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CONSULTATION TO COMMUNITY MEDICINE
PROGRAM

FACULTY OF MEDICINE

ANDALAS UNIVERSITY

PADANG, WEST SUMATRA

INDONESIA

A Report Prepared By:
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EXECUTIVE SUMMARY

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By March 1983, the Faculty of Medicine, University of Andalas (FKUA), was ready to implement their plans for teaching community medicine. Since November 1981, workshops and exercises had been held to prepare the faculty to make program decisions, and it had been determined that the program would begin with the second and sixth year activities. Second-year activities will be carried out in a suburban area near Padang and sixth-year activities, in Persisir Selatan and Limapuluh Kota.

The major activity during this consultation was a workshop held for 50 members of the faculty and members of the Department of Health and the School of Nursing. The workshop concentrated on providing details of health conditions and health services in the field and an opportunity for detailed discussion and planning of the community medicine program. As a result of these discussions, the plans for the second year in particular were shifted to allow for greater community involvement and orientation. Details of the organization and implementations were clarified, using in particular the experience from the University of Diponegoro as related by Dr. Satoto.

Most of the recommendations discussed in the workshop and in the two subsequent days in Padang can be summarized briefly as follows:

1. Proceed directly with field activities for the second and sixth years.
2. Provide greater community orientation for field activities.
3. Review and improve specific activities designed by the February and March workshops for the second and sixth years prior to implementation.
4. Use input from a puskesmas doctor in revision of activities.
5. Identify problems earlier in the educational process, specifically in the first and second years. Vertical integration of teaching staff will assist in this.
6. Make problem solving part of the curriculum at the beginning, although at a simple level.
7. Offer continuous teaching from the fourth semester through the eighth to improve communication with the community.

8. Second-year students should continue their COME activities beginning in the third semester of the third year.
9. To develop community medicine education, one year of teaching should be added each year.
10. Use modules in planning teaching activities for the third and fourth years.
11. A teaching module in the kabupaten hospital is recommended for Tingkat V and VI.
12. KKN should be utilized by COME as an additional means of achieving community medicine teaching objectives.
13. Group leaders should work for a one-year period at least and preferably for a three-year period in the same community.
14. A single group leader should be designated as coordinator for the COME activities of a single year or, if possible, for a three-year period.
15. Staff from the preclinical and paraclinical departments should participate in planning and should lead activities in the fifth and sixth years.
16. Give priority to the development of a subdepartment of social pediatrics.
17. Dr. Satoto from Universitas Diponegoro is recommended as a recurrent short-term consultant.
18. The Dean's continued enthusiastic support of community medicine development is critical.
19. Planning for the short course in project management should be carried forward.

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ABBREVIATIONS AND LOCAL TERMS

CHIPPS	Comprehensive Health Improvement Program-Province Specific
CHS	Consortium on Health Sciences, Ministry of Education
CM	Community medicine
COME	Community Oriented Medical Education
COMMED	Community Medicine as a separate activity
FKM	School of Public Health, University of Indonesia in Jakarta
FKUA	Faculty of Medicine, University of Andalas
FKUGM	Faculty of Medicine at UGM
Kabupaten	Regency
KI	Kurikulum Inty, Core Curriculum
KKN	Kuliah Kerja Nyata, a period of field work for university students
Pembimbing	Group leader
Puskesmas	Community health center
SKN	National Health System, a national plan and description published in 1982
Tim	Team
TIU	General educational goal
Tk	Tingkat year of the curriculum

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TOT	Training of the Trainers, short course in management taught by FKM and Johns Hopkins' faculty to provincial health personnel
TPK	Specific instructional objectives, behavioral objectives
UGM	Gadjah Mada University
YIS	Yayasn Indonesia Sejahtera

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INTRODUCTION

The Faculty of Medicine at Andalas University in Padang, West Sumatra, has developed a community-oriented medical education component for their medical curriculum. By delaying the commencement of the program, they have been able to take advantage of the experiences of other programs at other medical faculties throughout Indonesia. In November 1981, the consultant visited the Faculty of Medicine, University of Andalas (FKUA) and participated for two weeks in the refining of program plans for the medical curriculum. Initially, implementation was expected to begin in March or April 1982 with the students' first year, and in July for the first-year students. Because of a failure of funding through the Comprehensive Health Improvement Program--Province Specific (CHIPPS), however, no teaching or field activities were begun. Planning, however, continued steadily and, during the period November 1981 to March 1982, a number of events took place which advanced preparations to the point where implementation could begin.

In early 1982, when the faculty began to plan the detailed activities they were to carry out in the field, it became obvious that it would be very difficult to maintain activities in Pesisir Selatan, because it was so far from the University. Accordingly, that location was abandoned for the community medicine program during the earlier years of medical school, although it was retained for the fifth and sixth years, when the students are on clinical clerkships. At that time the students can go to a rural health center or a rural hospital and remain there for a number of weeks, rather than needing weekly transportation to and from a distant site. For the earlier years, it was decided to utilize a suburban field area near Padang. This would ideally be somewhat rural in nature, but within easy transportation distance from the medical school.

The community medicine planning team (Tim COME) worked diligently to plan specific education goals and objectives for the community medicine program ("top-down" planning). A general progression of activities was organized, with goals for the first and second year being to gather data about the community; for the third and fourth years, to diagnose community health problems; and for the fifth and sixth years, to treat community problems using various community-oriented activities.

At this same time, the Consortium on Medical Sciences, renamed the Consortium on Health Sciences (CHS), had received initial feedback on the draft core curriculum (Kurikulum Inti, or KI). The CHS published the KI in book form, with detailed educational goals, objectives, and activities for each department. It should be noted that the KI is organized according to

departments or disciplines, rather than incorporating an organ-based or other integrated approach. This strongly influenced the thinking of the departments at FKUA -- they felt constrained to follow this organization as the KI had been prepared at the central level.

Added to this was the continually repeated dictum from CHS that community oriented medical education (COME) was the goal, not community medicine (COMMED). By this, CHS meant that community medicine teaching should somehow be integral to medical education as a whole, and not be separated into a distinct activity such as has been done at some other medical faculties, such as Gadjah Mada. Unfortunately, CHS gave no specific guidelines as to how this was to be done. The Tim COME at FKUA was faced with the necessity of following a directive, the nature of which was not understood. Each department at FKUA wished to both follow the KI, and to carry out in some manner the community-oriented curricular objectives in the KI and still follow the directive not to develop a separate community medicine program.

