

**III. The Feasibility of Establishing
a Hospital-based and University-based
Physician Uncompensated Care Fund**

Prepared by: Health Services Cost Review Commission

The Feasibility of Establishing a Hospital-based and University-based Physician Uncompensated Care Fund

Introduction

Section 2 of Chapter 250 of the 2002 Laws of Maryland requires the Commissions (HSCRC and MHCC) to examine “the feasibility of establishing an uncompensated care fund to subsidize reimbursements to providers that deliver a disproportionate amount of uncompensated care to State residents, including emergency room physicians, trauma physicians, hospital-based physicians, and other health care providers as determined by the Commissions.”

To consider the feasibility of establishing an uncompensated care fund, it is necessary to estimate the total amount of uncompensated care that is provided by the applicable physician groups. Since physician uncompensated care is reported in neither the Medical Care Date Base (MCDB) managed by the MHCC, nor the HSCRC hospital database, an estimate has been derived based on parallel information from the MCDB and the HSCRC databases. University of Maryland, Johns Hopkins, and Johns Hopkins Bayview provided actual data on the level of charges and payments related to uninsured patients for university-based physicians.

Trauma physician uncompensated care was excluded from this analysis since the General Assembly, subsequent to the passage of HB 805, enacted legislation to provide funding for these services under the Maryland Trauma Physician Fund. The Trauma Fund will reimburse trauma physicians an estimated \$2.4 million for uncompensated care provided at Maryland trauma centers in FY 2004. Trauma physicians will also receive approximately \$4 million in FY 2004 for unreimbursed expenses under the Medicaid program, up to 100% of the Medicare fee schedule.

Estimation of Hospital-based Physician Uncompensated Care

The data available to calculate the amount of physician uncompensated care are incomplete; therefore, it was necessary to use data from a number of different sources and to make assumptions that appear reasonable. As a result, the estimates produced should be considered reasonable approximations given the limits of the available data.

The methodology to arrive at the estimates uses the HSCRC hospital discharge data to determine the proportion of charges associated with uninsured patients. These patients are assumed to contribute to the majority of the uncompensated care. It is assumed that a similar proportion of physician charges will be for uninsured patients, and that these charges will largely be uncompensated. The physician billings and payments associated with Medicare and privately insured patients for hospitals other than the university hospitals were estimated from the MCDB. Billings for uninsured patients, since they are not available in the MCDB, are estimated by multiplying the hospital ratio of uninsured charges to Medicare and privately insured charges by the total amount of physician billings for privately insured and Medicare services in the MCDB. The amount that would be paid on these billings at the Medicare payment levels was estimated

by applying the ratio of Medicare allowable payments, including the patient liability (i.e. copays), to Medicare billings from the MCDB.

The estimate is based on the following available information:

1. To estimate the rates for various hospital services, the proportion of charges associated with uninsured patients was calculated in total and by hospital using the HSCRC inpatient, ambulatory surgery, and ambulatory care databases. The following table shows the total charges in each category. Outpatient is the sum of ambulatory surgery and ambulatory care.

	Amb. Care	Inpatient	Amb. Surg.	Outpatient
Private	\$341,700,000	\$1,961,303,430	\$408,600,000	\$750,300,000
Medicare	\$134,000,000	\$2,410,115,047	\$197,000,000	\$331,000,000
Uninsured	\$122,331,544	\$172,586,352	\$18,021,795	\$140,353,340

2. The types of hospital-based physicians included in this analysis are: anesthesiologists, radiologists, pathologists, and emergency department physicians. As previously mentioned, trauma physicians were excluded since they are currently subject to reimbursement for uncompensated care under the Maryland Trauma Physician Fund. Emergency department physicians are specifically mentioned in the legislation, and the other three categories are generally referred to as hospital-based physicians.
3. The amount of physician billings and payments for services provided in a hospital setting, split by Medicare and privately insured for the various classes of physicians defined in step 2, were generated from the MCDB. The MCDB is estimated by the MHCC to include only 70% of the physician and billing and payment information; therefore, the amounts generated from the MCDB were inflated by dividing them by 0.7 to account for the estimated shortfalls in the MCDB.

The following example shows the formulae for the calculations that were performed. Attachment I presents the results of the calculations, which show the estimated total uncompensated care reimbursed at Medicare levels in 2001 dollars.

Sample Calculation for Emergency Department Physicians

Below is an example of how the calculation works for emergency department physicians. The ratio of payments to billings for ED physicians working in a hospital setting was calculated, by payment category, using data from the MCDB.

