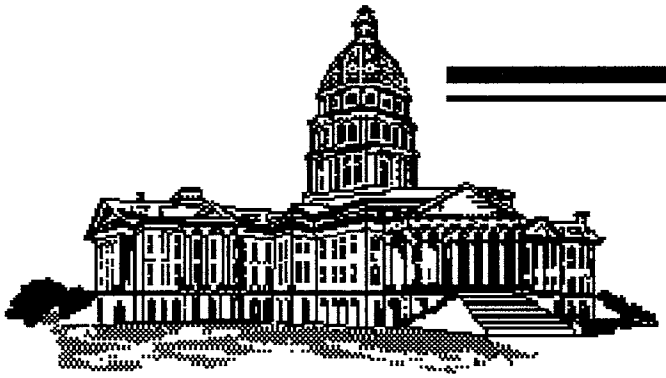

PERFORMANCE AUDIT REPORT

Reviewing State-Funded Medical Scholarships in Kansas

A Report to the Legislative Post Audit Committee
By the Legislative Division of Post Audit
State of Kansas
April 1992

92-44

Legislative Post Audit Committee

Legislative Division of Post Audit

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PERFORMANCE AUDIT REPORT

REVIEWING STATE-FUNDED MEDICAL SCHOLARSHIPS IN KANSAS

OBTAINING AUDIT INFORMATION

This audit was conducted by Allan Foster, Senior Auditor, and Cindy Denton and Tom Vittitow, Auditors, of the Division's staff. If you need any additional information about the audit's findings, please contact Mr. Foster at the Division's offices.

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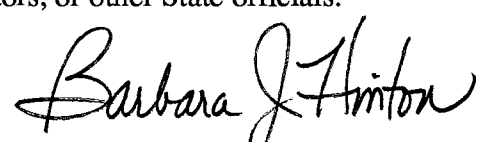
How have the requirements for the Kansas Medical Scholarship Program changed since the Program's inception in 1978? The original purpose of the Program was to retain more physicians in Kansas and to increase the number of those physicians practicing in underserved areas of the State. Since the inception of the Program, requirements have become more restrictive regarding designated areas of practice, types of medical specialties, and repayment provisions. In 1986, the emphasis of the Program changed from distributing physicians to underserved areas to placing primary-care physicians into rural areas. Recipients under these requirements will not be entering practice until late 1992. Other states' that have medical scholarship programs have programs similar to Kansas'.

How many and what types of scholarships have been granted since the Program began? Since 1978, more than $36 million in medical scholarships has been awarded to 1,476 students. The scholarships have included 3,574 scholarships which include payment of tuition and a monthly stipend, and 1,173 scholarships for tuition only. The number of scholarships awarded has dropped dramatically since 1982 because limits on the number of scholarships authorized and stricter Program requirements have made the scholarships less attractive to medical students. The Medical Scholarship Program has not received General Fund appropriations since fiscal year 1987, when money from scholarship repayments began exceeding the amounts needed to fund new scholarships. The Legislature has begun using the increasing balances in the Medical Scholarship Repayment Fund to help fund other operations at the Medical Center.

Have scholarship recipients fulfilled their scholarship obligations? Approximately 46 percent of the scholarship recipients have fulfilled their service obligations since the beginning of the Program. The Program appears to be achieving the goals of retaining Medical Center graduates in Kansas and distributing more doctors to underserved areas. In tracking past and present recipients, we found that many graduates are fulfilling their obligations under provisions of the law that allow them to practice in urban areas. About 42 percent of doctors who have completed fulfilling their obligations continue practicing in underserved areas, and most doctors who repay their scholarships go to other states to practice. In future years, because fewer than 35 new scholarships are being awarded annually, significantly fewer doctors will be distributed to underserved or rural areas as a result of the Program.

We would be happy to discuss the findings presented in this report with any legislative committees, individual legislators, or other State officials.



Barbara J. Hinton
Legislative Post Auditor

Reviewing State-Funded Medical Scholarships in Kansas

The 1978 Legislature passed legislation making scholarships available to medical students enrolled in the University of Kansas School of Medicine. The purpose of the Program is to retain more physicians in Kansas after they graduate from medical school, and to increase the number of those physicians who practice in underserved areas of the State. Under the Program, two types of scholarships are provided to medical students. Type I scholarships pay a medical student's tuition and provide the student with a stipend of $500 per month. Type II scholarships pay the student's tuition but do not provide a stipend. In exchange for this financial assistance, the students generally agree to practice one year in Kansas for each year that assistance was provided. Where a physician must practice in Kansas is tied to the type of scholarship provided and the year in which the physician received the first scholarship.

An audit of State-funded medical assistance programs was conducted by Legislative Post Audit in 1987. That audit showed the Program did not appear to be meeting the objective of retaining more Medical Center graduates in Kansas. However, it did appear to be redistributing some of those graduates to underserved areas of the State. Legislators again have expressed concerns about whether scholarship recipients are fulfilling their obligations to practice medicine in underserved areas of the State. This audit addresses the following questions:

1. **How have the requirements for the Kansas Medical Scholarship Program changed since the Program's inception in 1978?**

2. **How many and what types of scholarships have been granted since the Program began?**

3. **Have scholarship recipients fulfilled their scholarship obligations?**

To answer these questions, we interviewed officials of the University of Kansas Medical Center, reviewed the files of the Medical Scholarship Program, and gathered data on Program participants. We reviewed changes to the Scholarship Program statutes over time. We obtained information from the Board of Healing Arts on where past and present scholarship recipients are currently practicing. Finally, we surveyed a sample of Program recipients to determine their opinions on the Program. In conducting this audit, we followed all applicable government auditing standards set forth by the U.S. General Accounting Office.

In general, we found that the Medical Scholarship Program has undergone several significant changes since its inception in 1979, both in terms of Program goals and requirements for recipients. Many other states do not have medical scholarship programs, but those that do have programs similar to Kansas' Program. Since 1978, scholarships

totaling $36 million have been granted to about 1,500 students. Beginning with fiscal year 1988, the Scholarship Program has been able to fund all scholarships from moneys repaid by those who decide not to fulfill their practice requirements.

We also found that about 46 percent of Program recipients have fulfilled their service obligations. The Program appears to be helping to retain more doctors in Kansas and distributing more doctors to underserved areas. However, we found that many of the scholarship recipients' fulfilling their service obligations were practicing in urban areas, and few of the doctors fulfilling their service commitments practice in rural areas. We also found that about 40 percent of the doctors who have completed fulfilling their service obligations are still working in an area that had been designated as underserved during the past five years. Most of the doctors who repay their scholarships leave the State. Finally, we found that the impact of the Program will diminish in the future because in recent years fewer students have signed up for scholarships. These and other findings are discussed in more detail in the sections that follow.

How Have the Requirements for the Kansas Medical Scholarship Program Changed Since the Program's Inception in 1978?

The Kansas Medical Scholarship Program was created in response to legislative concerns about the supply and distribution of doctors in Kansas, as well as the rising cost of a medical education. The original intent of the Program in 1978 was to retain physicians in Kansas, to get some of those physicians into underserved areas, and to ease the large increase in tuition costs. In 1986, the intent of the Program was changed to placing primary-care physicians in rural areas of the State. The impact of the 1986 changes will not be reflected in this report, as those scholarship recipients will have just begun to enter practice in 1992. Other Program changes have affected scholarship recipients and how they fulfilled their obligations. We also found that other states' scholarship programs generally were similar to Kansas'. The Medical Scholarship Program and changes to it are described in the following sections of the audit.

The Kansas Medical Scholarship Program Was Designed To Retain Doctors In Kansas

In 1978, legislative concerns were raised about the number of students trained at the University of Kansas Medical Center who were leaving the State to begin their medical practice elsewhere. Some areas of Kansas were perceived as being medically underserved. In addition, the Legislature thought that tuition charged at the Medical Center should be increased because the medical tuition was only covering five percent of the actual costs. The Board of Regents has generally targeted tuition rates to cover 25 percent of the actual costs. The Legislature created the Kansas Medical Scholarship Program to address those concerns. The Program was designed to retain Medical Center graduates and place some of them in medically underserved areas by offering them financial assistance for their education. The Program also would offer students a means of continuing their education when the tuition tripled in 1979 at the Medical Center.

