

Maine Academy of Family Physicians

Presentation to the

Commission to Study Primary Care Medical Practice

September 14 & October 22, 2007

Attachments address the following questions:

- 1) How does Medicaid rates or reimbursement impact Primary Care Practices in independent office settings versus hospital or other settings?
 - a. Rate difference
 - b. Impact on patients
- 2) How does Maine's business climate impact Primary Care Practice?
- 3) How do Maine's malpractice laws impact Primary Care Practice?
- 4) How do Maine's malpractice laws impact Primary Care Practice?
- 5) What issues impact recruitment of Primary Care Physicians?
- 6) What are other states doing related to Primary Care Practices?

**Attachments provided by
AAFP Government Relations Office**

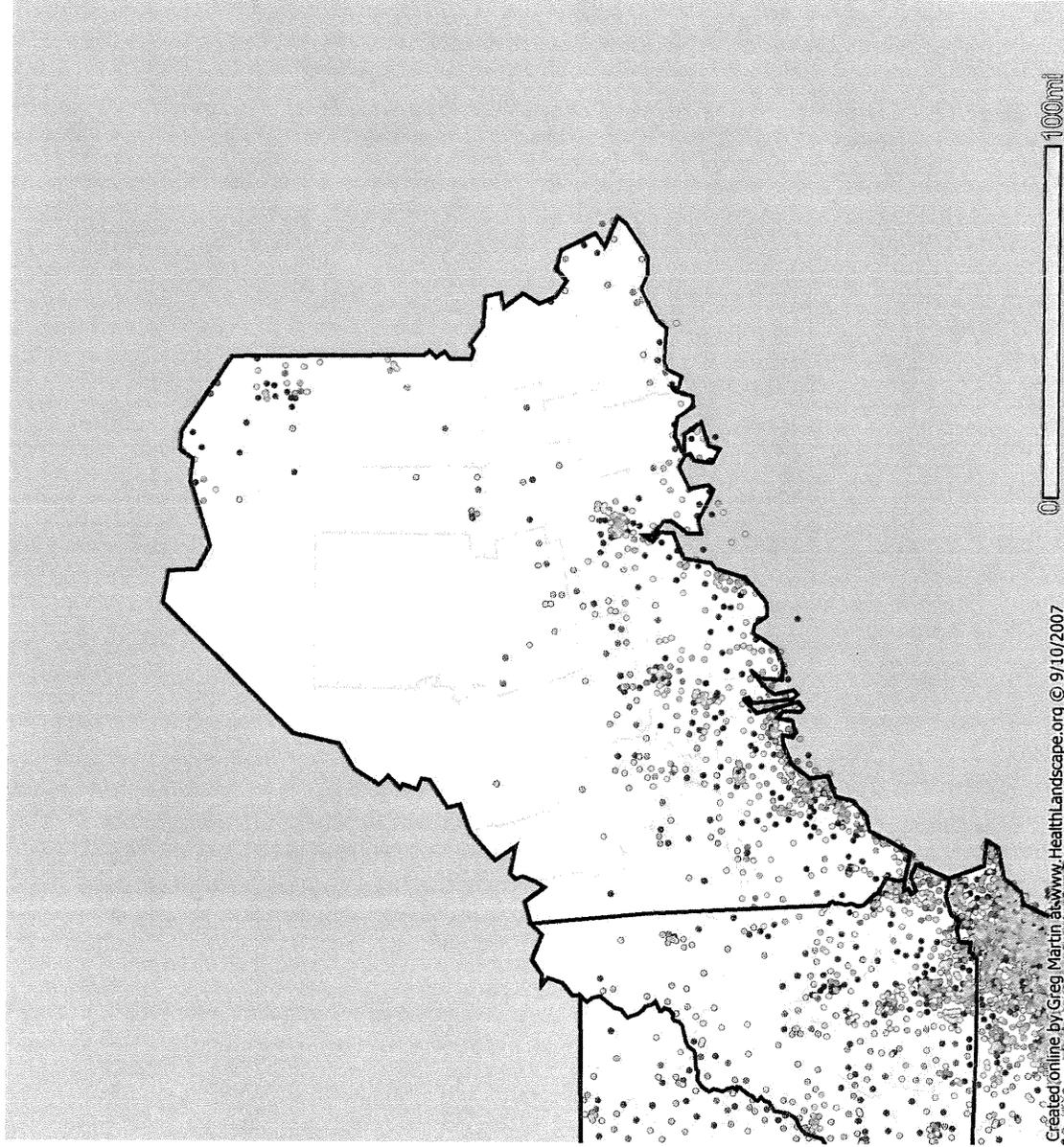
Maps that illustrate the location and value of primary care, particularly family medicine.

- Location of all primary care physicians
 - Location of family medicine physicians
 - Location of general internal medicine physicians
 - Location of general pediatricians
 - Location of community health centers
 - Location of family medicine residencies
-
- Health Professional Shortage Areas in 2006
 - HPSAs if Maine had no family docs
 - HPSAs if Maine had no general peds
 - HPSAs if Maine had no general internists
 - HPSAs if Maine had no family docs or general peds
 - HPSAs if Maine had no family docs or general internists
 - HPSAs if Maine had no general peds or general internists

What the HPSA maps show that is very interesting and something you already know, is that Maine's primary care infrastructure relies largely on family docs.

The HPSA withdrawal maps show that there are just enough of the other two (internists and peds) to keep any more HPSAs from popping up if all family docs left. However, as soon as family docs leave with either of those two specialties, HPSAs become *much* more prevalent.

Practice Location of Primary Care Physicians in Maine, 2006



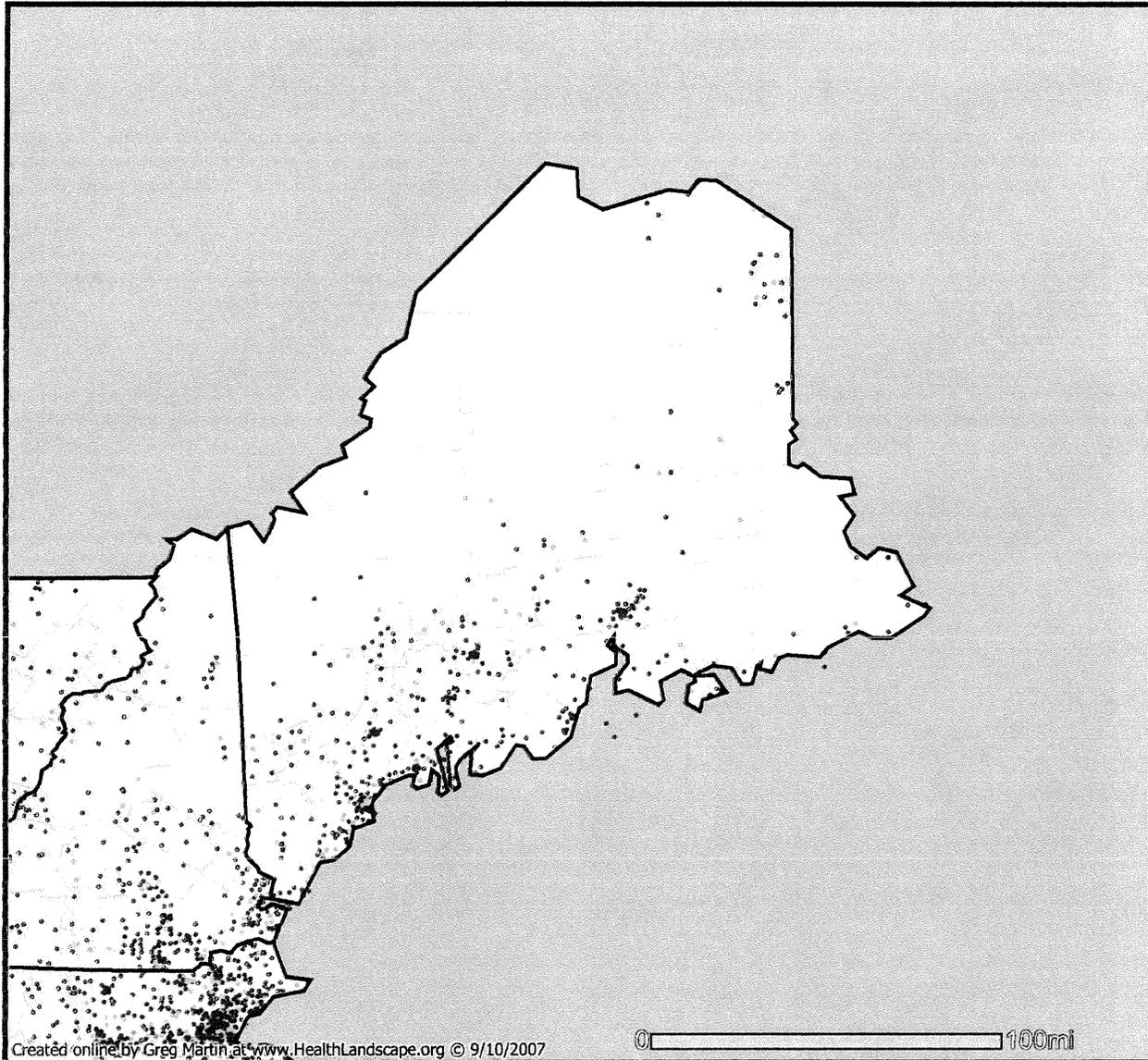
Legend:

- | | | |
|-----------------------------|--------------------------------------|--------------------------------------|
| Primary Care Physician Type | Primary Care Physician Type (Cont'd) | Primary Care Physician Type (Cont'd) |
| Family Medicine (FM) | General Practitioner | IM - Sports Medicine |
| FM - Geriatrics | General Internal Medicine | General Pediatrics |
| FM - Sports Medicine | IM - Geriatrics | |

The source data for this map was the AMA MasterFile. This map is meant to reflect precise practice locations in all instances. Some discrepancies between reported and actual primary care physician practice location may occur.

Created online by Greg Martin at www.HealthLandscape.org © 9/10/2007

Family Physicians in Maine, 2006



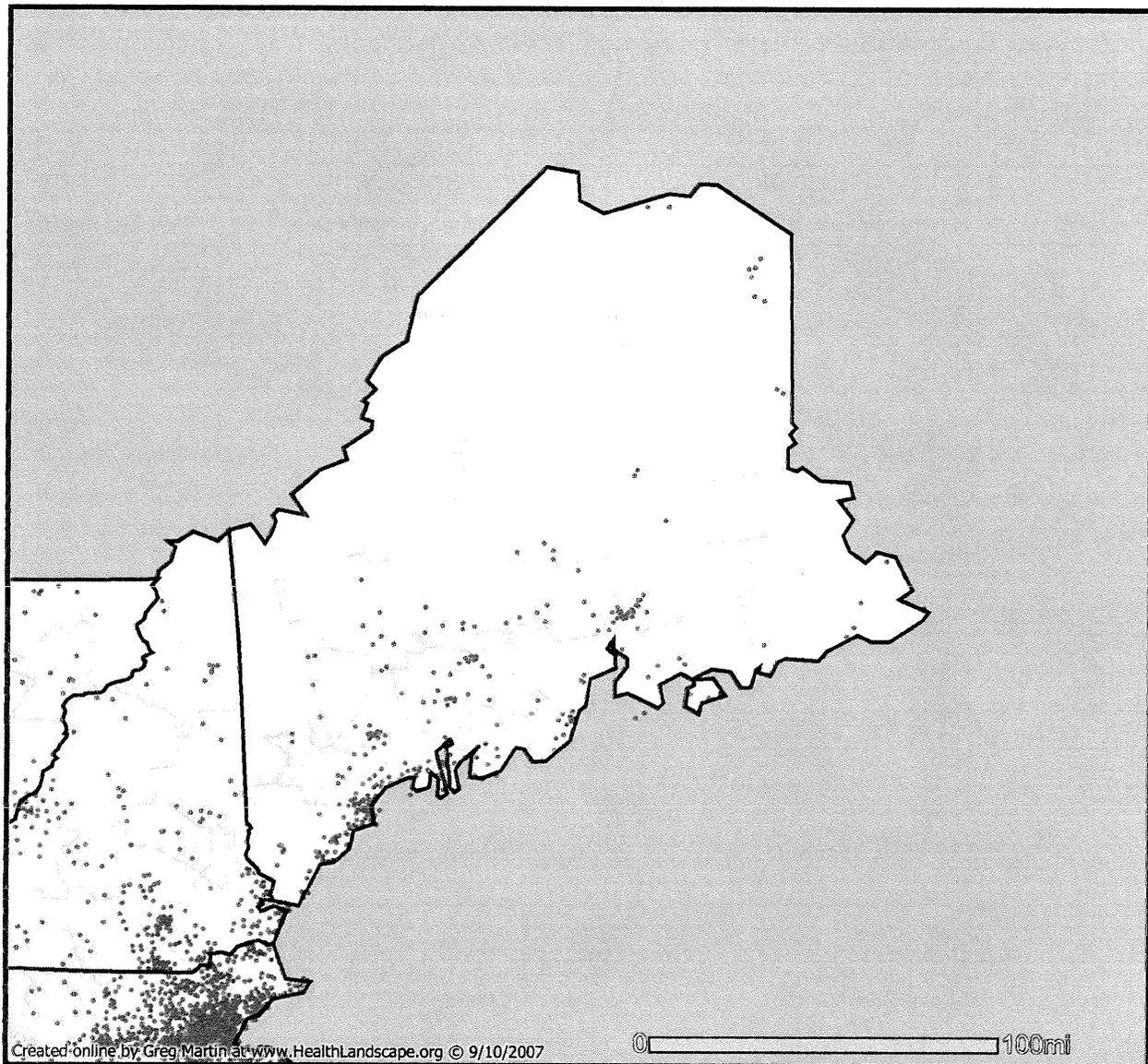
Legend:

Family Physicians

-  Family Medicine
-  Family Medicine - Geriatrics
-  Family Medicine - Sports Medicine
-  General Practice

The source data for this map was the AMA MasterFile. This map is representational in intent and not meant to reflect precise practice locations in all instances. Some discrepancies between reported and actual primary care physician practice location may occur.

