

communication between all who are interested in the patient. This, in turn, will increase the patient's confidence in his care. Ultimate arrangements for continued care of the patient should be integrated with his socioeconomic needs and with the available health services in the community.

- g. Day hospital facilities for short-term intensive group and/or individual education and training should be provided for patients whose diagnosis is established and who do not require hospitalization.
- h. Approximately 10 hospital beds should be available for patients who require hospitalization for short periods.
- i. Funds should be available for stipends for professional personnel and for transportation and temporary lodging for out-of-town patients.

Recommendation 2. Certain existing arthritis centers and service clinics should receive continued support to enable them to provide appropriate services. These should be identified as Diagnostic and Treatment Clinics, and additional units of this type should be created as fast as trained personnel become available. Suggested requirements for Diagnostic and

Treatment Clinics are:

- a. They should be based in an accredited hospital or other qualified medical facility.
- b. They should provide facilities for diagnosis and comprehensive treatment of outpatients.
- c. Professional staffing should include the part-time services of at least an internist, a pediatrician, an orthopedist, a physiatrist or physical therapist, and a coordinator of patient services. At least one physician should have received training in a Regional Arthritis Center.
- d. Such clinics should meet at least one-half day per week.
- e. An adequate number of Diagnostic and Treatment Clinics should be established to provide good quality service within an area of reasonable geographic dimensions and population density. (See appendix).
- f. Financial and patient admittance policies should be those of the parent institution.
- g. Funds should be available for stipends for professional personnel.

The shortage of physicians with skill or interest in the care of the arthritic patient and the wide gap between available knowl-

edge and its application to the patient are well-known. How do we apply the available knowledge, the experience of the arthritis clinical centers, at the local level? How do we bridge the gap between centers and the local doctor in communities without arthritis services? Consultative services, laboratory, X-ray, and paramedical services, which are so successfully applied at the centers, should be made available to the local doctor in such communities.

Recommendation 3. Roving Consultation Boards should be created. A Board from the regional center, or clinic, will visit local hospitals in communities in which such consultation services are not currently available. Consultation Boards will have the approval of local county medical societies. They will meet on an "on call" basis, approximately one-half day per month. Each Board will be composed of at least one medical specialist with training in arthritis, a physiatrist and/or physical therapist, and a community-oriented coordinator of patient services, who does not have to be from the center or clinic. Patients will be seen by the Board only on referral by a local physician, who will receive a written report promptly. The consultants will not treat the patients. Patients

will pay a nominal fee for consultation services, when possible. Financial support for these Consultation Boards will include stipends for the services of the consultants.

Recommendation 4. Because of the lack of uniformity and standardization in commonly used diagnostic tests, automated multitest laboratories should be established in each of the Regional Centers. The services of these laboratories will be made available to local physicians, Consultation Boards, and Diagnostic and Treatment Clinics in the region. Emphasis will be placed not only on quality-controlled uniformity of laboratory techniques, but also on data-processing capabilities. Although the introduction of automated equipment is costly, a savings will result from the lower cost per test unit.

Local doctors must have easy access to the many community facilities that are often available, but not properly used. Examples of such facilities are Public Assistance Medical Care for Categorical Aid, which provides aid for the aged, for the blind, for those in need who are disabled, and for families with needy children; Crippled Children's Service; and Kerr-Mills aid for patients who are over 65 who pass a means test. Additional examples of local facilities

include home care programs, which may be hospital-based or implemented by a visiting nurse or by a local health department; homemaker programs, which are sponsored by the Visiting Nurses' Association or Family Service Agency; public welfare programs; nursing home programs; rehabilitation services; information and referral centers; shopping services; home maintenance services; transportation services; and home dental services. A busy local physician, who sees 30 or 40 or more patients in a given day, is bewildered by this endless list of facilities, which are, in fact, available to him and to his patients.

Recommendation 5. The coordinator of patient services in the Diagnostic and Treatment Clinics should make readily available to all doctors in the area information regarding the easily accessible local facilities for patients with arthritis. Communication of such information may be expedited by telephone calls, as well as by frequently revised directories.

Recommendation 6. An Arthritis Advisory Committee should be created. This Committee will be responsible for recommending standards of quality and procedures for quality control of the Regional Centers, the automated multitest labora-

tories, the Diagnostic and Treatment Clinics and the local Consultation Boards. This Committee will have close liaison with The Arthritis Foundation, public health agencies, and with the American Medical Association. Its membership should represent a cross section of physicians who are interested in arthritis and should include representatives of the Rheumatism Section of The Arthritis Foundation, the American College of Physicians, and orthopedic, psychiatric, radiologic, pediatric, and other professional societies.

Recommendation 7. Physicians in Regional Centers, Diagnostic and Treatment Clinics, and on Consultation Boards should maintain a registry of patients with rheumatoid arthritis, juvenile rheumatoid arthritis, systemic lupus erythematosus, gout, and hyperuricemia. Data for prospective study are needed for better understanding of the clinical course of arthritic diseases, of the value of early diagnosis, of early treatment, and of comprehensive treatment. Such a registry should include the patient's name, parents' names, social security number, sex, date of birth, date of registry, and vital clinical data. Data collection and processing should be stand-

ardized by the Arthritis Advisory Committee. Periodic reports of the results should be made to local medical communities.

Recommendation 8. Clinical assessment of the modalities of treatment and of drugs in large numbers of patients in widely distributed geographic areas, currently performed by the Cooperative Clinics and sponsored by the Rheumatism Section of The Arthritis Foundation, should be extended to include participation by Regional Centers and by Diagnostic and Treatment Clinics.

Recommendation 9. The Arthritis Advisory Committee should explore and make recommendations regarding methods of early casefinding in arthritis. A health education program should be designed to improve public awareness of the advantages of early diagnosis and treatment. Serious consideration should be given to the suspension of drug advertising that may discourage early medical attention. Regional Centers, Diagnostic and Treatment Clinics, and Consultation Boards should have available to them the personnel, equipment, and facilities that are necessary to achieve early diagnosis and to evaluate the extent of disability. In this

way, early treatment can be directed to prevent or to minimize such disability.

Recommendation 10. Financial support of the programs that have been outlined should come from public health agencies at all levels and, whenever possible, from voluntary health agencies. Voluntary agencies usually have greater opportunities for experimentation than do those that are tax supported. They often demonstrate new methods that, if successful, may be desirable for adoption by tax-supported health agencies. It is hoped that voluntary support will be available, perhaps, initially, on a pilot basis, for new and untried facilities, such as the roving Consultation Boards, automated multitest laboratories, or the arthritis registry. Funds for other recommended facilities and, especially, for maintenance of established facilities might come chiefly from public sources.

Comment

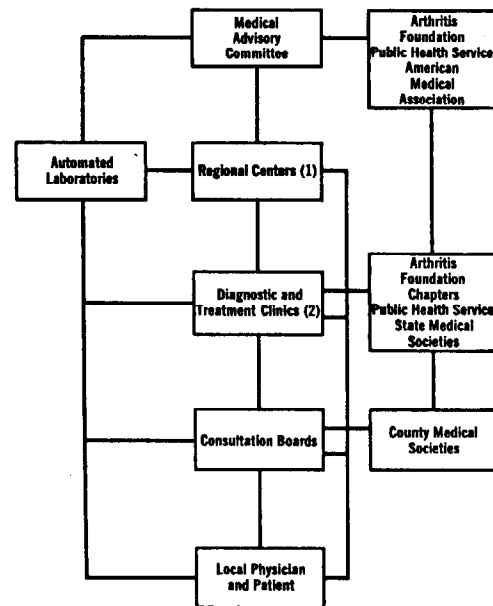
Fulfillment of these recommendations will provide the facilities that are required in the United States for widespread early diagnosis and treatment of arthritis. New construction is not required. The proposals include the sustained support and utilization of currently available, effective facil-

ities, which may be lost if funds are not made available immediately. These proposals give local physicians easy access to the practical application of information that has been gained in recent years in exemplary arthritis centers. They provide a mechanism for early diagnosis and treatment at grass roots levels, without interfering with the traditional, American doctor-patient relationship. Responsibility for high professional quality of diagnosis and treatment will rest with qualified physicians. Provisions are made for a national registry of arthritic patients, for standardization of laboratory criteria for diagnosis, and for expanded opportunities for cooperative assessment of new drugs and other therapeutic modalities. An approach to a study of methods in early casefinding is also suggested.