	Billings	Payments	Ratio	RVUs
Medicare	B(m)	P(m)	$P(m)/B(m)=R(m)$	V(m)

Private pay & other	B(p)	P(p)	P(p)/B(p)=R(p)	V(p)
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Using the HSCRC data base, the proportion of total charges by payer was calculated for Emergency Department services at the hospital as follows:

	Charges	Ratio
Medicare	C(m)	C(m)/C
Medicaid FFS	C(f)	C(f)/C
Medicaid HMO	C(h)	C(h)/C
Private pay and other	C(p)	C(p)/C
Uninsured	C(u)	C(u)/C
Total	C	1.00

Physician billings to the uninsured are estimated by using the following calculation:

$$B(u) = [C(u) / \{C(m) + C(p)\}] \times [B(m) + B(p)]$$

An estimate of the payments that would have been made for these services at the Medicare level of payment is calculated in the following manner:

$$P(u) = B(u) \times R(m)$$

The product is then inflated to reflect shortfalls in the MCDB (divide by 0.7). This calculation was then repeated for the other classes of physicians subject to this analysis.

Based on this methodology, the amount of uncompensated care provided by hospital-based physicians in Maryland is estimated to be \$40.7 million (see table below). This estimate however, does not take into account the potential for recoveries from self-pay patients. The experience of the university-based physicians shows that they tend to recover about 33% of charges to self-pay patients. The Congressional Budget Office has also reported that uninsured individuals pay about 30% of the cost of health care they receive. If hospital-based physicians are recovering one-third of their charges to self-pay patients, the total amount of uncompensated care provided by these physicians could reasonably be estimated at \$27.3 million per year.

Physician specialty	Uninsured services at Medicare payments
Anesthesiology	\$6,700,000
Emergency	\$20,000,000
Pathology	\$3,900,000
Radiology	\$10,100,000
Total of above specialties	\$40,700,000

To confirm the accuracy of the estimates above, the Commission requested survey information from the Maryland Chapter of the American College of Emergency Physicians. The purpose of

this calculation is to provide a cross-check on the figure calculated for emergency physicians using the MCDB. The American College of Emergency Physicians received data from fifteen non-university hospitals, which showed that \$12.8 million in self-pay uncompensated care is provided by these hospital based emergency physicians in Maryland (based on Medicare payment levels). This figure was calculated as follows:

Average Medicare collection per visit:	\$101
Average self-pay collection per visit:	\$23
Shortfall in collection per visit:	\$78
Number of uninsured visits:	164,522
Total shortfall in uninsured collections:	$164,522 \times \$78 = \12.8 million.

If hospital-based emergency physicians recovered 33% of charges to self-pay patients, the \$20 million estimate shown in the table above would yield a net loss of \$13.2 million, reasonably close to the \$12.8 million ACEP survey results.

Estimation of University-based Physician Uncompensated Care

The study of university-based physician uncompensated care was based on data supplied by the university physician practice plans at University of Maryland, Johns Hopkins Hospital and Johns Hopkins Bayview. These physician groups provided data on the level of charges and payments for uninsured patients. The shortfall in payments by self-pay patients (at 100% of Medicare), accounting for payments collected from those patients, was \$11.1 million.

Estimate of hospital-based and University-based Uncompensated Care

Under the aforementioned methodology, total physician uncompensated care for hospital-based physicians practicing at hospitals, other than the university-based medical centers, is estimated to be \$27.3 million a year. The survey of university-based physicians indicated that \$11.1 million in uncompensated care was provided to the uninsured after accounting for services paid by self-pay patients. The estimated total annual net amount of uncompensated care provided each year by hospital and university based physicians in Maryland is therefore \$38.4 million. These amounts were quantified at the Medicare level of payment.

It should be noted, however, that the Maryland Trauma Physician Fund enacted by the Legislature in 2003 provides funding for both trauma physician uncompensated care up to 100% of Medicare as well as for under-payment by Medicaid (up to 100% of Medicare). Medicaid generally pays about 40% of the Medicare fee schedule. The estimates provided above are for the uncompensated care associated with services of hospital-based and university-based physicians for uninsured patients, and do not include shortfalls resulting from payments by Medicaid. If uncompensated care would be defined to include Medicaid underpayment, the estimated amount of physician uncompensated care shown above would roughly double.

Methods for Providing Subsidization Physician Uncompensated Care

By virtue of the Medicare Waiver, the HSCRC is able to provide hospitals with a reasonable amount of funding for uncompensated care. Through hospital rates, all payers contribute to the provision of uncompensated care funding. The HSCRC uses a two-part methodology for determining hospital uncompensated care.

