Issues are identified that should be considered by state officials, mental-health program directors, university officials, and research coordinators and managers in setting up and managing state-supported mental health research programs. The following categories of research are defined: basic, basic categorical, clinical, socio-epidemiological, evaluative, program evaluation, administrative or operations, and policy. The university is the appropriate setting for much of the basic research and a large part of basic categorical and clinical research, while the operating agencies and planning agencies are the setting for program research and evaluation, administrative research, and much of the socio-epidemiological research. It is proposed that state-supported mental health research should be substantially relevant to the state's mental health service needs and useful to the state's mental health program. Attention is also directed to: administrative arrangements with universities for state-supported mental health research; program evaluation and administrative research; coordinating and facilitating mental health research; and funding and administering research funds. Excerpts from the Annotated Code of Maryland and policy statements on the Maryland Psychiatric Research Center are appended. (SW)
STATE-SUPPORTED MENTAL HEALTH/PSYCHIATRIC RESEARCH

Harold L. McPheeters

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<table>
<thead>
<tr>
<th>CONTENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>iii</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Research in Mental Health</td>
<td>4</td>
</tr>
<tr>
<td>Relating Mental Health Research to the Mission of the State</td>
<td>7</td>
</tr>
<tr>
<td>Administrative Arrangements with Universities for State-Supported Mental Health Research</td>
<td>13</td>
</tr>
<tr>
<td>Program Evaluation and Administrative Research</td>
<td>21</td>
</tr>
<tr>
<td>Coordinating and Facilitating Mental Health Research</td>
<td>24</td>
</tr>
<tr>
<td>Funding and Administering Research Funds</td>
<td>27</td>
</tr>
<tr>
<td>Conclusion</td>
<td>31</td>
</tr>
<tr>
<td>Appendix</td>
<td>33</td>
</tr>
</tbody>
</table>
FOREWORD

The Mental Health Program of the Southern Regional Education Board was established as a result of a resolution of the Southern Governors' Conference in 1954 to facilitate mental health training and research in the 14 states of the South. Much of the research that is carried out in the region is done by researchers in universities with financial support from the federal government or from foundations.

However, there is also a substantial amount of mental health research that is supported by state governments through regular state appropriations to the state mental health agencies, and there has been considerable murkiness about the missions and methods for administering such research in most of the state mental health programs.

This publication attempts to examine some of the issues that should be considered by state officials, mental health program directors, university officials, and research coordinators/managers in setting up and managing state-supported mental health research programs. It is essential that the state agencies have the research capacity to study systematically those problems and needs which are unique to improving the delivery of mental health services to their citizens—especially at this time when the federal government is reducing its support for many kinds of research.

This publication has been developed from the deliberations and suggestions of key persons from state-supported mental health research programs in several of the region's states. We are grateful for their assistance.

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INTRODUCTION

Research in the field of mental health has had a mystique that has kept it from being well understood by anyone except those persons who were in the research fraternity and those who understood its esoteric language. This should not be the case. Mental health research is the systematic pursuit of answers to questions about the nature of mental problems, the therapeutic and rehabilitative interventions to bring about improvements, or the prevention of these conditions, and the best ways to organize staff and facilities to bring about desired results.

Through research, we have been able to bring about remarkable changes in the kinds of mental disorders that commonly afflict Americans and the ways in which we treat them. Just 50 years ago, the mental hospitals were filled with patients suffering from the dementia of pellagra and syphilis of the brain. These conditions are seen only rarely today. Research has produced tranquilizer drugs and drugs used to relieve depression and epilepsy. As a result, thousands of patients can be treated effectively as outpatients or with only brief periods of hospitalization—instead of years of care in state or private mental hospitals. The populations of the state hospitals of the nation have fallen from 700,000 in 1955 to about 130,000 today as a result of research about mental treatment and the development of programs to deliver that treatment.

There is a common misconception that research must be done in mysterious laboratories with ultracentrifuges, electron microscopes, and scientists in white coats. This is true for a small portion of basic, biological research regarding brain functioning. A far greater portion involves clinical research in which promising therapeutic procedures are systematically tried out with various kinds of patients; or epidemiological research in which researchers examine the patterns of various disorders in our society, and attempt to identify influences from the environment that may be associated with
mental disorders. Other research systematically looks at how the basic knowledge about mental disorders and their treatment can best be organized into programs to deliver those services at the lowest cost and with the greatest effects.

All of this is research. It is done in varied settings by many different kinds of people--basic scientists, clinicians, epidemiologists, program administrators, and others. It is not as exotic as the media have made it seem. It really is quite simple. Mental health research is basically the systematic pursuit of answers to questions about the nature and treatment of mental disorders and the programs in which these are carried out. The university, with its focus on the investigation of the basic nature of things (thought, emotion, learning, behavior), is surely important. But, so are the professional schools, which are concerned about how to treat and improve individual patients, and the state agencies, in which clinical practitioners and program administrators work to learn how best to put it all together for large numbers of patients across the state.

The federal government has been a major supporter of mental health/psychiatric research--especially through the in-house laboratories of the National Institute of Mental Health (NIMH) and the research grants that the NIMH has made to universities. The NIMH has also made a significant contribution to our understanding of the incidence and prevalence of various disorders through its Division of Biometry and Epidemiology.

However, many state governments also invest considerable money in mental health/psychiatric research. This is entirely appropriate. Individual states invest in agricultural and highway research because their soils and climates are different. Similarly, they invest in mental health research because their people and their cultures are different. While there is a large amount of knowledge that develops from mental health research that is applicable anywhere, there is also need to pursue ways to apply that knowledge to local problems and conditions. This is the role of the states.
However, state leaders, such as state mental health administrators, university officials, budget officers, legislators, and governors, often have only hazy notions about the role of the states in mental health research. Because of the mystique and the sometimes esoteric language used by some researchers, policymakers are only lukewarm in their support and administration of research. Often, the budget for what research is carried on is hidden in a training or service budget item—lest it be discovered that "research" is being done. In several states, state-supported mental health psychiatric institutes operate in some kind of relationship with universities, but there is often uncertainty and conflict about the research mission of these institutes, and their relationship to the mission of the state's mental health delivery system.

