The availability of primary health care services is an growing concern of New York's rural citizens. Many rural country doctors are approaching retirement age, while most graduating physicians choose high tech specialties rather than primary care. In November 1989, a statewide conference examined the role of New York State medical schools in addressing the shortage of physicians in rural areas. This proceedings presents the perspectives of state legislators, medical educators, rural physicians, and the New York State Commission on Graduate Medical Education, including recommendations on physician reimbursement, practice site development, and physician training. Five model programs or strategies for training and recruiting rural physicians were described: (1) the remote campus at Binghamton; (2) selective medical school admissions policies favoring rural residents; (3) the extended rural preceptorship to give medical students experience at rural training sites; (4) state government initiatives in Texas; and (5) Michigan State University's comprehensive program in the upper peninsula. Three workshop reports focus on medical school curriculum, selective admissions, and physician recruitment and retention, with recommendations about a comprehensive approach to increasing the availability of rural primary care physicians. This proceedings contains maps and charts covering availability of primary care and rural-urban differences. Appendices contain background reading materials, symposium participants, rural-urban classification of New York counties, and a summary of relevant New York state legislation. (SV)
Training Physicians for Rural Health Careers in New York State
State of New York  
Legislative Commission on Rural Resources  
September 1990

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A Rural Resources
Special Focus Report:
Training Physicians for Rural Health Careers in New York State

Proceedings of a symposium held November 9 and 10, 1989
Buffalo, New York

Sponsored by: NYS Legislative Commission on Rural Resources and SUNY at Buffalo, Department of Family Medicine

Conference Chairman: Senator Charles D. Cook
Editor: Thomas C. Rosenthal, M.D. Clinical Associate Professor, SUNY at Buffalo
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The Legislative Commission on Rural Resources wishes to thank all of the conference participants and rural health care patients and physicians who so kindly consented to use of their photos in this report.

Cover inset: Lawrence Dwon

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To the Readers of this Special Focus Report:

The availability and accessibility of primary care services is becoming one of the greatest concerns of New York's three million rural citizens. Many of our rural country doctors are approaching retirement age. However, physicians just graduating from medical schools are increasingly choosing high-tech specialties and subspecialties for their careers, rather than the primary care specialties that are in great demand in rural New York. The vast majority of health care services needed by rural individuals can be performed in a primary care setting. Still, only 32% of all physicians practicing in New York State in 1988 specialized in primary care. In the same year, only 25% of physicians in residency training had selected primary care programs. Unless genuine efforts are made to design strategies to encourage physicians to practice primary care in underserved rural areas, the availability of such care will continue to decline, and rural families will face even greater hardship obtaining basic primary health care.

This report addresses the need for action — by state and local government, by health care providers, and by medical schools. At a minimum, such an action plan should seek to increase the numbers of physicians choosing the primary care specialties, to improve the financial and reimbursement climate which currently discourages primary care practice, and to develop new means of assisting physicians to practice in rural communities.
Specifically, this report serves as the proceedings of a symposium, “Training Physicians for Rural Health Careers in New York State,” which was held November 9-10, 1989 in Buffalo. I am pleased to have chaired this symposium, which was planned and hosted by the Office of Rural Health of the State University of New York (SUNY) at Buffalo’s Department of Family Medicine. The symposium proceedings were edited by Thomas C. Rosenthal, M.D., Associate Clinical Professor in the Department of Family Medicine. Also included in this report is pertinent information about other issues and ongoing activities that are related to the theme of that symposium.

We are grateful to Dr. Rosenthal and his colleagues at SUNY at Buffalo for their extensive efforts in planning and coordinating this symposium, as well as for much of the preparation of this report. Special thanks also go to Kevin McCarthy, Counsel for Senator Michael Tully, as Chair of the NYS Council on Health Care Financing, for his participation in the symposium. Several of the symposium recommendations were enacted into law during the 1990 legislative session, due in no small part to the efforts of Senator Tully and the staff of the Council. Thanks also is due Senator Kenneth LaValle, Chair of the Higher Education committee, Molly McKeown of Senator John Sheffer’s office, and Thomas Nitido, who represented Assemblyman Richard Gottfried, Chair of the Assembly Health Committee.

I am also particularly pleased that nine of the state’s twelve medical schools were represented at this symposium. I would like to take this opportunity to acknowledge their interest in and support of our joint endeavor to advance rural citizens’ access to primary health care.

The Commission will continue to work with the state’s health care providers, medical schools, and state government officials to see that the findings and recommendations of participants at this symposium are widely distributed and receive the attention of all those involved in advancing the availability and accessibility of primary care services throughout rural New York State.

Senator Charles D. Cook  
Chairman  
NYS Legislative Commission on Rural Resources and Symposium Chairman  
September, 1990
Introduction

The Office of Rural Health within the Department of Family Medicine at SUNY at Buffalo organized the symposium on Training Physicians for Rural Health Careers in New York State, held in Buffalo, New York, November 9-10, 1989. This symposium was supported by a grant from the New York State Legislature, secured by Senator Charles D. Cook, Chairman of the Legislative Commission on Rural Resources.

The theme of the statewide conference posed the question: What role do the medical schools of New York State have in addressing the shortage of physicians in rural areas? Each of the twelve medical schools in New York State was invited to send representatives from its Dean's office, curriculum office and primary care programs. Participating schools were invited to share programs, ideas and strategies as well as to hear presentations by nationally-known individuals involved in developing innovative programs that address these issues.

The majority of the medical schools in New York State were represented at the symposium. Also attending were representatives from the Legislative Commission on Rural Resources, the State Senate and Assembly Health Committees, the Senate Higher Education Committee, the NYS Department of Health and its Rural Health Council, the Western New York Rural Health Care Cooperative (WNYRHCC) and individual health care providers.
The goal of the symposium was to define strategies for training medical students for future careers in rural areas of New York State. Because the most urgent need in such regions is for primary care, the focus was on generating more primary care physicians.

Objectives included:

- To stimulate awareness among medical school faculty and legislators about rural health issues in New York State.
- To encourage medical schools to develop strategies that address rural primary care shortages.
- To share ideas and encourage consideration of new approaches to health care manpower shortages.
- To identify the role and responsibilities of New York State government in implementing such strategies.
- To publish this Special Focus Report, to serve as a guide for further activity.

The first day of the symposium was devoted to presentations by professionals who have had extensive experience in the areas of rural health, rural admissions programs, and curriculum programs that encourage future physicians to enter primary care specialties and help to decentralize medical education. On the second day, participants were divided into three workgroups on (1) admissions, (2) curriculum, and (3) physician recruitment and retention. The workgroups were charged with developing recommendations for further actions in each of these three general areas. Abstracts of the presentations, and findings and recommendations of the workgroups, are presented in this report.

It is hoped that readers of this document will share in the enthusiasm experienced by participants at the symposium. We invite readers to feel the comradeship of people facing a common problem and the optimism that comes from sharing ideas and perspectives.
While a great deal of work remains to be completed, several positive steps have been taken to improve the availability of primary care services statewide, and specifically in rural communities.

— Thomas C. Rosenthal, M.D.

Executive Summary

The need for greater attention to and innovative strategies for addressing the limited and oftentimes absent primary care services in rural and other underserved areas of New York State has been the subject of much study, debate, and policymaking in recent years. As the issue becomes more vital in importance to the state as a whole, a greater range of policymakers, educators, interest groups, providers and individuals is entering the realm of discussion.

One of the pioneers in this area has been the NYS Council on Graduate Medical Education, whose second annual report released in 1989 recommends a "three-pronged approach" to addressing primary care practice and training in New York State (see box on page 14): improving reimbursement to primary care physicians; developing well-organized, attractive practice sites in underserved communities; and increasing the supply of primary care physicians by strengthening undergraduate and graduate medical education in the primary care specialties. The NYS Department of Health's Rural Health Council has expanded upon the recommendations of that group, by addressing strategies specific to the unique needs for primary care in rural areas, in its February 1990 report, Rural Primary Health Care: Balancing the Health Care System.

A one-day briefing session on the recruitment, retention and training of physicians in rural New York was held in February 1990 by the NYS Legislative Commission on Rural Resources as a follow-up to the SUNY Buffalo Symposium of November 1989. Representatives of state government, medical schools, health care providers and others shared individual thoughts and perspectives on how to increase the supply of primary care physicians and other health care personnel in rural communities. The discussion reviewed the general theme and findings of the Physician Training Symposium held in Buffalo focusing on the individual roles of government, medical schools, and communities to address these issues, as well as the need for a comprehensive, coordinated approach by these various groups.

While a great deal of work remains to be completed, several positive steps have been taken to improve the availability of primary care services statewide, and specifically in rural communities. In the area of developing attractive practice sites for primary care providers, for example, members of the Legislative Commission on Rural Resources introduced a bill (S.3281-C; A.4925-C) which would create a NYS Practitioner Placement Program, designed to provide financial and technical assistance for the establishment and expansion of practice sites in underserved rural and urban areas of the state.

Although that specific bill did not become law, a Practitioner Placement Program similar to it was established with the passage of the new 1990-93 hospital reimbursement law which takes effect January 1, 1991. A total of $500,000 annually is now available to assist in the recruitment and placement of physicians and other health care practitioners to practice primary care and/or dentistry in underserved areas.

Other provisions of the new hospital reimbursement methodology will help to improve the availability of primary care throughout the state. For example, through the designation of "preferred primary care providers," enhanced reimbursement will be made available to health care facilities and providers that meet certain criteria designed to increase the availability of primary health
The availability of physicians throughout the state has traditionally been skewed toward metropolitan areas, with severe shortages in some rural counties.

Physician Distributions, 1970, 1980, 1985 (per 1000 pop.)

The November 1989 symposium afforded legislators, government staff, medical educators and rural providers a unique opportunity to discuss their concerns. Speakers described the pride and expertise of the country doctor, and recognized the primary care specialist as the most appropriate to fill the rural health care vacuum. Trends over the last fifty years have resulted in high technology specialists becoming the medical student's role model. This combined with fewer rural students selecting a medical career has resulted in the growing perception among the medical community that modern medicine can only be provided in major urban medical centers.

The primary care shortage is common to inner city, urban, and suburban, as well as rural areas of New York State. However, the rural shortage is unique and particularly stressful to rural communities and citizens, in part because of the necessity of physicians to live in the rural service area, a greater sense of professional isolation and a generally lower potential income. These factors, in combination with the patient's problems of lack of transportation and inadequate insurance coverage, dictate a focused approach to rural health care issues. An alliance among all underserved areas in New York State is desirable; however, unless the unique problems of each region are recognized, substantial improvement is unlikely.