Implementation of these recommendations can be accomplished in phases over a period of several years. The first and immediate phase, however, is the provision of funds for maintenance of those qualified arthritis centers and clinics whose voluntary support may terminate on July 1, 1966. The speed of evolution of remaining proposals will depend on the availability of funds and trained personnel.

And it will differ in various parts of the country. Professional training can be ex-

APPENDIX TO WORKSHOP REPORT
Suggested Mechanism for Implementation of Proposals of Workshop on Diagnostic and Treatment Facilities for Arthritis.



(1) Suggested number: 9-12.

(2) Ultimate goal: 1 clinic per 100,000 people in radius of 30 miles or, approximately, 1500 clinics. (One clinic for every 5± accredited hospitals.) In higher population areas more than one clinic should be established in order to maintain the part-time status of these clinics. The number of clinics in relation to the Regional Center should depend on the volume of work done in the clinics and geographic factors and thus must be flexible in order to insure the highest possible quality.

pedited enormously within the framework of these proposals, which are designed for undergraduate and postgraduate education in the Regional Centers and for continuing education of the practicing physician in his own community, with his own patients. It is emphasized that many of the proposed services should be shared with those of other chronic diseases, whenever possible.

In summary, the Workshop on Diagnostic and Treatment Facilities recommends the creation and/or preservation and the financial support of the following facilities:

1. Regional Arthritis Centers
2. Diagnostic and Treatment Clinics
3. Roving Consultation Boards
4. Automated multitest laboratories
5. Information regarding locally available community facilities
6. An Arthritis Advisory Committee
7. An arthritis registry
8. Cooperative clinical trials of methods of treatment
9. Early casefinding

Financial support should come from voluntary and public health agencies.

These recommendations represent the consensus of the participants in the Workshop.

Discussion

DR. FREYBERG: This is a very comprehensive report. It is based on a lot of study by people who gave a lot of time on the panel.

I hope that what I am going to say will not be misunderstood. It is more of a reference to a historical event. I hope that the report that goes to the Surgeon General does not imply that the best place to get diagnosis and early treatment is in the exemplary clinics and centers that have been funded by The Arthritis Foundation.

To pay homage to some pioneers, who are, unfortunately, no longer with us, some very excellent centers existed before this time. I hope that the report will not simply single out the regional centers for support, but will include others, of comparable standards, some of which have been in existence and have continued to function with the same degree of excellence without such support. I think we ought to include these centers in our planning, too.

DR. ENGLEMAN: I am sorry. You are quite right, Dr. Freyberg. As a matter of fact, this point was, indeed, brought out in our historical discussions. I wasn't able to include everything in our verbal report.

DR. GLENN CLARK: I think that this

was a beautifully organized report and that many of the things are crucial to our handling of the problem of arthritis. But I would not like to see us go completely for a categorical approach to the disease, arthritis, before we seriously consider the benefits of developing our program on a broad chronic disease basis, with developing physiotherapy units, social service units, and all the other things that are needed in so many chronic diseases on a regional basis. I would like to see a combined effort, with no separating out of arthritis as a disease entity of its own.

DR. ENGLEMAN: I probably didn't emphasize this sufficiently, Dr. Clark. We agreed, in our discussions, that services should be shared, whenever possible, with those of other chronic diseases.

DR. CALKINS: This is certainly a very interesting report. I am sorry that I had to take a telephone call toward the latter part; perhaps you raised points that were applicable to what I am about to say.

As we consider this type of regional center, which is something that the Heart Disease, Cancer and Stroke people are proposing, although perhaps along a somewhat different pattern, a question comes up that is of great importance: How can we

best develop this approach, while still supporting the private physicians, family physicians, private consultants, and others, who, through the accepted pattern of American practice, perform exemplary care in their private offices and in the homes?

At a time when there are groups of extremely low-income patients, it obviously is not appropriate to consider only low-income patients in this type of framework. Yet, if we extend this program to cover middle- and upper-income patients, how can we develop it without basically and seriously weakening the present fabric of care?

DR. ENGLEMAN: Dr. Calkins, I think you probably did miss a critical portion of the presentation—a portion in which emphasis was placed on preserving the relationship between the local physician and his patient. This, as a matter of fact, has been a vital consideration in the plan that has been evolved by the American College of Surgeons, American Cancer Society, and their 1,000 Tumor Boards. They have had some 25 or 30 years experience with this kind of setup, and I know that, in their experience, the rapport between private patient and local physician

has not been disrupted.

On our panel, we have a gentleman who is here because of his experience and background in facilities for the diagnosis and treatment of cancer. I would like him to speak to this crucial point, on which he spent a great deal of time in our discussions. Dr. Robbins?

DR. ROBBINS: I am Dr. Robbins of the Memorial Center in New York. That point came up very clearly and, in short, if you will look at the chart over here (indicating Appendix to Workshop Report) you will see that the "Local Physician and Patient" box is the guts of the care of the patient.

If the patient is not satisfied with the local physician and wants to go to a diagnostic and treatment clinic, he has to follow the rules that have been laid down by the community. In some local communities, the Tumor Boards will not see a patient unless there is a referral. Frequently, our sector coordinator at the Tumor Board will get a call from a patient. If he has no doctor, the coordinator will ask: "To whom would you like us to send the report if you see us?" And the matter is handled that way.

If the patient has a doctor, the coordinator will say: "We shall get in touch with

your doctor, or you tell him to call us.”

If the consultants who work on the Tumor Board or in the diagnostic clinics are any good, or have any moxie at all, they will set up this sort of system. The people who fill the diagnostic clinics are specialized in their field. They may be from the regional centers or from their community; but they are picked to meet standards that are set up by a Surgical Advisory Committee. And they are practicing. Some have salaries. You can call us watch dogs, or friends, or whatever you want; but we, in our program, are very careful. And we have been relatively successful, in that we haven't allowed a bunch of thieves, who might clip the local physicians, to get into the diagnostic clinics.

This program is merchandised in such a way, and with such economy of facilities at the laboratory level, that patients pay their way. If patients are indigent, the local community takes care of their costs.

One more thing: State and county medical societies and health agencies act as another watch dog, to make sure that the thieves do not cause trouble.

DR. CALKINS: It seems to me that you may be developing a situation in which the family physician as a referral source,

is coming along well. The private consultant, however, is still the backbone of most medical centers at the present time. How is this system, with its supported, endowed, and automated laboratories, and all the rest of it, going to enable the private consultant to exist, except by a merchandised program, which he isn't going to want?

DR. ENGLEMAN: No, no, Evan. Let me answer that question, because I happen to be one of those consultants, myself; and I would never support a program like that.

I think you are talking about the level of the Consultation Board. It is stated in the report that no Consultation Board will exist in an area in which such consultation services are otherwise available. This is primarily for the rural districts and for those communities in which such services are not currently available. Furthermore, the Consultation Boards must have the approval of the local county medical society.

DR. ROBBINS: Now, if the local physician wants to send his patient to the Consultation Board, to a previously established consultant, to me, or, perhaps, to you, he can do it. As a matter of fact, he can use the automated multitest laboratory with-

out utilizing any of the other facilities of the Regional Arthritis Center. To be able to get these services, the local physician doesn't have to promise to send his patient to see anyone. This is a very flexible sort of thing; and, certainly, in our committee, none of us had any preconceived ideas about changing the practice of medicine in America.