A number of interchanges with other faculties took place. These provided input and clarification of some of these questions. Dr. Kamardi attended the annual community medicine curricular review held by the community medicine team at Gadjah Mada University (UGM). While meeting with Dr. Marifin, the head of CHS, as well as the community medicine team at UGM, Kamardi heard again the directive that community medicine should be integrated with the other teaching activities. Again, no direction for accomplishing that goal was offered. The visit provided information about organizational design for the community medicine teaching program and alerted participants to some of the problems experienced at UGM because of their particular organization.

Also in December 1982, a workshop was held at FKUA in which Dr. Poerawono and the former dean of FKUGM, Dr. Soewasono, provided substantial input to most of the faculty at FKUA regarding planning community medicine activities. The workshop included field activities, in which the faculty members visited homes and components of the health system, obtaining information from families and from health resources as would be done in the future by their students. This was useful practical experience which gave some of the FKUA faculty members their first opportunity to carry out an interview in the home.

In January, Dr. Karmardi went to a national CHS meeting and presented the FKUA plans for the COME curriculum development. Again he expressed the difficulties engendered by the lack of guidance from CHS regarding how an integrated COME was to be carried out.

In February, a detailed planning workshop was held at FKUA, resulting in lists of curricular objectives prepared by each department. Each department listed the objectives in the KI that are community oriented, after which the Tim COME grouped them by year of the curriculum. Thus, the community medicine program for the second year emerged from the activities and objectives that the various second year teaching departments had compiled. Being produced in this way, the activities formed a rather strange collection, which seemed likely to be difficult to carry out as a group in a real community. The students were expected to measure blood pressure and examine serum creatinine in the community, whereas many other basic pieces of data would not be collected because they had not appeared in the KI for the second year. Previously, the departments had objected to the "top-down" planning, feeling that the results of that approach were not in agreement with KI. Now it seemed clear to the Tim COME that this "bottom-up" approach to planning had produced something equally unacceptable.

These departmentally organized CM objectives were completed by early March and were in the process of being typed and collated when the consultant arrived in Padang. A workshop had been organized to work with these objectives and to provide some specific community-oriented knowledge to the faculty members who would become the teachers of community medicine in the planned COME program. The participants included most of the faculty, some staff from the provincial health office, the kabupaten and kecamatan medical staff who worked in areas where the community medicine program was to take place, and representatives from the school of nursing who were also planning to work in those same areas (see workshop schedule, Appendix A).

Two additional outside consultants had been invited to the workshop: Dr. Bimo, from Yayasan Indonesia Sejahtera (YIS), a private socially oriented foundation which assists community development in general and which has had much experience in developing primary care activities in rural communities using community volunteers; and Dr. Satoto, a nutritionist, from Universitas Diponegoro in Semarang, Central Java. Dr. Satoto has been a key figure in the development of community medicine teaching there and is also a member of the Committee on Community Medicine of the CHS at the national level.

The workshop provided an opportunity to expose the members of the faculty to the realities of community work and nature of the national health system and its components. The program began with a review of the planning activities for COME which had taken place up to that time. The National Health System (SKN) and the details of Puskesmas organization and activities were described. The director of community development for the province focused on

the realities of community development and the need to work closely with the people. Dr. Bimo described the process of collaboration and work with the community. I spoke formally on the principles of management particularly as applied to field projects and educational field activities (Appendix C). My role also was to summarize the speakers for each day, which provided an opportunity to emphasize aspects of the presentations which seemed most critical to planning the community medicine program. Frequent informal discussions were held during the meetings, at lunch, at the hotel, and in the evening with the Tim COME and others on the faculty.

Dr. Satoto, who arrived on the third day of the conference, reviewed the curricular objectives and activities produced by the previous February workshop and then presented on the last day of the workshop a remarkable tour of community medicine thinking which crystallized and conceptualized the impressions which had been forming during the course of the workshop. At the end of that fourth day, the small groups which were assigned the task of reviewing the activities for the second and sixth years, completely revised the plans that had previously been made, preparing goals and objectives and activities that were oriented to the community and practical to implement.

Subsequently, further discussions were held with Dr. Syafril and the other members of the community medicine team and with Dean Marias. One topic was the short course in project management which had been outlined in 1981 and planned in more detail in collaboration with Johns Hopkins University in 1982. Subsequent discussions on this course were held in Jakarta at the Faculty of Public Health (FKM), which would provide the faculty. Plans were made to continue the planning process for the course and to implement it by the end of 1983.

A summary of recommendations to the medical faculty regarding the development of the community medicine program was prepared (Appendix D). The more detailed observations which led to each of these recommendations are presented below.

OBSERVATIONS AND RECOMMENDATIONS

These observations are organized according to the recommendations made prior to departure from Jakarta, included in this report as Appendix D.

1. Are we ready to start, or is more planning needed?

While the formally organized educational objectives were just revised during the course of the workshop, an amazing amount of work and planning had already been accomplished. Inasmuch as the first activity planned for the field in the second year was collection of information and the faculty members already had personal experience with that, more detailed preparation of objectives seemed unnecessary prior to the beginning of field activities. Clearly, faculty would learn from choosing a field location, organizing field activities with the students, meeting real problems in negotiations with the communities, and in other ways. In addition, the puskesmas in Tarusan and 50 Kota were well prepared for the sixth year program, their directors participated in the March workshop as well as in a number of previous discussions, and the kabupaten hospitals had been readied for the sixth year students. As the sixth year program was planned primarily as a preceptorship with details of the activities to be determined on the scene by the preceptor (either the doctor in the puskesmas or the doctor in the kabupaten hospital), it was felt that implementation could begin also.

Recommendation: FKUA should begin as soon as possible with teaching activities in the field for the second and sixth years, as long as money for these activities can be made available. Thinking and planning up to this point are sufficient to go ahead.

2. Can the educational objectives and activities from the core curriculum (KI) be applied directly without alteration in planning field activities?

A major emphasis during the workshop was on the need to collaborate actively with the community rather than forcing the community to participate. The Minang-Kabau people are noted for being open and candid, a characteristic which may lead to apparent initial resistance on the community's part and a need to convince them of the importance or benefit from a proposed action. After agreement is reached, however, this characteristic would lead to very active participation by the community. Because of this, it was concluded that it would be necessary to work closely with the community in designing the actual community activities, although general guidelines could

be set by the faculty in designing curriculum.