This publication looks at the issue of state-supported mental health research to help all parties concerned have a clearer understanding of the place of state-supported mental health research in the overall spectrum of research. It also looks at some of the alternative ways in which the research mission of the states can be carried out—that research which requires the collaboration of the universities and that which the state may support and conduct on its own. This publication has been developed through explorations of this topic with state mental health program directors and persons responsible for the direction/coordination of state-supported mental health/psychiatric research of several states of the South.
One of the reasons for the limited understanding of the state's mission in mental health research is that there has been little description of the full range of kinds of research necessary to learn the answers to all the many questions that influence the delivery of mental health services. Only when this is done is it possible to decide which of the categories of research are appropriate priorities for state support. Among the categories of research that have been identified are:

1. **Basic research.** This is research in the underlying processes of thought, emotion, learning, and behavior. It is likely to be conducted in the basic science departments of universities. It is not especially related to mental disorder or its treatment.

2. **Basic categorical research.** This is research regarding the processes and characteristics of thought, emotion, and behavior in various categories of mental problems (e.g., mental retardation, brain damage, schizophrenia). While it deals with categories of problems, this kind of research is not particularly related to treatment of the conditions, but rather to better understanding of them. This kind of research is also likely to be conducted in universities, but it might also be carried out in a mental health/psychiatric institute supported by the state.

3. **Clinical research.** This is research which is directed to improved diagnosis, treatment, or rehabilitation of specific disorders. This is the category which is most generally envisioned by the term "mental health research" or "psychiatric research." It is conducted by both university- and agency-based treatment programs, but it requires access to patients who may be in state institutions. In many clinical research studies, it is necessary to have the patients in hospitals where there can be frequent checks of blood or urine samples, and where these and other factors can be closely controlled and monitored. In other cases, especially wider field trials, the research may be conducted on outpatients with fairly frequent checkups.

4. **Socio-epidemiological research.** This is research relating to the incidence or prevalence of various mental conditions and their relationship to economic, cultural, or sociological influences. It may be conducted by medical schools, by schools of public health, or by state or local mental health agencies—especially those which have responsibility for assessing needs and planning programs for a specific locality or state. There are wide variations in the local incidence of problems such as alcoholism or suicide.

5. **Evaluative research or program research.** This is research to determine the relative efficacy of an intervention program (e.g., Is consultation to
school teachers an effective way to manage mental health problems that otherwise would be referred to a mental health center? Is a program of education for persons arrested for drunken driving effective in reducing the prevalence of alcoholism?). This kind of research is usually done by agencies, but it may be carried out by mental health/psychiatric institutes or clinical departments of universities.

(6) **Program evaluation.** This is research regarding how effectively ongoing programs are meeting their objectives and what side effects they are having. Everyone agrees that this kind of research should be done by every service program, and that it requires somewhat different, but related, techniques from those used for controlled research experiments.

(7) **Administrative or operations research.** This is research related to the costs, uses of personnel, and facilities of programs and services. Such studies may be done as part of program research or program evaluation, but they relate to the administrative processes more than to the clinical processes. Here, too, there is general agreement that all service agencies should be doing research on the administrative aspects of their programs.

(8) **Policy research.** This is a recently recognized category of research that involves determining the relative costs and benefits of pursuing various program options. It requires a blend of specialists in program areas: economists, sociologists, and public administrators. This is likely to be done by special policy institutes or by planning agencies and legislative research commissions. There are also private companies that specialize in policy research.

From this list it is clear that mental health research is not the exclusive province of any one specialty or type of agency. Certain kinds of research must be done by biologists, physiologists, chemists, and psychologists. Other kinds are done by psychiatrists, neurologists, nurses, clinical psychologists, sociologists, educators, and anthropologists. Still other kinds require epidemiologists, economists, social psychologists, and administrative experts.

The university is the appropriate setting for much of the basic research and for a large portion of basic categorical and clinical research. However, the operating agencies and planning agencies must be the setting for program research, program evaluation, administrative research, and a good part of the socio-epidemiological research that is needed in order to plan programs to meet the state's specific needs.
Some basic research requires elaborate and technical equipment that is most commonly found in university-based laboratories. Some research requires access to patients with specific mental disorders or to persons who may agree to participate in prevention research programs. Other research requires access to program data, including information about patients, staff, program procedures, and outcomes. Virtually all major research activities require or are greatly facilitated by computers to process the information.

What is evident is that mental health/psychiatric research includes a wide range of research endeavors. The states have legitimate reasons to support research in all of these categories, but they need a clear vision of the scope of the entire research endeavor. Also needed is a rationale on how to direct the authority for conducting the various parts and for appropriating the funds to support them. Most people agree that basic research should be supported by appropriations to the university and that clinical, program, and administrative research are best funded through the state mental health agencies. However, there are many subtle variations in between.
RELATING MENTAL HEALTH RESEARCH TO THE MISSION OF THE STATE

The ultimate mission of any mental health research is to enable mental health program administrators and professionals to do a better job of treating and restoring persons with mental disorders. However, certain kinds of research are more immediately-relevant to the mental health treatment activities of the individual states, and it is those kinds of research which should be encouraged and supported by the state. Those basic research activities that are concerned with developing a better understanding of mental processes and pathological conditions and large-scale epidemiological studies are perhaps more appropriately funded by federal grants or foundation grants, or by universities as part of their general research commitment. Outside funding should also be used for clinical research of troublesome, but minor and not disabling, emotional conditions. Two characteristics, then, should apply to state-supported mental health research:

1. It should be substantially relevant to the state's mental health service needs.
2. It should be useful to the state's mental health program.

Relevance to State Needs

The first criterion for state-supported research is relevance to the needs of the state's mental health delivery system. The states have some common needs, but some needs are unique. All states serve patients suffering from the major psychoses—alcoholism, drug abuse, childhood emotional disorders, etc. However, most states also have special mental health problems, for example, a large older population, persons from specific minority cultures, large rural areas at a great geographic distance from mental health facilities, or problems in serving dense inner city populations. Not only are these problems unique to certain states; they may occur only
at certain times. Periods of extensive unemployment, boom towns, or special stresses from natural or civil disturbances come and go, but they create special mental health problems.