All students enrolled in or admitted to the the University of Kansas School of Medicine are eligible to apply for a scholarship. In return for these scholarships, students agree to practice in a designated service-commitment area in Kansas when they have completed their medical training. If they do not wish to practice in the designated service area, they must repay the amount awarded to them plus substantial interest. A student's entry date into the Program determines the required service area and terms of the contact. These variations in requirements are shown in the table on the following page.

Scholarships are awarded on a yearly basis and each scholarship requires a year of service in a designated area. The Program offers two types of scholarships:

- Type I scholarships pay for tuition and a monthly stipend of $500 during the academic year.
- Type II scholarships pay for tuition only.

The Type I scholarship is not expected to cover the full cost of a medical education. The box on page five shows what the average costs might be for a medical student.

The requirements of the Program have been changed many times since its inception. Those changes include designated areas of practice, types of specialities, and payment requirements, as described in the accompanying table.

Requirements for the Kansas Medical Scholarship Program 1978 to 1991

Years	Service Area Requirement		Speciality Requirement	Repayment Terms for Students Who Do Not Fulfill Program Requirements	
	Type I	Type II		Interest	Years to Repay
1978-1981	Medically Underserved Area (a)	Anywhere in Kansas	Any Speciality	10%	10 years
1982-1985	Critically Underserved Area (a)	Medically Underserved Area (a)	Any Speciality	15%	5 years
1986-1991	Cities with pop. under 12,000 Excluding 4 urban counties	Cities with pop. under 12,000 Excluding 4 urban counties	Primary Care	15%	Full repayment is required within 90 days of completion of residency if residency is not in primary-care.

(a) An area, which can be a county or other sub-State region, is underserved in a particular specialty if it has fewer doctors in that speciality than a preestablished standard.

As the table shows, service area requirements became more restrictive as the Program began to mature. Initially, students who received Type I scholarships had to serve in a medically underserved area and Type II scholarship recipients could serve anywhere in Kansas. In 1982, these requirements changed to critically underserved areas for Type I scholarships and medically underserved areas for Type II scholarships. These underserved areas will be discussed later in this section.

In 1986, the emphasis of the Program changed from underserved areas to an emphasis on rural areas. With the 1986 changes, recipients were required to practice in a city of less than 12,000 population, excluding cities in Johnson, Sedgwick,

Shawnee, and Wyandotte. For the first time, service area requirements became the same for both types of scholarships.

The 1986 changes also added specialty requirements. Before 1986, recipients could choose to specialize in any area of medicine. In 1986, recipients were required to enter one of the primary-care specialties, including family practice, internal medicine, and pediatrics. For the first time, the law also contained a penalty for not entering a primary-care residency. If a recipient failed to enter one of the required residencies, he or she had to repay the entire scholarship amount plus interest within 90 days of entering residency. The timing of the repayment was later changed to completion of residency so that the recipient would have the ability to repay through a bank loan or though an advancement or payment by an employer.

Medical Scholarships Do Not Pay the Full Cost of a Medical Education

The Kansas Medical Scholarship paid $6,606 for a scholarship recipient's 1991 tuition and fees. In addition, a $500-per-month stipend was provided to students with Type I scholarships. Thus, a student receiving a Type I scholarship would have been awarded $11,106 for the 1991 school year.

The amount provided through the scholarship program is not enough to meet estimated student expenses.

Officials from the Medical Center estimate that a typical first-year medical student would have the following expenses:

Tuition & Fees	$6,826
Room & Board	4,950
Books	500
Personal/Medical	1,890
Transportation	900
Total	$15,056

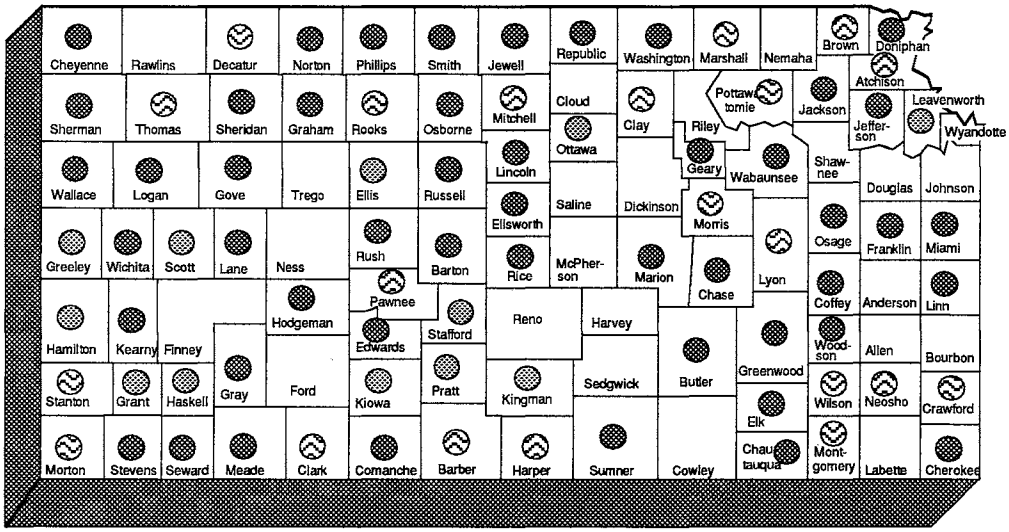
Because of the seven-year delay between the time a student first receives a scholarship to the time he or she enters practice, recipients covered by these requirements will not begin practicing until sometime in 1992. Therefore, the recipients we examined for this report do not fall under these requirements.

Other changes to the Program over the years have allowed service requirements to meet specific needs within the State. For example, to meet the Program's service requirement any recipient may serve in a State medical care facility or institution or Veterans Administration facility, may serve as a faculty member in family practice at the Medical Center, or may work 100 hours a month for a non-profit organization serving the medically indigent. Also, recipients who wish to fulfill their obligations by working less than full-time may do so by extending the length of their service obligation. Other Program changes to accommodate specific situations are shown in the box on page eight.

Medically Underserved Areas

Two levels of underserved areas are defined: medically underserved and critically medically underserved areas. An area, which can be a county or other sub-State region, is underserved in a particular specialty if it has fewer doctors in that speciality than a preestablished standard. These areas are not confined to rural areas.

Underserved Areas
Primary Care Specialties
Fiscal Years 1988 and 1991



Counties that have fewer doctors than a specified standard are considered to be underserved. Counties considered to be underserved in primary care have fluctuated considerably over the years. In 1988, 70 counties were considered to be underserved in primary care, but in 1991, 61 counties were classified as underserved in that specialty. Of these two groups of counties, 49 were considered to be underserved in both 1988 and 1991.

Different standards are used for each speciality using a ratio of the total number of doctors in that specialty who practice in Kansas to the total State population. Kansas standards are based on national studies of physician manpower. Before fiscal year 1987, the Department of Health and Environment had the statutory responsibility to designate underserved areas and determine whether a student was practicing in an appropriate location. In fiscal year 1987, the University of Kansas took over that task.

Underserved areas are evaluated and changed every year as necessary. The map above shows the underserved areas for primary-care physicians in 1988 and 1991, and how those areas shifted during the period. For the primary-care specialty, the county is the area of designation. The number of counties that have been designated underserved has ranged from 70 in 1988, to 61 in 1991. In addition, specific counties that have been designated underserved have changed as well. For example, the 70 counties that were underserved in 1988 were not the same counties that were underserved in 1991. One reason: some counties have so few people that the loss of one doctor moves the county into an underserved status. When a new doctor sets up practice in that county, the county is no longer underserved. Thus, there is constant fluctuation in underserved areas as a result of normal physician supply changes.

The change in the 1986 law requiring recipients to work in cities with a population of less than 12,000 will eliminate the requirement to practice in underserved areas.

Six of 14 Other States We Contacted Had Scholarship Programs Similar to Ours

We called 14 states, including the surrounding states and other predominantly rural states. Only six had scholarship programs. The table below compare those six programs and the Kansas Program.

