possible rare event of large economic losses in the event of sickness. Various combinations of both preferences may also be configured within the budget constraint of a given country at a particular point in time, depending upon community preferences and budgetary aspects of the matter.

JPKM's benefits package is configured around "health promotion and health maintenance," while the principal cost elements in the provision of health care are involved in the provision of ambulatory care and hospitalization coverage.

The actuarial risk pool for health care under any form of health insurance has not been worked out yet in any formal analytical manner, though there are several data bases which could be useful, that is, PHB, PKTK, and St. Carolus.

The non-private JPKM programs outside of Jakarta have not implemented a full benefits package as yet. Only ambulatory care benefits are included in the Tabanon scheme in Bali and a similar package is being tested in NTT. The problem of obtaining consumer agreement on paying the premium for the limited benefits package has been managed well according to the evidence presented to the team while in the Tabanon area.

It is less clear as to how much of the agreed-upon premium has actually been collected. Is it 62 percent of the potential premium for the year which has been

collected from all persons, or has that quantity of the potential revenue been collected from a smaller share of the population?

There is an issue of what would happen to payment of health care premiums if the village leadership did not have the control over the public as is the case in Bali via the Banjar system. Concern was expressed by the village leadership over a potential premium price rise if an extended benefits package were enacted to include inpatient care.

In the feasibility study developed for Bali, the actuarial calculations behind the premium structure under present implementation are not based on any concept of price elasticity. Further, the calculations have only considered rates of use regardless of price or its change, without taking into account behavioral responses of consumers when prices change.

It is unclear to the team how a JPKM proposes to move from an initial ambulatory-care-based benefits package to the envisioned more comprehensive and appropriate (from a quality and comprehensive medical care perspective) benefits package. The issues involved in rapidly moving from one benefits package to another was not clarified to the team, and it would appear that much remains to be done on this matter. This implementation problem is particularly difficult when a significant premium increase is involved as well.

## **7. Policy Assessment and Program Evaluation Development**

The two functions, policy assessment and program evaluation, appear to be within different functional units of the HSF project, in spite of the fact that the HE/PAU-AKEK unit was conceptualized as an entity to have jurisdiction over both functions. HE/PAU-AKEK has engaged in both types of activities; however, the other components of the project have made major independent contributions regarding the policy assessment function as it pertains to their own sphere of programmatic concern. For example, the social financing component has been actively involved in the assessment of JPKM issues and the hospital component has conducted a diagnosis of the problems confronting hospitals as they will be implementing the Unit Swadana policy. The team is unaware of exactly how coordination might best occur between these two functions, but perhaps it exists, especially now that the contractor team appears to be more interested in integrating project implementation activities.

The evaluation team views the baseline study in the location of the first integrated field test as a critical component of the second phase of the HSF project. At present, the evaluation team does not have a good sense about how this study will be conducted and analyzed, and it is concerned whether the study will adhere to international standards.

## **8. Project Management and Local Contracting**

In the 1991/92 HSF project workplan developed by the technical assistance team from ISTI, as well as the internal midterm evaluation, the technical implementation staff has made a significant effort to focus on these issues. Both documents indicate that project management problems which existed during the first three years of implementation have been or are being addressed. For example, the problem of MOH staff secondment has been resolved by USAID and GOI agreement and is being implemented by the project. Further, contracting problems which had previously existed have been resolved by contracting with an external entity to conduct the formal contracting procedures as required by both the GOI and USAID. Finally, it is understood that the problem which occurred when the BAPPENAS was overlooked in the project approval process is being rectified so that the project might be able to establish the proper GOI pre-financing mechanisms for use by the project beginning in April 1992.

While the project has not completely solved all of its management and administrative problems which has plagued its implementation since its inception, the moves which have been taken bode better for its future. The evaluation team is of the view that the HSF project is on a sounder management base than probably at any time since the inception of the project. Communication channels which were "overloaded" by the previous problems remain the most important aspect requiring additional attention by USAID, ISTI and MOH staff involved in the project's future implementation.

## **9. Summary**

From a technical perspective, the midterm evaluation team has been impressed by the extent to which the project "benchmarks" and activities necessary to develop the building blocks for health sector restructuring and refinancing have been actualized. It is the evaluation team's hope that this review of project activity has been of assistance to those involved in the day-to-day effort to see the "fruit of this labor."

## **V. OBSERVATIONS AND FINDINGS ON HSF PROJECT RELATED ISSUES AFFECTING PAST AND FUTURE PERFORMANCE**

This section has emerged as a consequence of the necessity for providing additional observations and comments underlying the findings presented in the preceding achievements section and the team's recommendations, which follow. The observations result from a multiplicity of issues which have been swirling around this project from its inception and which have an impact on the ultimate success of the policy and technical achievements in assisting the GOI to restructure and refinance the health sector in Indonesia.

### **A. BAPPENAS RECOGNITION AND PRE-FINANCING**

Given the history of the project's inception and approval by the GOI, it has not been given formal recognition or approval by key actors within BAPPENAS. Thus, it is generally thought that to sustain the project's achievements for the MOH, the project must obtain formal status by BAPPENAS, and, thus, the GOI. To obtain a new status with BAPPENAS, it is important to establish the pre-financing mechanisms for the processing of external assistance project funds.<sup>1</sup> These pre-financing mechanisms are under the jurisdiction of BAPPENAS and the relevant ministry, the MOH. Apparently, USAID, BAPPENAS and the MOH are in agreement that these standard procedures for implementing this project should begin in April 1992 for the FY 1992/93 budget year of the GOI.

The evaluation team is aware that discussions have been held regarding the configuration and location of pre-financing budgets within the MOH. The principles which we would like to encourage that GOI and USAID use in establishing these budgets include a) decentralization and b) project focus and prioritization of end of project outcomes.

### **B. ROLE OF OTHER GOI MINISTRIES IN THE POLICY AND TECHNICAL ACTIVITIES OF THE HSF PROJECT**

The policy issues underlying the restructuring and refinancing of the health sector are a consequence of GOI policy action taken in 1988 to decentralize and privatize many previous GOI activities. Since other entities of the GOI also have, as a consequence of their jurisdiction, a say in financing health care at present, it seems to be wise for the MOH and other entities with such jurisdiction to come together to further establish the procedures by which the sector might best be reconfigured

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<sup>1</sup>Project pre-financing refers to the process in which an external donor, such as USAID, provides assistance to the GOI only on a reimbursable basis. The GOI, via BAPPENAS, allocates GOI funds to the implementing GOI entity, such as a particular line ministry, to engage in a specific development activity via various development budgeting mechanisms, typically known as DIP budgets. After spending a certain amount of funds, the ministry accounts for the funds, and through BAPPENAS and the Ministry of Finance, makes a request to the donor for reimbursement to the GOI.

and refinanced. It is acknowledged that the Secretary General, by decree, has established a Task Force of other GOI actors with health sector financing jurisdiction. However, it is known that this entity has not realized its potential in addressing the coordination and regulation issues involved to accomplish the desired refinancing and restructuring objectives of the project.

Given this context, the evaluation team notes that the concept of JPKM is one which has been developed and implemented within the MOH. It is unclear to the team how well other GOI ministerial entities understand the JPKM concept. However, it is our collective judgement that it would be unwise for the MOH to further develop such an important concept which has obvious financial implications for the GOI without the full support of entities which have some present and future role and formal financial jurisdiction in the financing of the sector.

Since the MOH has been innovative in the formulation and development of the JPKM social financing concept and has the most up-to-date knowledge regarding the necessary building block strengthening tasks remaining to be completed, it would be important for it to continue to play an important secretariat function for a multiministerial committee or task force with jurisdiction over any aspect of health sector financing. This administrative function would, however, be conducted at the approval of this ministerial-level committee.

### C. LOCATION OF THE FUNCTIONS OF HE/PAU-AKEK

The team has learned that the role and function of AKEK is unclear within the MOH, with questions raised about its present location within MOH in the Planning Unit of SEC/GEN, and discussion has occurred regarding the possibility of its relocation to some other part of the ministry. This lack of clarity has been exacerbated by the fact that AKEK was established by the project to serve a larger policy analysis mission for the MOH than that prescribed by the project itself.

It is important to note also the distinction between the evaluation research function of monitoring the implementation of health policy changes from two other functions initially granted to AKEK. Those functions were to a) analyze policy options regarding health sector restructuring and refinancing, and, b) develop a data gathering capability for health expenditures, cost of health care, and health status.

Finally, the evaluation team recognizes the fact that the health sector is part of a larger economic and social environment undergoing rapid change due to decentralization and other government policies. It is unclear at present which governmental entity is responsible for monitoring the impact of this rapid change on health care and other social programs which improve the well-being of all persons in the country.

#### **D. THE ROLE OF THE PRIVATE SECTOR IN THE DEVELOPMENT AND FINANCING OF THE HEALTH CARE SECTOR IN INDONESIA**

The HSF project via the social financing component has made a number of contributions to the development of private health insurance plans in Indonesia. These contributions are detailed in other parts of this report.<sup>2</sup> It has been clear to the team that USAID views these accomplishments with great interest and favor and it is understood that the GOI is not unaware of the project's activities in this area as well. Perhaps one of the most noteworthy accomplishments of the private-sector initiatives in the health insurance industry is that the only full exemplars of the JPKM-managed care health insurance programs are presently private health sector entities within the Jakarta metropolitan area.

It is also useful to recognize the fact that the health sector in Indonesia is predominated by private-sector actors and transactions. Well over 50 percent of total health expenditures occur between private consumer and provider entities. Even public sector facilities and health personnel provide private-sector services, either on an after-hours basis, or by allowing private pharmaceutical initiatives close proximity to consumers of public health care services.

Many of the project's important systems and conceptual developments which the project has produced can also be utilized by private actors in the health sector. The team is also aware of the "social marketing" which has been undertaken by project staff to inform those in the private sector about the principles of JPKM and the status of the related government decree in establishing the legal basis for managed health care programs in the country.

There is some ambiguity about whether some of the preliminary products marketed as meeting JPKM benefits package standards include full preventive and promotive health components. This ambiguity may also be indicative of the important need for the MOH to assign a higher priority to the establishment of necessary JPKM regulatory mechanisms.

The team was made aware of the importance placed by the private health insurance sector on the enactment of the government JPKM decree authorizing the formal legal establishment of JPKM entities. It is viewed by some that upon its enactment, private entities will develop and flourish rapidly.

All of these observations indeed indicate that the private sector has received important and continued support by the project throughout its life. Thus, it has facilitated in the leveling of the health sector playing field for private actors.

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<sup>2</sup>See section IV.B, "Technical Achievements," and the "Social Financing Component Assessment" (Annex D.1) for details.

## **E. PROJECT INTEGRATION**

USAID/Jakarta has been concerned about project component integration since 1989. At that time the issue was raised during the periodic Mission Director's Internal Review conducted on all projects in the mission's portfolio. The ISTI expatriate technical assistance implementation team has been actively discussing how this might be done and whether it is required for the successful implementation of the remaining activities of the project. They have prepared several documents on the subject and the Internal Midterm Evaluation of the HSF Project conducted by the ISTI project staff during the summer and fall of 1991, addressed this issue at some length.

The noteworthy policy achievements of the project to date have a number of aspects which, in order to fully implement each of them, will require an integrated strategy. For example, the process of implementation of Unit Swadana within government hospitals requires that JPKM program development be fully involved in the decision-making discussions regarding costing and pricing of hospital services, MIS development, personnel payment, procedures, etc. This type of component integration is also required for the pharmaceutical component as well, which was emphasized earlier in this section of the report.

The evaluation team sees this issue as being key for the project to have any practical relevance to implement a sustained field test by the end of the project. The divergence of project activity into four separate streams sends a misguided message of factionalism between health care delivery and its financing. Clearly they are closely integrated and problems identified of one aspect have many implications on the other, and, thereby, must be addressed in that manner.

It is the evaluation team's judgment that the time has come when the project's resources must become focused on field testing an integrated model of the JPKM, Unit Swadana and pharmaceutical efficiencies which have been designed but not yet truly integrated. Figure 3 embodies the evaluation team's thinking about the degree and levels of integration necessary for an integrated field test to be implemented and sustained.

There are at least two dimensions to the integration necessary for a sustainable test of JPKM and the other project components. Along the vertical axis of Figure 3, the actors involved in the implementation of JPKM are articulated. These actors include: a) the political leadership of the region; b) those involved in the independent monitoring and evaluation of the test; c) the JPKM financiers, that is, those entities such as PHB, PKTK, Swasta entities, and Dana Sehat schemes which

**Figure 3**  
**ELEMENTS OF AN INTEGRATED JPKM TEST SITE**

Technical Integration Activities  Integration in a Site(s)	POLICY ENVIRONMENT			TECHNICAL SYSTEMS		AREAS FOR DEVELOPMENT			REGULATORY SYSTEMS DEVELOPMENT	
	Legislation	Economy	Govt./Ministry Coordination	Pricing & Payment Systems	MIS	Quality Assur. & Stds. of Care*	Personnel Training	Pharmaceuticals	Cross-Subsidy	Other
1. Political Will-Regional			Develop. of Decree							
2. Baseline for Monitoring and Policy Analysis	Project Assisted	Given	To be Done	Work Out & Implement	To be Done	Importance of Quality Assurance is Agreed Upon and is Being Implemented	Some Developed More to be Done	To be Done Results Adaptation	To be Done	
3. Managed Care Modeling (JPKM) • PHB • PKTK • SWASTA										
4. Lembaga Swadana Dev. • Hospital • Health Center										
5. Regulatory Entity (BUMD)										
6. Other Health Care Provider Input										
7. Consumer										

\*Standards of Care is one attribute of Quality Assurance. See section IV.B.4.

collect funds to pay for a specific package of services provided by a given set of providers; d) health care providers, both public and private, and those which are Swadana Units as well as those which are not; e) regulatory bodies, including BUMDs; and, f) the consuming public.

In Figure 3, the horizontal axis provides a set of activities or systems requiring integration. These items include: a) the policy environment, such as the economic environment, the policy and legislative environment and governmental organization and ministry jurisdiction configuration; b) technical systems, including pricing and payment systems, management information systems, quality assurance and standards of care systems, personnel training and pharmaceutical control and management systems; and, c) regulatory systems, such as benefits package monitoring, cross-subsidization systems from one managed-care financier to another based on relative risk, and licensing of providers and payers.

Within the matrix of Figure 3, a number of very detailed integrative functions appears. As has been discussed previously, it is clear that the HSF project has contributed significantly to the national objectives of JPKM and Unit Swadana. Both activities, however, require coordination among the many involved actors. The economic reality is assumed to be given to the health sector. At this point in time, it is unclear how government ministerial coordination efforts has integrated all of the health system's players, nor whether the sector actors know the extent to which each ministry has any jurisdiction over the restructuring or refinancing of the sector. Clearly much remains to be accomplished in this area. Finally, as has been reviewed in section IV.B above, regulatory systems development has yet to be undertaken.

Within the various technical systems development area, work has been ongoing on quality assurance systems with implications for all parties involved. There has also been important work accomplished across all areas of personnel or consumer training. Further, in the pharmaceutical systems development area, some useful work and studies have helped to improve the likelihood that government facilities may implement the recommendations made. For other actors, however, pharmaceutical efficiencies have yet to make significant progress. For both the pricing and MIS systems development, further work is required prior to launching these two systems.

Finally, the skills necessary for field implementation of the concept of JPKM and related policy changes in hospitals and pharmaceuticals may differ from those which are necessary for the development of policy documents and related policy pronouncements of the GOI, and building block conceptualization and development. The skill needs for the "learning-by-doing" phase implies a greater experiential base from which to provide "hands-on" assistance than is required during the conceptual development of the policy focus. Thus, the evaluation team is of the opinion that the skill mix of the technical assistance contractor be reviewed in light of this criterion.

## **F. PROJECT BUDGETING**

The team recognizes that it is outside its scope of work to fully analyze the budget and all related contracts involved in its formulation. The project has had a reputation for being a rapid disbursing of funds during the first three years of project activity. At the time of the evaluation, the level of project funds remaining for use without additional funds being authorized by USAID was about one-third of the total fifteen million dollars originally available for the project. The Internal Midterm Evaluation conducted by the technical assistance contractor, ISTI, on behalf of the MOH, has a rather detailed section of its report. Additional analysis of the use of project funds and the pace of expenditure is incorporated into the specific project component assessments contained in Annexes D.1 - D.4. All of these sources, in addition to the recommendations regarding project focus, require careful review by USAID and the GOI prior to decisions about further funding. The evaluation team would urge all parties involved in the reformulation of workplans and implementation tasks to engage in a budgeting exercise as soon as possible after agreeing on what the remaining life of the project's goals and purpose may be. The team has a clear view on this point which has been stated above; that is, to implement an integrated field test of the JPKM concept. Budgetary levels and required activities would be defined in light of this goal.

## **G. A.I.D. CONTRACTING ISSUES**

It is possible that the initial project management configuration may have been very useful for quickly beginning project activity. However, after the insights derived from the administrative and managerial events of the last year, the team understands that there may be several improved options for USAID and the GOI to follow for the remaining years of project implementation.

One possible option for consideration is for USAID to continue to contract with the U.S.-based contractor, ISTI, only for expatriate personnel, and, where necessary, on a subcontracting basis. All other project funds would flow through the pre-financing process established by BAPPENAS for the procurement of local personnel and other project items and costs (see the discussion of this matter above). These funds would then be allocated into two funds for project implementation following the normal procedures of the GOI. This option may streamline a number of troublesome issues resulting from the prior administrative arrangements. While the team has not had enough time to study all of the pros and cons of this contracting mechanism, on the face of it, it has some attractive features.

There has been nearly one full year of the project's life during which there has been so much administrative strife and managerial problems. This period has not only been frustrating to the project implementation staff, but also that it has materially slowed the technical developments of the project in each project

component regarding the building blocks necessary for field site implementation. In order for the project to have as much technical expertise available to field test and develop the remaining building block developments required to sustain the project's many achievements, it will be important to be able to "reclaim" as many as possible of the lost professional person months for the technical implementation of the project. It is our understanding that about four technical person years have been lost. This time, in our view, in addition to that which is presently left in the ISTI contract, would most likely enable this project to fully complete its intended work.

## VI. RECOMMENDATIONS

### A. TECHNICAL RECOMMENDATIONS

#### 1. **Soundness of JPKM as a Strategic Approach to Achieve Restructuring and Refinancing of the Health Care Sector: Now a Full Empirical Test is Warranted**

The evaluation team finds the JPKM concept sound as a strategic approach for the achievement of restructuring and refinancing the health sector within the national policy guidelines of decentralization and privatization. The implementation of this concept, with an appropriate regulatory mechanism in place and in conjunction with implementing the new policies of Unit Swadana and pharmaceutical efficiencies, has the potential to realize significant improvements in the delivery of higher quality health care as efficiently and equitably as possible, given the full range of interests among various segments of the people in Indonesia. The team also notes the technical progress which has been made via the project in shaping the policy context of the health sector to one amenable for restructuring and refinancing itself. It also notes the project's technical progress toward the design of important "building blocks" for use in implementing these policies. **It strongly recommends that GOI and USAID now use the remaining LOP to conduct an empirical test of the concept within the realities of economic and social life of at least one region of the country where the political will exists.**

#### 2. **Restate the Project Goal and Purpose in a PROAG Amendment**

In order for such an empirical test to be well focused, it is essential that the project goal and purpose be restated and the project agreement between the governments of the United States of America and Indonesia be amended as suggested in section III of this report. **The team recommends that a PROAG amendment restating the project goal and purpose to reflect the new purpose of restructuring and refinancing the health sector be drafted and incorporated into the original project agreement.**

#### 3. **Focus Project into an Integrated Field Test of JPKM**

Based on the analysis throughout the report and especially for the reasons stated in section V under project integration, the evaluation team finds that the time has come where the project's resources must become focused on field testing an integrated model of the JPKM, Unit Swadana and pharmaceutical efficiencies which have been designed but not yet truly integrated. **Thus, we strongly encourage a fully-integrated field test of the "learning-by-doing" phase of project activity.** (See Figure 3 which embodies our thinking to date regarding the degree and levels of integration necessary for an integrated field test to be implemented and sustained. See also Figure 2 to obtain a conceptual perspective of the type of integration we envision.) The team is aware that such a refocused project can take additional time to fully

prepare; however, considerable effort has already been addressing this problem from the perspective of the technical implementation staff during the last six to nine months, such that the additional time required to complete the work would not be great and the refocusing would not only be very fruitful to all involved, but also enhancing the potential for restructuring the health sector as desired, throughout the life of the project.

#### **4. Building Block Development Recommendations**

There are important building block developments which have been initiated recently and for which contracts may have been signed which support an integrated focus throughout the remaining life of the project. It is possible that the four project components have not been as coordinated as would be preferred to establish this integrated focus and that some overlapping work may have been conducted by more than one component of the project. **In such instances, the team recommends that support be extended to the further development of these supporting institutional or managerial tools for use in an evolving field test situation, and that a determination be made in full collaboration by the project components of which component will: a) take the lead in developing an integrated scope of work, and b) be responsible for contract monitoring of that activity, prior to initiating any further project activities.**

##### **a. JPKM**

A full assessment of the social financing component is included in Annex D.1 and the findings are incorporated into sections IV and V above. The evaluation team has summarized the salient points below:

- i) state policy regarding the national health system provides a strong legal base for the further development of the JPKM program based on DUKM/JPKM principles;
- ii) while not complete, the nationwide health infrastructure network is adequate for initiating JPKM program development;
- iii) the coordination and regulation of existing JPKM schemes have not yet been realized because the regulatory bodies at central and local levels have not yet become operational;
- iv) health provider and consumer understanding about JPKM have been developing, but large segments of both constituencies are not yet fully informed;

- v) it appears that emerging JPKM programs are operating without adequate information and typically lack organizational and managerial professional skills; and,
- vi) the Ministry of Health must resolve an organizational and jurisdictional issue of which structural component in the MOH will lead future development of the JPKM program.

**All supporting building blocks for the implementation of an integrated JPKM program must be supported by the HSF project, including: a) the legal basis of JPKM, b) regulatory system and procedures, c) management training for all JPKM providers, d) operational MIS, e) quality assurance systems, f) an operational monitoring and evaluation program, and g) the institutional support required by all directorates and other components of the MOH.**

Regarding the building block of training, the team acknowledges: a) the importance of personnel training, particularly in building the capacity of management at all levels of the health system; b) that training must be a coordinated team building exercise; and, c) that it must support team leadership development. Further, the team is aware that the latter two attributes of training fit directly into a "learning-by-doing" implementation modality. The team is concerned, however, about the social financing component's proposed program of initiating a major "social marketing" activity to all relevant actors in the health sector, including providers, government officials, private financiers, and consumers without a fully operational integrated field test of the concept in an Indonesian setting outside Jakarta. **Thus, the team views a large social marketing program without first implementing the operational field test as putting the "cart before the horse" with respect to the short-run use of scarce resources.**

#### **b. Hospitals**

The team notes the following findings regarding the policy of Unit Swadana of government hospitals:

- i) The hospital diagnosis and problem analysis phase has been completed and intervention packages and training modules are being prepared to consistently implement the Unit Swadana policy;
- ii) The hospital component implementation has not been inordinately delayed, due to the recent administrative and communication problems between USAID, ISTI and MOH; and,
- iii) The hospital component has generated outputs beyond those envisioned in the Project Paper, most notable being the background

work required for the enactment and implementation of the policy of Unit Swadana.

However, the hospital component of the project must be integrated with the other components so that duplication in planning, programming and implementing can be avoided and improved project efficiency can occur. Further, technical assistance from local and expatriate experts should be purely technical, especially now that the project has advanced to an intervention stage. The consultants should be continuously "in the field" working together on a day-to-day basis with the people from those hospitals undergoing "swadanaization."

**c. Pharmaceuticals**

The importance of this component has been recorded in earlier sections of the report and in Annex D.3, and the team's findings can be summarized as follows:

- i) The pharmaceutical component has conducted a wide range of assessment designed to have a favorable economic and financial impact on the way drugs are ordered, managed, prescribed, and used within health care delivery;
- ii) The information, techniques and strategies emanating from this work are available for implementing in a generic manner;
- iii) The national health and drug policy-related accomplishments of the component have been strong;
- iv) The future progress in some of the areas selected by the MOH for breakthroughs requires a horizontal view of the provision of pharmaceuticals as a building block of health care delivery in addition to operating as a vertical system;
- v) There is some ambiguity about the life of the pharmaceutical component as compared to the life of the project; and,
- vi) The divergence of project activity into four separate components sends a fractional message.

The team has the following recommendations regarding improvements in pharmaceutical efficiency.

- i) **Social Financing:** obtain an integrated understanding of the factors associated with the cost of drugs and structuring of a drug component in the benefits package.

- ii) **Hospitals: articulate the full role of pharmaceutical service within the hospital by expanding on YANMED SK, and articulate the elements of process and desired outcomes related to the use of drugs within the quality-of-care package being structured.**
- iii) **Continue work on improving pharmaceutical efficiency building blocks over the life of the project.**
- iv) **Reduce the conceptual ambiguity now present by agreement on basic definitions with regard to the terms drugs, pharmaceuticals, medicines, pharmaceutical services, pharmacy and drugs use process. To this end, a glossary is suggested. (See Annex D.3.)**
- v) **Prepare a series of guidance documents and manuals which translate all the information gleaned from all the focus assessments. Produce these manuals for POM use and distribute as widely as possible.**
- vi) **Work with POM to provide ministry coordination of efforts related to pharmaceuticals but give significantly increased and focused attention to strengthening JPKM-managed care and Unit Swadana progress in Indonesia.**
- vii) **Join with other aspects of the project in structuring a district-based network for the field test within the JPKM and Unit Swadana framework. Give priority to the technical areas of drug pricing, the role of drug ordering, managing, prescribing, and use within the quality assurance process, and the training of manpower to support these priorities.**
- viii) **Initiate a transition phase over the next year preparing for full implementation of the results achieved from the focused assessments thus far.**

**d. HE/PAU-AKEK**

The importance of health policy and health economics research to achieve health sector restructuring and refinancing is recognized. The effort by AKEK to initiate these functions has not gone unnoticed and unappreciated. It is known that the role and function of AKEK is unclear within the MOH, with questions raised about its present location within the MOH in the Planning Unit of SEC/GEN, and, discussions have occurred regarding the possibility of its relocation. AKEK's role has also been unclear to the project since it has been a part of an integrated HSF project in conjunction with its role as serving a larger health policy analysis function within the Ministry. Finally, the team has concluded that AKEK has been given at least

three important functions to perform, as well as recognizing at least one additional role which it might usefully serve for the GOI.

**Function I:**

Serve an evaluation role of field test site(s) of health sector restructuring and refinancing implemented by other project components. Possible examples include:

- Bali baseline and follow-on surveys; and,
- other baseline and follow-on surveys in other potential test site location(s).

**Function II:**

Provide quick policy analyses addressing the implications of regulations or policies proposed or evaluated in other sectors which may influence the MOH restructuring and refinancing policy program of JPKM, Unit Swadana and pharmaceutical efficiencies.

**Function III:**

Update and maintain the existing health sector use, resource, and cost/expenditure data bases and ensure the expertise necessary to extend them (A National Center for Health Statistics function).

**Additional Function/Role:**

Provide policy makers with information about the larger economic and social environment in which the health sector operates and which is undergoing rapid change due to decentralization and other government policies.

Given the above findings, the team has the following recommendations regarding HE/PAU-AKEK and the locational homes of the four identified functions.

**Function I - The baseline and follow-up evaluation research function:**

**The team considers that it would be best to contract it out to avoid conflict of interest regarding the results of the evaluation.**

Possibilities include: (a) University of Indonesia faculty, (b) local (for example, University of Indonesia faculty) research firms, (c) international expertise, or (d) a combination of the above. **The team recommends the last option, that is, a combination of local and international expertise.**

## Function II - Policy analysis:

**This activity needs to be directly attached to a unit of GOI overseeing the implementation of the restructuring and refinancing of the health sector. It may be located in the MOH, directly under the Minister, or in a separate organizational entity reporting to the line ministries with jurisdiction over health sector restructuring and refinancing, including at least the ministries of health, finance, planning (BAPPENAS), interior, manpower, as well as the Minister of Administrative Reform, related parastatals, that is, PHB and PKTK, and representatives from private providers via their various Associations, for example, IDI, etc. The team recommends the latter location, that is, in a separate organizational entity reporting to a multi-ministerial committee. (This recommendation is consistent with the recommendations regarding prefinancing and project transition management.)**

## Function III - Health economics data base development, management, and analysis:

**This function would be best located in an entity of the MOH involved with research.**

**Finally, the team also recommends that a multi-ministerial unit be established to address a number of health development policy issues such as environmental or demographic issues, and the ramifications of other proposed policy changes for the economy as a whole, for example, technology development, foreign private involvement in the sector, capital and banking policy, insurance industry reform, personnel development, pharmaceutical industry reform, etc.**

### 5. Broaden the Concept of Unit Swadana

**The team recommends that the concept of Unit Swadana be extended at least in the field-test site to the set of non-hospital facilities administered by the government so that a fully integrated test of the concepts of JPKM can be included in the test.**

### 6. Private Sector

**The importance of private-sector initiatives assisted and implemented via this project in the health sector is recognized. Further, it is noted that these initiatives have generally adhered to the GOI's policy of decentralization and privatization promulgated in 1988. The project has clearly facilitated in the leveling of the health sector playing field for private actors. The detailed observations made by the evaluation team regarding the importance of and issues involved in enhancing the role of the private sector in restructuring and refinancing the health sector are**

included in section V.D of this report. Thus, the team's recommendation regarding the role of the private sector is stated here without the supporting commentary and observations.

While the team views this assistance to the private sector as important, the team takes the position that the primary responsibility of this project remains in implementing a field test of a fully-integrated JPKM program at the regional level where all actors, private and public, are fully involved. Thus, we see the predominant focus of resources and effort to be focused on this endeavor.

## **7. Project Budgeting**

The team recognizes that it is outside its scope of work to fully analyze the budget and all related contracts involved in its formulation. As was indicated in section V of the report, project resource needs have been addressed in the Internal Evaluation Report by ISTI and the MOH, and other expenditure analyses have been incorporated in Annexes D.1 - D.4. However, we would urge all parties involved in the reformulation of workplans and implementation tasks to engage in a budgeting exercise as soon as possible after agreeing on what the remaining life of the project's goals and purpose may be. The team has a clear view on this point which has been stated above, that is, to implement an integrated field test of the JPKM concept and supporting restructuring policy changes such as Unit Swadana and pharmaceutical efficiencies. Budgetary levels and required activities would be defined in light of this goal.

In summary, the evaluation team's recommendation regarding budgetary support is that the project should be continued and the budget recalculated in accordance with the amended purpose and expected output.

## **8. Managing Project Transition**

The team recognizes that the proposed shift of project focus to a field site integration requires transition and management of that transition in order to ensure the success of the test. This shift from intervention design to installation of an integrated intervention must be made in an orderly, well-thought out manner in which the MOH and other ministries of the government negotiate an agreement regarding the characterization and features of the JPKM model and its application in the field.