The state-supported mental health research program should be particularly alert to the unique needs of the state. The state mental health agency’s planning office should have information about the special problems and needs of the state, and how they are changing. The program evaluation office should have information about special problems of the ongoing service programs of the agency. When the research coordinator sits in on the meetings of the management team of the state agency, he/she is in an ideal position to learn of current or impending problems or trends that may lend themselves to research. Some research coordinators conduct an annual survey of the major operating units of their own state mental health agencies to solicit their perceptions of problems that should be addressed. Some research coordinators also keep abreast of problems and trends in other state agencies, for example, watching for changes of policy or practice that will likely increase the problems for the mental health agency, such as changes in the implementation of the Education for All Handicapped Children Act, PL 94-142 or changes in the management of emotionally disturbed prisoners.

It is also important that research coordinators and researchers keep abreast of research in progress in other states that may be applicable to their own state. Although some applied study may be required to make the appropriate adaptation, it should not be necessary to repeat an entire study. It is difficult to keep up with all of the relevant published research literature in mental health—especially since some of it appears in the journals of related fields, such as early child development, education, or gerontology. It is even more difficult to learn about research in progress before it has been reported in the formal literature. Keeping up with research...
in progress requires attendance at conferences of researchers in order to become personally acquainted with persons from other places, and to establish networks of persons working in related areas. This personal contact may also facilitate the exchange of draft papers, case materials, and research problems and solutions. Sometimes collaborative research about conditions which afflict only a small number of persons at a time speeds the solution to questions which affect the mental health delivery system in several states, for example, medication-resistant persons with severely disturbed behavior problems.

Usefulness for the State's Mental Health Delivery Programs

The other major criterion for state-supported mental health research is that it should have significant usefulness for the state's mental health delivery system. This criterion requires collaboration with the persons in the delivery system to learn more about how a problem presents itself, and something of the context within which it must be addressed. Frequently program people can describe realistic constraints, or additional dimensions of a problem, which will make the research findings more useful and more likely to be implemented.

Such collaboration between the research program and the operating programs will give the researchers (1) some sense of the priority of the problem, (2) the time constraints within which the findings are needed in order to be most useful, and (3) the depth and kind of information that is needed to make the necessary policy or program decisions. These early contacts between the researchers and the operating program leaders also will be helpful in identifying strategies for getting access to patients and data, and will help assure later cooperation when the research activity is underway.

Collaborative steps at the beginning will also provide the researchers with some sense of the format and style of research reports that will be most useful
for different audiences of users, for example, legislators, program administrators, and clinicians. This will lessen the common problem of research reports which are written in the language of the research community and, thus, are not easily understood by the potential users.

After the assessment of the problems and needs of the state, the research coordinators/administrators must decide:

1. Are these problems of significant service priority to be worth the potential costs?

2. Are they being researched elsewhere, or are the answers already available, but not yet reported or known to the program people with the problem?

3. Are they researchable?

4. Can they be addressed with the resources available to the state (e.g., researchers in the needed specialties, funds, research facilities, ability to establish adequate controls and data collection procedures)?

The research problems which meet these criteria are mainly applied or program research issues. Other research which does not meet these criteria, for example, research of "interesting" problems which are not of major significance to the state's mental health delivery system, may well be allowed and even encouraged by the state—but may be of secondary interest as far as state support is concerned. Such research might be supported by outside grants from government, foundations, or businesses, or it might be conducted as part of a researcher's university commitment. This may appear to be a hard line, because, of course, one never knows what operational benefits may result from any research findings. However, the state dollars that are appropriated by legislatures for mental health research are usually intended for serving the mentally disabled of that state. Therefore, firm evidence should be provided that such research programs have high relevance to the mental health delivery needs of the state, and that they are structured in such a fashion that they can be useful to that state's mission.
**Scope of Mental Health Research Needs of a State**

It should be stressed that the mental health research needs of a state are not likely to be adequately met by any single professional discipline or by any single administrative structure. In some states, there has been a tendency to think only of clinical research by psychiatrists as the research program of the state. In other states, there is a tendency to think of the research program as only that which is conducted in mental health/psychiatric institutes or in research units of the state hospitals. While research programs indeed may meet high priority research needs of a state, they do not help the state solve problems related to evaluation of programs, costs, and manpower utilization. Often program evaluation and administrative research units operate in a separate organizational system from the "research" system. These are discussed in a later section. The state must decide on the best pattern for meeting overall mental health research needs, and establish some mechanism for coordinating the full scope of research activity of the state agency.

**Communication of Research Findings to Users**

A major mission of state-supported research should be to communicate the findings of the research to the persons in the state who will use it in their policymaking and programming. It is not sufficient to report the findings in formal literature or project reports. Someone connected with the research program should assume responsibility for preparing brief, timely reports, written in ordinary language so that they are easily read and understood by the potential users.

Depending on the nature of the research findings and the uses to be made of them, the research program may have to provide technical assistance and training to agency staff, for implementing the research findings into agency practice, or to policymakers, who must consider options when they make policy decisions.
In a few states, the research staff have also offered consultation to program administrators and clinicians concerning problems about which the researchers have developed considerable expertise, even though the solutions are not direct findings of their personal research. This kind of consultation also helps coordinators and staff to pinpoint some of the problems that may need further research.
It is essential that there be collaboration between the state mental health agency and the state's universities in carrying out mental health research which is supported by the state. However, because the basic missions of universities and agencies are different, relationships are always a bit strained. Considerable trust and collaborative effort on the part of both parties are required. It also helps to have some policy and structural arrangements that facilitate the coming together of the key actors on a regular basis to clarify the research agenda, to define the roles of each side in the relationship, and to monitor progress and problems. "War stories" of problems that arise when there are no such arrangements are common. However, for each example of places across the nation where problems have occurred, there are others where the relationships are excellent and extremely productive. Current examples of the latter are the collaborative efforts of the Maryland Department of Health and Mental Hygiene and the University of Maryland; the South Carolina Department of Mental Health and the University of South Carolina; and the Texas Department of Mental Health and Mental Retardation through the Texas Research Institute in Mental Sciences and the campus of the Texas Medical Center at Houston. In these and other successful associations, the key individuals have been committed and diligent in making the relationships work, although the overall structural arrangements are different.