Medical Scholarship Programs In Other States

State	Type of Program	Eligible	Current Practice Requirements		Repayment Requirements
			Specialty	Location	
Kansas	Scholarship	All Students	Internal Medicine Family Practice Pediatrics	Community of less than 12,000	Funds received plus 15% interest
Arkansas	Loan	State Residents	No Restriction	Community of less than 8,000	Funds received plus federal discount rate, plus 5%
Kentucky	Scholarship	State Residents	Internal Medicine Family Practice Pediatrics OB/GYN	Underserved Area	Funds received plus one-half of prime rate plus 4%, plus $5,000 penalty
Nebraska	Loan	State Residents	Internal Medicine Family Practice General Pediatrics General Surgery OB/GYN Psychiatry	Underserved Area	Funds received plus 24% interest
Oklahoma	Scholarship	State Residents	No Restriction	Community of less than 7,500	Funds received plus 12 percent interest, plus 25%-98% penalty depending on location of practice
South Dakota	Scholarship	All Students	Internal Medicine Family Practice General Practice OB/GYN	Underserved Area	Funds received plus 9% interest
West Virginia	Loan	State Residents	Shortage Specialties Identified by Area	Underserved Area	Funds received plus 8% interest

The table shows that four states, including Kansas, had scholarship programs and three had loan programs. Traditionally, a scholarship is a grant awarded to the student that is not required to be repaid, and a loan must be repaid with interest. For these seven programs, however, there is little practical difference between a scholarship and a loan.

Program Changes to Accommodate Specific Situations

Statutes affecting the Kansas Medical Scholarship Program were sometimes changed to accommodate specific situations. For example:

- In 1988, legislation was passed to help certain individuals who could not work full time fulfill their obligation (76-375(j)).
- In 1990, recipients could meet their service obligation by working with the medically indigent (76-375(e)(2)).
- In 1990, legislation was passed that would encourage physicians to work in areas such as Hutchinson, Salina, and Hays (76-375(e)(3)).
- In 1991, a recipient who fulfilled his or her obligation at Memorial Hospital in Topeka in emergency medicine could transfer to a critically underserved area with the same speciality (76-376(a)(8)). Medical Center officials told us that this law was enacted to accommodate one individual.

Each state requires the recipient to serve in a specific area of the state to either fulfill a service obligation or have a loan forgiven.

All states require students to repay their loans or scholarships, plus interest, if they do not fulfill their service obligations. The interest charged ranged from about eight percent in West Virginia to 24 percent in Nebraska. In addition, the following states have substantial penalty requirements:

- Oklahoma assesses a penalty of 25 - 98 percent of the original award
- Kentucky assesses a $5,000 penalty

The Kansas Program does not require repayment from students who fail to complete their degrees or obtain their licenses. Additional information about the seven state programs can be found in appendix A.

How Many and What Types of Scholarships Have Been Granted Since the Program Began?

Since its beginning in fiscal year 1979, the Medical Scholarship Program has provided 4,747 scholarships to 1,476 students at the University of Kansas Medical Center. The cost of the awarded scholarships has been just over $36 million. In 1982, at the peak of the Program, 665 students were participating in the Scholarship Program. The number scholarships awarded have declined since then, and in fiscal year 1991 only 100 medical scholarships were awarded at the Medical Center. The scholarship Program became self-funding in fiscal year 1988 and currently helps pay for other operating expenses at the Medical Center.

Since 1978, a Total of $36 Million in Medical Scholarships Has Been Awarded to 1,476 Medical Students

During the 13-year period that the Medical Scholarship Program has operated, 4,747 scholarships have been awarded to medical students at the Medical Center. The scholarships have included 3,574 Type I scholarships, which include payment of tuition and a $500 monthly stipend, and 1,173 Type II scholarships, which include payment of tuition only. Total costs of these scholarship awards have amounted to more than $36 million, or an average of $7,638 per award. About $29 million of this amount came from the State General Fund, and the rest came from scholarship repayments. The table on the following page shows scholarship information for each fiscal year the Program has been operating.

Scholarship awards have dropped significantly because of limits imposed by the Legislature, and because fewer students have applied for the available scholarships. The table on the following page shows that the number of medical scholarships awarded has declined significantly over the life of the Program. Scholarship awards reached a high of 665 in fiscal year 1982, but had dropped to 100 scholarship awards in fiscal year 1991. One major reason for the decline has been the statutory restrictions placed on the number of new scholarships the Medical Center is allowed to award. During the first four years of the Program, no statutory limits were placed on the number of medical scholarships that could be awarded. Beginning with fiscal year 1983, the number of scholarships that could be awarded was limited to 100. Although the current limit is 50, the amount of money appropriated for the Program limits new scholarships to 35.

In five of the last six years, the Medical Center has not been able to award all the authorized scholarships. According to Medical Center officials, the 1986 change to the Program requiring students to enter a primary care specialty and establish their practices in cities of less than 12,000 population discouraged some students from applying. Students were reluctant to commit to a primary care specialty before they were sure of their own area of interest.

Kansas Medical Scholarships Awarded and Annual Disbursements
Fiscal Years 1979-1991 (a)

Fiscal Year	Limit on New Awards	Number of Scholarship Awards			Scholarship Costs	
		New	Continuing	Total	Total	Average
1979	no limit	426	0	426	$2,826,396	$6,635
1980	no limit	202	302	504	3,352,584	6,652
1981	no limit	178	381	559	3,602,916	6,445
1982	no limit	190	475	665	4,702,030	7,071
1983	100	100	505	605	4,212,830	6,963
1984	100	100	421	521	3,973,394	7,626
1985	75	75	346	421	3,456,198	8,209
1986	50	49	244	293	2,645,810	9,030
1987	50(b)	31	196	227	2,113,310	9,310
1988	50(b)	41	145	186	1,810,745	9,735
1989	50(b)	24	109	133	1,290,029	9,699
1990	50(b)	32	75	107	1,118,394	10,452
1991	50(b)	28	72	100	1,154,160	11,542
Totals		1,476	3,271	4,747	$36,258,796	$7,638

(a) The information provided by the Medical Center for this table contains minor differences from the information presented in our 1987 audit. These differences do not affect any conclusions drawn from the information.

(b) The actual statutory limit was 50 as indicated; however, the amount of money appropriated effectively set the limit at 35.

Another reason for fewer applications may be the cost of repayment. Several respondents to our survey of scholarship recipients complained of the high interest costs associated with repaying the scholarships, and indicated they wished they had sought out a less expensive way to finance their medical education.

Tuition hikes and the decision to make practice requirements the same for both types of scholarships have contributed to rising average scholarship amounts. The table also shows that the average scholarship amount has increased from $6,635 in 1979 to $11,542 in 1991. A primary reason has been tuition increases. The increase also has been caused by a significant drop in the number of students applying for the Type II scholarships (tuition only). The table on the facing page shows the changes in the number of Type I and Type II medical scholarships awarded.

As this table shows, during the last four years only three medical students have received new Type II scholarships. According to Medical Center officials, when the practice requirements became the same for the Type I and Type II scholarships in 1986, most medical students began to take the Type I scholarship because it provided more money.

Type I and Type II Scholarships Awarded
Fiscal Years 1979-1991

Fiscal Year	New Scholarships		Continuing Scholarships		Total Scholarships	
	Type I	Type II	Type I	Type II	Type I	Type II
1979	273	153	0	0	273	153
1980	153	49	216	86	369	135
1981	131	47	295	86	426	133
1982	126	64	365	110	491	174
1983	72	28	362	143	434	171
1984	86	14	281	140	367	154
1985	59	16	246	100	305	116
1986	39	10	202	42	241	52
1987	28	3	163	33	191	36
1988	41	0	119	26	160	26
1989	23	1	95	14	118	15
1990	31	1	71	4	102	5
1991	27	1	70	2	97	3

The Medical Scholarship Program Became Self Funded in Fiscal Year 1988

During its early years, the Program was funded through State General Fund appropriations. However, as scholarship recipients began repaying their scholarships, the Medical Center was able to begin using those funds to finance some of the scholarships. By fiscal year 1987, repayments had reached a level that the Medical Center only had to use about $500,000 in State General Fund money. Since then, the Program has been totally funded through scholarship repayments.

The Program now receives far more money in repayments than it gives out in scholarships. For example, in fiscal year 1991, the Program received $4.5 million in repayments and gave out $1.2 million in scholarship awards. Since the Program began, the Medical Center has paid out $36.2 million in scholarships and has collected $15.4 million in repayments.

The Legislature has begun using the increasing balances in the Medical Scholarship Repayment Fund to help fund other operations at the Medical Center. During the last three fiscal years, the Legislature has approved total expenditures of $4.5 million from the Medical Scholarship Repayment Fund for other operating expenses of the Medical Center. Effectively, these authorized expenditures from the Medical Scholarship Repayment Fund have lowered the Medical Center's total State General Fund appropriation by a similar amount. As of January 31, 1992, the Medical Scholarship Repayment Fund had a balance of about $4.9 million.