In order to implement a project transition, staff work is needed to conceptualize and coordinate the building blocks of the model. Table 2, "Conceptual Basis for Social Finance 1991 - 1992 Strategic Plan," provides an excellent example of the de-

**Table 2**  
**CONCEPTUAL BASIS FOR SOCIAL FINANCE 1991-92 STRATEGIC PLAN**  
 Produced by James Marzolf, HSF Project Staff, 1991

Level	Legal-Regulatory Framework	Regulatory Capability	Market Demand	Technical Components	Manpower
I. National/Central					
PIO/SF					
Management Manuals Training Modules Standards of Care Training Needs Study QA Training SIP Training TPA II SIP National SIP Provincial BUMD Structure JPKM Product Devel. Cross-Subsidy System Consultants Central Soc. Marketing	Manuals  SOC    Cross-Subsidy System Regulatory Consultant	Manuals  SOC  QA Training SIP Training  SIP National SIP Provincial BUMD Structure  Cross-Subsidy System Regulatory Consultant SIM Consultant STT		Management Manuals Training Modules Standards of Care    JPKM Product Devel.  Consultants OD, QA MIS & Underwriting	Management Manuals Training Modules Standards of Care Training Needs Study QA Training SIP Training TPA II   Consultant QA
STT TPA Team JPKM Steering Committee PHB	JPKM Steering Committee	JPKM Steering Committee TPA Team	Marketing Consult. Central Social Marketing	STT TPA Team	STT TPA Team
PHB MIS Devel. PHB Training PHB Product Devel.				PHB MIS Devel. PHB Product Devel. Management Manuals Training Modules Standards of Care	QA Training PHB Training Management Manuals Training Modules Standards of Care
PKTK			Marketing Module		
PKTK MIS Devel. PKTK Training PKTK Product Devel.				PKTK MIS Devel. PKTK Product Devel. Management Manuals Training Modules Standards of Care	PKTK Training Management: Manuals Training Modules Standards of Care QA Training
Dana Sehat			Marketing Module		

Table 2 (continued)  
 CONCEPTUAL BASIS FOR SOCIAL FINANCE 1991-92 STRATEGIC PLAN

Level	Legal-Regulatory Framework	Regulatory Capability	Market Demand	Technical Components	Manpower
DS Management Sys. Dev. DS Marketing Sys. Dev. SWASTA			DS Marketing System Marketing Module	DS Management System Management Manuals Training Modules Standards of Care	Management Manuals Training Modules Standards of Care QA Training
Promotion/Domestic Promotion/International Technical Assistance Perundang-Undangan			Promotion Domestic International Marketing Module	Technical Assistance TPA Team Management Manuals Training Modules Standards of Care	Management Manuals Training Modules Standards of Care QA Training
PP Studi Perbandingan Permenkes Kerangka Global SKB Lintas Sektoral Social Marketing PP	PP Studi Perbandingan Permenkes Kerangka Global SKB Lintas Sektoral	PP Studi Perbandingan Permenkes Kerangka Global SKB Lintas Sektoral Social Marketing PP			
II. Advanced Provincial Development					
Bali					
Regulatory Training Provider Training Social Marketing Implementation Regulation Evaluation NTT	All Legislative Activities Implementation JPKM Steering Committee	Regulatory Training Implementation Regulation Evaluation BUMD Structure Cross-Subsidy System SIP Provincial Social Marketing PP	Social Marketing Marketing Module	Implementation Management Manuals Training Modules Standards of Care JPKM Product Devel. TPA Team PKTK & SWASTA DS Management System	Provider Training Management Manuals Training Modules Standards of Care JPKM Product Devel. TPA Team PKTK & SWASTA DS Management System
Regulatory Training Social Marketing Regulation	All Legislative Activities Implementation JPKM Steering Committee	Regulatory Training Regulation BUMD Structure Cross-Subsidy System SIP Training SIP Provincial Social Marketing PP	Social Marketing Marketing Module DS Marketing System	Management Manuals Training Modules Standards of Care JPKM Product Devel. TPA Team Programs DS, PHB, PKTK & SWASTA DS Management System	Management Manuals Training Modules Standards of Care JPKM Product Devel. TPA Team Programs DS, PHB, PKTK & SWASTA DS Management System

Table 2 (continued)  
 CONCEPTUAL BASIS FOR SOCIAL FINANCE 1991-92 STRATEGIC PLAN

Level	Legal-Regulatory Framework	Regulatory Capability	Market Demand	Technical Components	Manpower
III. Intermediate Provincial Development DKI					
Programs DS, PHB, PKTK & SWASTA  Extension of PUSAT Activities  JATIM, JABAR, JATENG & YOGYA	All legislative Activities JPKM Steering Committee	Regulatory Training Regulation BUMD Structure Cross-Subsidy System SIP Training SIP Provincial Social Marketing PP	Marketing Module  DS Marketing System  Central Soc. Marketing SWASTA Promotional Activities	Programs DS, PHB, PKTK & SWASTA Extension of PUSAT Activities DS Management System Management Manuals Training Modules Standards of Care JPKM Product Devel. TPA Team SWASTA Promotional SWASTA TA	Programs DS, PHB, PKTK & SWASTA Extension of PUSAT Activities DS Management System Management Manuals Training Modules Standards of Care JPKM Product Devel. TPA Team SWASTA TA
Programs DS, PHB, PKTK & SWASTA  Extension of PUSAT Activities  SULUT, SULSEL, SUMBAR	All Legislative Activities JPKM Steering Committee	BUMD Structure Cross-Subsidy System SIP Training SIP Provincial Social Marketing PP	Marketing Module  DS Marketing System	Programs DS, PHB, PKTK & SWASTA Extension of PUSAT Activities DS Management System Management Manuals Training Modules Standards of Care JPKM Product Devel. TPA Team	Programs DS, PHB, PKTK & SWASTA Extension of PUSAT Activities DS Management System Management Manuals Training Modules Standards of Care JPKM Product Devel. TPA Team
Programs DS, PHB, PKTK & SWASTA  Extension of PUSAT Activities	All Legislative Activities JPKM Steering committee	BUMD Structure Cross-Subsidy System SIP Training SIP Provincial Social Marketing PP	Marketing Module  DS Marketing System	Programs DS, PHB, PKTK & SWASTA Extension of PUSAT Activities DS Management System Management Manuals Training Modules Standards of Care JPKM Product Devel. TPA Team	Programs DS, PHB, PKTK & SWASTA Extension of PUSAT Activities DS Management System Management Manuals Training Modules Standards of Care JPKM Product Devel. TPA Team

**Table 2 (continued)**  
**CONCEPTUAL BASIS FOR SOCIAL FINANCE 1991-92 STRATEGIC PLAN**

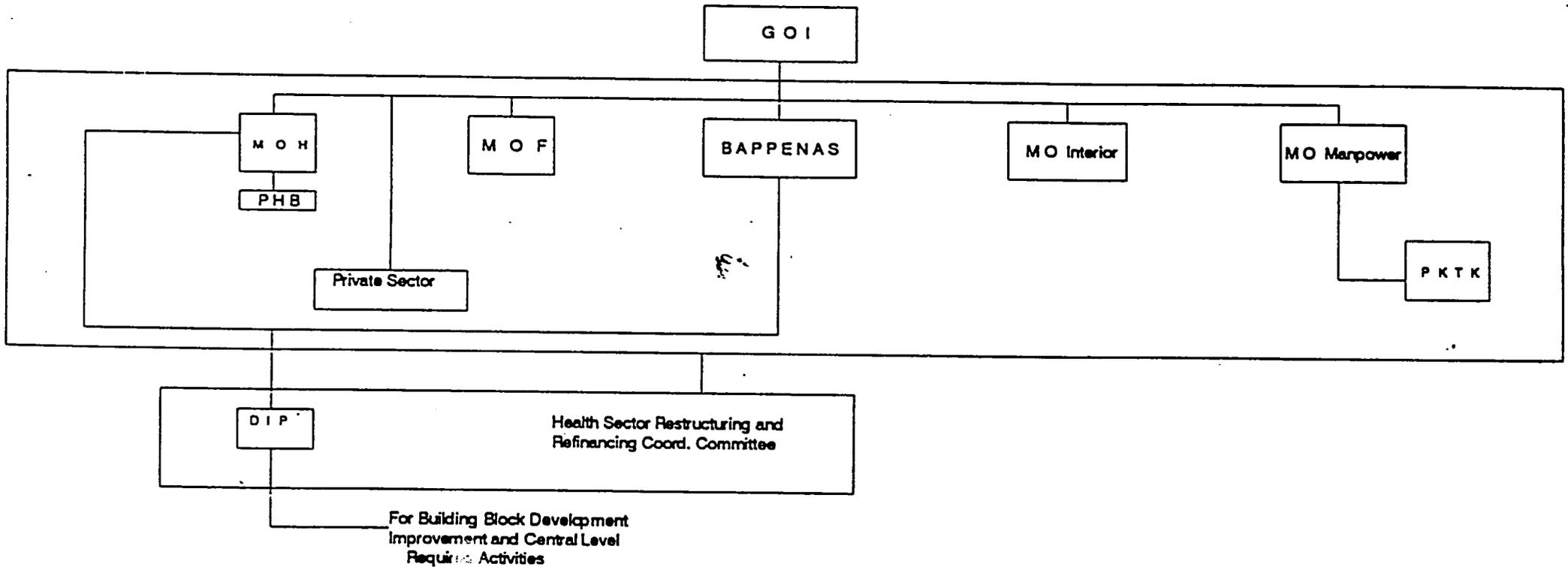
<b>Level</b>	<b>Legal-Regulatory Framework</b>	<b>Regulatory Capability</b>	<b>Market Demand</b>	<b>Technical Components</b>	<b>Manpower</b>
<b>IV. Primary Stage</b> <b>Provincial Development</b>  <b>SUMUT, SUMSEL,</b> <b>LAMPUNG</b>	<b>All Legislative Activities</b> <b>JPKM Steering Committee</b> <b>Legislation</b>	<b>BUMD Structure</b> <b>Cross-Subsidy System</b> <b>SIP Training</b> <b>SIP Provincial</b> <b>PP Social Marketing</b>	<b>Marketing Module</b> <b>DS Marketing System</b>  <b>Provincial Social</b> <b>Marketing</b>	<b>Programs DS, PHB,</b> <b>PKTK &amp; SWASTA</b> <b>Extension of PUSAT</b> <b>Activities</b> <b>DS Management System</b> <b>Management Manuals</b> <b>Training Modules</b> <b>Standards of Care</b> <b>JPKM Product Devel.</b> <b>TPA Team</b>	<b>Programs DS, PHB,</b> <b>PKTK &amp; SWASTA</b> <b>Extension of PUSAT</b> <b>Activities</b> <b>DS Management System</b> <b>Management Manuals</b> <b>Training Modules</b> <b>Standards of Care</b> <b>JPKM Product Devel.</b> <b>TPA Team</b>
<b>Provincial Social</b> <b>Marketing</b> <b>PP Social Marketing</b> <b>Legislation</b>					

tails to which attention must be given in order to prepare for implementation of the model. However, it is recognized that if the project is to continue to have its strategic importance to the Ministry of Health, the transition period should not be too long and drawn out. Accordingly, the team urges strengthening the Ministry of Health's guidance of the project's transition management and offers the following points in this regard.

- a. **A multi-ministerial committee should be established to provide the policy guidance and more complete oversight required for this phase of the project. (Figure 4 is provided as one possible configuration of such a committee.)**
- b. **The multi-ministerial committee should be functionally supported by a secretariat.**
- c. **The Ministry of Health, in concert with the multi-ministerial committee, should consider naming a chief of the secretariat and define who will constitute the secretariat membership.**
- d. **This secretariat could be charged with the development of the following products within the suggested transition timeframe:**
  - i.) **A DEPKES strategic management implementation plan would be prepared in accordance with the agreed-upon JPKM model as guided by the multi-sectoral committee. The plan should indicate site preferences and cover the full transition period which should last for no longer than six months and should contain the appropriate "milestones" for self-assessment of progress.**
  - ii.) **A detailed implementation plan for the content and conduct of the needed baseline survey in the site(s) selected would be developed.**
  - iii.) **The elements of the model would be documented which could be widely disseminated within the Ministries of the multi-ministerial committee and used by these members for their internal discussion and to generate support for JPKM.**

It should be noted that the project implementation contractor has used as one of its ten criteria for prioritization of activities for the August 1991 - March 1992, workplan the ". . . possibilities for packing of activities with other strategic interventions in order to maximize impact and integration with other components."

**Figure 4**  
**PROPOSED POTENTIAL CONFIGURATION FOR A MULTI-MINISTERIAL**  
**HEALTH SECTOR RESTRUCTURING AND**  
**REFINANCING COORDINATING COMMITTEE (HSRRCC)**



- 1) Want MOH to provide the secretariat support for the HSRCC (at least initially)
- 2) Want MOH to begin with the management of DIP with approval from HSRCC

Implications for MOH

- 1) HSRCC the mechanism to institutionalize and legitimize the concept of JPKM
- 2) The management of money from DIP and secretariat function by MOH enables MOH to continue to lead in the evolution of the innovative JPKM and related concept
- 3) Timing is auspicious from the MOH committee working on a reorganization analysis.

However, the team recommendation goes far beyond this criterion and the need to alter the currently approved workplan is urgent in light of the basic recommendation for the structuring of a field test of an integrated model of the JPKM. While this exercise would require some additional time, the team is of the view that the long-term benefits warrant this type of investment at this time in the life of the project.

## **B. MANAGERIAL AND ADMINISTRATIVE RECOMMENDATIONS**

### **1. Communication Between Parties: ISTI, USAID, and MOH/GOI**

The team acknowledges that the ISTI technical assistance team has regularly communicated with the MOH and USAID via the quarterly report mechanism and that there were other times when the contractor, MOH and USAID discussed technical progress of the project via budget and workplan reviews. However, the reporting process must be strengthened to ensure a continued focused assessment of project progress regarding performance towards revised project goals and objectives. The team believes that three steps must be undertaken to strengthen communications between the parties.

- a. **The technical implementation team must develop and use self-assessment tools and methods every three months during the remaining LOP.**
- b. **It would be important for a small independent team of Indonesians and other international experts familiar with the technical aspects of the project to meet periodically with the technical implementation team to review their own self-assessment findings and discuss them in light of the revised project goal and objectives.**
- c. **It is USAID's responsibility to strengthen its technical capacity to regularly monitor progress toward the revised project goals and provide additional guidance where necessary on a more regular and timely basis. If the Mission does not intend to strengthen its own staff capability in this area, the team recommends that A.I.D. contract on an independent basis with an external person to review project progress on a regular basis.**

### **2. Pre-financing Budgets**

The team recognizes the importance of getting this project on a regular procedural track with the GOI. Many problems in the past would have been eased if it had been implemented in accordance with regular GOI clearance procedures. The details of the team's observations are presented in section V of this report. Thus, our recommendations follow.

**First, it is important to establish the pre-financing mechanisms for the processing of external assistance project funds. These pre-financing mechanisms are under the jurisdiction of BAPPENAS and the relevant operating ministry, which in this instance is MOH.**

**Second, the team is aware that discussions have been held regarding the configuration and location of pre-financing budgets within the MOH. While we would not want to alter formally approved arrangements between BAPPENAS, MOH and USAID, we would like the parties involved to consider the following points in establishing these budgets.**

- a. First, if the most important recommendation the evaluation team has made regarding implementation is to have any real opportunity of success, it is a fundamental principle that money must back up recommended action. Thus, in order to implement an integrated field test of the concept of JPKM in a region in Indonesia, we think it would be very wise for that regional authority in charge of implementation to have an important share of any pre-financing funding which may be available for further project implementation. The team would also like to point out that one criteria for determining where the regional field test may be conducted is a local government commitment in the form of co-financing funds to further assist in establishing the necessary political commitment necessary for sustainable implementation of the proposition.**
- b. Second, the team notes that the policies underlying the restructuring and refinancing of the health sector are decentralization and privatization, and since other entities of the GOI also have, as a consequence of their jurisdiction, a say in financing health care at present, it recommends that the MOH and other entities with such jurisdiction meet together to further establish the procedures by which the sector might best be reconfigured and refinanced.**
- c. Third, the team recommends that the remaining pre-financing funds be allocated through a multisectoral ministerial committee charged with policy oversight in the restructuring and refinancing of the health sector, with the MOH administering the funds on the advice and recommendation of the committee.**

### **3. Project Staffing**

**There are two issues about project staffing about which the team has clear views. These recommendations emanate from the basic recommendation of field site integration. First, the team has concluded that in order for an integrated field test**

of JPKM to have its best opportunity for success, **project implementation technical assistance staffing must reside in the locality of the test.** We acknowledge that technical project staff have been actively involved in the development and preparation of the many building blocks necessary for the implementation of an integrated field trial of JPKM, and if relocated in another site, these developments may suffer some. However, we think that the project focus should be fundamentally reoriented to the field setting so that policy makers may quickly learn what the long-term potential of an implemented JPKM concept may be.

**Second, the skills necessary for field implementation of the concept of JPKM and related policy changes in hospitals and pharmaceuticals will differ from those which are necessary for the development of policy documents and related policy pronouncements of the GOI, and building block conceptualization and development.** We see the skill needs for the learning-by-doing phase as being more experiential than conceptual, although it is clear that such skills will also be necessary in the practical implementation reality of the field.

**Thus, the evaluation team is of the opinion that the skill mix of the future technical assistance team will differ from the presently configured one. We would urge the parties involved in this project to review the present technical staff with these considerations in mind.**

#### **4. A.I.D. Contracting Issues**

The team is aware that the present project management configuration may have been very useful for the initial implementation of the project. However, after the insights derived from the administrative and managerial events of the last year, the team has two recommendations for USAID and the GOI to follow for the future years of project implementation. These recommendations are discussed more fully in section V of this report.

**First, USAID should continue to contract with the U.S.-based contractor, ISTI, for expatriate personnel only, and where necessary, on a subcontracting basis. All other project funds would flow through the pre-financing process established by BAPPENAS for the procurement of local personnel and other project items and costs. These funds would then be allocated into two funds for project implementation following the normal procedures of the GOI. This option may streamline a number of troublesome issues resulting from the prior administrative arrangements.**

**Second, the evaluation team urges USAID and the GOI/MOH to consider that the period during which there has been so much administrative strife and managerial problems has not only been frustrating to them but also to the project implementation staff. It has also materially slowed the technical developments of the project in each component. In order for the project to have as much technical**

**expertise available for furthering the policy achievements and technical activities initiated during the first phase of the project, it will be necessary for the project to be able to "reclaim" the lost person months back into the technical implementation plan for the project. The team understands that about four technical person years have been lost. Thus, the team recommends to the project financier, USAID, to provide for an additional four person years of time into the remaining four years of the project's life, in addition to that which is presently left in the ISTI contract.**

**ANNEX A**  
**METHODOLOGY**

## **METHODOLOGY**

### **1. Approach**

This evaluation seeks to respond to the scope of work with emphasis on measuring the degree of progress and the needed recommendations to achieve project objectives within the remaining life of the project. The team has concentrated on the technical aspects of the project components in relationship to the achievement of project milestones and desired outcomes, with secondary discussion of management, since those were addressed in an earlier evaluation conducted in May and June 1991. In addition, a thorough review of project funds was not conducted as part of this evaluation as this was not incorporated into the scope of work and an audit of the project was underway during this same period. However, as has become very clear to this team, it has been necessary to assess many managerial, contractual and administrative issues to make practical and feasible technical recommendations for the achievement of project objectives.

No attempt has been made to provide an in-depth quantitative and/or qualitative review of specific activities. Within the timeframe allotted for the review, it is intended to be a broad review based on the stated goals of USAID and the MOH for health care services and delivery in Indonesia. Recommendations are made within the constraints of time available to accomplish an expansive scope of work.

### **2. Methods**

The team has used three principal sources of information from which technical progress of the project could be assessed and recommendations could be formulated. These sources include: (a) a review of documents related to the project; (b) interviews with knowledgeable people affiliated with the government of Indonesia and especially the Ministry of Health, the technical assistance contractor, ISTI, and USAID; and, (c) site visits to locations in Indonesia where project activities have occurred.

Examples of the sources of information made available to the team include:

#### **(a) Documents**

- USAID PROAG,
- MOH directives, policies, initiatives, and budget documents,
- Project paper,
- ISTI contract,
- All subcontracts,
- Project implementation letters,
- Workplans of the entire project, and by component,

- Quarterly reports,
- Consultant reports,
- Project publications,
- Key correspondence,
- Reviews,
- Issue discussion documents, and
- Reports on health financing from other donors.

The full set of documents reviewed is contained in the bibliography (Annex C).

**(b) Interviews**

The evaluation team has been able to interview many senior and very knowledgeable persons within Indonesia and Washington, D.C. regarding the activities and performance of this project. A full list of persons interviewed is contained in Annex B.

**(c) Site Visits**

Finally, one or more members of the team were able to make site visits to the following locations in Indonesia where project activities have occurred or where assistance has been provided. These visits include trips to the region near Surabaya, Yogyakarta and Bali provinces as well as to two-private sector sites in Jakarta, P.T. Bintang, and St. Carolus. The specific site visits outside Jakarta occurred at the following locations:

- Dinas Kesehatan - Pasurwan,
- Puskesmas Gondangwetan,
- Tegalyoso Hospital, Klaten,
- Kulon Progo - PHB pilot Puskesmas,
- Bali - Puskesmas Kerambitan, and
- Kerambitan Village Lurah.

These particular visits were very helpful in term of assessing field progress toward field implementation of project concept and building development.

**(d) Focus of Interview Questions**

Finally, during the conduct of interviews with officials here in Jakarta, the team focused its attention on addressing the following questions:

- a. Are the goals and objectives of the project in line with the national health department goals and objectives?

- b. What has the project achieved technically?
- c. Are project milestones still appropriate, given project accomplishments and the changing project context?
- d. What is the effectiveness of the technical assistance contribution to the project in developing social financing schemes, implementing the policy of Unit Swadana into government hospitals, improving pharmaceutical efficiency, and in strengthening the role and function of HE/PAU?
- e. How relevant is the project in changing DEPKES priority to reduce subsidies to government health facilities?
- f. What technical and administrative problems/constraints have occurred during the implementation of the project and how were they resolved?
- g. Has the project's components' activities (Lembaga Swadana, DUKM/JPKM, and improved management and rationalization of drugs) functioned in the framework of existing policy or contributed to or fostered any change in policy?
- h. What progress has been made to launch and integrate field tests of the project components to ascertain the viability of the policies and technical building blocks pertaining to financial performance, quality of care, management information, and community mobilization?
- i. At the central level, to what extent has there been coordination across structural components of the project within the MOH in terms of integration across Directorates General and other implementing units?
- j. What is the "readiness" of project personnel to implementing an integrated field test of the concept of JPKM and related policies?
- k. How far did the project stray from appropriate administrative procedures to achieve project goals?
- l. In reality, what needs to be done to make the project work? and,
- m. What can be done with the remaining project resources and what criteria should be employed to determine areas of resource need?

In the conduct of assessing technical progress in each major project component (social financing, hospitals, pharmaceuticals, and health economic and policy assessment), members of the team asked many more detailed questions to

assess focus, performance on contracts, product quality, and how specific products were related to an overall project goal. The nature of these questions can be best understood in reviewing technical assessment annexes to the evaluation report.

To assess the full significance of the information we were receiving and assimilating daily, the team met regularly and discussed the information and its implications in terms of the scope of work. Also during the last two weeks of the evaluation, the team met on a formal basis to define the report's scope, develop common findings and discuss recommendations. In this manner, the team has been able to develop a series of recommendations which was consistent with the information we had received, and which, in our judgment, can actualize the revised purpose of this project.

**ANNEX B**  
**LIST OF PERSONS INTERVIEWED**



- |                       |          |
|-----------------------|----------|
| 5. Ascobat Gani       | LTC      |
| 6. James Jeffers      | LTC      |
| 7. Soedibjo Sardadi   | Director |
| 8. Rukmono, MD        | LTC      |
| 9. Philip Stokoe      | LTC      |
| 10. Rizali Noor       | LTC      |
| 11. R. Pratolo        | LTC      |
| 12. James Marzolf, MD | LTC      |
| 13. Jos Hudyono       | STC      |
| 14. S. U. Sembiring   | LTC      |
| 15. Widyastuti        | STC      |

IV. PERUM Husada Bhakti

- |                      |                        |
|----------------------|------------------------|
| 1. Dr. Sonya Roesma  | President Director     |
| 2. Dr. Soelastomo    | Director of Planning   |
| 3. Dr. Manan Prasodo | Director of Finance    |
| 4. Dr. Yosephin, SKM | Director of Operations |

V. Bintang General Insurance

- |                             |                           |
|-----------------------------|---------------------------|
| 1. Dr. Judiherry Justam, MM | General Manager-Marketing |
|-----------------------------|---------------------------|

VI. St. Carolus Hospital

- |                |          |
|----------------|----------|
| 1. Dr. Mariono | Director |
|----------------|----------|

VII. Provincial Officials (Bali)

1. Dr. Mahayasa Director, PHB - Bali Province
2. Dr. Kadesurya Deputy Government Social Welfare and Health
3. Dr. Soebandi Depkes Provincial Administrator/Task Force
4. Dr. Soemendra Task Force, JPKM Project
5. Government Regional Health Administrator/Task Force
6. Government Regional Administrator/Task Force
7. Task Force Member
8. Dr. Ketut Sanjana Chief, Kerambitan Health Centre
9. Staff of Kerambitan Health Centre
10. Kerambitan Village Head (Lurah)
11. Dr. Gde Darmasetiawan Lecture of University of Udayana

VIII. USAID

1. Lewis Reyd Mission Director
2. Lee Twentyman Deputy Mission Director, USAID
3. John Rogosch Director, Office of Population and Health
4. Joy Riggs-Perla Project Officer, HSF
5. Ned Greeley Office for Program and Project Support
6. Marc Stevenson Contracting Officer USAID/Contracts

- |                     |  |
|---------------------|--|
| 7. Nancy Langworthy | Office for Program and Project Support |
| 8. John Hepp        | Vice Comptroller,<br>USAID/Finance     |
| 9. Ken Farr         | Office of Population and Health        |
| 10. Dr. Ratna       | Staff, Office of Population and Health |

IX. HSF Project

- |   |                                     |
|---|-------------------------------------|
| 1. Dr. Saryana  | Chief of Finance, D.G. Medical Care |
| 2. Nihal Goonewardene   | President, ISTI                     |
| 3. Dr. Reginal Gipson   | Chief of Party, ISTI                |
| 4. Anne DeMaret   | Executive Officer, ISTI             |
| 5. Abd. Azis La Sida  | HSFP, PMU                           |
| 6. Prof. Dr. Rukmono<br>Dr. Philip Stokoe                               | Consultant                          |
| 7. Dr. Rizali Noor<br>Dr. J. Marzolf                                    | Consultant                          |
| 8. Dr. Yos Hudiono<br>Ms. Christine Leiverman<br>Dr. Widyastuti Soerojo | Consultant                          |
| 9. Dr. Ridwan Malik,<br>Dr. Ascobat Gani, and<br>Dr. J. Jeffers         | Consultant                          |

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X. World Bank

1. Rosanny Dean
2. Nicholas Prescott
3. Susan Stout
4. Sandy Liebermann

XI. Tegalyoso Hospital, Klaten

1. Dr. Sulaiman Medical Staff
2. Pharmacist

XII. Kulonprogo PHB

1. Staffs
2. Director of PHB Kulonprogo - Central Java

XIII. Pasuruan Officials

1. Dr. Masjon Surjono Chief of Regional Health Service  
Pasuruan
2. Dr. Harjanto Chief of Rehabilitation, Pasuruan
3. Dra. Suprihati Pharmacy Warehouse
4. Dr. Suharto Chief of Communicable Control,  
Food and Drug Control
5. Medical Staff of Pasuruan Medical Centre, Pasuruan

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- New Unit Swadana - Model Hospitals
- Project Design Process
- Present Process Model Design
- Present Implementation Model
- Future Project Design Process Alternatives
- Level of Funding Effort
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- The Management
- The Board of Directors
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- The Culture: The Basic Bipartite Operational System
- The Operational Formations
- Providers
- Capitation (Out-Patient)
- Profit Sharing <sup>4</sup>
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**ANNEX D.1**  
**SOCIAL FINANCING**  
**COMPONENT ASSESSMENT**

## SOCIAL FINANCING COMPONENT ASSESSMENT<sup>1</sup>

### 1. Component's Purpose and Output

According to Indonesia's Health Sector Financing Project's Project Paper (PP) (February 1988), this component of the project was to develop social financing schemes in accordance with DUKM principles of health insurance, benefits package design, service quality, and equity of access to health care.<sup>2</sup> According to the PP,

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<sup>1</sup>This annex was prepared by Dr. David W. Dunlop and Dr. L. A. Lolong.

<sup>2</sup>DUKM principles of health insurance have been summarized in the HSF Project Paper (1988) as follows:

- a. Health insurance should be encouraged in both the public and private sectors;
- b. Services provided via health insurance programs should be oriented to health maintenance and therefore include, whenever possible, preventive, promotive and curative services;
- c. Services should be provided according to need and should meet minimum standards of quality;
- d. Health insurance programs should support the GOI's national objectives in health so that they can eventually relieve the government of its burden for providing health services to the public at large;
- e. Health insurance programs should be funded on a pre-paid capitated premium basis;
- f. Health insurance should promote equitable access to health services with healthy as well as sick persons contributing toward support of the health system;
- g. Coverage of health insurance should eventually be national in scope. At some point, every person in Indonesia should have access to health services through some form of health insurance;
- h. Health insurance programs should be coordinated under the auspices of the government to guarantee standards of quality and cost; and,
- i. There should be enabling legislation which formalizes the principles of DUKM and a coordinating body which can oversee adherence to these principles (pp. 16 and 17, PP, 1988).

More recently (12/90), HSF project staff member, Dr. Rizali Noor, has summarized the above nine DUKM principles into six principles as follows:

- (i) The goal [of DUKM] is to improve the status of health and not merely the payment of health services;
- (ii) Health care provision is structured, comprehensive, of high quality and continuous;

"social financing is defined as the spreading of risk for incurring out-of-pocket costs for health services. It is generally synonymous with health insurance" (p. 11, PP, 1988). The HSF project staff, however, has more recently defined social financing in a different manner and this revised definition has guided project thinking since. The revised definition has been stated as follows:

[Social financing] . . . is a system that utilizes incentives to directly address health care problems in the most efficient, effective, and economical way possible. Social financing as promoted by the HSF Project is neither an HMO nor conventional health insurance. It does utilize some of the principles of insurance but incorporated with epidemiology, informatics, and public health within the context of a normative systems approach to society." (Dr. James Marzolf, Figure 1, May, 1989)

This activity was designed to relieve the GOI of its responsibility to provide the full financial support for the development and operating costs of the health sector by introducing another financing mechanism in the sector.

The design of the project envisioned that four specific types of health insurance schemes would be supported via this component: two public schemes and two private scheme types. The public schemes included the MOH parastatal scheme known as PHB or previously as ASKES, which was established to insure government workers for their health care, and PKTK, which is a parastatal scheme under the jurisdiction of the Ministry of Manpower for the wage-based population of the country. The two private scheme types include: a) Dana Sehat-type of village level cooperative schemes, and b) privately-managed health insurance programs operated by private insurance companies as an additional product line, groups of private providers, large industrial firms self-financing their health care requirements to their employees (and possibly their dependents), and any other organized private group.

Finally, the PP envisioned assistance be provided to the GOI to develop its capacity to coordinate the development of health insurance. This assistance would

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- (iii) Financing is based on "gotong royong" and prepayment, managed professionally using insurance principles;
  - (iv) The target population is composed of organized groups enrolled as members;
  - (v) The Managed Care Organization and the health care providers cooperate on the basis of a contractual agreement and share the financial risk; [and]
  - (vi) Health care providers are paid prospectively on a capitated, packaged or budgetary system.

be used to a) ensure the necessary legislative framework so that the GOI would be able to coordinate and influence the shape of health insurance in Indonesia, and b) monitor and evaluate health insurance plans to guarantee benefits package standards, quality of care, internal management, information and reporting standards, and according to the principles of DUKM, as defined by the Project Paper, cost standards.

In summary, the PP envisioned that this component of the project would a) work with all four types of public and private health insurance mechanisms operating in the country as of 1988 to improve their capacity to finance and provide a package of health services which adhered to the DUKM principles, and b) assist the government in developing the legal basis for such insurance mechanisms and managing the development of such mechanisms according to quality and cost standards (Table 6, pp. 52-53, PP, 1988).

## **2. A Review of the Inputs for Achieving Component Purpose**

### **A. Component Personnel**

The social financing component of the HSF project has nine full-time employees, with one full-time long-term expatriate technical consultant, Dr. James Marzolf, who has been working with the project since 1989. Three other technical consultants from Indonesia have been involved with the project for most of the period since project inception. These persons include: Dr. Rizali Noor, the former head of the PHB, which is the largest health insurance organization in Indonesia with over 14 million beneficiaries; Dr. Bastaman, MPH, health economist and former assistant financial manager of the PHB; and, Mr. R. Pratolo, a retired actuary with more than 35 years experience in the private insurance industry in Indonesia. In addition, since the beginning of the project, this component has obtained about eighteen person months of short-term technical assistance from U.S.-based individuals, for various technical assignments (see Table D.1.1 for a listing of the assistance provided under this project component). One person, Dr. Robert Shouldice, provided about seven person months of that assistance, and was primarily involved at the inception of the project in activating this component, prior to Dr. Marzolf's hiring.

This component of the project has not had a direct link to a particular directorate general in the MOH as all of the other three project components have. However, it has worked very closely with Dr. Widodo, the Minister of Health's personal advisor on social financing, who has acted as the primary liaison with the senior officials of the MOH, and has provided intellectual and strategic input to the activities of the component.

TABLE D.1.1

**SHORT-TERM TECHNICAL ASSISTANCE FOR SOCIAL FINANCING  
COMPONENT OF THE HSF PROJECT**

<b>Name of Consultant</b>	<b>Amount Paid (\$)</b>	<b>Report Number</b>	<b>Report Title</b>
1. Paul Torrens	5,802	1	Organizational Structure and Placement for Coordinating Mechanism for Social Financing/Health Insurance Program & Social Financing/Health Insurance Law
2. Robert Shouldice	15,094	2	Social Financing, Actuarial, & Capitation Studies
3. Paul Galvin	5,216	4	Perum Husada Bhakti Pilot Project Capitation
4. John Robertson	NA	5	Review of the Assessment Methodology for the PKTK Program
5. James Marzolf	6,171	7	PHB Management Information Systems Analysis and Development
6. George Goldstein	NA	10	Tour and Review of Selected U.S. Health Maintenance Organizations and Brief Overview of the Ontario, Canada Comprehensive Universal Health Care System
7. Robert Martin	8,212	11	Dana Sehat for Non-wage Based Workforce Pilot Project-DKI Design of a Dana Sehat for Kecamatan Candi Roto
8. Robert Shouldice	14,036	12	Social Financing Studies PKTK Assessment and Proposed Model
9. Elliot Wolf	2,300	20	Exit/Progress Report on Consulting Team Activities for Pttugu Mandiri Feasibility Study to Develop an HMO Product Line of Business
10. Robert Shouldice	8,107	21	Continuing Development of Health Insurance Programs in Indonesia
11. Robert Martin	7,260	26	Review of Dana Sehat Development
12. Michael Wood	5,252	32	JPKM Social Marketing Strategy
13. Robert Shouldice	1,076	NA	NA
14. Sandra Libby	3,604	34	Quality Assurance Utilization Management: Managed Health Care Systems
15. Michael Gonzalves	3,956	37	Evaluation of Selected MIS Systems of the MOII, Republic of Indonesia
16. Frank Abou-Sayf	4,808	38	Social Financing Component
<b>TOTAL</b>	<b>90,894</b>		

Given the above information, the total expatriate short and long term, and long-term Indonesian technical assistance provided by the social financing project component to the GOI's MOH, as of November 1991, has been approximately 116 person months (9 $\frac{2}{3}$  person years) of time, divided accordingly:

Expatriate LT	24 months,
Indonesian LT	74 months,
Expatriate ST	18 months, and
Indonesian ST	uncertain.