General Internal Medicine Physicians in Maine, 2006



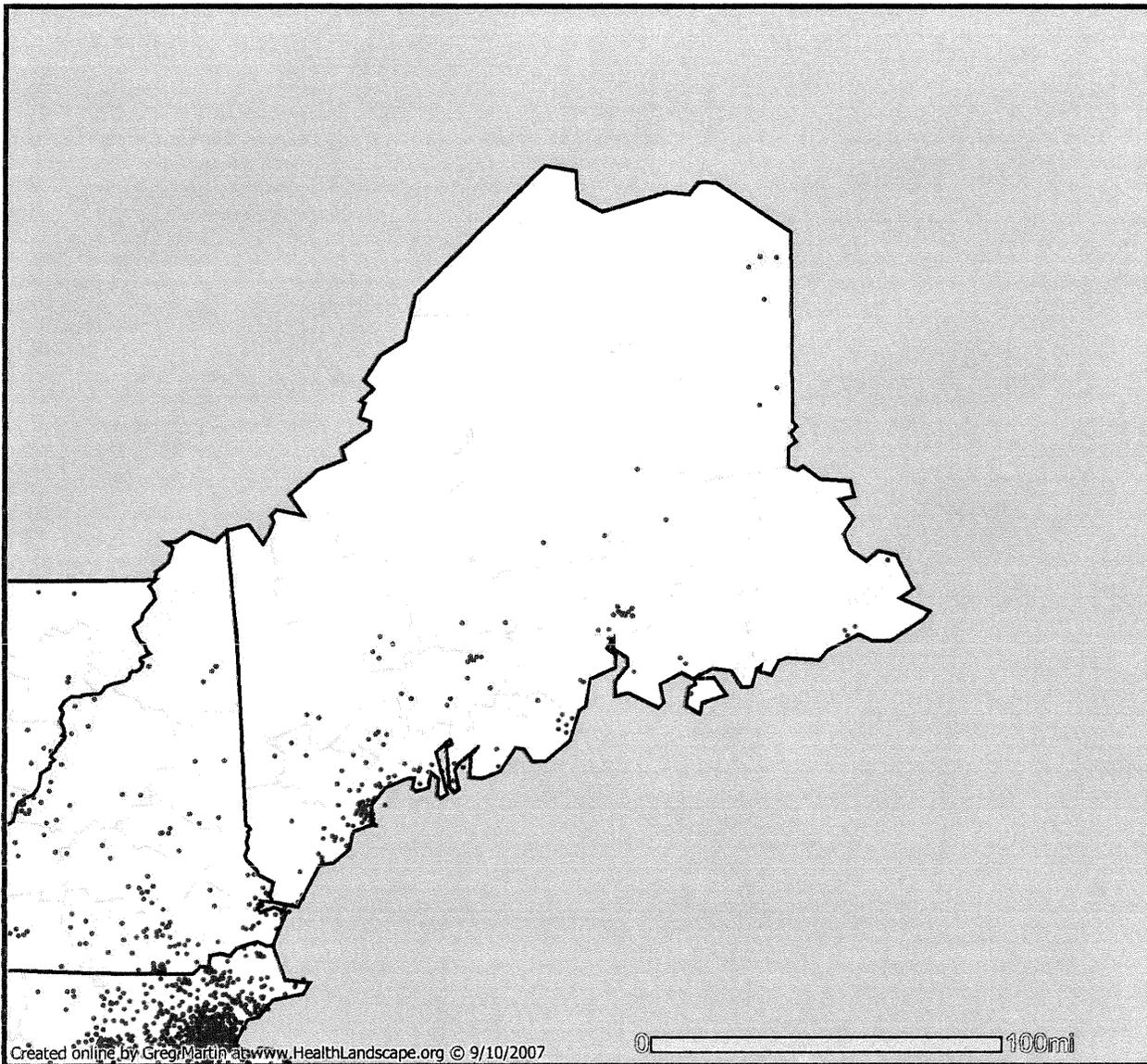
Legend:

Internists

-  General Internal Medicine
-  General Internal Medicine - Geriatrics
-  General Internal Medicine - Sports Medicine

The source data for this map was the AMA MasterFile. This map is representational in intent and not meant to reflect precise practice locations in all instances. Some discrepancies between reported and actual primary care physician practice location may occur.

General Pediatricians in Maine, 2006

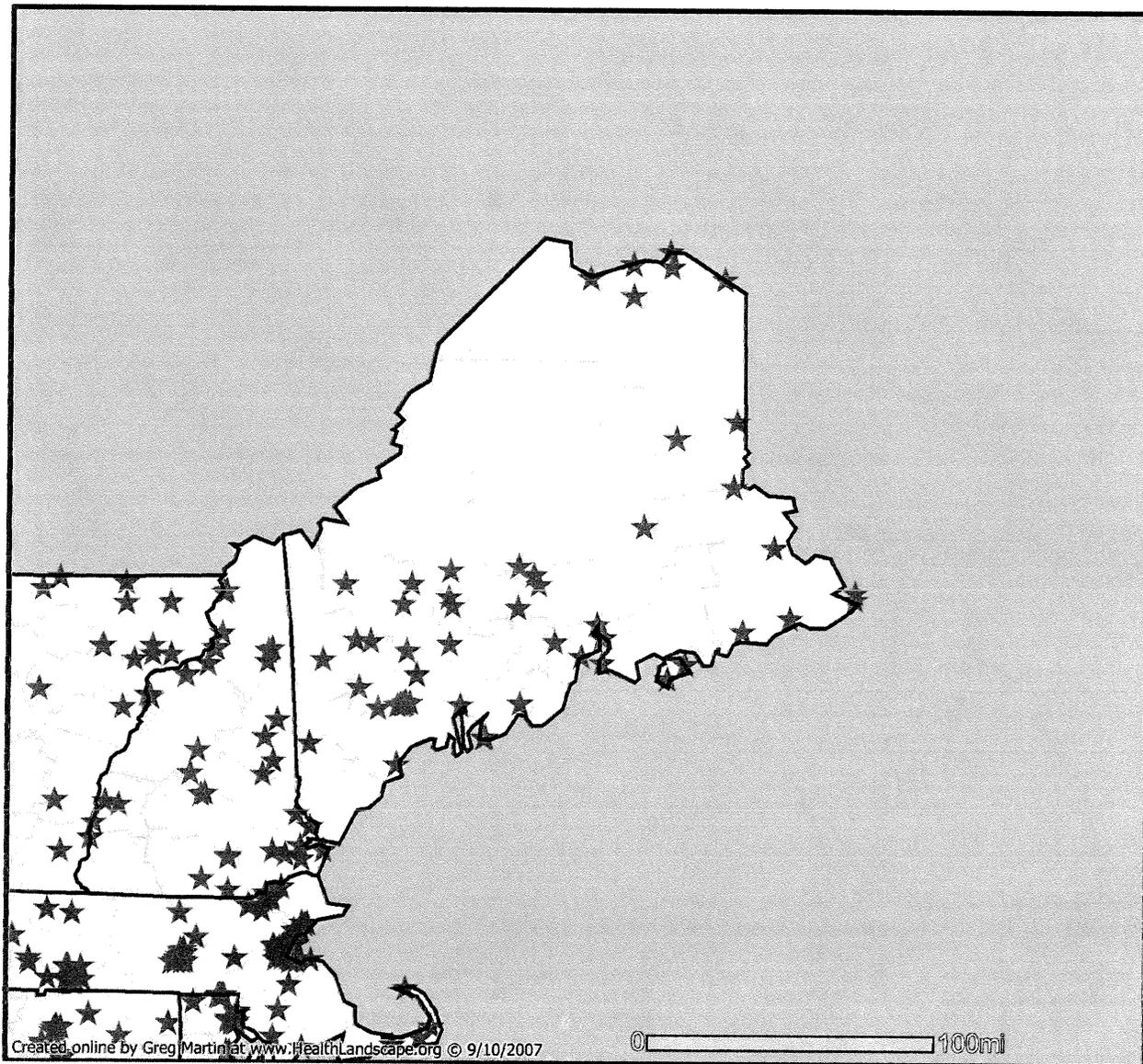


Legend:

 General Pediatricians

The source data for this map was the AMA MasterFile. This map is representational in intent and not meant to reflect precise practice locations in all instances. Some discrepancies between reported and actual primary care physician practice location may occur.

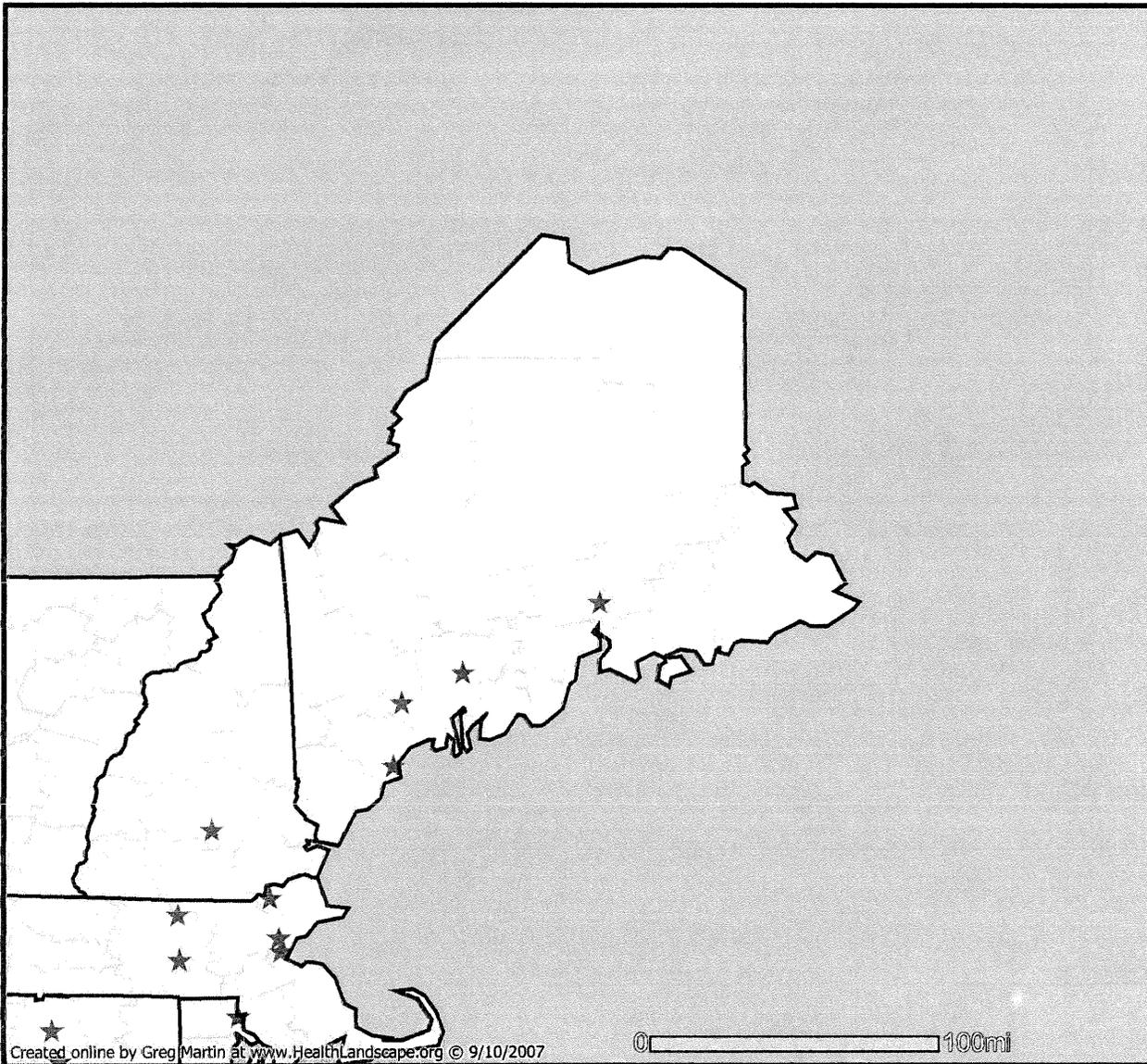
Locations of Community Health Centers in Maine, 2005



Legend:

- ★ CHC Locations, 2005

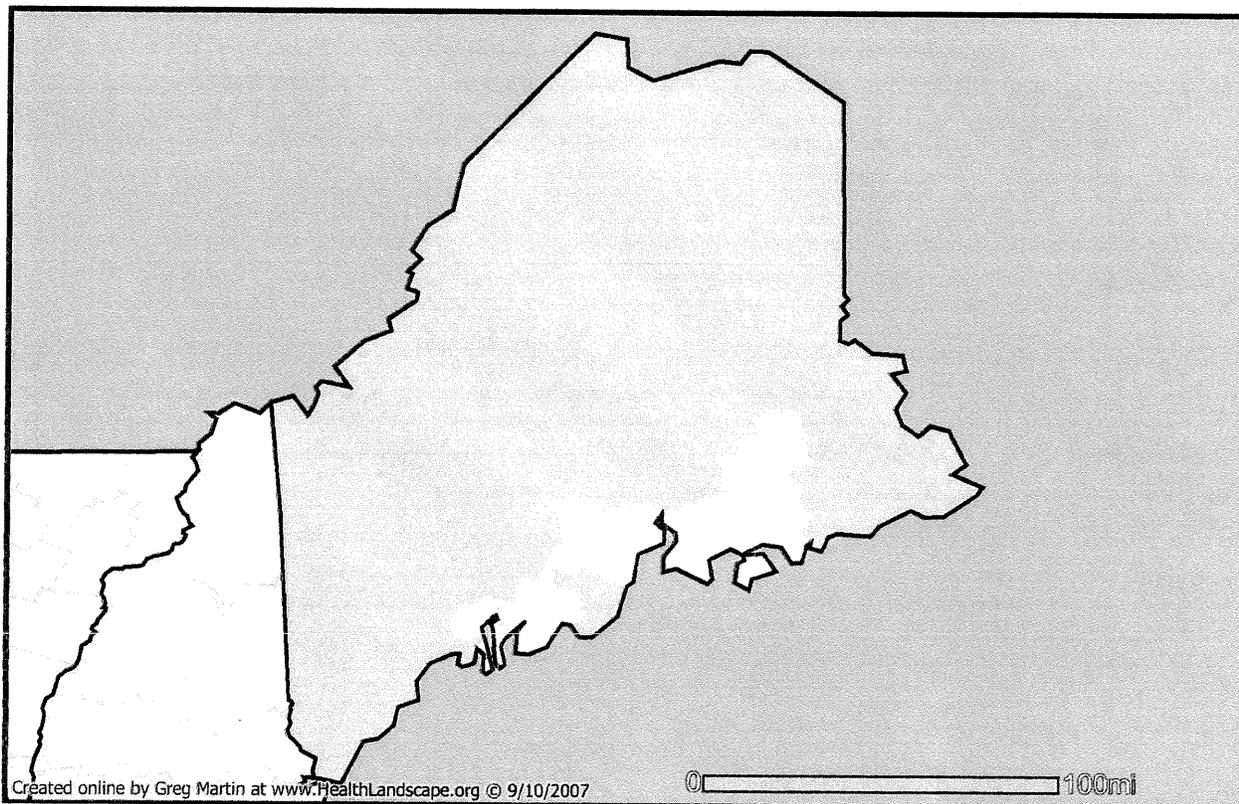
Locations of Family Medicine Residency Programs in Maine, 2005