Have Scholarship Recipients Fulfilled Their Scholarship Obligations?

Since the beginning of the Program, about 46 percent of the scholarship recipients have fulfilled their service obligations. To some extent, the Program appears to be achieving the goals of retaining Medical Center graduates in Kansas and distributing more doctors to underserved areas. In tracking recipients' practice locations, we found that many recipients currently fulfilling their obligations were practicing in urban areas, that about 42 percent of the doctors who have completed their service obligations were still practicing in areas that had been designated as underserved during the past five years, and that few recipients who repaid their scholarships stayed in Kansas. Whatever impact the Program has had will diminish significantly in the future because of the large decrease in the number of students receiving scholarships.

Nearly Half the Scholarship Recipients Who Were Practicing Medicine In 1991 Fulfilled Their Service Obligations

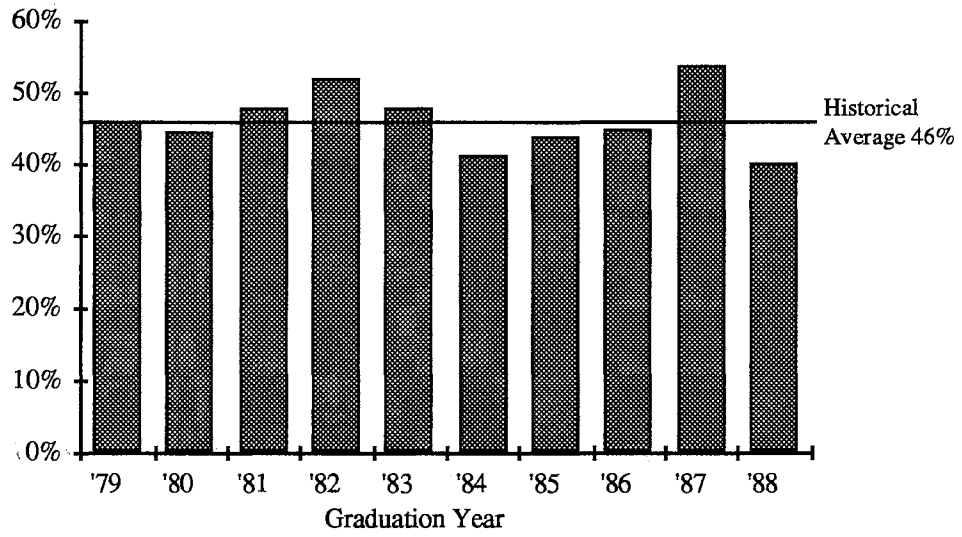
As explained earlier, scholarship recipients have certain service obligations based on the rules in effect the first year they received scholarships. After medical school and residency, recipients must practice in compliance with those requirements one year for each scholarship received. For example, recipients who received their first Type I scholarship in 1985 and later set up practice in critically underserved areas in Kansas would be in compliance with their scholarship service obligations. However, those who decided to practice in another state or in an area that was not critically underserved would not be in compliance and would have to repay the scholarships. The following table shows compliance rates since the beginning of the Program.

Rate of Compliance With Service Obligations for the Kansas Medical Scholarship Program

Year of Graduation	Number of Scholarship Recipients	Number in Practice in 1991	Percent of Total	Number Fulfilling Obligations	Percent Fulfilling Obligations
1979	103	102	99.0%	47	46.1%
1980	100	97	97.0	43	44.3
1981	70	67	95.7	32	47.8
1982	155	148	95.5	77	52.0
1983	173	169	97.7	81	47.9
1984	165	151	91.5	62	41.1
1985	177	169	95.5	74	43.8
1986	105	87	82.9	39	44.8
1987	85	52	61.2	28	53.8
1988	72	30	41.7%	12	40.0%
Total	1,205	1,072	89.0%	495	46.2%

As the table shows, over the life of the Program about 46 percent of the participants have fulfilled or are fulfilling their service obligations. As the box below shows, the annual compliance rates showed no explainable patterns or trends. The lowest compliance rate occurred in the 1988 graduation class; however, more than half these scholarship recipients are still in residencies or fellowships. When those students begin entering practice, that rate may increase.

Percentage of Physicians Practicing in 1991 Who Met Or Are Meeting Their Scholarship Obligations



Scholarship service obligations are fulfilled by practicing in a specific type of location in Kansas. The percentage of scholarship recipients who fulfill their service obligations has fluctuated between 40 percent and 54 percent over the history of the program. Overall, an average of 46 percent of scholarship recipients fulfill their obligations.

A survey of Program recipients showed that people who chose not to comply did so for a variety of reasons. The table on the previous page shows that 577 recipients (54 percent) did not fulfill their service obligations. These recipients were required to repay their scholarships. We surveyed 406 scholarship recipients who graduated between 1985 and 1988 to find out their opinions of the Program. A total of 211 doctors responded to the survey for a response rate of 52 percent.

One of the survey questions asked those who had decided to repay what the major factors in their decision had been. About half of the respondents who were repaying their scholarships said a key factor in their decision to repay was the lack of a suitable practice opportunity. One of the respondents commented that "none of the small towns I contacted were interested in having a pediatrician. The family practitioners told me

they did not need the competition." Another said "I was told that I would not be able to practice my specialty in an academic setting and fulfill my scholarship obligations," We also received such comments as "modern radiology requires technology not available in rural Kansas." The complete survey results can be found in Appendix B.

Two other factors seemed important in the respondents decisions to repay. Forty-three percent said they went into a specialty other than family practice, and about 40 percent said that they wanted to practice in an urban area. (Respondents could give more than one response to this question.) Several people suggested that the Medical Center should establish a service to match up students with practices in cities that need doctors.

The Medical Scholarship Program Appears to Have Increased the Retention of Medical Center Graduates in Kansas

One objective of the Program is to increase the number of doctors in Kansas by retaining more Medical Center graduates in the State. To evaluate the success of the Program in retaining more graduates, we looked at the change in overall physician supply before and after the Program. We also looked at the percentage of Medical Center graduates from 1979 to 1986 who were still working in Kansas in 1991.

The following table shows physician supply data for the years 1981 through 1991.

Supply of Medical Doctors in Kansas
1981 - 1991

Calendar Year	Number of FTE Medical Doctors	Number of Medical Center Graduates	Percent Of Total
1981	2,307	1,053	45.6%
1982	2,391	1,093	45.7
1983	2,469	1,128	45.7
1984	2,575	1,179	45.8
1985	2,558	1,186	46.4
1986	2,556	1,190	46.6
1987	2,452	1,152	47.0
1988	2,664	1,256	47.1
1989	2,705	1,295	47.9
1990	2,794	1,330	47.6
1991	2,854	1,349	47.3%

The first recipients of medical scholarships under the Program generally began practicing medicine in 1983, and they began to show up in the physician supply data in

Scholarship Recipients' Comments About the Program

We sent surveys to 406 scholarship recipients who graduated between 1985 and 1988. These recipients were generally the ones that had established their practices since the last audit. A total of 211 doctors responded to the survey for a response rate of 52 percent. Following is a selection of their comments, both positive and negative, about the Program.

"The Kansas medical scholarship was the only way that I could afford to go to medical school. I wanted to go to a small town and feared I would not be able to afford to if I took only loans."

"My wife and I personally benefited from this Program. I thought it was a good idea, especially since we planned on returning to a small town to live and work. I do appreciate the assistance this Program offered and I try to thank the taxpayers of this State for putting me through school."

"Tuition was set so high by the State that I was forced to accept the scholarship. However, medical students and residents should be better educated about the opportunities in underserved Kansas. What a pleasant surprise Great Bend is!"

"It would help to tie the scholarship to a particular community that the student could learn about throughout medical school and residency. The familiarity with the site of obligation would increase fulfillment of that obligation."

"Look at counties with an aging physician population. I interviewed in a town that was not critically underserved based on number criteria, but the only two internists in town were nearly 70 years old. They were not retiring until a new physician could be found. They were desperate. I could not go there and fulfill the scholarship."

"I look at it as the only way I was able to go to medical school. My total medical scholarship debt including interest was over $70,000 for four years. Maybe the military would have been a better option. I just keep paying it every month - its a lot of money ($850 per month)."

"I think it is impossible to know where you will want to practice and in what specialty when you begin medical school. I think the State should offer an alternative program of low interest loans which do not obligate you to a certain specialty or location."