DR. CALKINS: I am asking about a constructive way out, here. How are we going to do it to satisfy our physicians? We are not changing the basic philosophy.

DR. ROBBINS: We do it just as we are doing it now. This is one of the few cases of which I am aware in which a surgeon and his syndicate can come to the intellectuals of the medical profession and say, "Look, we have been doing this for 30 years."

DR. JOHNSON: I am Amos Johnson. I represent some twenty-eight or thirty thousand family physicians in the American Academy of General Practice. These physicians are immensely interested in this program at the community level. They are interested in it from the standpoint of their knowledge of the patient in his own perspective in the community and of their knowledge of him from the standpoint of

ecology and of other areas of interest.

I am really very impressed with the way you have this all worked out. I assume that there is no doubt in the minds of those who erected this chart that this is a workable condition. If I thought that that were so, however, I would be sitting down over here and not standing up talking now.

Today, I happened to be in Workshop 4, which was concerned with professional education. There was some question, in this group, as to whether or not we did, indeed, have the answers to the treatment of people who have the various arthritic manifestations of the disease process of joints. I have heard it expressed, here, that all you have to do is identify arthritis at a local level—that the arthritis panacea will be effected by so many institutions per one hundred thousand persons. Is 1,500 the figure?

DR. ENGLEMAN: Correct.

DR. JOHNSON: And all of this must be funded—check me if I am wrong—by public funds. I just get the impression that we have built up something, here, that is impractical. I think that when those of you who are referred to as specialists in this disease—the internists, the orthopedists, and the rheumatologists—to whom

all of these cases will be referred, finally see these patients, they will have been one, two, three, or four years in their disease process. And when the patient has the type of personality that does not motivate him to seek aid early in his disease process, those of us who have attempted to provide him with aid—and I am including not only the family physician, but the internist, the surgeon, and others in that area who do general practice—we will have told the patient that nothing can be done.

Your chart is really beautiful. I can read it from the bottom up, from the top down, and from inside out. But, to me, from where I sit in the actual treating of people, in the community of captive patients that I know well, this is not the practical approach. I may be the only one, but I would like to be recorded as taking exception to the idea that this is a program that can be handled by an outlay of public funds. Would you record me as being opposed to this concept.

DR. ENGLEMAN: Yes, sir.

DR. WEDGWOOD: I was wondering if I could make a comment from the pediatrician's point of view?

DR. ENGLEMAN: By all means.

DR. WEDGWOOD: Unfortunately, this

Workshop was scheduled concurrently with the national pediatric meetings, which somewhat precluded pediatric representation on some of the Workshop panels. I would like, however, to make some points about the child population of arthritics.

The number of children who have arthritis is a little difficult to determine. It probably runs between five and ten percent of the arthritic population. This sounds like a small figure, but from the point of view of man-years of potential disability, from the point of view of potential manpower lost, and, particularly, from the point of view of crippling diseases that occur and create their crippling in the early child-bearing years—that destroy families, as well as productivity—the pediatric age group represents a severe problem.

One could calculate that, from the point of view of possible man-years, the figure of disability would represent at least 25 to 35 percent of the potential disability for man-years lost for arthritis in all age groups.

Now, there are certain problems that are related to the child with arthritis that I believe need the types of attention that are, perhaps, best given by either the pediatrician or the family physician who has a

clear understanding of the interaction of a child and his family and who has some fundamental knowledge of the process of child development.

The impact of arthritis, when it starts at, let's say, the age of one year, or one-and-one-half years, is extraordinary; and the problems that the acute phases of the disease present are manifestly different than those problems that occur in the majority of adults. The projective problems of understanding the appropriate therapy for the child, not only as they apply to dose schedules, but also with respect to activity and the difficulties that are imposed on the child, who has to relate not only to family, but, eventually, to school, are very real.

I am delighted to see the report that Dr. Engleman presented. From my experience, this type of approach is necessary if we are going to be able to provide the type of health care, to a mass population, that is needed so badly. However, I think it would be appropriate to suggest that we not be parochial in our definition of the persons who are involved in providing this type of health care. And I would specifically suggest that we should not be denominational in assigning the title of a program

director, for example, to an internist. It seems to me that, in many communities and in many areas, this person might well be an entirely different subspecies group and quite appropriate, himself.

I believe that if we fix ourselves too firmly to defining, designing, and designating the specialty guidelines for the care of arthritic children, we may miss a flexibility that may be more appropriate in a few years. Quite specifically, I would suggest that the appropriate care of the arthritic, be he child or adult, requires a variety of personnel, all of whom have to work functionally, as a team. The team director may be a primary physician of any designation; and the person who follows the child or adult might be a physician of distinctly different designations in different areas. But it is the team approach that is important.

I think, then, that it is inappropriate to designate the pediatrician a consultant. He is part of the working team, and I hope that he will not be relegated to the sidelines as a consultant, but will be included more clearly. For certain patients, he is going to have to be the primary physician.

To return to my original statement, from the point of view of man-years of

productivity that are potentially lost, the pediatric group supplies perhaps one-quarter or even as much as one-third of the potential crippling disability that may occur from arthritis. I would, therefore, file a mild minority report, Dr. Engleman, concerning the designation. I think it is important that we not be parochial or denominational.

I would like to add one other thing: I believe that it is crucial to the provision of optimal health care, particularly on a mass basis, to be able to include the first contact physician within the team, if at all possible. And I hope that some means can be designed by which the local physician can have direct and continued contact, not only with the Diagnostic Clinics, but with the Regional Arthritis Centers. In this way, he will be included in their functions. In this way, too, the functional matter of the continuing education of the physician is best achieved.

DR. WILLIAM CLARK: Dr. Engleman, while I may or may not agree with what Ralph (Dr. Wedgwood) said so eloquently, I do hope that the statistics that are published in the final transcript are more in line with the actuality.

First of all, Dr. Wedgwood is probably

quoting from Dr. Edstrom's article, which states that five to seven percent of adult rheumatoid arthritis starts in childhood. I doubt if there are any other statistics that could negate what he said.

DR. WEDGWOOD: That doesn't mean, necessarily, that they are right.

DR. WILLIAM CLARK: Well, you provide correct statistics to the contrary.

I have mixed feelings about the report of this Workshop. First of all, I, as a participant in this conference, question whether we, as a group, should make such a structurally specific recommendation for the care of the arthritic to the Surgeon General. I think that those of us who have been involved in the development of centers and in the administration of center programs would say, with conviction, that, as neat and symmetrical as this plan is, it probably will not be a practical and feasible solution to the problem of preventing crippling arthritis in the foreseeable future. The reasons for that are obvious, apart from the cost, which would be in excess of \$30 million per year.

The point that Dr. Johnson raised is, we know, reality. We do not now have the personnel to properly man quality arthritis

centers in half the Nation's medical schools. We will not have the personnel in the next five years. If we do achieve that goal in five years, we will be accomplishing a great deal.

Now, let me give you a quick history of the center program. Dr. Freyberg is correct. Prior to World War II, there were about five or six arthritis centers that were responsible for establishing standards of treatment and for training young men—medical personnel—in the care of the arthritis patient and in the techniques of teaching and giving clinical service.

Following World War II, because of The Arthritis Foundation, particularly those chapters that encouraged interest in medical schools in their areas, the number of centers proliferated. Also, because of the fellowship program, provided first by the Arthritis and Rheumatism Foundation and, subsequently, by the National Institutes of Health (PHS), the number of young men who were available for such programs did increase. But, at this time, we do not have programs that could be considered of top quality in one-third of our medical schools.