Legend:

- ★ Family Medicine Residency Programs

Health Professional Shortage Areas (HPSA), 2006

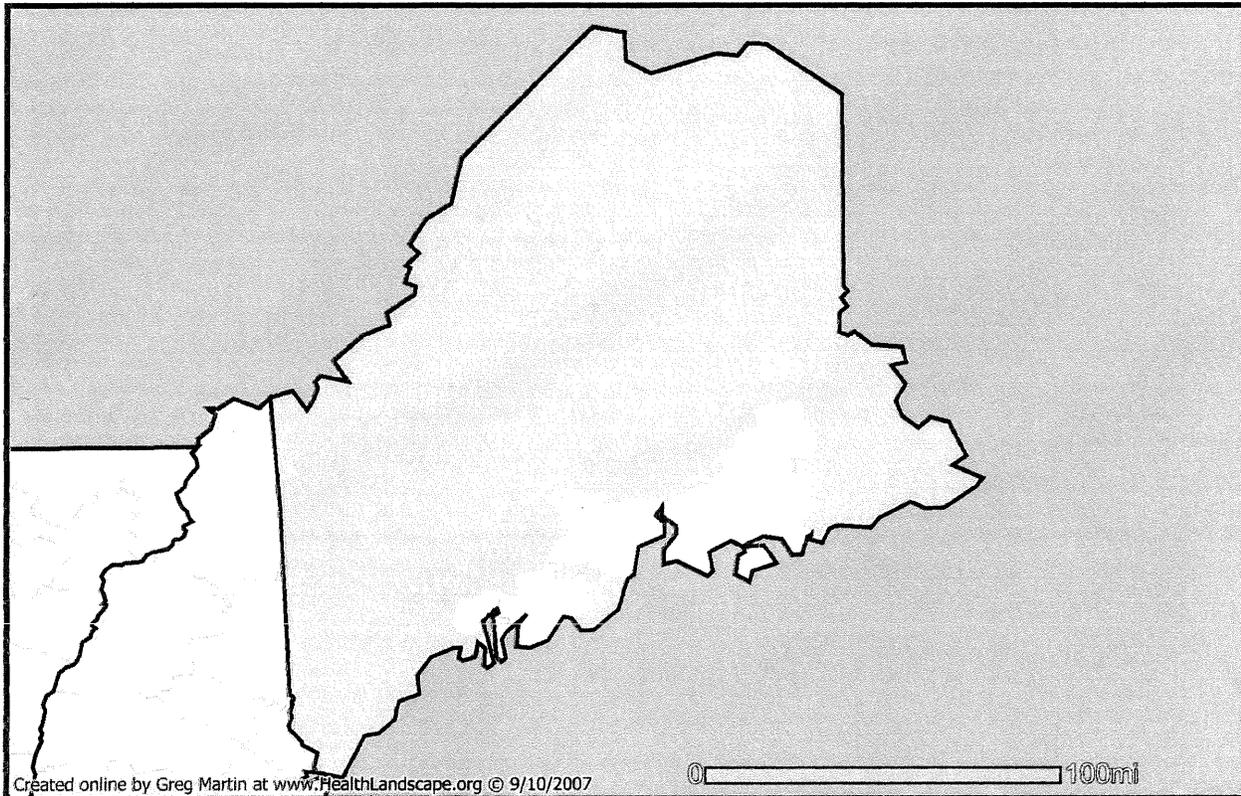


Legend:

HPSA Wizard -- 2006 Federal HPSA Designations

- Full HPSA
- Partial HPSA
- Not a HPSA
- Status Not Available

Health Professional Shortage Areas (HPSA) after Removal of Family Physicians, 2006

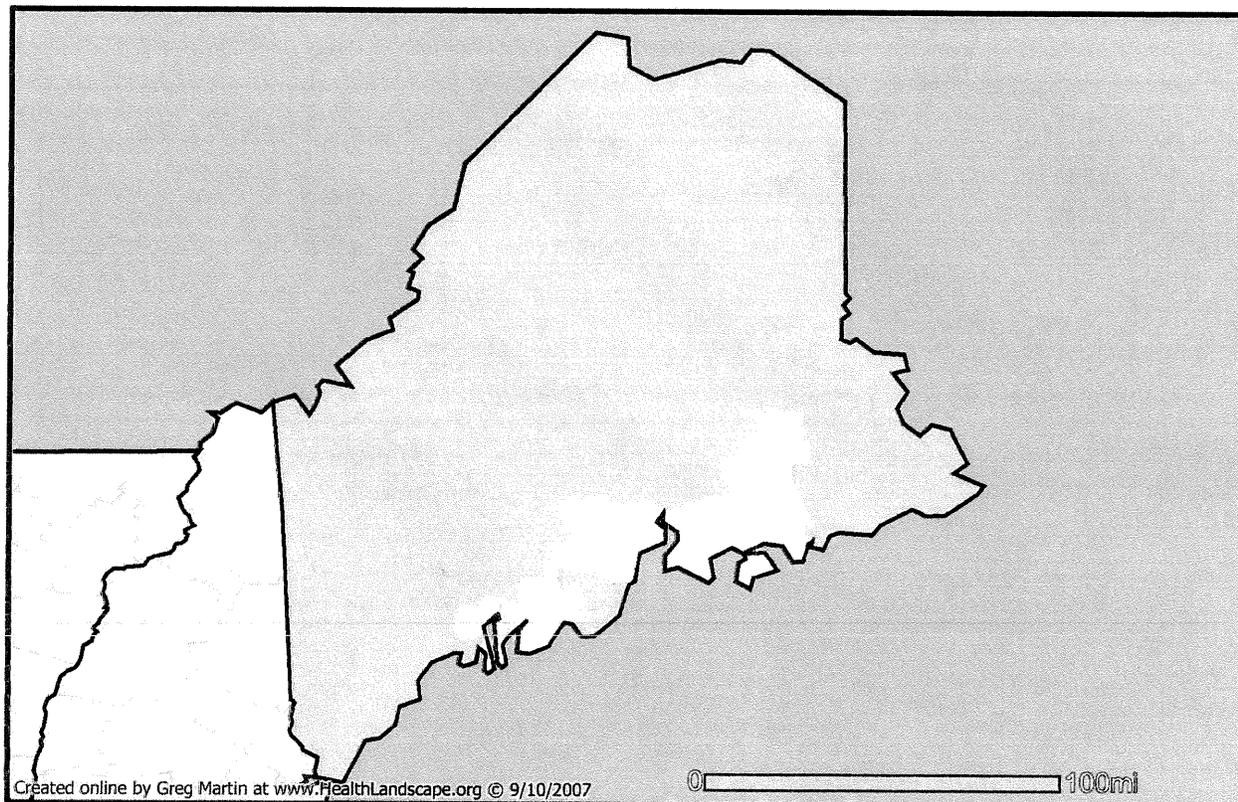


Legend:

HPSA Wizard -- Withdrawal HPSA (2006)

- Becomes or is already full HPSA
- Remains partial HPSA
- Not a HPSA
- Status Not Available

Health Professional Shortage Areas (HPSA) after Removal of General Internal Medicine

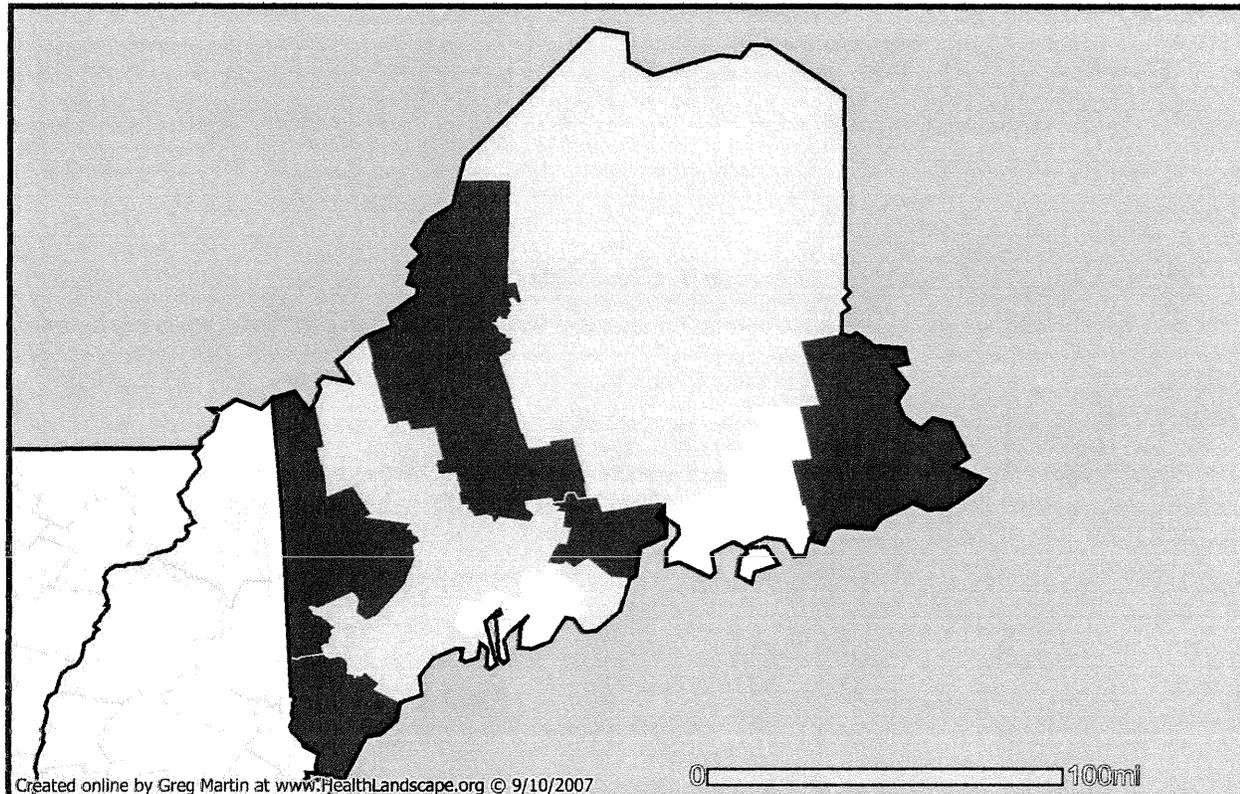


Legend:

HPSA Wizard -- Withdrawal HPSA (2006)

- Becomes or is already full HPSA
- Remains partial HPSA
- Not a HPSA
- Status Not Available

Health Professional Shortage Areas (HPSA) after Removal of Family Physicians and Pediatricians, 2006



Legend:

HPSA Wizard -- Withdrawal HPSA (2006)