This expertise has provided technical leadership to not only assist all four types of existing health insurance entities defined above, but also has provided the expertise to contract for the assistance required to work on a number of the generic building blocks required to extend social financing activities into the future. This work includes the technical support for enacting new legislative policy framework for social financing activities according to the principles of DUKM, as modified by the policy principles of JPKM insurance and managed care.

During this first 3-year period, these technical experts have a) managed 23 local contracts (20 have been completed; see Table D.1.2 for details); b) completed 14 "benchmarks" of progress toward the envisioned component goals of assisting the 4 types of social financing entities in the country (see Table D.1.3); and c) contributed toward one of the major policy initiatives of the MOH during the fifth 5-year plan of the GOI, Replita V, 1988-1992 (refer to Table D.1.1). Finally, they have provided workplan details to show what the necessary steps are to fulfill the entire scope of work envisioned in the original Project Paper.<sup>3</sup>

## B. Component Studies

Unfortunately, it was not feasible for the team to review, in detail, the set of expatriate consultant reports prepared for this project component for content and relevance to the achievement of identifiable "benchmarks" of progress for this component. However, with respect to the social financing component, it is known that since the beginning of the project, 16 consultant assignments were financed, involving 12 separate individuals. The average consulting assignment lasted slightly longer than one month in duration and cost about \$6,500 in direct fees, excluding travel.

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<sup>3</sup>See MOH and ISTI, *Internal Midterm Evaluation* (Jakarta: MOH in collaboration with ISTI, October 21, 1991), and MOH and ISTI, *Technical Workplan and Budget for August 15, 1991 - March 31, 1992*, Final Draft (Jakarta; MOH in collaboration with ISTI, November 1, 1991).

**TABLE D.1.2**  
**AN ANALYSIS OF THE STATUS OF**  
**SOCIAL FINANCING COMPONENT CONTRACTS**  
**NOVEMBER 15, 1991**

Contract Number	Purpose	Contract Amount Mill Rup	Contract Status	Activity & Building Block Focus <sup>1</sup>	Comments
K4/056/89	Study Tax Regs on Health Insurance	16.925	Complete	I/3A & C	
K4/151/IV/89	First Feasibility Study for JPKM on Bali	15.340	Complete	IIIA/6 & 9	
K4/719/89	Software Dev. for Membership for PHB	10.000	Complete	IIA/1 & 9	
K4/302/90	Business Plan for Dena Sehat JPKM, Bali	16.400	Complete	IIIA/3,8 & 9	
K4/301/90	PP for JPKM, Review of Law	11.000	Complete	I/3C	
03/1.012.13/90/05/19	JPKM Training Module for Dena Sehat	18.000	Complete	IID/2	
03/1.017.13/90/06/15	PHB Actuarial/Utilization Study	40.000	Billing Complete	IIA/6	Work is incomplete due to MIS problem
03/1.013.13/90/07/05	Tech. Task Forces on QA, MIS, & Benefits Package	12.600	Complete	I/1,4 & 6	
03/1.002.13/90/08.1	PP Draft Development for JPKM	16.000	Complete	I/3C	
03/1.006.13/90/08/30	Mkt. Research for PKTK	45.000	Complete	IIB/6D	
03/1.013A.13/90/08/01	Tech. Task Forces on Mkt. Dev. & Org. Dev.	8.400	Complete	I/6D & 3B	
03/1.035/13/90/10/15	Pre-academic Draft of PP for JPKM	13.000	Complete	I/3C	
03/1.008.13/90/11/09	JPKM Mgmt. Training Module Dev.	45.000	Complete	I/2 & 3	
03/1.014.13/90/11/30	PHB Membership Master File Dev.	73.507	Complete	IIA/1 & 6B	
03/1.032.13/90/12/05	Benefit Pricing/Mkting Re: Dena Sehat	17.829	Complete	IID/2,6A,B,D & 8	
03/1.029.13/90/10/09	Standards of Care/IDI	18.000	Billing Complete	I/4	Work has been started on Phase II for 6 million Rup

<sup>1</sup>ISTI printout of contract status, 10/15/91, and updated by conversations with Dr. James Marzolf on 11/15/91. See accompanying page for details on activity and building-block codes used.

TABLE D.1.2 (cont'd)

AN ANALYSIS OF THE STATUS OF  
SOCIAL FINANCING COMPONENT CONTRACTS  
NOVEMBER 15, 1991

Contract Number	Purpose	Contract Amount Mill Rup	Activity & Building Contract Status	Block Focus	Comments
03/1.039.13/91/04.05	Bali Integration/JPKM Regulation Options	15.879	Billing Complete	III/3A & 8	Work completed on this contract on 11/8/91
03/1.051.13/91/4.5	Academic Draft of PP for JPKM	16.060	Complete	I/3C	
01/1.038.13/91/08.19	Phase I: Soc. Mkting with Providers Re: JPKM	44.875	70% Complete	I/2 & 6C	
03.1.010A.13/91.08.30	Soc. Mkting with MOH Re: JPKM	18.645	65% Complete	I/2	
03/1.005.14/90/11.22	Procure 11 Computers for PKTK Program	70.750	Complete	IIB/1	
03.01.015.14/91/02.26	Procure 15 Computers for PHB MIS	170.000	Complete	IIA/1	
Number NA	Procure 3 Computers for Dena Sehat	27.000	Ordered	IIC/1	
TOTAL		740.210			

### C. Component Contracts

As of mid-November 1991, the component had entered into twenty-three contracts with Indonesian firms and entities to obtain a number of specific goods and services required to implement the set of activities involved with supporting existing social financing entities and promoting the development of new ones in both the private and public sectors. According to the information summarized in Table D.1.2, twenty of these contracts have been completed. Most (14) had been let during the calendar year 1990, with only 6 in 1991. All four types of social financing entities in existence at the time of project initiation in 1988 have been targeted for some assistance from these contracts. Seven of the nine building blocks (see Notes to Table D.1.2 for a list of the building blocks) have also been targeted by one or more of the contracts, with only pharmaceutical efficiencies and policy assessment and evaluation not explicitly addressed, and these two items remain the primary jurisdiction of two other components of the project.

While most all project component progress indicators and "benchmarks" have been addressed by one or more of the contracts, the contracts have been focused on four aspects of social financing program development during this first phase of the project. These four aspects include: a) MIS development for all four types of social financing, b) support for the legal framework for social financing embodied in the JPKM policy statement as a government decree, c) the development of a field trial of JPKM in Bali, and d) most recently, social marketing of the concept of JPKM. These four foci of activity have resulted in 18 of the 23 contracts (over 75 percent) and about 78 percent of their value (about 580 Rupiah).

### 3. Component Achievements

#### A. Policy Achievements

According to the *Indonesian Times*, dated October 31, 1991, the GOI will launch a public health insurance program in 1992. This program is based on the JPKM policy work of this project component. This foci of the social financing component's contracts have been for the development of the legal framework of JPKM, including a background tax analysis to the drafting of the government decree documents. Five project contracts, comprising nearly 73 million Rupiah, or about 10 percent of the total value of the contracts let to date by this component, have focused on this matter.

##### i. Development of Initial Policy Concept

According to trends in health expenditures relative to other countries in Asia, the government of Indonesia has spent a relatively small share of its GNP on health. In addition, private funding for health has increased as a share of total health

expenditures from 46.5 percent (1976-1977) to 64 percent in 1982-1983. These expenditure trends mean that public resources must be used efficiently and additional resource mobilization is needed for financing health services, especially those provided by GOI facilities.

The MOH since 1981 has been involved in developing alternative approaches for financing health services. This effort has focused on two approaches to increase (a) community participation and (b) private sector involvement in paying for the use of health care providing resources. Further, it was felt that a method of health financing based on insurance principles and on a close relationship with health service providers and financial management is required. The evolving JPKM concept is considered as the approach for increasing community involvement, integrating insurance principles, and developing more efficient health care service delivery, in conjunction with strong financial management systems.

ii. Contribute to Articulating the Concept in a Precise and Implementable Manner

At present, DUKM/JPKM is still in its early stages of development. In the long run, the potential for its successful implementation is promising. At present, there are several public and private social financing mechanisms in operation based on various insurance principles. It is anticipated in the future that these schemes will be based on the DUKM/JPKM pre-payment and capitation principles. To date, the HSF project has assisted at least two regions, NTT and Bali, in developing and implementing JPKM in non-urban locations, and has assisted several private urban-based programs in Jakarta. This assistance is designed to institutionalize JPKM and demonstrate the viability of this new system design.

iii. Policy Development Contribution

Some concepts and systems have been developed, such as:

- (a) the principal components of a comprehensive health care benefits package;
- (b) approximate price/price ranges for specific benefits packages;
- (c) informational requirements for establishing precise premiums via the completion of certain actuarial studies;
- (d) work scope and contracts development for designing MIS systems and managing information flow;

- (e) establishing quality of care standards and the processes for revising them as necessary; and,
- (f) initiating work on vital regulation and cross-subsidization systems to protect consumers and ensure equity of access across income and risk groups, and, where necessary, secure subsidies from general public revenue sources.

As of mid-November 1991, a government decree on regulation is being processed. Expatriate and domestic consultants have been employed to assist in developing the JPKM concept, designing systems to support its implementation, and conducting personnel development activities required to support JPKM. (The project staff has developed a specific document which has addressed the need for a much larger effort than is possible via this project to institutionalize the total social marketing training and technical skills development required for the full institutionalization of JPKM.)

iv. Product of the Contribution to the Policy Initiative

In late October 1991, the JPKM concept was sent in the form of a government decree to the President's office for his endorsement into Indonesian law. This law will enable private/public entities to develop specific types of health benefits packages and market them to various segments of the community. It also imposes certain economic-risk sharing discipline on health care providers to provide a comprehensive package of health care services to the beneficiary population within a specified budget constraint.

v. Managerial Controls and Personnel Performance

At the policy level, the development of the JPKM concept will, over time, add critical control and personnel performance features to the delivery of health care in Indonesia. At St. Carolus, in Jakarta, the only location where the team was able to learn about the outcome of a fully implemented JPKM program, it has reduced average lengths of stay among enrollees by one-third in two years and ambulatory visits also fell by one-sixth. Not as striking, but still identifiable progress of a similar nature, was also noted at the PHB test JPKM site in Kulon Progo, Central Java.

vi. Timeliness of Contributions

The output of JPKM policy contribution activities for Repelita VI is not clearly defined. However, if the outputs are clearly defined, they will be essential input for national long-term planning of the future national health care system.

## **B. Technical Achievements**

### **i. MIS Systems Development**

As explained above, the social financing component has contracted with many entities throughout the country to accomplish its objectives. Given that the product of social financing entities require substantial information to develop and price, a substantial share of the total contracts (six of twenty-three) have addressed either hardware or software aspects of MIS. The total expenditure on these six contracts for MIS activities amounts to nearly 50 percent (47.5 percent) of the total contract level. While substantial work remains before these MIS systems can become fully operational with skilled personnel involved with all aspects of the MIS systems, the first phases of MIS development have taken place, including the procurement of necessary hardware, some software development for membership files, and the establishment of a technical task force which will be developing training materials and standards for MIS systems in this field.

In specific terms, the project has provided computer hardware to all JPKM-type MIS models, that is, PHB (15 computers), PKTK (11 computers), and Dana Sehat (3 computers for the Bali trial). In addition, technical assistance has been provided to several swasta-type JPKM insurance entities in Jakarta, for example, P.T. Bintang, P.T. Genesha, and St. Carolus.

Software has been developed for and introduced to the Bali field site experiment; persons have been trained to utilize some of that information system within the emerging regulatory<sup>41</sup> body under development there. Further, this component of the project has helped PHB solve some of its software problems, particularly for using the vast data base compiled on the membership characteristics and their utilization profile. Finally, technical assistance has been provided by project component staff, to specific swasta groups to ensure that the information system component of private insurance programs activities has been developed according to MIS standards envisioned for JPKM service entities.

### **ii. Personnel Training**

The social financing component has recognized the importance of training health personnel as well as those involved in the management and financing of the sector in the principles and skills required to develop and operate JPKM programs. Two contracts during the first phase of the project addressed personnel training in an explicit manner, one which developed JPKM training for Dena Sehat personnel and one for PKTK personnel. In addition, the project has invested in five technical task forces on such topics as quality assurance, MIS, benefits package design, market development, and organizational development. One of the tasks for these technical

task forces is to ensure that technical training material regarding its topic is developed and tested.

iii. Regulatory and Management Systems Development

The principal work on this vital set of systems remains for the second phase of the project. One contract of nearly 19 million Rupiah has initiated preliminary work on this issue in Bali with the local government officials there and additional discussions are expected over the next several months to develop a more comprehensive plan of action. No substantive systems development has been implemented as yet, especially at the central level, even though there has been a Task Force established by the Secretary General of the MOH (component "Benchmark" number 1.5.1.)

The component has indicated that quality of care and benefits packages will be monitored by a regulatory body. However, it is unclear what specific regulatory measures such an entity will employ, nor is there a good understanding of what procedures and sanctions may be imposed, if noncompliance is observed regarding benefits packages, premium size and collection, financial malfeasance, service delivery problems, etc. Further, the importance of this function at the village, kabupaten, regional, and central levels has not yet been clarified. It is also not clear to the team what type of regulatory entity should be established, where it should be housed within the GOI structure or what its procedures may be.

The team notes with interest that in reviewing how most affluent nations have addressed their health financing problem, William Hsiao has recently remarked, "In order to provide social protection for their citizens and/or to promote solidarity among their peoples, all affluent nations have explicitly organized financing for health care. Such action changed the usual bilateral exchange relationship between consumers and providers into a trilateral relationship. In this trilateral model, the government must decide the locus of financial power, which will determine the allocation and use of resources. . . ." (p. 45, William Hsiao, "Lessons for Developing Countries From the Experiences of Affluent Nations About a Comprehensive Health Financing Strategy," in David Dunlop and Jo Martins, eds., *Health Financing and the Role of Health Insurance in Developing Countries: Lessons From the More Affluent Nations* (Washington, D.C.: EDI for the World Bank, 1992, forthcoming). To date, the regulatory mechanisms referred to via this project component have not yet addressed this fundamental issue in regard to what and how the regulation of health care financing will be addressed by the GOI. The proposed government decree on JPKM submitted by the Minister of Health on November 22, 1991, has ten chapters, with several potentially establishing the legal framework to address these matters in the future.

iv. Quality Assurance System Development

There are two components in which quality assurance and standards of care activities have been programmed: hospitals and social financing. The Technical Task Force required to oversee these activities has been functioning for over a year and supported by this project component via a contract with the Indonesian Medical Association (IDI). The Task Force has issued a concept paper which identifies the criteria for defining the contractor tasks necessary to develop medical standards of care for specific diagnoses, and other aspects related to quality management.

The definition of the term "quality of care" is broader than "standards of care." The technical work carried out to date has focused on the narrower concept of care standards via the project's contract with the IDI. Ten of IDI's medical specialty groups have been working to define medical standards of care. The work being done on the broader concept of "Quality of Care" has been contracted by PQM, a subcontracting entity to the HSF project. The subcontractor is in the process of developing training modules for the implementation of quality assurance (QA).

The work on standards of care is being conducted by IDI and their ten specialist groups and they are in the process of completing the definition of at least 100 specific standards of care for the most prevalent diagnoses and other countries in the region are beginning to request the findings of the IDI. A second phase of this work is being initiated at the present time via a contract extension to IDI for six million Rupiah to include an additional 70 diagnoses to the original list of 100 diagnoses. The team understands that the work on standards of care has been well received by not only the medical profession in Indonesia but also by other countries in the region and Australia has requested assistance from the Indonesians involved for purposes of establishing such standards for that country.

v. Benefits Package Design, Actuarial Systems, and Pricing Strategies and Collection Procedures Development

General Comments

Several contracts of this project component have addressed benefits package design, with one contract directly addressing the topic of benefits package design and pricing in the context of Dena Sehat types of JPKM programs. This contract has particular salience in the context of the Bali and possibly NTT field experiments.

There are, however, several issues in regard to benefits package design, pricing and financial systems development in relationship to JPKM that must be raised. First, JPKM's benefits package is configured around "health promotion and health maintenance," while the principal cost elements in the provision of health care are involved in the provision of ambulatory care and hospitalization coverage. The social

financing component staff is aware of this problem and is attempting to mitigate the adverse cost impact of the broad benefits package by providing comprehensive health care and by structuring self-care, prevention and promotion so that the cost of ambulatory and hospitalization coverage will be decreased. However, little work has been done to ascertain: a) what the cost implications would be of different benefits packages, b) how the additional costs might be financed, c) which segments of the population are willing and able to pay for and what the public subsidy implications would be to fully cover the population in an equitable manner and whether those subsidies can be publicly financed, and d) what the true benefits of such a broad coverage might be in the present Indonesian context. Thus, this cost-benefit package dissonance has not yet been seriously addressed by the project team.

Second, a false dichotomy between health insurance and JPKM as an insurance mechanism has evolved in the writings regarding JPKM. The team is of the view that indemnity-type of health insurance has been established as a relevant comparator to JPKM, which in the team's view is misleading. The term health insurance has been implemented in many ways throughout history around the world with many different configurations of benefits packages (indemnity being but one type of benefits package), payment mechanisms, and risk pooling arrangements being tried or used. In the team's view, the managed care prepayment approach to health insurance embodied in the concept of JPKM is a good one but it must be viewed as but one option among many for the configuration of health insurance. The team would like to see the term health insurance be used in a generic manner, with the managed care embodiment of JPKM as one possible option.

The real issue for the development of the social financing option is what the insurance mechanism should be insuring. Embodied in the JPKM concept (as the team understands it) is the notion that it is good medical care to provide "first rupiah coverage" of common events requiring ambulatory care or inpatient services. Others with an interest in addressing aspects of the health care cost spiral would tend to prefer to see health insurance be used to insure the public against the possible rare event of large economic losses in the event of sickness. Various combinations of both preferences may also be configured within the budget constraint of a given country at a particular point in time, depending upon community preferences and budgetary aspects of the matter.

Third, the project has contracted for an actuarial and utilization study of a sample of the PHB membership. However, the study has not yet been completed for technical computer software reasons. It important for the project to find a way to resolve this technical problem as soon as possible so that simulations might be developed to assess what the resource implications might become in the event that benefits packages are similarly designed for use throughout the country in JPKM programs. It is further critical that other available data bases are actuarially analyzed, such as those available from PKTK and St. Carolus, even if they are in an

evolutionary state, so the likely resource implications might be more completely understood.

### Field Experiments

The project component's contracts have focused on the development of the field trial of an integrated test of the JPKM-model type of social financing in the Bali region of the country. Up to five contracts have been so focused, comprising about 12.5 percent of the total value of existing contracts.

In the case of field experiments, the non-private JPKM programs outside of Jakarta have not implemented a full benefits package as yet. Only ambulatory care benefits are included in the Tabanon scheme in Bali and a similar package is being tested in NTT. The problem of obtaining consumer agreement on paying the premium for the limited benefits package has been managed well, according to the evidence presented to the team while in the Tabanan area. It is less clear as to how much of the agreed-upon premium has actually been collected. Is it 62 percent of the potential premium for the year which has been collected from all persons, or has that quantity of the potential revenue been collected from a smaller share of the population?

From all accounts, in Bali, there is a very powerful community-based system of social authority, called the Banjar system, where elders in the community can provide government officials with considerable assistance in administering any type of local program where all members of the community must participate in some specific manner. The issue for the implementation of a social financing program is: what would happen to the share of households paying health care premiums if the formal village leadership did not have the control over the public, as is the case in Bali via the Banjar system? Concern was expressed by the village leadership over a potential premium price rise if a more extended set of benefits was incorporated into the benefits package to include inpatient care.

In the feasibility study for the Bali experiment, contracted for by this project component, the actuarial calculations behind the premium structure under present implementation are not based on any concept of price elasticity. The health service resource implications of not considering this aspect of consumer behavior, are to overestimate the resources required to provide health care when prices are raised and underestimate them when prices to the consumers drop. The calculations have only considered rates of use regardless of price or its change, without taking into account behavioral responses of consumers when prices change.

Finally, transitional strategies have yet to be worked out about how a JPKM program proposes to move from an initial ambulatory-care-based benefits package to the envisioned more comprehensive and appropriate (from a quality and

comprehensive medical care perspective) benefits package. The issues involved in rapidly moving from one benefits package to another was not clarified to the team, and it would appear that much remains to be done on this matter.

vi. Other Technical Achievements

Finally, other than computer procurement, the most recently signed contracts have focused on social marketing aspects of social financing/JPKM program development. Two of the three contracts still being implemented as of the time of the evaluation addressed this matter, both in terms of informing providers about this form of payment and service provision mechanism as embodied in JPKM, and informing MOH personnel about it as well.

In addition, by implementing a field test of the Dena Sehat and other forms of JPKM in Bali, this component of the project is *de facto* addressing the important details of how to implement a policy of government decentralization. This field test is multi-faceted enough for all aspects of decentralization to come to the surface during implementation, from multi-ministerial differences in reporting and power devolution to the development of a local financing strategy for program sustainability. It would be important for this case study to be fully documented.

4. **Component Plans for the Future**

It is envisioned that the social financing component of the project will only be fully implemented at the end of the seven-year life of the project, in 1995. When fully implemented, fifty-nine specific "progress benchmarks" will have been completed, including implementation or strengthening of four alternative forms of social financing according to the principles of JPKM, PHB, PKTK, Swasta, and Dana Sehat, as well as developing the necessary building blocks for the further development of JPKM programs throughout the country. (For detail, see Table D.1.3.) As of the end of 1991, only fourteen benchmarks are deemed to have been completed. Many of these benchmarks (nearly fifty percent) have been programmed for completion in 1992, including a number (twelve) in the area of benefits package design, pricing, and market creation. Given that 1991 has not been a period of full implementation due to the recent history of the project, it would appear likely that some of the envisioned 1992 activities will not be completed in the timeframe originally envisioned. How this delay will affect the timely completion of subsequent project components is unclear. However, the implications of this delay must be considered when revising the project components workplans and budget.<sup>4</sup>

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<sup>4</sup>The authors of this Annex decided that a detailed analysis of the workplan for the August 15, 1991 to March 31, 1992 period would not be a useful exercise, since the project focus may change as well as the period over which a subsequent workplan may be implemented may also be different.

The analysis embodied in Table D.1.3 suggests that adequate attention may not be given to several of the key building blocks required for future JPKM implementation. Further, there are several benchmarks which are envisioned for completion only in 1993 or later, without which other benchmark may not be easily completed. Finally, there appear to be several progress benchmarks which on the surface appear to be tangentially related to the achievement of the overall objectives of providing assistance to the GOI to develop social financing mechanisms which can be evaluated in terms of assisting the GOI to financially sustain the delivery of health services throughout the country.

#### **A. Inadequate Attention**

The building blocks which do not appear to be receiving adequate attention include: a) quality assurance systems development; b) regulatory systems development; and, c) pricing strategies for defined benefits packages. It is assumed that the pharmaceutical component of the project is addressing the types of issues through its mandate to resolve the lack of activity on such issues within the social financing component. Also, this component has not taken direct action on policy assessment and evaluation, nor government decentralization.

According to the analysis of the component's contracts, it would appear that the quality assurance systems development has received important support by this component. The work which has been completed on standards of care is substantial and this aspect is well along in its evolution. Further, since this component envisions one of the regulatory functions for the MOH as regulation of quality of care, it is important that this activity be incorporated into the "benchmarks of progress" of the social financing component.

The evaluation team is aware that the HE/PAU-AKEK project component will be involved in the policy assessment and evaluation building block in regard to the Bali evaluation study of the integration of JPKM throughout the region. However, without close interaction between the components, it will be difficult for that other component to conduct a well-designed review of these important experimental activities. The team would urge the project implementation team to determine how such concerns are being addressed via its recent concern over integration of its own activities.

Regarding the issue of decentralization, the social financing component is addressing it in an indirect manner, by engaging in the field experiment activity in Bali with the Dana Sehat trial. How decentralization works in specific regions of the country in the health sector is of great interest to the present Minister, and he identified this building block as key to the longer term implementation of the JPKM program. Thus, it would be useful to consider it more carefully in designing any evaluation analysis of the field activities of the project.

## **B. Timing of Benchmark Completion**

There are two issues in the design of this project component's "benchmarks" which warrant comment. First, given that the development of MIS is a vital input into the design of benefits packages and their pricing, it is disheartening to note that it is expected that the completion of the MIS "benchmark" will not occur until the end of 1993. How will these other two building block activities be adequately addressed without these vital informational elements being operational?

Second, given that the only regulatory "benchmark" defined is that of the establishment of a "multi-disciplinary board," or Task Force, responsible to the Secretary General "... to coordinate developments in the 'managed care' sector," and the component's contracts have only begun to address the regulatory development issue in the context of Bali (see contract number 17 shown in Table D.1.2), it is clear that this important building block has yet to be fully considered. Since many other subsequent implementation activities and building blocks are dependent upon what this body will do and how it will do it, along with the other issue of whether other GOI ministries are also involved with the work of this entity, greater emphasis is warranted on the development and functioning of this regulatory body. The team is aware that the JPKM governmental decree is vital to the future success of such an entity, since the regulatory function is defined in the impending legislation.

## **C. Tangential Activities**

According to Table D.1.3, and the information underlying it, as of 1989 the component has established a special unit within the PIO to stimulate the development of private health insurance plans. It is unclear who is staffing this activity. Further, it is unclear what specific technical assistance this unit has provided to interested private parties, although it is clear that as of the middle of November 1991, at least three JPKM-type private health insurance plans have been established in Jakarta, P.T. Bintang/IDI, P.T. Genesha, and St. Carolus. Two of the three exemplar programs were visited by members of the evaluation team and it was clear that these programs had received useful information and advice by the project staff regarding the establishment of a JPKM-type of product line in the health area. The two years of data from St. Carolus also suggested that substantial savings and efficiencies might result if JPKM-type programs could be implemented from reductions in length of stays in hospitals and from possibly fewer visits to ambulatory care providers.

The project component has also made available information about JPKM to other private health insurance entities in the country and is planning to more widely disseminate this information in a social marketing program designed for private actors in the insurance industry in Indonesia. Also, it is understood that the government

**TABLE D.1.3**  
**ANALYSIS OF THE SOCIAL FINANCING COMPONENT'S PROGRESS TOWARD PROJECT**  
**"MILESTONES" AND "BENCHMARKS" OF PROGRESS, AS DEFINED BY THE**  
**PROJECT PAPER IN TERMS OF DEVELOPING THE IDENTIFIED "BUILDING**  
**BLOCKS" NECESSARY TO SUSTAIN A REFINANCED AND RESTRUCTURED**  
**HEALTH CARE SYSTEM IN INDONESIA, AS OF 11/20/91**

Building Block/Progress Benchmarks Name	Year Completed or Expected for Completion							Total
	1989	1990	1991	1992	1993	1994	1995	
1. MIS				1	2			3
2. Personnel Training		2	1	4				7
3. Regulatory & Mgmt. Systems Dev.								
A. Regulatory Systems		1						1
B. Mgmt. Systems				4	5	2		11
C. Legal Systems			2	1				3
4. Quality Assurance Systems Devm.								0
5. Pharmaceutical Efficiencies								NA
6. Benefit Pkg Design, Pricing & Mkt. Creation (General)								
A. Benefits Pkg. Design			1	1				2
B. Accounting Systems				2		1		3
C. Pricing Strategies				1				1
D. Social Mktg & Comm. Part.			3	6	1			10
7. Policy Assessment & Evaluation								0
8. Government Decentralization								0
9. Financial Control & Planning		1	1	5				7
10. Feasibility Study & Assessment		1		2	1			4
11. Private Sector Assist/Subsidy	1				1	1		3
12. Implement Dana Sehat						1		1
13. Implement PKTK							1	1
Total	1	5	8	29	10	5	1	59

Note: Analysis of Table 3 of Social Finance Component's "Recommended 'Milestones' and 'Benchmarks,'" from Dr. James Marzolf, 11/19/91.

decree on JPKM, which is nearing final approval, will provide an important legal underpinning for private action in this sector, and it is anticipated that other private entities will initiate programs upon its formal approval.

These observations indicate that the private health insurance sector has received important and continued support throughout the life of the project and has facilitated in leveling the playing field for private entities in this potential and emerging market.

However, when the "benchmarks" of this component suggest that this type of JPKM will not only obtain the assistance already provided, but also will obtain in 1994 "start-up assistance provided for promising business ventures," the team is concerned about the focus of the component, particularly when the regulatory mechanisms necessary for program monitoring have yet to be established and their systems developed. It is unknown what exactly is meant by the quoted phrase; however, the team would hope that the increasingly scarce resources available to the project not be so allocated, given the many other valid and competing claims for project resources. If the market for JPKM services is attractive, the private sector, with information in the public domain from this project, can invest its own scarce resources to implement such activities. The three private initiatives mentioned above have not received such assistance and there does not appear to be a compelling rationale for such project assistance.

**5. Remaining Issues for Consideration in Implementing this Component of the Project**

**A. Staffing and Budget**

The team determined that the professional staff is qualified to complete the work of the component and has a very good idea about what is required to implement this project component and achieve the identified "benchmarks."

The amount of work initially envisioned for the achievement of the identified "benchmarks" is unclear, however, and the present staffing of this component is not likely to achieve all of the envisioned "benchmarks."

A large amount of work appears to remain to be completed in the second half of the project, given the progress made toward the establishment of viable exemplars for each of the four types of social financing institution, and in the development of the necessary building blocks for implementing JPKM. Less than one quarter of the "benchmarks" of progress have been achieved to date.

Priorities must be established within the configuration of this particular project. The options within the configuration of this project appear to be either to

reduce the number of exemplars to support, that is, PKTK, and possibly Swasta, based on the discussion above, or to reduce the number of building block activities supported. Several building block activities, such as for social marketing, management systems development, and financial planning and control systems, may be reduced if one or more of the exemplars are not provided additional direct assistance. Other options would be to provide additional financial resources to the project for this component, or reconfigure the existing financial resources of the project as presently funded toward the achievement of this component's objectives and measurable "benchmarks." If all envisioned activities are deemed essential, more financial and personnel resources are warranted.

Given that this component is the only one in the project which will significantly assist the GOI and MOH to refinance the health sector of Indonesia, the team views this component as a high priority area for subsequent focus. Thus, it is the view of the team that additional resources should be made available to it, and possibly additional professional long-term consultant personnel, or additional funds should be reallocated from other project components so that its objectives might be reached.

#### **B. Regulation Development**

It is vital that the necessary building blocks are developed for the implementation of a competent regulatory framework. This is even more urgent in situations where the active participation of the private sector in the health insurance market is envisioned as it is in Indonesia. To not include the other GOI ministries involved in the financing of the health sector in the development and coordination of this regulatory body is unwise.<sup>4</sup> The active implementation of the regulatory body, including the inclusion of the representation of the other relevant ministries as cooperating entities, should become the highest priority "benchmark" to achieve in the coming year of the project. The development of the regulatory body and its jurisdiction at both the central and regional levels, such as in Bali, so as to develop appropriate working decentralization linkages and responsibilities, is of utmost importance for the long-term sustainability of the project's activities. This implies that such building blocks as MIS systems and skilled personnel in the benefits packages, pricing, and quality assurance must also be incorporated into such entities.

**ANNEX D.2**  
**EVALUATION OF HOSPITAL COMPONENT**

## EVALUATION OF HOSPITAL COMPONENT<sup>1</sup>

This section addresses issues specific to the Hospital Component of the HSF-Project.

### 1. Review of output indicators (milestones) and benchmarks

In view of the recent policy initiatives taken by the GOI, the output of the Hospital Component should be appropriately modified or redefined as follows:

#### A. A viable system of Unit Swadana hospitals in accordance with Presidential Decree No. 38, 1991.

The originally expected output was: ". . . a system for improved management and fundamental structural reform in government hospitals resulting in greater operational efficiency, increased cost recovery and less government subsidy to government hospitals."

B. Indicators and benchmarks are generally considered still relevant. However, to be more specific, new indicators and benchmarks should be added and related to five pilot hospitals that have been selected for field tests and demonstration of the Unit Swadana system.

### 2. Progress of the Hospital Component

Table D.2.1 shows that many specific policy and technical activities of the hospital component had been designed and implemented during the first three years of the project. As of the time of the midterm evaluation, it may in summary be stated that the overall accomplishment of the hospital component is approximately 60 percent.

### 3. Project's success at achieving its major policy goal (Hospital Component and the concept of Unit Swadana)

The concept of Unit Swadana Hospital was initiated by the MOH. It is one of ten "breakthrough" or policy initiatives in the last few years within the MOH.

Consultants from the Hospital Component have contributed by further developing the initial concept. This contribution became so intensive that gradually the component's original objective was altered and became identical with preparing the operationalization of Unit Swadana.

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<sup>1</sup>This annex was prepared by Dr. Samsi Jacobalis.

**TABLE D.2.1**  
**PROGRESS OF THE HOSPITAL COMPONENT**

Indicator	Accomplished	Benchmarks	Accomplished
Diagnosis of hospital systems in 3 provinces	Completed Aug. 1989 (Bali, East Java, West Sumatra)	Provinces determined	Done
		Diagnosis instrument developed	Done
		Team of experts for hosp. diagnosis	Done
Analysis of problems impeding efficiency and cost recovery	Completed Nov. 1990 (9 problem areas identified)	Data from hosp. diagnosis analyzed	Done
		Workshop to discuss findings of hosp. diagn.	Done
		Report on problems affecting efficiency and cost recovery to PIO and SC	Done
Comprehensive intervention packages design	Intervention package prepared for implementation in 5 pilot hospitals.	Activity coordinator designing intervention package	Done
		Intervention packages - approved by PIO & SC	Done
Field test and demonstration in 3 provinces	In preparation	Provincial teams	Done
		Exemptions from MOH and provincial authorities	Done
		Intervention package instituted	No

The products of this contribution include:

1. Studies;
2. Preconditioning of future Swadana hospitals;
3. Training modules (in preparation);
4. Technical manuals;
5. Support for training programs organized by MOH; and,
6. Legislative and regulatory products;
  - Presidential Decree No. 38, 1991,
  - Joint Ministerial Decree between MOH, MOF, and,
  - other related ministers (draft).