Today, there is a dropoff in the availability of men. We are robbing Peter to pay Paul. For example, several years ago,

the National Institutes of Health had training grant programs in 47 medical schools. Since that time, the number has dropped to 43.

We have a serious situation that we must meet now. Having been through many workshops, I consider this sort of thing to be a form of therapy for our own frustrations. It looks good, but those who are actively involved in the development of such programs know that it is not attainable in the immediate future.

The weakness in this approach is that we are starting from the top and working down. It is based on the assumption that if you can have an administrative superstructure, you can coordinate services, personal skills, and knowledge, which, in fact, do not exist. But from a practical standpoint, it is traditional in American medicine that the motivation that increases the number of troops that must be coordinated begins from the bottom.

That might have been the essence of the message in the public education and information program. Regardless of the political implications that might have been brought out, or that must be running through at least a few people's minds, I do not think, as one who has had practical ex-

perience, that we can offer this structurally specific program as an immediate and practical solution to the prevention of crippling arthritis.

DR. ROBINSON: I have one question and one minor speech. First, how do you arrive at the number of from 9 to 12 Regional Arthritis Centers?

DR. ENGLEMAN: The number of regions was based on two or three considerations. One was the number of regions in The Arthritis Foundation, which is nine. There are also nine Federal regions. And the cancer groups are divided into 12 regions. So, we decided that the number should be somewhere between 9 and 12.

DR. ROBINSON: Well, I think that the statement that Dr. Clark made with respect to training programs, with full appreciation of training programs, does not mean that we necessarily have the personnel, manpower, and structure for an effective, comprehensive care program in each of those places. I think we already have more than 9 or 12 centers where, with proper support and development, exemplary standards of consultation and care for the arthritis patient can be developed.

I would like to state that our panel, which was concerned with voluntary and public

programs, considered this problem, as, I am sure, other panels did; and we felt that it would be much wiser to include into existing programs, rather than to develop a formalized structure, such as this. I hope to be able to present the reasons for this tomorrow morning, although the overwhelming conviction and the underlying reason for it can be stated now.

The problem of arthritis is not going to be solved by the Advisory Committee or by the various centers. The problem of arthritis is a community problem, and it is going to be solved by mobilizing community resources. I would agree with Dr. Clark that, from the point of view of our panel discussion, the place to start is down at the bottom, rather than up at the top. We must build up, not down.

DR. HILL: May I come up front? I can't sit still any longer. I'm Donald Hill, from Tucson, Arizona. I have been practicing in rheumatology and internal medicine for over 30 years. There are several points that I would like to make.

I have great respect for general practitioners. In trying to educate more doctors in arthritis—to understand it, to recognize it, and to know what to do about it—I have had occasion to talk with all kinds

of doctors. Of all of them, the members of the Academy of General Practice are full of interest, eager to learn. They are totally different from the general practitioners of fifty years ago. These young men are learning the different diseases. They are learning to identify them. If they are too busy to treat them, they are learning what to do about them, where to refer them. Already, this is taking place. It is very refreshing.

Dr. Clark is, I think, quite right. This chart is an example of beautiful diagramming; but it is upside down. This (indicating "Local Physician and Patient" box) belongs on top, if we are going to make progress; and we are making progress. I am amazed and pleased when I see the intelligence about arthritis, the keen interest, the enthusiasm, and the motivation in all of you people. We are making excellent progress in this disease.

I am not an old man, but I have been at this long enough to realize that you don't change things overnight. We are making good progress in arthritis, even though we have a lot of problems that are unsolved, a lot of people who are untreated, and lots of goals to accomplish. We have come a long way in recent years,

if you will just stop and think a minute.

Turn this chart upside down and start with the local physician, who is learning, now, about arthritis, and with the patient, who is learning more from public sources. Incidentally, I would like to add one thing, here, and that is that we doctors, these days, have to read *Newsweek*, *Time*, and the *Reader's Digest*, to be sure we keep up with our patients. I do this every noon, or most noons, when I drink my milkshake at the drugstore. I grab a magazine to be sure I have kept up. Too often, our patients are getting advised about new treatments in the lay papers before our doctors are advised; and this, I am sure, you are all aware of.

To return to the subject, the local physician is catching up; the general practitioner is learning; and the patient is certainly learning. And there are good centers available. We have a number of them. Dr. Robinson has a good one. There is a good one in New York, one in Boston, and one around Philadelphia. There are others in other places around the country, too, and local physicians are learning where these centers are and are referring patients there.

Actually, we already have many of the

institutions that are shown on the chart. And we have test laboratories to which we can send materials. But if the local physician had to send everything to his automated test laboratory, then wait three days, or a week, to get a report back, I am not sure that the procedure would be practical. There are simple tests; and, after all, I think that those of us who practice are not really convinced of the value to clinical practice of laboratory procedures, anyway. Some of them, of course, are good guides; and we all use them as aids. But I don't think that we are going to change things overnight.

I would go back to one thing that I have been insisting on in my time: that is that we concentrate on spreading more information—on trying to teach doctors to understand the problem before the patient understands it, if this is possible. We must also emphasize the importance of providing more paramedical services and of stimulating the comprehensive team approach.

Finally, Dr. Johnson spoke, a few minutes ago, about the patient who rightfully reveres his family doctor because he is a good doctor. Unfortunately, a family doctor is also a busy doctor. And, many times,

he has not had time to study arthritis before he sees the arthritic patient. All he has heard is that there is nothing he can do but prescribe aspirin. The patient, believing this, goes home and doesn't see another doctor for a year. This chart won't work until the local doctor realizes that there is something else that can be done for arthritis. It won't work until the local doctor either knows how to do it, himself, or knows where to go to get assistance.

I will end by making a plea for continued effort from each of us. Thank you very much, Dr. Engleman, for starting this stimulating discussion.

DR. SHULMAN: I think we all agree that some things have been accomplished. But I think it is much more fruitful to indicate that much needs to be done. And I am sure that we will be hearing from the other groups with respect to what the needs actually are.

I would ask Dr. Engleman the following brief questions: (1) Do you and your group think that what applies to cancer applies, also, to arthritis? Or do you think that there might be some differences between the approaches to the two sets of disorders? I wondered, in effect, whether or

not you have given thought to a further explanation of this, and whether you think that the figures, which have been elaborate, have been worked out to a sufficient degree; and (2) what thought have you and your group given to the question of timing? I ask because I think that this is what seems to be bothering so many of the people here. It is that the final plan has been arrived at, perhaps, with a little haste. I sincerely submit this to you.

DR. JOHNSON: One last word, Dr. Engleman: I want to thank Dr. Hill for expressing, in such fine phraseology, the thoughts that I did not, perhaps, bring out in my earlier discussion. I want to emphasize one point, one aspect of this total question, that I think is of the essence. I will do it by asking a question.

Is there anyone among us who, at this time, would like to stand up and tell us what the treatment of arthritis is? If there is, I stand willing to listen. And if you don't have an answer, does anyone choose to give a learned discussion on this topic? I would love to hear it.

If we don't have the answer to the question, then we had better be careful about using certain areas of available patient-physician interrelationships for learning

more about the disease, before we assume the posture, nationally, of saying that we have a plan that will remedy all that besets everyone.

Now, in all sincerity, if there is one person here who is satisfied, in his own mind, about the complete diagnosis and the complete treatment of the various forms of joint manifestations that beset mankind, I am willing to listen to him. I stand available.

DR. STILLMAN: Mr. Chairman, I would like to answer that loaded question, not because I think I know all the answers to the treatment of the rheumatic diseases, because I have learned a lot of questions in 30 years and not too many answers. However, it can be said unequivocally, that there are certain rheumatic diseases that can be cured, such as infectious arthritis. Now, this is cured when you suspect the diagnosis, when you do a joint tap, culture the fluid, and apply the appropriate antibiotic to the patient. Unfortunately, this is not done too frequently, and great destruction of the joint results.