Support for improving access to primary care comes from several sectors. The New York State Department of Health, the Association of New York State Medical Schools, the Gellhorn Commission (i.e., the
NYS Council on Graduate Medical Education, the Legislative Health Committees, the Higher Education Committee, the State Office of Rural Affairs, as well as the Legislative Commission on Rural Resources are striving to address these issues. Michigan State University, the University of Minnesota and SUNY Syracuse have shown that medical education can be successfully decentralized and that a rural educational and clinical experience increases the likelihood that physicians will select a rural practice setting. Jefferson Medical College in Philadelphia has shown that selective admissions (of rural students) can increase the number of graduates selecting primary care rural practice. SUNY at Buffalo has developed programs that involve rural practitioners in teaching programs both in their offices and at the University. Other related activity is ongoing at Albany Medical College, New York Medical College and the University of Rochester.

Three workgroups at the November 1989 symposium on Physician Training for Rural Health Careers focused on the medical school's role in addressing the shortage of rural health care providers in the areas of admissions, curriculum, and physician recruitment and retention. A summary of some of the major recommendations made by each of these workgroups, as well as cross-cutting recommendations relating to community action and public policy, follows.

Medical School Curriculum
- Each medical school should be encouraged to establish an Office of Rural Health which would coordinate and expand medical school programs that involve and enhance medical care and education in rural communities. This should be encouraged particularly at the upstate medical schools (SUNY at Buffalo, SUNY Upstate Medical Center at Syracuse, the University of Rochester, and Albany Medical College).
- Medical school curricula should address the need for more primary care physicians, specifically family practice, general internal medicine and pediatrics. This includes a continuity of care experience of at least one year in a primary care situation. These experiences should be made available in rural areas as an option.
- Extended preceptorships should be available that would allow interested students a significant experience (7-12 months) in rural areas with qualified preceptors and structured curricula. This experience should commence in the third year of medical school.
- Rural physicians should be encouraged to become active in medical schools as teachers, role models and researchers.

Medical School Admissions
- Admissions committees in all New York State Medical Schools should be sensitized to the relationship between the types of students admitted and eventual practice site selection, and establish admissions criteria that address these issues.

Physician Recruitment and Retention
- Medical schools should participate in programs with rural communities that will overcome some of the barriers to establishing practice in rural areas. This may be through an incubation program similar to other schools within the State University system that incubate small business.
- Medical schools should encourage participation in Continuing Medical Education programs in rural areas.

Community/Public Policy
- An Office of Rural Health should be established at the state level that would coordinate activities at the medical school and community level.
- Support for family practice residencies should be continued, since they have the best record for placing graduates in rural communities.
- New York State should provide sufficient financial support for programs in rural...
health care. This may be accomplished through the present capitation system or by securing special program support. A grant program could be utilized to encourage innovation but would not encourage long term investment of resources.

- Rural communities and their residents should become active participants in special rural health programs by identifying local talented secondary school students and encouraging them to pursue careers in the health care field.

- The primary care environment should be modified to encourage students to consider a career in family practice, general internal medicine and pediatrics. This includes appropriate reimbursement for cognitive primary care services and relief from high malpractice premiums.

To assume responsibility for these recommendations means that medical schools must adopt a mission that adequately responds to society’s needs. This mission must not supplant the mission to advance medical technology but should be legitimately elevated to an equal role. To divorce primary care from high technology care would weaken both. An alliance can and should be a strengthening force, both by making technology available to all citizens of the state and by utilizing it in a caring, responsive way.
In order to set the stage for the symposium, four perspectives relating to the challenge of training physicians for rural health careers in New York State were offered by a state legislator, a medical educator, a rural physician, and another medical educator who overviewed the findings of the Gellhorn Commission. The first such presentation was The State Legislator's Perspective from Senator Charles D. Cook, Chairman of the Legislative Commission on Rural Resources. Following the Senator's remarks came The Medical Educator's Perspective, provided by David M. Holden, M.D., Professor and Chairman of the Department of Family Medicine of SUNY at Buffalo.

Stoner E. Horey, M.D., an internist from Hornell, New York, gave brief comments next (The Rural Physician's Perspective), focusing on his experiences both as a rural primary care physician and also as an individual involved in rural health care planning. John Naughton, M.D., Dean of the School of Medicine and Biomedical Sciences at SUNY at Buffalo, in a presentation entitled, The Gellhorn Perspective, briefly summarized the history of changes in medical care and specifically in graduate medical education. Dr. Naughton focused on the work of the NYS Commission on Graduate Medical Education (commonly known as the "Gellhorn Commission," after its Chairman, Dr. Alfred Gellhorn). Dr. Naughton implored symposium participants to refer to the extensive work of that Commission in their deliberations on strategies related to training more physicians for rural primary care practice.

As legislators we have two goals at conferences such as the symposium here at SUNY/Buffalo. The first is to develop a base of facts and the second is to form ideas into workable programs. As legislators, we need these opportunities to exchange and refine ideas with people in positions to implement innovative work plans. I would like to thank the people at SUNY/Buffalo for planning this conference and Ronald Brach, one of my best appointments since being in public office. As director of the Commission on Rural Resources he has taken a fledgling idea and expanded it into an effective force in rural New York State.

The participants of this conference have been charged with developing specific recommendations that we can take back to the legislature. These recommendations will be used by the Commission on Rural Resources, the Senate Higher Education Committee and the Senate and Assembly Health Committees to draft policy for new initiatives in addressing the maldistribution of health care throughout New York State.

It is no news to anyone here that medical practice has undergone a revolution. Increased specialization has changed the focus and methods of dealing with illness. For the patient this has mixed consequences. On the one hand, there is absolute confidence that somebody somewhere will know a good deal about his
illness. The down side is that he may have difficulty finding somebody to treat his bronchitis or set a broken bone, particularly if he lives in a rural area.

The effects of regulations and reimbursement methodologies to date have been to reward high-profile specialty procedures. The result has been that family practice is not considered as desirable by financial or personal points of view. Reimbursement policies have allowed a highly paid specialist to deal with one particular symptom of a patient's condition and then release that patient to a family physician who must deal with a whole syndrome of conditions surrounding that central illness. Specialization at the ultimate carries the danger of focusing on the symptoms, not the patient. This dehumanizes the art of healing into the mere process of matching up the correct response to the diagnosed condition rather than a pro-active treatment built upon an understanding of the patient's personality, history, and behavior as well as his physiology.

In rural communities, typically more dependent on the generalist, this means that even with appropriate referrals the rural physician finds himself overwhelmed. Once more he finds that his specialist friends in the city are working fewer hours and earning substantially more money. In addition, the rural physician often finds himself with more hospital responsibility, doing physicals for the local football team and acting as the town health officer. It is therefore not surprising that student doctors shy away from rural communities and that for many rural people, access to basic primary care services is extremely limited.

The circle tightens with the financially strapped rural hospital, the physician and the patient caught up in a struggle to solve their mutual problems. This, it seems to me, is the gist of our challenge. For the rural patient we need to provide access to quality primary care. Rural doctors do not need to be specialists but they do need to have good diagnostic and treatment skills to deal with 90 percent of the common complaints that walk through their doors, and they need to have access to a center with basic quality technical facilities. Rural hospitals need to provide quality nursing services for recuperative patients and those with chronic recurring conditions, as well as emergency services.

Attention needs to be given to providing financial incentives that will enable rural providers to fill these appropriate roles. Collegial relationships for physicians with the broader medical community need to be encouraged in order to lessen the sense of isolation and lighten the burden of a 365-day-a-year job. A network can be built around the rural hospital to provide services, as well as administrative and educational relationships.

With all its problems, service as a physician in a rural community can be a deeply satisfying experience. Rural people afford to these doctors a prestige that is rooted in admiration for their work. The rural physician is only one step away from the inner family circle. These are very genuine benefits that can be most appreciated by doctors who have a profound feeling of their own humanity.

Our task is to help discover such persons and help them establish a practice that can be a way of life rather than a vocation. The academic and professional minds assembled at this conference can provide some specific guidance on how we might assist in accomplishing these important goals.

"Collegial relationships for physicians with the broader medical community need to be encouraged in order to lessen the sense of isolation and lighten the burden of a 365-day-a-year job."

— Senator Charles D. Cook
Symposium attendees get a short break from intensive panel discussions. From the left: Tom Johnson MD, Associate Dean at Michigan State University; David Holden MD, Professor and Chairman, Department of Family Medicine, SUNY at Buffalo; and Roy Gerard MD, Professor and Chairman, Department of Family Medicine, Michigan State University.

The Medical Educator’s Perspective

David M. Holden, M.D.,
Professor and Chairman,
Department of Family Medicine,
SUNY at Buffalo

Training physicians for rural health careers is a timely topic in New York State as well as around the nation. The Association of American Medical Colleges (AAMC) last week, for the first time, had a plenary session on rural health with Senator Robert Dole as the keynote speaker. The AAMC formed an interest group on rural health headed by Tom Johnson, M.D., who is in attendance at this conference.

Whenever we discuss the training of physicians for rural health care, we find ourselves discussing primary care. While primary care physicians practice in urban, suburban and rural areas, we will be focusing on their role in rural communities. Primary care physicians include family physicians, general internists and general pediatricians, and represent the broad-based specialties critically important to rural areas. These physicians, in rural communities, are augmented by obstetricians, gynecologists and general surgeons. Rural hospitals require all these specialties to survive.

Medical schools in New York State are failing to attract students interested in careers in primary care. During this symposium, we will look at a success story from Jefferson College in Philadelphia, where selective admissions has had a significant impact. Medical schools are also failing to sustain the interest of those students who are interested in primary care through to the point when they make their career decisions. Hence we will be looking at the curriculum process at Minnesota, Michigan State and Syracuse, where innovative programs have addressed these issues. Finally, physicians who do select rural health careers are often disadvantaged. They have less contact with their professional peers and they frequently need to practice in more populous areas. Therefore, we will attempt to define new strategies for recruitment and retention of rural physicians from the intellectual and educational perspective. Rural physicians can have a significant role as teachers and researchers in primary health care issues.