The Need for Collaborative Arrangements

Generating new knowledge through research is a primary function of universities, especially in their graduate and professional schools. Virtually all researchers, regardless of where they currently work, have been trained in universities. Universities are equipped with many of the resources required by researchers—libraries, with access
to research literature in a variety of health and social sciences; computers; laboratories; and technicians. In addition, faculty and graduate students, who are knowledgeable about the many professional and technical fields that facilitate research, are available to examine and comment on research proposals, to review progress and problems, to suggest alternative hypotheses or approaches, and to assist and stimulate other researchers in their studies.

For these reasons, universities are ideal sites for conducting basic research in thought, emotion, and behavior. However, difficulties arise as researchers move from the laboratory into the field to conduct clinical and epidemiological studies or program and administrative research. University faculties often are not fully aware of the many constraints of law, money, administrative policy, and patients' rights that apply to the programs of agencies, and there is a tendency to apply the same kinds of controls used in laboratory experiments to patients and communities. This leads to allegations that the universities are "ivory towers" detached from the "real world."

Researchers who work in clinical, epidemiological, and program research need access to patients, communities, and programs, but they also need (and usually want) the expertise and the stimulation that come from their colleagues in university research programs. An overwhelming majority of researchers, regardless of where they are employed, seek out university affiliations. These affiliations may be privately negotiated, or they may be arranged, for example, as part of an overall administrative agreement between the agency in which a researcher works and the nearby university. A few researchers are so committed to the university atmosphere that they will not consider working in any other setting. Persons who are responsible for the overall administration of state-supported mental health research should recognize the importance of university affiliations.
Policy Direction and Monitoring of Research Programs

State mental health directors must be aware of both the advantages and pitfalls of collaborative arrangements with universities and must provide strong policy direction and monitoring for their research operations, regardless of the administrative arrangements for carrying out the research. The state agency should take the lead by organizing a high-level research policy group. The group should include the state mental health director and the research coordinator, and the deans and department heads or research directors of universities collaborating in the research. The purpose of the policy group is to meet regularly and set overall policies and agendas for the research and to monitor the progress of research projects. The policy group might also assist in recruitment of research personnel and in the development of university affiliations for agency-based researchers. The group should also provide overall guidance to the research directors, mechanisms for reporting findings to the state agency for policy decisions and program operations, and methods for submitting findings for publication in the research literature. This policy group probably should not review the design of individual proposals or conduct the human subjects review of specific projects. There are special Quality Review and Consent Committees for these reviews.

The provision for such a policy group may be spelled out in legislation, as it is in Maryland (see Appendix for the legislation and a description of how the Maryland program works), or in formal memoranda of agreement, as in other states. In any case, the policy group should be expected to meet on a regular schedule to make changes in the policies and in the overall research agenda as new needs and problems arise. If the researchers are expected or encouraged to seek other research funds from foundations, pharmaceutical firms, or other sources, the policy group should set general policies regarding that research as well—especially if the research will require the use of state facilities, resources, and patients. However, the researchers must be allowed some freedom and discretion for their research.
The state mental health agency's research coordinator is probably the best person to serve as the staff person for the policy group. The staff person then assumes responsibility for negotiating specific administrative arrangements, recruiting staff, and seeing to it that the research is carried out and properly reported to the state agency and in the formal research literature.

Administrative Arrangements for Research

There are four major kinds of administrative arrangements for carrying out state-supported mental health research, with several minor variations. Each structure has its own implications and limitations, depending on the kinds of research to be done and the unique characteristics of the state.

State-Operated Research Units

These are units set up by the state mental health agency and owned and operated by the state according to its usual administrative policies and procedures. These research units are often located on the grounds of the state mental health institutions and are staffed by researchers who are employees of the state. The researchers negotiate their university affiliations privately.

Especially when the units are located in geographic areas remote from universities, there may be difficulty in recruiting the needed researchers and related technicians, such as laboratory specialists, statisticians, and computer experts. The research has sometimes been accused of being "quirky," in response to the idiosyncratic notions of the researchers who are willing to work in isolation from the mainstream of research. And, there is a tendency for the research conducted in these isolated units not to be reported in the regular research literature.

On the other hand, these units are close to the patients and the programs that serve them, so that researchers have the potential to conduct studies that
are highly relevant to the treatment needs. They also have ready access to patients' records and to the clinical staff to make needed revisions in research designs. There is also a greater likelihood that the research findings will be quickly and easily reported to the clinical staff for incorporation into the treatment programs. Obviously, such research units are best situated to conduct clinical and program research.

Joint State-University Research Units

These are arrangements in which the state agency and the university are jointly responsible for the operation of the research unit. The state usually provides the facility and its basic operations, while the university provides the researchers, the technicians, and the research direction. These units, often called mental health or psychiatric institutes, are usually responsible for several functions in addition to research, especially professional education and certain specialized treatment services. All offer additional points around which there may be disagreements about policies and procedures.

These institutes have often been subject to frequent administrative changes because of turnover in the leadership of either the university or the state agency. A major part of the problem in these arrangements appears to lie in the failure to have a policy group to think through and define the research mission and agenda, and to monitor the programs over time. In some cases, the state mental health agency has designated "Research" as a major function of a mental health or psychiatric institute, and has turned the responsibility for deciding what research is to be done over to a single department of a university or to the researchers themselves. Later, when there are questions about the relevance of the research to the overall mission of the state agency, there is a tendency for the state agency to take back full responsibility for the institute's research topics.
this point the university and the researchers withdraw because the program becomes "too service-oriented" for the researchers to maintain adequate research controls. This type of situation illustrates the need for a strong policy group in joint state/university administrative arrangements.