There is a disease, gout, that can be treated very successfully in a variety of different ways. There are other diseases, such as osteoarthritis and rheumatoid

arthritis, that cannot be cured. And they are not being controlled in a way that is satisfying to any of us. But, certainly, we can stem the development of these crippling diseases when we treat with all of the skills that are available to us today. And I hope that the education program will make these skills available to everyone.

DR. ROBBINS: In cancer—and it is different—we have been using the facilities that are available, including all of these on the chart, and we have come a long way in 30 years, just as you have. I was in this Workshop group; and I can't remember that we advocated any kind of a final word that was to go down as law. We were given a job to do; and how we ever stood all of this, I don't know.

But we did come up with some suggestions to tear apart. And for Heaven's sake, I don't think that anyone on the committee would say that this is a final thing at all.

There are two ways to build a house. You can build it with a big foundation, like this one down here (indicating "Local Physician and Patient" box). You can also turn it upside down. Now, we considered the physician and the patient to be the foundation; and we sort of like our foundation on the bottom.

DR. ENGLEMAN: Dr. Shulman, the current inadequacy of community facilities for early diagnosis and treatment of arthritis is reminiscent of the situation in cancer 20 years ago. Since then, the cancer people have come a long way. We should profit by their experience.

I simply want to say, again, that we were charged with the responsibility of coming up with some suggestions about how we might eventually improve, through development of facilities, early diagnosis and early treatment. We were given eight hours for discussion; this is what we came up with.

Certainly, this was not intended to be the last word; nor was it intended, Dr. Shulman, that all of this would go into effect tomorrow, next year, or even in the next two or three years. This is a long-term, projected consideration which should be implemented in phases over a period of several years. However, we *did* emphasize that the first and immediate phase is the provision of funds for maintenance of those qualified centers whose voluntary support may terminate on July 1, 1966. The speed of evolution of the other proposals will of course depend on the availability of trained personnel; but it is

noted that professional training will be expedited within the framework of these proposals.

I think that, if nothing else, we have provoked discussion.

We are grateful to you for it.

Long-Term Control and Management

Chairman: Currier McEwen, M.D.

The long-term management of the patient with arthritis is a natural extension of a program that begins during the acute and subacute phases of these diseases. It must be considered in relation to the overall problem of the management of chronic diseases.

Nevertheless, there are special features that are particularly important and pertinent to it. In the following statement, these features will be emphasized; areas that require further study will be noted, and recommendations will be made.

I. OBJECTIVES

The objectives of long-term care are:

a. to prevent recurrences of attacks of

those diseases, such as rheumatic fever and gout, where this is possible.

- b. to prevent disability.
- c. to restore function in patients who are already handicapped.
- d. to maintain function that has been gained.

The prevention and correction of disability must encompass not only the function of joints, but also the patient's total physical and psychological status, capacity, and well-being.

II. RESOURCES

The resources that are required include skilled personnel, facilities, and programs of care.

A. Personnel:

The patient's personal physician is the key figure, since he is the one who has primary responsibility for the patient; he is the first to see him. In addition, various personnel with special skills are essential. Required on an intensive basis are rheumatologists, psychiatrists, orthopedic surgeons, physical therapists, occupational therapists, hospital and public health nurses, social workers, and vocational counselors. For op-

timal benefit, these skilled personnel must function not merely as individuals, but as a coordinated team. In addition, supporting skills, such as those of pediatricians, dermatologists, ophthalmologists, urologists, dentists, psychologists, radiologists, dietitians, podiatrists, laboratory personnel, and others must be readily available.

B. Facilities:

These include general hospital beds, long-term care and rehabilitation facilities, facilities for the supervision of the ambulatory patient, and the patient's own home.

1. Whereas the acutely and subacutely ill arthritic patient often needs the facilities of a general hospital, the latter are neither necessary nor most advantageous for long-term management. Nevertheless, general hospital care must be readily available to the chronic arthritic patient, who may suffer a severe exacerbation of his disease, or who may require an orthopedic operation or other major diagnostic or therapeutic measure.

2. The facility that is particularly needed in the arthritis program is the intermediate care facility. These are necessary for the patient who no longer requires the complex and expensive facilities of the general hospital, but who still needs a more intensive program of therapeutic exercises and other measures that can be carried out at home. There is need for exploration of the optimal roles of the chronic disease hospital, the rehabilitation center, the "midway house" type of facility, and the nursing home in this program.
3. The ultimate aim of the treatment of the arthritic patient, at all stages of his disease, is to enable him to engage in productive activity in his home and in the community. The chronic nature of arthritis requires, however, that a program of supervision and care be continued for years after the patient returns home. Two types of supervision are required: a. home care programs, for the pa-

tient who is still homebound; and b. outpatient care, for the patient who can leave the home. The principles of both types of supervision are the same, whether they are provided on a private basis or through properly organized clinics. In either instance, it is essential that all the necessary skills be available. Also essential to ambulatory care is suitable transportation between home and place of care.

4. For the patient who does not have a suitable home of his own, boarding and foster homes and nursing homes and homes for the aged may serve as a substitute. There is need for exploration of the roles of these facilities and of means of developing constructive programs for arthritic patients in them.
5. Although not specifically a facility for long-term management, mention should also be made of the need for units to which the family physician can refer his arthritic patient for intensive evaluation and treat-

ment by the full team of skilled personnel that was referred to above. Such units can be developed in the general hospital, rehabilitation center, or in the midway house type of facility.

C. Programs of Management:

1. Utilization of professional personnel

Proper management of patients with long-term illness depends primarily on persons who have professional knowledge, technical skills, and a commitment to the provision of optimal patient care and to the development and dissemination of knowledge. The physician is charged with the key role in management. All plans for care center on the patient and are the general responsibility of the physician, who must work with other professional persons.

Organization of personnel from the many disciplines that are needed to give the broad spectrum of patient care that chronic disease requires will vary from one region to another and from urban to rural localities. Groups of physicians and

representatives of other health professions should join together in such a way that they can provide care within the home, nursing home, midway and rehabilitation facilities, clinics, and acute general hospitals for patients who are acutely and chronically ill. In this way, they can provide the essential continuity of patient management that is so essential in arthritis.

Such a group should be based in a general hospital, and the concept of the general hospital should be expanded to include facilities and services for all levels of care, either within itself or through affiliated units. The members of the team should go into local communities for workshops, demonstrations, and consultation, and physicians and other health workers from those communities should participate in patient care and educational programs in the centers. The physician with the primary responsibility for the patient might be a member of the group or might use the group for consultation and special therapy. Good function of any pattern

of care depends on the understanding by physicians, patients, their families, and the community of the advantages that are offered by the particular organization that is rendering service. It is evident that the patient's physician is a most important member of the team and should be involved at every stage in the planning and management of the patient's care.

2. Education of Professional Personnel

Meeting the needs of patients with arthritis begins with the education of those who will provide the care and manage the patient in his illness. Professional people who can meet the ever-increasing demands for patient care, education, and research in all health professions are in extremely short supply. Their education must be supported in colleges and professional schools if needs are to be met and if the future of health services is to be assured.

Education of people in health professions includes: (1) The general preparation that is needed to

understand the needs of patients and the settings in which they live; (2) the acquisition of knowledge in the particular field of specialization; (3) practice in the techniques that are essential in the specialty; and (4) the development of capacities to work with others to produce effective teams that will give care, teach others, and explore new areas.

Experience and education in collaborative efforts in health care and research have been inadequately developed. They are applicable in principle to all aspects of health, but are of singular importance in the care of people with long-term illnesses. Programs of education and training with broad financial support and active recruitment programs, should be designed to meet both current needs and those of the future. They should prepare people to adapt to changing social demands and emerging medical knowledge.