Since 1983, the Commission has used a statistical analysis to determine the reasonable level of uncompensated care based on the broad characteristics of each hospital's actual uncompensated care experience, current uncompensated care provision in rates, and the reasonable (or "adjusted fitted" value) level of uncompensated care as determined by a statistical analysis. The outcome of this comparison is that uncompensated care provisions are built prospectively into rates. The rate change in any one year is limited to plus or minus 1.50 percentage points. This corridor is in place to protect hospitals from large shifts, both positive and negative, in Uncompensated Care that may result simply from a change in how the HSCRC performs the calculation.

The second part of the methodology was the result of legislation adopted in 1992 (House Bill 924) which directed the Commission to study alternative financing methodologies to "promote the equitable distribution of the cost of uncompensated care among hospitals". In 1996, an Uncompensated Care Implementation Task Force made recommendations to establish an Uncompensated Care Fund using a .75% assessment in all hospital rates to be redistributed to those hospitals with high uncompensated care costs. Medicare officials approved this mechanism with the proviso that the funds generated be used solely for the purpose of financing the delivery of hospital uncompensated care.

Each year, the statistical analysis summarized above determines the uncompensated care provision for each hospital. Additionally, it is determined how much will be collected into the Fund from the .75% assessment. Then a threshold is established where any hospital with an uncompensated care rate above the threshold would receive money out of the Fund. For example, the most recent established threshold was 7.90%. This means that any hospital with an uncompensated care level of 7.90% or more would receive the amount above 7.90% from the fund. In FY 2002, \$49.3 million was redistributed to nine hospitals with high uncompensated care levels.¹ The remaining approximately \$500 million in uncompensated care is provided in rates across all hospitals' rate bases.

Massachusetts operates a hospital uncompensated care pool which is supported by assessments on hospitals, payers and State General Fund revenue. The \$345 million pool is funded through a \$215 million assessment on hospitals' private sector charges, a \$100 million surcharge on payments from private sector payers to hospitals and ambulatory surgical centers, and a \$30 million contribution from the Commonwealth of Massachusetts. The Pool pays for medically necessary inpatient and outpatient services provided by hospitals and community health centers, but the Pool does not provide any reimbursement to physicians.

In the absence of a federal waiver that permits Medicare and Medicaid to participate in a rate system that would provide for uncompensated care, the establishment of a similar system for physicians would be improbable and inequitable since the costs would be disproportionately

¹ The nine hospitals were Prince George's Hospital, University of Maryland Medical System, Bon Secours Hospital, Johns Hopkins Bayview, Johns Hopkins Hospital, Mercy Medical Center, Maryland General Hospital, Laurel Regional Hospital, and Dorchester General Hospital.

borne by participating payers. A more feasible approach, therefore, would be to use a funding mechanism similar to the Maryland Trauma Physician Fund.

Senate Bill 479, enacted during the 2003 Session of the Maryland General Assembly, established the Maryland Trauma Physician Fund supported by a \$5 surcharge (every two years) on Motor Vehicle Administration (MVA) automobile registrations. The Fund provides additional reimbursement for trauma physicians to recover the costs of uncompensated care and Medicaid shortfalls as well as to provide subsidies to Level II and III trauma centers to recover a specified amount of on-call costs.

The MHCC and the HSCRC have promulgated regulations to provide for the transfer of monies from the MVA, the implementation of reporting requirements, disbursements from the fund to physicians and trauma centers, and establishment of a Medicaid CPT modifier for physician care to trauma patients. The MVA began collecting the \$5 surcharge on new vehicle titles on July 1, 2003 and began collecting the surcharge on vehicle renewals in September 2003. Physicians and trauma centers will be eligible for uncompensated care and on-call reimbursements from the fund for services that are provided to patients on the Maryland trauma registry beginning October 1, 2003. Disbursements, however, will be made after the first semi-annual report on these costs are due to the MHCC on April 30, 2004. The modifier for increased Medicaid payments for physicians providing trauma care became effective on December 1, 2003.

It is estimated that disbursements from the fund will be made in the following amounts:

Uncompensated Care (includes 250,000 for ED)	\$ 2.60 million
Medicaid Shortfall	\$ 4.00 million
On-call Costs at Level II Centers	\$ 2.00 million
On-call Costs at Level III Centers	\$ 3.00 million
Children’s Hospital Standby Allowance	\$ 0.25 million
<u>Administrative Expense (audit)</u>	<u>\$ 0.30 million</u>
Total Costs	\$12.15 million
<u>Federal Share of Medicaid Shortfall</u>	<u>(\$ 2.00) million</u>
Total State Cost	\$10.15 million

The Maryland Trauma Fund represents a good model for the operation and administration of a physician uncompensated care fund. Identifying, however, a revenue source to support the subsidization of an uncompensated program is a more difficult issue to resolve, particularly with the fiscal constraints that all states are encountering.