Joint arrangements provide an ideal setting for several kinds of basic, clinical and program research—especially if the institutes are located close to the university centers. They make recruitment easier, and they provide access to graduate students and other research resources at the university. They also provide flexibility for staffing and purchasing that may be difficult to achieve in a state-operated program. However, extra efforts must be made to relate research to the ongoing operations of the state mental health agency and to feed back findings to the administrators and clinicians in ways that are timely and useful to them.

**Research Contracts to Universities**

These are arrangements in which the state mental health agency turns over research monies to the university under regular contract agreements. Contractual arrangements have sometimes been called irrelevant and isolated from the real needs of the state. And, while the reports usually are published in the research literature, they often are not reported in a timely way to the state mental health program administrators. Hence, the findings cannot be used to influence state policymaking or to change operating procedures. The extent to which this becomes a problem depends on the way the contract is written, and the detail with which the relationships and expectations are spelled out and monitored. Here too, it seems well to have a high-level policy group to define those policies and monitor how well they are being carried out—especially
if the amounts of money are large. The state agency should have a research coordinator to provide liaison, close monitoring, and troubleshooting for research contracts with universities.

Research contracts with universities are especially appropriate for basic research and clinical research of conditions that are commonly seen in the acute treatment services of the academic health centers. They are less appropriate for research on chronic conditions or questions that require longitudinal studies. And, they have definite disadvantages in areas of program research, administrative research, and program evaluation, because the universities are separate from the operating agencies and their constraints. On the other hand, universities do have the researchers and the research resources readily at hand, and time-limited research contracts are usually carried out in a very creditable manner.

Research Grants

Research grants are arrangements under which individual researchers (or groups of researchers) in the universities submit proposals for research studies and receive funding of fixed amounts of money to carry out those proposals. This has been the major administrative arrangement for funding of federal research, but relatively few states have used the grant mechanism. The initiative for the research grant typically comes from the researcher rather than from the granting agency, but it may be possible for the state to solicit grants in certain research topics and then negotiate with the researchers to develop a research design that is acceptable to both parties.

Grants are useful for time-limited and relatively specific research projects. However, they pose problems in assuring relevance to the state mental health program's operations and in relating findings to agency administrators and/or clinicians.
There is no overall preferred administrative arrangement for conducting state-supported mental health research. There are proponents and critics of all approaches. In most states it might be well to consider some combination of arrangements, so that the state can make best use of its research funds by applying them in various combinations that capitalize on the advantages of each.

**Faculty Appointments**

If the research has been contracted to the university, the university will provide for faculty appointments as part of the employment process.

However, arrangements under which researchers are employed by the state agency require special attention and/or negotiation for faculty appointments. The state agency can take the initiative to encourage and assist its research staff persons to obtain faculty appointments. This is done partly by setting the expectation that staff should have such appointments, and partly by paying careful attention to the persons recruited to assure that they are qualified for, and motivated to, hold such appointments. Including university leaders in the state policy group, so that they are familiar with the research activities, can help in arranging faculty appointments. The agency can also help by providing financial incentives to staff who obtain faculty appointments and time off for staff to participate in faculty activities at the university.

Faculty appointments should not be just nominal appointments for prestige purposes, but should be made with the expectation that the researcher will participate in research seminars, receive the benefit of faculty stimulation, and have his/her work critiqued by other faculty members. A good faculty relationship for staff sometimes results in added depth or different dimensions because graduate students or other faculty persons elect to do some of their work with the research program. Of course, researchers should become fully comfortable in using the university's library and other research resources.
Program evaluation (including evaluation research) and administrative research require access to the data about the state's programs, and almost all such research demands that the studies be done by staff persons closely associated with the programs. Some critics question whether evaluators and program researchers who are employed by a mental health agency can be truly objective in their evaluation of the programs of that agency. This is certainly a valid consideration and must be given attention. However, this concern is offset because the agency's staff is likely to view an in-house researcher's findings as more credible than those of an outsider, and thus, would be more open to suggestions for modifying the agency's policies and procedures. Outsiders often do not share the values and philosophies of the agency; therefore, their evaluations may not always be relevant to the agency's goals. One approach to this dilemma is to have an occasional outside evaluation study done to assure that the in-house researchers are objective and unbiased in their program evaluation work.

Virtually all state mental health agencies have established some kind of "office of program evaluation" that serves this in-house evaluation function. These evaluators conduct regular studies of program results, costs, and the satisfaction of clients who have been served. They also do special studies of program problems, and they look for unintended, good and bad effects of programs. Through these evaluation studies, the agency can determine whether there are changes in the kinds and numbers of clients who are coming to the agency for service, what problems exist in the recruitment and utilization of personnel, and the relative cost-effectiveness of various programs.

Administrative research may be carried out by the program evaluation unit (especially research about manpower), or it may be conducted by the administrative unit of the agency, particularly if the topic is one relating to support services, financing,
billing, or other general administrative matters. Recently, there has been a more active trend to link studies about the clients and the services they receive with studies about costs and revenues. These linking studies are likely to be carried out by the program evaluation units rather than by the administrative units.

Both program evaluation and administrative research use some of the same analytic and statistical methods as the more traditional kinds of research, but often different research designs are used and the objectives are different. It is seldom possible, or even desirable, in the administration of a program to hold all of the factors constant while one single activity is changed in order to study the effects of that single change. (This is the traditional experimental research design which is highly favored by researchers.) Instead of focusing on one variable, studies in program evaluation and administrative research are concerned with measuring the effects of all of the different factors on the programs. Because of these differences, there is often less interest in program evaluation and program research by university-based researchers. Nevertheless, affiliations between program evaluators and universities are still desirable in order to help evaluators keep up with the latest data management and analytic techniques that they need for their work, and in order to help them keep up with the latest research findings.

Program evaluators and administrative researchers, because they are members of the agency's management team, must be prepared to design their studies to meet the time and program needs of the agency. They must also be able to prepare reports of their studies that are easily read and understood by program administrators who need to make timely decisions about program resources and directions. It is desirable that any researcher be able to do this, but it is particularly important for program evaluators.