3. Community Planning and Design

The complexities of the disabilities that result from arthritis demand extensive community planning if resources are to be used most

effectively. Health care has evolved from the status of a privilege to a right. This change requires the development of a sense of community trusteeship on the part of physicians, other health personnel, community leaders, and the agencies that are concerned with the provision of patient care. Only through planning can the sick person be assured continuity of care, from the most highly specialized technical and intensive levels to the home.

Community planning, in the broad sense, should include provision of facilities for all types of care, the development of appliances and equipment, the training of the patient and his family to use them, and the means of bringing the patient, personnel, and facilities together most effectively. Furthermore, greater attention should be given to architectural design in community planning and building, so that disabled citizens may enjoy social and cultural advantages that are available to the well.

Before planning for facilities and resources for patient care, it is most

important to determine resources that are already available in the community and to make them known to those who will use them. Additional resources will then be developed in an orderly and economical fashion to supplement those that are available. Programs that are established should include means of evaluating their strengths and limitations, so that they can be modified and improved on the basis of experience. The results should be published. Educators and social scientists can be of great assistance in developing means of evaluation.

4. Financing of Care

Although the financing of care is not the specific assignment of this committee, methods of financing have profound implications for any program. This is of particular importance in chronic, disabling diseases, such as the arthritides, in which family resources are usually insufficient to meet the costs of long-term care. Planning and financing are most important at the local level. Private, voluntary agencies, as well as public agencies, are in-

involved; and the planning and financing of facilities and resources of care should also include regional and federal participation.

III. RECOMMENDATIONS

1. Because the most serious obstacle to the provision of optimal long-term management of arthritis is the lack of sufficient numbers of personnel in the essential health professions, there is urgent need for support of education in these fields, coupled with intensive recruitment efforts. This should include direct support of education in medicine, physical and occupational therapy, nursing, social work, and other special skills. In addition, there is need for the development and support of special programs of postgraduate instruction of these personnel in the application of their skills to the patient with arthritis.
2. Studies are needed of the numbers and types of arthritic patients that require long-term care in rural, as well as urban, communities and of where and how they now receive care. Such studies should be made in the context of the total health

needs and the social, economic, educational, and health resources of the community.

3. Studies are needed of various programs of coordinated health services for providing long-term care for arthritic patients. Support should be given for research and demonstration projects of this type. Such projects should be undertaken on both local and regional bases.

There is particular need for exploration of various types of facilities and programs for providing optimal, long-term care at low cost. The role of voluntary health agencies and of volunteers should be included in such studies.

4. An important need in the long-term management of arthritis is that of educating physicians in the value of psychiatric and orthopedic measures.
5. The optimal care of chronic arthritic patients requires the combined skills of the various essential health professions, on a team basis. The patient's family physician, the patient himself, and his family are essential members of this team. Studies should be made of ways in

which the team can best cooperate in improving the total care of the patient and of factors that militate against effective functioning of the team.

6. In planning for improved means of providing long-term management of arthritis, consideration should be given to the desirability of combining such programs with those that are designed to combat other chronic diseases. In rural areas, such combined efforts may be more effective and feasible than attacking diseases separately. They may, therefore, enhance the management of the arthritic patient without unduly increasing the economic burden on the small community.
7. There is a need for rheumatologists, orthopedists, and physiatrists to work together, through interdisciplinary study, to define means of evaluating various measures of care of arthritic patients, as outlined in the recommendations of the Conference on Surgical Criteria and Rheumatoid Arthritis, which was held in December 1963, under the joint auspices of the National Institute

of Arthritis and Metabolic Diseases, the American Rheumatism Association, and The Arthritis Foundation.

8. Studies should be made to determine which members of the professional team can most efficiently provide the various types of patient care that are needed in diverse stages of disability and improvement. For example, an evaluation should be made of the current use and effectiveness of therapeutic exercises, as supervised by personnel with various degrees of training, such as physical therapists, physical therapist aides, visiting nurses, and the patient's relatives. Such studies will not only permit the most effective use of skills that are in short supply, but they will provide yardsticks for determining staffing needs for various types of facilities.
9. There is a need for programs that are designed to enable the disabled arthritic patient to lead the most productive and meaningful life possible. Among these programs, for example, should be ones that will enable patients to be gainfully em-

ployed in their homes, in sheltered workshops, and in competitive situations. Recreational and social opportunities should be developed in conjunction with those that are needed for other members of the community. In addition to developing such programs, there is a need for continuing studies of better means of achieving these aims.

Discussion

DR. JOHNSON: I have been practicing as a personal physician for 31 years, and the thing that is important to me is that I know that the man of first contact is the one who sees the patient when he has the little joint involvement, the first episode. I know that when the patient gets around to going to the clinic and seeing the person who is specifically concerned with the joint diseases, he is already far along the course toward disability; and I think it is of immense importance that those of us who see all of these patients every day for their minor illness—be it seborrheic dermatitis of the scalp, the plantar wart of the foot, or anything that intervenes between—that we look for these things and begin to do something about them. I wish to emphasize that.

DR. CALKINS: I feel this has been a very well brought out and balanced presentation, and I would like to give it my fullest endorsement.

DR. MASI: Your third recommendation, which I would like to compliment you on, was very pertinent. It had to do with demonstration. I think this is something we should try to emphasize.

Any program that we recommend at this time is only something we can conceive of in our present understanding of the problem. As time goes on, we will understand better. I think that we should have an open mind and be constantly trying to demonstrate new and better ways of doing what we are doing, or evaluating how we are doing it, and of comparing one method with another.

DR. MCDONALD: I would like to contribute one thought with regard to general practitioners: They are our hope for prevention, inasmuch as they are the first to see the patients. We have stressed, in all of these deliberations, the importance of early identification, early diagnosis, and early care in the prevention of later disability. We must continue to stress that general practitioners are in the front lines; they give us the greatest core for prevention.

Professional Education

Chairman: Howard F. Polley, M.D.

Our Workshop was concerned with professional education. We had a very competent group of participants and a very good discussion. I am pleased to be able to report it to you.

Arthritis and related rheumatic diseases are a domestic problem with a high degree of public health significance. The possibilities of their prevention, or, at least, the prevention of disability that is related thereto, warrant intensive consideration. Because of this, better educational efforts that are referable to arthritis are regarded as a current major obligation of our society. These efforts should be directed towards medical, as well as associated professional, personnel and, also, to the public.

Our Workshop first considered the subject of professional education, from the viewpoint of available resources and of apparent deficiencies.

Some of the *currently available educational resources* are;

(a) Training centers, which are supported by the Public Health Service,

through the National Institutes of Health. (I understand that there are 43 of these.) To date, they have been supported for research training. Although they do provide some patient care, they have not been established to provide *training* for patient care.

(b) Existing clinical study centers, of which there are seven, and special treatment centers, of which there are 18, are presently supported by The Arthritis Foundation.

An indeterminate, but small, number of centers, perhaps 10 to 15, are supported by other agencies.

(c) Assorted graduate educational programs for both medical and associated professional personnel.

(d) Currently existing training in the field of rheumatology in medical school curricula.

(e) Existing schools for education of associated professional personnel, including physical therapists, occupational therapists, nurses, nutritionists, social workers, and scientists in other fields.

Deficiencies that were noted were:

(a) An insufficient number of arthritis study or treatment centers to cope with the magnitude of the public health arthritis

problem, and the limitations of the clinical teaching or educational aspects of the function of these centers.

(b) Insufficient comprehensive care programs, which could serve as models of educational training of medical students, graduate physicians, and of other professional personnel. (We do not know of any medical center that provides the full spectrum of optimal comprehensive care, from prevention, on the one hand, to care of the chronically-disabled patient, on the other).

(c) The wide variability of instruction in rheumatology that now exists in various medical school curricula.