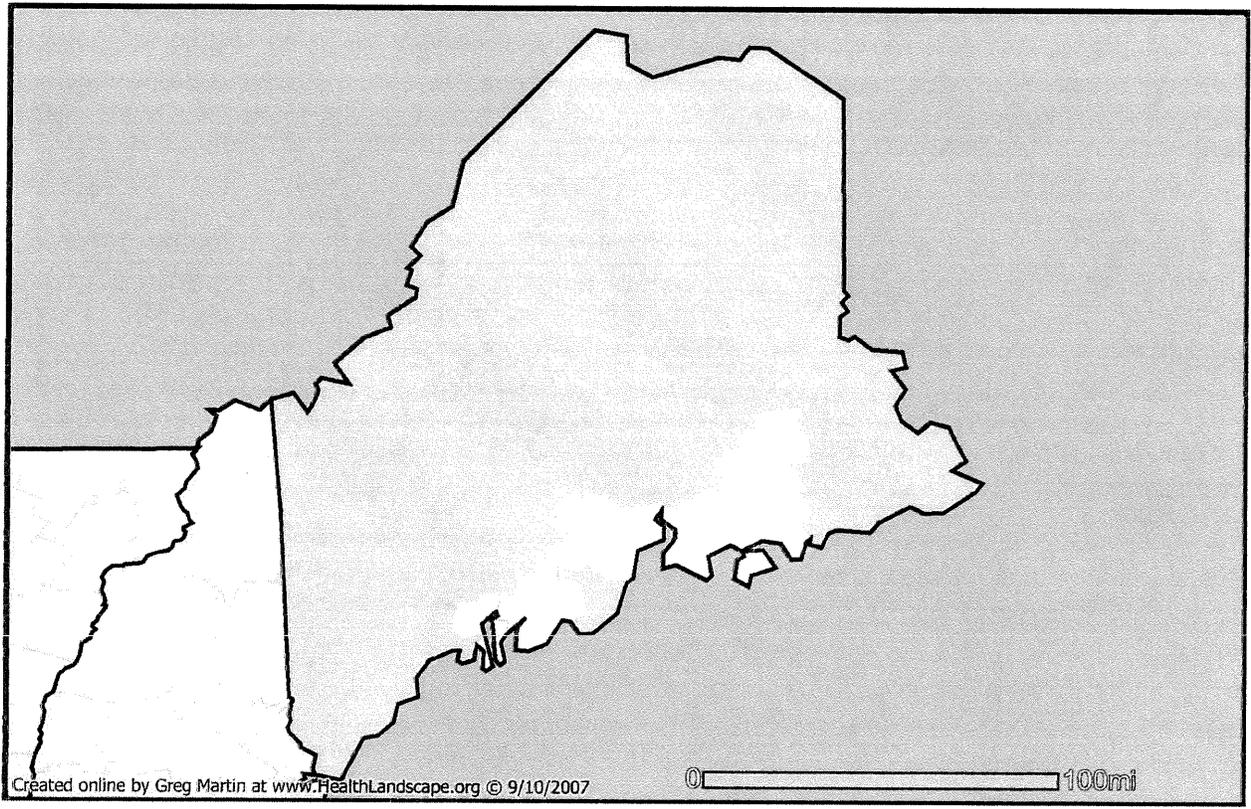
Becomes or is already full HPSA

Remains partial HPSA

Not a HPSA

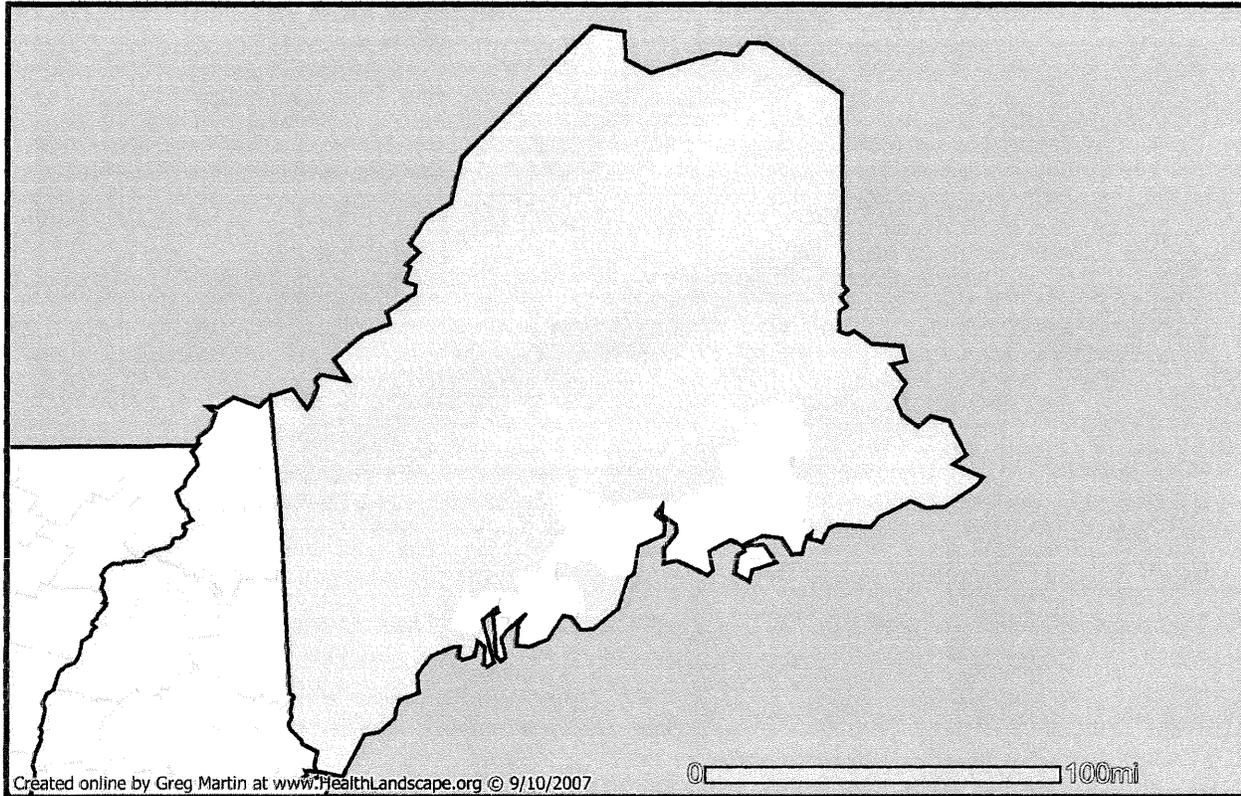
Status Not Available

Health Professional Shortage Areas (HPSA) after Removal of General Pediatricians, 2006



- Legend:
- HPSA Wizard -- Withdrawal HPSA (2006)
- Becomes or is already full HPSA
 - Remains partial HPSA
 - Not a HPSA
 - Status Not Available

Health Professional Shortage Areas (HPSA) after Removal of Pediatricians and General Internal Medicine, 2006



Legend:

HPSA Wizard -- Withdrawal HPSA (2006)

Becomes or is already full HPSA

Remains partial HPSA

Not a HPSA

Status Not Available

4. How does Medicaid rates or reimbursement impact Primary Care Practices in independent office settings versus hospital or other settings?

a. Rate difference

· **Medicaid E & M Codes by State, April 2007**

b. Impact on patients

· **Equal Pay for Equal Work? Not for Medicaid Doctors**

(from Public Citizen:

<http://www.citizen.org/publications/release.cfm?ID=75>

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**CURRENT STATE MEDICAID FEE-FOR-SERVICE PAYMENT RATES FOR SELECTED EVALUATION AND MANAGEMENT
PROCEDURE CODES, April 2007**

Office Visit, New Patient by CPT Code	ALABAMA		ALASKA		ARIZONA		ARIZONA Facility		ARIZONA Non-Facility		ARKANSAS		ARKANSAS (FP and/or UB Mod)		CALIFORNIA Basic		CALIFORNIA Child	
99201	\$ 30.00	\$ 52.47	\$ 36.69	\$ 25.19	\$ 29.70	\$ 137.50	\$ 22.90	\$ 24.98										
99202	\$ 53.00	\$ 91.30	\$ 65.07	\$ 48.83	\$ 45.10	n/r	\$ 34.30	\$ 37.42										
99203	\$ 78.00	\$ 134.86	\$ 96.91	\$ 74.92	\$ 64.90	n/r	\$ 57.20	\$ 62.41										
99204	\$ 111.00	\$ 205.50	\$ 137.05	\$ 110.32	\$ 88.00	n/r	\$ 68.90	\$ 75.17										
99205	\$ 142.00	\$ 257.98	\$ 174.18	\$ 146.10	\$ 137.50	n/r	\$ 82.70	\$ 90.23										
Office Visit, Established Patient by CPT Code																		
99211	\$ 17.00	\$ 29.53	\$ 21.51	\$ 10.34	\$ 14.30	n/r	\$ 12.00	\$ 13.09										
99212	\$ 31.00	\$ 54.13	\$ 38.57	\$ 25.71	\$ 27.50	n/r	\$ 18.10	\$ 19.75										
99213	\$ 42.00	\$ 87.35	\$ 52.55	\$ 37.32	\$ 36.30	n/r	\$ 24.00	\$ 26.18										
99214	\$ 67.00	\$ 132.49	\$ 82.44	\$ 61.46	\$ 70.05	n/r	\$ 37.50	\$ 40.91										
99215	\$ 98.00	\$ 179.43	\$ 119.94	\$ 97.27	\$ 106.00	\$ 55.00	\$ 57.20	\$ 62.41										

n/r = No separate rate

**CURRENT STATE MEDICAID FEE-FOR-SERVICE PAYMENT RATES FOR SELECTED EVALUATION AND MANAGEMENT
PROCEDURE CODES, April 2007**

Office Visit, New Patient by CPT Code	COLORADO	CONNECTICUT Basic	CONNECTICUT Child	DELAWARE	DISTRICT OF COLUMBIA	FLORIDA Age 21+	FLORIDA Age <21	FLORIDA Age 0-19
99201	\$ 24.78	\$ 17.87	\$ 34.44	\$ 36.05	\$ 25.00	\$ 31.20	\$ 32.44	n/r
99202	\$ 47.43	\$ 29.74	\$ 55.16	\$ 62.88	\$ 32.97	\$ 32.71	\$ 34.01	n/r
99203	\$ 83.27	\$ 46.77	\$ 82.42	\$ 93.08	\$ 48.77	\$ 48.68	\$ 50.62	n/r
99204	\$ 117.74	\$ 62.26	\$ 117.13	\$ 141.36	\$ 69.36	\$ 68.84	\$ 71.59	n/r
99205	\$ 124.54	\$ 83.51	\$ 148.93	\$ 177.34	\$ 88.28	\$ 87.48	\$ 90.97	n/r
Office Visit, Established Patient by CPT Code								
99211	\$ 12.18	\$ 10.12	\$ 22.49	\$ 20.39	\$ 15.00	\$ 12.48	\$ 12.97	n/r
99212	\$ 32.82	\$ 18.84	\$ 34.55	\$ 37.21	\$ 19.37	\$ 21.84	\$ 22.71	\$ 26.45
99213	\$ 45.75	\$ 24.16	\$ 45.10	\$ 60.27	\$ 27.11	\$ 26.61	\$ 27.67	\$ 32.56
99214	\$ 71.46	\$ 40.03	\$ 70.74	\$ 91.34	\$ 42.24	\$ 41.46	\$ 43.11	\$ 48.27
99215	\$ 103.60	\$ 54.59	\$ 103.83	\$ 123.49	\$ 61.53	\$ 60.28	\$ 62.69	n/r

n/r = No separate rate

**CURRENT STATE MEDICAID FEE-FOR-SERVICE PAYMENT RATES FOR SELECTED EVALUATION AND MANAGEMENT
PROCEDURE CODES, April 2007**

Office Visit, New Patient by CPT Code	GEORGIA	HAWAII	IDAHO	ILLINOIS	INDIANA	IOWA	KANSAS	KENTUCKY
99201	\$ 35.13	\$ 24.13	\$ 32.85	\$ 27.95	\$ 20.82	\$ 36.89	\$ 30.91	\$ 22.05
99202	\$ 54.57	\$ 48.12	\$ 59.40	\$ 32.00	\$ 33.96	\$ 57.92	\$ 50.66	\$ 35.29
99203	\$ 76.53	\$ 68.82	\$ 88.75	\$ 41.60	\$ 46.85	\$ 81.52	\$ 75.45	\$ 48.86
99204	\$ 110.51	\$ 99.17	\$ 126.65	\$ 66.40	\$ 70.14	\$ 118.04	\$ 107.12	\$ 73.04
99205	\$ 137.12	\$ 122.28	\$ 161.51	\$ 70.85	\$ 88.36	\$ 147.16	\$ 136.62	\$ 91.89
Office Visit, Established Patient by CPT Code								
99211	\$ 17.46	\$ 9.17	\$ 19.30	\$ 12.30	\$ 9.98	\$ 18.14	\$ 16.36	\$ 10.57
99212	\$ 29.67	\$ 24.13	\$ 34.88	\$ 24.25	\$ 18.20	\$ 31.42	\$ 29.76	\$ 19.15
99213	\$ 40.70	\$ 36.31	\$ 48.59	\$ 28.35	\$ 25.98	\$ 43.31	\$ 40.84	\$ 27.06
99214	\$ 62.71	\$ 56.46	\$ 76.45	\$ 42.50	\$ 40.43	\$ 66.92	\$ 64.22	\$ 41.97
99215	\$ 93.46	\$ 83.57	\$ 112.53	\$ 48.00	\$ 63.87	\$ 100.15	\$ 94.00	\$ 66.39

n/r = No separate rate

**CURRENT STATE MEDICAID FEE-FOR-SERVICE PAYMENT RATES FOR SELECTED EVALUATION AND MANAGEMENT
PROCEDURE CODES, April 2007**

Office Visit, New Patient by CPT Code	LOUISIANA		LOUISIANA Prenatal/ Obstetrical	MAINE	MARYLAND	MASSACHUSETTS Non-Facility	MASSACHUSETTS Facility
	\$	\$	\$	\$	\$	\$	\$
99201	\$ 19.80	\$ 45.00	\$ 45.00	\$ 21.92	\$ 30.27	\$ 29.17	\$ 18.12
99202	\$ 27.00	\$ 45.00	\$ 45.00	\$ 32.56	\$ 53.50	\$ 51.68	\$ 35.79
99203	\$ 32.40	\$ 45.00	\$ 45.00	\$ 48.45	\$ 79.45	\$ 76.59	\$ 55.07
99204	\$ 36.90	\$ 45.00	\$ 45.00	\$ 68.76	\$ 112.14	\$ 107.81	\$ 81.66
99205	\$ 45.00	\$ 45.00	\$ 45.00	\$ 87.34	\$ 142.20	\$ 136.34	\$ 108.86
Office Visit, Established Patient by CPT Code							
99211	\$ 9.24	\$ 33.43	\$ 33.43	\$ 13.17	\$ 18.07	\$ 17.85	\$ 6.92
99212	\$ 30.13	\$ 33.43	\$ 33.43	\$ 19.85	\$ 31.90	\$ 31.03	\$ 18.45
99213	\$ 36.13	\$ 33.43	\$ 33.43	\$ 28.94	\$ 43.41	\$ 42.10	\$ 27.20
99214	\$ 41.13	\$ 33.43	\$ 33.43	\$ 42.50	\$ 67.94	\$ 65.73	\$ 45.20
99215	\$ 49.63	\$ 33.43	\$ 33.43	\$ 60.38	\$ 98.32	\$ 94.58	\$ 72.40

n/r = No separate rate

**CURRENT STATE MEDICAID FEE-FOR-SERVICE PAYMENT RATES FOR SELECTED EVALUATION AND MANAGEMENT
PROCEDURE CODES, April 2007**