Recommendation: Student activities in the field need to be coordinated and aligned with the needs and desires of the community. Equal emphasis should be given to the needs of education and the needs of the community in planning community activities for COME.

3. What educational objectives should we use? As described above, the educational objectives from the KI are neither complete in themselves for a useful and practical community medicine teaching program, nor would they be acceptable if taken directly into community activities. While substantial progress was made during the March workshop in setting more appropriate objectives and teaching activities for both the second- and sixth-year programs, revision of the results of the brief small-group discussions is still needed.

Recommendation: The educational objectives coming from the February workshop and the KI as well as those coming from the brief small-group sessions of the March workshop should be reviewed and perfected, considering particularly the community needs discussed in recommendation 2 above.

4. Should the faculty plan educational activities by itself, in isolation from the health services system? Throughout the planning process for COME at FKUA, an excellent spirit of collaboration among the medical faculty, the provincial health department, the kabupaten medical personnel, and the nursing school has prevailed. This in fact is one of the strongest supporting factors for the development of an effective community medicine teaching program at FKUA. It was only in the February workshop and its aftermath that the medical faculty on its own attempted to plan community teaching activities and objectives without input from the Department of Health, basing their planning almost exclusively on the KI. Clearly in this case the health care system has had the most practical hands-on experience with community based health activities. The health centers which will be used in the sixth year have been effective community developers in both Kabupaten Pesisir Selatan and Kabupaten Limapuluh Kota. In developing the activities for the preceptorship to be based in the health center for sixth-year students, the doctor in the health center would have suggestions as to the most realistic activities during the 4 weeks in the health center. This would also be true, with regard

to the kabupaten hospital activities during that week of the preceptorship. For the second year curriculum, although not designed to be carried out in a health center, planning would also benefit by the experience of the long-term health department employees. While the setting for second-year activities may be more urban than the areas in which the sixth-year health centers are located, the communities will function in a similar fashion, and thus the experience of a health center doctor will be very helpful.

Recommendation: In planning the community teaching activities for both second- and sixth-year students, input should be sought from the doctors in Pesisir Selatan and Limapuluh Kota, both at the health center and at the kabupaten hospital level.

5. How early can the students be expected to diagnose problems? If moved earlier than the third year, can the first- or second-year faculty members handle the responsibility? Clearly developmental progression in an educational curriculum is required. Traditionally, in medical education this progression proceeds from learning basic scientific facts to applying them. Specifically, it progresses from understanding the healthy and normal, to understanding disease processes, to learning how to diagnose disease, and finally to treating diseases. In the "top-down" planning for the community medicine curriculum described in Chapter I, this general approach was taken. The progression seemed highly logical, moving from data collection in the first two years to community diagnosis in the third and fourth years, and on to treatment and management of community problems in the fifth and sixth years.

In the workshop, however, it was brought out that working with the community demands a more rapid response than that planned for the student program. It would be doubtful that the community would wish to wait two years before even being told what their problems were, another two years before receiving any help in overcoming them. Because of this, the theoretical progression proposed by the committee would probably not work well when applied practically in the field.

There is another acceptable theoretical approach. In this approach, the student from the beginning tackles the whole range of activities, from data collection to management. Earlier in training when his understanding is minimal, he receives teaching at a simple, uncomplex level, with training in problem diagnosis and his participation in problem solution remaining quite simple and basic. In subsequent years, with the accumulation both of

experience and didactic teaching input, he becomes more skillful in all phases of community health work, from being better able to identify and collect data and make an accurate and useful diagnosis of community problems to becoming more knowledgeable of the details and pitfalls of various community health action programs. By working with the community in solving problems from the very beginning, the student can build a bond of trust and collaboration. Through this successful collaboration, he also further reinforces and motivates his own learning.

Many problems, however, are clinical and demand solutions requiring some clinical skills. Such problems would clearly benefit from the participation of staff from the clinical departments in the teaching and organization of field activities. Such participation may be required, as the faculty members in the first two years of medical school are usually physicians. As such they, too, have the necessary clinical skills. The participation of the clinical faculty members in preclinical teaching, however, would have the additional advantage of tying basic science lessons into clinical applications at the earliest period.

Recommendation: Identification and diagnosis of community problems should be moved up, into the first and second years: during the first year at the family level and during the second year at the community level. As students progress in their medical education, they will build in comprehension and sophistication on the basic activities they learned during the first two years. It is very desirable to have clinical faculty participate in teaching when clinically related activities are planned. By such vertical integration, students will be more motivated both for their basic science activities and for future clinical learning.

6. At what point in the curriculum should problem solving be introduced? If early, what are some simple examples? Just as in the previous point, problem solving is greatly desired by the community, and the students themselves wish to begin as soon as possible. Indeed, until they are able to begin problem solving, they feel profoundly ineffective and immature. Just as problem identification and diagnosis can begin early, so can problem solving -- as early as the first and second years in the curriculum. Medical students, who have completed high school and who are, even in their first year, among the better educated members of society, should be able to work in a community as educated persons. Unfortunately, in the traditional medical curriculum, medical students are taught little during their first two years that is useful to a community. Thus, a second-year

medical student usually does not know as much about simple treatment or even first aid as a barely literate community volunteer trained to provide care in his neighborhood. Certainly medical students could and should learn that much in their first year at the university.

In addition to simple first aid and treatment measures, a major problem-solving technique which students can begin to carry out is that of education. Even the simplest principles of good health are as yet unknown to many in rural villages. First-year students can be trained to teach such measures to community people.

Recommendation: Problem solving may also begin in the first and second years as per the considerations mentioned in 5 above, including the attractiveness of these activities both for the community and for the students. As examples, students can be trained to the level of knowledge and skill of a volunteer village health worker, including simple treatment and first aid. In other problem solving activities, students may educate by presenting the results of their survey to family heads at the neighborhood level as a report, and to the whole community, in particular the children of the community, as a health fair emphasizing education in health.

7. Are there any disadvantages to carrying out community activities in only the second semester of the second, third, and fourth years? To avoid taking up too much time and to conserve manpower, the faculty decided to begin community teaching activities in the second semester of the second year in medical school, working in a single suburban community of Padang with the same group of students for the next two years, also only in the second semester. While any given group of students would work only in a single community, they would work there for only six-month periods separated by six months each. They would have a total of approximately one and a half years of working time to carry out their activities in that community.