Because program evaluation and administrative research are regarded as ongoing monitoring tools of management, these units usually are assigned and function within

22
the central offices of state mental health agencies, rather than in mental health research institutes or university settings. In the central office, records and statistics about the agency's program are readily accessible and researchers are able to consult with managers of the agency or to participate in planning meetings to provide information from evaluation studies for the planning process. Such participation also provides the opportunity for the evaluators to anticipate the design of evaluation studies of new programs so that the programs are properly evaluated from the start, rather than after the programs have been underway for some time.
COORDINATING AND FACILITATING MENTAL HEALTH RESEARCH

A state mental health agency has many benefits to gain from a well-coordinated research program that identifies the needs and problems of the agency, helps develop research proposals or contracts through which the research is carried out, monitors the research, and then sees to it that the results are fed back to agency leaders in appropriate ways so that they are used in policymaking and in agency operations.

Most state mental health research will be conducted through specially designated research units or research programs such as those already discussed. However, there may be many opportunities for other staff persons in the agencies to undertake small research projects to help answer questions about their own particular areas of work. Some states have encouraged all staff to think of such research questions and offered consultation and assistance in designing studies, processing data, doing statistical analyses, etc. Sometimes this has been done through programs of small grants (i.e., up to $3,000 each), an approach which has yielded a high return for the amount of money required and which has been a good morale builder within the agency.

Other states have offered prizes for research studies conducted by regular staff at all levels. And, some states have published research newsletters or bulletins which report on research studies in progress and the findings of completed studies. All of these techniques encourage and facilitate the systematic finding of answers to questions about how to make the services more effective or more efficient.

These kinds of agency-wide research program require active development and coordination by persons with the expertise and time to devote to this work. Several states have established positions of directors or coordinators of research. At present the responsibilities of these persons vary considerably. Some coordinators have responsibility for only the work of research institutes or of the specially designated
research units of the state; others have responsibility only for arranging and monitoring of university contracts. Some have responsibility for all research throughout the agency, while others have responsibility for program evaluation as well as research.

The scope of responsibility varies with the concept of the role that research plays or should play in the agency. One of the major constraints on the development of research activities by state mental health agencies has been the limited concept of what constitutes research and who does it by leaders in the field, including state agency directors, board members, and clinicians. A clear concept of the research mission of the agency will lead to a broader definition of the responsibilities of the research coordinator/director and a wider range of research activity within the agency.

The specific responsibilities of a research coordinator/director might be to:

1. Arrange for meetings and serve as staff for the Research Policy group. This would include drafting and refining overall research policies of the agency and updating the overall research agendas from time to time.

2. Serve as the research liaison on the commissioner's management team and collect data about problems and needs which are facing the agency and which must be addressed through research.

3. Prepare and monitor research contracts with universities or small research grants to individual researchers, either within or outside the state agency, to assure that they will be relevant and practical to the state agency.

4. Assist in the development of research proposals to assure a balance between relevance and quality, and assist in obtaining funding to support research.

5. Assist in the development of research programs of the agency's own research institutes and units.

6. Monitor the progress of all research activities to resolve problems and correct any abuses that may become evident, e.g., excessive overhead figures, nonproductive researchers, improper expenditures.

7. Assist in setting up and keeping in operation those fiscal and administrative mechanisms that will facilitate the administration of research projects.

8. Serve as liaison with universities regarding research activities (faculty appointments, graduate student placements, access to clinical materials by university-based researchers, consultants, etc.).
(9) Stimulate and encourage research by staff throughout the agency through newsletters, technical consultation, research prizes, etc.

(10) Be the conduit for assuring that research findings are reported to policymakers, program administrators, and professionals in ways that they can use them (e.g., simple, readable reports which avoid jargon and high-tech appearance).

(11) Arrange periodic conferences to exchange information among researchers within the agency and those engaged in university-based research elsewhere in the state.

(12) Provide liaison consultation about the research activities to legislators, professionals, operating agencies, mental health associations, and officials in government agencies.
FUNDING AND ADMINISTERING RESEARCH FUNDS

Funding for Research

State mental health agency directors often point out that it is difficult to obtain state appropriations for research because of the widespread notion that the sole mission of the state mental health agency is to treat patients and carry out prevention services. The directors feel that state legislators generally believe that they have no business funding research in a state mental health agency because research belongs in the universities.

This is probably true if the legislatures and state budget officials are given no specific understanding of what is meant by mental health research and how state-supported research is directed toward helping a state address some of its unique problems so that its mental health services can be made more effective and efficient. Most legislatures now make significant contributions to research programs for agriculture and highways, but this came about only after it was made clear that the research was going to be directed toward helping solve the state's agricultural and highway problems. It is the responsibility of the state mental health director and the coordinator/director of research to make clear that the proposed research is directed toward improving the operation of mental health programs of that particular state. How the state agency proposes to administer the research and monitor its progress must also be made clear. In addition, it is important that legislators and operating program leaders realize that the research findings will be reported to them to help with their decision making and operation of the programs. Like any other appropriation request, the more graphic, relevant, and targeted the description of the research proposal is, the more likely that it will be acted upon favorably.
About half of the states have established state-supported research programs as a result of well-defined proposals which have been incorporated into the state agencies' overall program and budget requests. Timing is important. Proposals must be prepared in advance of the legislative sessions, and discussed with key persons from budget offices, governors' offices, and legislative committees and their staffs, so that they understand the purposes of the research program and are willing to lend their support. It helps to have the understanding and support of mental health associations and the universities when seeking research authorizations and appropriations.

The strategy for timing a request to support any new program of this kind should take into consideration the state's economic condition. In times of economic downturns when states are experiencing revenue shortfalls, it is unlikely that any new programs will be authorized. The introduction of mental health research proposals should wait for better times when it will be easier for states to commit funds to new programs.