"New medical students have no way of telling whether a primary care specialty will really be what's best for them. They are desperate to go to medical school - they will sign about anything. Some find later that they really love specialties, or that they hate primary care. The later is not the type person I want to send to western Kansas."

"Whoever enacted this Scholarship Program may not have understood what seven to nine years of training can do to a person's original plans on specialty and setting of practice."

"I seriously regret having even one year of this expensive loan."

"If I had known how severely the Program would cripple me financially, I would probably not have gone into primary care medicine but into a high paying specialty. Also, if I would have known how deeply in debt I would be, I probably would never have gone into medicine at all."

"The State needs to improve the legal climate. Lots of my classmates left Kansas because malpractice was too high and it was too easy to get sued."

"I went to an underserved county instead of a critically underserved county so have a $66,000 debt. So you can buzz off!"

1984. As the table shows, in 1981 through 1983, before the Scholarship Program, Medical Center graduates generally represented about 45 percent of the overall physician supply in Kansas. In the years since the Program, the percentage of overall physicians practicing in the State who graduated from the Medical Center has gradually increased to 47 percent. This is one indication that the Program is retaining more graduates in Kansas.

Another way to determine if the Program is helping keep more graduates in the State is to examined the retention rate of Medical Center graduates. To do this, we compared the percentage of pre-program and post-program graduates working in Kansas in 1991. We found that the average retention rates were:

•26 percent for pre-program graduates (graduating in 1975-1978)
•33 percent for post-program graduates (graduating in 1979-1986)
•39 percent for Scholarship Program recipients (graduating in 1979-1986)

As these figures show, the average retention rate for post-program Medical Center graduates was considerably higher than for pre-program graduates. It appears that the increase in retention rates was largely attributable to the Medical Scholarship Program. Between 1979 and 1986, Program participants made up about three-fourths of all Medical Center graduates. As the figures show, the retention rate for scholarship recipients those years averaged nearly 39 percent. In fact, only 12 percent of the graduates that were not scholarship recipients during those years were practicing in Kansas in 1991.

In a survey of scholarship recipients, 21 percent of those who were practicing in compliance with their service requirements said they would not have established their practice in Kansas without the scholarships. Of the 92 survey respondents who were fulfilling their service requirements, 19, or 21 percent, said that they would not have established a practice in Kansas if they had not had the scholarships. This percentage is not large but it does represent 19 doctors working in Kansas that would be working elsewhere had the Scholarship Program not existed. Many of the respondents commented on this subject. One commented that "without the medical scholarship I would have been more likely to look seriously for practice opportunities in other parts of the country." Another said that "I would probably have stayed in Colorado where I did my fellowship."

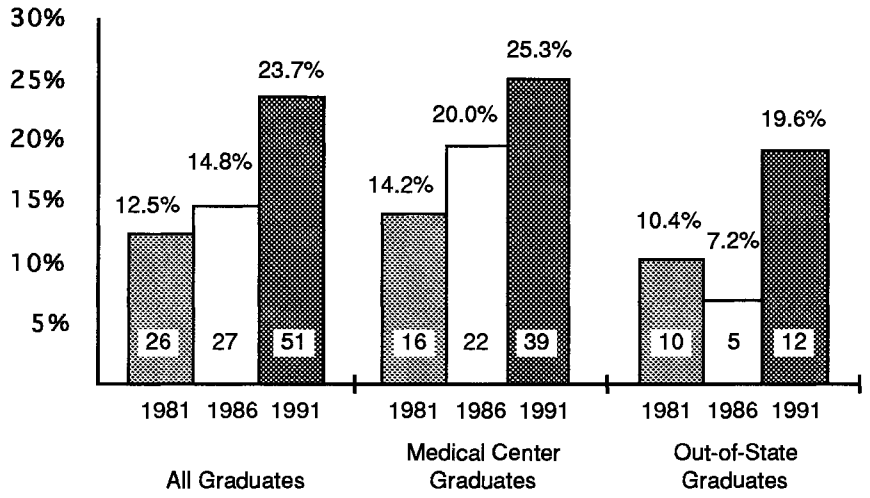
An additional 40 percent of all survey respondents said they would not have been able to afford to go to medical school without the scholarships.

The Medical Scholarship Program Has Had An Impact On the Distribution of Doctors to Underserved Areas

Another objective of the Medical Scholarship Program is to increase the number of doctors who practice in underserved areas of Kansas. To evaluate the success of the Program in meeting this objective, we reviewed the changes in the proportion of Medical Center graduates who went to underserved areas.

A much higher percentage of Medical Center graduates have set up their initial practices in underserved areas now than before the Program started. In the previous audit of this Program, we compared data on the proportion of graduates who were in underserved areas in 1981 (before Program recipients entered practice) with the proportion of graduates who were in underserved areas in 1986 (after Program recipients entered practice). To update this analysis, we added data on the 1991 practice locations of graduates from 1985 to 1987. The results are displayed on the following chart.

Distribution of FTE Medical Doctors In Underserved Areas in Kansas



% of 1975-1977 graduates (pre-program) practicing in underserved areas in 1981.

% of 1980-1982 graduates (post-program) practicing in underserved areas in 1986.

% of 1985-1987 graduates (post-program) practicing in underserved areas in 1991.

For the three time periods listed above, the graph shows the precent of physicians practicing in underserved areas. The number in the lower part of each column is the number of FTE physicians represented by the column. The chart shows a significant increase during the 10-year period (1981 to 1991) in the number of Medical Center graduates serving in underserved areas.

As the chart shows, the proportion of Medical Center graduates setting up practice in underserved areas has continued to increase. In 1981, before any of the Program recipients began practicing, only 14 percent of Medical Center graduates were practicing in areas that were designated as underserved at that time. By 1991, more than one-fourth of all Medical Center graduates were practicing in an underserved area. A statistical analysis comparing the 1981 and 1991 data showed that we could be 95 percent sure this increase did not occur by chance.

The increase in Medical Center graduates practicing in underserved areas has had a corresponding effect on the total number of physicians working in underserved areas, because Medical Center graduates make up about 77 percent of all such doctors.

The percentage of out-of-state graduates working in underserved areas also increased from seven percent to 20 percent. Although the percentage increase in non-Medical Center graduates was fairly dramatic, it does not represent very many doctors;

the 1991 figure consists of only 12 people. We could find no explanation for the large increase in this category.

About three-fourths of the survey respondents said they would not have established a practice in an underserved area if they had not had the scholarship. One survey respondent commented that "because of the smaller group practices in rural areas, there are more nights on call—this factor would probably have lead me to seek a larger group practice setting in an urban area. There are probably greater financial rewards in urban practices also." Other doctors commented that they would probably have established a practice in the Kansas City metropolitan area.

Most Recipients Who Are Fulfilling Their Obligations Work In A Specialty or Position That Allows Them To Discharge Their Obligations By Working In Urban Areas

To determine where recipients went after they completed their scholarship commitments, we obtained a listing from the Board of Healing Arts of the current practice locations of all past and present scholarship recipients. We tracked three groups of recipients:

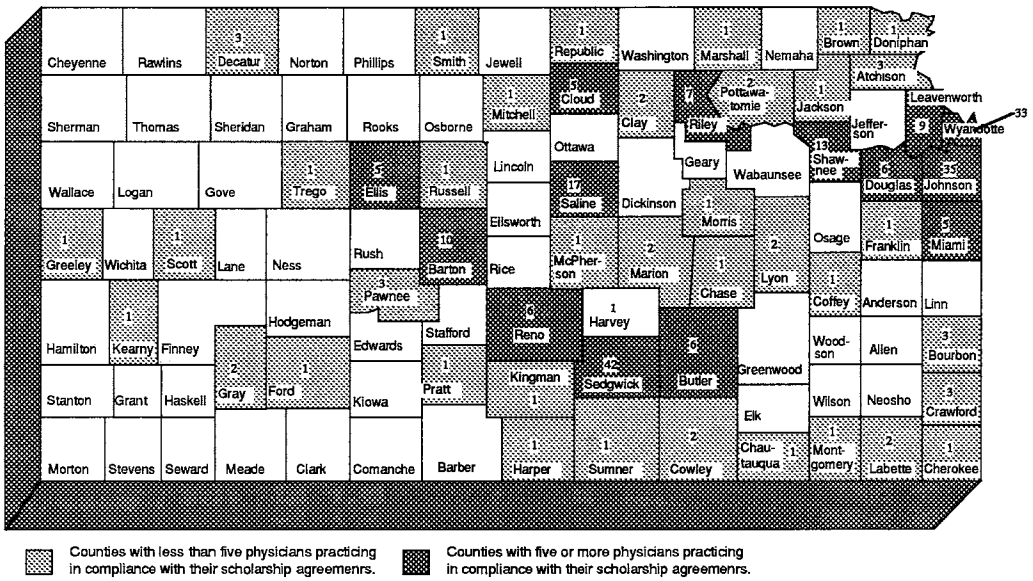
- those currently serving out their commitment
- those who successfully completed serving out their entire commitment
- those who repaid or are currently repaying their scholarships

In general, we found that most recipients currently in the process of fulfilling their scholarship commitments work in urban areas, and over 40 percent of recipients who have completed fulfilling their obligations still serve in areas that have been designated as underserved during the past five years. Additionally, over three-fourths of those who repaid their scholarships practice in other states.