These outputs are in line and supportive to the GOI's PELITA in the health sector, and preparatory to the second national long-term development plan.

4. Project's success at designing a system for improved management and fundamental structural reforms in government hospitals
  - a. Basic elements for a system of improved management and structural reforms in government hospitals are completed.
  - b. Interventions have not been implemented yet, so their effectiveness can not be measured at this point in time. The intended interventions are broad enough.
  - c. Replications and sustainability for reforms beyond the pilot hospitals and their adaptability throughout the GOI and private systems cannot be judged in generic terms because of great structural and other variations between individual hospitals in Indonesia.
  - d. Operational research is highly recommended, in particular on efficiency, effectiveness and quality of care in government hospitals.
5. Evaluation of the technical assistance contract and assessment of the contribution of the prime contractor (ISTI) toward achieving the project's goal, purpose and outputs
  - a. Quality and effectiveness of personnel of management positions within PMU and PIO:

PMU: Should be improved. The finding of the External Management Review Team that the PMU is "a ship with two captains" still holds, although things are going better after the recent change of COP.

PIO: The director of PIO is at the moment incapacitated and recovering from a serious illness. This fact has also contributed to delays in administrative and managerial process.

- b. Quality and effectiveness of long-term technical consultants: appropriate for the diagnosis and design phase.
- c. On the administrative system established to contract technical assistance and procure commodities of a timely basis, this evaluation team is generally in agreement with the finding of the external management review on this matter.

6. Pace of Hospital Component expenditures compared with the pace of project implementation

In order to address this issue, periodic reports on total expenditures vis-à-vis periodic reports on accomplishments over the last 2.5 years should be reviewed. Time and readily available information did not permit the evaluation team to do such an audit.

The following figures presented in Table D.2.2 may give an indication of the pace of expenditures versus implementation of the Hospital Component.

This rupiah total is equivalent to US\$ 279,190 (1 US\$ = Rp. 1,950). The total budget of the project allocated to the Hospital Component is US\$ 3,040,000. So expenditure for the diagnosis and intervention design was:

$$(279.190)/(3.040.000) \times 100\% = 9.18\% \text{ of the total budget.}$$

This percentage is small compared to the 60 percent accomplishment of the Hospital Component (see above). Expenses for technical assistance, commodities, training, contingency and other costs are, however, not included in this comparison. However, it is likely that if such a detailed expenditures analysis were included, the total figure would still be substantially under the budget figure of \$3 plus million. A complete cost-benefit analysis is beyond the objectives of this mid-term evaluation.

In Table D.2.3, an analysis is presented of actual, in comparison with projected expenditures, for the first two component phases. It shows that this project component was well planned and was accomplished within project budget estimates.

**TABLE D.2.2**

**HOSPITAL EXPENDITURES**

1.	<b>Hospital Diagnosis Phase</b>	
a.	East Java (4 hospitals) by PQM Consultants	Rp. 94,473,000
b.	Bali (4 hospitals) by PQM Consultants	Rp. 94,849,000
c.	West Sumatera (4 hospitals) by PT. Binaman Utama	Rp. 95,000,000
	SUBTOTAL	284,322,000
2.	<b>Intervention Design Phase</b>	
a.	Medical Records (PT Sispro)	Rp. 11,847,000
b.	Standards for Health Care (Perinasia)	Rp. 44,228,000
c.	Ability of the Community to Pay for Hospital Care (PQM Consultants)	Rp. 20,020,000
d.	Hospital Information System (PQM Consultants)	Rp. 18,293,000
e.	Hospital Accounting System (PQM Consultants)	Rp. 45,302,400
f.	Hospital Financing and Budgeting System (PQM Consultants)	Rp. 43,678,000
g.	Hospital Legislation (AES Themis Medical Law Con.)	Rp. 36,690,000
h.	Hospital Organizational structure (IAKMI)	Rp. 16,660,000
i.	Hospital Pharmacy Service (MJM Consultants)	Rp. 23,381,640
	SUBTOTAL	Rp. 260,100,040
	TOTAL	Rp. 544,422,040

Table D.2.3

PROJECTED VERSUS ACTUAL ANNUAL EXPENDITURES

Phase	FY	Expenditure		
		Projected	Actual	Variance
1. Diagnosis	88/89	40,362,000	35,674,585	4,687,415
	89/90	402,925,000	388,318,025	14,606,975
2. Design intervention	90/91	410,162,390	397,520,050	12,642,340
		834,449,390	821,512,660	31,936,730 (3.7%)

7. Preparation of Unit Swadana Concept in Tegalyoso Hospital, Klaten

- a. The Director is motivated. The doctors and pharmacist seem to have a fairly good idea of what the concept is and what potential changes it may bring to the hospital and to themselves. The nursing staff and other supporting personnel still need to be more actively involved in the preparatory stage.
- b. Awareness for quality of care is already present and quality improvement efforts have already been started.
- c. The medical records are fairly well managed. Existing data collecting and reporting system can easily be developed into a better information system by training of personnel and procurement of hardware and software.
- d. There should be an initial investment for improving inpatient and diagnostic facilities.
- e. The general condition of the hospital and the availability of a potential market are conducive for a successful implementation of the Swadana concept.
- f. The pharmaceutical readiness is separately assessed in Annex D.3 on the Pharmaceutical Component. That review suggests that additional effort is required to integrate pharmaceutical efficiency reforms into the implementation of Unit Swadana.
- g. The missing elements for initiating Unit Swadana at this locality and others identified for HSF project assistance are the acquisition of the necessary computer hardware and software for institutionalizing financial controls and managed health care delivery information in relationship to resource use.
- h. The active implementation of this intervention should be started as soon as possible.

8. Summary

- a. The overall accomplishment of the hospital component is approximately 60 percent compared to indicators and benchmarks as determined in the Project Paper.

- b. There is no delay in the implementation of the Hospital Component, notwithstanding the fact, that in the recent past, administrative and communication issues between related parties were not supportive.
- c. In fact, the Hospital Component of the HSF project has generated outputs beyond the Project Paper. The most significant of this is the component's contribution to the conceptualization and preparation for the implementation of the Unit Swadana hospital system, which is one of the major policy initiatives of the MOH. The component has recently contributed to a training program for officials from fifteen public hospitals selected for the future implementation of Unit Swadana. Together with other components of the project, an integrative model is being developed, to be field-tested in the future.
- d. The remaining time allocated to the project (2.5 to 3 years) will be adequate to achieve the original project objectives envisioned for this component.

**ANNEX D.3**

**PHARMACEUTICAL COMPONENT AND RELATED ASPECTS**

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## **PHARMACEUTICAL COMPONENT AND RELATED ASPECTS MIDTERM ASSESSMENT<sup>1</sup>**

### **1.0 INTRODUCTION**

#### **1.1 Scope of Report**

This report presents the findings and recommendations emanating from an evaluation of the pharmaceutical component of the Health Sector Financing Project conducted during the period October - November 21, 1991. It also contains several suggestions and comments on other aspects of the project which relate to the issue of pharmaceuticals. It is recognized that other aspects of the project which relate to pharmaceuticals fall within the purview of the other evaluators and may be addressed in other parts of the evaluation report.

This evaluation concentrates on pharmaceuticals as an integral part of health care delivery rather than on pharmaceuticals as a component of the industrial sector of Indonesia. Full resolution of all policy issues for the pharmaceutical sector as a whole is outside the scope of the project and therefore this evaluation.

There is a concentration on the technical aspects of the component and its support of project objectives with secondary review of the management/administrative ones.

No attempt is made to provide an in-depth quantitative and/or qualitative review of specific reports, other products or pharmaceutical activities. The validation of the totality of information on the project and the component as presented in the Internal Midterm Evaluation Report is not an aim of this evaluation.

Within the short timeframe allotted for the review, it is intended to be a broad review based on the stated goals of the MOH for financing health care services to the Indonesian population and USAID's assistance goals. Recommendations are made within the constraints of time available to accomplish an expansive scope of work.

### **2.0 CONTEXT FOR POLICY REFORM**

#### **2.1 Government of Indonesia Policy Directions**

The Ministry of Health is in the fifth of its five-year plans and has targeted improvement in the efficiency of health services among its goals. Drugs are considered an important element of health services. The control, supply and

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<sup>1</sup>This annex was prepared by Dr. Rosalyn C. King.

supervision of medicines, food and hazardous substances has been an objective of the long-range plan of the government. The previous Pelita (1984-1989) plan emphasized improving coverage of the population with essential drugs and developing drug management infrastructure. The project was inaugurated during this Pelita and this focus has continued during this period as well.

The report of the Minister of Health to the Vice-President has indicated that there need to be achievements and/or breakthrough in certain areas in order to accelerate development of the health sector. (Please see the section on Strategic Orientation of Achievements for further discussion of these areas.) Of these, three relate directly to the substance of the pharmaceutical component of the project: the use of generic drugs, the deregulation of the pharmaceutical sector and job analysis.

There are two new policy initiatives of the government to which this component will need to relate: the concepts of Lembaga Swadana for hospitals and DUKM/JPKM. The progress toward Swadana hospitals and implementation of the JPKM concept have implications for the progress in the pharmaceuticals component as well. The achievement of the objectives of each of these important programs generally requires a focus on the cost and structuring of pharmaceutical services.

In addition, the government has established its National Drug Policy which is to:

1. ensure the availability of drugs in compliance with the actual needs of the population;
2. improve the equitable distribution of the needed drugs in order to make these accessible to the whole population;
3. ensure the efficacy, safety, quality, and validity of marketed drugs and to promote the proper, rational and efficient use;
4. protect the public from drug misuse and drug abuse; and,
5. develop the national pharmaceutical potential towards the achievement of self-reliance in drugs in support of the national economic growth.

The government's emphasis on increasing coverage and bringing good and affordable drugs within the reach of all Indonesians is even the subject of editorial comment (Friday, November 1, 1991, Jakarta Post).

### 3.0 THE PHARMACEUTICAL COMPONENT

The output of the pharmaceutical component of the HSF project was to be reforms in the way pharmaceuticals are ordered, managed, and prescribed, which will result in improved efficiency, greater therapeutic impact for the money invested, and more resources available for essential drugs which impact on child survival. This output was designed to be supportive of the overall project purpose of government achievement of a sustainable spending increase of 35 percent on child survival services.

The rationale behind this component is that by improving the efficiency of procurement, distribution and use of pharmaceuticals, internal shifts of allocations within the drug budgets could be made. Costs could be reduced and savings allocated to those drugs which could give greater therapeutic impact for money invested and certainly to those drugs which had a greater impact on child survival.

To achieve the reforms and mark the progress of the project, the component was to:

1. conduct focused assessments to identify problems related to:
  - a) product selection and procurement planning at the provincial and district levels;
  - b) storage and distribution at the district level hospitals and health centers;
  - c) prescribing and dispensing practices of hospitals and health centers, especially with relationship to diagnosis and standard treatment protocols; and,
  - d) factors influencing the prescribing practices of providers and factors which influence community expectations for drug prescribing at both hospitals and health centers;
2. design interventions which assist in the production of the rational use of drug budgets and the drugs themselves; and,
3. conduct a demonstration of a comprehensive package in six districts.

Project activity within the pharmaceutical components was to take an operations research approach to problem identification and resolution. Results of the focused assessments were to be used to formulate interventions.

The project paper outlines the major stages of the workplan for this component (see Table D.3.1) over the seven years of the project. This is compared

**Table D.3.1  
HSFP: MAJOR IMPLEMENTARY EVENTS - PHARMACEUTICAL SECTOR**

	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95
<b>3. Pharmaceutical Sector</b>							
3.1 Assessment	—	—					
3.2 Intervention Design		—	—				
3.3 Field Test				—	—		
3.4 Evaluation*				—	—		
3.5 Intervention Package Design					—		
3.6 Demonstration						—	
3.7 Monitoring & Evaluation							—

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to Table D.3.2 which gives the major implementation events in the life of the project as a whole. Expected outputs, indicators of progress and benchmarks for monitoring results of efforts undertaken were spelled out in the project paper (see Table D.3.3).

### 3.1 Inputs

The following section reviews the use of inputs to conduct the activities of this component and is based directly on information provided by both the PIO/P consultants and the PMU staff.

There is a differing perspective on the length of technical assistance in the pharmaceutical component as outlined in the project paper and as stated in the Internal Midterm Evaluation. The latter reports that the agreement between USAID and ISTI is for a five-year period but technical assistance to the PIO/P is only for a four-year period (1988-1992).

However, the project has supported inputs of long- and short-term technical assistance, studies/assessments/demonstrations, training, and commodities.

#### 3.1.1 Technical Assistance

An expatriate, long-term advisor, Dr. Reginald F. Gibson, has guided the provision of technical assistance since June 1989. A subcontract with Management Sciences for Health provides additional technical assistance in drug supply. (Appendix A gives the scope of work and estimated cost of the subcontract.)

Both expatriate and domestic consultants were recruited and selected to provide long- and short-term consultations. A listing of the Indonesian and expatriate long- and short-term technical advisors (contractors/subcontractors) along with their scope of work or report and their length of service to the project is presented in Tables D.3.4 and D.3.5. Expenditure review indicates that the total fees paid to date for both expatriate and domestic technical assistance was at least \$168,285. Of the 21 expatriate consultancies conducted for PIO/P, data on payments were available for 16.

It is evident that the project and the PIO/P developed a formal contracting system. The current procedures used for the selection and monitoring of contractor performance is included in Appendix B.

**Table D.3.2**  
**HSFP: MAJOR IMPLEMENTATION**  
**EVENTS FOR LIFE OF THE PROJECT**

	1988	1989	1990	1991	1992	1993	1994
1. Problem Analysis in Hospital and Pharmaceutical Sectors	_____						
2. Intervention Design Stage for Hospital and Pharmaceutical Sectors		_____	_____	_____			
3. Field Test Interventions for Hospital and Pharmaceutical Sectors			_____	_____			
4. Assistance of AsKes & Dana Sehat	_____				_____		
5. Assistance to PKTK	_____		_____				
6. Midterm Evaluation				_____			
7. Private Health Insurance	_____						
8. Demonstration of Hospital and Pharmaceutical Sector Interventions				_____	_____	_____	_____
9. Final Project Evaluation							_____

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**Table D.3.3**  
**IISFP: PHARMACEUTICAL SECTOR OUTPUTS, INDICATORS OF**  
**PROGRESS AND BENCHMARKS FOR MONITORING**

<u>OUTPUTS</u>	<u>INDICATORS OF PROGRESS</u>	<u>BENCHMARKS</u>
3. Reforms in pharmaceutical management and distribution which will result in improved efficiency and more resources for essential drugs which have an impact on child survival	3.1 A focused assessment of the public pharmaceutical sector has been completed which analyzes procurement, storage, distribution, and use factors	3.1.1 Review of secondary data on pharmaceutical supply management completed
		3.1.2 Workshop held to finalize research agenda for focused assessment
		3.1.3 Study areas determined
		3.1.4 Individual studies commissioned either to provincial health authorities or research institutions
	3.2 Management and communications interventions have been designed and tested to address problems identified during the focused assessment	3.2.1 Individual interventions chosen to address problem areas identified during focused assessment
		3.2.2 Interventions field tested in selected rural areas
		3.2.3 Field tests evaluated to determine most effective interventions
		3.2.4 Comprehensive packet of interventions formulated for large-scale demonstration
	3.3 A comprehensive package of interventions has been demonstrated in six districts	3.3.1 Demonstration sites chosen
		3.3.2 Provincial and district teams formed
		3.3.3 Requisite training completed
		3.3.4 Demonstrations commenced

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**Table D.3.4**  
**INDONESIAN CONSULTANTS**

No.	Name	Contract Start-Up	Contract Completion	Scope of Work or Title of Report
LTC	Dr. Marisi Sihombing	06-01-88	05-31-89	Development of Terms of Reference: Health Sector Financing Project/Pharmaceutical Component
STC	Dr. Berlian Siagian	08-01-88	09-30-88	Development of Overall Design of Focused Assessment Studies
STC	Dr. H. Sukaryo	02-01-89	06-30-89	Review of Drug Use Study Evaluation and Social Marketing Study
STC	Dr. Gusti Abdul Cholid	03-01-89	05-31-89	Evaluation of Focused Assessment Studies
STC	Dr. A.L. Pong Tenko	10-01-88	03-31-89	Needs Analysis of Drug Manpower Study, Synopsis of Drug Management Study, Evaluation of DPI Drug Management Study
STC	Dr. B. Silalahi	10-01-88	03-31-89	Evaluation of DPI Social Marketing Study
STC	Dr. Ahmad Fuad Afdal	10-01-88	03-31-89	Evaluation of DPI Drug Use Study
STC	Dr. Vincent H.S. Gan	08-01-88 03-01-90	09-30-88 08-31-90	Evaluation of DPI Social Marketing Study Status Report on the Implementation of Drug Use Study
STC	Dr. Djoko Tri W.	03-01-89	08-31-89 08-31-90	Database Management Report Integration of Drug Use Study to Intervention Phase, Training RX and DEM
STC	Dr. Yoke Wattimena	06-01-90	01-12-90	Drug Use Study for Puskesmas and Hospitals Pharmaceutical Study: An Operations Research Approach
STC	Dr. Widyastuti	08-13-90 11-08-90 04-01-90 10-01-91	10-31-91 03-31-91 05-26-91 03-31-92	Development of Training Modules and Summary of Interventions in Medical Services; Integrated Analysis (in collaboration with Jennifer Zeitlin and Dennis Ross-Degnan)

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Table D.3.4 (cont'd)  
INDONESIAN CONSULTANTS

No.	Name	Contract Start-Up	Contract Completion	Scope of Work or Title of Report
STC	Dr. Bimo	08-01-88 06-01-90	09-30-88 07-31-90	Drug Use Study Bioavailability Study for Generic Drugs
STC	Dr. Purwanto	04-15-90	04-15-91	Integrated Analysis, Bioavailability Study, KAP Study, Training in Drug Use--A Cumulative Report
LTC	Dr. S.U. Sembiring	04-15-90 04-15-91	04-15-91 11-30-91	Field Supervision on Planning, Implementation, Monitoring of PIO/P Activities at National, Provincial and Kabupaten Level
SUBC	Dr. Yos. E. Hudyono	12-08-89	11-17-91	Quarterly Activity Reports; Intervention Design for the Pharmaceutical Component; Strategy and Procedures for the Intervention Design
LTC	Dr. Roostijan Effendie	04-15-90	04-15-91	Activities and Internal Evaluation Report for PIO/P
STC	Dr. Nainggolan	10-01-88	11-30-88	Drug Use Study
STC	Dr. Budiono Santoso	04-08-91	08-31-91	Review Integrated Analysis and Standard Therapy
STC	Nina Juliana	10-01-89	05-31-90	Personal Services Contract: Technical Assistant, no report required
STC	Ida Hafiz	01-01-89	03-31-89	Administrative Support to PIO/P; no report required
	Kartini	06-01-91	12-31-91	

STC = Short-Term Consultant  
LTC = Long-Term Consultant  
SUBC = Subcontractor

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**Table D.3.5**  
**EXPATRIATE CONSULTANTS**

<b>Name</b>	<b>Consultancy Period</b>	<b>Report No.</b>	<b>Report Title</b>
J. Quick	19 Aug 88 - 01 Sep 88	6	Preparation for Focus Assessments: Revision of Terms of Reference and Planning for Study Implementation
J. Quick	23 Jan 89 - 03 Mar 89	--	36, 37, 38, 39 in one report
M. Visser	21 Jan 89 - 12 Feb 89	--	
E. Holtzman	30 Jan 89 - 17 Mar 89	13	Observations and Recommendations on the Social Marketing Study for the Pharmaceutical Component
R. Gipson	18 Feb 89 - 26 Feb 89	14	Implementation Plan for the Focused Assessment of the Pharmaceutical Sector and Assessment for Overall Planning Process
R. Gipson	01 Apr 89 - 22 Apr 89	18	Assessment of Planning and Evaluation Design for Pharmaceutical Component of Health Sector Financing Project
M. White	15 May 89 - 30 Jun 89	25	Consultancy to Project Implementation Office for Pharmaceuticals
D. Degnan	26 Jun 89 - 15 Jul 89	27	Strategy for Evaluation of the Health Sector Financing Project Pharmaceutical Component and Progress of the Focused Assessments
R. Gipson	12 June 89 - 30 Mar 91		Long-term Technical Advisor
D. Degnan	23 Jan 90 - 11 Feb 90	--	
J. Bates	30 Jan 90 - 31 Mar 90	--	
E. Maran	04 Feb 90 - 18 Feb 90	39	Research Plan for KAP Study for Prescribers, Dispensers and Consumers of Drugs
S. Fabricant	06 Apr 90 - 24 Apr 90	30	Economic Consideration in the Health Sector Financing Project Pharmaceuticals Component: Drug Costs and Expenditures

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**Table D.3.5 (cont'd)**  
**EXPATRIATE CONSULTANTS**

<b>Name</b>	<b>Consultancy Period</b>	<b>Report No.</b>	<b>Report Title</b>
J. Zeitlin	01 Apr 90 - 06 Apr 90	31	Being completed
J. Zeitlin	06 May 90 - 20 May 90	31	Being completed
J. Zeitlin	19 Sep 90 - 31 Oct 90	Draft	50 and 52 in one report at PIO-P
N. Hirschorn	22 Oct 90 - 25 Nov 90	35	Evaluation of the Pharmaceutical Concept Component of the Health Sector Financing Project
D. Degnan	05 Nov 90 - 17 Nov 90	Draft	At PIO-P
G. Wasek	12 Nov 90 - 25 Nov 90	36	Social Marketing Strategy Development for the Health Sector Financing Project
J. Maneno	10 Sep 90 - 01 Oct 90	40	Proposal for Pilot Project to Strengthen the Management of Drug Supplies to Rural Health Facilities
C. Costello	01 Aug 91 - 21 Jun 91	--	Assignment not completed
J. Bates	01 Jul 91 - 03 Jul 91	--	--
C. Leivermann	24 Jun 91 - 24 Dec 91	--	Assignment in Progress
J. Sallet	09 Sep 91 - 15 Oct 91	Draft	--

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### **3.1.2 Studies/Assessments/Demonstrations**

A total of 21 studies have been undertaken as part of the focused assessments and/or design of interventions. Table D.3.6 portrays the studies, their total cost and their status. Data from the assessments have been organized into study reports which are listed in Table D.3.7.

### **3.1.3 Training**

The persons who received training overseas under this component are reported in the Internal Midterm Review. The Director and Deputy Director of Dr. Soetomo Hospital participated in a five-week study tour in the United States. They were introduced to innovations in hospital pharmacy and their role with Pharmacy and Therapeutic Committees (P&T) in pursuit of hospital goals and objectives.

In-country oversight and management development workshops and meetings were held and a listing of these by year and the relation to benchmarks are given in Appendix C. Sessions are reported along with their purpose, number of persons involved, and the venue. However, it appears that some of the entries on the list are more closely aligned with the traditional definition of training than others. Included are local training of PIO/P personnel on the use of computers and of other POM personnel who trained personnel at the Kabupaten level. A mini-course in methodology for pre- and post information gathering was given.

### **3.1.4 Commodities**

In support of the activities of this component, computers and computer software were purchased. For one purchase, the Swedis system, waivers were obtained. The list of computers and software procured along with the names of the companies from which they were obtained is given in Appendix D.

## **3.2 Management of Inputs**

### **3.2.1 Planning**

Technical, financial and administrative workplans were prepared for the component. The workplan for the period August 1991 through March 1992 is evidence of this. The format of the workplan is prepared in such a way as to permit its continuous use for self-assessment and reporting.

**Table D.3.6**  
**HEALTH SECTOR FINANCING PROJECT**  
**LIST OF STUDIES**  
**PIO - P**

31 October 1991

No.	Title	Cross Reference With Report No. on Contract Monitoring Sheet	Amount Rp.	Status
01	Drug Management Study	1	120.000.00	Completed
02	Drug Use Study	2	96.191.883	Completed
03	Drug Manpower Study	3	93.740.000	Completed
04	Sec. Data Analysis and Literature Review	4	37.695.000	Completed
05	Soc. Marketing Study, Generic Drugs	5	13.500.000	Terminated
06	Bioavailability Studies	31, 32, 33, 35	36.600.032	Completed
07	Providers KAP Study	37	93.627.563	Completed
08	Organ./Mgmt. Analysis for Intervention Design	39	17.000.000	Completed
09	Urban KAP Study	40	9.350 USD	Completed
10	Training Module Devel. for Rational Drug Use Supervision	54	9.990.000	Ongoing
11	Motivation Module for the use of Standard Therapy	55	15.410.000	Completed
12	Drug Needs Estimation Module	57	8.855.000	Ongoing
13	Drug Distribution Module	58	15.990.000	Ongoing
14	Pharm. Serv. Management at Health Center Module	59	17.794.000	Ongoing
15	Rational Drug Use for Paramedics Module	64	14.511.000	Ongoing
16	Develop. of Generic Drug Inform. Material	63	17.000.000	Ongoing
17	Generic Drug Inform. Package Development (Radio and Bulletin)	65	18.500.000	Ongoing
18	Baseline Study (YKPM is contractor) (Intervention site)		14.511.000	Ongoing
19	Health Econ. for Health Executives	Not yet entered because not signed	9.900.000	Contract in Process
20	Evaluation of Training Modules		7.500.000	Contract in Process
21	MIS Development	45	161.364.388	In Process

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Table D.3.7

LIST OF STUDY REPORTS  
PIO/ PHARMACEUTICALS

NO.	STUDY	REPORT	CONTRACTOR
1	Drug Management Study (DMS)	<ul style="list-style-type: none"> <li>- Laporan Studi Pengelolaan Obat - Buku 1</li> <li>- Laporan Studi Pengelolaan Obat - Buku 11</li> <li>- Laporan Rksekutif Studi Pengelolaan Jan Studi Sumber Daya Manusia</li> </ul>	P.T. Manggala Jiwa Mukti
2	Manpower Study (MPS)	Final Report: <ul style="list-style-type: none"> <li>- Job Description and Person Specification</li> <li>- Appendices</li> <li>- Report of Manpower Study HSFP-P, Ministry of Health</li> <li>- Pokok-pokok Hasil Studi Ketenagaan HSFP-P (16 November 1989)</li> </ul>	Price Waterhouse Siddik
3	Analisis Organisasi dan Manajemen untuk Disain Intervensi	<ul style="list-style-type: none"> <li>- Laporan Akhir Rekomendasi Intervensi Pengelolaan Obat</li> <li>- Ringkasan Laporan Rekomendasi Intervensi Pengelolaan</li> <li>- Summary of the Report on the Recommendations for the Intervention into Drug Management</li> </ul>	P.T. Mabico Husa
4	Review of Secondary Data and Literature (ADSP)	<ul style="list-style-type: none"> <li>- Laporan akhir telaah data sekunder dan pustaka pendukung studi</li> <li>- Final Report Review of Secondary Data and Literature</li> </ul>	Yayasan Indonesia Sejahtera (YIS)
5	Drug Use Study (DUS)	<ul style="list-style-type: none"> <li>- Laporan Akhir Telaah Data Sekunder dan Pustaka Pendukung Studi</li> <li>- Lampiran I: Kumpulan Abstraksi Dokumen/Pustaka</li> <li>- Lampiran II: Kumpulan Review Dokumen/Pustaka Pendukung Studi</li> <li>- Lampiran III: Review dan Analisis Data Sekunder</li> <li>- Lampiran V: Evaluasi Studi</li> <li>- Laporan Akhir Rawat Jalan di Puskesmas dan Hunah Sakit (30 Mei 1990)</li> <li>- Laporan Akhir di Kawat Inap Kumah Sakit Tipe B, C dan D (30 Juni 1990)</li> <li>- Laporan Akhir Diskusi Kelompok Terarah (30 Juni 1990)</li> <li>- Summary Drug Use Study</li> </ul>	Yasan Indonesia Sejahtera (YIS)
6	Knowledge, Attitude and Practices (KAP for providers)	<ul style="list-style-type: none"> <li>- Studi Kualitatif Pengetahuan, Sikap dan Praktek (PSP) Preskriber dalam Penggunaan dan Manajemen Obat di Puskesmas dan Puskesmas Pembantu (Juni 1990)</li> <li>- Laporan Sementara Studi Kuantitatif</li> </ul>	Pusat Kelangsungan Hidup Anak (PUSKA-UI)

**Table D.3.7 (cont'd)**  
**LIST OF STUDY REPORTS**  
**PIO/ PHARMACEUTICALS**

NO.	STUDY	REPORT	CONTRACTOR
7	Knowledge, Attitude and Practices for Urban Community (KAP-Urban)	<ul style="list-style-type: none"> <li>- Omnibus HSFP KAP Study - May 1991</li> <li>- Rangkuman Hasil Penelitian</li> <li>- Omnibus HSFP KAP Study - May 1991</li> <li>- Management Summary</li> </ul>	Survey Research Indonesia (SRI)
8	Generic Bioavailability Studies	<ul style="list-style-type: none"> <li>- Glibenklamid vs Daonil</li> <li>- Nifedipin vs. Adalat</li> <li>- Dexametason vs. Oradexon</li> <li>- Diazepan</li> <li>- Digoksin</li> <li>- Rifampisin 450 mg tablet</li> <li>- Lidokain 2% injeksi</li> <li>- Laporan Akhir Hasil Uji Ketersediaan Hayati 4 macam tablet obat generik (Aminofilina 200 mg, Furosemide 40 mg, Metronidazol 500 mg dan Propranolol 40 mg)</li> </ul>	<ul style="list-style-type: none"> <li>Universitas Gajah Mada</li> <li>Universitas Gajah Mada</li> <li>Universitas Gajah Mada</li> <li>Universitas Airlangga</li> <li>Universitas Airlangga</li> <li>Universitas Indonesia</li> <li>Universitas Indonesia</li> <li>Institut Teknologi Bandung</li> </ul>
9	Social Marketing Study (SMS)	<ul style="list-style-type: none"> <li>- Studi "Social Marketing" Penggunaan Obat Instrumen</li> <li>- Protokol Studi Social Marketing Penggunaan Obat</li> </ul>	P.T. Dinamika Cipta Widya

Financial plans and budgets for the early years of the PIO/P were not readily available for review but a general project budget for each year is given in Table D.3.8. A summary of project expenditures through August 1991 (Table D.3.9) by Project Implementation Offices (PIOs) indicated that in FY 90 and 91, PIO/P ranked first in the order of expenditures among the project's units. However, at design, the project budget allotted approximately 22 percent of the overall project budget to the component. Expenditures as of July 31, 1991, as reported in the Internal Midterm Evaluation report, are nearly 26 percent of the total project funds spent to date. Therefore, this component is, proportionately, only 4 percent above the intended percentage of total project budget allocation.

### **3.2.2 Directing and Organizing**

The PIO/P is physically a part of the POM offices, is housed separately from the main DEPKES offices, and reports to the head of the Directorate for Pharmaceutical Control, who reports to the Directorate General for Food and Drug Control. (The issue of secondment is not a current one for the PIO/P. No one on the list of persons to return to the MOH is a part of the PIO/P.)

The PIO/P organizational structure and list of personnel, prior to the move of the long-term expatriate advisor to the position of Chief of Party, is portrayed in Figure D.3.1.

However, a network of persons from other directorates was organized to support the design and implementation of interventions, as depicted in Figure D.3.2. Figure D.3.3 shows which segments of the Ministry of Health had representation on the steering committee, activity coordination group, consensus group, and working groups.

Working groups were established at the provincial level as well so that these officials could participate in the implementation of interventions. A listing of the members of these groups along with a summary of their roles is given in Appendix E.

### **3.2.3 Controlling**

It is reported that staff members are evaluated on an annual basis but the process was not addressed in this assessment as the majority of the staff is Ministry persons and the evaluation of Ministry personnel was outside the scope of this evaluation.