Office Visit, New Patient by CPT Code	MICHIGAN		MINNESOTA	MISSISSIPPI	MISSOURI	MONTANA	
	Non-Facility	Facility				Non-Facility	Facility
99201	\$ 20.88	\$ 13.56	\$ 27.19	\$ 30.10	\$ 21.52	\$ 29.23	\$ 19.82
99202	\$ 37.03	\$ 26.70	\$ 30.48	\$ 53.86	\$ 38.23	\$ 52.23	\$ 38.95
99203	\$ 55.12	\$ 41.12	\$ 36.25	\$ 80.25	\$ 56.93	\$ 77.92	\$ 59.91
99204	\$ 77.94	\$ 60.93	\$ 61.80	\$ 114.09	\$ 80.62	\$ 110.70	\$ 88.85
99205	\$ 99.04	\$ 81.17	\$ 90.64	\$ 145.70	\$ 102.58	\$ 141.35	\$ 118.35
Office Visit, Established Patient by CPT Code							
99211	\$ 12.27	\$ 5.17	\$ 12.36	\$ 17.21	\$ 12.55	\$ 16.67	\$ 7.55
99212	\$ 21.96	\$ 13.78	\$ 20.60	\$ 31.54	\$ 22.60	\$ 30.61	\$ 20.08
99213	\$ 29.93	\$ 20.24	\$ 24.72	\$ 43.34	\$ 30.86	\$ 41.96	\$ 29.53
99214	\$ 46.94	\$ 33.59	\$ 46.14	\$ 68.23	\$ 48.45	\$ 66.11	\$ 48.92
99215	\$ 68.25	\$ 53.82	\$ 65.92	\$ 100.12	\$ 70.63	\$ 96.99	\$ 78.45

n/r = No separate rate

**CURRENT STATE MEDICAID FEE-FOR-SERVICE PAYMENT RATES FOR SELECTED EVALUATION AND MANAGEMENT
PROCEDURE CODES, April 2007**

Office Visit, New Patient by CPT Code	NEBRASKA		NEVADA		NEW HAMPSHIRE		NEW JERSEY		NEW MEXICO		NEW YORK		NORTH CAROLINA Non-Facility		NORTH CAROLINA Facility	
99201	\$	28.73	\$	29.54	\$	20.16	\$	20.60	\$	32.81	\$	30.00	\$	33.12	\$	21.86
99202	\$	41.99	\$	53.54	\$	33.60	\$	20.60	\$	58.52	\$	30.00	\$	59.00	\$	43.10
99203	\$	61.88	\$	80.31	\$	42.56	\$	25.00	\$	87.23	\$	30.00	\$	87.75	\$	66.22
99204	\$	88.40	\$	113.85	\$	63.84	\$	25.00	\$	123.78	\$	30.00	\$	124.45	\$	98.29
99205	\$	114.92	\$	144.62	\$	80.64	\$	25.00	\$	157.80	\$	30.00	\$	158.30	\$	130.99
Office Visit, Established Patient by CPT Code																
99211	\$	15.47	\$	17.85	\$	18.38	\$	14.00	\$	18.90	\$	30.00	\$	19.27	\$	8.34
99212	\$	26.52	\$	31.69	\$	31.18	\$	20.60	\$	34.41	\$	30.00	\$	34.78	\$	22.19
99213	\$	39.78	\$	44.00	\$	42.72	\$	20.60	\$	47.12	\$	30.00	\$	47.67	\$	32.76
99214	\$	59.67	\$	68.62	\$	65.79	\$	20.60	\$	74.11	\$	30.00	\$	74.87	\$	54.34
99215	\$	86.19	\$	100.93	\$	75.04	\$	20.60	\$	108.45	\$	30.00	\$	109.29	\$	87.10

n/r = No separate rate

**CURRENT STATE MEDICAID FEE-FOR-SERVICE PAYMENT RATES FOR SELECTED EVALUATION AND MANAGEMENT
PROCEDURE CODES, April 2007**

Office Visit, New Patient by CPT Code	NORTH DAKOTA	OHIO	OKLAHOMA	OREGON	PENNSYLVANIA	RHODE ISLAND	SOUTH CAROLINA Non-Facility	SOUTH CAROLINA Facility
99201	\$ 31.14	\$ 21.81	\$ 33.35	\$ 25.17	\$ 20.00	\$ 16.72	\$ 28.97	\$ 19.19
99202	\$ 55.63	\$ 34.42	\$ 59.64	\$ 44.63	\$ 23.00	\$ 27.24	\$ 51.71	\$ 37.90
99203	\$ 82.93	\$ 48.01	\$ 88.66	\$ 66.43	\$ 25.00	\$ 29.00	\$ 76.81	\$ 58.12
99204	\$ 117.57	\$ 70.32	\$ 126.08	\$ 93.94	\$ 27.00	\$ 45.00	\$ 109.10	\$ 86.37
99205	\$ 150.11	\$ 87.97	\$ 160.97	\$ 119.37	\$ 36.00	\$ 46.00	\$ 139.12	\$ 115.24
Office Visit, Established Patient by CPT Code								
99211	\$ 17.84	\$ 13.43	\$ 19.21	\$ 14.79	\$ 20.00	\$ 8.05	\$ 16.82	\$ 7.33
99212	\$ 32.54	\$ 24.74	\$ 34.96	\$ 26.47	\$ 26.00	\$ 20.64	\$ 30.41	\$ 19.48
99213	\$ 44.79	\$ 34.35	\$ 48.16	\$ 36.07	\$ 27.00	\$ 20.64	\$ 41.81	\$ 28.87
99214	\$ 70.68	\$ 52.57	\$ 75.75	\$ 56.57	\$ 29.00	\$ 27.00	\$ 65.70	\$ 47.86
99215	\$ 103.22	\$ 81.04	\$ 110.96	\$ 82.26	\$ 36.00	\$ 32.00	\$ 96.00	\$ 76.73

n/r = No separate rate

**CURRENT STATE MEDICAID FEE-FOR-SERVICE PAYMENT RATES FOR SELECTED EVALUATION AND MANAGEMENT
PROCEDURE CODES, April 2007**

Office Visit, New Patient by CPT Code	SOUTH DAKOTA		TENNESSEE		TEXAS		UTAH		VERMONT		VIRGINIA <21 years		VIRGINIA >20 years	
99201	\$	30.87	\$	23.00	\$	22.64	\$	24.52	\$	35.61	\$	27.32	\$	26.02
99202	\$	47.69	\$	30.00	\$	35.73	\$	43.48	\$	63.30	\$	48.44	\$	46.13
99203	\$	70.87	\$	40.00	\$	48.28	\$	64.71	\$	93.99	\$	72.09	\$	68.66
99204	\$	100.64	\$	50.00	\$	70.64	\$	91.50	\$	133.16	\$	101.94	\$	97.09
99205	\$	128.38	\$	60.00	\$	87.83	\$	116.27	\$	169.41	\$	129.54	\$	123.37
Office Visit, Established Patient by CPT Code														
99211	\$	15.36	\$	18.00	\$	11.73	\$	14.41	\$	20.94	\$	16.05	\$	15.29
99212	\$	27.74	\$	22.00	\$	19.64	\$	25.78	\$	37.45	\$	28.73	\$	27.36
99213	\$	38.77	\$	27.00	\$	-	\$	35.13	\$	51.29	\$	39.14	\$	37.28
99214	\$	60.77	\$	32.00	\$	41.46	\$	55.10	\$	80.45	\$	61.39	\$	58.47
99215	\$	88.68	\$	37.96	\$	63.83	\$	80.13	\$	117.06	\$	89.27	\$	85.02

n/r = No separate rate

**CURRENT STATE MEDICAID FEE-FOR-SERVICE PAYMENT RATES FOR SELECTED EVALUATION AND MANAGEMENT
PROCEDURE CODES, April 2007**

Office Visit, New Patient by CPT Code	WASHINGTON		WEST VIRGINIA		WEST VIRGINIA		WISCONSIN		WYOMING	
	Non-Facility	Facility	Non-Facility	Facility	Non-Facility	Facility	Non-Facility	Facility	Non-Facility	Facility
99201	\$ 25.00	\$ 16.07	\$ 25.10	\$ 16.54	\$ 21.78	\$ 21.78	\$ 42.52	\$ 38.00	\$ 42.52	\$ 38.00
99202	\$ 44.13	\$ 31.63	\$ 44.30	\$ 32.48	\$ 36.64	\$ 36.64	\$ 75.40	\$ 45.36	\$ 75.40	\$ 45.36
99203	\$ 65.82	\$ 48.72	\$ 65.85	\$ 49.91	\$ 54.78	\$ 54.78	\$ 112.23	\$ 62.91	\$ 112.23	\$ 62.91
99204	\$ 92.86	\$ 72.19	\$ 100.99	\$ 81.80	\$ 78.38	\$ 78.38	\$ 158.69	\$ 78.81	\$ 158.69	\$ 78.81
99205	\$ 118.11	\$ 96.43	\$ 127.27	\$ 107.19	\$ 99.71	\$ 99.71	\$ 201.66	\$ 100.47	\$ 201.66	\$ 100.47
Office Visit, Established Patient by CPT Code										
99211	\$ 14.80	\$ 6.12	\$ 13.58	\$ 6.20	\$ 12.07	\$ 12.07	\$ 24.99	\$ 38.00	\$ 24.99	\$ 38.00
99212	\$ 26.28	\$ 16.33	\$ 25.99	\$ 16.83	\$ 21.74	\$ 21.74	\$ 44.71	\$ 45.36	\$ 44.71	\$ 45.36
99213	\$ 35.71	\$ 23.98	\$ 42.23	\$ 31.01	\$ 30.00	\$ 30.00	\$ 60.94	\$ 45.36	\$ 60.94	\$ 45.36
99214	\$ 56.12	\$ 40.05	\$ 64.08	\$ 49.02	\$ 47.18	\$ 47.18	\$ 95.57	\$ 62.91	\$ 95.57	\$ 62.91
99215	\$ 81.38	\$ 64.03	\$ 87.70	\$ 70.58	\$ 69.14	\$ 69.14	\$ 138.97	\$ 78.81	\$ 138.97	\$ 78.81

n/r = No separate rate

NOTE: Unless otherwise identified, reimbursement rates presented are for non-specialist physician care services provided in a non-facility (office) setting.

Source: Tim M. Henderson, AAFP Medicaid consultant. March-April 2007 survey of state Medicaid programs.

5. How does Maine's business climate impact Primary Care Practice?
 - **The Economic Impact of Family Physicians in Maine**
 - **Study Methods for the Economic Impact of Family Physicians**



Economic Impact of Family Physicians in Maine

Who are family physicians?

Family physicians provide a personal medical home for people of any age. Family physicians complete at least three years of specialty training, learning how to deliver a range of acute, chronic and preventive medical care services. In addition to diagnosing and treating illness, they also provide preventive care including routine check-ups, health risk assessments, immunization and screening tests, and personalized counseling on maintaining a healthy lifestyle. Family physicians also manage chronic illnesses and coordinate care with other sub specialists. From heart disease, stroke and hypertension, to diabetes, cancer and asthma, family physicians provide primary care for the nation's most serious health problems.

While most medical specialties tend to cluster in urban areas and near academic health centers, family physicians are more likely than other primary care physicians to work in areas with the greatest needs — e.g. rural areas and health professional shortage areas (HPSA) federally designated area or populations (bhpr.hrsa.gov — Department of Health and Human Services) with the lowest ratios of health providers to population.

Do family physicians generate economic benefits for Maine?

In addition to the health care services they provide, family physicians are significant generators of economic activity in local communities. Family physicians provide employment, purchase goods and services and even generate income to other health care organizations such as hospitals and nursing homes.

A recent study by the Robert Graham Center for Policy Studies evaluated the impact of family physicians on a state-by-state basis. These figures do not account for a family physician's contribution to the generation of income for other local health care organizations such as hospitals and nursing homes. The study found that in Maine, family physicians have an economic impact of \$829,391 per doctor, per year. The total impact of family physicians in Maine is estimated to be \$372,396,496 per year.

Table 1: Economic Impact of Family Physicians in Maine

<i>Impact per family physician per year</i>	\$ 829,391
<i>Total Impact per year</i>	\$ 372,396,496

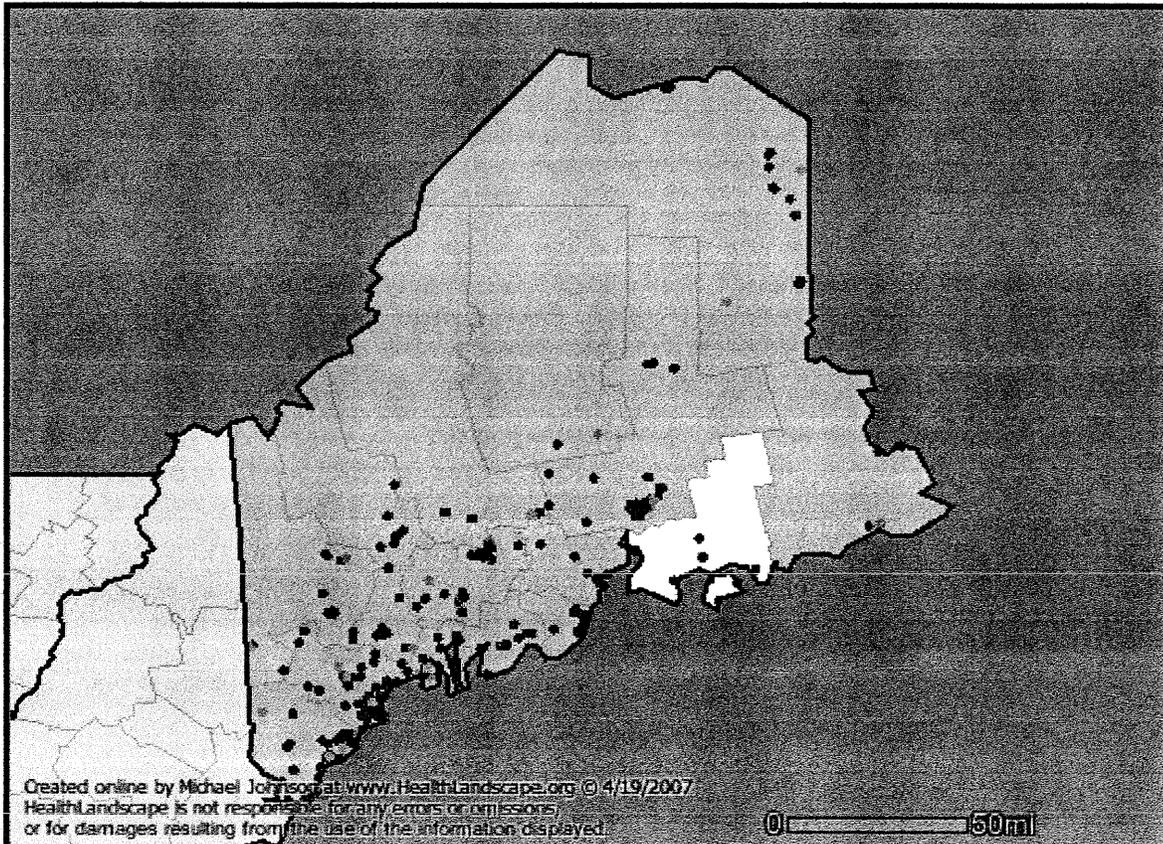
Source: Robert Graham Center for Policy Studies – www.graham-center.org

How does this affect family physicians in Maine?