We will attempt to identify useful pilot projects, because I believe that New York State legislators are eager to support practical programs that have a strong likelihood of success. These efforts will position New York State in the forefront of the nation for response to rural health problems as it is for so many other issues.
The Rural Physician's Perspective

Stoner E. Horey, M.D., Internist, Hornell, New York

I have had the privilege of simultaneously being able to view rural health care from the local perspective as a practicing physician and from the regional and statewide level through Health Systems Agency (HSA) and New York State planning activities. I hope to bring to you today a brief overview of rural health manpower issues in New York State and personal observations on strategies that might best encourage young minds to consider practice in rural areas.

Rural practice is not for everyone! Students from rural communities are already knowledgeable about the disadvantages of non-urban settings. They appreciate that the rewards will come with time, especially the doctor-patient relationships that are closer and less litigious. Primary care physicians are generally the most adaptable because the population density of a rural community may support only a single-specialty practitioner who works without coverage and time off.

Limited specialty backup has mixed effects. Internists and family practitioners manage a broader scope of medical conditions. Primary care in urban settings can become a triage function. In my own practice, I may be a cardiologist, pulmonologist, psychiatrist, neurologist, etc., all in the same morning. In the academic setting, decisionmaking is diffused. In rural practice physicians find being "on their own" is anxiety-provoking, especially for new graduates.

Most full-time physicians prefer to care for their own in-hospital patients, and hospitals require physicians to participate in after-hours coverage. Therefore, physicians must cluster around the facilities in which they practice.

The stability of many rural hospitals is in question. There currently are 50 rural hospitals in 44 rural counties with about 2,400 acute care beds. Stamford Community Hospital in Delaware County closed 6 weeks ago and five others have closed in the last five years. This uncertainty impedes physician recruitment. As occupancy declines in local hospitals, traditional catchment areas are being "invaded" by large facilities which have more marketing expertise.

The October 1989 issue of the New York State Journal of Medicine contains the following statement from Medical Society of New York executive vice-president Donald Foy:

Moreover, the climate for the practice of medicine in New York State is becoming less attractive, especially to young physicians. Excessive regulations, coupled with a Department of Health that displays a continuing disdain for the profession, the AIDS crisis, and the unrealistic reimbursement policies, have all contributed to a deteriorating practice environment.

Whether or not one accepts this statement as fact, this is the message that is being circulated. It is an unhealthy recruiting environment when responsible doctors are advising the new generation of physicians to stay away from New York State.

Where will the doctors come from?

Horey's 1st law is: "If there were a simple answer, someone would already have thought of it." The Federal National Health Service Corps was a good source of new physicians for underserved areas. Unfortunately, this program has ended. The NYS Regents Physician shortage area methodology requires a physician-to-population ratio of less than 1:3000—a figure that can be met only by including patients from an enormous service territory in sparsely populated rural areas. As a consequence, the areas in need often don't qualify. The Adam Smith approach, laissez-faire, would be to allow market factors of supply and demand to locate physicians. This has some merit and is the traditional determining factor, but it just has not worked. I believe intervention is needed. One solution is to buy physicians, but as is true of most problems, rural physician supply will not be solved merely by throwing money at it. Other strategies will be needed.
Medical schools must assure that adequate numbers of physicians are trained in primary care specialties. They should seek out those with rural backgrounds and encourage trainees to maintain contacts with the doctors "back home." Medical schools should provide more support to make the transition from the protective cocoon of training to the independence of practice more gradual and less traumatic. This will require interaction between those in training and the local communities needing physicians. Programs should focus training in the final residency year to more closely reflect the problems actually seen in office practice and decentralize the experiences by adding more community experiences. Including more information on practice management would also enhance the likelihood of physicians locating away from the urban center.

The stability of many rural hospitals is in question...This uncertainty impedes physician recruitment."
— Stoner E. Horey, M.D.

One of the vital health centers that provide essential primary care services to rural families. The Commission on Rural Resources developed legislation, included in the 1990 Hospital Reimbursement Act, that will encourage doctors and other health professionals to accept positions at rural clinics and hospitals (See Appendix D).

The Gellhorn Perspective

John Naughton, M.D., Dean, School of Medicine and Biomedical Sciences, SUNY at Buffalo

Graduate medical education (GME) and biomedical research probably represent the two major outcomes of the Flexner Report1 that have served to influence the quality of medical education and health care in the United States and the western world. Both of these efforts were essentially non-existent at the time of Flexner’s report, and each remained rudimentary until the end of the second world war. In the 45 years since, the nation’s federally sponsored biomedical research budget has grown to approximately 7 billion dollars annually and approximately 70,000 medical school graduates are engaged in some phase of residency or fellowship experiences. The former mission has spawned a continued need to educate increased numbers of creative basic scientists and clinical investigators. The expansions of new scientific knowledge and technological refinements have spawned a proliferation of medical specialties and an imbalance of specialists to generalists.

Today, the United States in general and the northeastern region in particular, are faced with a potential excess of selected specialists and tertiary care facilities and an inadequate distribution and availability of generalists and ambulatory care services. These imbalances in a physician pool perceived as overexpanded have been accompanied by the undesired consequences of over-utilization of some services; a lack of access for the general population, especially the poor, minority, socially disadvantaged and rural consumers; and a reward structure in terms of income and status which is unrelated to the needs for adequate health care.

Governor Mario Cuomo, recognizing a need to respond to the above requisites, established the Commission on Graduate Medical Education in 1984. The Commission was chaired by a world renowned physician-scientist-educator, Dr. Alfred Gellhorn.

NYS Council on Graduate Medical Education
Primary Care Recommendations

The NYS Council on Graduate Medical Education's recommendations for primary care training and practice reflect a three-pronged approach:

- Improving reimbursement to primary care physicians;
- Developing well-organized, attractive practice sites in underserved communities; and
- Increasing the supply of primary care physicians by strengthening undergraduate and graduate medical education in the primary care specialties.

The specific recommendations are:

**Physician Reimbursement:**

1. Increase the Medicaid fee schedule, particularly for primary care services. Tie increases to measures of quality, accessibility and continuity; and enhance reimbursement in underserved areas.

2. Expand public and private insurance coverage to include primary care services, and coverage for the uninsured and medically indigent.

**Practice Site Development:**

3. Raise capital for establishing attractive primary care practices in underserved areas, by forming a new public organization empowered to issue bonds backed by the State.

4. Restore funding of the NYS Primary Care Initiative to at least its 1988 level, and include the enhancement of existing primary care practices, in addition to new projects.

5. Continue support for existing programs that encourage new ways of organizing the delivery of primary care.

**Physician Training:**

6. Revise eligibility for capitation assistance and "Bundy" aid to be contingent on a school's development and implementation of a required primary care curriculum.

7. Develop an appropriate mechanism to identify and pay for the costs of teaching in ambulatory care settings.

8. Create and fund primary care Regents Professorships for medical schools, located in selected model practices in underserved communities, and perhaps including physicians already in practice in these communities.

9. Support and financially reward graduate medical education consortia for placing their graduates in underserved areas.

10. Create a State Health Service Corps for physicians, by combining existing scholarship and loan repayment programs.

11. Redirect the $1 million used to fund positions at the out-of-state medical schools that are not predominately minority, to enhance and expand primary care training initiatives within New York State.

Acknowledgement: NYS Council on Graduate Medical Education for use of this information.
In its deliberations the Commission identified a number of serious problems in the graduate medical education programs in New York State. Although New York State represents only about eight percent of the United States population base, the physician graduates from its twelve public and privately supported medical schools total almost twelve percent of the nation's physicians each year and the resident pool approximates 16 percent of the nation's total. These data indicate that New York State citizens, through the tax base used to support Medicaid and private health insurance agencies, provide a far larger share of GME support than do other states. More importantly, in contrast to most other states, New York has a larger than desirable pool of foreign medical graduates in its GME programs, and the ratio of specialty trained physicians to primary care generalists is two-to-one, the opposite of the distribution required to ensure access and availability of health care to all of our citizens at an affordable cost. Just as important was the finding that despite a rapidly changing demography which favors a growing plurality of Afro-Americans and Hispanics, the enrollment and retention of representatives from these groups in the undergraduate and graduate medical education enterprises is inadequate.

Given the above considerations as well as other issues, the Commission recommended that a permanent organization, the Council on Graduate Medical Education, be formed. This was established by Governor Cuomo's order, and its first report was issued in 1988. Its original chairman was Dr. Gelhorn, whose term expired on December 31, 1989. In its first year, the Council emphasized a need for the state's medical schools and affiliated teaching hospitals to address these matters. These included the formation of consortia designed to institutionalize and regionalize GME to encourage educational innovation and a commitment to changing the emphasis in training toward more ambulatory care and the development of more primary care specialists. It also recommended that the composition of GME trainees governed by each consortium be composed of at least 50% primary care trainees enrolled in internal medicine, pediatrics and family medicine. The Council's recommendations concerning recruitment and retention of minority and socially disadvantaged physicians to GME programs was emphasizing by requiring each consortium to attain a minimal enrollment of 11 percent by 1993.

The Council's second report is due out in early 1990, and its recommendations will deal more specifically with unmet needs for children with chronic illnesses and geriatrics.

It is apparent that NYS government is concerned about the health care system, which — although of excellent quality — is failing to meet the needs of its citizens. Despite a large, well educated, affluent population of physicians, the access to health care and its availability at an affordable cost is lacking in many urban and rural areas of the Empire State. It seems clear that the state's twelve medical schools and its abundance of clinical teaching facilities must work cooperatively and energetically to deal with a system that is imbalanced. Although the need to train specialists and scientists will certainly continue to exist, each of our twelve medical schools must accept the added primary care challenge and give it the value that is required. To do otherwise would be socially irresponsible and a disservice to the citizens whom we are charged to serve and who support our efforts.

As you contemplate the needs for a viable system of rural health care, I hope you will refer to the work that has been initiated by the GME Commission and the Council on GME. The efforts of these bodies have provided a substantial information base, with which we can project future health policy in New York State that will serve to improve the health care provided to our citizens, and serve as a model for other states to emulate.


Model Programs for Training and Recruiting Physicians

The symposium, Training Physicians for Rural Health Careers in New York State, featured several presentations by individuals involved in developing and/or administering model programs relating to medical school curriculum and admissions, and physician recruitment and retention. The programs described were all designed to address one or more of these issues, with the ultimate goal of training more primary care physicians for practice in rural communities. Following are brief summaries of the five model programs or strategies described in presentations at the symposium.