In late 2001, the two trauma centers serving Tucson and all of southern Arizona became so financially stressed—due in part to uncompensated care to foreign nationals—that both threatened to close their trauma units if no additional funding was provided. Legislation enacted during the 2001 Arizona Legislative Session appropriated a total of \$4.3 million in FY 2001-2002 from the emergency medical services operating fund (\$1.3 million) and the spinal and head injuries trust fund (\$3 million) to reimburse hospitals in southern Arizona for losses associated with level I “trauma center readiness costs”. Monies in both of these funds are generated from

the 77 percent surcharge on fines and penalties imposed and collected by the courts for criminal offenses, civil traffic violations and violations of the motor vehicle and game and fish statutes. Under the legislation, "trauma center readiness costs" means clinical, professional and operational costs that are incurred by a level I trauma center and that are necessary for the provision of level I trauma care on a twenty-four hour, seven days per week basis. Trauma center readiness costs include only those administrative and overhead costs that are directly associated with providing level I trauma care.

California has been the most progressive state in providing subsidization of physician uncompensated care costs. The state permits the local Emergency Medical Service funds to collect and distribute funding for physician uncompensated care from three sources:

- A portion of tobacco tax revenue;
- An assessment on fines and penalties for tickets and citations; and
- A percentage of tobacco settlement funds.

In 1988, California voters passed Proposition 99, the Tobacco Tax and Health Promotion Act, increasing the state tobacco tax by 25 cents on a pack of cigarettes (to 35 cents per pack) and 42 cents on other tobacco products. Proposition 99 revenues are deposited into the Cigarette and Tobacco Products Surtax Fund to support anti-smoking education programs, tobacco-related diseases research, and indigent health care and public resources. The Fund is divided into six separate accounts and made available to the twenty-four participating counties in California. Ten percent of the fund is distributed to pay emergency physicians, obstetricians, and pediatricians who render uncompensated care to indigent patients. In FY 2004, the Proposition 99 Fund received \$314 million in revenues and roughly \$31 million is made available statewide for physician uncompensated care through the participating counties.

Separate California legislation adopted in 1988 authorized the imposition of increased fines collected by the courts for criminal offenses and permitted the establishment of local EMS funds. The local Boards are required to establish policies for the administration and expenditure of the fund, which is to be used to reimburse physicians, hospitals and the EMS Agency that administers a County's pre-hospital emergency medical care system. Currently, the various county funds are supported by a \$2 assessment on each \$10 in fines and penalties primarily on tickets and citations issued by local law enforcement and the California Highway Patrol. In FY 2001, the various county EMS funds provided \$33.3 million in payments to physicians for uncompensated emergency room care.

Finally, a portion of the funds derived from the 1998 Tobacco Litigation Master Settlement Agreement is used for physician uncompensated care. California is expected to receive \$25 billion through the year 2025. The tobacco revenues are split between the state and local governments: 50 percent for state allocation and 50 percent to local government. Within the local government amount, 10 percent of the funds are directed to the cities of Los Angeles, San Diego, San Francisco and San Jose, all of which had their own separate lawsuits against the tobacco industry, and the remaining 40 percent is then divided between the 58 counties based on population.

The tobacco settlement agreement places no restrictions on how these tobacco revenues may be spent. Orange County, California for example dedicated 50% of its settlement payments to health care programs. In FY 01, Orange County distributed \$7.9 million of tobacco settlement revenue to emergency room physicians and on-call physician specialists for services for nonpaying patients.

In Fiscal Years 2002 and 2003, the California legislature provided \$45 million in supplemental funding for uncompensated care from the General Fund. These funds were used for both trauma centers and physicians and the counties were responsible for dividing the resources among those requesting them.

California voters will likely be considering a Ballot Question in November 2004 that would increase California's existing 911 surcharge to 3.7% on telephone calls made within California to fund 911 emergency dispatch, emergency rooms, trauma centers and emergency doctors. It would cap the cost of the surcharge for residential telephone customers at a maximum of 50 cents per month and exempt senior citizens and others who are on basic life-line rates. In addition to funding for emergency rooms, trauma centers, and emergency doctors, the ballot measure provides money for community clinics, which provide urgent and primary care services in an effort to reduce the flow of patients to overcrowded hospital emergency rooms. Of the revenue from the additional surcharge, 30.5% shall be deposited into to the Emergency and Trauma Physician Uninsured Account, with about 60% of that amount going to emergency physicians. Projected total revenues from the initiative are estimated to be between \$470 million and \$550 million per year. That equates to an estimated \$30,000 per emergency physician per year.