(d) The orientation of medical undergraduate educational experiences toward acute illness. (The recognition that such episodes often are but phases of chronic illness is overlooked or neglected in training programs.)

(e) Limitations in the availability of, and in the selection of, attendants at post-graduate courses.

(f) The quite limited or nonexistent training in rheumatic diseases in the curricula of schools for associated professional personnel and in the post-graduate education that is offered to these personnel.

(g) A desperate shortage of physical

therapists and a scarcity of other associated professional personnel who are needed for optimal care and education for arthritis.

(h) Deficiencies in support of faculty who are interested in teaching clinical care.

(i) The lack of reliable information on, (1) what to teach; (2) how to prevent disability; (3) what particular disabilities of arthritis are preventable; (4) the role of various preventive measures; and (5) psychological aspects of physical disability.

Other deficiencies could be listed since deficiencies were obvious and critical in all areas of our deliberations.

The recognition of resources quickly pointed up deficiencies, and discussion of one was usually intertwined with the other. Our Workshop was of the opinion that *education in arthritis requires broad concepts of the diseases that are included in this category and the avoidance of excessive sophistication and fragmentation*. The objectives are the best care for all patients who are properly motivated to receive it and the prevention of disability.

The necessary balance between research and clinical orientations seems, now, to be lacking, because of the emphasis on research in the post-World War II era. This research emphasis has obviously been pro-

ductive. Now, a similar resurgence of training in clinical skills is needed to reach a balance between the two.

Improved clinical skills would improve clinical research and bring both teacher and student closer to the patient. This is important because an adequate educational program should be centered around the patient. And it requires a teacher who is able to provide exemplary care. Clinical skills are not easily acquired, and their adequacy may be even harder to measure; but they do need to be used continually to be most effective.

In teaching, individualized contact is probably most effective. But it is woefully inadequate to meet current public health requirements. The essence, in any effective medical teaching program, includes good communications, teaching by example, the ability to inspire a student to strive to meet his best potential, and adequate time for contact with patients.

Student interest is signally influenced by the quality and excellence of a faculty that can be readily recognized for its outstanding care of patients and for the opportunity it provides to the student to practice what he has learned under quality supervision. There is no recognized substitute

for training by example and for the care of patients.

The establishment of a family practice section or academic chair that would teach care of patients at all socioeconomic levels was suggested as a means of providing future family physicians with the skills that are useful for improved care of arthritic patients. As has already been stated, it is the family physician, in general practice, who is often the most deficient in this area. But it is also the family physician who has the earliest contact with arthritic patients and, thus, the earliest opportunity to apply preventive measures against disability.

Postgraduate education is considered to be an integral part of an effective educational program. It is most effective when it is produced in a teaching center, when the attendees have the opportunity to participate actively in its planning. Existing courses need to be strengthened and new courses offered. The effectiveness of postgraduate courses is dependent upon the upgrading of clinical skills and levels of patient care. Support of local chapters of The Arthritis Foundation was also recognized as a stimulating influence.

Postgraduate education has been offered

to the professions and to the public in various forms. These have included lecture courses, printed literature, films, teaching machines and other types of programmed instruction, and teaching visits to local community hospitals by specialists. Physicians express strong preference for workshops and seminars, rather than for lectures. Associated personnel prefer short-term lecture-type courses, although they also have a need for long-term training programs with rheumatologic orientation. All agree that postgraduate education, in any form, should be self-sustaining, through tuition or other support.

Associated professional personnel are considered to be an integral and essential part of an ideal team approach to both educational programs and to patient care in prevention of disability. Associated professional personnel are especially helpful in patient and public education, because of their close and repeated contacts with patients.

There is a great need for expanded educational efforts and for financial support to overcome serious shortages of all associated professional personnel. Physical therapy, especially, needs wider support than it has received to overcome critical

shortages and to develop teachers in the field.

Comprehensive care has three recognized levels, including depth or expertness, scope or breadth, and duration or continuity. None have received adequate emphasis. Some of the best comprehensive care is given in arthritis clinics. In general, however, it is very limited. It is a neglected area because of the lack of people to teach it. A stimulating teacher could make comprehensive care attractive to students by teaching the rewards to be derived from rehabilitation of arthritic patients. This would avoid the fragmentation that comes from teaching by separate specialists from various fields.

Center-type programs stimulate more interest and attract more people to the care of the arthritic. They also appear to be the ideal arrangement for improvement in both management and educational training, at all levels of teaching and in all aspects of the long-term care of chronic disease.

Such programs also need to incorporate the functions of all associated professional personnel. The teaching aspects would be strengthened by more emphasis on clinicians and by investigations of, and teach-

ing that is related to, patient care, training, and research, rather than emphasis on service functions.

Comprehensive care in center-type programs readily offers the advantages of a continuing postgraduate education program and consultative guidance for physicians in regions that are adjacent to the center. However, medical schools do not have the financial resources for the establishment of such centers at this time.

Research that is related to all aspects of disability in arthritis is an integral part of the program of education. Vast areas of scientific ignorance currently exist in diagnosis, treatment, and rehabilitation. Evaluation of therapy seems to have ignored important factors such as socioeconomic stratification, geography, sex, age, how to get patients motivated for early therapy, and the exploration of the relevance of psychological aspects of disability. Evaluation is needed on a long-term basis, with a free association of all philosophies and skills, preferably in a center-type setting. This may require that some beds be made available for long-term studies. It is preferable that evaluation be conducted as collaborative or cooperative studies.

Large-scale public health surveys to find

patients who may not be seeking medical care are also needed. They would be most helpful in the overall evaluation studies.

Better teaching for the 8,000 annual graduates from medical schools would significantly and, probably, quickly improve medical efforts against arthritis. But the question of how best to accomplish this teaching requires data of a sort that is not now available.

Our recommendations emphasize educational, rather than service, functions.

We recommend that current training programs in rheumatic diseases be broadened, within the framework of the Public Health Service, to include support of faculty to train both professional and associated professional personnel at the undergraduate and graduate levels, not only for academic positions, but also for treatment and clinical research of arthritis. This recommendation favors support for those persons whose graduate training has not already been completed.

We recommend comprehensive care centers, multicategorically oriented, that focus on arthritis as a prototype of chronic disease and serve as educational facilities in which physicians work in concert with well-trained associated profes-

sional personnel and provide graduate education for all fields. Such centers should be part of existing teaching centers. They should make studies of management techniques and teach by conducting exemplary patient care. All teaching centers that are presently in existence and those whose development is proposed in the foreseeable future will need to be included, if there is any expectation of coping with the magnitude of the problem of arthritis in the expanding American population.

We recommend that the Division of Chronic Diseases, Public Health Service, develop plans to help medical schools in their formative stages to plan facilities and curricula that are based on the foreseeable future needs of the public health approach to the major medical problems of chronic disease and to the prevention of disability. The Service should incorporate multidiscipline participation in the study of all stages of disease and plan for long-term teaching experiences in both outpatient and inpatient needs. Arthritis represents an ideal example of such a forward-looking need.

We recommend that increased emphasis be placed on training programs for associated professional personnel and on re-

education, when needed, for previously trained personnel who are ready to reenter employment.

We recommend the undertaking of large-scale, cooperative studies among arthritis training and study units, involving all or most teaching centers in the United States. This would constitute a major contribution to the development of more successful programs for care of patients with arthritis.

Finally, we recommend that adequate financial support be provided for the above. Allocation of special project funds for arthritis is one method of achieving such support. In any event, Federal financial support, where needed, is in the public interest, because it will significantly contribute to the solution of a public health problem about which the public, as well as the professions, have become more aroused.

In conclusion, on behalf of my associates in this Workshop, I wish to thank the Surgeon General and Dr. McDonald and his staff for the opportunity to participate in what clearly is an exciting public health development of great importance to us all. Thank you.