From the point of view of the community, this approach is likely to be unsatisfactory. If, as in the current plan, the students leave the community after only six months of activities, community interest and participation would die, and even greater efforts would be required six months later to reattract it. In addition, a major goal of the teaching program should be to have a significant impact on the community. By so targeting activities, the students will come to understand realistic time-limited approaches to working in communities and the need to

develop in a brief period of time self-reliance and to avoid long lasting dependence by the community. At Gadjah Mada, students begin to work in a chosen community at the beginning of their third year and carry out some sort of activity in that community throughout the next two and a half years. During the last half year, they work closely with community leaders and community groups to turn over to the mothers or other community people many of their health development and health maintenance activities. Thus after two and a half years of working in that community, they leave, but leave behind themselves a functioning community health organization and set of activities.

Recommendation: The FKUA community medicine program should consider the advantages of working continuously in the community until the decision is made to leave that community. In practical terms, this could be working continuously in a chosen community from semester four through semester eight of the medical curriculum. During the last semester, students could work to turn over to community members such health programs as baby weighing or feeding or health insurance or community health volunteer programs.

8. What about this year's second-year students? The program for second-year students in 1983 is planned to begin in April. As the academic year is completed in July, these students would have only half a semester working in the community. According to the original plans, they would then drop out of the community until the second semester of the next academic year, beginning in January 1984. According to 7, above, there are a number of disadvantages in having students work only half a semester per year in a community. The present second-year students have even more reason to continue working in the community, as their introduction will be only three months in duration.

Recommendation: The second-year students who will begin community medicine in April 1983 should not stop in July 1983, but continue working between July and December in the same community and continue in 1984 as well. In accordance with 7, above, they would thus have continuous exposure and involvement with the community. Next year's second-year students could begin their community involvement most profitably in January, 1984.

9. How should the faculty proceed to complete the curriculum after beginning with the second and sixth years? At FKUA community medicine teaching will begin in the second and sixth years. For the next few years, the sixth year will function more as a catchup program, taking students who have had little or no exposure to community medicine and in attempting to provide them some basics in community medicine during their field preceptorship. At the same time, another group of students will begin their exposure to the community in their second year. Each year of teaching added to a program requires a tremendous amount of planning as well as solicitation and training of manpower. It pays to proceed slowly, avoiding the problems associated with taking on too many new tasks at once. Another point to be considered is community needs. Students starting in a new community in their second year should feel a responsibility to that community to continue working there throughout the period for which they have "contracted".

Recommendation: The faculty should add one year at a time to the curriculum. This would most naturally be accomplished by proceeding with the third year for students who will begin community medicine this year in their second year. A new and additional second-year class can be added in January 1984.

10. What is the best way to plan curriculum and teaching activities? The purpose of COME is to teach medical students how to manage, prevent, or eliminate the major health problems in Indonesia's communities. So, too, the purpose of the puskesmas is to manage, prevent, or eliminate the major diseases of Indonesian communities. From these purposes arise the activities and programs of the puskesmas as well as the activities and curricular objectives of COME. Just as the activities of the puskesmas can be divided into various programs which are often aimed at specific health problems or groups of diseases, so too the medical school curriculum in COME can be organized in programs surrounding a single disease or group of related health problems with a number of teaching activities, including lectures, small group discussions or projects, and activities in the field.

Thus, in planning the curriculum for COME, it is necessary initially to determine the major health problems that should be addressed, then to determine the types of activities necessary to address those problems and the organization and structure of the team that will address them. These determinations form the content of the teaching program, ranging from activities and skills needed to define problems to those needed to organize and manage the team and the various programs and projects or disease-oriented activities.

The results of such deliberations are spelled out in Appendix E, Kewajiban Minimal COME Di Indonesia. From these minimal requirements come the actual teaching activities, which are best grouped into modules or packets around a unifying goal.

The design of curriculum in modules has many advantages. It allows integration of subject matter, drawing from a number of disciplines and departments (bagian-bagian), which customarily teach material on a particular subject in isolation from other departments. Through the modular approach, these teaching activities can be combined to present the whole picture, and to explore relationships between each of the disciplines. Also, a module is easier to organize. Responsibility for a specific module, which may occupy two to six weeks in the curriculum, may be given to an individual, who will then organize the activities and manpower, provide proper handouts, deal with evaluation, and so forth. While the coordinator for the Tingkat has overall responsibility for the program, individual activities can be thus delegated and more efficiently carried out by persons with particular interests or skills.

Recommendation: The most efficient strategy for planning the COME curriculum is to group activities into modules. These should be oriented toward overall goals, which are themselves aimed toward solving problems in the community. The modules should include goals related to health or disease problems and those related to the development of skills for working with the community, gathering data, and organizing and managing a team and its activities. Examples are given in Appendix F through I. These activities and modules, which have their origin in community needs, should be listed in relation to the goals and objectives (TIU/TPK) from the core curriculum (KI). Planning in this fashion will insure that the teaching modules are both related to the needs of the community and connected directly with the principles of the core curriculum. Vertical as well as horizontal integration of departments in these activities will be desirable, as will assembling objectives and goals from various tingkats to form the type of modules which will be practical to carry out in the classroom and the field.

11. Is COME related only to the puskesmas (kupeskesmasan)? What about the kabupaten hospital? In the current curriculum at FKUA, the medical students spend almost all of their clinical time in the hospital. The majority of this is at RSUP, the general hospital in Padang, which is run jointly as a teaching hospital and as the Department of Health provincial type B hospital. In both medicine and surgery, students spend some time

in the hospital at Bukittinggi, a type C hospital. The Department of Pediatrics has discussed for at least one and a half years the possibility of developing a branch or satellite program at RS Solok. This so far has not occurred and may be one of the factors considered by the CHS accreditation team, which denied the Department of Pediatrics the right to grant a post graduate degree (Pasca Sarjana).

Because the standard curriculum is already so heavily hospital-oriented, those planning the COME curriculum should emphasize the development of activities and objectives in the community and in the puskesmas. Such redirection will help correct the current imbalance.

Nevertheless, there are practical aspects and skills needed to work in a kabupaten-level hospital (type D). Diagnoses must often be made without the benefit of either sophisticated laboratory studies or specialists. Other facilities are lacking, such as oxygen, lighting, surgical equipment, isolation, and the like. Also, the interaction between the community doctor in the puskesmas and the receiving doctor in the kabupaten hospital is much more apparent at the kabupaten level than it is at a tertiary hospital, such as the teaching hospital in Padang. The attitudes and skills needed to maintain and develop good relationships between the referring doctor and the receiving doctor can be learned at a kabupaten hospital.