The Commonwealth Fund's Commission on a High Performance Health System (www.cmwf.org (<http://www.cmwf.org/>)) seeks to move the U.S. toward a health care system that achieves better access, improved quality and greater efficiency, particularly for those who are most vulnerable. The Commonwealth Fund states that the United States cannot achieve a high performing healthcare system without "...developing the workforce required to foster patient-centered primary care..." Furthermore, the American Academy of Family Physicians, American Academy of Pediatrics, American College of Physicians and American Osteopathic Association have called for a patient-centered medical home for all Americans.

Family physicians are trained to provide that medical home, improving access to health care for communities in the greatest need. In addition, as *Table 1* demonstrates, family physicians can serve as economic engines for your state. Family physicians contribute to the economic viability of the communities they serve, as highly educated consumers, employers and purchasers. States choosing to invest in loan repayment, primary care residency training and tax incentives for practice in underserved areas should consider not only the health benefits, but also the potential return on investment for some of the most economically deprived areas of the state.

Maine Family Physicians and Primary Care HPSA



This map shows the locations of family physicians in the state of Maine over a county map displaying federally designated primary care health professional shortage areas (HPSA). Primary care HPSAs are counties or portions of counties in the United States with the lowest ratio of primary care physicians to population. As seen on the preceding page and in this map, the impact of family physicians spreads across Maine. Policies that positively impact recruitment and retention of family physicians within Maine will not only contribute to an increase in the availability and provision of quality health care services in underserved counties, but will also have a significant impact on the local economy by generating jobs, income and development. If you would like to explore health data relevant to Maine and make your own maps of the physician workforce, please visit: www.healthlandscape.org

LEGEND

HPSA Wizard – 2004 Federal HPSA Designations

-  Becomes or is already full HPSA
-  Remains partial HPSA
-  Not a HPSA
-  Status Not Available
-  County
-  FM
-  FPG
-  FSM
-  GP



Economic Impact of Family Physicians in Your State

AAFP Government Relations

June 2007

How did AAFP determine the financial values presented in the *Economic Impact of Family Physicians* issue briefs?

The information presented in the AAFP issue briefs came directly from research performed by Krishnan Narasimhan, MD, Assistant Professor at Howard University Department of Community Health and Family Medicine. Dr. Narasimhan presented his data at the North American Primary Care Research Group Annual Meeting on October 16, 2006. Below is a summary of the study methods used.

STUDY METHODS:

- The number of office-based family physicians per state for the year 2003 was obtained from the Area Resource File¹ database.
- Second, value of five full-time staff/physician (from 2002 MGMA² survey) was added.
- A linear input-output social accounting matrix (SAM) framework using IMPLAN³ software and multipliers derived from the 2002 structural matrices of the US economy, were used to estimate the direct, indirect, induced, and total economic impacts of family physicians.
- This process was applied to each of the fifty states and the District of Columbia.
- Outcome measures:
 - The economic impact in dollars per office-based family physician in each state.
 - Total economic impact in dollars of all office-based family physicians in each state.

NOTES

¹ The Area Resource File (ARF) is a national county-level health resources information system which contains statistics on health professions, health training programs, health facilities, measures of resource scarcity, and health status

² A cost survey performed by the Medical Group Management Association on member Family Practice Single Specialty Groups based on year 2003 data shows a median value of 5 total employed support staff FTE per physician.

³ IMPLAN is a PC based economic analysis system which allows the creation of regional models. It aggregates economic changes that result from additions to specific industries, to generate economic impacts. Originally used in the forestry industry, it is widely utilized for regional economic planning by federal and state government agencies, academia, and private industry.

Narasimhan K. *The Economic Impact of Family Physicians*. Presented at the North American Primary Care Research Group Annual Meeting, Oct. 16, 2006.

6. How do Maine's malpractice laws impact Primary Care Practice?

- **Liability: Attorney Fees**
- **Liability: Damage Awards**
- **Liability: Doctor Apologies**
- **Liability: Joint and Several Liability**



Liability: Limits on Attorney Fees

AAFP State Government Relations

Issue

Limits on attorney fees in medical malpractice suits are a contentious issue in the debate over how to abate the medical liability insurance crisis. While the federal government has yet to pass a law addressing liability insurance, the states continue to be the battleground for malpractice tort reform. Proponents of limiting the fees an attorney may charge litigant claim that such limitations will help reign in the lottery-like atmosphere presently surrounding liability litigation. Those on the other side put forward that any limitations on what an attorney can collect will water-down the pool of available and qualified attorneys and thus limit access to the justice system by the economically disadvantaged.

As many attorneys collect a portion of jury awards in successful litigation, incentive exists to press frivolous cases and push juries to offer higher and higher awards. Exorbitant jury awards are partly to blame for the recent period of crisis regarding liability insurance. As premiums have risen rapidly, the ability of physicians to practice how and where they choose has been restricted. This problem has proven particularly acute for family physicians wishing to practice obstetrics, especially those wishing to do so in underserved areas.

Considerations

AAFP constituent chapters have made great progress in advancing this central tenet of effectively addressing the liability insurance crisis. Chapters should continue to educate state legislators, particularly, around the importance of this issue. Limiting attorney fees is an effective strategy for decreasing the number of suits brought forward—and reducing the lottery-like atmosphere surrounding medical tort—in addition to stabilizing liability insurance premiums in the mid- to long-term; short-term gains are unlikely to materialize. Chapters can anticipate, though, the likelihood of court challenges to limits on attorney fees, as this issue, quite literally, hits physicians traditional opposition on liability reform in their pocketbook.

State Activity

As of October 2005, 23 states (CA, CT, DE, FL, HI, IL, IN, IA, KS, ME, MA, MI, NV, NH, NJ, NY, OK, OR, TN, UT, WA, WI, WY) limit attorney fees. Generally, these laws dictate a sliding scale specifying what percentage of an award may be collected by an attorney. In Illinois, for example, the sliding scale specifies attorney fees are not to exceed 1/3 of the first \$150,000; 25 percent of \$150,001 to \$1 million; and 20 percent of awards over \$1 million. Conversely, 27 states (AL, AK, AZ, AR, CO, GA, ID, KY, LA, MD, MN, MS, MO, MT, NE, NM, NC, ND, OH, PA, RI, SC, SD, TX, VT, VA, WV) do not place limits on the fees an attorney may collect through liability litigation.

AAFP Policy

The AAFP Professional Medical Liability policy may be viewed at www.aafp.org/x7019.xml.

The AAFP *Medical Liability Strike Force Report* may be viewed at
http://members.aafp.org/members/PreBuilt/congress_boardreportI.pdf (*Members Only*)

Additional Resources

Medical Liability/Medical Malpractice from the National Conference of State Legislatures
<http://www.ncsl.org/programs/health/medmalmain.htm>

State	Limits on Attorney Fees
Alabama	<i>No limitations.</i>
Alaska	<i>No limitations.</i>
Arizona	§12-568. <i>Not limited, but court may review reasonableness of fees upon request of either party.</i>
Arkansas	<i>No limitations.</i>
California	Business and Professions §6146. Sliding scale, not to exceed 40% of first \$50,000, 33 1/3% of next \$50,000, 25% of next \$500,000, and 15% of damages exceeding \$600,000.
Colorado	<i>No limitations.</i>
Connecticut	§52-251c. Sliding scale, not to exceed 1/3 of first \$300,000; 25% of next \$300,000; 20% of next \$300,000; 15% of next \$300,000; and 10% of damages exceeding \$1.2 million.
Delaware	§18.6865. Sliding scale, not to exceed 35% of first \$100,000; 25% of next \$100,000; and 10% of all damages exceeding \$200,000.
Florida	Adopted 2004: Florida Constitution, Article I, Section 26. Limits attorney fees in malpractice lawsuits to 30% of first \$250,000; 10% of any award over \$250,000.
Georgia	<i>No limitations.</i>
Hawaii	§663.10.9. When negligence is less than 25%, noneconomic damages awarded in proportion according to degree of fault.
Idaho	<i>No limitations.</i>
Illinois	§735 5/2-1114. Sliding scale, not to exceed 1/3 of first \$150,000; 25% of \$150,000 to \$1 million; 20% of damages over \$1 million.
Indiana	§34-18-18-1. Plaintiff's attorney fees may not exceed 15% of any award made from Patient Compensation Fund.
Iowa	§147.138. Court to review plaintiff attorney fees in any personal injury or wrongful death action against specified health care providers or hospitals.
Kansas	§7.121b. Attorney fees must be approved by court.
Kentucky	<i>No limitations.</i>
Louisiana	<i>No limitations.</i>
Maine	§24.2961. Sliding scale, not to exceed 1/3 of first \$100,000; 25% of next \$100,000; and 20% of damages exceeding \$200,000.
Maryland	<i>No limitations.</i>
Massachusetts	§231.601. Sliding scale, not to exceed 40% of first \$150,000; 33.33% of next \$150,000; 30% of next \$200,000 and 25% of award over \$500,000.
Michigan	Court Rules 8.121(b). Maximum contingency fee for personal injury action is third of amount recovered.
Minnesota	<i>No limitations.</i>

State	Limits on Attorney Fees
Mississippi	No limitations.
Missouri	No limitations.
Montana	No limitations.
Nebraska	§44.2834. No limitations, but court can review for reasonableness at request of prevailing party.
Nevada	§7.095. Sliding scale for attorney fees, not to exceed 40% of first \$50,000; 33 1/3% of next \$50,000; 25% of next \$500,000; 15% of any amount over \$600,000.
New Hampshire	§507-C:8. Sliding scale, not to exceed 50% of first \$1000; 40% of next \$2000; 1/3 of next \$97,000; 20% of excess of \$100,000. If settled out of court, fee limited to 25% of up to \$50,000.
New Jersey	Court Rules §1:2107. Sliding scale, not to exceed 1/3 of first \$500,000; 30% of next \$500,000; 25% of third \$500,000; and 20% of fourth \$500,000. 25% limit for minor or incompetent plaintiff.
New Mexico	No limitations.
New York	Jud. §474-A. Sliding scale, not to exceed 30% of first \$250,000; 25% of second \$250,000; 20% of next \$500,000; 15% of next \$250,000; 10% over \$1.25 million.
North Carolina	No limitations.
North Dakota	No limitations.
Ohio	§2323.43 (F). No limitations but court must approve if fees exceed limits on damage award.
Oklahoma	§5-7. Fee may not exceed 50% of net judgment.
Oregon	§31.735. No more than 20% of punitive damages to attorney, no limitation of percentage of economic damages.
Pennsylvania	No limitations.
Rhode Island	No limitations.
South Carolina	No limitations.
South Dakota	No limitations.
Tennessee	§29.26.120. Fees limited to 1/3 of award to plaintiff.
Texas	No limitations.
Utah	§78.14.7.5. Contingency fee not to exceed 1/3 of award.
Vermont	No limitations.
Virginia	No limitations.
Washington	§7.70.070. Court to determine reasonableness of each party's attorney fees.
West Virginia	No limitations.
Wisconsin	§655.013. Sliding scale, not to exceed 1/3 of first \$1 million, or 25% of first \$1 million recovered if liability is stipulated within time limits, 20% of any amount exceeding \$1 million.
Wyoming	Ct. Rules, R. 5. Recovery \$1 million or less: 1/3 if claim settled prior to 60 days after filing; 40% if settled after 60 days or judgment; 30% over \$1 million.

Source: National Conference of State Legislatures. *State Medical Malpractice Laws: Section 1.* (<http://www.ncsl.org/standcomm/sclaw/statelaws1.htm>, accessed 13 October 2005.)



Liability: Limits on Damage Awards

AAFP State Government Relations

Issue

Limits on damage awards (caps) in medical malpractice suits are a cornerstone of addressing the medical liability insurance crisis. While the federal government has yet to pass a law addressing liability insurance, the states continue to be the battleground for malpractice tort reform.

Reigning in exorbitant jury awards in malpractice cases will help prevent recurrence of the period of rapidly escalating liability insurance premiums recently experienced. This escalation has been acute particularly for family physicians practicing obstetrics and gynecology, further reducing access to certain services in underserved areas.

Considerations

AAFP constituent chapters have made great progress in advancing this central tenet of effectively addressing the liability insurance crisis. Chapters should continue to educate state legislators, particularly, around the importance of this issue. Limiting damage awards is an effective strategy for decreasing claim severity and stabilizing liability insurance premiums in the mid- to long-term; short-term gains are unlikely to materialize. Additionally, the likelihood of court challenges to damage caps is quite high. Through the judicial process, caps in a number of states have been thrown out. In many of the states without a cap, such limits are unconstitutional.