The Remote Campus: Clinical Campus at Binghamton

Edward Wolfson, M.D.
Dean, Binghamton Campus
SUNY at Syracuse (Binghamton, New York)

The medical schools of New York State should and can play an important role in addressing the shortage of physicians practicing in rural areas. There are substantial barriers to accomplishing any new set of objectives, especially when we deal with expanding a medical school’s mission and/or changing its curriculum, but these can be overcome by imaginative leadership and planning without substantially altering the traditional medical school’s self-proclaimed image, mission and strivings for academic excellence. The remote campus presents an excellent opportunity for expanding the school’s compliance to societal needs.

The Clinical Campus at Binghamton, a branch of the State University of New York (SUNY) Health Science Center at Syracuse, came into being in 1977. It is the result of an effort by SUNY Binghamton originally aimed at establishing a full medical school. Limited enthusiasm from other SUNY medical schools was matched against the stubborn support of legislators and SUNY Central Administration. Unfortunately, the lack of support from the full-time faculty at SUNY Syracuse, occasionally bordering on antagonism, proved to be and continues to be a major barrier to full acceptance of the innovative programs. This has made it necessary to distinctively delineate goals of the new program to be in synch with SUNY Central and the state legislature. Also, budget matters clearly must be handled separately from the sponsoring unit.

It is clear that a new program has a distinct advantage in changing a curriculum since there are no entrenched departmentally-based curricula to overcome. The curriculum at SUNY Binghamton is based on the EPOCH program. The EPOCH approach is defined as a series of life’s stages including perinatal, pediatric, adolescence, adult, geriatric and community health. This approach forces interdisciplinary curriculum and a distillation of what is really important for a medical student to learn. DEVELOPING THE CURRICULUM TOOK 2 YEARS AND ACCOMPLISHED BOTH FACULTY DEVELOPMENT AND INNOVATION. SPECIFIC INNOVATIONS ARE IN THE AREAS OF GERIATRIC MEDICINE, AMBULATORY CLEARKSHIPS, AND A CONTINUITY CARE PROGRAM. IN THE LATTER EACH MEDICAL STUDENT IS ASSIGNED TO A PRIMARY CARE PHYSICIAN FOR ONE-HALF DAY PER WEEK OVER THE COURSE OF THE THIRD YEAR. MANY OF THESE CLEARKSHIPS ARE IN RURAL COMMUNITIES WITHIN 30 MILES OF BINGHAMTON. THIS ADDED...
Three of the sites in the rural preceptorship program organized by the SUNY Health Science Center at Syracuse, College of Medicine, Department of Family Medicine. They are the Oswego Family Physicians, Mid-York Family Health Center in Hamilton, and Edward John Noble Medical Center in Alexandria Bay.

Travel is often perceived as a tremendous problem by students but uniformly, by the end of the year, they all rate the continuity experience as superb.

Since 1979 forty students each year have experienced their third and fourth year of medical school in Binghamton after doing the first two years in Syracuse. Selection was initially voluntary but now is done by lottery at the time of admission to SUNY Syracuse. The results of the Clinical Campus program indicate that the National Board scores are equivalent to those of students who remained in Syracuse. Twenty-one percent have chosen family medicine residencies compared to the 11 percent of the Syracuse cohort and 7.5 percent for all of the Upstate New York medical schools. Approximately 35 percent of our graduates who have completed residencies have started practices in a rural community, but these numbers are still small. Graduates are also matching with their first choice for residency training at the same ratio as students in the more traditional tract.

Without making any claims as to any direct relationships to the overall Clinical Campus program and/or to the Continuity of Care program specifically, the bottom line is that a significantly greater proportion of Clinical Campus students select family practice residencies than do the cohort of students who remain in Syracuse for their clinical education, or, in fact, than do students from any other New York State medical school.
The Role of Selective Medical School Admissions Policies

Howard K. Rabinowitz, M.D.
Associate Professor
Jefferson Medical College
Philadelphia, Pennsylvania

The recent report of the national Council on Graduate Medical Education (COGME, 1989) has reaffirmed the fact that the shortage of physicians in rural areas of the United States remains a major health care problem. Despite a large variety of attempts to address the physician maldistribution over the past few decades, rural residents remain one of the largest medically-underserved groups in this country.

Although a number of factors may contribute toward increasing the number of physicians in rural areas, admission to medical school represents a critical starting point in the process. Previous studies have consistently defined two subgroups of physicians who are most likely to practice in rural areas: physicians who grew up in such areas, and family physicians/general practitioners. Conversely, students who did not grow up in rural areas rarely choose to practice there, and students not planning to enter family practice at the time of medical school admission rarely enter family practice, irrespective of other influencing factors which may occur during or after medical school.

Based on this information, Jefferson Medical College (Philadelphia, Pennsylvania) initiated the Physician Shortage Area Program (PSAP) in 1974. This program preferentially selects applicants for medical school from rural backgrounds who intend to practice family medicine in rural areas. Twenty-four places in each class of 223 students are reserved for PSAP students. In addition to preferential admission, the PSAP also provides students with additional financial aid (loans), and participation in the family medicine rural curriculum during medical school. Applicants to the PSAP are evaluated by a subcommittee of the Committee on Admissions, and only academically qualified students are recommended to the full committee for acceptance.

Evaluation of the PSAP after 12 years has shown that PSAP students have performed similar to their classmates during medical school and postgraduate training. PSAP graduates, however, were 5 times as likely as their peers to practice family medicine (60% vs. 12%), 4 times as likely to practice in rural areas (40% vs. 10%), and 8 times as likely to combine a career in family medicine with practice in a rural area (30% vs. 4%). In addition, almost none of the PSAP graduates (7%) are practicing non-primary care specialties in large urban areas, where most of the non-PSAP graduates have located their practices.

Jefferson's PSAP has clearly answered the question: "Can one preselect students at the time of admission to medical school who are likely to eventually practice in rural areas?" Likewise, other medical schools, such as the University of Minnesota and the University of Washington, have also had positive experiences with preferential admissions. Nevertheless, a number of important questions remain: What is the relative role of preferential admission vs. other factors (e.g., curriculum, loan repayment) in increasing the number of rural doctors? As the number of rural applicants and those interested in family practice decline sharply, are there enough applicants for other schools to replicate the PSAP? Finally, how does a medical school balance the needs of individual applicants to be afforded equal opportunity for admission, with the needs of society to have an equitable distribution of physicians?
The Extended Rural Preceptorship

Macaran Baird, M.D.
Professor and Chairman
Department of Family Medicine
SUNY at Syracuse (Syracuse, New York)

Introduction

Through the Extended Rural Preceptorship (ERP), the Department of Family Medicine of the State University of New York (SUNY) Health Science Center at Syracuse places a small number of third-year medical students in rural communities for nine consecutive months, on a full-time basis, to work and learn under the supervision of board-certified family physicians and other specialists. Full academic credit is earned for this experience. Students who elect this program live in the rural community, returning to Syracuse campus at the end of the course to complete their studies for the M.D. degree. The education goals of the rural preceptorship are to:

- Add flexibility to the undergraduate clinical curriculum so as to better meet the needs of students considering careers in a primary care field in a non-urban setting;
- Broaden the student’s knowledge base;
- Provide greatly expanded opportunities for the student to sharpen clinical skills;
- Foster positive attitudes toward patient care in the ambulatory setting;
- Expose the student to the practice of continuous comprehensive medical care;
- Develop the student’s skills in clinical problem solving and patient management;
- Help the student develop independent learning skills.

This course offers a unique opportunity for the student to develop a long-term relationship with clinical preceptors in a rural community while becoming immersed in the delivery of primary health care to the local population. The student participates actively and extensively in continuous and comprehensive care of the preceptors’ patients across the age spectrum including management of both ambulatory and hospitalized patients.

The preceptorship encompasses more than family medicine, also providing training under appropriate supervision which satisfies the requirements of third-year clerkships in ENT, Orthopedics, Radiology, Ophthalmology and Anesthesiology. Full or partial clerkship credit may also be earned in Urology, Psychiatry, Pediatrics and Community Medicine. Decisions for each of these areas is at the discretion of each of these departments and may vary on a site-by-site basis. Credit granted for a clerkship will appear on the student’s academic transcript in the same manner as for students earning the credit at the Health Science Center.

The Rural Preceptorship is modeled after the Rural Physician Associate Program (RPAP), which has successfully operated at the University of Minnesota Medical School continually since 1971, placing more than 500 students in rural training sites for 9- to 12-month experiences. The educational soundness of this program has been well documented, clearly indicating that RPAP students perform as well as traditional curriculum students in all areas of evaluation, including National Board of Medical Examiners Part II board scores.

Student Eligibility

This is an optional experience for all medical students in good academic standing at the Health Science Center. Those who are on academic probation or with current deficiencies will not be accepted into the program.
Schools of Medicine & Osteopathy in New York State 1990
By Health Systems Agency Region

1. Albany Medical College
2. Columbia University
3. Cornell University
4. Mount Sinai School of Medicine
5. New York Medical College
6. New York University
7. SUNY at Buffalo
8. SUNY at Stony Brook
9. SUNY Health Sciences Center at Brooklyn
10. SUNY Health Sciences Center at Syracuse
11. University of Rochester
12. Albert Einstein School of Medicine
13. New York College of Osteopathic Medicine

Prerequisites

Prior to beginning the Extended Rural Preceptorship, the student will be required to complete the Medicine, Surgery and OB/GYN clerkships. Other required clerkships may be satisfied at the rural site at the discretion of the respective departments granting clerkship credit.

Duration and Scheduling

The duration of this course is six academic periods (36 weeks spanning the third and fourth years). Depending on the arrangement of the student's schedule, the rural preceptorship begins in either period 5 or 6 of the junior year and continues to period 2 or 3 of the senior year. Regardless of the specific schedule adopted, in all cases students complete all required and elective courses in the appropriate time frame and graduate on time with classmates.
The experience offers extensive patient care activity, increased responsibility and independence, one-to-one clinical instruction, and the chance to observe and participate in the lifestyle of a medical professional in a rural community.

— Alacran Baird, M.D.

Instructors and Facilities

Each student works under the direct supervision of board certified physicians who are approved as preceptors by participating Health Science Center academic departments. Overall supervision and coordination of the student's schedule in the rural community is handled by the family medicine preceptor working closely with ERP coordinators from the Health Science Center.

As a supplement to instruction, and to monitor the quality of the education experience, monthly visits to the rural site are made by faculty from clinical departments at the Health Science Center. During these teaching sessions, the student makes in-depth case presentations and receives consultation on difficult cases. These visits also include presentation of Continuing Medical Education programs by visiting faculty. Hospital facilities used in the rural preceptorship are those which have a formal education affiliation with the Health Science Center.