Table D.3.8  
HEALTH SECTOR FINANCING PROJECT  
ISTI CONTRACT ONLY  
HOME AND FIELD PROJECT BUDGET\*

Cost Category	Year One 4/18/88-4/17/89	Year Two 4/18/89-4/17/90	Year Three 4/18/90-4/17/91	Year Four 4/18/91-4/17/92	Year Five 4/18/92-4/17/93	Total
1. Total Salaries	\$602,074	\$661,414	\$631,723	\$536,681	\$512,963	\$2,944,855
2. Fringe	22,995	23,459	20,095	20,899	20,865	108,313
3. Overhead	231,534	256,201	246,161	203,071	191,103	1,128,070
4. Consultants	41,580	53,460	53,460	35,640	29,700	213,840
5. Travel & Transportation	327,320	259,270	253,470	270,945	250,195	1,361,200
6. Allowances	184,839	191,794	193,466	116,158	104,989	791,246
7. Other Direct Costs	125,654	110,250	112,537	106,885	105,847	561,173
8. Equipment, Materials & Supplies	210,200	210,000	40,000	0	0	460,200
9. Training	319,000	335,500	245,000	225,000	156,000	1,280,500
10. Subcontracts	89,100	89,100	89,100	89,100	89,100	445,500
11. Studies/Assessments/Pilots	174,000	198,000	564,000	519,000	362,000	1,817,000
12. G & A	243,479	250,772	278,389	244,114	208,040	1,224,744
13. Fee	<u>181,798</u>	<u>187,206</u>	<u>207,864</u>	<u>182,271</u>	<u>155,336</u>	<u>914,475</u>
14. Total Costs	\$2,753,573	\$2,826,426	\$2,935,265	\$2,549,764	\$2,186,138	\$13,251,116

\*Excludes P.I.L. budget

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**Table D.3.9**  
**ISTI FIELD EXPENDITURES 1988-1991**  
**(U.S. \$)**

DESCRIPTION	FY 88	FY 89	FY90	FY91 (Up to Sep. 91)	TOTAL
PMU	45,502.36	182,084.68	214,264.14	71,941.74	513,792.92
PIO/Hospitals	69,068.50	282,968.36	227,904.80	54,025.44	633,967.10
PIO/Pharmaceuticals	95,203.74	281,315.13	301,262.57	163,623.06	841,404.50
PIO/Social Financing	153,060.88	198,345.91	291,136.22	121,451.04	763,994.05
HE PAU	44,533.34	348,931.13	130,795.28	46,003.28	570,263.03
ISTI	12,082.88	31,393.39	42,085.21	26,184.89	111,746.37
<b>TOTAL</b>	<b>419,451.70</b>	<b>1,325,038.60</b>	<b>1,207,448.22</b>	<b>483,229.45</b>	<b>3,435,167.97</b>

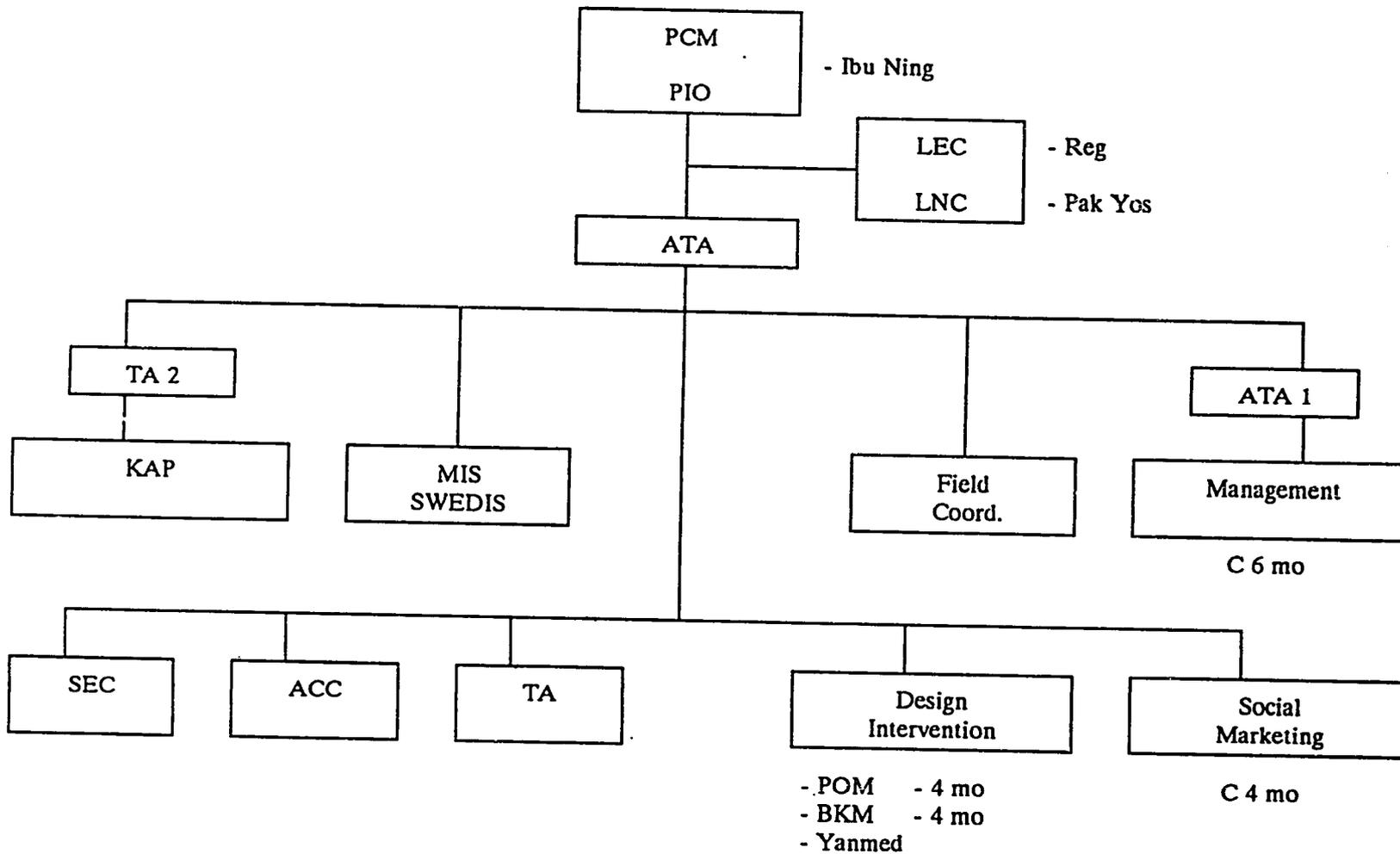
**NOTES**

1. FY 88 only includes the period Dec. 88 to March 89. For the period before Dec. 88, all expenses are not broken down as PIOs and are approved in total only.
2. All figures do not include:
  - local fringes and overhead
  - G&A
  - Fee
 and exclude contracts and commodities.
3. Based on monthly UTOMO reports per Anna de Maret, ISTI Executive Officer

**SOURCE**

Anna de Maret; 18 Nov. 1991

Figure D.3.1  
PIO-P ORGANIZATION STRUCTURE\*



NOTE:

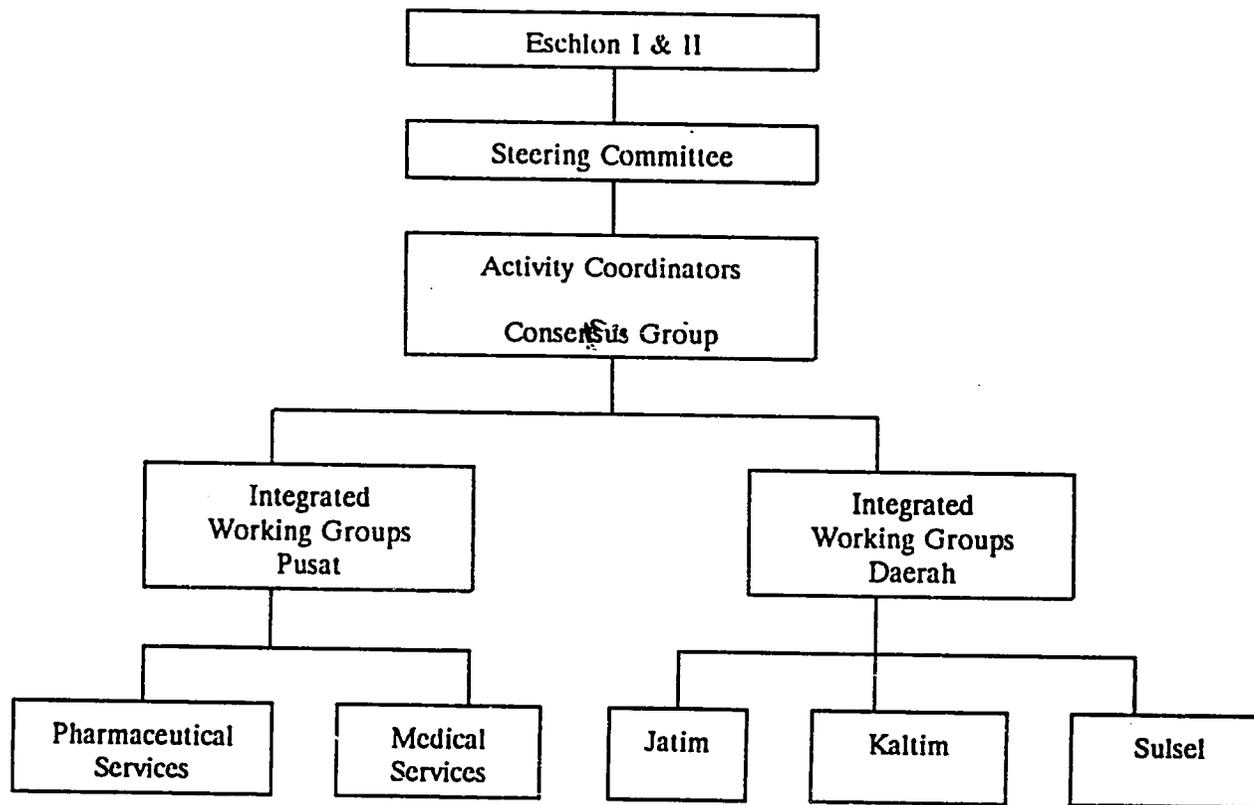
- LTC = Dr. Reginal Gipson
- LNC = Dr. Yos E. Hudyono
- ATA 1 = Dr. Roostijan Effendie
- TA 2 = Dr. Purwanto Hardjasaputra
- Field Coord. = Dr. S.U. Sembiring
- C = Consultant

\* Up to March 1991

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*Handwritten mark*

Figure D.3.2  
PIO/P  
ORGANIZATIONAL CHART  
FOR  
DESIGN AND IMPLEMENTATION OF INTERVENTIONS

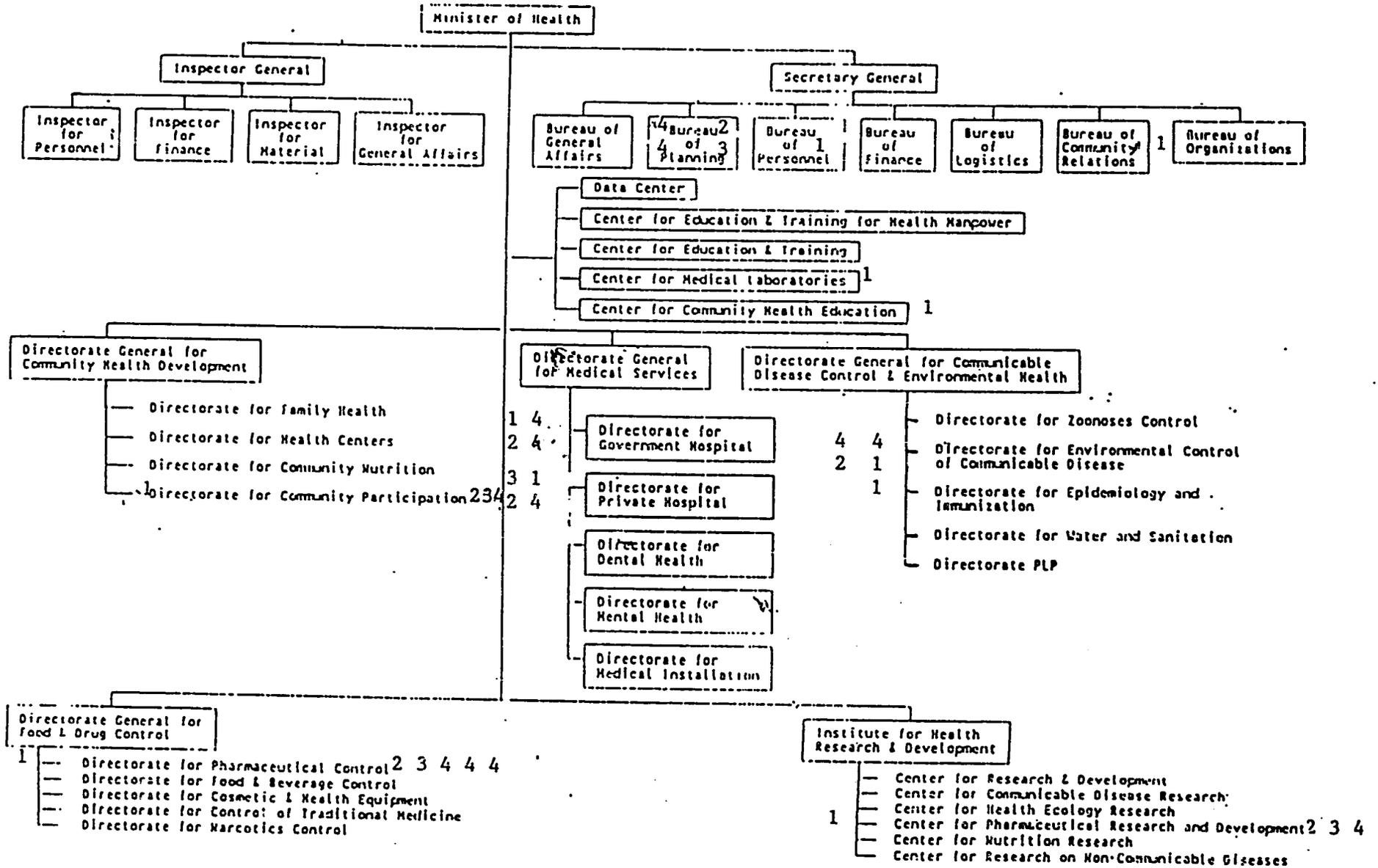


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FIGURE D.3.3

ORGANIZATIONAL STRUCTURE, MINISTRY OF HEALTH, CENTRAL LEVEL



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<sup>1</sup>Steering Committee for PIO-P  
<sup>2</sup>Activity Coordinators  
<sup>3</sup>Consensus Group  
<sup>4</sup>Working Group

Most of the financial monitoring of expenditures is done by the PMU. Operating procedures for financial management are in place. Monthly cash forecasts are prepared as well as a 6-month forecast based on projected activities, as outlined in the workplan. All payments are approved by the Chief of Party. Key elements from these procedures may be found in Appendix B.

Quarterly reports from the component are produced for the Chief of Party's incorporation into the reports to the funding agency and the Ministry of Health. These form the basis for monitoring progress. As noted earlier, the component has undergone two evaluations, one of which was the self-assessment, the Internal Midterm Evaluation. Published self-assessment is not usually the hallmark of USAID-funded projects and the staff should be recognized for this effort.

### **3.2.4 Constraints to Performance**

At the time of this evaluation, the activities of the component are constrained in their performance by the move of the long-term advisor to the position of COP, the lack of an approved workplan for the period April 1991 through March 1992, and the absence of a clear USAID statement regarding the future of the project, its staffing and, therefore, the future of the component.

### **3.3 Other Pharmaceutical Aspects of the Project**

In the design of the project, pharmaceuticals are also included as an aspect of other project segments. For example, the project design calls for a diagnostic of the performance of government hospital management. One of the features of hospital operations to be reviewed is medical and pharmaceutical services as well as standards of care.

The project paper also recognizes that pharmaceuticals form a significant cost center for hospital operations as well as for public health insurance schemes. The structuring of benefits packages was to take this fact into consideration. The project is in the process of refining its approach to the delineation of the drug benefit as it develops social financing schemes.

There is, however, considerable conceptual ambiguity which exists in other aspects of the project regarding definitions of terms and services. This is evident in the models for testing managed care and the baseline study which is to be used prior to the tests.

## **4.0 PROJECT ACCOMPLISHMENTS RELATED TO PHARMACEUTICALS**

### **4.1 Accomplishments Within the Component**

As planned, the component was to conduct focused assessments for problem identification and use the results in the design of interventions and testing of the intervention packages in six districts. The major findings of accomplishments relate to the studies conducted, the degree of institutionalization of effort, the design of interventions, direct facilitation of the government's policy reforms, and likely professional impact of project efforts. Summary points on these follow.

The project component has already reported on the lists of studies, trainings and technical assistance activities and can be related directly to the progress made thus far; they will not be repeated here. (See Appendix F.)

#### **4.1.1 Focused Assessments**

Four focused assessments were planned (drug management, drug manpower, drug use and secondary data analysis). The focused assessments have been conducted with the exception of the study of knowledge, attitude and practice in rural areas. Appendix G contains a summary of the integrated analysis of the results of these studies and the conclusions and recommendations of the KAP study for prescribers, managers and patients.

Recommendations from these studies have been analyzed by the structural component of POM and consultants. The analysis pointed out the presence of structural and operational problems:

1. Uncoordinated drug planning, procurement and distribution;
2. Uncoordinated drug budgeting between funding sources;
3. The irrational use of drugs;
4. Ineffective supervision for rational use of drugs; and,
5. Low provider and community awareness on selected pharmaceutical issues.

#### **4.1.2 Intervention Design**

Based on the needs identified in the studies and assessments, three models for intervention have been designed, sites selected and preparation initiated for installation of the intervention(s). Sites selected for a full package of interventions are East Java and West Sumatra.

The design has taken into consideration the complexities and needs of the ordering, managing, distributing, prescribing, and use within the system, as outlined

in Figure D.3.4. The system for the first model is graphically depicted in Figure D.3.5.

Further, some training has already occurred and during the site visit the evaluator could identify changes in the procedures which will increase the efficiency of the planning of drug requirements, drug storage and distribution techniques, etc.

Plans for the intervention do include the patient and the community. For example, IEC messages will be designed and developed which will target the perception that injections are better than other forms of medication. Messages which will also target the perceived need to absolutely have several medications prescribed during a visit to the health centers are among those planned.

Plans for intervention, however, could be strengthened regarding the structures and methods to be used for the assurance of appropriate dispensing and administration of medicines. This point is made in light of the observation and information that there are innovative plans for the pre-packaged treatment for ARI and diarrheal disease.

There is a clear articulation of the focus on rationalizing the system to assure that drugs are accessible to the populations in the intervention sites and to assure the correct prescribing (using standard treatment protocols). On one of the site visits, however, there is evidence that dispensing is made without minimal supportive consultation on patient self-administration.

The question arises as to how other areas of the country and the other project components will benefit from the wealth of information derived from the work of the component thus far. Perhaps a way could be found to encapsulate the information in guidance documents or manuals which could be used as "standard operating procedures" or the basis for training in other parts of the country. The PIO/P is proceeding to respond to this question by initiating a relationship with the normal pusdiklat training process and providing them with information they can use regarding the pharmaceutical system at the district level.

A second question emanates from the need to increase the synergism with other interventions designed by the project, especially in light of initiatives of the government since the project's beginnings (for example, Unit Swadana and DUKM/JPKM). The project has proposed an integrated trials strategy which could be implemented but not necessarily at the same site. The strategy as designed recognizes the need to see the use of drugs in a more than vertical approach as is

FIGURE D.3.4

MAIN SOURCES OF FUNDS AND SUPPLIES TO  
KABUPATEN HOSPITALS AND HEALTH CENTERS

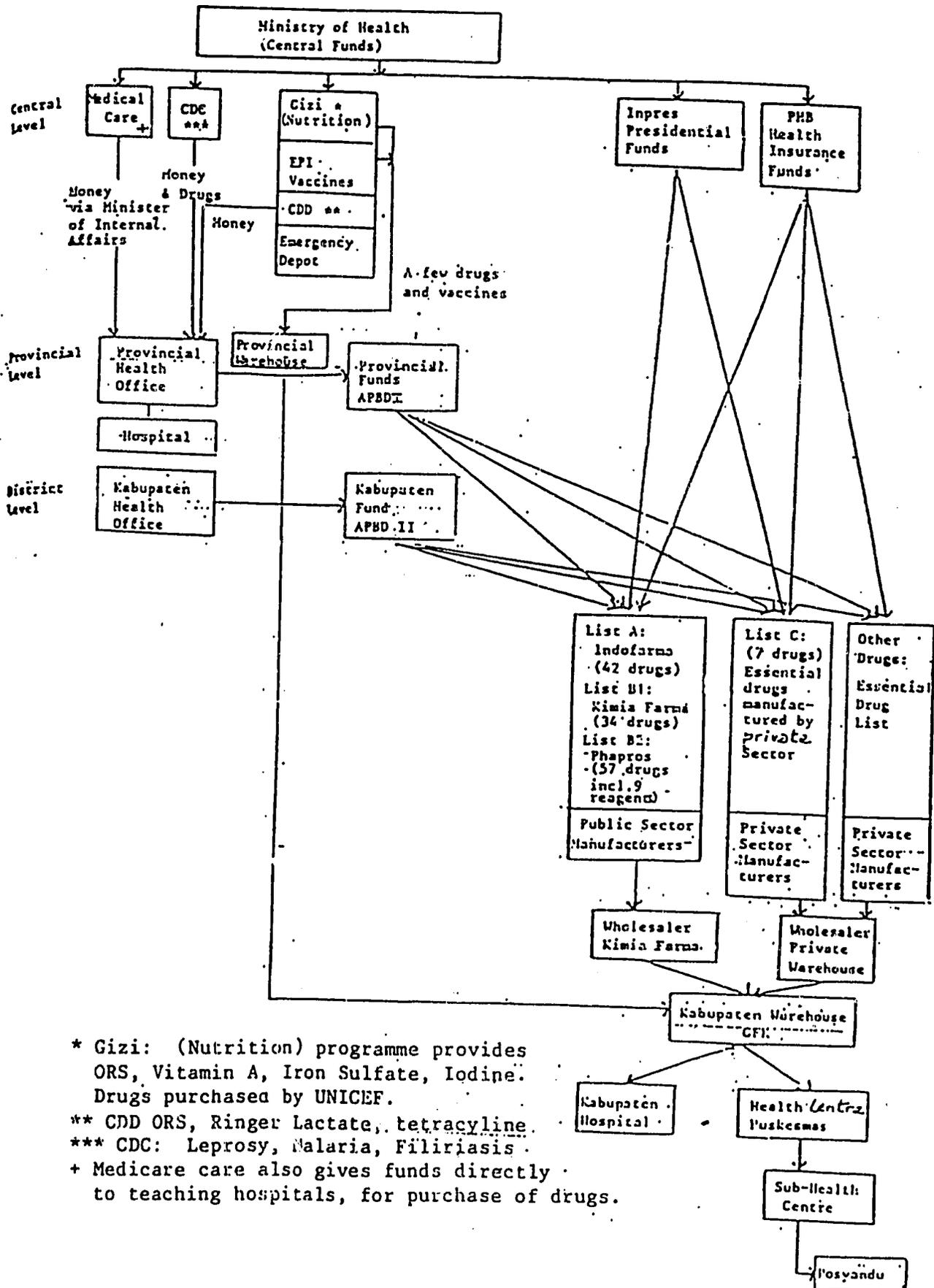
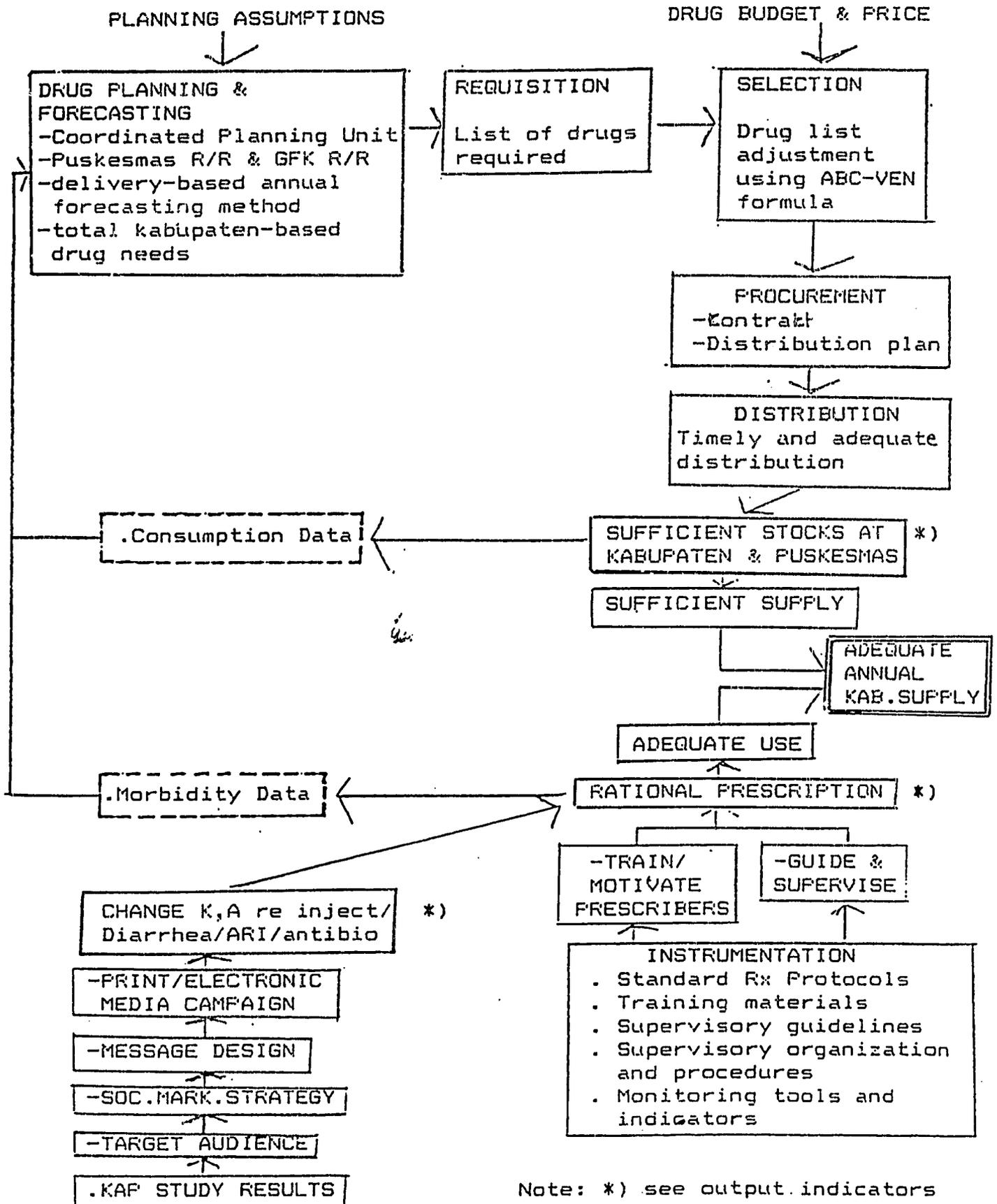


FIGURE D.3.5

SYSTEM MODEL FOR IMPROVING EFFICIENCY AND EFFECTIVENESS OF DRUG MANAGEMENT AND USE



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now the case. Five technical areas of focus have been chosen for the global integration strategy: payment systems, standards of care, quality assurance, management information systems, and training. These are key areas for the containment of costs and the assurance of health outcomes in organized health care delivery.

The project recognizes that if these areas are not themselves integrated on a practical basis, then achievements of health objectives are reduced. As outlined, the global strategy recognizes the impact of these systems on the production of health outcomes, not only on cost containment.

To this end, it is deemed appropriate to assure that the standards of care developed also include standards for specific health care services. The development of therapeutic standards is seen as an early step in this process. The proposed package of minimum standards should be expanded to include these service standards if this can be coordinated with other aspects of government activity and is politically and programmatically feasible at this time. The organization of service standards could be seen as cumbersome and time-consuming tasks but there are examples from many countries which could be considered for possible revision and/or adaptation. (And, the package of basic health care services is already structured by the government.) One example of service standards is the package of standards of primary health care services which has been adopted by the U.S. government for its community health care programs. These elements form the basis for the definition of quality of care in these programs.

Accordingly, the project <sup>is</sup> may also wish to view standards of care as one element of the quality assurance system since they are so closely linked in concept and in application, unless they are going to also be a part of the accrediting process outlined.

#### **4.1.3. Testing of Interventions**

The actual installation of the coordinated package of designed interventions has not yet begun, as according to the workplan, but preliminary training has yielded some testing of interventions. For example, the training of staff in the planning of drug requirement at the district level has been implemented and has resulted in new procedures.

#### **4.1.4 Institutionalization of Effort**

Functional institutionalization within the Ministry of Health was not a designed output of the project. Nonetheless, the presence of a network and organization for the design and implementation of interventions is commendable. However, it seems

that this network's involvement might have been affected by the move of the long-term technical advisor to the chief-of-party slot.

There should be a specific plan developed, agreed upon and implemented that strengthens and improves the institutionalization effort. The POM, along with other parts of the Ministry, must be in a position to continue the strategy and methods adopted long after technical advisors are gone.

#### **4.1.5. Professional Impact**

It was observed that the use of pharmacists as active and full participants in the design and implementation of interventions was minimal. This became an intriguing question for this evaluator, especially since physicians were sent to the U.S. for review of hospital pharmacy services. It is reported that pharmacists are trained in Indonesia primarily as scientists and that they receive little training on how to be a part of the community health team.

However, Nomor 244/MENKES/SK/V/1990 directs pharmacists in community pharmacies to provide information and consultation services about drugs. These services are to include drug information for doctors, paramedics and the community in general, as well as report on the potential of adverse drug effects and on drug quality.

As the project moves to relate more to the knowledge, attitudes and practices of consumers, there will be a direct effect to private-sector, community pharmacists. Wherever they are located, they generally have first-hand and daily contact with a wide range of persons. It would be well to consider this potential factor and prepare to deflect likely adverse effects by early and targeted involvement of this component of the community. Such involvement could further energize a sense of partnership between the pharmacist and other health care personnel, where this is needed.

#### **4.2 Accomplishments Within the Project as a Whole**

There has also been progress on pharmaceutical issues in other parts of the project. As the concept and implementation of Unit Swadana moves forward, the hospital component has supported the focus on quality and standards of care, including the development of standard treatment protocols. There is also consideration given for using the hospital pharmacy as an organized service unit, complete with a structured role in the quality assurance process, in addition to serving as the drug distribution point. In this manner, there is a view that this unit can move from simply a cost center to a revenue generation center.

YANMED, in its 1989 decree (Nomor 0428/YANMED/RSKS/SK/1989), addresses the issue of the pharmacy installation in the hospital. The pharmacy has the

responsibility of managing the drugs and is to be a one-stop shop for planning and procuring the drugs based on the use within the hospital. There is to be a P & T committee, the secretary of which is to be the pharmacist. This committee is to recommend the selection of drugs, the establishment of a hospital formulary, development of standard treatment regimens and evaluate prescribing and drug use. The pharmacy installation is to be the only "apotik" in the hospital. Social financing has assisted in identifying the costs associated with drugs and structuring premiums to include the costs of drugs as a part of their pilot efforts in PHB and Bali JPKM. In the PHB capitation pilot, drugs accounted for approximately 45 percent of the health service budget allocation (Figure D.3.6) but 52 percent of the 1989 expenditures. (See Figure D.3.7.)

Of the three kinds of health care packages considered under Dana Sehat in Bali, all are to cover the costs of medications. The Bali pre-paid health insurance experiment has structured the monthly medical service premium so that 50 percent of it will cover the costs of drugs.

In the Bali pilot, it is reported that physicians purchase a small amount of their drugs for sale to their patients from the local apotik. As the program grows, there will be increased need to review this purchasing arrangement for efficiency. There may be some efficiency which can be achieved through the use of bulk or group purchasing schemes as part of the JPKM test. There may also be a need to limit the number of prescriptions one can obtain per unit of time or cap the total amount to be reimbursed for drugs per patient per unit of time.

### **4.3 Unanticipated Accomplishments**

In many projects, there are planned, anticipated accomplishments as well as unplanned ones. This section outlines several unanticipated accomplishments within the component and the project as a whole.

#### **4.3.1 Within the Component**

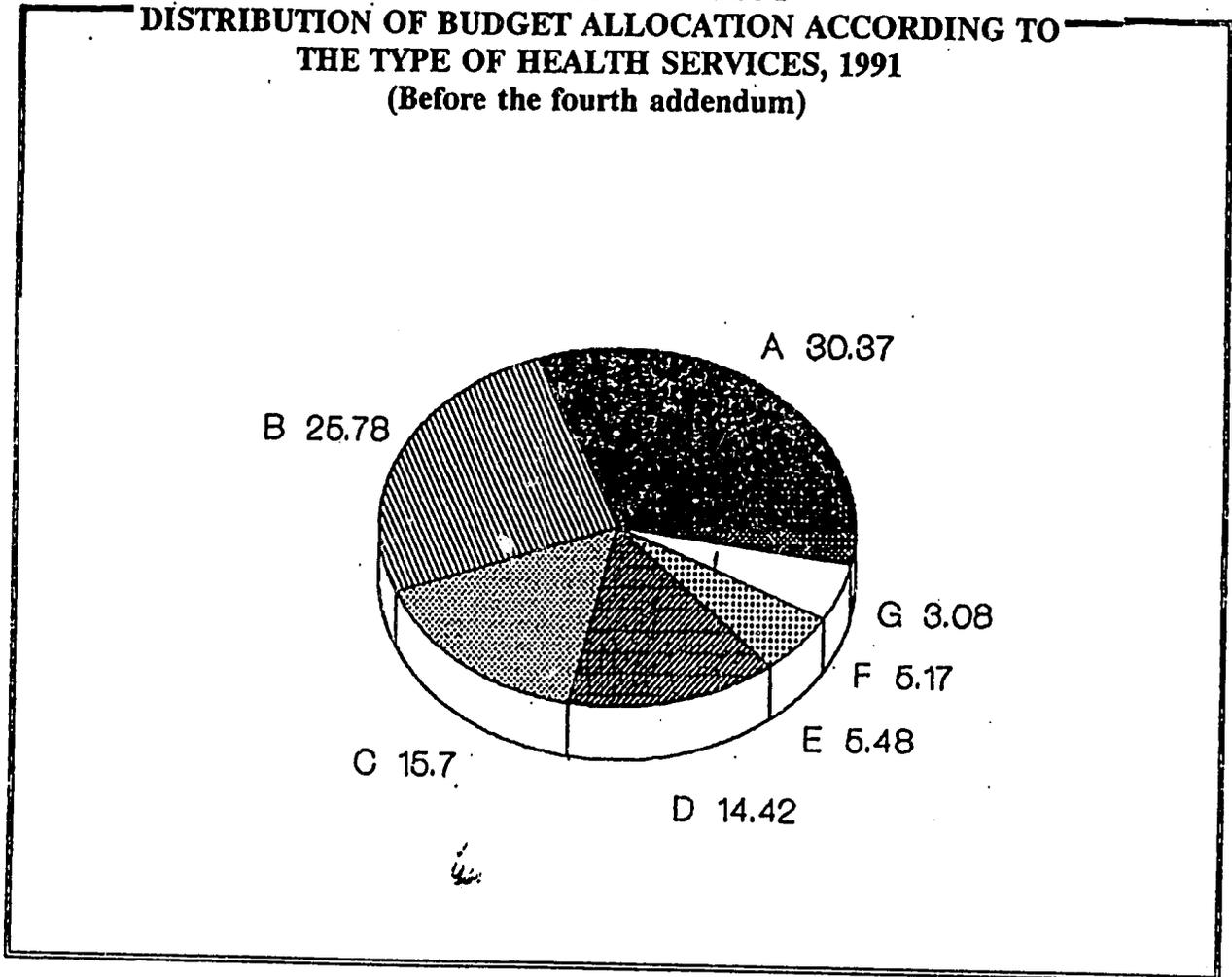
The government has moved ahead in its policy and structural reforms at a pace quicker than initially expected. Information coming from project activities has been one stimulating factor. Information has proved to be immediately useful to the needs of structural reforms in drug supply, management, distribution, and use. This has served as an inadvertent fuel, however, to the conduct of studies.