Initiatives to amend state constitutions are a slippery slope not to be traveled lightly. For example, in the 2004 election in Florida, medicine and trial lawyers took competing liability and tort reform ideas to ballot initiative. Voters approved initiatives limiting damages and attorney fees, but also approved physician license revocation.

State Activity

As of October 2005, 17 states (AL, AZ, CT, DE, IA, KY, MN, NH, NY, OR, PA, RI, TN, VT, WA, WI, WY) and the District of Columbia did not have limits on damage awards. Of those, limits are unconstitutional—by state Supreme Court decision, constitutional prohibition or amendment—in seven (AL, AZ, NH, OR, PA, WI, WY).

Eleven states (AL, AR, CA, CO, ID, IN, KS, ME, MT, NC, TX) enacted damage award limits of \$250,000; in line with AAFP's policy for federal liability reform. Meanwhile, ten states (AK, GA, HI, MI, MO, NV, NJ, OK, SC, UT) placed their limit between \$250,001 and \$499,999, with the remaining 13 states (FL, IL, LA, MD, MA, MS, NE, NM, ND, OH, SD, VA, WV) enumerate a cap of \$500,000 or higher.

AAFP Policy

The AAFP Professional Medical Liability policy may be viewed at www.aafp.org/x7019.xml.

The AAFP *Medical Liability Strike Force Report* may be viewed at http://members.aafp.org/members/PreBuilt/congress_boardreportI.pdf (*Members Only*)

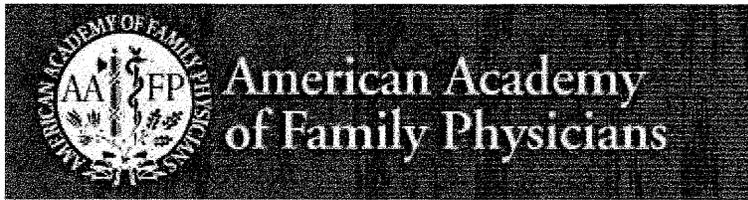
State	Limits on Damage Awards
Alabama	<i>No limitations. Limits declared unconstitutional by State Supreme Court.</i>
Alaska	<p>Enacted 2005: §09.55.549. Noneconomic damages limited to \$250,000; limited to \$400,000 for wrongful death or injury over 70% disabling; limits not applicable to intentional or reckless acts or omissions.</p> <p>§9.17.020. Punitive damages limited to \$500,000 or 3 times compensatory damages.</p>
Arizona	<i>No limitations. Limits constitutionally prohibited.</i>
Arkansas	<p>§16-55-205 – 209. Punitive damages limited to \$250,000 per plaintiff or 3 times amount of economic damages. Not to exceed \$1 million. Limits adjusted for inflation at 3-year intervals beginning in 2006. Contingent on proof of recklessness or intentional malice.</p>
California	<p>Civil Code §3333.2. \$250,000 limit for noneconomic damages.</p>
Colorado	<p>§13-64-302. \$1 million total limit on all damages; \$300,000 noneconomic limitation.</p>
Connecticut	<i>No limitations.</i>
Delaware	<p>§18.6855. <i>Punitive damages may be awarded only on finding of malicious intent to injure or willful or wanton misconduct. No mandated limit.</i></p>
Florida	<p>§766.118. Noneconomic damages limited to \$500,000 per claimant. Death or permanent vegetative state noneconomic damages not to exceed \$1 million.</p> <p>§768.73. Punitive damages limited to the greater of 3 times amount of economic damages or \$500,000. If deliberate intent to harm, no limit on punitive damages.</p>
Georgia	<p>Enacted 2005: §51-13-1. Noneconomic damages in medical malpractice actions limited to \$350,000 against physicians regardless of number of defendants. Noneconomic damages limited to \$350,000 against single medical facility; \$700,000 against multiple facilities. Aggregate amount of noneconomic damages limited to \$1.05 million.</p>
Hawaii	<p>§663.8.5, 8.7. \$375,000 limit for pain and suffering damages.</p>
Idaho	<p>§6.1603-4. \$250,000 limit on noneconomic damages, adjusted annually according to state's average annual wage. Punitive damages limited to \$250,000 or amount 3 times of compensatory damages.</p>
Illinois	<p>Enacted 2005: §735 5/2-1706.5. Noneconomic damages limited to \$500,000 against individual physician, \$1 million against hospital.</p> <p>§735 5/2-1115. Punitive damages not recoverable in medical malpractice cases.</p>
Indiana	<p>§34-18-4-3. \$1,250,000 total limit. Liability limited to \$250,000 per health care provider. Any award beyond limits covered by Patient Compensation Fund.</p>
Iowa	<i>No limitations.</i>
Kansas	<p>§60.19a02. \$250,000 limit on noneconomic damages recoverable by each party from all defendants.</p>

State	Limits on Damage Awards
Kansas (cont.)	§60.3702. Punitive damages limited to lesser of defendant's highest gross income for prior 5 years or \$5 million.
Kentucky	<i>No limitations.</i>
Louisiana	RS §40:1299.42. \$500,000 limit for total recovery. Health care provider liability limited to \$100,000. Any award in excess of all liable providers paid from Patient's Compensation Fund.
Maine	Enacted 2005: §24.2907. Noneconomic damages in medical liability actions limited to \$250,000; punitive damages limited to \$75,000. §18A.2.804. Noneconomic damages in wrongful death cases limited to \$400,000, punitive damages limited to \$75,000.
Maryland	§3-2A-09(A). Noneconomic damages limited to \$650,000 from 2005 to 2008, thereafter increasing by \$15,000 per year beginning on January 1 of applicable year.
Massachusetts	§231.60H. \$500,000 limit for noneconomic damages, some exceptions released from limitations.
Michigan	§600.1483. \$280,000 limit on noneconomic damages; \$500,000 limit on noneconomic damages applies to certain other circumstance. Limit adjusted annually by state treasurer according to consumer price index.
Minnesota	§549.20. <i>No limitation for punitive damages but are only allowed if defendant proven to have deliberate disregard to safety. Award subject to judicial review.</i>
Mississippi	§11.1.60. \$500,000 limit on noneconomic damages. §11.1.65. Punitive damages only awarded if willful malice or gross negligence proved. Court determines if award granted and amount. Damages limited based on defendant's net worth.
Missouri	Amended 2005: §538.210. Noneconomic damages limited to \$350,000 regardless of number of defendants. (Inflation index repealed.) Enacted 2005: §510.265. Punitive damages limited to \$500,000 or 5 times net amount of judgment.
Montana	§25.9.411. \$250,000 limit on noneconomic damages. §27.1.221. Liability for punitive damages determined by court, defendant must have been proven guilty of deliberate malice. Enacted 2005: §27.6.103. Damages for negligence awarded based on "reduced chance of recovery."
Nebraska	§44.2825. Total damages limited to \$1,750,000. Health care provider liability limited to \$500,000. Any excess of total liability of all health care providers paid from Excess Liability Fund.

State	Limits on Damage Awards
Nevada	<p>§41A.035. \$350,000 limit on noneconomic damages, no exceptions.</p> <p>§42.005. Punitive damages limited to \$300,000 or 3 times compensatory damages; only awarded by court for fraud, oppression, or malice.</p>
New Hampshire	<i>No limitations. Limits declared unconstitutional by State Supreme Court.</i>
New Jersey	<p>§2A:15-5.14. \$350,000 limit on punitive damages, or 5 times compensatory damages, whichever is greater.</p>
New Mexico	<p>§41.5.6-7. \$600,000 total limit on all damages. Health care providers not liable for any amount over \$200,000; any judgment in excess paid from Patient's Compensation Fund.</p>
New York	<i>No limitations.</i>
North Carolina	<p>§1D-25. \$250,000 limit on punitive damages, or 3 times economic damages, whichever is greater.</p>
North Dakota	<p>§32.42.02. \$500,000 limit on noneconomic damages.</p> <p>§32.03.2.08. Economic damage awards in excess of \$250,000 subject to court review.</p>
Ohio	<p>§2315.18. \$250,000 limit on noneconomic damages or three times plaintiff's economic loss, determined by court. Maximum noneconomic damages \$350,000 per plaintiff or \$500,000 per occurrence. No limit for permanent injury that prevents victim from independently caring for self.</p> <p>§2315.21. Punitive damages limited to twice amount of economic damages or percentage of defendant's net worth. No limit where defendant acted knowingly.</p>
Oklahoma	<p>§63-1-1708.1F. \$300,000 limit on noneconomic damages; also specific to obstetric and emergency room care. No limits for negligence or wrongful death.</p> <p>§23-9.1. Punitive damages based on misconduct.</p>
Oregon	<p><i>No limitations. Limits declared unconstitutional by State Supreme Court; 2004 ballot measure to institute noneconomic damage limits rejected by voters.</i></p> <p>§31.740. Punitive damages not awarded if physician is found acting in scope of duties without malice.</p>
Pennsylvania	<p><i>No limitations. Constitutionally prohibited.</i></p> <p>§40.1301.812-A. Punitive damages granted only if defendant found guilty of willful misconduct or reckless disregard.</p>
Rhode Island	<p><i>No limitations.</i></p> <p>§9.19.34.1. Collateral source rule requires jury to reduce award for damages by sum</p>

State	Limits on Damage Awards
Rhode Island (cont.)	equal to difference between total benefits received and total amount paid to secure benefits by plaintiff.
South Carolina	Enacted 2005: §15-32-220. Noneconomic damages limited to \$350,000 against single health care provider or facility; limit of \$1.05 million for multiple defendants. Limits increased or decreased annually based on Consumer Price Index. No limits on noneconomic or punitive damages for cases of willful negligence or misconduct.
South Dakota	§21-3-11. \$500,000 limit on noneconomic damages. No limit on special damages.
Tennessee	<i>No limitations.</i>
Texas	Civil Practice §74.301. \$250,000 limit per claimant for noneconomic damages. \$500,000 limit per claimant for noneconomic damages in judgments against health care institutions.
Utah	§78.14.7.1. \$400,000 limit on noneconomic damages for actions arising after July 1, 2002. Adjusted annually by Administrative Office of Courts.
Vermont	<i>No limitations.</i>
Virginia	§8.01-581.15. \$1.5 million limit on recovery damages. Increased by \$50,000 each year from 2001 to 2006. Increased by \$75,000 each year in 2007 and 2008.
Washington	§4.56.250. <i>No specific limits on damage awards. Judgment for noneconomic damages cannot exceed formulation of average annual wage and life expectancy of injured.</i>
West Virginia	§55.7B.8. \$250,000 limit for noneconomic damages. \$500,000 limit for compensatory damages, limit goes up beginning in 2004 according to inflation index. Physicians must carry at least \$1 million malpractice insurance to qualify for limits.
Wisconsin	July 2005: State Supreme Court declared caps on noneconomic damages in medical injury cases unconstitutional, <i>Ferdon v. Wisconsin</i>. (Statute §893.55(4)(d).)
Wyoming	§97.3.027. <i>Limits prohibited. 2004 ballot measure to adopt constitutional amendment allowing noneconomic damage limits rejected by voters.</i>

Source: National Conference of State Legislatures. *State Medical Malpractice Laws: Section 1.* (<http://www.ncsl.org/standcomm/sclaw/statelaws1.htm>, accessed 13 October 2005.)



Liability: Doctor Apologies

AAFP State Government Relations

Issue

Following discovery of an adverse event or bad outcome, many physicians wish to express their condolences or apologies to patients or their families. However, in many states, they may find such expressions admissible before courts as evidence of wrongdoing. In these states, a liability tort could result in sympathy being construed as admission of guilt. As such, many physicians are advised, if not ordered, to refrain from making statements on adverse events or bad outcomes to patients and families, should the matter end up in court.

At the core of this issue is the patient-physician relationship. Patients and physicians both wish to be treated fairly and honestly in event of an unforeseen outcome. Laws that protect the right of a physician to enter honest and heartfelt dialogue with patients are key in preserving the patient-physician relationship.

Considerations

AAFP constituent chapters have made great progress in advancing this central tenet of effectively addressing the liability insurance crisis. Chapters should continue to educate state legislators, particularly, around the importance of this issue. While doctor apologies—characterized as “Sorry Works!” by the coalition of the same name—have the goal of decreasing the size of settlement awards, advocates indicate apologies could increase the quantity of settlements. However, the goal of doctor apologies is to decrease the number of suits that go to trial, particularly those that result in exorbitant noneconomic damage awards. Sorry Works! indicates that the sum of the increased quantity of settlements ultimately will be less than the current lottery-style awards, while simultaneously lowering legal bills for physicians. A final hope is that allowing physicians to express apologies or condolences will open up the system for review and improvement, leading to greater patient safety and fewer errors.

State Activity

As of October 2005, 30 states (AL, AK, AR, CA, DE, HI, ID, IL, IN, IA, KS, KY, MI, MN, MS, NE, NV, NJ, NM, NY, ND, PA, RI, SC, TN, TX, UT, VT, WA, WI) did not have provisions allowing doctors to apologize or express condolences without fear. Twenty states (AZ, CO, CT, FL, GA, LA, ME, MD, MA, MO, MT, NH, NC, OH, OK, OR, SD, VA, WV, WY) have passed laws allowing, or declaring inadmissible as evidence, some form of expressions of condolence and/or apology by physicians to patients and/or their families. The 2005 state legislative sessions saw great progress on this issue, with a dozen of those 20 states (AZ, CT, GA, IL, LA, ME, MO, MT, NH, SD, VA, WV) enacting laws.