In planning for COME up to March 1983, only one brief period was provided for the kabupaten hospital. This was in the sixth year (Tingkat VI), in which the students would spend five weeks total, four weeks in the puskesmas and a single week in the RS kabupaten. While this single week can serve as an introduction to the kabupaten and can provide specific experience in the perspective at both ends of the referring chain, one week is hardly enough. If other departments develop outreach satellite programs in type D kabupaten hospitals such as that planned by Pediatrics, they could improve the service provided in those hospitals by providing additional manpower in the form of residents (assisten) and also teach medical students how to handle the major health problems requiring hospitalization. As it takes time to become acquainted with the personnel and facilities at a hospital, it would be preferable to group the weeks during which students would work in a particular kabupaten hospital.

Recommendation: Consideration should be given to developing a module aimed at the kabupaten hospital for the fifth and sixth years of the medical curriculum. Time for this module could be obtained from the time presently given to the major departments (medicine, surgery, pediatrics, obstetrics), for example, two

weeks from pediatrics, two weeks from internal medicine, two weeks from surgery, and two weeks from OB/GYN. This can be combined with the teaching programs for residents in those departments, which could also be organized to include a period at kabupaten hospitals. The weeks in the kabupaten hospital should be pulled together into one continuous period, if possible, to maximize the students' familiarity with the personnel and facilities. The ideal would be eight continuous weeks at a single kabupaten hospital. Short of that, four-week segments, or even four two-week segments could be a beginning, while aiming eventually for a longer period. Supervision of the medical students would be carried out by the residents and faculty members either posted semi permanently to the kabupaten hospital or visiting there on a regular basis. Because of the desirability of understanding the referral chain, the present intention to give one week in the kabupaten hospital out of the five weeks planned for COME in Tingkat VI should be implemented as planned.

12. Can KKN be made a part of COME? KKN (Kuliah Kerja Nyata) (education through real work), is a program in which students from all facilities of the university go to various communities throughout the province initially for two weeks of working together on a single large project, subsequently working in pairs for two and a half months in an isolated community on a more limited project. Andalas University, a pioneer in this, was one of the first universities to require KKN of all its students. Whereas at other universities medical students have somehow avoided their KKN obligation, at FKUA all medical students take part in the program. While the actual time in the field is three months, with preparations and delays usually six months is devoted to getting through KKN.

Many of the activities carried out in KKN are closely related to community needs, even to community health needs. Agricultural, economic, and health-related projects are common among the activities carried out by the students. In Central Java, communities have often requested students to organize and teach a group of community health workers (kader kesehatan).

Students from Gadjah Mada were particularly skillful in KKN because of their community medicine training in the medical school curriculum. The medical students, because they are usually two or more years older than other students, often assume leadership roles in the KKN teams. They thus acquire experience in group dynamics, project organization, problem definition, and community motivation, planning, supervision, and evaluation.

Until now, the KKN experience has been essentially outside the medical school curriculum. Although the medical students clearly benefit from the experience, there has been no attempt by the faculty to introduce health-related activities into the program, to evaluate any changes in their knowledge, or to require any kind of report from the students. In view of the importance of collaboration with the community and community programs, particularly as a result of the stress on community activities and needs during the workshop in March, substantial discussion was withheld during my visit regarding KKN. While some restrictions prevent total takeover of KKN by the faculty, it was clear that it would be possible for FK supervisors to visit students in their villages, for the medical school to determine some specific objectives to be expected of the students during their time in the field, and some evaluation approaches, including the possibility of reporting. From these discussions came the following recommendations:

Recommendation: KKN should be used in the COME program, with at least the following steps:

- Training of the students, their activities in the field, the goals of KKN, and possible evaluation of methods should be reviewed with regard to both what is expected to happen and what actually happens during the KKN experience.
- The COME planning team should determine teaching objectives most related to KKN; for example, community development, local government, basic health, education of the community, group dynamics and communication, and so forth.
- Supervision and evaluation methods should be developed in accordance with the teaching objectives and KKN realities mentioned above and then applied to the implementation of KKN. Some possibilities include the utilization of pre- and posttesting, supervisory visits to the students during their time working in the field, requiring a report from such a survey or from other health related projects, and so forth.

13. What should be the tasks and responsibilities of group leaders from the faculty? The statement from CHS that COME should somehow not be separated from traditional educational approaches caused substantial confusion with regard to the activities of the faculty members who were to lead the students in their COME

activities. Clearly the students cannot work in the community without guidance and supervision. Pembimbing (group leaders) are needed to develop an ongoing relationship with community leaders and to insure that promises between the medical school and the community are kept. Yet the emphasis on the core curriculum with its division of objectives into departments and disciplines made it seem as if, somehow, the teaching activities related to a particular department only could be initially led by faculty members from that department, after which they would stay at home.

Another major need seen by the COME planning team is to educate faculty members in the knowledge and skills needed to work in the community. Most of the faculty members have had little or no experience working in the community and are only minimally acquainted with community health resources, such as the puskesmas or kabupaten hospital. The major purpose of the March workshop was, in fact, to upgrade the knowledge of the faculty members in these areas. Obviously the faculty members as well as the students will need prolonged experience working in the community.

Another conflict relates to the planned division of the curriculum into the rigidly defined Tingkat activities. According to these plans, faculty members from the second year of the curriculum, for example, would lead and manage the program second year and would be confined to teaching objectives from the KI for the second-year courses. This has been discussed previously. This approach would be in conflict with one oriented toward meeting the needs of the community. Such a community-oriented approach would integrate activities across years of the medical curriculum so that, even in the second year, students would carry out some activities related to specific disease problems and their management and thus more related to clinical departments than to basic science departments. Dr. Satoto in his presentations emphasized strongly that Pembimbings would be broadly skilled, and that strict limitation of their activities to their own disciplines was in fact impossible.

Recommendation: The pembimbing for Tingkats II, III, and IV, where students will be working in a single community during a three-year period, should have a minimal assignment of at least one full year. This will allow the maintenance of good relations with the community as well as maintaining a good attitude by the students whom they lead. Pembimbings should be selected from the departments of each Tingkat and should work in all the activities carried out during the COME program for that Tingkat (horizontal integration).