For example, the government policy focus on generic drugs and deregulation in the pharmaceutical sector has been supported within the component by selected bioequivalence studies on eleven generic drugs:

Figure D.3.6

**PHB CAPITATION PILOT**

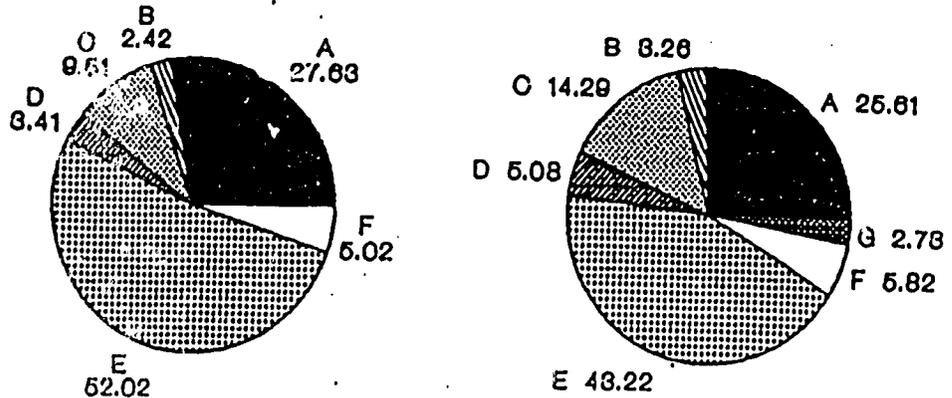
**DISTRIBUTION OF BUDGET ALLOCATION ACCORDING TO  
THE TYPE OF HEALTH SERVICES, 1991  
(Before the fourth addendum)**



	Rupiah (Rp)	Percent (%)
A. Health Centers drug Cost	58.817.664	30,37
B. Basic Health Care Cost	49.992.400	25,78
C. Hospital in patient Cost	30.400.000	15,70
D. Hospital drug Cost	27.920.000	14,42
E. Health center in pasien Cost	10.620.000	5,48
F. Individual klaims	10.004.600	5,17
G. Hospital out patient Cost	5.962.000	3,08
	193.646.664	100,00

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Figure D.3.7  
**PHB CAPITATION PILOT**  
**PERCENTAGE DISTRIBUTION OF THE EXPENDITURE**  
**OF HEALTH SERVICE COST IN 1989**  
**COMPARED WITH THAT OF 1990**



	Th. 1989 (Rp)	Th. 1990 (Rp)
A. Basic Health Care Cost	41.151.348 (27,63 %)	47.698.200 (25,61 %)
B. Hospital Out Patient Cost	3.601.000 ( 2,42 %)	6.067.100 ( 3,26 %)
C. Hospital in patient Cost	14.154.000 ( 9,51 %)	26.602.000 (14,29 %)
D. H.C. in Patient Cost	5.080.219 ( 3,41 %)	9.451.000 ( 5,08 %)
E. Drug Cost (HC+Hospital)	77.469.256 (52,02 %)	80.481.883 (43,22 %)
F. Individual Claims	7.467.350 ( 5,02 %)	10.834.500 ( 5,82 %)
G. Others ( Surplus )	-	5.083.777 ( 2,73 %)
	148.923.173 (100 %)	186.218.480 (100 %).

1. Glibenklamid (Glyburide)
2. Nifedipine
3. Dexamethasone
4. Diazepam 5. Rifampicin 450 mg. Tablets
6. Lidocain 2% Injection
7. Aminophyllin 200 mg.
8. Furosemide 40 mg.
9. Metronidazole 500 mg.
10. Propranolol 40 mg.
11. Digoxin

Facilitation of the government's drug registration system with purchase of computers and software (SWEDIS) was not a planned part of the project.

#### **4.3.2. Within the Project**

The project has responded to the need for an increased emphasis on the integration and interrelationship of all of the important information emanating from this segment. The reader is referred to the earlier section on intervention design for elaboration.

There has been a growing realization of the need for a new partnership between all members of the health care team, especially between physicians and pharmacists and nurses.

### **5.0 STRATEGIC ORIENTATION OF ACCOMPLISHMENTS**

#### **5.1 Government of Indonesia Policies and Directives**

The Health Minister has indicated that there need to be achievements and/or breakthrough in ten areas to accelerate development of the health sector.<sup>2</sup> Of these, three relate directly to the substance of the pharmaceutical component of the project: the use of generic drugs, the deregulation of the pharmaceutical sector and job analysis.

The Ministry plans to make drugs more available to the general public through encouraging the wider use of generic drugs at public health facilities. It will also seek to increase the use of generic drugs within the private sector by providing further information in campaigns on the use of generics.

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<sup>2</sup>See section IV-A for a review of these ten areas.

To assist in achieving these breakthroughs, the pharmaceutical component of the project has, among others:

1. conducted bioequivalence studies on eleven generic drugs and provided further information for the use of generics for the Ministry of Health use in increasing prescriber confidence with generic drugs;
2. established a drug requirement planning and budgeting framework at the district level which focuses on the description, procurement and use of drugs which are generically described;
3. included a policy of the use of generic drugs within its plans for the promotion of the rational use of drugs;
4. developed training material for use by public health personnel, primarily prescribers, which incorporates generic nomenclature for pharmaceuticals; and,
5. plans to increase community awareness on the characterization and use of generic drugs.

Deregulation is directed towards the production of drugs, the retail distribution of drugs, drug-related services through pharmacies, and registration of pharmaceutical and traditional medicines. One identified strategy to achieve deregulation objectives is to simplify procedures for pharmaceutical and traditional medicine registration.

The pharmaceutical component of the project has assisted in the execution of this strategy by the waived procurement of computer software and hardware which will, among other things, speed up and simplify the process of registering pharmaceuticals and retrieving information on those drugs which are already registered.

Under the pharmaceutical component of the project, a drug manpower study was carried out to assess staffing and personnel needs required to assure appropriate management of pharmaceuticals at all levels.

It appears, however, that the project can take no credit for assisting the Ministry in initiating these policy concepts but there is some evidence that information from the project assisted in articulation of the concepts in a more precise and implementable manner. The component provided resource, expertise and in the case of drug registration, an entire upgrade of the existing computerized system. Given that the Ministry is in the process of preparing the next pelita and 25-year plan, it seems that the output is timely.

Finally, the PHB and Bali experiments give further demonstration and support to the government's goals for Lembaga Swadana and managed comprehensive health care (DUKM/JPKM).

## **5.2 A.I.D. Policies and Priorities**

As A.I.D. was focused on child survival at the time of project design, the targets of the achievements thus far are supportive of the reduction of the morbidity and mortality of children. The interventions as currently designed are targeting the problems related to the supply of essential child survival drugs, correct treatment of ARI and diarrheal disease, the correct use of antibiotics and injections, as well as polyprescribing.

## **5.3 Other Donor Assistance**

The findings of the 1989 WHO review of the drug programme in Indonesia demonstrate that the direction the project had taken with regard to support for the rationalization of the drug system as a whole was sound. This WHO team outlined and encouraged the development of a national program on the promotion of rational use and effective management of drugs in Indonesia. (See Appendix I.) Many of the project's objectives are supportive of the recommendations of the WHO team.

## **6.0 SUMMARY**

In summary, the activities of the component are contributing to the achievement of the overall goals of the project and the specific policy and structural reforms goals within the area of pharmaceuticals. The pace of activities appears to be close to the planned schedule (midway) and 40 percent of the component's budget is reported as expended.

However, depending on additional workplan approvals, the breadth of unplanned but needed demonstrations in support of integration efforts and new government initiative, USAID may wish to consider additional funding for this component. This is especially true since the delay in workplan approval required expense of technical assistance funds and there is a greater need for more field-based activities.

Amendments to benchmarks of progress are in order if agreement is reached concerning unplanned but needed demonstrations and tests.

## **7.0 PRIMARY RECOMMENDATIONS**

Recommendations are made throughout the text for the component and the project as a whole. However, primary recommendations are listed below for the pharmaceutical component of the project and they focus on the use of the information flowing from the focused assessments, the design of the interventions, the

need for institutionalization, greater contribution to policy initiatives, and the strengthening of the health team. The remainder of the recommendations relate to the pharmaceutical aspects of the project as a whole.

#### **7.1 For the Component:**

1. Extend the technical assistance available within the component for the full seven years of the project;
2. Strengthen the institutionalization efforts; have a wide dissemination of reports within the Ministry; use the activity coordinators to not only represent the views of their department on PIO/P actions but also to bring information on PIO/P issues and achievements, formally, to their department;
3. Reduce the conceptual ambiguity now present in the use of terms by project-wide agreement on basic definitions with regard to the terms drugs, pharmaceutical, medicines, pharmaceutical services, pharmacy and drug use process;
4. Prepare a series of guidance documents and manuals which translates all the information gleaned from all the focus assessments. Produce these manuals for POM use and distribute widely as possible;
5. Continue to function within POM in support of Ministry efforts related to pharmaceuticals and direct facilitation of policy initiatives but give increased and focused attention as well to the strengthening of the plan for integration of pharmaceuticals in the pilot test(s) for managed care and Lembaga Swadana progress within Indonesia;
6. Join with other aspects of the project in the implementation of the pilot tests of an integrated model of district-based network systems within the managed care and Lembaga Swadana framework; use the principles, methods, etc., of the interventions designed to construct the system and give priority to the technical areas of pricing of drugs and payment for them; the management information needed to track costs and use of drugs within the model, the role of drug ordering, managing, prescribing and use within the quality assurance process and the training of manpower to support these priorities;
7. Initiate a transition phase over the next year preparing for full integration and implementation of the results achieved from the focused assessments and intervention design thus far;

8. Should the integration demonstration sites differ from those selected for the interventions designed under this component, use the sites identified and prepared for the medical, pharmaceutical interventions as exemplars of drug requirement planning and involvement at the kabupaten level so as to reap the benefit from the investments already made in those areas. Such transition will let those willing government personnel know that they too have a role to play in assisting their government in achieving goals in managed care;
9. In light of the move of the expatriate long-term advisor to the COP position, staff function within the PIO/P must be reorganized to support the intervention design and implementation as well as the growing synergism within the project; the advisor could come back into the unit or, if this is not possible, a couple of Indonesian short-term consultants with expatriate assistance to structure specific elements of the integration implementation. Leadership in this coupling should be within the purview of the Indonesian counterpart with the expatriate responsible for input of "world class" information;
10. Assist the hospital component to structure hospital pharmacy services as per YANMED;
11. Continue active participation in delineating the elements of the baseline which pertain to rationalizing the system, the costs, charges, etc.;
12. Actively promote the physician, pharmacist, nurse partnership within the health care team;
13. Work with private-sector apotiks to provide information increase their use of generic drugs, role in health care services, etc., by involving their professional organization in discussions of JPKM policy analysis, development of standard treatment protocols, increasing the dispensing/administration knowledge of the patient and the pharmacist/dispenser/administrator; role of drug expenditures in achieving managed care objectives, etc.

## 7.2 For the Project

### 7.2.1 Social Financing

1. Continue to obtain a greater understanding of the factors associated with the cost of drugs and the structuring of the drug benefit; consider the expansion of the minimum package of standards to include

standards of specific service including pharmaceutical services; and,

2. Develop a relationship with local apotiks for efficient supply arrangements given that local doctors buy their drug supply from local apotiks and/or use the puskesmas drugs.

#### **7.2.2 Hospitals**

1. Continue articulation of the full role of pharmaceutical services within the hospital by expanding on the YANMED SK;
2. Collaborate with the pharmaceutical component on defining the elements, process and desired outcomes related to the use of drugs within the quality of care assurance package being structured.

**APPENDIX A**  
**MANAGEMENT SCIENCES FOR HEALTH SUBCONTRACT**  
**SCOPE OF WORK AND SERVICES**

## SECTION A

### SCOPE OF WORK AND SERVICES

#### A.1. Health Sector Financing Project -- Pharmaceuticals Component

In the pharmaceutical management areas of primary MSH capability, any project needs for short-term technical assistance which have been identified by the ISTI field team (long-term expatriate pharmaceuticals advisor, the Director of the Pharmaceuticals Project Implementation Office, and the Chief of Party) and approved by the USAID mission will be referred first to MSH for identification of potential candidates. The ISTI team would be encouraged to request specific individuals whenever there are clear local preferences. If MSH is unable to propose a candidate who is acceptable to ISTI and USAID, then ISTI would be expected to identify alternative candidates.

Pharmaceutical management areas of primary MSH capability include selection and formulary management, procurement, distribution, hospital pharmacy management, drug utilization review, promoting rational drug use, patient compliance, financial management for drug supply including drug revolving funds and other forms of pharmaceutical cost-recovery, drug management training, drug management information systems, and operations research for drug management.

In addition, ISTI may refer short term technical assistance requirements identified by the MOH and the ISTI field team to MSH for the nomination of candidates in areas in which MSH has been less active. These areas include pharmaceutical manpower planning, social marketing of essential drugs, industrial pharmacy (local production), and health communications.

It is expected that MSH would identify the best available candidates, drawing primarily on fulltime MSH drug management staff, and consulting staff at the Harvard Program for the Analysis of Clinical Strategies. As appropriate and as requested by ISTI, MSH would also draw on the skills of other MSH central and field staff, individuals from the MSH DMP consultant roster, and individuals suggested by project staff as having unique skills needed by the project.

## A.2. Deliverables

MSH shall provide professional personnel with expertise in the following technical areas:

Pharmaceutical Policy and Management	8 person months
Pharmaceutical Logistics, Distribution/ Hospital Pharmacy Management/or Coordination and Management	1.75 person months
Consultants	1 person month

It is understood and agreed that the person months may fluctuate in pursuit of the technical objectives of the project as determined by ISTI and mutually agreed by MSH.

In the event that MSH professional personnel are unavailable, consultants approved by ISTI and MSH may be used.

## A.3. Key Personnel

The individual listed below is considered to be the key person assigned to this subcontract:

Dr. Jonathan D. Quick

The person specified above is considered to be essential to the work being performed hereunder. Prior to changing the specified individual, MSH shall notify the ISTI Team Leader reasonably in advance and shall submit justification in sufficient detail to permit evaluation of the impact on the program.

MSH shall consult with ISTI if the specified individual plans to, or becomes aware that he will, devote substantially less effort to the work than anticipated. If ISTI determines, at its sole discretion, that the reduction of effort would be so substantial as to impair the successful prosecution of the project, ISTI may request a change of Key Personnel, terminate the subcontract or make any other appropriate modification to the subcontract.

## A.4. Cost Reimbursement

The total estimated price of this subcontract is \$226,242.

**APPENDIX B**  
**HEALTH SECTOR FINANCING PROJECT**  
**SUMMARY OF CONTRACTING PROCEDURES**

**CONTRACTING PROCEDURES**

NO.	PROCESS	\$0 - \$9,999	\$10,000 - \$24,999	\$25,000 - \$99,999	\$100,000 and above
1	2	3	4	5	6
1.	Draft TORs, SOW, Expected Outputs	PIO	PIO	PIO	PIO
2.	Review and Approval of #1	PMU/ISTI	PMU/ISTI	PMU/ISTI	PMU/ISTI + USAID/C
3.	Tender Document A. Prepare Tender Documents and Admin Requirements B. Devt of Standard Budget C. Solicitation of Bids/Conduct Tender	PIO + S	PIO + S	PIO + S	PIO + S
		U	U	U	U
		PIO + S	PIO + S	PIO + S	PMU/ISTI + PIO + USAID/C
4.	Administrative Review of proposals	U	U	U	U + USAID/C
5.	Technical Review of Proposals	PIO + S	PIO + S	PIO + S	PIO + S
6.	Budget Review of Proposals	U	U	U	U + USAID/C
7.	Admin preparations for Best and Finals	N/A	U	U	U + USAID/C
8.	Conduct Best and Finals Negotiation	N/A	PIO + S + PMU	PIO + S + PMU	PMU + PIO + S
9.	Review Budget of Best and Finals Proposals	N/A	U	U	U + USAID/C

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NO.	PROCESS	\$0 - \$9,999	\$10,000 - \$24,999	\$25,000 - \$99,999	\$100,000 and above
1	2	3	4	5	6
10.	Select Winner	PIO + S	PIO + S + PMU	PIO + S + PMU + Tim Inti	PIO + S + Tim Inti
11.	Review Selection and Admin Tender Process	U	U	U	U
12.	Formal Approval	PIO + S + PMU	PIO + S + PMU	PIO + S + PMU + Tim Inti	PIO + S + TimInti+U/ Contracts
13.	Formal Advisement to each Contractor	U	U	U	U
14.	Draft Contract	U	U	U	U
15.	review and Approval of Draft Contract	PIO + PMU/ISTI	PIO + PMU/ISTI + S	PIO + S + PMU/ISTI	PIO + S + PMU/ISTI
16.	Draft Contract Sent to Contractor	U	U	U	U
17.	Formal Contract Approval	PMU/ISTI+ Contractor	PMU/ISTI+ Contractor	PMU/ISTI + Contractor	PMU/ISTI+ Contractor
18.	Contract Signed	PMU/ISTI + Contractor	PMU/ISTI + Contractor	PMU/ISTI + Contractor	PMU/ISTI + Contractor

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NO.	PROCESS	\$0 - \$9,999	\$10,000 - \$24,999	\$25,000 - \$99,999	\$100,000 and above
1	2	3	4	5	6
19.	Copies distributed to O/PH and U/Contracts, Original to U and Contractor	U	U	U	U
20.	Monitoring of Contract Payments and Deliverables	U	U	U	U
21.	Maintenance and Monitoring of Contract Close-Out	U	U	U	U
22.	Preparation of Contract Amendments (if necessary)	PIO + U	PIO + U	PIO + U	PIO + U

- PIO = Project Implementation Office: Administrative Staff Person and Technical Consultants
- PMU/ISTI = Project Management Unit/ISTI Staff Members
- S = Representative of related Structural Unit or Activity Coordinator
- Tim Teknis = Surat Keputusan (Decree issued by Project Officer, MOH) designates the composition of this team, which will consist at a minimum of a representative from the PIO, Structural Staff, and any additional technical personnel as required
- Tim Inti = Surat Keputusan (Decree issued by Project Officer, MOH) designates the composition of this team, which will consist at a minimum, of the Director/PIO, Director/PMU, CP-PTC, MOH/Structural Official (Steering Committee)
- U = Drs. UTOMO & Co.,
- NA = Not Applicable

Example

**Monthly Cash Forecast**

Project ANE-0354-C-8030-00

ISTI Department No. 200

Forecast Period: August 1-31, 1991

Monthly Fixed Expenses

Salary	xx,xxx
UTOMO fee	x,xxx
Total fixed:	xx,xxx

Variable Cash Outlays

Short-term Advisor Fees	x,xxx
Long-term Advisory Costs	xx,xxx
Travel	x,xxx
Training	x,xxx
Studies	xx,xxx
Commodities	xx,xxx
Other Direct Costs	x,xxx
Total Variable:	xx,xxx
Total Projected Monthly Cash Expenditures:	xxx,xxx

07/30/1991

Six Month Expenditures Forecast  
 ISTI Project #200

Form F.3

PIO/ \_\_\_\_\_

(in Rupiah)

Working Budget/ Line Item	October 91	November 91	December 91	January 92	February 92	March 92	Total
9. Short Tech. Assist.							
11. Travel							
12. Training							
13. Studies							
14. Commodities							
15. Other Direct Cost							
Total							

**APPENDIX C**  
**OVERSIGHT AND MANAGEMENT DEVELOPMENT WORKSHOPS**  
**AND MEETINGS**  
**(In-Country By Year)**

**PERTEMUAN UPP-FARMASI  
TAHUN 1988**

Benchmark	No.	Pertemuan	Tanggal	Tempat	Peserta
3.1.2	1	Mini Workshop	15-16 Juni	Jarkata/Grand Menteng Hotel	25 Orang
3.1.4	2	Lokakarya UPP - Farmasi	17-18 Juni	Jakarta/Grand Menteng Hotel	50 Orang
3.1.3	3	Penawaran Rekanan	28 Juni	Jakarta	22 Orang
3.1.3	4	Workshop	15 Juli	Jakarta	NA
3.1.3	5	Workshop	5 Agustus	Jakarta	NA
3.1.3	6	Pertemuan Dengan Konsultan	22-26 Agustus	Jakarta	5 POM
3.1.3	7	Seminar Sehari	27 Agustus	Jakarta/Hotel Wisata	30 Orang
3.1.4	8	Invitation to Bid	28 September	Jakarta	30 Orang
	9	Rapat Tender studi farmasi	22 November	Jakarta	NA
	10	Invitation to Bid	25 November	Jakarta	9 Orang
	11	Invitation to Bid	26 November	Jakarta	16 Orang
3.2.4	12	Mini Workshop Steering Committee	27 Desember	Jakarta	NA

NA = Not available

**PERTEMUAN UPP-FARMASI  
TAHUN 1989**

Benchmark	No.	Pertemuan	Tanggal	Tempat	Peserta
	1	Mini Lokakarya	24-25 Januari	Tana Toraja	23 Orang
	2	Mini Workshop	30 Jan - 1 Feb	Jakarta/Ditjen POM	30 Orang
	3	Rapat Kerja Terpadu Pelaksanaan Studi Focused Assessment dan Rapat Kerja Tim Pengarah	9-11 Februari	Jakarta/Ditjen POM	29 Orang
	4	HSFP Meeting	3 Februari	Jakarta	9 Orang
	5	Study Implementor	9 Februari	Jakarta	6 Orang
	6	Study Implementor	10 Februari	Jakarta	13 Orang
	7	Study Implementor	14 Februari	Jakarta	15 Orang
	8	Study Implementor	8 Maret	Jakarta	8 Orang
3.2.4	9	Consensus Group I	22 Juni	Jakarta/Rg. Rapat PPOM	23 Orang
3.2.4	10	Consensus Group II	30 Juni	Jakarta/Rg. Rapat PPOM	18 Orang
3.2.4	11	Consensus Group III	29 Juli	Jakarta/Depkes Kuningan	24 Orang
3.2.4	12	Consensus Group IV	12 Agustus	Jakarta/Aula PPOM	30 Orang
	13	Evaluasi hasil studi pengelolaan obat (DMS) dan studi ketenagaan (MPS)	20 September		46 Orang
3.2.4	14	Pertemuan Steering Committee/Pembahasan DPI Study Penggunaan Obat (DUS)	6 November	Jakarta/Rg. Rapat PPOM	23 Orang

**PERTEMUAN UPP-FARMASI  
TAHUN 1990**

Benchmark	No.	Pertemuan	Tanggal	Tempat	Peserta
	1	Rapat PPSDK - Farmasi	19 Februari	NA	7 Orang
3.2.4	2	Lokakarya UPP - Farmasi	16 - 18 April	Jakarta/UPP - Farmasi	15 Orang
	3	Rapat Staff Mingguan	4 Mei	Jakarta/UPP - Farmasi	9 Orang
	4	Koordinasi Kegiatan UPP Farmasi	7 Mei	Jakarta/UPP - Farmasi	7 Orang
	5	Rapat Staff Mingguan	14 Mei	Jakarta/UPP - Farmasi	9 Orang
	6	Rapat Staff Mingguan	21 Mei	Jakarta/UPP - Farmasi	10 Orang
	7	Meeting with Dr. Bimo	21 Mei	Jakarta/UPP - Farmasi	5 Orang
	8	Rapat Staff Mingguan	28 Mei	Jakarta/UPP - Farmasi	7 Orang
	9	Rapat Dengan PMU	31 Mei	Jakarta/Rg. Rapat Dirjen POM	13 Orang
3.2.1	10	Seminar Sehari Tim Pengarah, Plan/Strategy	9 Juni	Jakarta/BKKBN Halim	29 Orang
	11	Rapat Staff Mingguan	11 Juni	Jakarta/UPP - Farmasi	8 Orang
	12	Rapat Staff Mingguan	25 Juni	Jakarta/UPP - Farmasi	6 Orang
3.2.2	13	Lokakarya Activity Coordinator: Propose, Intervention	4-7 Juli	Sawangan	31 Orang
	14	Rapat Staff Mingguan	9 Juli	Jakarta/UPP - Farmasi	7 Orang
	15	Rapat Staff dengan PMU	12 Juli	Jakarta/PMU	7 Orang
	16	Rapat Staff Mingguan	16 Juli	Jakarta/UPP - Farmasi	7 Orang
	17	Rapat Staff dengan PMU	28 Juli	Jakarta/Rg. Rapat Dirjen POM	6 Orang
3.2.4	18	Lokakarya Steering Committee Dan Consensus Group fin. DPI/KAP	15 Agustus	Jakarta/BKKBN Halim	28 Orang
	19	Rapat Staff Mingguan	22 Agustus	Jakarta/UPP - Farmasi	10 Orang
3.3.1	20	Site Preparation	5-6 September	N T B	23 Orang
3.3.1	21	Site Preparation	14-15 September	Jawa Timur	34 Orang
3.3.1	22	Site Preparation	26-27 September	Kalimantan Timur	26 Orang
3.3.1	23	Site Preparation	5-6 Oktober	Padang dan Sumut	18 Orang
3.3.1	24	Site Preparation	10-11 Oktober	Sulawesi Selatan	20 Orang
3.2.2	25	Lokakarya Activity Coordinator II Framework for Intervention	9-10 November	Ciawi	34 Orang

Benchmark	No.	Pertemuan	Tanggal	Tempat	Peserta
	26	Lokakarya Steering Committee Dan Consensus Group	16 November	Jakarta/Depkes Kuningan	29 Orang
	27	Rapat Staff Mingguan	16 November	Jakarta/UPP - Farmasi	7 Orang
	28	Rapat Staff Mingguan	19 November	Jakarta/Rg. Rapat Konsultan	6 Orang
3.2.4	29	Lokakarya Pokja + UPP Farmasi	19-22 Desember	Bandung	20 Orang

**PERTEMUAN UPP-FARMASI  
TAHUN 1991**

Benchmark	No.	Pertemuan	Tanggal	Tempat	Peserta
	1	Rapat Staff Mingguan	5 Februari	Jakarta/UPP-Farmasi	7 Orang
	2	Rapat Staff Mingguan	20 Februari	Jakarta/Rg. Konsultan	7 Orang
	3	Rapat Staff + Calon Implementor	22 Februari	Jakarta/Aula POM	18 Orang
3.2.4	4	Rapat Steering Committee dan Consensus Group	7 Maret	Jakarta/Depkes Kuningan	39 Orang
	5	Rapat Staff Mingguan	13 Maret	Jakarta/UPP-Farmasi	5 Orang
	6	Weekly Consultant Meeting (All Units)	27 Maret	Jakarta/Depkes Kuningan	14 Orang
	7	Rapat Staff Mingguan	2 Mei	Jakarta/UPP-Farmasi	6 Orang
	8	Rapat Staff Mingguan	21 Mei	Jakarta/UPP-Farmasi	9 Orang
	9	Weekly Consultant Meeting (All Units)	31 Mei	Jakarta/Depkes Kuningan	8 Orang
	10	Rapat Staff Mingguan	5 Juni	Jakarta/UPP-Farmasi	4 Orang
	11	Weekly Consultant Meeting (All Units)	6 Juni	Jakarta/Depkes Kuningan	9 Orang
	12	Rapat Staff Mingguan	13 Juni	Jakarta/UPP-Farmasi	4 Orang
	13	Weekly Consultant Meeting (All Units)	22 Juni	Jakarta/Depkes Kuningan	12 Orang
	14	Rapat dengan Project Officer dan USAID	24 Juni	Jakarta/Depkes Kuningan	10 Orang
	15	HSFP Staff Meeting	3 Juli	Jakarta/Depkes Kuningan	20 Orang
	16	Rapat Staff Mingguan	9 Juli	Jakarta/UPP-Farmasi	5 Orang
	17	Weekly Consultant Meeting (All Units)	15 Juli	Jakarta/Depkes Kuningan	13 Orang
	18	Rapat dengan PMU	15 Juli	Jakarta/PMU	5 Orang
	19	Weekly Consultant Meeting (All Units)	24 Juli	Jakarta/Depkes Kuningan	14 Orang
3.2.4	20	Integrated Working Group Presentation Survey Result Design	19-21 August	Ciawi	NA

NA = Not available

**APPENDIX D**  
**COMPUTER HARDWARE AND SOFTWARE PROCUREMENT**

**List of Commodity for PIO/Pharmaceuticals**

Activity	Purpose of Commodity	No./Item	Amount of Payment	Date of Payment	Contractor
Supply of computer	To support drug management information at center level	1 HP 9000 minicomputer	\$ 4,973	June 14, 90	PT Berca Ind.
Supply of computer		w/8 terminals/screen	\$55,398	Feb. 20, 90	PT Berca Ind.
Supply of computer		1 Laser HP printer	\$ 4,768	Feb. 20, 91	PT Berca Ind.
Supply of computer		1 Epson printer	\$ 4,517	Apr. 09, 91	PT Berca Ind.
		1 set networking			
Computer procurement for software & hardware	Provide equipment for drug management information system at regency level	3 servers [PCs] 6 PC workstation 10 printers 6 PCs 7 Stabilizers 3 UPS	\$56,199	Sep. 13, 91	PT Cendekia
Supply of software	For Drug Registration System and Adverse Drug Reactions Report System	1 Swedis software	\$31,000	Apr. 02, 91	Swedis Development Centre
<b>Total</b>			<b>\$156,855</b>		

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**APPENDIX E**

**STEERING COMMITTEE, ACTIVITY COORDINATORS AND  
WORKING GROUPS: MEMBERSHIP AND ROLE**

*4.*

## **BRIEF SYNOPSIS OF ROLES OF OVERSIGHT COMMITTEES**

### Echelons I and II

These are the Ministry of Health government officials in charge of health in Indonesia. They are involved superficially in project oversight from the government perspective. ISTI reports to the Ministry of Health directly.

### Steering Committee

Operates as does any steering committee responsible for authorization of activities. Generally reported to on a quarterly basis, but have not convened since the end of the last fiscal year due to delays in budget authorization. Informal discussions have occurred with various members, including a recent meeting with the chief of the committee to determine a suitable time for the next meeting.

### Activity Coordinators

Involved in the development and monitoring of activities. Many are also members of the Steering Committee. All are structural people from various Health directorates and sub-directorates. In addition to Jakarta-based coordinators, there are also provincial activity coordinators who represent the intervention areas. Purpose is to ensure sufficient input from the various directorates and hopefully cut down on any duplication of effort. Last meeting involving Activity Coordinators held October 29, 1991.

### Integrated Working Group

A team of medical and pharmacy personnel to ensure that interventions meet specific standards and quality of care. Many are also involved on other committees. Review of all designs and offer comments for revisions. Last meeting held in August 1991.