A source of funding that has been used for the support of mental health research in a few states is earmarked funds from special taxes, such as liquor taxes or the collections made for patient services. This approach provides for the relatively stable funding which is desirable for mental health research. Research is not the kind of thing that can be started up and terminated quickly, since it usually requires a substantial number of clients so that observations can be made over a period of time to determine changes. All benefits are lost because of inadequate study of results if research projects are terminated in midstream.

In addition to the funds that come from state appropriations for mental health research, there should be the opportunity for the research staff and other staff persons to apply for outside grants or contracts for funding of additional research projects. Chances for receiving outside funding are greater if there is already a nucleus of staff and research activity funded by the state. The National Institute of Mental Health has traditionally been a major source of grants for mental health research,
and the Institute probably will continue to offer competitive research grants, especially in biomedical research of mental disorders. Many of the successful grant applicants for NIMH funds have been researchers from state-supported mental health research institutes or units. Other possible federal sources for research funding include the National Institute of Drug Abuse, the National Institute of Alcohol Abuse and Alcoholism, and several of the National Institutes of Health, e.g., the National Institute of Neurological Diseases and Blindness, the National Institute on Child Health and Human Development.

Research funds also may be available from private foundations or corporations. Pharmaceutical firms, in particular, are interested in having qualified researchers do field trials of new medications or of existing medications on different target groups of patients.

Funding for administrative research may be available from businesses that stand to benefit from the findings of the research, through better or less expensive equipment or supplies, or better ways to make use of equipment. The contracts must be carefully negotiated to assure that there are no conflicts of interest, but there is nothing inherently improper about such funding arrangements between the private sector and public agencies. It should be the responsibility of the agency's research coordinator to help negotiate additional funding, and to scrutinize the proposals and contracts for any conflict of interest and assure that the studies are appropriate to the state's overall research mission.

Administering Research Funds

The administration of research funds calls for flexible arrangements that are sometimes difficult to negotiate within the limits of the usual state personnel and purchasing procedures. Those parts of the state funds that go to the support services for the research programs, e.g., the nursing and maintenance activities for patients
on a clinical research ward, should be managed under standard personnel and purchasing procedures. However, often it is necessary to purchase special supplies and equipment or make arrangements for extra personnel during data-gathering phases of studies. The research program's administrators must be prepared to respond to these needs quickly, or special arrangements should be made to take care of them. The universities traditionally have this kind of flexibility, so one possible approach would be to negotiate agreements with universities for certain aspects of projects. In some agreements, the research staff is officially employed and equipment is purchased, by the university, and the funds are interaccounted from the state agency to the university.

Another mechanism developed in several states to provide flexibility in administration of research grants from outside sources is the "mental health research foundation." Mental health research foundations are independently operating foundations whose board members are officials of the agencies in which the research is done. With this mechanism, those research grant funds that do not need to be entered into the state treasury are administered by the foundation, which has its own separate accounting and reporting system and flexible procedures for purchasing/leasing of research equipment and employing personnel.

Cost Accounting

Cost accounting for research programs poses some special problems—especially if some of the basic facilities and services, e.g., buildings, room and board for patients on research wards, are supplied by the regular institutional or agency funds. In most situations, these costs would not be labeled as research costs. State policies and practices for reporting and allocating research costs vary, but it is recommended that one person, such as the research coordinator, keep a separate accounting of all actual costs, so that better estimates can be made for contracts and grants. Costs include space rental, utilities, and room and board charges for patients, as well as the costs of items more directly related to the research activity.
CONCLUSION

The idea of state-supported mental health research has often encountered poor acceptance by policymakers and agency administrators, despite the rather substantial contributions from such research. To a considerable extent, this situation is the result of narrow concepts of the scope of mental health research, and lack of clarity about how to relate it to the mission of the state mental health agency. Researchers have often aggravated the situation by using technical jargon in bulky reports and insisting on models of research that were not appropriate to the needs of the agencies. They also have had a tendency to detach their research from the realities of the limitations and complications that service programs must face.

On the other side, state agency administrators have had little experience with researchers. They are uncertain about how to administer research programs to assure that the activities are relevant to the state agency's mission, and that the findings are reported directly and promptly to the people who need the information. Research administration requires university affiliations, flexible administration of personnel and funds, and special skills in translating the findings to budget officials, legislators, and other policymakers.

This publication has attempted to define the full scope of mental health research activity that might be undertaken with state funds, and to document some of the principles that probably should be applied to state-supported research. It also presents alternative arrangements for research affiliations, and explores some of the issues in the funding and administration of research activities. It proposes that there be state-level research coordinators, and research policy groups of key leaders from the universities and the state mental health agencies to define research policies, set
research agendas, and monitor the progress. Research coordinators can provide liaison between the researchers, service program directors, and universities, and also be the agents for assuring that the research findings come to the attention of the persons who need them in forms that are most useful.

It is hoped that this publication will be helpful to state policymakers and state-level mental health program administrators, and also to research coordinators, researchers, and university administrators.
§31A. Maryland Psychiatric Research Center.

(a) Assigned to Department of Health and Mental Hygiene; research programs; superintendent and other personnel; budget.—(1) From January 1, 1977 the Maryland Psychiatric Research Center is assigned to the Department of Health and Mental Hygiene.

(2) The center shall perform those research programs specified in written agreements entered into by the Department of Health and Mental Hygiene and the Department of Psychiatry, University of Maryland School of Medicine. Research programs shall be carried out under the general supervision and direction of the Department of Psychiatry; but subject to the policies of the executive board.

(3) The position of superintendent of the center shall be filled by appointment and may be vacated by joint action of the Commissioner of Mental Hygiene and the chairman of the Department of Psychiatry, University of Maryland. All other appointments to scientific and technical positions at the center shall be made by the executive board and these persons may be removed by the executive board.

(4) All positions at the center shall be assigned to the University of Maryland School of Medicine. The superintendent of the center and all persons in scientific and technical positions shall be unclassified employees of the State. The remaining administrative employees and all clerical employees shall be classified employees. The determination of the status of all positions at the center shall be made by the executive board.

(5) The Department of Health and Mental Hygiene shall have responsibility for the preparation and submission of the annual budget of the center and for necessary budgetary controls over the moneys appropriated to the center.