Many of the scholarship recipients who are currently meeting their scholarship requirements are serving in urban areas. In all, 110 of the 254 recipients (43 percent) who are currently meeting their service requirements work in Sedgwick, Johnson, and Wyandotte Counties. The map on the facing page shows the locations of the 254 recipients currently fulfilling their service obligations.

It is important to remember that underserved areas are not the same as rural areas. Many urban areas can be underserved in certain specialties, such as emergency medicine. Further, certain types of facilities in urban areas may be considered to be underserved, such as State institutions and the Medical Center. The statutes concerning the Medical Scholarship Program allow many situations in which doctors can practice in urban areas in compliance with service requirements.

Number of Recipients Practicing in Compliance With Their Scholarship Agreements, by County



As of March 1, 1992, a total of 254 scholarship recipients were practicing in Kansas in locations or specialties called for by their scholarship agreements. The number located within a county indicates the number of recipients currently fulfilling their scholarship obligations in that county. One recipient practices in multiple locations throughout the State and does not appear in any of the county numbers.

We examined Program files of the 110 recipients working in Sedgwick, Johnson, and Wyandotte Counties to determine if the recipients were serving in compliance with their scholarship requirements. We found that all were in compliance and were serving in the following situations:

- 29 had Type II scholarships that allowed them to practice anywhere in Kansas
- 21 had specialties designated as underserved in these counties
- 19 had converted their Type I scholarships to Type II scholarships by repaying the stipend portion of the scholarships thereby allowing them to practice any where in Kansas
- 17 were faculty at the Medical Center
- 14 were in specialties that had no underserved areas in the State
- 10 had exceptions granted by the Medical Center, worked at VA hospitals or State institutions, or worked 100 hours a month for a non-profit organization

Only 25 percent of these recipients were actually working in "rural" locations. (To classify recipients' practice locations as urban or rural, we counted how many recipients were working in a city of less than 12,000 population.) However, this percentage may increase in future years as students who received their first scholarship after 1986 begin to enter practice. Those students generally must work in a city of less than

12,000 population (excluding cities in Johnson, Sedgwick, Shawnee, and Wyandotte Counties.) However, recipients will still be allowed to practice in those counties if they work at State institutions or Veterans Administration hospitals, serve as family practice faculty at the Medical Center, or practice at least 100 hours a month in non-profit clinics serving the medically indigent.

About 42 percent of the recipients who have finished fulfilling their commitment have continued practicing in underserved counties. To determine where recipients went after they finished serving their commitment we reviewed and analyzed data from the Board of Healing Arts showing the practice location of all Kansas physicians as of July 1991. We found that 100 of the 239 recipients who have successfully completed their scholarship commitments are currently practicing in areas that have been designated as underserved within the last five years. Moreover, 151 of these 239 recipients (63 percent) are practicing in the same city they practiced in while serving their commitment.

We also asked scholarship recipients in our survey if they planned to continue practicing in the same area after their scholarship obligation was satisfied. Over 83 percent of those recipients who were currently fulfilling their service obligation answered that they planned to continue practicing in their current location after they finished with their commitment.

Few recipients who chose to repay their scholarships are practicing in Kansas. Using the data obtained from the Board of Healing Arts, we were able to locate practice locations for 465 of the recipients who have paid off their scholarships or are currently in repayment status. Of these 465 people, only 110 (24 percent) are currently practicing in Kansas. Nearly all those 110 physicians were practicing in the larger urban areas of Kansas.

The Impact of the Medical Scholarship Program Will Diminish Significantly In the Future

As this report has shown, the Scholarship Program has had an impact on the retention of doctors in Kansas and on distributing more doctors to underserved areas of the State. As described below, the extent of this impact could drop dramatically in future years.

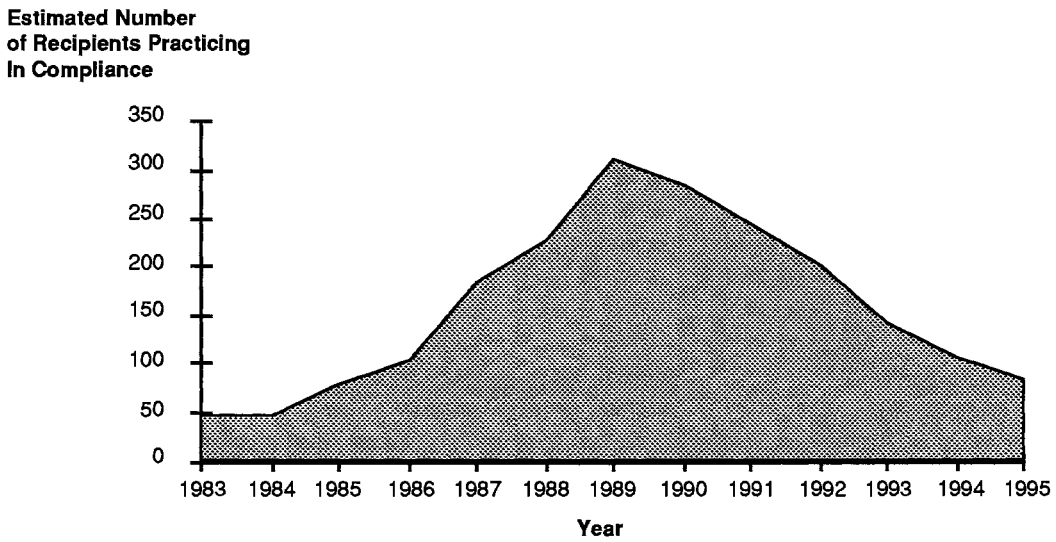
When the Program was first introduced, there were no limits on the number of scholarships awarded and as many as 80 percent of the medical students participated in the Program. Since then, the requirements of the Program have become much more stringent, and the number of new scholarships has been sharply curtailed. These two factors have worked together to significantly lower the number of graduates who have

participated in the Program. In the 1991 graduating class, only 21 percent of the graduates were scholarship recipients.

Because it takes a minimum of seven years for recipients to work through the system, there is a corresponding seven-year delay before any change is noticed. For illustration purposes, the diagram below projects what will happen to the number of graduates entering practice in coming years.

The estimate of medical school graduates who would be practicing in any given year is based on a number of assumptions. We assumed that the historical average rate of 46 percent of the scholarship recipients from each class would choose to practice in compliance with the scholarship agreement. We also assumed that each recipient would have completed a residency three years following graduation and would have started practice immediately following residency. We further assumed that each recipient would have accepted a medical scholarship in every eligible year, but not more than four years.

Estimated Number of Medical Scholarship Program Recipients Practicing in Compliance With Scholarship Agreements



This chart shows a rough estimate of the number of Medical Scholarship Program recipients that will be fulfilling their service obligations in different years. The imposition of limits on the number of scholarships allowed to be awarded and the tightening of scholarship requirements have resulted in steady decreases in the number of scholarships. As a result of this decrease, the impact of the Program will drop sharply in coming years.

As the chart shows, the largest number of Program recipients available to fulfill Program requirements was experienced in 1989 when an estimated 309 recipients from

the graduation years of 1982 through 1985 were serving out their obligations. By 1995, however, we estimate that there will only be 85. If the trend in the number of scholarships awarded continues, the number will continue to drop after 1995. In other words, unless more scholarships are awarded or significantly more students comply with their service obligations, the Program's impact may continue to decline. Neither scenario appears likely under the circumstances. For example, students do not take out all the scholarships that the Medical Center is authorized to give.