Educational Objectives

This course is intended to enhance the educational experience of students interested in a career in a primary care field, and particularly those who may want to practice in a rural or small town area. The experience offers extensive patient care activity, increased responsibility and independence, one-to-one clinical instruction, and the chance to observe and participate in the lifestyle of a medical professional in a rural community. Specific educational objectives in family medicine are described below. Objectives for coursework in other academic areas are established by the respective departments.

Family Medicine Objectives

- Learn how to diagnose and treat the common health problems that constitute the great majority of primary care, including upper respiratory tract disease, lower respiratory tract disease, cardiac disease, neurological problems, ophthalmologic problems, dermatologic problems, psychiatric disorders, endocrine disorders, orthopedic illness, office surgery, obstetrics, gynecology, urology and gastroenterology.
- Improve the speed, accuracy and thoroughness of history and physical exam skills.
- Improve patient education and health assessment and promotion skills.
- Learn when and how to perform common office procedures and laboratory tests appropriate to the ambulatory setting.
- Develop the ability to recognize and deal appropriately with family dysfunction and substance abuse, and to identify situations in which medical problems are a manifestation of underlying interpersonal problems.
- Develop a personal, sensitive and comprehensive approach to patients which recognizes the relationship of the family to health and illness.
- Be able to recognize when consultation and referral are appropriate actions for the primary care physician.
- Become familiar with community resources in order to provide information to patients and refer them to appropriate social services.
- Be able to accurately and concisely maintain a Problem Oriented Medical Record (POMR).
Regents-Designated
Primary Care Shortage Areas
in Rural New York State, 1990*

*Map shows Regents-designated primary care shortage areas in rural towns (less than 150 persons per square mile).

Source: NYS Education Department
Learning Activities

Specific learning activities of rural preceptorship students include: daily office hours with family practice preceptor; inpatient rounds; scheduled time with ENT, Orthopedic, Radiology, Anesthesiology, Ophthalmology and other specialists depending on clerkship credit being sought; laboratory, night call, hospital lectures and other CME activity with preceptor; reading and computer literature searches.

Each student will be videotaped doing a complete history on a real patient five times over the nine month period of the course.

Evaluation

Student performance is carefully and continuously evaluated. Feedback to the student is provided on a regular basis in order to assure that maximum benefit is gained from the experience. Specific components of the evaluation process include:

- A 90-day conditional period. The student is carefully observed during the first 3 months of the experience. If the student's performance during this time is not acceptable, he or she may be removed from the program and asked to resume studies at the Health Science Center. Academic credit is not granted for performance that is deemed unacceptable.

- Experience Log Book. The student maintains a log book of patient encounters which documents the number of patient contacts, patient demographics, problems seen, variety of procedures performed and level of responsibility.

- Feedback from Preceptors. The student's clinical performance is evaluated every 10 weeks for appropriate development in the areas of interviewing and physical exam skills, clinical problem solving, problem management, clinical procedure and office laboratory skills, fund of medical knowledge, professional demeanor, ability to relate to patients and families, record keeping skills and attitude toward learning.

- Faculty Visits. Periodic scheduled visits by faculty from all concerned departments monitor student performance through student case presentations and evaluation of write-ups.

- Knowledge examinations at the discretion of participating departments.

Grading and Academic Credit

The student is graded separately by each academic department offering credit through the program. Grading in the course is based on the standard Health Science Center system (Honors, Pass, Conditional, Incomplete, Fail).

Credit for the Extended Rural Preceptorship is on the basis of one credit for each week of the course. A nine-month total experience, therefore, carries with it 36 academic credits. Clerkship credit appears on the student's academic transcript in the same form as that of students completing the clerkship at the Health Science Center.

Reading Requirements

Readings in appropriate texts in each area of study are assigned and additional review of the literature in relevant areas is expected. The student should take advantage of the preceptor's personal library, the hospital medical library and any other available resources.

A computer link with the Health Science Center is established at each rural training site. This enables the student to perform computer literature searches through MEDLINE, a computerized medical literature database maintained by the National Library of Medicine.
The Role of State Government: Texas’ Approach

William Gutermuth, Attorney
Special Task Force on Rural Health Care Delivery in Texas

The crisis in the rural health care delivery system in Texas is real. It is represented by hospital closures; the curtailment of obstetrical services; and a shortage of rural physicians, nurses and allied health professionals. The result is thousands of rural Texans being denied or having limited access to health care.

Witham Gutermuth
Attorney

The Special Task Force on Rural Health Care Delivery in Texas was created by Senate Concurrent Resolution 25 (Brooks) by the 70th Texas Legislature, Second Called Session, in June 1987. The nine-member Task Force was appointed by Governor William P. Clements, Jr., Lieutenant Governor William P. Hobby and Speaker of the House Gibson D. “Gib” Lewis.

Commencing in March 1988, the Task Force conducted 11 public hearings in Austin, Amarillo, Odessa, Texarkana, Tyler, Brownsville, Warm Springs, and Abilene. Additionally, subcommittees of the Task Force met and accepted testimony in various locations around the state. The Task Force received testimony from over 225 witnesses including elected representatives of local, county, state, and federal governments; physicians, nurses and allied health professionals; hospital administrators, and other health care providers; representatives of state and federal agencies; clergy; business leaders; advocacy groups; and health care consumers.

The crisis in the rural health care delivery system in Texas is real. It is represented by hospital closures; the curtailment of obstetrical services; and a shortage of rural physicians, nurses and allied health professionals. The result is thousands of rural Texans being denied or having limited access to health care.

The situation is getting worse. Texas has lost 65 hospitals since 1984, in addition to others that have closed and subsequently reopened. Fourteen Texas counties do not have a physician. Hospital obstetrical care is not available in 92 rural counties. Obstetrical care has either been curtailed or abandoned by 61 percent of general and family practitioners in Texas. Twenty-five percent of obstetrician/gynecologists have eliminated or limited obstetrical procedures; and 45 percent have limited or eliminated high-risk obstetrics.

The causes of the rural health care delivery crisis are complex and interrelated. No single cause emerges as the most significant; no single solution will be a panacea. The crisis is the culmination of long-term forces and will not be adequately addressed without long-term solutions.

The report of the Special Task Force on Rural Health Care Delivery in Texas focuses on five related issues: Emergency Medical System and Trauma Care; Medical Manpower; Financing Rural Health Care; Regulatory Restrictions; and Obstetrics and Medical Malpractice Liability. The report contains specific findings and recommendations with respect to each topic area. Additionally, the Task Force found several special and related federal issues which warrant specific recommendations.

The Task Force also has recommended that the Legislature establish a Center for Rural Health Initiatives, mandated to assume a leadership role in developing integrated solutions to rural health issues and policies. The 71st Texas Legislature has a unique opportunity to make a lasting and positive impact on the health and safety of our rural citizens and an opportunity to reverse disturbing trends limiting availability and access to health care in rural areas.

The Texas Legislature responded to the recommendations in the report by enacting a statewide plan for Emergency Medical Services, establishing a loan repayment program for rural physicians and requiring rural experiences in medical schools and family practice residencies. It equalized reimbursement for rural hospitals and streamlined regulation. Most of these measures have yet to be implemented but it is a bold directive into developing an organized health care system for all of Texas.
The Comprehensive Approach: Michigan's Upper Peninsula Program

Roy Gerard, M.D.
Professor & Chairman,
Department of Family Medicine
Michigan State University

"The curriculum at Michigan State is organized in a non-traditional manner."
— Roy Gerard, M.D.

The Michigan State College of Human Medicine began in 1964. It is a community-based school with campuses in Grand Rapids, Kalamazoo, Flint, Saginaw, East Lansing, Lansing and the Upper Peninsula. To clarify the geographic challenge, it is important to know that it is 500 miles from Detroit to Washington D.C. and also 500 miles from Detroit to Marquette (both within the state of Michigan).

The curriculum at Michigan State is organized in a non-traditional manner. All students enter a ten-week phase to study anatomy. The students must then decide if they will choose Track 1 which is a more traditional approach to medical school, or Track 2 which is organized around focal problems. Focal problem learning is conducted by primary care physicians interacting with small student workgroups around patient cases. Basic scientists participate as a member of the team that defines and explores the patient problems. In years 3 & 4, the students go to one of the above communities for clinical training. In these clinical years there is a continuous training experience in ambulatory medicine. In the Upper Peninsula Program, the clinical year students are based in a model family...
practice continuously for the third year and then have specialty inpatient rotations in hospitals in Marquette and elsewhere.

The results of this program, after the first 49 graduates, show that 35 percent of these graduates are in family medicine residencies. Thirty percent have returned to the Upper Peninsula to practice. Sixty-six percent are in primary care (family practice, general internal medicine or pediatrics) and 50 percent are in rural practice whether they are specialized or not. Sixty-six percent of the applicants came from the Upper Peninsula district.

The goals in the Upper Peninsula Program are: (1) to promote primary care — especially family practice — as a career choice; (2) to increase the number of primary care physicians in the Upper Peninsula by retaining graduates who experienced the Upper Peninsula program; (3) to improve access to health care in the Upper Peninsula as well as the northern lower peninsula by a selection bias in the admissions process; and (4) to improve access directly through the provision of academic health services. We have accomplished these goals with reasonable effectiveness.

The Upper Peninsula program was developed by Dr. Donald Weston with the Area Wide Comprehensive Health Planning Agency, a precursor to the Health Systems Agency, in partnership with the Michigan State College of Human Medicine. The Area Wide Comprehensive Health Planning Agency formed the core of the Upper Peninsula Health Care Corporation which actually operates the program. Dr. Ronald Richards from the Office of Medical Education, Research and Development at Michigan State was assigned the task of developing a curriculum. In the Upper Peninsula there was a very public process in which the communities were asked to bid for the site location of the first clinic. Escanaba was chosen because it had a central location and it had a spirited application.

Funding of this initiative was by a line item action in the Michigan State budget, and the program has continued to be funded by this process. It is dependent on the continued annual support of the State legislators from the Upper Peninsula. Administrative structure was awkward at first because people from the Upper Peninsula were not sure they could rely on consistent administration from Michigan State which was almost 500 miles away. Originally 10 students were chosen every other year to participate in this program. Students in 1974, when the program first started, went to the Upper Peninsula after the first 10 weeks at the Michigan State campus, but the Liaison Committee for Medical Education (credentialing agent for U.S. medical schools) would not approve this portion of the program. Under the present arrangement students don't go to the Upper Peninsula until their third year.