(b) Executive board.—(1) There is established an executive board for the center. The membership is composed of the following persons: the superintendent of the center; the director of research and evaluation, or any successor position, of the Department of Health and Mental Hygiene;
Commissioner of Mental Hygiene; the chairman of the Department of Psychiatry and the dean of the School of Medicine, both of the University of Maryland.

(2) The board shall select its chairman.

(3) The board has responsibility for the development of policy for the operations of the center, including policies on the assignments and responsibilities of the scientific and technical employees of the center. The board shall submit an annual report to the Secretary of Health and Mental Hygiene and the General Assembly.

(c) Technical review committee.—(1) A technical review committee is established to provide peer review over research activities at the center. The committee serves in an advisory capacity to the executive board and the superintendent. The committee is composed of: (i) the superintendent of the center; (ii) the chairman of the Department of Psychiatry, University of Maryland School of Medicine; (iii) three psychiatrists and three psychologists, one of whom shall be selected by the executive board from the University of Maryland School of Medicine, two of whom shall be selected by the executive board from the Johns Hopkins University School of Medicine, and three of whom shall be selected by the executive board from other affiliations, including private practitioners; and (iv) three citizens of the State selected by the executive board from persons who are interested in and concerned about the care of the mentally ill and about research directed toward the prevention, discovery of causes, and treatment of mental disorders and allied conditions.

(2) The committee shall select its chairman.

(3) The committee shall submit an annual report to the executive board.

(d) Appointment to University of Maryland faculty positions.—The employees of the center who are designated by the executive board as performing scientific and technical duties shall be appointed to faculty positions in the Department of Psychiatry, University of Maryland School of Medicine.

(e) Termination of positions.—The positions of those persons who were employed by the center on December 31, 1976 shall be terminated on January 1, 1977. Those positions which are determined by the executive board to be scientific and technical positions shall be filled on and after January 1, 1977 first by those persons who were employed by the center on December 31, 1976, and who are qualified under the terms of this section for appointment to scientific and technical positions. All other positions at the center shall be filled initially by transfer of persons employed by the center on December 31, 1976. (1976, ch. 677, §2.)
Policy of the
MARYLAND PSYCHIATRIC RESEARCH CENTER

House of Delegates Bill #767, concerning the Maryland Psychiatric Research Center (MPRC), clarifies that the intent of the legislation is to enable the Center to contribute new knowledge which would benefit the mentally ill by (1) preventing development of such illness, (2) increasing the effectiveness of treatment if an individual becomes mentally ill, and (3) reduction of the disability of such illnesses that cannot be cured. The Center is a unique facility for investigating biologic and psychosocial aspects of behavior and, provided with a suitable atmosphere and support, should lead to new insights into the causes and treatments of mental illnesses.

The legislation shifting the Center's operation to the University of Maryland School of Medicine acknowledges the advantages of conducting biomedical/psychiatric research within the academic tradition. Creativity and productivity of individual scientists are enhanced by a setting which attracts outstanding minds and encourages the collaborative application of their investigative talents. It is reinforced by participation of students in research efforts. It should be recognized that technologic and informational advances relevant to mental illness are sufficiently rapid to require that research program operations must provide the necessary flexibility to rapidly discontinue lines of inquiry and shift to new strategies. To achieve these goals the Executive Board of the MPRC has developed the following policy statements.

POLICY STATEMENT #1 The Center's Executive Board is committed to the recruitment of gifted investigators and to providing them with the resources and the atmosphere which will facilitate creative scientific work.

POLICY STATEMENT #2 The Center will conduct investigations relevant to both neurosciences and clinical sciences. The scientific staff must be comprised of clinical and basic investigators capable of examining the interfaces between the two and effectively collaborating in these studies.

POLICY STATEMENT #3 The Center's future scientific activities will focus on research relevant to those seriously ill with mental/emotional disorders. Investigations relevant to the major mental illnesses (especially Schizophrenia) will be preeminent, and will restrict but not exclude studies of other important biomedical issues.

Study designs will deal with the identification of treatment and etiologically relevant subgroups of the psychoses utilizing clinical and biological variables, studies of innovative and comparative treatment strategies, and investigation of brain mechanisms involved in the pathogenesis and/or treatment responsiveness.
POLICY STATEMENT #4 The Executive Board is committed to enhancing collaboration between investigators with expertise in the social, psychological and biological sciences, both within the Center and between Center personnel and investigators and scholars from other institutions in the Baltimore-Washington area. Thus the Center intends to establish collaborative links with other institutions which can enlarge the scope of the Center's work and/or facilitate scientific work in other facilities.

POLICY STATEMENT #5 The Executive Board wishes to make explicit its intention to conduct multi-disciplinary research. Many considerations beyond simple scientific merit determine the success or failure of such projects. Therefore, in selecting scientific staff, the Executive Board will consider the individual's capacity for collaboration as well as the more-usual considerations such as areas of interest and expertise, quality and productivity of previous work, and capacity to creatively contribute to accomplishing the Center's goals. The staff and resources of the Center are far too small to permit programs within the Center to develop in isolation from one another or to pursue goals disparate from the overall policies of the Center.

In setting this policy for the Center, the Executive Board intends to establish sound principles for scientific work fairly representing legislative intent. To effectively conduct clinical research, the Center requires clinical facilities. Outpatient programs can be established with existing resources, but the Center must procure an inpatient clinical research unit in space adjacent to the Center and the necessary funding for personnel to conduct inpatient studies. Cooperation with the Spring Grove Hospital Center and with the University Hospital is intended but this will not provide a sufficient clinical base to accomplish the goals outlined in this policy statement. It is not feasible to base the major clinical endeavor on borrowed space, borrowed staff, and borrowed patients. Such an arrangement will preclude recruiting clinical investigators and sharply limit our capacity to investigate psychobiological issues in the psychoses. The policy outlined above is not feasible with the present resources of the Center; therefore, the Executive Board will be seeking fiscal support for an inpatient research facility at Spring Grove Hospital Center.