Discussion

DR. MANNING: First of all, I would like to congratulate Dr. Polley for a very spectacular summary of what went on. I would also like to emphasize the point that no one, I think, would like to establish a center that would isolate arthritis from the rest of medicine. I think that this is always a danger and that we must remember that arthritis doesn't exist in a vacuum. We must keep it with the rest of medicine.

I have heard centers mentioned several times. I trust and hope that the integrative processes will be utilized to the fullest, so that arthritis will not be isolated.

DR. GLENN CLARK: I hate to pick on just one phrase of such a magnificent report, but in each of the conferences I have heard the statement that properly motivated patients should get good treatment. It is a practical point, I guess, to evaluate a patient's motivation before doing extensive orthopedic surgery. But I would like to express what may be a minority opinion: If treatment is restricted to patients who have good motivation, this merely provides an "easy out" for not taking care of the more difficult, less motivated patients. I feel that we have a responsibility to teach the medical student

not to look for some flaw in the patient's motivation. I feel, also, that we have to take care of all arthritics and that we have no right to sit in judgment of a patient's motivation. If they aren't well motivated, it may be because of their disease, because of their economic environment, because of the warmth of our clinic atmosphere, or because of many other things. I think we have the job of motivating them, as well as of getting them well.

DR. CALKINS: This was a wonderful report, Howard, and I am sure it will be carefully studied by all of us.

We have heard a wonderfully strong statement pertaining to the need for education in the rheumatic disease field, perhaps in unfortunate sequence. We heard about facilities from Dr. Engleman and his group before we heard about education from Dr. Polley's committee. I would hope we could perhaps reconsider these reports before we go on to the next area of discussion.

Let's think, first, of the centers with which we are all familiar. Dr. Polley emphasized small group instruction in preceptorial fashion. He emphasized a close relationship between the personal physician and those with a little deeper experience

in the broader range of techniques and available approaches. We should consider making well-supported clinical traineeships available to personal physicians who might come to graduate medical centers for a three-month or a six-month period to work with the specialists in the various clinics. These physicians would work in rehabilitation, in physical medicine, and in the laboratory and learn some of the things that can be done. We might consider establishing, on a national basis, the sort of program that has been going on for a number of years in New England. I am sure that there are a number of other areas in which this type of graduate traineeship for practicing physicians is receiving support. Through this approach, we might take the initial step in improving communication and in getting the motivation of physicians more clearly defined.

Then, perhaps, there should be support for something that might be termed "community education plus consultation clinics," in which teams of specialists would go to communities and conduct exemplary clinics, on the spot, in various hospitals. The physicians could come with their patients so that the educational program would be reinforced in the community set-

ting. These principles, and analogous ones, might also be utilized for associated professional personnel, at least on a trial basis. This approach might avert some of the hazards that all of us fear when we think of the grand scale, single disciplinary center.

DR. POLLEY: The regional medical center, however it's described, is certainly most likely to be located in a teaching center and have facilities that are available at both undergraduate and graduate levels for communication and teaching between physicians in the adjacent areas and the comprehensive care center.

DR. HILL: I would like to second this very emphatically. I congratulate you, Dr. Polley, on your presentation.

DR. ROBBINS: I don't know how many family physicians or surgeons or anybody else can get away for three months. We have had quite an educational program along these lines in cancer, and to try to do something for more than a month, we found, is quite impractical.

DR. WILLIAM CLARK: First of all, I want to add my word of compliment to you and your group for what I think is an outstanding report. I think it's something we will want to read and weigh carefully,

because, obviously, each comment represented a great deal of thought. I also want to compliment Dr. Robbins on his comments.

Also, it would seem to me that any differences between the recommendations of your panel and Dr. Engleman's panel may be due, entirely, to semantics. First of all, the definition of a center does not require a rigidly structured physical or personnel organization table. It is, rather, an island, or focal point, of concentrated interest, and, as such, will always be the leading edge of progress against any disease. Dr. Polley appropriately and carefully used the word "prototype." If we can solve the problems of the disease, as well as of the *approach* to the disease, there will be similar emphasis in other areas.

Secondly, the idea of a regional medical center sometimes frightens people because "regional" often seems to suggest a number of quite different things: Federal research regions, judicial regions, and Army or military regions, for example. What we want is to relate these programs to population concentration. It is a fact that medical schools also relate to population concentrations. We are really talking about a region or an area around those

concentrations that will make these facilities available and accessible to the largest possible number of victims of arthritis and to the physicians who care for them.

Finally I think that Dr. Engleman's group should give some consideration to deemphasizing the concept of a commission. I question, very much, if we need another organizational structure at the top to bring this about. I think that the function of such a structure can be brought about by an assumption of responsibility, on a broad base, by individuals who work in the communities and in the medical schools. Thus, the two reports can be reconciled, and I think that we would all agree that a strong recommendation should come out of it for the support of this kind of program.

DR. GLENN CLARK: I was a critic of Dr. Engleman's report, as I listened to it, but the more I look at it, the more I think it is a good idea. It is what we need now, and I don't think Dr. Engleman's report, other than the few disturbing words that have been mentioned, does anything but exhibit the feeling of our group—that we need to incorporate what we already have into an expanded and well-supported program.

DR. COLLEN: I would like to strike while the iron is hot. Dr. Polley's report was excellent; the similarities between it and Dr. Engleman's report are really, now, quite apparent to all of us. There is no question that everyone at this conference came for the purpose of improving the care of the arthritis patient. We have, perhaps, approached this important objective from different viewpoints and, perhaps, used different words. Some people are more visually-minded than others, while others, perhaps, prefer to express things in less rigid manners. But let us not jeopardize our objectives by semantics and symbols and so forth.

To summarize, we are all interested in the care of the patient; and we recognize that the physician who takes care of the patient is the key figure in getting the care to the patient. Furthermore, we are agreed that the assistance he needs should come from the established areas that are close to him. Local centers, or local hospitals, in turn, need assistance from a regional area. Some persons place a dreadful connotation on regional medical centers. But they are, in fact, in existence; and we all work with them. Nowhere in his report did Dr. Engleman recommend the establishment of,

construction of, or expenditures of monies for new facilities. He very carefully spoke of utilizing existing centers to develop additional support for the assistance of physicians in giving care to their patients.

We wanted to assist the progress that is being made in this difficult field by trying to standardize terminology. For this reason, we recommended registries that would gather information together and, in so doing, utilize recent advances in automation for the benefit of physician and patient, alike.

Dr. Polley's presentation helps to support Dr. Engleman's report; they are, indeed, very similar. It would be unfortunate if positive recommendations were lost or discarded because the chosen symbols and signs were improperly understood.

DR. BRINKLEY: The Vocational Rehabilitation Administration has teaching grants and traineeships in physical therapy and occupational therapy and in most of the paramedical fields. One of the problems we find among college students and high school students is a lack of sufficient interest in going into these fields. I feel that our recommendations should include programs to encourage students to go into these fields for their careers.

DR. POLLEY: We did discuss that, too.

DR. TRAEGER: I just want to emphasize one point that you made, Howard, and that is that the distance from the laboratory to the bedside is increasing.

DR. POLLEY: Thank you.

DR. CAUGHEY: I am very much interested in the fact that there has been so much emphasis placed on the importance of the personal or family physician in the management of the arthritic patient to prevent disabilities; but I hope that this group recognizes that, unless something is done about the education of our physicians, we are talking about a disappearing group. Furthermore, most of us are helping the disappearance by the way we plan the educational program. You all know the statistics; there are steadily declining numbers of people who are fulfilling this role in the care of patients.

I hope that this conference will put appropriate emphasis on the fact that, today, most medical schools do not have the resources or the personnel to set up excellent models of comprehensive patient care—units in which the students and house staff have a chance to observe and to participate in excellent comprehensive care. Furthermore, as far as I know, none