The results of this program, after the first 49 graduates, show that 35 percent of these graduates are in or have completed family medicine residencies. Thirty percent have returned to the Upper Peninsula to practice. Sixty-six percent are in primary care (family practice, general internal medicine or pediatrics) and 50 percent are in rural practice whether they are specialized or not. Sixty-six percent of the applicants came from the Upper Peninsula district.

Unfortunately the number of practicing family physicians in Michigan is the same today as it was in 1970. If we had an Escanaba-type opportunity in more communities I'm sure our numbers would be a lot better, but unfortunately we don't. The incredible amount of resources and energy needed to develop and maintain such a program and the restrictions imposed by credentialing guidelines make it unlikely that we can repeat it in the near future.
If students are to choose rural practice they must have experience in rural areas during training, and the medical school faculty must include rural practitioners.

— Curriculum Workshop Report

The culmination of the symposium, Training Physicians for Rural Health Careers in New York State, was the production of reports by the three workgroups on: (1) medical school curriculum; (2) selective admissions; and (3) physician recruitment and retention. These three workgroups each met over the two-day period of the symposium to discuss what they learned from the various presentations and to share their individual experiences on each of the three topics.

After carefully considering the issues and especially the problems relating to each topic, the workgroups provided a series of recommendations which, in whole, establish a comprehensive approach to increasing the availability of primary care physicians for practice in rural communities of the state, and for training physicians in the unique types of practice required in such areas. Following are the three reports produced by the individual symposium workgroups.

Curriculum Workshop Report

Moderator: Molly McKeown
Consultant: L. Thomas Wolff, M.D.
Recorder: David Silverstein, M.D.

The workgroup on medical school curricula began with the premise that all medical schools have a social responsibility to respond to the health care needs of society, a premise shared by the New York State Commissioner of Health and the Associated Medical Schools of New York. More specifically, the medical schools must respond to the critical shortage of rural physicians in New York State.

The group's second premise was that medical school curriculum has an impact on the career choice of physicians, and that appropriately designed curricula could help alleviate the shortage of rural physicians. This premise is supported by the experience at the University of Minnesota Medical School where 57% of the graduates of the Minnesota Rural Physician Associate Program are practicing in rural areas and for the first time all 87 counties in Minnesota have an acceptable ratio of one general physician for 2500 people or better.

Therefore, the curriculum workgroup's objective was to propose a strategy for the design and implementation of medical school curricula in New York State that could produce more rural doctors. In addition to the Minnesota program, a number of other models were considered during the course of the two-day conference, including the Upper Peninsula Rural Health Program in Michigan, the Physician Shortage Area Program at Jefferson Medical College (Philadelphia), the Continuity of Care Program in Binghamton and the Extended Rural Preceptorship at Syracuse. Successful programs tended to share three features that the workgroup felt must be a part of any program:

1. A community-university integrated rural experience. If students are to choose rural practice they must have experience in rural areas during training, and the medical school faculty must include rural practitioners. Individuals from the medical school and the community must
be equal partners in the design, planning
and implementation of the rural training
experience. The student’s education
should employ a team approach,
involving the full spectrum of health care
providers in the community.

2. An emphasis on primary care beginning
on the first day of medical school.
Although many rural areas are in need of
a variety of specialists, the greatest need is
for primary care practitioners. In addi-
tion, physicians trained in the primary
care specialties, particularly family
medicine, are far more likely to practice in
rural, underserved areas.6 7 Therefore,
from a practical point of view, training
physicians to enter rural practice is
synonymous with training physicians in
primary care, and the only way to get
students to choose primary care
residencies is to give primary care a
The health care needs of rural areas are clearly different from those of underserved inner-city populations, and different strategies are required to attract students to rural communities. The Special Task Force on Rural Health Care Delivery in Texas recognized this when it included among its recommendations the requirement that all medical schools include third-year clerkships in family medicine.

3. Clearly defined outcome criteria. Programs should not be evaluated solely on the apparent quality of their curricula, but also by their success in achieving the goal of increasing the number of rural physicians. Objectives should be established at the outset, and program evaluation should focus on the programs' abilities to meet those objectives. Due to the long lead time required to determine physician location, the percentage of graduates entering family medicine and other primary care residencies may serve as an interim surrogate. Reasonable targets might include 25 percent in family medicine and 50 percent in primary care.

There were several important issues upon which the group did not reach consensus:

1. Should the focus of this program be only on rural areas or should there be a more broadly defined goal of training students in a variety of underserved sites? The health care needs of rural areas are clearly different from those of underserved inner-city populations, and different strategies are required to attract students to rural communities. For example, low-income rural patients tend to be uninsured or underinsured, while inner-city residents more frequently are covered by Medicaid; rural physicians must live in the communities they serve while inner-city physicians usually can commute from more affluent neighborhoods; and transportation to health care facilities is a far more critical problem in rural communities. It was felt by some that if training physicians in rural areas was not approached as a separate issue it would be short-changed. On the other hand, there are clearly urban medical schools and students from inner-city backgrounds who are not likely to participate in or profit from a rural health initiative. A broader focus on the underserved could forge a wider consensus. In terms of legislative action it would also avoid putting the needs of urban and rural politicians into conflict.

2. Should there be a one- or two-track system? A single track would expose all medical students to rural health and primary care. However, there are clearly students with no interest in or aptitude for rural practice who might profit more from other experiences. A separate track would allow for a concentration of resources where they are most likely to be productive.

A number of obstacles to the implementation of new curricula were identified:

1. Inadequate resources. Traditional medical school faculty are supported to a large degree by federal research grants. National Institutes of Health (NIH) funds have not been obtainable by primary care faculty. Current reimbursement systems also limit the ability of primary care departments to use clinical income to support faculty and teaching programs.

2. University tenure rules. The path to promotion still lies with bench research, publication and external funding. Funds for primary care research are limited, and the large clinical and teaching requirements of a community-university integrated rural training program would leave little time for large numbers of publications.

3. Institutional inertia. Tenured medical school faculty and administrators are primarily oriented toward the basic sciences and tertiary-care subspecialties. There is little leadership promoting the needs of rural communities.
Strategies for Change

The most compelling stimulus for medical schools to change their curricula will be dollars. The Minnesota Rural Physician Associate Program was created in response to a threat from the State Legislature to cut off all state funding. A position paper from the Associated Medical Schools of New York cites "...the need to formulate an effective and comprehensive model for the education of physicians, and to link that process to providing access to high quality health care throughout the state." We agree with Dr. Axelrod that "the state needs to promote changes in the education and training of medical students by putting strings/requirements on the distribution of state funds that go to medical schools." In addition to redirecting current funding, including capitation payments, the State University of New York (SUNY) budget and state support to out-of-state medical schools, there is a need for new monies in support of pilot programs that incorporate the curricular principles outlined previously. Initial funding would be based on well-designed and feasible proposals, with evidence of community-university integration and strong institutional commitments. Ongoing support should be based primarily on outcome criteria; funds will go to programs that have been successful in placing their graduates in rural communities.

Finally, a mechanism is needed to coordinate this initiative, disseminate Requests for Proposals and award grant funds. One such mechanism would be the New York State Institute for Primary Care, as proposed by Senator Michael J. Tully, Jr., Chairman of the Senate Health Committee.

Specialty Distribution in New York State
Physicians in Practice and in Residency Training

Physicians in Practice
(n = 39,509)

Physicians in Residency Training
(n = 13,135)

*One-half of current Internal Medicine residents who will enter subspecialty training upon completion of 3 years Internal Medicine Training.

Conclusions

1. Medical schools have a social obligation to meet the health care needs of rural New York.
2. The way to fulfill this obligation is by providing students with training in rural settings and to emphasize primary care, and particularly family medicine, from the first day of medical school.
3. State funding for medical education must be redirected to schools that graduate physicians who practice in rural areas.
4. New grant monies are needed to stimulate curricular innovation.

Admissions Workshop Report

Moderator: Kevin McCarthy, Esq.
Consultant: Howard Rabinowitz, M.D.
Recorder: Thomas J. Guttuso, M.D.

The Admissions Workgroup at the symposium considered carefully the existing barriers to implementing a selected admissions program (i.e., targeting admissions policies toward recruiting more rural students) and recommends:

1. Medical schools in New York State should be charged with the philosophy that they need to recruit and train health care professionals to provide services to all segments of society with special emphasis on rural, minority and inner city needs.
   • Admissions Committee members should be educated on the special aspects of rural health care problems and on the type of candidates most likely to eventually choose a rural health career.
   • The "Selective Medical School Admission Policy" at the Jefferson Medical College, Philadelphia, is a good role model from which individual schools could develop their own programs.
   • Each medical school should establish and fund an Office of Rural Health to assist and coordinate these special admissions programs.
2. New York State should support this program by:
   • Providing financial incentives to medical schools that develop an Office of Rural Health.
   • Providing significant capitation incentives for enrollment in the program.
   • Establishing a "Loan Forgiveness" program for candidates who agree to practice in a rural area.
   • Funding a preceptorship program in rural areas.
3. Rural communities should be active partners in this program. The county or town and/or the rural hospital should identify talented secondary school students who are science oriented, encourage them to pursue a career in medicine, and possibly provide funding for such students' college education.
   • Participating medical schools should provide summer research and/or clinical programs for these students.
   • Practicing physicians from rural areas should be funded to act as preceptors for these interested students.
4. The medical environment should be improved to reduce the discouragement many talented young men and women experience when they investigate the field of medicine. Specifically, tort reform, easing of restrictions and limiting required paper work is recommended.
Recruitment and Retention Workshop Report

Moderator: Joseph Geraee
Consultant: Thomas C. Rosenthal, M.D.
Recorder: James Wild, M.D.

I. Introduction

The focus of this workgroup was the enhancement of recruiting efforts to bring increased numbers of primary care physicians to rural New York State and keep them there. There was a wide representation of various perspectives among the participants in this session. The workgroup was comprised of representatives from the legislature and the Governor's office, residency program directors, medical school faculty, administrators of community health centers, and rural primary care physicians.

It was generally agreed upon that the recruitment of primary care doctors is a serious problem in New York State. The problem is one of a maldistribution of physicians in New York by specialty choice as well as geographic location. The difficulty in obtaining good data to adequately assess the scope of the problem was briefly discussed. In general, however, the participants felt the problem had not improved in the last several years and in many ways appeared to be getting worse.