The faculty should ideally work toward a situation in which the duty for a Pembimbing would extend from Tingkat II through Tingkat IV, three years, over the time during which the students would be working with a particular community. In this fashion the experience of a Pembimbing will develop along with that of the students, and the cooperation of the community as well as the likely outcome of this cooperation will be maximal. This would obviously require participation in activities of Tingkat II by a Pembimbing from Tingkat III or IV, and vice-versa (vertical integration).

14. How should the COME teaching program be managed?

According to the recommendation of CHS, COME should be integral to the whole medical teaching program. But it is clear that the management of a substantial interaction with the community, development of modules for teaching activities as described in point 10, coordination of the activities of a number of small-group leaders (Pembimbing), and so forth, will require skilled and dedicated management. To expect such coordination to occur without someone taking responsibility for it is not realistic.

Recommendation: One faculty member should be given the responsibility of coordination of the COME activities in a particular Tingkat -- both those in the faculty and in the community. This would include preparation and initial contacts with the community, liaison with community figures at the chosen field area, obtaining permissions from government officials, and arranging for appropriate lectures and group activities at the faculty. Even better, if possible, would be assigning such responsibilities to an individual for a three-year period, which would help a great deal in insuring the continuity of relationships with the particular community and its leaders. The coordinator must be prepared to visit the chosen community on both formal and informal occasions, dropping in at the house of important community persons on a Sunday afternoon or in the evening after finishing his practice.

15. Is there a role for the preclinical and paraclinical departments and their faculty members in the COME teaching during the clerkship years (Tingkat V and VI)? According to the plans prior to the March workshop, preclinical and paraclinical departments would confine their activities to Tingkat in which they had curricular responsibility in the standard curriculum. Yet it is obvious that many of their skills would be useful during the application of basic sciences in the clerkship years.

Recommendation: In future planning faculty members from the preclinical and paraclinical departments should participate in planning and leading of student activities in the fifth and sixth years, the clerkship years. This may take place, for example, relative to activities in the puskesmas laboratories, in the laboratories at the kabupaten hospital, and in other ways (vertical integration).

16. How can the development of a subdivision of social pediatrics be related to the development of COME as well as the CHIPPS program? Many of the major events of mortality and morbidity occur among the children of Indonesia. Thus, it is particularly important that pediatrics develop substantial expertise and involvement in the community. This was the opinion of the accreditation team from the Consortium on Health Sciences, which during 1982 judged the Pediatrics Department as not yet ready to give postgraduate degrees, in part because they had not yet developed activities and a strength in social pediatrics. Social pediatrics at other medical schools, such as Gadjah Mada, involves developing activities at a puskesmas that focus on child development and nutrition, management of common pediatric diseases, and working with women in the community to improve their ability to raise healthy children. Training in social pediatrics is obviously extremely important for residents in pediatrics. It is also a key part of community-oriented medical education for medical students.

The development of departmentally organized, community-oriented education has been a goal of the COME planning team. Pediatrics is an ideal place to begin this type of community oriented departmental education (CODE) development. During my visit to Padang, the consultant met Dr. E. Croft-Long, vice-president for International Activities of Project Hope, who is interested in supporting development of various activities at FKUA. In subsequent conversations with him in Jakarta he was interested in the possibility of working with the Department of Pediatrics to develop a social pediatrics program. Discussions with Dr. Calder of USAID also indicated his support for this goal as a worthwhile subproject within the overall CHIPPS program.

Recommendation: The development of a Department of Social Pediatrics should be made a particularly important element in the efforts to develop COME at FKUA. It should be set aside as a special subproject, with a specific budget, plans, etc. Planning should ideally include consultation coming from both within and outside Indonesia. Training of the staff from the Department in Social Pediatrics, both short and long term and within and

outside Indonesia, would also be advised. Consultants who are requested to assist in planning should determine sources of aid and assist in seeking such funds. USAID and Project Hope seem likely sources for such development aid.

17. What Indonesian consultants could assist in the further development of COME at FKUA? It is often difficult to predict just what characteristics of a consultant will make one person successful while another one will be less than maximally effective. FKUA has experienced a number of consultants in their COME development, both from other medical schools in Indonesia and from outside. During this visit, it was a privilege to work with Dr. Satoto from the University of Diponegoro. Dr. Satoto has had long experience in community medicine in various faculties. He is a member of the National Community Medicine Development team, which is a part of CHS. His personality represents a blend of solid ideas, practical solutions, willingness to listen as well as speak, and an expression of differences of opinion that do not antagonize the listener. He understands the details of utilizing university budgets, DUP, DIP, and so forth, elements that are critical to the ultimate success of a program. He also understands the personal aspects of dealing with faculty members who may seek promotion, be pressed by financial concerns, or in other ways face considerations which may inhibit their full participation in the community medicine program.

Recommendation: Dr. Satoto from Diponegoro University be used as a consultant for community medicine development at FKUA whenever needed. He has indicated his agreement with this, as has Dr. Calder at USAID.

18. What should be the role of the dean in the development of community medicine programs? COME means change in traditional methods for medical education. As such considered efforts will be required by many to create the atmosphere in which such change can be accepted by all the members and departments in the faculty. It has been the experience in other medical schools in Indonesia that where the dean is solidly behind the development of community medicine, it is accepted. Where the dean is only partially supportive or even slightly opposed, the COME development is much less likely to be successful. At FKUA, the dean admits that his experience in community work is minimal. Yet his continuing support, in particular allowing his first assistant Dr. Syafril to play a key leadership role, has been extremely important in

bringing COME development at FKUA to its present stage.

Recommendation: To maximally encourage and support the development of COME at FKUA, it is urged that the dean as well as his staff give full support to the efforts to develop COME. If possible, he should give high priority to COME development among the many matters which demand his attention.

19. Should planning continue for the short course in project management for medical educators, proposed initially in November 1981 and designed in more detail by Northrup with Johns Hopkins University faculty members in May 1982? Due to lack of knowledge about availability of funds from CHIPPS and the prospect of major delays in the implementation of a COME program, FKUA did not move ahead in 1982 with plans to hold the short course in project management. The major purposes of this course were to provide input for faculty members who were developing community medicine education or community-oriented studies, and also faculty members who might be planning projects within their departments, developmental projects, etc.

On further discussion with Dr. Syafril and the COME planning team, it was agreed that the short course continues to be a desirable activity, and a number of potential participants has already been identified informally.

The school of Public Health in Jakarta, which would provide the faculty members for the course, continues to be interested in the program and would like to hold it in late November or early December 1983. This would also fit with the schedule proposed by the FKUA faculty members.