## STEERING COMMITTEE

### SUSUNAN SUB TIM PENGARAH

#### UNIT PELAKSANA PROYEK BIDANG FARMASI PROYEK PENGKAJIAN SUMBER DAYA KESEHATAN

- : Dra. Andajaningsih, MSc.
- KETUA : Dr. Suwarna
- KEBIDAN : 1. Dra. Sri Soegati Syamsuhidayat (merangkap anggota)  
2. Dra. Tilda S. Djohan  
3. Drs. A.L. Pong Tengko
- ANGGOTA : - Dr. Soemarya Aniroen  
- Dr. Budi Hartono  
- Dr. IGP Wiadnyana  
- Dr. Titi Indijati Suwarso  
- Emma Suratman, SH  
- Dr. Ida Bagus Mantra  
- Dr. Hadi Abednego  
- Drs. Syarifuddin Djalil  
- Drs. A.M. Meliala  
- Direktur Utama Perum Husada Bhakti  
- Direktur Utama P.T. Kimia Farma  
- Direktur Utama Perum Indo Farma  
- Direktur Utama Perum Bio Farma  
- Direktur Utama P.T. Phapros

## ACTIVITY COORDINATORS

Lampiran 1

SK Menteri Kesehatan RI  
No. : 1385/SJ/B.Perenc/XII  
Tanggal : 28 Desember 1989

### DAFTAR NAMA KOORDINATOR KEGIATAN STUDI BIDANG FARMASI PROYEK PENGKAJIAN SUMBER DAYA KESEHATAN

1. Dr. Arbanto : Direktorat Jenderal Pembinaan Kesehatan Masyarakat
2. Dr. Prawito : Direktorat Jenderal Pelayanan Medik,  
Direktorat Rumah Sakit Khusus dan Swasta
3. Dr. Bagus Mulyadi : Direktorat Jenderal Pelayanan Medik,  
Direktorat Rumah Sakit Umum dan Pendidikan
4. Dr. Sutoto : Direktorat Jenderal Pemberantasan Penyakit Menular dan Penyehatan Lingkungan Pemukiman
5. Drs. Amir Rivai : Direktorat Jenderal Pengawasan Obat dan Makanan
6. Drs. Janahar Murad : Badan Penelitian dan Pengembangan Kesehatan, Pusat Penelitian dan Pengembangan Farmasi
7. Drs. Husny M Moor : Perum Husada bakti

8. Wakil dari Bagian Perencanaan Sumber Daya, Biro Perencanaan Departemen Kesehatan RI.

9. Kepala Bidang BPFM \*) Kanwil Depkes Propinsi Sumatra Utara

10. Kepala Bidang BPFM Kanwil Depkes Propinsi Sumatra Barat

11. Kepala Bidang BPFM Kanwil Depkes Propinsi Jawa Timur

12. Kepala Bidang BPFM Kanwil Depkes Propinsi Kalimantan Timur

13. Kepala Bidang BPFM Kanwil Depkes Propinsi Sulawesi Selatan

14. Kepala Bidang BPFM Kanwil Depkes Propinsi Nusa Tenggara Barat

\*) BPFM = Bimbingan dan Pengendalian Farmasi dan Makanan

f:ac/stc-ep

DAFTAR ANGGOTA "CONCENSUS GROUP" STUDI BIDANG FARMASI

1. Badan Litbangkes : Dr. Vincent Gandan  
Drs. Trijoko Wahono
2. Ditjen Binkesmas : Dr. Arbanto
3. Ditjen Yanmedik : Dr. Prawito
4. Ditjen P2M PLP : Dr. Sutoto atau  
Daryono Adi SKM
5. Ditjen POM : Dra. Tilda Djchan  
DR Linda Sitanggang  
Drs. Amir Rivai
6. Perum Husada Bhakti : Dr. Husny M. Noor
7. Biro Perencanaan : Drs. A. L. Pong Tengko

## WORKING GROUPS

### DAFTAR ANGGOTA KELOMPOK KERJA PUSAT & KELOMPOK KERJA DAERAH

(Surat Penetapan Karoren No: CT.01.6.485)

#### I. KELOMPOK KERJA PUSAT

##### 1.1. KELOMPOK KERJA PELAYANAN FARMASI

- 1) Drs Amir Rivai (Ketua)  
Ditjen Pengawas Obat dan Makanan
- 2) Dr. Fainal  
Ditjen Pelayanan Medik -Dit. R.S.U. dan Pendidikan
- 3) Drs Husni M. Noor  
Perum Husada Bhakti
- 4) Drs A.L. Pong Tengko  
Biro Perencanaan
- 5) DR. Linda Sitanggang (Sekretaris)  
Ditjen Pengawas Obat dan Makanan
- 6) Darjono Adh. SKM  
Ditjen PPMPPLP

##### 1.2. KELOMPOK KERJA PELAYANAN MEDIK

- 1) Dr. Arbanto (Ketua)  
Ditjen Pembinaan Kesehatan Masyarakat
- 2) Drs Janahar Murad  
Badan Penelitian dan Pengembangan Kesehatan, Pusat Penelitian dan Pengembangan Farmasi
- 3) Dr. Sutoto  
Ditjen Pemberantas Penyakit Menular dan Penyehatan Lingkungan Pemukiman
- 4) Dr. Prawito  
Ditjen Pelayanan Medik - Dit. R.S. Khusus dan Swasta
- 5) Dr. Bagus Mulyadi  
Ditjen Pelayanan Medik - Dit. R.S.U. dan Pendidikan
- 6) Dra Sri Indrawati (Sekretaris)  
Ditjen Pengawasan Obat dan Makanan

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## II. KELOMPOK KERJA DAERAH

### 2.1. KELOMPOK KERJA DAERAH PROPINSI JAWA TIMUR

- 1) Kepala Bindal Farmasi dan Makanan (Ketua)
- 2) Kepala Bindal Pelayanan Kesehatan
- 3) Kepala Sub Dinas Pemulihan Kesehatan (Sekretaris)
- 4) Kepala Seksi Pemulihan Kesehatan Kabupaten Gresik
- 5) Kepala Seksi Pemulihan Kesehatan Kabupaten Pasuruan
- 6) Kepala Gudang Farmasi Kabupaten Gresik
- 7) Kepala Gudang Farmasi Kabupaten Pasuruan

### 2.2. KELOMPOK KERJA DAERAH PROPINSI KALIMANTAN TIMUR

- 1) Kepala Bindal Farmasi dan Makanan (Ketua)
- 2) Kepala Bindal Pelayanan Kesehatan
- 3) Kepala Sub Dinas Pemulihan Kesehatan (Sekretaris)
- 4) Kepala Seksi Pemulihan Kesehatan Kotamadya Balikpapan
- 5) Kepala Seksi Pemulihan Kesehatan Kabupaten Bulungan
- 6) Kepala Gudang Farmasi Kotamadya Balikpapan
- 7) Kepala Gudang Farmasi Kabupaten Bulungan

### 2.3. KELOMPOK KERJA DAERAH PROPINSI SULAWESI SELATAN

- 1) Kepala Bindal Farmasi dan Makanan
- 2) Kepala Bindal Pelayanan Kesehatan
- 3) Kepala Sub Dinas Pemulihan Kesehatan (Sekretarsi)
- 4) Kepala Seksi Pemulihan Kesehatan Kodya Ujungpandang
- 5) Kepala Seksi Pemulihan Kesehatan Kabupaten Tana Toraja
- 6) Kepala Gudang Farmasi Kodya Ujung Pandang
- 7) Kepala Gudang Farmasi Kabupaten Tana Toraja

**APPENDIX F**

**PIO/P ACTIVITIES (THROUGH SEPTEMBER 1991)  
IN RELATION TO STRATEGIC OBJECTIVES,  
INDICATORS AND BENCHMARKS**

\*=ACTIVITY COMPLETE

#=ACTIVITY DONE BY ANOTHER ENTITY

Strategic Obj.	Indicator	Activity	Bmark	Est. Comp.
1. Assessment of problem	3.1 A focussed assessment of the public pharmaceutical sector has been completed which analyzes procurement, storage and use factors.	1. Secondary data review completed	3.1.1	1989*
		2. consensus groups established	3.1.2	1989*
		3. study sites determined	3.1.3	1989*
		4. Completion of DMS	3.1.4	1990*
		5. " DUS	3.1.4	1990*
		6. " MPS	3.1.4	1989*
		7. " KAP providers	3.1.4	1991*
		8. " KAP community	3.1.4	8/91*
		9. TOR in process for KAP rural	3.1.4	1991
		10. social marketing study (cancelled after stage one)	3.1.4	1990
2. Supportive studies and designs	3.2 Management and communications interventions have been designed to address problems identified during the F.A. and revised as indicated by results of later studies and inputs	1. evaluation of previous studies	3.2.1	1990*
		2. Integrated analysis conducted	3.2.1	1990*
		3. interventions identified:	3.2.1	1990*
		medical and pharmaceutical		
		4. Baseline information at intervention sites-TOR in process	none	1991
		5. morb./mort. study-under review	3.2.3	1991
		6. Antibiotic use study-TOR in process	3.2.3	1991
		7. injection study-under review	3.2.3	1991
		8. AKI and diarrhea packets for mothers and providers-TOR in process	none	1992
		9. Generic Bioavailability conducted	none	1991*
		10. drug budget studies	3.2.3	1992
11. service cost of drugs at PKM	3.2.3	1992		

3. Pharm. interventions designed	3.2	1. drug planning and management design nearly completed	3.2.2	1991
		2. MIS designs for KBP commenced	3.2.2	1991
		3. Standard format for training packets developed	3.2.2	1991*
		4. computers for KBP procured	3.2.4	1991*
		5. interventions commenced	3.3.4	1/92
4. Medical Interventions designed	3.2	1. drug use process (provider) design nearly complete	3.2.2	1991
		2. Standard format for training packets developed	3.2.2	1991*
		3. Standard therapy developed	3.2.2 #	1991
		4. interventions commenced	3.3.4	1/92
5. Community interventions designed:	3.2	1. Conceptualization of community interventions	3.2.2	1991
		2. Design for comm. intervention	3.2.2	1991
		3. evaluation/revision	3.2.3	1992
		4. Intervention commenced	3.2.4	1992
6. Behavioral interventions designed	3.2	1. Health economy P.O. in process	none	1991
		2. Generic drug marketing packets (2 ) P.O. at USAID	none	1991
		3. Generic promotion	none	1992
		4. Motivation for providers	none	1992
		5.		

7. Management Monitoring System instituted	3.2	1. Development of oversight groups (AC, IWG, CG, etc.)	3.2.4	1989*
		2. Training: overseas pharm. comp.	3.2.4	1990*
		3. training: computer/software use (POM)	3.2.4	1990*
		4. training: computer software use at KBP	3.2.4	1991
		5. PMCS: TOR in process	3.2.4	1992
		6. supervision at sites	3.2.4	1992
8. Identification and development of sites for intervention	3.3. Comprehensive package of interventions demonstrated in 2 provinces	1. Demonstration sites chosen	3.3.1	1990*
		2. Initial interaction with areas	3.3.2	1990*
		3. Finalization of teams.	3.3.2	1991
		4. Site preparation	none	1991
		5. Training completed	3.3.3	1991
		6. Demonstration commenced.	3.3.4	1992
		7. Project evaluation		1995

**APPENDIX G**

**INTEGRATED ANALYSIS SUMMARY**

**CONCLUSIONS AND RECOMMENDATIONS:  
KAP STUDY FOR PRESCRIBERS, MANAGERS AND PATIENTS**

Report No. 31  
**INTEGRATED ANALYSIS OF FOCUSSED PROBLEM ASSESSMENTS  
ON DRUG MANAGEMENT AND USE DESIGN INTERVENTION**

Dr. Andayanings  
Dr. Yos Hudyono  
Dr. Widyastuti Sucrojo  
Dr. Linda Sitanggang  
Ms. Jennifer Zeitlin  
Dr. Reginald Gipson

The purpose of the Health Sector Financing Project's (HSFP) Pharmaceutical Component (PIO/P) is to support the Indonesian National Drug Policy by designing interventions which lead to more rational drug planning, selection, procurement, prescription and use. The major planned outputs are reforms in the way pharmaceuticals are ordered, managed, prescribed and distributed, which will result in improved efficiency, more resources available for essential drugs which have an impact on child survival.

The overall strategy is to conduct focus assessments to identify major problems in the above areas and to use the results for the formulation of interventions. The PIO/P has conducted the following four focussed assessment studies; and a fifth study on Knowledge, Attitudes and Practices (KAP) is currently undertaken.

- Drug Management Study (DMS) : an analysis of retrospective data on drug budgeting, selection, procurement and distribution in six provinces, and interviews with administrators and managers at the central, provincial, kabupaten, and puskesmas level;
- Drug Manpower Study (DMS) : a review of job descriptions, staffing, and procedures in six provinces, and interviews with personnel at the central, provincial, kabupaten, and puskesmas level;
- Review of Secondary Data and Literature (RSDL) : collection and synthesis of previously published documents and reports related to management and use of pharmaceuticals, to support the findings of the other focussed assessments; and
- Drug Use Study (DUS): a retroactive audit of prescribing in puskesmas, hospital outpatient, and inpatient departments in nine kabupaten, and focus groups with physicians and with paramedics.

The objectives of the Integrated Analysis are to integrate the results of the focussed assessments by summarizing conclusions from each study, linking the major findings, and highlighting the relationship between key variables and to formulate an intervention strategy based on this initial analysis, in close collaboration with policy makers in concerned directorates of the Ministry of Health.

## RECOMMENDATIONS

### Design Interventions

The strategic and operational recommendations for the intervention imply a wide range of structural modifications to the current system. Few of these recommendations can be directly implemented without first developing methods, materials, organizational models, and implementation strategies. In order to test

and design appropriate and effective strategies for achieving these recommended structural modifications, it is important to test the principles underlying these recommendations by the way of behavioral interventions in pilot areas.

1. Innovative training programs in drug planning, distribution and control for drug system managers will be designed to help them interpret and use information about drug consumption and morbidity to estimate drug needs, to distribute drugs more efficiently, and to manage their work more cost effectively.
2. Developing and implementing an integrated MIS responds to the need for improved information for managers to plan, monitor and control the drug system. Installing an information system sensitive to changes in drug consumption is necessary if interventions in drug use are to achieve an impact on drugs ordered and distributed in the kabupaten.
3. Training in health economics and budget planning for planners at Dinkes Tk. II.
4. Training for providers in diagnosis and prescribing for ARI and diarrhea, and in government drug programs will start to introduce standards of treatment and quality of care.
5. Providing unbiased drug information to managers, providers and the community.
6. Developing a system of symptom-based treatment and standardized supply at Puskesmas pembantu is another method for introducing standards into the health care system;
7. Developing of regional supervisory systems for drug management and drug use providers structural support for interventions to improve the quality of drug management and use.
8. Promoting improved community management of ARI and diarrhea and awareness of MOH drug programs.

#### KAP Study of Managers, Prescribers, Patients and the Community

The PIO/P is currently conducting focus group discussions with managers, prescribers, patients and community members to explore knowledge, attitudes and practices related to drug management and use. A second component of this study will conduct observations of care in health centers. This study focusses on exploring findings of the first four focussed assessments in more depth and on providing answers to questions needed to design effective interventions.

During the process of integrated analysis of the focussed assessments, a number of key structural and operational problems that contribute to the current situation have been identified. In order to address these problems, a draft set of recommendations was developed which calls for:

- strategic changes in regulations, and in the procedures and systems used for budgeting, planning, and controlling pharmaceuticals in the public sector;
- reorganization in the responsibilities and functions of key units involved in drug supply at the kabupaten level;
- the development and implementation of standards for quality in pharmaceutical services and quality care;
- clarification and implementation of supervisory systems adequate to ensure adherence to these quality standards

the development of systems to provide appropriate unbiased information on drugs and drug use to health system personnel and to the community; and

the provision of community education to support changes in management and use, aimed at increasing understanding of key health problems and the role of pharmaceuticals in treating them.

The design, protocols, and instruments for a KAP studies are currently in the early stages of development. Each type of focus group, the observations at health center, and the interview studies will all seek to answer questions a different set of questions about motivations and constraints, and to uncover promising messages and strategies for achieving the objectives of the separate interventions.

CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

Concerning Matters Relative to the Knowledge, Attitude, and Practice of the Prescribers:

1. The majority of the prescribers still lack the knowledge of the diagnoses, classification, and management of diarrhoeal and AIRT cases. The possible causes of this are:
  - a. Their educational background is lacking, both the formal and the non-formal one (training). This is particularly true of the paramedics.
  - b. The absence of a manual on the measures to be taken in performing diagnoses and managing cases of diarrhoea and AIRT.
  - c. The lack of other sources of information concerning measures to be taken in diagnosing, classifying, and managing the cases mentioned above.
2. The practices of the majority of the prescribers in diagnosing, classifying, and managing diarrhoeal and AIRT cases are still not up to the required standard, or in discord with what they ought to be. Possible causes of this are:
  - a. The knowledge of the prescribers is less comprehensive than their confidence in their own capability of performing the diagnoses of the cases they encounter is not optimal. Added to this is their perception that the patients' environment is an environment that is

"full of probabilities of getting an infection", and as thus the prescribers will immediately take "safety" measures in their therapeutical services by prescribing anti-biotics for most of the cases they encounter..

- b. The "perception" of the prescribers of the patients' insistence, particularly on getting themselves injected.
  - c.) The prescribers simply follow in the footsteps of the preceding or the more senior prescribers in performing the diagnoses of and managing diarrhoeal and AIRT cases.
  - d. The prescribers feel they are under the pressure of having to achieve the "targeted" number of visits.
3. The knowledge of most of the prescribers of the use of anti-biotics is still lacking. This knowledge includes indication of prescribing, span of time of prescribing, and factors causing germs to become resistant to anti-biotics. The possible causes of this are :
- a. The educational background of the prescribers: lack of both formal and informal training.
  - b.. The absence of a manual on the use of anti-biotics.
  - c. Other sources of information are lacking : manuals, periodicals.
4. The practice of prescribing anti-biotics not in accord with what it ought to be. The possible causes are :
- a. Most of the prescribers lack the knowledge of anti-

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biotics.

- b. The "perception" that the patients insist that they be given a therapy that will ensure quick recovery, which as a result has motivated them to prescribe anti-biotics without the proper indication.
  - c. The "perception" of the prescribers of the "insufficiency" of the supply of anti-biotics, which has led them to give their patients anti-biotics for only three days or even less.
5. The prescribers lack the proper knowledge of injection, e.g. the anti-histamine injection is considered by them to be free from allergic reactions. The possible causes are :
- a. The educational background of the prescribers.
  - b. The absence of a manual on injection prescribing.
  - c. The lack of sources of information on injections.
6. The practice of prescribing injections is still improper, i.e. there is still a considerable number of prescribers who give injections to those who actually do not need them. The possible causes are :
- a. Their lack of knowledge.
  - b. The "perception" that the patients themselves insist on their getting the injections.
7. Polypharmacy is a common practice among prescribers, even for "mild" cases. The possible causes are :
- a. The concept of therapy based on cause, symptoms, and roboransia.
  - b. The patients' "insistence".

8. The majority of the prescribers are of the opinion that the supply of drugs is insufficient, due to, among others : a) their "untimely" dropping, b) the types and quantities of the drugs are not in accordance with the plan/request, and c) the packaging or variation in the colors/forms of the drugs looks less attractive to the patients. The possible causes are :

Ways considered by the prescribers to be favourable for increasing their knowledge and capability are: from manuals, through training-courses, and through periodicals.

### Concerning Matters Relative to the Supply of Drugs of Puskesmas and Subsidiary Puskesmas :

1. The prescribers are of the opinion that the supply of drugs is insufficient, due to, among others : a) their "untimely" dropping, b) the types and quantities of the drugs are not in accordance with the plan/request, and c) the packaging or variation in the colors/forms of the drugs looks less attractive to the patients. The possible causes are :

a. The planning and supply of drugs is still not quite in accord with the actual local needs.

b. Certain drugs are used to excess, e.g. anti-biotics and injections.

c. Patients are affected by the outward appearance (packaging) of the drugs, and consider that patent drugs have better packs and colors.

2. The knowledge of the majority of the prescribers of generic drugs is still lacking. The possible cause is the lack of information on generic drugs.

3. The perception of most prescribers of generic drugs is still mistaken. The possible causes are :

a. The knowledge of the prescribers of generic drugs.

b. Because of the way they are packed, generic drugs are being looked upon as cheap/simple drugs.

4. The sources of information and the sources of reference concerning drugs are still lacking. The prescribers consider manuals and leaflets to be the best sources of information, besides the consultation with colleagues/more senior superiors.

#### Concerning the Knowledge, Attitude, and Practice of the Patients

1. The knowledge of the patients of the names and benefits of the drugs and injections given by the prescribers is still very low.

2. A considerable proportion of the patients think that injection is the most efficacious therapy that consequently most of those who come to the Puskesmas expect an injection.

3. The prescribers are of the opinion that the majority of the patients think that the value of a drug prescribed for their disease depends on the form and the pack/wrapping of the drug.

#### B. RECOMMENDATIONS

1. It is necessary to increase the knowledge and build up the capability of the prescribers, the paramedic prescribers in particular. This can be done by developing the following modules:

a. The module on the Method of Diagnosing and Managing Diarrhoeal Cases.

b. The module on the Method of Diagnosing and Managing AIRT cases.

c. The module on Indications, Span of Time of Prescribing, and Resistance to Anti-biotics, the focus of which is mainly on Diarrhoeal and AIRT Cases.

2. Promote knowledge and capability of prescribers by conducting training-courses, distributing leaflets and periodicals.

3. Develop a regulation from the Kanwil level concerning the following issues :

a. The prescribing of anti-biotics : particularly as concerns the indications and span of time of prescribing.

b. The prescribing of injections : particularly as concerns the indications of injections prescribing.

c. The polypharmacy practices: Therapy is to be based only on cause and symptoms; and, only where necessary, will it be based on roboransia.

4. Make a revision to the system of supplying drugs, e.g. by equipping the Dinas, and also if possible the Puskesmas, with broader authority.

5. It is also necessary to revise the system of reporting so as to match it with the programme, particularly with the classification of diarrhoea and AIRT.

6. Prescribers need to be given training in filling in the report form on diseases (codes), in the benefits they can get by recording disease codes correctly, and in what incorrect recording will cost them.

7. It is necessary to educate the public in general, and patients in particular, on the harm injections can bring, the benefits and ways of using oralit, the harm that disorderly taking of drugs may cause, the danger of taking drugs that they actually do not need to take, etc. This can take place in the form of extension of knowledge/information directly done by health officers to the health cadres of Posyandu, through FP field-workers, through members of the PKK (Women's Family Welfare Promotion Movement), and community elders. It is expected that through them the messages will be delivered to the people. For this, it will be necessary to develop modules concerning the messages mentioned above. The extension of the message to patients can be done directly at the Puskesmas/subsidiary Puskesmas; it is also advisable that leaflets and posters be made available to support this effort.

THE FINAL REPORT OF  
THE QUANTITATIVE AND QUALITATIVE STUDY OF THE KNOWLEDGE,  
ATTITUDE, AND PRACTICE OF PRESCRIBERS, PATIENTS, AND MANAGERS  
IN  
DRUG USE AND MANAGEMENT

Prepared by :  
Anhari Achadi  
Endang L. Achadi.  
Christine Costello  
Alex Papilaya  
Sudarti  
Furwastyastuti Ascobat  
Udin Samsuddin  
Lusia Gani  
Nasrin Kodim  
Agoes Setyadi

Prepared for  
The Project Office for Pharmaceuticals  
Health Sector Financing Project  
Directorate General of Food and Drugs Control  
Ministry of Health of the Republic of Indonesia  
Jakarta

September, 1981

THE CENTRE OF CHILD SURVIVAL OF THE UNIVERSITY OF INDONESIA  
Address : Faculty of Public Health, UI Campus, Depok, West Java  
Phone. 7270014, 7270037. Fax. 7270014

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**APPENDIX H<sup>7</sup>**  
**REPORT OF THE HEALTH MINISTER TO THE VICE-PRESIDENT**  
**(UNOFFICIAL TRANSLATION)**

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Report to the Vice President, Republic of Indonesia  
by the Minister of Health

Jakarta, April 10, 1991

Ministry of Health

Honorable Vice President,

The overall goal of Indonesia's health program is the attainment of the best possible health status for the population, and constitutes one element of general prosperity defined by the statement of national goals and principles.

Towards this end, many accomplishments have been achieved, as evidenced by positive changes in health indicators such as reduced mortality, lower birth rates, increase in life expectancy and improved nutritional status among children.

In Repelita V, two central issues received particular attention: the equal distribution and improved quality of health care. In order to accelerate the development of the health sector to ensure the take-off phase during Repelita VI, policy issues of strategic importance were identified. By 1990, the policies which have been implemented include the placement of midwives in rural districts, use of generic drugs, functional job analysis, and deregulation in the pharmaceutical and hospital sectors.

In the year 1991, there are several policies whose importance are not only strategical but essential to the future success of the health system in Indonesia. These policies are, among others, staffing doctors as non-permanent employees, health services in remote, low-income and tourist areas, as well as the management of government hospitals as Lembaga Swadana.

(page 2)

A. Organization

In accordance with Presidential Decree No. 15, 1984, the primary objective of the Ministry of Health is to carry out the general management and development of the health sector.

The organizational structure of the Ministry of Health is composed of the Secretariate General, Inspectorate General, Directorate General for Community Health, Directorate General for Medical Services, Directorate General for Communicable Diseases, Directorate General for Food and Drug Control, Research and Development Board, Principals and Special Advisors to the Minister as well as District Offices and Ministry of Health offices as vertical institutions in the provinces.

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The personnel organization of the Ministry of Health main offices consists of 11 Eschelon I, 47 Eschelon II, 219 Eschelon III and 786 Eschelon IV officials. At the provincial level, there are 27 Eschelon II, 141 Eschelon III, and 564 Eschelon IV employees. At the district level, there are 296 Eschelon III and 888 Eschelon IV, and 888 Eschelon V officials. At the health service provider level (hospitals, pharmaceutical warehouses, village health offices), there are 37 Eschelon II, 422 Eschelon III, 1600 Eschelon IV and 1778 Eschelon V employees.

### B. Personnel

There are 5,758 doctors currently working at 4,972 public health centers (Puskesmas), which translates to 2-3 general doctors per public health center. In remote areas, 684 public health centers continue to provide health services without a doctor present.

There are 5,337 doctors working at public/government hospitals, and 3,863 specialist doctors.

### C. Legislation

The organization of the health sector in Indonesia is governed by Law (Undang-undang) No. 9, dated 1960, covering the principles of health, which constitutes an amendment to the original Law Governing the Health Services for the Population (Het Reglement op de Dienst der Volksegezondheid), and accompanying legislation. Law No. 9 (1960) is currently under revision and, at the time of this writing, is under discussion with the Cabinet Secretariate (Sekkab). It is hoped that the revised legislation will be ready for discussion with Parliament during 1991.

The development of enabling legislation for the health sector is intended to create and enforce the application of the legislation, by increasing consciousness, understanding and adherence to the laws, in order to clarify the authority, rights and entitlement of the population and the private sector to health care.

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The development of the health sector during Repelita V refers to GBHN (National Guidelines for State Policy) 1988 which stipulates the following:

1. Development of the health sector to increase health status, specifically nutrition to improve the quality and standards of living, as well as the education and prosperity of the general public.

2. Development of the health sector, specifically for the low income population in rural and urban areas. Special attention will be given to remote villages, isolated regions, border areas, and areas of new residents including transmigration sites.
3. Efforts to improve the health status of the population, with special emphasis provided to protection of the population against pollution, industrial waste, narcotics, misuse of drugs, as well as increasing health awareness with regard to overall health, including appropriate pharmaceuticals and nutrition.
4. The quality of medical services provided by hospitals, health centers and other health institutions to be continuously improved, including the education and allocation of medical personnel, health care staff, as well as the prescription of drugs most frequently prescribed and used.
5. Health care financing by the population, to be implemented by health insurance schemes.
6. Pharmaceuticals as well as traditional medicine need to be further developed, as well as promoting the acceptance of traditional medication, which have been proven to be effective healing methods.

The primary goals for the development of the health sector during Repelita V are as follows:

1. Improve the quality and distribution of health services, in addition to improving the technical and administrative capabilities as numbers of medical personnel according to need; improve management capabilities; and increase the participation of the private sector and general population in the health sector.
- (page 9)
2. Support the efficient use of funds, manpower and facilities, by deregulating and de-bureaucratizing the management of health programs. The management of funds which may be used by health service providers will be facilitated if they can be more efficiently and effectively integrated in the management of public hospitals which are (becoming) Lembaga Swadana.
  3. Means to improve the public health status with special attention given to reduce infant, child and maternal mortality by reducing the morbidity rate and improving the nutritional status of the general population.

4. Improve overall health status to ensure individual, family and general public have awareness and access to information, communication and education regarding health care.
5. Improve the nutritional status of the community, based upon the efforts of families and the community to be able to attain their nutritional requirements in accordance with local socio-economic conditions.
6. Increase the availability of drugs and medical equipment according to need and rational use of the general populace. Towards this end, the use of generic drugs will be reinforced by medical doctors and information regarding the advantages of generic drug use in order to support acceptance and familiarity by the population.
7. Reduction in fertility rate by strengthening the acceptance of the Norm of a Small, Happy and Prosperous Family (NKKBS) with the integration of family planning and information, education and communication services into the current family care program.
8. Improve the training and management of qualified medical and para medical personnel, general health service staff and other related health personnel.
9. Improve the physical wellbeing, especially of the productive age group, in order to enable them to live a healthy and productive life.

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In order to achieve the primary goals listed above, health sector development activities during Repelita V consist of thirteen programs. These are as follows:

- o Health Concerns of the Young Generation
- o Teaching, Training and Development of Health Personnel
- o Health Instruction
- o Health Services Development
- o Disease Control
- o Nutrition Improvement
- o Food and Drug Control
- o Women's Role
- o Clean Water
- o Regional Population Health
- o Health Development Studies
- o Increased Efficiency of the Government Structure
- o Improved Government Effectiveness

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The improvement of health status, as supported by the information provided through health status indicators, will necessarily entail a transition in demography, for example an increase in the number and age of the adolescent population, productive members and the aged. Currently accelerating developments in the financial sector will require an economic transition of a primarily agricultural nation toward an industrialized, market-oriented economy.

This rapid economic transition, aside from the positive effect thereof, will also entail negative ramifications, such as the destruction of the natural environment, increased urbanization, and others.

These demographic and economic trends, and the socio-cultural effects thereof (including changes in quality of life), will also effect an epidemiological transition. This epidemiological transition will effect a shift in morbidity and mortality patterns from infectious diseases to non-infectious diseases.

Diseases which will influence the "quality of life" of the population will be, amongst others:

- chronic diseases, e.g. cardio-vascular, diabetes, and cancer;
- sexually transmitted diseases, including AIDS;
- mental sickness; and
- alcoholism, narcotics abuse, diseases associated with smoking.

Despite the improvements and positive developments which have been achieved during the past four Pelita periods, the following problems still persist in the health sector:

1. Health status still remains to be improved. Infant mortality rates and and mortality rates for children below five years of age remain high: 58/1,000 live births and 10,6% per 1,000, respectively. In comparison, infant mortality rates for Thailand and Malaysia in 1987 was 40 and 24 per 1,000, respectively. Maternal health care requires particular attention, in light of the maternal mortality rate of 4,5 per 1,000 live births, in contrast with Thailand and Malaysia where maternal mortality rates are 1,0 and 0,7 per 1,000 live births, respectively.
2. General health, including the availability of clean water, is still lacking. Only 70% of the urban population, and 40% of the rural population have access to clean water. This issue will become increasingly problematic as the nation becomes increasingly industrialized.

3. The design of health services, particularly the referral system, is not yet fully operational. Referral services are provided by hospital categories beginning from the lowest (Class D hospitals) to the most sophisticated (Class A hospitals) and hospital laboratories. Currently, many patients still proceed directly to the lowest class facility, such as public health center (Puskesmas) or practicing physician, causing a reduction in the utilization of hospital services. In addition, another problem with the referral process are the fees involved which are often higher than can feasibly be paid by the care seeker.

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4. Management and distribution of health care personnel. There are still clusters of health care personnel centered in urban areas. This "clusterization" is most clearly evidenced by the location of physician specialists.
5. Drugs/pharmaceuticals are not yet available to the general public. The prices of pharmaceuticals, which are established in accordance with standard pharmaceutical price on the international market, high patent and promotional fees are affordable only to a small proportion of the general public.
6. Health sector financing in accordance with the principles of DUKM (Dana Upaya Kesehatan Masyarakat - or Financing Health Care for the Public) with JPKM (Jaminan Pemeliharaan Kesehatan Masyarakat - or Health Maintenance Assurance Program for the Community) as a model is not yet operational. Currently, health coverage services financed by Perum Husada Bhakti, PKTK (Pelayanan Kesehatan bagi Tenaga Kerja or Health Care Services Program for the Private Sector Work Force), Dana Sehat (Community Health Fund) and private insurance initiatives are covering only approximately 12% of the total population.
7. Health care management, especially at the provincial level, requires further strengthening in the areas of planning, implementation, monitoring and evaluation.
8. An health information system to support the managers at each administrative level of the health system has not yet been institutionalized.
9. In the Presidential Decree dated 1987 governing the delegation of health management activities to the provinces (Levels I and II), the lines of authority and accountability between the main Ministry of Health and the regional offices remain unclear.

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In order to accelerate further development within the health sector, the following achievements and/or breakthroughs will be required:

1. **Generic Drugs**

One means towards making drugs more accessible to the general population is to encourage the use of generic drugs at public health centers. With further information and intensive campaigns, the use of generic drugs can be marketed also to the private sector.

The use of generic drugs continues to increase, despite several hindrances such as the uneven distribution and prescription of generic drugs, especially outside Java and in outlying rural areas.

2. **Placement of Midwives in Provinces**

During Repelita V, 18,900 midwives were scheduled for placement in outerlying provinces. During FY 1989/90 4,000 places for midwives were established, which were filled by 3,253 persons. During FY 1989/90, an additional 5,656 midwives were trained and it is hoped that each of these individuals can be placed. In the past FY 1990/91, of 4,001 available positions, 3,823 are currently undergoing placement.

3. **Deregulation in the Pharmaceutical and Hospital Sectors**

Deregulation in the pharmaceutical sector will be directed towards achieving the following goals:

- a. To broaden the access to health services with drugs which are affordable to the general population.
- b. To guarantee the availability of drugs in all regions.
- c. To continue to ensure the safety and quality of drugs which are circulated to cover the needs of the population.

The scope of deregulation efforts will be directed towards:

- a. Pharmaceutical and Traditional Medicine (production of drugs).
- b. Pharmaceutical Retail Industry (distribution of drugs).
- c. Pharmacies (drug-related services).
- d. Registration for Pharmaceuticals and Traditional Medicine.

At the time of this writing, legislation to support the trial implementation of government hospitals to become self-financing institutions, which can exercise self-management and retain revenues to cover operational and development costs, is under review.

Some government subsidization for lembaga swadana hospitals will still be required, but will gradually be reduced in order to allow those funds to be reallocated to health care institutions which require more financial assistance.