Survey Respondents Suggested Ways To Improve the Program Including Adding Other Financial Incentives and Reducing the Malpractice Insurance Burden

The survey we sent to scholarship recipients asked what incentives they thought the State could offer that would encourage Medical Center graduates to fulfill their practice obligations. Of the 211 surveys returned, 126 included answers to this question.

The suggestion most often cited (39 respondents) was for the State to provide an income guarantee or financial help to start a rural practice. For example, one respondent said there needs to be "a reasonable income guarantee in underserved areas." Another said the State could "help with starting a new practice, possibly interest-free or low interest loans." A third respondent thought the State should "offer additional incentives to practice in certain locations, i.e. tax credits and loan repayments."

The next most frequent response (30 respondents) was for the State to do something about the high cost of malpractice insurance. One response stated that the State should "continue to pursue making malpractice in Kansas more competitive with other regional states." Another respondent suggested that the State could "provide supplementation of malpractice insurance." This same respondent also stated that "although insurance premiums have leveled off since tort reform measures were instituted, I believe the difference in malpractice premiums between Kansas and bordering states such as Oklahoma and Nebraska is substantial."

Other suggestions for the State to improve the Program included: providing assistance in locating acceptable practice locations (12 respondents), reducing the Kansas tax burden (eight respondents), addressing the problem of back-up and on-call coverage in rural practices (eight respondents), and placing greater emphasis by the Medical Center on desired specialties and opportunities in underserved areas (seven respondents).

Conclusion

It appears that the Medical Scholarship Program has been successful in keeping more graduates in Kansas and distributing physicians to underserved ar-

eas. If you assume that the Program has been the deciding factor in graduates' decisions on where to practice, then the Program has resulted in about 500 doctors remaining in Kansas and nearly 400 doctors practicing in underserved areas. The cost of getting those doctors into those locations has been about $20 million. However, the peak impact of the Program may already have passed. As the result of Legislative changes, the Program has become more restrictive over the years, resulting in fewer students accepting scholarships. As the number of recipients entering practice declines, so will the impact of the Program.

Any changes made to the Program now will not be realized for seven years. For example, the 1986 change to require recipients to practice in rural areas has yet to be felt because those students are just now entering practice. If the Legislature expects the Program to have a significant impact on the supply and distribution of doctors in the future, it may want to reconsider the restrictions it has placed on the Program. Alternatively, the Legislature could explore other programs or options for achieving the same results, including but not limited to providing funding to doctors to establish a new practice either through low interest loans or grants, providing annual funding to doctors to supplement their income during the early years of their new practice, or repaying outstanding school loans of doctors instead of providing scholarships.

APPENDIX A

Medical Scholarship Program Comparison
Kansas and Other States

We called officials in 14 other states, including the surrounding states and other predominantly rural states. We found that six of these other states had medical scholarship or loan programs. The officials' responses are presented on the following pages along with comparable information about the Kansas Medical Scholarship Program.

Questions	Kansas	Arkansas	Kentucky
1. What type of program?	Scholarship	Loan	Scholarship
2. How is program funded?	Revolving Fund	Revolving Fund & Appropriation	Revolving Fund
3. a. Who is eligible to participate?	All Students	State Residents	State Residents
b. Specialties	General Internal Medicine Family Practice General Pediatrics	No Restriction	Internal Medicine Family Practice Pediatrics OB/GYN
4. What are program limits?	35 Students per class	Available Funding	No Limitation
5. What dollar limits for individuals?	Type I=Tuition + $4,500 Type II = Tuition Tuition: In-State =$6,606 Out-State =$14,532	Annual = $12,000 Total = $48,000	Annual = $10,000 Total = $40,000
6. What is average funds provided to an individual?	Same as Question 5	Annual = $10,000 Total = $40,000	Same as Question 5
7. Is there a limit on the number of years of participation?	Four years -- Additional years can be approved if needed to graduate	Four Years	Four Years
8. What expenses can funds be used for?	Tuition Other School Related Costs Housing Expenses Personal Expenses	Tuition Other School Related Costs Housing Expenses Personal Expenses	Tuition Other School Related Costs Housing Expenses Personal Expenses
9. What commitments does student make to participate?	One year for one year in Kansas community of less than12,000	One year for one year in community of less than 8,000	One year for one year in Identified underserved areas.

Nebraska	Oklahoma	South Dakota	West Virginia
Loan	Scholarship	Scholarship	Loan
Appropriation	Appropriation	Appropriation	Student Fees
State Residents	State Residents	All Students	State Residents
General Internal Medicine Family Practice General Pediatrics General Surgery OB/GYN Psychiatry	No Restriction	Family Practice Internal Medicine General Practice OB/GYN	Shortage specialties identified by areas of the state
Appropriation	Appropriation	Six students in 1st or 2nd year Up to nine students in 3rd or 4th year	Funds available from fees
Annual = $10,000 Total = $40,000	Annual = $6,000 1st year Annual = $10,000 2nd to 4th years Total = $36,000	Annual = $7,000 Total = $28,000	Annual = $5,000 Total = $20,000
Annual = $7,500 Total = $30,000	Same as Question 5	Same as Question 5	Annual = $3,500 Total = $14,000
Four Years	Four Years -- A fifth year can be approved if needed to graduate	Four Years	Four Years
Tuition Other School Related Costs Housing Expenses Personal Expenses	Tuition Other School Related Costs Housing Expenses Personal Expenses	Tuition	Tuition Other School Related Costs
One year for one year in Identified underserved areas.	One year for one year in community of less than 7,500	One year for one year in Identified underserved areas.	One year for each $5,000 in Identified underserved areas.

Questions	Kansas	Arkansas	Kentucky
10. What provisions or penalties are there if student fails to meet commitment?	Repay funds plus 15 % from time money received. Repayment to be made within 90 days of completion of three year residency. Earlier plans allowed up to 10 years for repayment.	Repay funds plus (federal discount rate plus 5 %) from time money received. Repayment to be made within six months of completion of residency. Up to four years allowed for residency.	Repay funds plus (one-half of prime rate plus 4 %) from time money received plus $5,000 penalty. Repayment to begin immediately following residency with total repayment to be within six years.
11. Under what circumstances will scholarship/loan be forgiven?	Complete Commitment Death or Disability Failure to Complete Degree Failure to Obtain License	Complete Commitment	Complete Commitment Death or Disability --Require student to have insurance that will repay program.
12. What circumstances will require student to repay funds received?	Noncompliance	Noncompliance No Degree No License	Noncompliance No Degree No License
13. What percent of program participants fulfill commitments?	46.7% (85-88 Grads)	40% of participants	35% of participants
14. Other Comments.	None	Graduates have requested retroactive changes of legislators.	None

Nebraska	Oklahoma	South Dakota	West Virginia
Repay funds plus 24 % from time money received. Repayment to be made within 90 days of completion of residency. Allow up to five years of residency. Will allow up to two years to repay per loan.	Repay funds plus 12 % from time money received. However time in residency is excluded from interest. If practicing in Oklahoma, a penalty of 25% to 50%, of funds received is assessed based on size of community. If practicing in another state, a penalty of 98% of funds received is assessed. Repayment to be made within 90 days of completion of residency.	Repay funds plus 9 % from time money received. Repayment to begin as soon as commitment is broken. Allowed up to five years to complete repayment.	Repay funds plus 8 % from time graduated. Repayment to begin one year following residency. Allowed up to 10 years to complete repayment.
Complete Commitment Death or Disability	Complete Commitment Death or Disability --Require student to have insurance that will repay program.	Complete Commitment	Complete Commitment Death or Disability
Noncompliance No Degree No License	Noncompliance No Degree No License	Noncompliance No Degree No License	Noncompliance No Degree No License
55% of participants	100% of participants For past three years. Oklahoma allows the participants to find a replacement.	Program started two years ago. None of the participants in practice.	3% of participants.
Satisfied with program	None	None	Legislature currently looking to change program -- increase funds and add penalties for noncompliance.

APPENDIX B

Survey of Medical Scholarship Recipients

We mailed surveys to 406 medical scholarship recipients who graduated from the Medical Center in 1985, 1986, 1987 and 1988. We received 211 completed surveys from the former graduates for a response rate of 52 percent. A copy of the survey form sent to the Medical Center graduates, with the responses to the opinion information shown in italics, is included on the following pages.