II. The Issues

The issues that help to create the recruitment problem and hamper its solution were outlined. A summary of those major issues follows.
An attempt was made to group the issues into three major categories: (1) Economic, (2) Professional, and (3) Community or Public Health Policy Issues. These divisions are somewhat artificial, but helped to organize the approach to the issues in order that some concrete solutions to a very complex problem could be put forth.

1. The Economic Issues

The economic issues that act as barriers to recruitment and retention were analyzed. It was generally accepted that there exists a rural/urban economic disparity. This is true in many facets of society outside of the health care industry. The scope of that disparity is important to recognize, but it was felt that it could not be realistically addressed in the context of the workgroup. With that background, however, the specific problem of the inequity of primary care reimbursement was outlined. The workgroup felt that there exists not only a rural/urban differential in terms of income levels, but also an impression that the primary care specialties are generally undervalued and consequently underpaid.

The financial instability of rural hospitals was also pointed out as having a negative impact on recruiting and perhaps even more so on the retention of physicians in rural areas.

There appears to be a "critical mass" of health care professionals needed to provide the full range of primary care services in rural communities. That fact makes it imperative to think in terms of wider-ranging solutions than typical band-aid measures such as recruiting a physician and guaranteeing the salary for a short term.

Finally, the debt burden that many young physicians starting out must carry further hampers rural recruiting efforts unless significant economic incentives are in place.

2. The Professional Issues

Barriers to professional fulfillment were next considered. In general the quality of life that rural communities had to offer was considered either a plus or a minus depending on specific community resources as well as the perceptions of young physicians in training. Specifically, rural practice may at times make one feel professionally and intellectually isolated. There may be a lack of quality backup in terms of secondary and tertiary care. The professional burden, including hospital responsibilities and office practice, could often lead to "burnout". There was a perception that rural doctors had a low status among their peers. Access to Continuing Medical Education was also felt to be lacking.

Finally, quality-of-life issues for the family, and spousal satisfaction were thought to be some of the most important issues. (For example, are quality education for the children and career opportunities for the spouse available in the community?)

3. Public Health Policy Issues

Larger health policy issues were also considered. The workgroup felt that the malpractice climate has a strong negative impact on recruitment in New York State, relative to other states. The regulatory burden was also perceived as proportionately greater for rural primary care physicians in New York State. Finally, the simple lack of physical facilities and the closing of existing facilities further strain the recruiting efforts in rural New York State.

In summary, there are several significant issues that impact upon recruitment and retention of rural health care providers. Solutions to address these issues must be realistic and account for the fact that rural practice is not for everybody and that, to some extent, rural/urban economic disparity will always exist.

III. Recommendations

In addressing the barriers to recruitment and retention some very general and some rather specific recommendations were put forth. A synopsis of the major strategies follows.
1. The establishment of an Office of Rural Health (ORH) within the State Health Department (DOH) was proposed. This Office would function as an advocate for rural health issues within the state bureaucracy. For example, the Office would coordinate programs that involve input from multiple state agencies such as the Office of Mental Retardation and Development Disabilities (OMRDD) and the Office of Mental Health (OMH). This Office could also work with the medical schools and SUNY Health Science Centers (HSCs) to develop comprehensive programs to improve rural health care delivery. The ORH could develop rural impact statements for proposed DOH regulations, new legislation, and new programs. The Office could also provide technical assistance for startup of new sites and generally promote community strategic planning for rural health care. This Office could allow for some regulatory flexibility with regard to rural providers while still respecting quality assurance issues.

2. A second major proposal was the establishment of Offices of Rural Health at all of the New York State medical schools and HSCs. Furthermore, there could be a statewide consortium of these offices that could work with the state ORH in the Health Department to advocate for rural health issues and develop new programs. The function of these ORHs would be to: (1) identify need areas and help to prioritize them, (2) assist in the establishment of new rural practices, (3) establish bi-directional relationships between medical schools and rural practitioners, (4) help coordinate clinical research in rural areas/populations, and (5) encourage needed curricular changes.

   The general ideology behind this proposal is to improve the oftentimes strained relationships between "the town" and "the Gown". In this case the "town" more specifically means rural communities and rural providers.

   As this proposal involves all New York State medical schools, both public and private, a mechanism of economic incentives and/or strings or requirements should be attached to the distribution of state funds to these schools. Generally it was proposed that economic incentives be created for the development of a regionalized network for the provision of primary care. Financial rewards could be considered for the medical schools and/or residency programs successful in placing primary care doctors in rural areas. The Office of Rural Health framework could allow for the implementation of many of these incentives.

3. A task force consisting of representatives from the state's medical schools and law schools should be formed to deal with the malpractice crisis and to recommend needed tort reform. Specific representation from the offices of rural health would help to elucidate the problem from the perspective of its impact on recruitment and retention of physicians in rural areas.

4. Correction of existing disparities in reimbursement for rural hospitals and doctors was strongly urged. Specifically, the Medicare reimbursement differential for rural/urban hospitals was cited as a major barrier for strengthening existing rural hospitals and developing networks of care.

   Equally important is correcting the disparity between reimbursement for specialty care and primary care. There was general support for the implementation of a "Relative Value Scale," as proposed for Medicare. It is hoped that a wide-scale movement in this direction by third-party payers will go a long way toward removing the economic disincentives for choosing primary care and practicing in rural areas. Other short-term solutions, pending full implementation of such a program, might include direct subsidy of practitioners starting practices in underserved areas. Another specific recommendation was expansion of the current loan forgiveness program to help remove debt burden, which is another economic disincentive to practicing in a rural community.
Barbara Michaelis, one of the students in the rural preceptorship program conducted by SUNY Health Science Center at Syracuse, examining a patient.

"Any approach, be it an Institute for Primary Care, an independent authority, or an Office of Rural Health in the Health Department, must be responsive to rural needs and help make rural practice a more attractive option."

— All Workgroups

There was support for many of the strategies put forth by the New York State Council on Graduate Medical Education. Consideration was given to the establishment of an independent authority at the state level to monitor rural health care issues. There was some sentiment that this approach would be preferable to creating an Office of Rural Health within the Health Department.

One proposal currently being developed is for an Institute for Primary Care that would support primary care initiatives throughout the state, but not exclusively rural initiatives. The important issue here is to avoid redundancy and over-expansion of bureaucracy.

Any approach, be it an Institute for Primary Care, an independent authority, or an Office of Rural Health in the Health Department, must be responsive to rural needs and help to make rural practice a more attractive option.

IV. Summary

Long-term solutions to the problems outlined will likely involve proposed changes in admissions policies and curriculum that have been discussed above. However, some of the more immediate concerns of the maldistribution of physicians in urban centers and specialty practice could be addressed by the strategies outlined. Cooperation between the legislature, the executive branch, private medical schools, the SUNY Health Science Centers, local governments, and rural health care providers is needed to meet the challenge of attracting well-trained, caring physicians and other health care providers to the rural areas of our state.

References
8. Executive Summary of the Special Task Force on Rural Health Care Delivery in Texas.
Appendices

A. Background Reading Materials
B. Symposium Participants
C. Classification of NYS Counties
D. Major Components of NYS 1991-93 Hospital Reimbursement Legislation of Interest to Rural Hospitals and Primary Care Practitioners
Appendix A — Background Reading Materials

Training Physicians for Rural Health Careers in New York State

David Axelrod, M.D.
Commissioner of Health, New York State
November 1989

Medical education and graduate medical education must respond to many diverse needs in preparing future physicians. In New York we have some of the finest medical schools in the nation, but we are also challenged by a very broad array of problems. The persistent shortages of health personnel in general and primary care physicians in particular that plague rural communities have been a concern of several policy advisory groups, among them the New York State Council on Graduate Medical Education, the New York State Health Research Council, and the Rural Health Council. In rural communities that face hospital closing or conversions and physicians’ retirement we must redirect our efforts to maintain access to primary care. As we restructure the rural health care delivery system, we must also restructure our medical education system so that physicians are prepared for practice in rural settings.

A number of steps need to be taken to effectively alleviate physician shortages in rural areas. The focus of medical education and graduate medical education must be expanded in order to assure that rural areas are competitive in attracting new primary care providers. In addition, medical schools are not training sufficient numbers of primary care physicians. In fact, graduates in primary care specialties have been declining. Medical schools currently focus on training students to subspecialize, and subspecialists usually practice in urban health centers. Subspecialization is considered to be more rewarding in status as well as financially than primary care. There are a number of steps involving medical education reform which need to be taken to reverse this trend toward subspecialization while promoting rural practices.

Medical schools must rethink their student selection criteria. The goal should not be to select those who will do well on written tests and research, but individuals who care for people, are committed to providing service and can relate to other people.

Medical schools must have a greater sense of responsibility to train physicians to meet the needs of New Yorkers—particularly those that lack access, due to economic or geographic barriers.

Students must receive experience and exposure outside of medical schools and academic medical centers. Medical education cannot and should not be primarily in large urban research centers. Medical school programs should be redesigned to assure experience in community-based rural health care settings via preceptorships and other model programs.

New York State medical school capitation now exceeds $10 million per year. The state needs to promote changes in the education and training of medical students by putting strings/requirements on the distribution of state funds that go to medical schools. In addition, state support now going to out-of-state medical schools must be reprogrammed to support needed medical education reforms in New York.

In addition to medical education, graduate medical education plays a major role in shaping physician practice plans. Most residency programs in the state do not focus on training physicians for primary care but rather emphasize subspecialization. The New York State Council on Graduate Medical...
"We must go beyond the efforts that have been made, and restructure our medical education system to encourage training of primary care physicians while providing experience in rural practice."

—David Axelrod, M.D.

Education has helped identify strategies of reform to focus greater attention on primary care and service to high need rural populations. Among the reforms they have recommended are the following:

- Increased attention and support for primary care training including revisions in state hospital reimbursement for graduate medical education to redirect funds to primary care;
- Promotion of a graduate medical education consortium. Consortia can encourage rural placement by linking physicians to a comprehensive system of health care services which would include collaboration with medical schools and affiliated hospitals, residency programs and other physicians. These networks make rural practice a more attractive option. The resources to support these changes must come from a re-direction of our present funding priorities;
- Development of systems to support training in community-based sites, including supervision and financing.

As the New York State Council on Graduate Medical Education has identified, hand in hand with the need to change the focus of medical education and training is the need to change the reimbursement structure for primary care physicians. Physicians will continue to select non-primary care specialties which limit their practice to large urban health centers unless reimbursement becomes commensurate with that paid to specialists.