With the implementation of Lembaga Swadana, it is hoped that the quality of services provided by hospitals will be increased and the efficiency of services improved. The burden to the government budget will be reduced, the population will receive better health care and the management of the hospitals will be streamlined. In FY 1991/92, fifteen hospitals which meet the required criteria have been selected as "trial case" Lembaga Swadana hospitals.

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#### 6. DUKM/JPKM

It has been universally recognized that the government is not able to finance all health care costs required by the population. In the National Health System (Sistem Kesehatan Nasional), the role of the population and private sector in financing the health sector is stipulated.

From several studies which have been conducted, the general population is able to pay approximately 70% of health costs. These funds are not organized, but should be systematized via the principles of DUKM.

JPKM, which consists of an operational model of DUKM is designed to guarantee quality of health services, based upon the development of a basic health care package in accordance with the needs of the population by changing the payment mechanism, from a per individual basis, to a collective financing scheme.

#### 7. Prioritization of Eastern Islands

National prioritization for the development of the Eastern Islands (Irian Jaya, Maluku, NTT, NTB, Celebes, Kalimantan) is evidenced by higher budgetary allocation to these regions, by funding staff training, equipment and operational expenses at the public health centers. Effective 1992, NTT, Maluku and Irian Jaya will receive assistance from the World Bank to improve the health, specifically nutritional status, of this region.

10. To strengthen the effectiveness of budgetary control as a managerial function throughout the Ministry of Health.

8. Job Analysis

The aim of job analysis proposed is to provide information which could be utilized in a national personnel/staffing program, and improvement of organizational structures.

9. Functional Job Analysis

The functional job analysis and approvals still required by the Ministry of Manpower, are those for dental assistants, technical dental staff persons, pharmacists, laboratory assistants, and computer specialists, among others.

Recommendations to improve the Ministry of Health absorptive capacity of funds allocated by the government include:

3. The budget and funds distribution of donor assistance projects (of sizable budgets) will be managed by (government) employees which will be assigned to this responsibility on a full-time basis.

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Parastatal organizations (BUMN - Badan Usaha Milik Negara) which operate in collaboration with the Ministry of Health include PT Kimia Farma, Perum Bio Farma, Perum Indonesia Farma and Perum Husada Bhakti. In accordance with services which these institutions currently provide, these institutions will also be requested to assist in the following areas:

1. Development of Inpres pharmaceuticals and generic drugs of high quality at an affordable price;
2. Development of vaccine to be included in national immunization programs to reduce infant and under-fives mortality rate(s).
3. Improve the quality of health services to civil servants and retired civil servants.
4. Development of the Health Maintenance Assurance Program for the Community (JPKM).

Honorable Vice President, with this summary I have presented you with a brief overview of the general activities of and developments within the health sector. I look forward to your guidance and direction to further improve the implementation of health services provided by the Ministry of Health.

Signed: Minister of Health  
Dr. Adhyatma, MPH

## LIST OF ACRONYMS AND ABBREVIATIONS

BUMN:	Badan Usaha Milik Negara - or parastatal organization
Dana Sehat:	Community Health Fund
DUKM:	Dana Upaya Kesehatan Masyarakat - or Financing Health Care for the Public
FY:	Fiscal Year
GBHN:	National Guidelines for State Policy
JPKM:	Jaminan Pemeliharaan Kesehatan Masyarakat - or Health Maintenance Assurance Program for the Community
Lembaga Swadana:	self-financing institution
NKKBS:	Norm of a Small, Happy and Prosperous Family
NTB:	Nusa Tenggara Barat
NTT:	Nusa Tenggara Timur
PKTK:	Pelayanan Kesehatan bagi Tenaga Kerja - or Health Care Services for the Private Sector Work Force
Puskesmas:	public health center

**APPENDIX I**

**WHO RECOMMENDATION:  
NATIONAL PROGRAMME ON PROMOTING RATIONAL USE AND  
EFFECTIVE MANAGEMENT OF DRUGS IN INDONESIA**

~~SECRET~~

Outline of national programme

on promoting rational use & effective management of drugs in Indonesia

Immediate Objectives

- To promote concept of Essential Drugs.
- To improve prescribing practices of medical and paramedical health personnel.
- To promote rational use of drugs and effective drug management in all public health facilities in Indonesia.
- To prepare standard treatment regimens for Puskesmas and Kabupaten hospitals.
- To prepare training modules in rational prescribing for medical and paramedical personnel.
- To introduce methodology for quantification of essential drugs for Puskesmas and Kabupaten using methodology on standard treatment and morbidity developed by the WHO Action Programme on Essential Drugs.
- To develop a National Centre for providing appropriate and authentic information on drugs to prescribers, patients and community.
- To rationalize training programme of pharmacists, nurses and medical students to reflect adequately the concept of Essential Drugs and the National Drug Policy.

Developmental Objectives

- To improve patient care in PHC
- To achieve rational use of financial resources for health development.

Institutional Framework : Core Group

Ministry of Health

Directorate General of Community Health

Directorate General of Medical Care

Directorate General of Communicable Disease Control

Directorate General of Food & Drug Control Administration (POM)

University Departments:

- Clinical Pharmacology Department, Faculty of Medicine - Gajah Mada University, Yogyakarta
- Clinical Pharmacology Department, Faculty of Medicine, University of Indonesia, Jakarta
- Dr Soetomo, Teaching Hospital, Pharmacy and Therapeutic Committee and Air Langga University, Department of Pharmacy.

Non-governmental Organizations:

- Indonesian Medical Association
- Indonesian Pharmacists Association

Duration: 5 years in three parts - Part I, II and III.

**ANNEX D.4**

**HEALTH ECONOMICS AND POLICY ANALYSIS UNIT  
COMPONENT ASSESSMENT**

all public and private expenditures for health on a yearly basis"; and, c) "Policy recommendations have been made to the Project Advisory Board based upon data generated from this project" (p. 54, PP, 1988).

A more recent statement of the purpose and output of this project's component is included in the final draft of the project's *Technical Workplan and Budget for August 15, 1991 - March 31, 1992*, dated November 1, 1991. This document lists this component's strategy as providing a) health sector financing and policy analysis capacity, and b) analysis and policy options (Figure 3, p. 9, *Technical Workplan and Budget for August 15, 1991 - March 31, 1992*).

Unlike other project components, this component was established as a "functional unit" of the MOH's Bureau of Planning. This difference meant that it had a broader mandate than that of the other components in that it was to be available to the MOH in general and specifically the Minister to provide economic information and analysis of policy issues and options under consideration by the GOI as it pertains to the health sector. Sometimes such analyses would be outside the direct purview of other responsibilities of the HSF project.

## 2. Review of the Inputs for Achieving Component Purpose

### A. Component Personnel

At the time of the evaluation, the Health Economics and Policy Analysis Unit (HE/PAU and AKEK in Indonesian) had nine employees, with one long-term expatriate technical consultant, Dr. James Jeffers, an economist, who had been with the project for nearly two years. In addition, the component had two other long-term domestic consultants, one with an economic background, Dr. Ascobat Gani, and one, Dr. Paramita Sudharto, a public health background. The Director of the Unit, Dr. Ridwan Malik, a physician, also had training in health economics. Besides the above named personnel, the component had several other technical staff with computer and other analytical skills. Finally, early in the implementation of the project, the unit relied on two short-term consulting staff to provide about eight person months of assistance to conduct specific analytical tasks on various health economic topics of policy interest to the MOH and GOI.

Given the above information, the short- and long-term expatriate and local technical assistance provided via the project to the MOH has been approximately 128 person months, disaggregated as follows:

Expatriate LT	24 months
Indonesian LT	96 months
Expatriate ST	8 months
Indonesian ST	uncertain.

The primary activities which this assistance has provided included. a) economic and policy analysis; b) health sector resource, expenditure, and policy data base development; c) assistance in study design and review for the MOH; d) health economics training and pedagogical materials development; and, e) contract management. These activities were conducted as part of the envisioned focus of the unit as a functioning unit of the Bureau of Planning of the MOH. This meant that the unit was to provide direct policy analysis services to senior MOH policy makers as requested by the Minister and his level: one staff colleagues. The Bureau of Planning was initially under the leadership of Dr. Brotowasisto, who has since become the Director General of Medical Services, and now, Dr. Nyoman Kumara Rai. At present, AKEK comprises only one of about seven units of the Bureau of Planning, and as such does not receive much direct supervision from the Director of the Bureau.

## B. Component Studies

AKEK staff has been involved in a number of specific studies, including analyses of health economics data and health policy reviews. Perhaps the most noteworthy of these studies have been the two monographs, numbers 4 and 10, on health sector financing from FY 1983 to 1989.<sup>2</sup> These studies are based on health expenditure data assembled for both public and private sources over this period. The earlier monograph, number 4, is more comprehensive since it also includes information on household expenditures on health from the SUSENAS survey of 1987. The unit has also completed an analysis of the operational and maintenance costs of government hospitals for the FY 1989.<sup>3</sup> A cost-effectiveness study of medical technology was also recently completed by members of HE/PAU. According to the internal midterm evaluation of the HSF project, since the project began, the AKEK has completed eleven final reports of studies conducted by the unit.

The two short-term consultants hired by this component have also produced four reports/studies on topics such as user charges and equity of access, and provided other technical assistance in collaboration with BPS (National Statistical Centre) on the 1990 social and economic survey (see Table D.4.1). Unfortunately, the time available for this evaluation was not long enough to technically review their analytical work.

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<sup>2</sup>Ridwan Malik, *et al.*, *Analysis of Health Financing in Indonesia, 1982 -1986*, Monograph No. 4 (Jakarta: MOH with assistance from ISTI and USAID Grant No. 497-0354, 1990), and HE/PAU, *Analysis of Health Financing in Indonesia, 1982/83 - 1988/89 (Data Updating)*, Monograph No. 10 (Jakarta: MOH with assistance from ISTI and USAID Grant No. 497-0354, 1991).

<sup>3</sup>Ascobat Gani, *Study on Operational and Maintenance Cost of Government Hospitals, FY 1988/1989*, Monograph No. 8 (Jakarta: MOH, with assistance from ITSI and USAID Grant No. 497-0354, 1991).

Table D.4.1

**SHORT-TERM TECHNICAL ASSISTANCE FOR HEALTH ECONOMICS AND  
POLICY ANALYSIS COMPONENT OF THE HSF PROJECT**

Name of Consultant	Amount Paid (\$)	Report Number	Report Title
1. Oscar Gish	7,612	9	Review of Health Financing Studies
2. Oscar Gish	6,039	15	Who Gets What? Utilization of Health Services in Indonesia
3. Glen Melnick	7,539	19	Development of a National Health Expenditures Data Base and Reporting System for Indonesia
4. Oscar Gish	7,612	28	NA
5. Glen Melnick	6,001	NA	Tech. Assist. to MOH & Nat'l. Stat. Ctr. for 1990 Nat'l. Social & Econ. Survey
6. Glen Melnick	14,989	NA	Tech. Assist. to MOH & Nat'l. Stat. Ctr. for 1990 Nat'l. Social & Econ. Survey
TOTAL	49,792		

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### **C. Component Contracts**

According to an analysis of this project component's contracts (see Table D.4.2 for a listing of the contracts), AKEK has managed eleven contracts over the life of the project, with ten of them having been completed as of mid-November 1991. At present foreign exchange rates between the U.S. dollar and the Indonesian Rupiah, the total value of these contracts amounted to over \$171,000 (338.712 million Rupiah).

In terms of the focus of the contracts let by this component, virtually all of them have been addressing the generic building block of "policy assessment and program evaluation" (coded as I/7). The largest contract (about 45 percent of the total) was to procure the 1987 SUSENAS survey data set. Many of the others were either to analyze a special data set, complete the editing of other reports, or address a technical issue in a particular data set. Finally, HE/PAU-AKEK staff was requested to participate in the evaluation of the CHIPPS project by conducting the cost analysis component of the scope of work. By so doing, the staff was "learning by doing." However, it is unclear whether the HSF project was responsible for paying for this work when the CHIPPS project evaluation would have had resources to pay for such contract work.

### **3. Component Achievements**

#### **A. Policy Achievements**

While this particular project component did not have a unique policy role as described for the other components above, according to the HSF project staff's own internal midterm review, it engaged in 5 policy analyses in FY 1990/91 and 15 health policy reviews during the first 3 years of the project. These analyses included assessments of the doctor contracting policy, medical technology assessment, and concern about regional equity in expenditure and service delivery.

AKEK has also developed a policy analysis research agenda. In that agenda, the unit has proposed to conduct the following five policy analyses during the remaining LOP. Those proposed policy topics include: a) the development of health policy in Indonesia, b) equity in health development, c) health policy on the development of the eastern part of Indonesia and less developed regions, d) the role of the government and private medical sectors, and e) social financing policy in Indonesia. The first analysis would appear to be pertinent to all of the policy thrusts outlined by the Minister of Health in his report to the Vice-President of the GOI (April 10, 1991), and the last two have direct applicability for several of the policy

TABLE D.4.2

AN ANALYSIS OF THE STATUS OF HEALTH ECONOMICS AND  
POLICY ANALYSIS COMPONENT CONTRACTS  
NOVEMBER 15, 1991

Contract Number	Purpose	Contract Amount Mill Rup	Activity & Building Contract Block Status Focus <sup>1</sup>	Comments
1. HSF-5/X/88	Facilities Study	2.200	Com1/7	
2. K4/040/89	Final Eval re: CHIPPS Proj.	81.390	Com1/7	
3. K4/045/89	Technical Editing	8.184	Com1/7	
4. K4/228/89	Procure SUSENAS Data	149.070	Com1/7	
5. K4/254/89	Health Econ. Int'l. Workshop Collaboration w/WHO	17.500	Com1/2	12 countries participated
6. K4/207/89	Translate Econ. Survival Kit	6.250	Com1/7	
7. 03.4.011A.13/90/08.20	Analyze 1987 SUSENAS Data	6.000 <sup>2</sup>	Com1/7	
8. 03/4.011C13/90/12.21	Hospital Cost & Rev. Study	4.500	Com1/7	
9. 03.4.011E.13/91/03.05	Computer Pgm: Data Base Devm.	8.590	Com1/1 & 7	
10. 03.4.011D.13/91/05.08	C-E of Med. Technology	9.113	Com1/7	
11. 03/04.014.13/91/07.12	Private Sector Study	45.915	75 IID/7 & 10	Completed in 292
	TOTAL	388.712		

<sup>1</sup>See Accompanying Notes to Table 2. This note is similar to that accompanying Table 2 in Annex D.1, Social Financing Component Assessment.

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## Notes to Table D.4.2

### Social Financing Component Activities and Building Blocks

#### Activities

- I. Generic Building Block Development, including Legislative Activities for the PP
- II. Developing Four Types of Generic JPKM Program Options
  - A. PHB option for government workers (MOH parastatal)
  - B. PKTK option managed by Ministry of Manpower
  - C. Dena Sehat option community cooperative approach (local government involved along with the Ministry of Cooperatives)
  - D. Swasta option (private insurance programs)
- III. Field Site Experiments
  - A. Bali
  - B. NTT

#### Building Blocks

1. MIS
2. Personnel Training, including Social Marketing, etc.
3. Regulatory and Management Systems Development
  - A. Regulatory Systems
  - B. Management Systems
  - C. Legal Systems
4. Quality Assurance Systems development
5. Pharmaceutical Efficiencies Development (See Annex 3.1 assessment)
6. Benefits Package Design, Pricing, and Market Creation
  - A. Benefits Package Design
  - B. Accounting Systems Development
  - C. Pricing Strategies (to Consumers and Providers)
  - D. Social Marketing, Community Participation
  - E. Grievance and Complaints Services
  - F. Utilization Review Techniques
7. Policy Assessment and Program Evaluation
8. Government Decentralization
9. Financial Control and Planning
10. Feasibility Review and Assessment

efforts outlined in the separate project components. The extent to which these proposed policy research analyses has been approved for inclusion in the workplan of the project remains unclear to the evaluation team and resides outside the capacity of the team to investigate fully.

It is known that members of AKEK have been involved in the development of the Swadana concept and have participated in the discussions regarding JPKM. However, since this unit did not take a direct lead role in the policy formulation process, it is difficult to assess the contribution of any AKEK member in this regard.

Finally, HE/PAU-AKEK has been helpful to the Planning Unit of MOH in actively participating in the design and development of policy-related studies funded by other donors, such as the World Bank study on the demand for health care in East Kalimantan.

## **B. Technical Achievements**

Tables D.4.3 and D.4.4 reproduce the ISTI, Internal Midterm HSF Project Evaluation table on page 202, which analyzes the activities of AKEK in terms of two alternatives of the "benchmark" indicators.<sup>4</sup> In both tables, the progress of this component of the project is summarized. According to these tables, the progress of this project component has been in twelve areas, including: a) studies, b) policy analyses, c) health policy reviews, d) evaluation exercises, e) data base construction, f) teaching sessions, g) scientific presentations, h) editing of scientific publications, i) organization of steering committees for seminars, j) participation in national and international seminars and conferences, k) establishment of the Indonesian Health Economics Association, and l) engaging in scientific collaboration.

The difference between the two tables (D.4.3 and D.4.4) is that in Table D.4.3, the "benchmark" indicators found on p. 56 of the PP are presented as the relevant measures, whereas Table D.4.4 utilizes those "benchmark" measures found on p. HE-1 in *The Health Sector Financing Project Technical Workplan and Budget for August 15, 1991 - March 31, 1992*, dated November 1, 1991. It is not indicated in the second version of the "benchmarks" found in Table D.4.4 whether these sets of "benchmarks" have been formally agreed upon by the parties involved in the project (GOI/MOH and USAID), even though they appear to be more accurate with respect to the actual work conducted by AKEK over the last three years. Basically, the difference between the two sets of "benchmarks" is that in the PP set, no mention is made of the health economics institutionalization function. By including it, some of the activities implemented by AKEK, such as teaching sessions, seminar participation and the

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<sup>4</sup>ISTI, *Final Report on the Results of an Internal Midterm Evaluation of the Health Sector Financing Project for the Department of Health, GOI* (Jakarta: MOH, October 21, 1991).

Table D.4.3

ANALYSIS OF THE COMPLETED ACTIVITIES PERFORMED BY HE/PAU AKEK IN TERMS OF  
PP "BENCHMARKS" DURING THE FIRST THREE YEARS OF THE IISF PROJECT, 1988-1991

Activity	No. Compl.	"Benchmark" of Progress from PP								
		1 Decree Establishing HE/PAU 4.1.1	2 Info. System Developed to Track Pub. Hea. Sector Expenditures 4.2.1	3 Annual Research Agendas Developed For Sec. Data 4.2.2	4 Research Comissioned and Completed 4.2.3	5 Annual Workshop Held to Discuss Findings 4.2.4	6 Review of Existing MOH Policy Re: Hea. Fin. Completed 4.3.1	7 Study Findings Monitored For Policy Implications 4.3.2	8 Evaluation Designs for All Project Components Completed 4.3.3	9 Project Evaluation Completed 4.3.4
1. Final Report	11				Yes					
Proposals	14			Contrib.	Contrib.					
2. Policy Analyses	5									
3. Hea. Policy Reviews	15						Contrib.			
4. Evaluation Exercises	3						Contrib.			
5. Data Base Construction	2		Yes							
6. Teaching Sessions	18									
7. Scientific Presentation	11						Contrib.			
8. Editing Sci. Publications	25							Contrib.		
9. Org. Comm. for Seminars	6						Contrib.			
10. Participate in Sem/Conf.										
National	14						Contrib.			
International	10									
11. Establish Indonesian Health Econ. Association	1									
12. Sci. Collab.	8						Contrib.			

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Table D.4.4

**ANALYSIS OF THE COMPLETED ACTIVITIES PERFORMED BY HE/PAU AKEK IN TERMS OF PP "BENCHMARKS" DURING THE FIRST THREE YEARS OF THE HSF PROJECT, 1988-1991**

Activity	No. Compl.	Alternative HSF Project Milestones for HE/PAU				
		1 Institution- alize HE/PAU AKEK	2 Develop a Mechanism to Collect Health Econ & Policy Data	3 Independent Conduct of Policy Analysis	4 Monitoring & Evaluation of HSF Project	5 Institution- alize Health Econ. in Indonesia
1. Studies	.					
Final Rept.	11			yes		
Proposals	14			Contribute		
2. Policy Analyses	5			yes		
3. Health Policy Reviews	15			yes		
4. Evaluation Exercises	3				Contribute	
5. Data Base Construction	2		Yes			
6. Teaching Sessions	18					Contribute
7. Scientific Presentation	11			Contribute		Contribute
8. Editing Sci. Publications	25	Contribute				Contribute
9. Org. Comm. for Seminars	6					Contribute
10. Participate in Sem/Conf.						
National	14					Contribute
International	10					Contribute
11. Establish Indonesian Health Econ. Association	1					Contribute
12. Sci. Collab.	8	Contribute				Contribute

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establishment of an Indonesian Health Economic Association which did not relate to any original project paper "benchmark" could now be justified in terms of its contribution toward a measure of progress.

It is also not clear whether the first "benchmark" on either Table D.4.3 or D.4.4 is a relevant "benchmark" since AKEK was legally institutionalized by a decree issued by the Secretary General of the MOH at the time of project implementation within his jurisdiction. The fact that there is continual discussion regarding its appropriate location within the GOI is indicative that the unit has not yet been fully institutionalized within the MOH and remains an issue for further consideration by GOI and USAID (see further discussion of this issue and the evaluation team's recommendation regarding institutionalization below).

In terms of AKEK's technical contributions toward the ultimate project goal of assisting the GOI to restructure and refinance the health sector, AKEK has made several notable contributions. These include: a) the development and analysis of a health financing data base in which trends in public and private health expenditures are monitored; b) training public health and economics personnel in the country in the basics of health economics; c) health policy assessment; and, d) collaboration with the other components of the project to evaluate and assess the impact of an integrated field test of the proposed hospital restructuring via Swadanaization, and the implementation of a full set of JPKM social financing mechanisms in a given location.

(i) Data Base Development and Analysis

AKEK has developed data bases and the procedures for updating these data bases, and has conducted analyses of that information to monitor public and private health expenditure flows over the 1982-89 period. In addition, the unit expects that it will use the recently completed (1990) National Economic Survey (SUSENAS) data set for policy research purposes. However, at present the unit has very little computer hardware and software capacity for managing and manipulating large data bases as would be required to extend the health expenditure data base, other surveys which the unit might be asked to develop and manage, and the SUSENAS data set. With improved hardware and software, however, two individuals on the unit staff who serve as the computer programmer and data analyst may have the requisite skills and expertise to continue to use this information for policy relevant purposes within the MOH. A full assessment of their skills would be important prior to an extension of this activity to ascertain whether the investment made on the development of this data base might be sustained.

(ii) Training in Health Economics

All project components have engaged in training and pedagogical materials development, including HE/PAU-AKEK in the area of health economics education and materials provision. As Tables D.4.3 and D.4.4 indicate, many of this component's activities were focused on institutionalizing such training by establishing a professional forum for advancement in the field of health economics (the Indonesian Health Economics Association), participating in national and international seminars and conferences, organizing seminars, translating and editing scientific publications in health economics, making scientific presentations, and conducting teaching sessions in various educational programs throughout the country.

It was not possible, given time constraints, to assess the extent to which this educational focus on health economics substituted for activities of greater salience from a policy and analytical perspective. While AKEK developed an MOH-approved policy relevant research agenda during 1991 for implementation in FY 1991/92, with the exception of the inventory of the country's health policies, the agenda does not appear to be included in the project's technical workplan and budget for the period August 15, 1991 - March 31, 1992.<sup>5</sup> Further, at the time of the evaluation team's work in Indonesia, this workplan and budget had not as yet received the approval of USAID.<sup>6</sup>

(iii) Policy Assessment and Program Evaluation Development

While Tables D.4.3 and D.4.4 suggest that a number of policy reviews and analyses have been conducted over the first three years of the project, a full listing of what these analyses or reviews precisely covered was not made available to the evaluation team. The set of study reports completed by the AKEK component addressed various policy issues as well, including financing and equity of access to health services. The other three components of the project also were materially involved in various analyses and reviews of the specific policy issues under their jurisdiction. Since the other components had a clearly focused mandate for specific policy change regarding social financing, hospital restructuring, and pharmaceutical efficiencies, it would appear that their contribution to policy reform may have been greater than that of AKEK. However, AKEK, through its studies, policy analyses and reviews,

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<sup>5</sup>Review pages HE 1-21 of *The Health Sector Financing Project Technical Workplan and Budget for August 15, 1991 - March 31, 1992*, Final Draft (Jakarta: MOH/ISTI, November 1, 1991).

<sup>6</sup>These comments are not meant to suggest that the proposed research agenda did not address important policy issues of relevance to the MOH and the GOI. Quite the contrary. Each of the five proposed research initiatives presented in the research agenda as presented on pages 203-217 of the *Internal Midterm Evaluation of the HSF Project*, prepared by ISTI technical assistance staff, and dated October 21, 1991, address important components of the ten MOH policy initiatives as summarized in Table 1 in the main text of this report.

provided considerable input into the formulation of the policy regarding physician contracting, the conceptual development of hospital Swadana policy, financial and service delivery issues involved in introducing new medical treatment technology, and regional equity concerns. Finally, it was able to clearly document the substantial increase in financial support provided by the GOI to child survival services, which was a principal concern of USAID prior to the launching of the project.

Another responsibility of AKEK has been to provide leadership to the project in monitoring project performance via the evaluation process. It led the project implementation team in its conduct of the internal mid-term evaluation of this project and has materially contributed to the work of the external evaluation team as a consequence of developing that report. Further, as part of its evaluation function, AKEK has been involved in developing a scope of work to conduct a baseline study of health care delivery, service use and health financing in Bali prior to the implementation of an integrated field test of social financing and service delivery restructuring throughout the region.

The team views the baseline study in Bali as a critical component of the second phase of the HSF project. At present, the team does not have a good sense about how this study will be conducted and analyzed, and it is concerned whether the study will adhere to international standards. According to the HSF project staff involved, the existing/proposed HE/PAU contract<sup>7</sup> scopes of work only provide for developing a baseline data base for use by health economic and policy analysts and support for monitoring and evaluation. The precise status of this proposed work must be clarified as soon as possible and revised to conform to international standards and with substantial collaboration between the expertise of Indonesian scholars and other international expertise in the conduct of the work.

(iv) Integration of Project Implementation

A.I.D., via the Mission Director's internal review mechanism, has been concerned about this aspect of the project since 1989. It has raised this issue with ISTI's implementation team in subsequent discussions and program reviews. During the last six months, the ISTI implementation team has been actively discussing how this might be done since they also view integration of the various project components as being key to the successful implementation of the remaining activities of the project, and several project documents have been prepared on the subject.<sup>7</sup>

It is envisioned that AKEK's role in such an integrated field test of the project's components would be to supervise the baseline and subsequent follow-up surveys of service provision and use and its related financing. The evaluation team

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<sup>7</sup>See ISTI, *An Integration Strategy for the HSF Project* (Jakarta: ISTI for the MOH, no date, but approximately mid-1991).

views integration of the project components as key for the project to have any practical relevance to implement a sustained field test by the end of the project. It is also of the view that the role of AKEK in monitoring project performance in an integrated field trial of the policy restructuring and refinancing reforms is vital to the future success of the project.

#### **4. Component Future Plans**

##### **A. Analytical Plans**

AKEK's primary project role in the next year of the project will be to manage and implement the Bali implementation field test baseline survey and to analyze its results. In addition, it is expected that the unit will begin to develop more complete terms of reference for the policy research agenda recently endorsed by the MOH.<sup>8</sup> Finally, the unit is expected to request additional computer hardware and software in order to manage the annually expanding health expenditure data base, specialized surveys and other related data. At present, the unit will be losing much of its computational capacity when Dr. Jeffers departs from Indonesia.

##### **B. Analysis of Component Location Options**

The team recognizes the importance of the health policy and related economic research function to achieve goals of sector restructuring and refinancing. The effort by AKEK to initiate these functions has not gone unnoticed and unappreciated. Further, it is recognized that AKEK is undergoing personnel changes. Dr. James Jeffers, the long-term expatriate consultant, is leaving after the middle of December 1991. Other personnel changes of the technical staff may also be underway.

The evaluation team understands that the role and function of AKEK is unclear within the MOH, with questions raised about its present location within MOH in the Planning Unit of SEC/GEN. It is understood that there have been discussions about possibly relocating it to some other part of the ministry. There has also been a lack of clarity in AKEK's role, since while it has been a part of an integrated HSF project, its role has also been to serve as a focal point for health policy analysis work more broadly defined within the Ministry.

The team notes the importance of the distinction of the function of (i) analyzing policy options regarding health sector restructuring and refinancing from (ii) data gathering for health expenditure trends analysis, cost of health care, and changes in health status. It is important to note also the distinction between the

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<sup>8</sup>See the full text of the approved research agenda in the MOH/ISTI, *Internal Midterm Evaluation Report* (Jakarta: MOH/ISTI, October, 1991).

evaluation research function to monitor the implementation of health policy changes and the other two functions stated in the previous sentence.

The team recognizes that the health sector is part of a larger economic and social environment which is undergoing rapid growth and change due to decentralization, privatization of economic activity and other government policies. The extent to which restructuring and refinancing the health sector can occur is highly dependent upon these larger economic, political and social forces.

Given the above findings, the team presents the following analysis of AKEK's functions. The project appears to have two important functions for a health policy and economic analysis unit to perform over the remaining life of the project.

**Function I:**

Serve an evaluation role of integrated field test site(s) where health sector restructuring and refinancing is implemented by other project components.

Possible examples include:

- Bali baseline and follow-on surveys; and,
- other baseline and follow-on surveys in other integrated test site locations.

**Function II:**

Provide quick policy analyses addressing the implications of regulations or policies proposed or evaluated in other sectors which may influence the MOH restructuring and refinancing policy program of JPKM, and Swadana and pharmaceutical efficiencies.

**Function III:**

A third function of the originally conceived HE/PAU-AKEK also exists: to update and maintain the existing health sector use, resource, and cost/expenditure data bases and ensure the expertise necessary to extend them (A National Center for Health Statistics function).

The locational homes of these three functions may best reside in separate places in the GOI with varying MOH direct oversight on the activities.

Function I: The baseline and follow-up evaluation research function:

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The team considers that it would be best to contract it out to avoid conflict of interest regarding the results of the evaluation. Possibilities involve: (a) University of Indonesia faculty, (b) local (for example, University of Indonesia faculty) research firms, (c) international expertise, or (d) a combination of the above. The team recommends the last option, that is, a combination of local and international expertise.

#### Function II: Policy analysis:

This function needs to be directly attached to a unit of GOI overseeing implementation of restructuring and refinancing the health sector. It may be located in the MOH, directly under the Minister, or in a separate organizational entity reporting to the line ministries with jurisdiction over health sector restructuring and refinancing, including at least MOH, MOF, BAPPENAS, MO Interior, MO Labor, and the Ministry of Administrative Reform, related parastatals of PHB and PKTK, and representatives from private providers via their various associations, for example, IDI. The team recommends the latter location, that is, in a separate organizational entity reporting to a multi-ministerial committee.

Finally, the team recommends that a multi-ministerial unit be established to address a number of health development policy issues such as environmental or demographic issues, and the ramifications of other proposed policy changes for the economy as a whole, for example, technology development, foreign private involvement in the sector, capital and banking policy, insurance industry reform, personnel development, pharmaceutical industry reform, etc. This proposal would require additional funding and staff to implement.

### **5. Other Issues for Assessing the Future of the Component**

#### **A. Staffing**

The evaluation team understands that AKEK is losing its long-term expatriate consultant, Dr. James Jeffers, as of the middle of December 1991, and it is expected that Dr. Ascobat Gani may return soon to an academic base at the University of Indonesia as well. Such personnel changes will have an adverse impact on the component's ability to continue to provide the technical support required to monitor the Bali baseline study and any related follow-up surveys and data analyses.

Whether this component should make an effort to replace these people is dependent upon the decision regarding the future location of AKEK's various functions and roles (see section 4.B above). It is likely, however, that more rather than less reliance on the analytical skills of health economics will be required to implement all functions and roles, regardless of the locational home within the GOI, as the

project is implemented and the GOI makes the financing and structural changes envisioned by the policy changes which have occurred during the last three years.

#### **B. Policy Analysis**

This project has demonstrated the importance of conducting various types of policy analysis within the health sector. Each project component has been involved in this work. It is unclear that only one entity within the MOH (or the GOI, for that matter) should be involved in health policy analysis. However, clearer responsibilities for various types of policy analysis and the skills required to conduct and implement the results of the analysis would lead to a smoother operation and facilitate the implementation of an integrated set of responsibilities required to restructure and refinance the health sector.

#### **C. Regulation Function**

Some discussion has occurred about the possibility that AKEK might assume some of the roles and functions of a regulatory unit of social financing within the MOH. As yet, the role and function of such a unit has not been defined by the GOI, nor has the bureaucratic home of such an entity been identified. If the role and function were matters solely under the present jurisdiction of the MOH, then its focus and responsibilities would be easier to define. However, since so many of the issues in the health sector have financial implications and possible solutions, it is conceivable that such a unit be located within the jurisdiction of a multi-ministerial body representing their various interests as well as those of the MOH. Much greater attention to these issues must be given by the project during its subsequent phases.

#### **D. Budget Issues**

Given that the possible functions of the present AKEK may become housed in separate bureaucratic entities of the GOI as proposed above or modified in some similar manner, the present workplans and budgets may require modification. Furthermore, depending on how the set of identified functions of AKEK is shifted to new entities, it is unclear what the preferred staffing arrangements may be and to what extent the GOI might attract the expertise necessary to implement the work on its own or whether it should contract out for the expertise required.