Further planning is needed, including more formal determination of participants. This, as previously described in the course proposal, should be done rather formally, with each prospective participant proposing a project in summary and in brief. These projects could then be reviewed by a course committee and the actual participants selected among them. FKN (School of Public Health) faculty members who will be in West Sumatra in April or May for followup of the TOI course for managers have agreed to visit FKUA and to define in more detail the actual modules needed and the process of selection of participants. Discussions on this matter were held at FKM in Jakarta, and a more complete report is included with the HDPM report.

Recommendation: Further planning for the short course in project management should be carried out, both at FKM and at FKUA, to define in more detail the course contents, the teaching modules, and the participants and their projects. The best time for holding the course is to be in late November and early December 1983.

APPENDIX A

ITINERARY
ROBERT S. NORTHRUP, M.D.
MARCH 10 - 26, 1983

March 10	06:45 a.m.	- Leave home
	07:55 a.m.	- Leave Tuscaloosa
March 11	09:30 p.m.	- Arrive Hong Kong
March 12	03:00 p.m.	- Leave Hong Kong
	06:30 p.m.	- Arrive Jakarta
	08:00 p.m.	- Met with S. Henry, briefing on HDPM project evaluation of activities and progress.
March 13		- Review UNAND and COME papers
		- Met with S. Henry, R. Pratt
		- Briefing by M. Gingerich
		- Travel to Padang
		- Plan objectives of provincial HDPM
		- Review with S. Henry
March 14		- Met with head health officer Dr. Rafki, also Dr. Baktiar, head of planning for provincial health office (w/S. Henry)
		- Met with Dr. Syakil EKUNAND, review progress in developing COME
		- Met with committee for seminar, reviewed schedule
		- Met with S. Henry, reviewed whole HDPM evaluation, my impressions and suggestions
March 15		- Met with team COME,
		- planning for workshop
		- review developments in curriculum, field
		- review problems
		- Prepare lecture for 1st day of workshop
March 16		- Workshop begin. My role: to present summary at end

- of 1st day and to design questionnaire for evaluation
 - Analyse results of questionnaire
 - Met with Dr. Bimo, YIS, consultant to FK-COME
 - Met with E. Croft-Long consultant from HOPE
 - Evening meeting with team COME - evaluate seminar, discuss COME
- March 17
- 2nd day of workshop
 - Present summary of the day's presentations & discussions
 - Prepare lecture for 3 day
 - Met with Dr. Bimo
 - Dinner and meeting with Dean (Marias Marionis) Syafril, Darwin Arsyad, Yaknis (PD III), Bimo, Long
- March 18
- 3rd day of workshop
 - Present lecture on management, with questions, approx. 2-1/2 hrs. (in Indonesian)
 - Met with Dr. Satoto (consultant to FK-COME from UNDIP), Dr. Bimo
 - Evening meeting with team COME until 1:00 a.m.
- March 19
- Last day of worksho
 - Worked with small groups
 - Presented brief summary
- March 20
- Met with Dr. Syafril, discuss plans for COME development
 - Began report preparation
 - Prepared for meeting with DepKes
- March 21
- Met with Dr. Rafki (Rep. Kanwil, DepKes), Dr. Bachtiar, regarding FKM-JHU program in management, also on health services research, cooperation with Andalas Medical School
 - Met with Dr. Anwar Shah, Dr. Saif (P2N) regarding FK-JHU management workshop and continuing activities
 - Met with Syafril, Bachtiar, Faisal (PH), Darwin regarding use of KKN in COME

- Met with Dean, report on findings and recommendations
 - Met with Prof. Hanif, head of Internal Medicine Department, also Dr. Ilyas
 - Continued preparation of report
- March 22
- Discuss list of general recommendations with Dr. Syafril, Kamardi, Bastian, Darwin
 - Introduced to team COME from Aceh.
 - Depart Padang for Jakarta
 - Met with Pratt (JHU eval. team)
 - Met with Calder (USAID)
 - Met with Piet (Pop-USAID)
 - Met with E. Croft-Long regarding Project Hope's participation in developing Pediatric Department at FKUS
- March 23
- Worked on reports
 - Met with Charles Johnson (USAID-Population), regarding new FKMs
 - Met with Calder regarding FKM-JHU project
 - Met with Henry Mosley regarding Ford Foundation research support and interest in FKM TA lembaga
- March 24
- Met with A. Horwitz on provincial health system
 - Reviewed FKUA progress and recommendations w/Calder
 - Complete FKUA short summary
 - Met at FKU w/Adik, Wibowo, Gani Ascobat, Amal & Anhari for short course for FKUA faculty, also JHU project
 - Left Jakarta for U.S.
- March 25
- En route to U.S.
 - Over night in London
- March 26
- 06:30 p.m.
- 07:00 p.m.
- Arrive Tuscaloosa
 - Arrive home

A P P E N D I X B.

PROPOSED MINIMAL REQUIREMENTS FOR COMMUNITY MEDICINE
TEACHING PROGRAMS IN THE NATIONAL FACULTIES OF MEDICINE
IN INDONESIA.

APPENDIX B
PROPOSED MINIMAL REQUIREMENTS
for
COMMUNITY MEDICINE TEACHING PROGRAMS
in the
NATIONAL FACULTIES of MEDICINE in INDONESIA

By the time a Student or Assistant has completed his study at the Medical Faculty, he should have done the following activities:

FAMILY

1. has followed one or more families during 2 years or more, with a minimal visit of once monthly.
2. has followed the progress of one mother and her family, in the clinic as well as at home, through the last half of her pregnancy, birth, and the first 6 months of her baby.

COMMUNITY

1. Has worked together with a certain community for at least 2 years, with real work in their development/community health handling, with real responsibility.
2. Personal execution of general community survey, including setting up its planning, implementation, analysis, and interpretation of its results as a diagnosis of the community, so as to define the baseline of a future evaluation through epidemiology and surveillance about the change/development of said community. From this has
3. defined together with the community the relative priorities as to the needs of said community. From this has
4. implemented activities on development of said village during 2 years or more. After this has
5. evaluated the development reached during the mentioned program.
6. Has presented data and health education to a Village Meeting,

through a good and appropriate aids: at least three times.

7. Has met repeatedly with the headman and pamong desa to explain, to discuss, to decide, plan and implement together development activities.
8. has asked for and gotten the permission needed for activities in the village from the particular/concerned officials.
9. has evaluated directly and cooperated with assisting resources and services which can be utilized by the community, government as well as private, in the field of health as well as other fields closely related to development.