Changing medical education to sensitize physicians to societal needs and providing them with hands-on training in rural areas is only the first step in attracting physicians to rural communities. Other support services are necessary. For example, the State Department of Health's Practitioner Placement Program actively and effectively assists communities and sites recruit physicians. During the 1989 placement cycle alone, the program helped place and direct over 100 primary care physicians to state-designated physician shortage areas. Without active placement assistance, the probability of a physician locating in a rural area and, or serving a medically needy population becomes slim at best. Rural areas need a recruitment advocate and the Practitioner Placement Program serves as that advocate with physicians needing placement assistance. In addition to placement assistance, the New York State Regents Physician Loan Forgiveness Program, which provides grant monies to physicians locating in critical medically underserved areas, eases the financial burden of a physician locating to a rural area.

Rural communities face critical threats to their health care systems as some adjust to hospital closings and others react to physicians' retirement and physician burnout. It is the obligation and the responsibility of the medical education system to meet societal needs for health care. We must go beyond the efforts that have been made, and restructure our medical education system to encourage training of primary care physicians while providing experience in rural practice.
Curriculum Issues for Rural Health Careers

L. Thomas Wolff, M.D.
Professor, Department of Family Medicine
SUNY at Syracuse

A career choice in medicine is a complex process which has been studied over many years. Multiple factors are involved, including home of origin, social background, lifestyle needs, spouse's needs, role models and educational exposure, to name a few. In regard to curriculum, I think it is felt by many that student exposure during medical school to a curricular area is a major factor in career choice. Certainly, I believe that if students are not exposed to a curricular area, their chances of selecting it are virtually nil.

Today's medical education process takes place almost entirely in a tertiary care setting. This exposes a student to sophisticated technology and subspecialty care with little or no exposure to primary care and especially rural health care away from the medical center. Students have no idea as to the scope of this practice, the ability to practice excellent medicine, the excitement of knowing and understanding their patients in the context of their community, and the lifestyle this can provide for them and their families. They are not afforded the opportunity to explore the intellectual challenges of doing 'front line' medicine, where the patient has not already been seen by multiple people and the diagnostic and therapeutic problem narrowed to a small number of specific possibilities. The challenge to medical educators is to develop a vibrant, positive, real-life educational setting in which students can experience the medical and intellectual challenges of rural medicine, as well as participate, feel and understand the benefits of this as a lifestyle for them and their families. To do this, the educational institution must portray this endeavor as a positive, productive and challenging career. It must offer students the opportunity to test this curriculum at a number of points during their education beginning early enough so that it influences career selection. Different opportunities must be available so that reinforcement can occur. The curriculum must be designed so that students get an understanding of the health issues and disease processes present in the rural communities. They must be able to see that primary care forms the basis for health care in these communities, but that specialty care is also needed and can be practiced in an excellent manner away from the tertiary centers.

Medical schools must have a multi-faceted approach to curriculum development, including the following:

- Meaningful curricular exposure in all years of medical education by primary care faculty.
- Sustained, in-depth clinical clerkship during the third year of medical school where major career choices and role modeling occur.
- Support not only of the administration of the school, but of the other specialty faculty so that efforts to strengthen primary care are not undermined, but reinforced.
- Economic incentives, possibly scholarship programs, for students considering entering rural practice or selecting certain curricular endeavors supporting this choice.
- An ongoing career counseling program throughout medical school.
- Practice-based educational experiences away from the tertiary center.

In order for these things to be successful, the school must make it a priority to have students selecting primary care and rural health as a career choice. This must be actively and aggressively encouraged by all involved in the school. Excellent role models must be presented to the student from a variety of sources, not only full-time faculty but clinical practicing faculty as well. Only with a coordinated, concerted effort such as this will a school be successful in attracting students into primary care and rural health.
Recruitment and Retention

Thomas C. Rosenthal, M.D.
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Community wellness includes the several components by which one gets that impression of an economically and socially healthy community. It is this property of community wellness that must be addressed if we are to encourage more physicians to consider career-long practice in rural communities. Guaranteeing physicians an annual income, building a clinic, and hiring a recruitment agency are band-aid measures at best. Physician recruitment and more importantly retention are dependent on the components of community structure that make up its ability to solve its own problems. The well community attracts physicians. Yet health care is a major measure of a community's wellness.

Besides access to health care, what does a physician mean to a community? A two-physician family practice in rural New York has had a typical impact on the village (population 2,500) and the area it serves. The practice gross receipts are $425,000 annually. It employees seven people (5 FTE's). Two drug store chains have opened stores in town since the practice began. The practice cares for 2,200 families and there is a waiting list for new patients. The physicians have worked with two small manufacturing plants to decrease injuries and have participated in recruitment of specialized personnel for these businesses. They deliver 105 babies to the community each year. They are active on hospital staff 12 miles away, where their average inpatient census is 11. Forty-five cars drive through Main Street to the physicians' offices daily. Fifteen medical students a year serve preceptorships with these physicians and stay in an apartment provided by the town board. The community definitely has a greater sense of wellness, related directly, indirectly and only incidentally to the arrival of these two physicians nine years ago.

Recruitment and retention of physicians cannot be addressed in a vacuum. The needs of the whole rural community must be addressed by such agencies as the Legislative Commission on Rural Resources and the Office of Rural Affairs. Better main streets, good schools, transportation services, and jobs are crucial to physician retention. But government agencies can only provide some of the necessary opportunities.

The Hippocratic Oath defines a unique relationship between a medical school and its regional physicians. The need for continuing medical education and the necessity for ambulatory experiences for students further potentiate this role. Typically, the medical school has focused on the University hospital for teaching, but recent directives have urged an expansion of this role to the broader community. Students consistently rank preceptorships as a valued experience and many rural physicians make enthusiastic teachers. So, yes, there is a significant role for medical schools in rural health and it is consistent with their mission.

Education programs will be enhanced by decentralization. Many rural physicians would welcome the opportunity to be credentialed as preceptors in required primary care rotations. In Minnesota, the rural physicians are willing to pay for the opportunity of hosting a student on an extended rotation. Community-based clinical research using networks of practitioners' offices should be encouraged. The long-term relationship between doctor and patient makes rural practices particularly useful for longitudinal studies of disease processes. Quality Assurance programs and peer reviews are opportunities for planned, focused education by Offices of Continuing
Medical Education. Rural office practices may be incubated by the University much like the high-tech industry model. Medical schools may establish offices of rural health to market and coordinate the bridging of services.

The rural physician makes health care accessible to the community and often becomes an important contributor to community wellness. He/she may also be a tremendous asset to the medical school as a teacher, role model, referral source and supporter.

References:


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Appendix C

Classification of NYS Counties*

Metropolitan - Rural Continuum

Graphic presentations throughout this report were produced using a set of six categories of county types. Counties are grouped along a continuum from the most metropolitan (Type 1) to the most rural (Type 6).

Type 1: Downstate Metropolitan
Type 2: Upstate Metropolitan
Type 3: Rural With Extensive Urban Influence
Type 4: Rural With Considerable Urban Influence
Type 5: Rural With Moderate Urban Influence
Type 6: Rural With Limited Urban Influence

The 62 NYS counties in the six county types, from Most Metropolitan to Most Rural are:

<table>
<thead>
<tr>
<th>Very Metropolitan</th>
<th>Very Rural</th>
</tr>
</thead>
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Type 1
- Bronx
- Kings
- Nassau
- New York
- Queens
- Richmond
- Rockland
- Suffolk
- Westchester

Type 2
- Type 2
- New York
- Albany
- Queens
- Broome
- Richmond
- Dutchess
- Rockland
- Erie
- Suffolk
- Monroe
- Westchester

Type 3
- Type 3
- Genesee
- Oneida
- Oswego
- Orange
- Schenectady
- Saratoga
- Schuyler
- Wayne

Type 4
- Type 4
- Cattaraugus
- Chautauqua
- Chemung
- Oneida
- Montgomery
- Otsego
- Steuben
- Tioga
- Warren

Type 5
- Type 5
- Clinton
- Greene
- Hamilton
- Schoharie
- Schuyler
- Seneca
- Tioga
- Washington
- Yates

Type 6
- Type 6
- Columbia
- Delaware
- Allegany
- Chenango
- Delaware
- Essex
- Lewis
- Sullivan

*For details on the design of this classification system, see the Commission's report, Socioeconomic Trends in Rural New York State: Toward the 21st Century (1984).

Special Note to Readers:
In recommending rural health policy and programs the Commission recognizes there are outlying areas within several metropolitan counties that have rural needs and conditions. Therefore, such rural areas are typically included in program eligibility criteria developed by policymakers, along with the 44 rural counties. In all, approximately 80 percent of the state's land area is rural in character and home to over 3 million New Yorkers.
Appendix D

Major Components of the NYS 1991-93 Hospital Reimbursement Legislation Of Interest to Rural Hospitals and Primary Care Practitioners

- A program to cover primary, preventive, and outpatient services for children up to age 13, from families not eligible for Medicaid whose household incomes are at or below 185% of the federal poverty level;

- Inpatient base year enhancements to cover necessary cost increases due to labor costs, changes in technology and medical practice, increased admissions from the emergency room, providing comprehensive community care, and certain other discrete costs;

- For the 80 rural hospitals with 200 beds or less, an option to be reimbursed either at the actual hospital-specific costs, or at the blended rate (the averaged costs of similar hospitals);

- Rural hospitals will receive a rate increase to help cover fixed costs when patient volume decreases by as little as 1 percent. (Other facilities have a 10% volume adjustment threshold.)

- Rural hospitals are now exempt from a reduced reimbursement formula applicable to hospitals with increases in patient volume.

- Additional funds are allocated to rural hospitals, or to federally-designated Sole Community Hospitals, for the recruitment and retention of scarce health personnel.

- $500,000 annually for a Practitioner Placement Program in underserved rural or urban areas.

- Funding to cover start-up costs for establishment of primary care programs and to subsidize services to the medically indigent;

- Establishment of a payment dispute resolution system;

- Increases in the Medicaid clinic cap to $70 and in the Medicaid emergency room cap to $70 and in the Medicaid emergency room cap to $97.50;

- Establishment of a preferred primary care provider program and enhanced outpatient reimbursement for such providers through the use of the Products of Ambulatory Care (PACs) methodology;

- Higher weighting of primary care residencies for calculating indirect medical education expenses (for 1993 only);

- Requirement that hospital boards of trustees issue mission statements identifying the hospital's commitment to the community, review these statements annually, and solicit community views.

— July, 1990