The Mississippi trauma system is supported through a \$5 assessment on all moving traffic violations. In 1999, the Mississippi legislature added \$6 million to the trauma fund to provide regional support and uncompensated trauma care. In 2000, \$6.5 million was distributed from the Trauma Care Trust Fund for reimbursement of uncompensated care. The fund was divided between designated trauma center hospitals and eligible physicians based on an allocation of 70% to hospitals (\$4.5 million) and 30% to eligible physicians (\$2 million).

Finally, the recently signed Medicare Modernization Act (Subtitle B, Section 1011) includes a provision to provide \$1 billion over four years (\$250 million per year) for emergency services provided by hospitals and physicians to undocumented aliens. Border states will receive a higher proportion of the available resources under the Medicare program. States will receive funding under this program in FYs 2005 through 2008.

Findings

The progress made on the establishment of the Maryland Trauma Physicians Fund in 2003 has demonstrated that it is feasible to create and administer a fund to provide subsidies to physicians for uncompensated care. Any shortcomings will be seen over the coming months as information is submitted to the Commissions and money is disbursed. The more challenging questions, however, relate to how a fund for a broader base of physicians could be funded.

First, the Maryland Trauma Physicians Fund is expected to provide funding for hundreds of trauma physicians in the State. If a fund was fashioned to provide subsidies for all hospital-based and university-based physicians, the fund could be providing subsidies to many thousands of physicians. The administrative structure needed to manage this broader task would be much larger than what is needed to operate the Maryland Trauma Physicians Fund and more costly.

Secondly, the size of the fund would be four times that of the Maryland Trauma Physician Fund - \$38.4 million versus \$11 million. That ratio would be significantly larger if subsidies for Medicaid underpayments were allocable from a newly created fund. Nonetheless, a new sustainable revenue source would be required to provide between \$30 and \$80 million in uncompensated care depending on how the term is defined. The following types of revenue sources have been used, or are intended to be used in the future, for physician uncompensated care funds in other states:

- Automobile registration
- Assessment on penalties and fines for moving violations
- Tobacco tax revenue
- Surcharge on residential telephone calls
- Tobacco settlement revenue
- State General Fund revenue
- Federal funds

Attachment 1

Calculation of Estimated Uninsured Care

Uninsured Physician Billings				
Specialty	Inpatient	Outpatient	ER	Total
Other	\$45,467,174	\$109,967,888	\$18,117,998	\$173,553,060
Anesthesiology	\$5,354,425	\$14,272,296	\$90,188	\$19,716,909
Radiology	\$4,125,193	\$13,177,432	\$6,751,754	\$24,054,380
Emergency	\$195,962	\$4,310,623	\$29,073,661	\$33,580,246
Pathology	\$1,229,839	\$6,216,908	\$98,358	\$7,545,104
Imputed payments for uninsured at Medicare rates				
Specialty	Inpatient	Outpatient	ER	Total
Other	\$19,108,115	\$35,184,246	\$7,338,966	\$61,631,327
Anesthesiology	\$1,364,449	\$3,301,956	\$25,973	\$4,692,378
Radiology	\$1,182,914	\$3,894,529	\$1,993,064	\$7,070,507
Emergency	\$82,923	\$1,660,089	\$12,262,440	\$14,005,452
Pathology	\$461,270	\$2,243,651	\$34,072	\$2,738,992
Total	\$22,199,670	\$46,284,471	\$21,654,515	\$90,138,657
Excl. other	\$3,091,555	\$11,100,225	\$14,315,549	\$28,507,329
The amounts in the preceding table will be underestimated to the extent the MCDB is incomplete. Assuming the MCDB is 70% complete:				
Incompleteness factor:	0.7			
Imputed payments for uninsured at Medicare rates				
Specialty	Inpatient	Outpatient	ER	Total
Other Specialties	\$27,297,307	\$50,263,209	\$10,484,238	\$88,044,753
Anesthesiology	\$1,949,213	\$4,717,079	\$37,104	\$6,703,397
Radiology	\$1,689,877	\$5,563,613	\$2,847,235	\$10,100,725
Emergency	\$118,461	\$2,371,556	\$17,517,772	\$20,007,789
Pathology	\$658,957	\$3,205,216	\$48,674	\$3,912,846
Total	\$31,713,815	\$66,120,673	\$30,935,022	\$128,769,509
	\$4,416,508	\$15,857,464	\$20,450,784	\$40,724,756
Note: all estimates are shown in 2001 dollars				