HEALTH SYSTEM

1. has mastered the characteristics of the health system, from national level down to the district level.
2. has met with the private health system figures, including the doctor in practice, mantri, traditional healers; has explained and discussed their role as seen in the context of the government health system
3. has worked/visited repeatedly during several years various puskesmases, up to their most sophisticated experience:- the final year, a clerkship or internship of 1 - 3 months at the Puskesmas.
4. has learned the different types of personnel at the Puskesmas, including the admission requirements for their training, their training, their abilities, and their task descriptions.
5. has carried out by himself the task/work of each kind of Puskesmas personnel.
6. has handled himself Puskesmas administration, including reporting and recording, planning, organization, personnel management, and overall management.
7. has evaluated the working methods and results of the Puskesmas personnel, and has been active in upgrading them.

8. Has carried out primary health care as done at the BP (clinic) of the Puskesmas, including keeping careful records under good supervision, also evaluating objectively working methods and results in comparison with appropriate standards: minimum 1 month.
9. Has evaluated the success of the Puskesmas in pursuing specific targets defined problems which form obstacles in this respect, and given suggestions to overcome said problems.
10. Has performed an assistantship of 1 - 4 months at a Kabupaten Hospital, preferably with experience at this hospital in each of the major clinical fields (internal medicine, surgery, Ob-gyn, pediatrics), with real clinical responsibility.

SPECIFIC ACTIVITIES

Has carried out personally for the community 8 out of 9 of the following activities/programs, including an evaluation of the results of each:

1. An under-fives weighing program, including giving advice to mothers on the results of the weighing activities.
 2. Active casefinding for Tuberculosis (house-to-house visits) and Mantoux test.
 3. Teaching basic techniques of rehydration at home for diarrhea to mothers in the community.
 4. Evaluating and combating vector borne diseases (malaria, filariasis, dengue), with activities such as surveys of parasite rates in blood, and survey and control of mosquitoes both adult as well as larvae.
 5. Giving motivation to eligible couples so as to make them new acceptors for Family Planning, both in a mass gathering (at a village meeting) as well as individually.
 6. Teaching schoolchildren about health both directly and through cooperation with the in teachers.
 7. Planning and carrying out vaccination campaigns (DPT, TBT, BCG, etc.)
- 

8. Teaching village health kaders, including making an evaluation of educational results, and subsequently supervising directly their activities.
9. Arranging/organizing health education and motivation within the community (health fairs, contests etc.), then evaluating the impact of these activities objectively with a, before and after, KAP survey.

OTHER EDUCATION

By the time of graduation, students/co-assistants have achieved a practical & functional understanding of the following matters:

<u>Subject</u>	<u>Details, teaching method</u>
1. Community Development	<ul style="list-style-type: none">- visit successfully developing villages; interview village local officials; report evaluation of the development process- methods to evaluate the development stage of the village (swadaya, swakarya swasembada)
2. Statistics	<ul style="list-style-type: none">- data analysis (preferably from a survey carried out by the student), data processing, data presentation.
3. Epidemiology	<ul style="list-style-type: none">- surveillance (organized by the students over a one year period about a particular problem)- investigation methods for epidemics or chronic situations.
4. Administration/management	<ul style="list-style-type: none">- interviews with various types of organizations about 1 general administration (planning, manpower, supervision, decision making methods, budgeting, etc)- training with simulation exercises regarding the administrative problems, especially those at the Puskesmas and hospital.- Task analysis, time-motion study, cost-benefit and cost-effectiveness analysis
5. Leadership/group dynamics	<ul style="list-style-type: none">- Self-evaluation- collaborative activities with scouts, village organizations, etc..
6. Demography	<ul style="list-style-type: none">- its usefulness, national projection, interpretation of the population pyramid- influences on development, poverty, education, health services.

7. Sociology
 - family, community
 - cultural practices which influence communication and/or development
8. Behavioral Science
 - communication
 - educational science
9. Ecology of Health
 - Economics (national planning for health & development)
 - government (micro-relative to family behaviour)

PROJECTS

Have organized two or more projects at the village, including preparation of/proposals (background, justification, aims/goals and objectives, task analysis, timing, budgetting, and the evaluation methods); implementation; evaluation; and reporting of the project results in detail. Possible projects include the following:

- Evaluation of wells and their renovation
- Survey for worm infection, subsequently treatment
- Survey for hypertension
- Survey and treatment of anemia
- Under-fives mental health evaluation and the stimulation of prevention of mental retardation
- Community surgery
- Upgrading traditional healers
- Survey and treatment of struma
- Survey and treatment of Vit.A deficiency
- Motivation/promotion of garden utilization
- Fish pond
- Poultry husbandry
- Upgrading of home industries
- Mother's feeding program (Taman Gizi)
- Village health insurance (Dana sehat)
- etc.

A P P E N D I X C.

STATEMENT OF WORK

Best Available Document

STATEMENT OF WORK

A. Objectives

To assist Faculty Members at the Faculty of Medicine, Andalas University, Padang, Sumatra Barat with their ongoing preparation of a community-oriented medical education program. This assignment is a follow up to the work done by Dr. Robert Northrup with ~~the~~ medical faculty at FK Andalas in November 1981 and a report done by Dr. Northrup and Johns Hopkins SPH staff in June 1982 for the FK Andalas medical faculty.

B. Scope of Work

1. Continue work begun in November 1981 on planning of community-oriented medical education activities to be undertaken as a CHIPPS project sub-activity in Sumatra Barat. Recommend future actions and alternative approaches as appropriate.
2. Assist the medical faculty prepare for the implementation of the short course in Project Management for Medical Educators which was described and outlined in the report by Dr. Robert Northrup, June 23, 1982 in fulfillment of USAID Contract No. ASE-

0249-C-00-2018-00.

3. To review the FK Andalas COME curriculum in the field and to recommend changes which would strengthen the medical students' training in epidemiological approaches to health services planning and delivery.
4. Review the kabupaten level management training which is being conducted by Fakultas Kesehatan Masyarakat, Jakarta and Johns Hopkins SPK in Sumatra Barat with FK Andalas participation. Up to 2 days may be allotted for this activity.
5. Provide FK Andalas and the Provincial Health Office of Sumatra Barat a short, written report of consultancy and recommendations of the next steps which need to be taken in the development of FK Andalas' COME program.