Other information provided by the surveys showed that 143 respondents had received only Type I scholarships, 52 respondents had received only Type II scholarships and 13 respondents received both Type I and Type II scholarships. (Three survey respondents did not indicate the type of scholarship they received.) The survey responses also showed that 122 respondents are practicing in Kansas, and 39 are practicing in some other state. Another 48 respondents reported that they are in a deferred status and have not yet started a medical practice.

SURVEY OF MEDICAL SCHOOL GRADUATES

1. Why did you apply for a Kansas medical scholarship?

   194 *Needed money for tuition*
   39 *Planned to practice in Kansas*
   25 *Planned to practice in rural Kansas*
   10 *Planned to enter primary care*
   1 *No response*

2. Would it have been possible for you to attend medical school if you had not received a Kansas medical scholarship? 118 yes 77 no 16 no response

3. Overall, has the process of applying for, receiving, and discharging the obligations of your Kansas medical scholarship been reasonably convenient and trouble-free?
   173 yes 35 no 3 no response

4. Have you encountered problems establishing a viable practice in an approved service commitment area? 19 yes 82 no 110 no response (a)

5. Do you plan to continue practice in the same approved service commitment area after you satisfy your Kansas medical scholarship obligations?
   70 yes 14 no 127 no response (a)

6. If you had not received a Kansas medical scholarship, do you think you would have established a practice:

in Kansas?	71 yes	19 no	121 no response (a)
in a medically underserved area in Kansas?	21 yes	60 no	130 no response (a)

7. If you chose to fulfill your scholarship agreement through repayment rather than an approved practice, please describe the factors that contributed to your decision.

   35 Lack of suitable practice opportunity
   32 Went into specialty other than family practice
   31 Urban area more attractive than rural area
   17 Other state more attractive than Kansas
   29 Other
   136 no response (b)

(a) No response includes recipients who were repaying their scholarship, and should not have answered this question.

(b) No response includes recipients who were practicing in compliance with their scholarship agreement, and should not have answered this question.

8. Do you think the State's Medical Scholarship Program is an effective way to increase the supply of physicians:

in medically underserved areas?	114 yes	77 no	20 no response
in Kansas as a whole?	132 yes	61 no	18 no response

9. Other than forgiving repayment of the scholarship and accumulated interest, is there any additional incentive the State could offer to encourage graduates to fulfill the practice obligations of their scholarship agreements?

39	*Provide income guarantee or financial help to start a rural practice*
30	*Do something about malpractice costs*
12	*Provide assistance in locating acceptable practice location*
8	*Reduce Kansas tax burden*
8	*Offer more acceptable practice locations*
8	*Address problem of back-up / on-call coverage in rural practices*
7	*Place more emphasis on desired specialties and opportunities in underserved areas at the Medical Center*
7	*The current incentives are adequate*
5	*Equalize the reimbursement between urban and rural practices*
4	*Offer partial forgiveness of scholarship*
4	*Increase the repayment costs or add penalties*
35	*Other*

10. Do you have any additional comments about or suggestions for improving the State's Medical Scholarship Program?

14	*Interest rates are too high or should be deferred until practice started*
10	*The guidelines for participation need to be more flexible*
8	*The Program should be discontinued or it should be changed to a loan program*
8	*Students are not ready to make decisions about specialty or practice location when the scholarship is offered*
7	*Need to make rural practice more attractive*
6	*Need assistance in locating acceptable practice location*
6	*This is a good Program and should be continued as it is*
5	*Increase rural income or offer financial incentives*
4	*Students are alienated by changing rules for participation in the Program*
4	*There is a lack of acceptable practice locations*
4	*There needs to be scholarships for specialties other than primary care*
31	*Other*

APPENDIX C

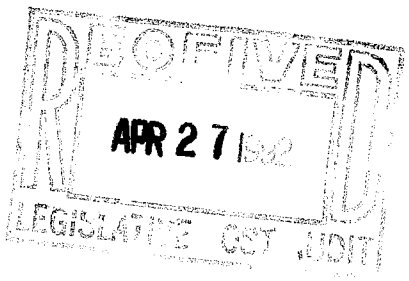
Agency Response

On April 15, 1992, we provided copies of the draft audit report to the University of Kansas. Their response is included as this Appendix.

The University of Kansas

Office of the Chancellor

April 20, 1992



Barbara J. Hinton
Legislative Post Auditor
Merchants Bank Tower
800 S.W. Jackson, Suite 1200
Topeka, Kansas 66612-2212

RE: State Funded Medical Scholarships in Kansas

Dear Ms. Hinton:

The draft copy of the completed performance audit has been reviewed by those at the Medical Center who assist in a variety of ways in administering the program. Your request not to publicly comment or release information concerning the draft report has been specifically adhered to.

All agree that the audit is well done. The fact that there are a number of comments necessary to be made should not be taken as a detraction from the "well done" comment just made.

Page 9-paragraph 3: In the last sentence it is stated that the Medical Center sets its own scholarship limit of 35. The same statement is made in (b) to the chart on page 10. The limit of 35 was established by legislative enactment through the appropriation process. It is not the Medical Center that has limited the scholarships available.

Page 3-paragraph 3: Inasmuch as there is a legislative cap on the number of scholarships granted, perhaps in the first sentence of the third paragraph it is not exactly correct to say that the program is open to all.

Page 4-"Requirement" table: For the years 1986-1991 the indicated 5 year repayment period was repealed by the 1991 amendments to 76-376(a)(2) and 76-376(a)(7).

Page 5-paragraph 1: In line 6 of the first full paragraph, reference is made to a primary care specialty "general practice". There is no such specialty. The primary care specialties are family practice, general internal medicine and general pediatrics. (76-375(e)(3))

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Page 5-"Cost" box: In the box the figure of $6,816 is shown as the amount the scholarship program pays for tuition and fees. The program does not pay fees. The program provides the cost of tuition which is $6,606. A Type 1 scholarship for 1991 would actually be $11,106.

The total expenses of medical school are considered to be as follows:

Tuition and Fees	$ 6,826
Room and Board	$ 4,950
Books	$ 1,200
Personal/Medical	$ 2,070
Transportation	$ 855
TOTAL	$15,901

Page 5: The paragraph which begins with the bold type sentence "**Other changes to the Program over the years....**" seems to suggest that one of the ways the service requirement may be met is by serving as a faculty member at the Medical Center in any capacity. The service requirement may be met by serving as a faculty member at the Medical Center only in family practice or family medicine. (76-375(a)) In this same paragraph the box referred to in the last sentence is found on page 8 as opposed to page 6.

Page 6-paragraph 1: The first sentence describes the manner in which the Department of Health and Environment identified service areas for specialties. The Medical Center's method has been the utilization of fixed standards based on national studies of physician manpower.

Page 8-"Program Changes" box:

a. As reported the 1988 amendment seems to suggest that all physicians could remain in compliance even though they reduced their practice to less than full-time. The 1988 amendment related only to individuals working at a state medical facility or institution or working pursuant to a practice affiliation agreement. (76-375(j))

b. There was a 1991 amendment which is not reflected in the box. It was 76-376(a)(6). This amendment allows a physician to request of the Chancellor permission to reduce his/her full-time practice to no less than half time and still remain in compliance.

Page 14-Physician Supply Table: Certain portions of the headings to the four columns in the table are off, i.e. the first column should be "Calendar Year", the second column should be "FTE Medical Doctors", etc.

Pages 2 and 18: The third sentence of the first full paragraph of page 2 and the bold print found on page 18 concerning the satisfaction of service obligations by physicians practicing in urban areas are accurate but could be a bit misleading. There are a variety of reasons why an urban setting satisfies a service obligation. These various reasons are set forth on page 19, however, if one does not read past the "urban" reference on pages 2 or 18,

it would be easy to draw erroneous conclusions as to how so many urban practices satisfy service obligations. Even the explanation on page 19 does not inform the reader that most of these physicians came out of the program during its first four years (1978 - 1981) when the program had no specialty requirement and the service areas were at their broadest level.

Appendix A: As concerns the Kansas program, line 7, there is no limit on the number of years of participation.

Once again, the report is well done. It is obvious that Cynthia Denton and any other staff that assisted her thoroughly studied and understood the depth and ramifications of the program. We concur with the Report's conclusions and stand ready to assist in anyway possible to make quality health care more available throughout Kansas.

Thank you for allowing me the opportunity to respond to the draft copy.

Sincerely,

Gene A. Budig

Gene A. Budig
Chancellor

RSW:mb