AAFP Policy

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The AAFP *Medical Liability Strike Force Report* may be viewed at http://members.aafp.org/members/PreBuilt/congress_boardreportI.pdf (*Members Only*)

State	Doctor Apologies
Alabama	<i>No provision.</i>
Alaska	<i>No provision.</i>
Arizona	Enacted 2005: §12-2605. Any statement or conduct expressing apology, responsibility or sympathy made by health care provider to patient or patient's relative relating to injury is inadmissible as evidence of admission of liability or against interest.
Arkansas	<i>No provision.</i>
California	<i>No provision.</i>
Colorado	§13-25-135. Statements or conduct by health care provider expressing apology, sympathy or fault to victim or relative of victim relating to suffering or injury inadmissible as evidence of admission of liability or against interest.
Connecticut	Enacted 2005: §52-195-8. Any statements or conduct expressing apology, sympathy or fault made by health care provider to victim or relative of victim relating to pain or injury inadmissible as evidence of admission of liability or against interest.
Delaware	<i>No provision.</i>
Florida	§90.4026. Statements or gestures expressing sympathy relating to the pain or death of person involved in an accident to person or family member inadmissible as evidence in civil action; statement of fault admissible. In general evidence rules, not solely for medical liability actions.
Georgia	Enacted 2005: §24-3-37.1. In any medical malpractice civil action, any statements or conduct expressing apology, sympathy, mistake or error made by a health care provider to the patient or relative or representative of the patient is inadmissible as evidence of admission of liability or against interest.
Hawaii	<i>No provision.</i>
Idaho	<i>No provision.</i>
Illinois	Enacted 2005: §735 5/8-1901. Any expression of apology or explanation provided by health care provider to patient, family or legal representative about inadequate or unanticipated outcome provided within 72 hours of provider's knowledge of potential cause not be admissible as evidence in any action of any kind.
Indiana	<i>No provision.</i>
Iowa	<i>No provision.</i>
Kansas	<i>No provision.</i>
Kentucky	<i>No provision.</i>
Louisiana	Enacted 2005: RS §13:3715.5. Any communication or conduct by health care provider expressing apology or regret, made to patient or patient's relative inadmissible as admission of liability or against interest. Statement of fault is admissible.
Maine	Enacted 2005: §24.2908. Any statement or conduct by health care practitioner expressing apology, regret or fault made to patient or relative inadmissible as admission of liability or against interest.
Maryland	§10-920. Any expression by health care provider expressing apology or regret inadmissible as admission of liability or against interest. Statement of liability or fault is admissible.
Massachusetts	§233.23D. Statements or gestures expressing sympathy relating to pain or death of person involved in accident made to person or family inadmissible as evidence of admission of liability. Not exclusive to medical profession.
Michigan	<i>No provision.</i>

State	Doctor Apologies
Minnesota	<i>No provision.</i>
Mississippi	<i>No provision.</i>
Missouri	Enacted 2005: §538.229. Statements or gestures expressing sympathy by health care provider relating to pain or suffering made to person or family inadmissible as admission of liability. Statement of fault admissible.
Montana	Enacted 2005: §26.1.1. Any statement or conduct expressing apology or sympathy relating to pain or death of a person made to person, family or friend , not admissible for any purpose in medical malpractice action.
Nebraska	<i>No provision.</i>
Nevada	<i>No provision.</i>
New Hampshire	Enacted 2005: §507-E:4. Any statement or action expressing sympathy or commiseration relating to pain or death of individual made to individual or family is inadmissible as admission of liability. Does not apply to statement of fault or negligence.
New Jersey	<i>No provision.</i>
New Mexico	<i>No provision.</i>
New York	<i>No provision.</i>
North Carolina	§8C-4.413. Statements by health care provider to apologize for treatment not admissible to prove negligence or culpable conduct.
North Dakota	<i>No provision.</i>
Ohio	§2317.43. Any statements or conduct expressing apology or sympathy made by health care provider to alleged victim or relative relating to injury or death inadmissible as admission of liability or against interest.
Oklahoma	§63-1-1708.1H. Expression of apology or sympathy by health care provider not admissible as admission of liability.
Oregon	§677.082. Any expression of regret or apology made by person licensed by Board of Medical Examiners does not constitute admission of liability in civil action.
Pennsylvania	<i>No provision.</i>
Rhode Island	<i>No provision.</i>
South Carolina	<i>No provision.</i>
South Dakota	Enacted 2005: HB 1148. No apology, offer of corrective treatment, or gratuitous act of assistance made by health care provider is admissible to prove negligence. Statement constituting admission against interest is admissible.
Tennessee	<i>No provision.</i>
Texas	<i>No provision.</i>
Utah	<i>No provision.</i>
Vermont	<i>No provision.</i>
Virginia	Enacted 2005: §8.01-581.20:1. Any statement, writing or conduct made by health care provider to patient or relative or representative of patient inadmissible as evidence of admission of liability or against interest. Statement of fault admissible.
Washington	<i>No provision.</i>
West Virginia	Enacted 2005: §55.7.11. Any statement or conduct of healthcare provider expressing apology or condolence to patient, or relative or representative of patient relating to pain, injury or death of patient is inadmissible as evidence of admission of liability or against interest.

State	Doctor Apologies
Wisconsin	<i>No provision.</i>
Wyoming	§1.1.130. Any statement or conduct expressing apology or sympathy made by health care provider to alleged victim, or relative or representative of alleged victim relating to pain, injury or death is inadmissible as evidence of admission of liability or against interest.

Source: National Conference of State Legislatures. *State Medical Malpractice Laws: Section 1.* (<http://www.ncsl.org/standcomm/sclaw/statelaws1.htm>, accessed 13 October 2005.)

Additional Information

The Sorry Works! Coalition may be found at <http://www.sorryworks.net/>



Liability: Joint and Several Liability

AAFP State Government Relations

Issue

One of the great myths of the medical liability insurance crisis is that it is due to incompetent doctors. As clearly stated by the AAFP Medical Liability Strike Force, most errors are *system* failures, rather than failures of individual physicians. However, many states' laws and judicial systems do not recognize the difference between role in a system and sole responsibility. As such, in many liability torts, a physician tangentially connected to treatment of a patient that resulted in a bad outcome may be found equally as responsible as a physician more directly connected to the outcome. This issue commonly is referred to as joint and several liability.

Considerations

AAFP constituent chapters have made great progress in advancing this central tenet of effectively addressing the liability insurance crisis. Chapters should continue to educate state legislators, particularly, around the importance of this issue. Separating joint and several liability is a key strategy to ensuring fairness in liability tort. Proportional liability protects the individual physician while simultaneously and tacitly acknowledging, to a degree, that errors are failures of the system.

Opening a discussion of the liability crisis to include the notion of system failures allows chapters to engage in a discussion of system improvements and the Academy's continued commitment to improving the safety of all patients. Additionally, some studies show this to be an essential piece of the liability insurance premiums puzzle. For example, a June 2005 *Wall Street Journal* article indicated that anesthesiologists pay less for malpractice insurance today, in constant dollars, than they did 20 years ago. The article cited the decision of the anesthesiologist to focus on improving patient safety as the reason for their relatively low insurance premiums

State Activity

As of October 2005, 36 states (AK, AZ, AR, CA, CO, CT, FL, GA, HI, ID, IA, KY, LA, ME, MI, MN, MS, MO, MT, NE, NV, NH, NJ, NM, NY, ND, OH, OK, OR, SD, TX, UT, WA, WV, WI, WY) separated joint and several liability, enacting proportional liability. Fourteen states (AL, DE, IL, IN, KS, MD, MA, NC, PA, RI, SC, TN, VT, VA) have no separation of joint and several liability, with Pennsylvania and Tennessee courts declaring such separations unconstitutional.

AAFP Policy

The AAFP Professional Medical Liability policy may be viewed at www.aafp.org/x7019.xml.

The AAFP *Medical Liability Strike Force Report* may be viewed at http://members.aafp.org/members/PreBuilt/congress_boardreportI.pdf (*Members Only*)

State	Joint and Several Liability
Alabama	<i>No separation of joint and several liability.</i>
Alaska	§09.17.080. Defendants are proportionally liable for damages awarded according to percentage of fault.
Arizona	§12-2506. Defendants are proportionally liable for damages awarded according to percentage of fault, unless defendant acted in concert with another person.
Arkansas	§16-55-201. Defendants are proportionally liable for damages awarded according to percentage of fault.
California	Civil Code §1431.2. Defendants are proportionally liable for noneconomic damages according to percentage of fault, but jointly and severally liable for economic damages.
Colorado	§13-21-111(5). Defendants are proportionally liable for damages awarded according to percentage of fault, unless act proved deliberate.
Connecticut	§52-572h. Defendants are proportionally liable according to percentage of fault for damages awarded.
Delaware	<i>No separation of joint and several liability.</i>
Florida	§768.81. Defendants are proportionally liable according to percentage of fault for damages awarded, monetary limits in liability according to percentage as level of fault increases.
Georgia	Enacted 2005: §51-12-33. Multiple defendants liable for apportioned damages according to percentage of fault of each person. Damages reduced by court in proportion to percentage of fault if plaintiff is found partially responsible for injury. Plaintiff not entitled to receive any damages if found 50% or more responsible for injury.
Hawaii	§671.18. Arbitration tolls statute until 60 days after panel's decision is delivered.
Idaho	§6.803. Defendants are proportionally liable according to percentage of fault for damages awarded, except in cases of intentional act.
Illinois	§735 5/2-1117. <i>No separation of joint and several liability.</i>
Indiana	<i>No separation of joint and several liability.</i>
Iowa	§668.4. Defendants are proportionally liable according to percentage of fault. Several liability not granted for economic damages when defendant is found more than 50% at fault.
Kansas	<i>No separation of joint and several liability.</i>
Kentucky	§411.182. When court apportions percentage of fault, defendant is only liable for comparable share of damages.
Louisiana	CC §2324. Defendants are liable only for percentage of fault unless conspiracy of intentional or willful act.
Maine	Enacted 2005: §14.156-A. In action involving multiple defendants, damage liability if several only for amount of damages in proportion to percentage of fault. Joint liability for defendants in case of acting in concert.

State	Joint and Several Liability
Maryland	<i>No separation of joint and several liability.</i>
Massachusetts	<i>No separation of joint and several liability.</i>
Michigan	§600.2925a. Defendants are proportionally liable according to percentage of fault for damages awarded, except when uncollectible shares are reallocated among solvent defendants.
Minnesota	§604.02. Defendants are proportionally liable according to percentage of fault for damages awarded, except when defendant is assessed greater than 50% of fault, or proven to have intentional malice.
Mississippi	§85.5.7. Defendants are proportionally liable according to percentage of fault for damages awarded, except when defendant is proven to have intentional malice.
Missouri	Amended 2005: §537.067. Defendants are proportionally liable according to percentage of fault for damages awarded; jointly liable if found more than 51% at fault.
Montana	§27.1.703. Defendants are proportionally liable according to percentage of fault for damages awarded, except when defendant is assessed greater than 50% of fault.
Nebraska	§25.21,185.10. Defendants are proportionally liable according to percentage of fault for noneconomic damages awarded, and jointly liable for economic damages.
Nevada	§41A.045. Defendants proportionally liable according to percentage of fault for economic and noneconomic damages awarded.
New Hampshire	§507:7-d. Defendants are proportionally liable according to percentage of fault for damages awarded.
New Jersey	§2A:15-5.2. Defendants only responsible for share of fault if less than 60% . Defendants found more than 60% at fault subject to modified rule.
New Mexico	§41.3A.1. Defendants are proportionally liable according to percentage of fault for damages awarded, except when defendant is proven to have intentional malice.
New York	§16-1601. Defendants are proportionally liable according to percentage of fault for noneconomic damages awarded, unless found more than 50% at fault. Defendants may be held jointly liable for economic damages.
North Carolina	§1B-7. <i>No separation of joint and several liability.</i>
North Dakota	§32.03.2.02. Defendants are proportionally liable according to percentage of fault for damages awarded, except when defendant is proven to have intentional malice.
Ohio	§2307.22. Defendants are proportionally liable for economic damages according to percentage of fault for damages awarded, unless found more than 50% at fault. Severally liable only for noneconomic damages.
Oklahoma	§23-15. Defendants are proportionally liable according to percentage of fault for damages awarded, unless found more than 50% at fault or guilty of willful misconduct or reckless disregard.

State	Joint and Several Liability
Oregon	§31.610. Defendants are proportionally liable according to percentage of fault for damages awarded.
Pennsylvania	July 2005: <i>Commonwealth Court declared separation of joint and several liability unconstitutional based on germane standard of legislation enacted in 2002. (Statute §42.71.7102.)</i>
Rhode Island	<i>No separation of joint and several liability.</i>
South Carolina	§15-38-10. <i>No separation of joint and several liability.</i>
South Dakota	§15-8-15.1. Defendants are proportionally liable according to percentage of fault; defendants found less than 50% liable not jointly liable for more than twice percentage of fault allocated.
Tennessee	<i>Joint and several liability provisions in statute declared unconstitutional by State Supreme Court.</i>
Texas	Civil Practice §33.013. Defendants are proportionally liable according to percentage of fault for damages awarded, unless found more than 50% at fault.
Utah	§78.27.40. Defendants are proportionally liable according to percentage of fault for damages awarded.
Vermont	<i>No separation of joint and several liability.</i>
Virginia	<i>No separation of joint and several liability.</i>
Washington	§4.22.070. Defendants are proportionally liable according to percentage of fault for damages awarded, unless found to be deliberately acting in concert with others.
West Virginia	§55.7B.9. Defendants are proportionally liable according to percentage of fault for damages awarded.
Wisconsin	§895.045.(2). Defendants are proportionally liable according to percentage of fault for damages awarded, unless found to be deliberately acting in concert with others or found more than 50% at fault.
Wyoming	§1.1.109. Defendants are proportionally liable according to percentage of fault for damages awarded.

Source: National Conference of State Legislatures. *State Medical Malpractice Laws: Section 1.* (<http://www.ncsl.org/standcomm/sclaw/statelaws1.htm>, accessed 13 October 2005.)

7. What issues impact recruitment of Primary Care Physicians?
- **Education, Training and Recruitment of Family Physicians**
 - **Educating Family Physicians**
 - **Medical School Expansion: An Opportunity to Meet Your State's Rural Health Care Needs**

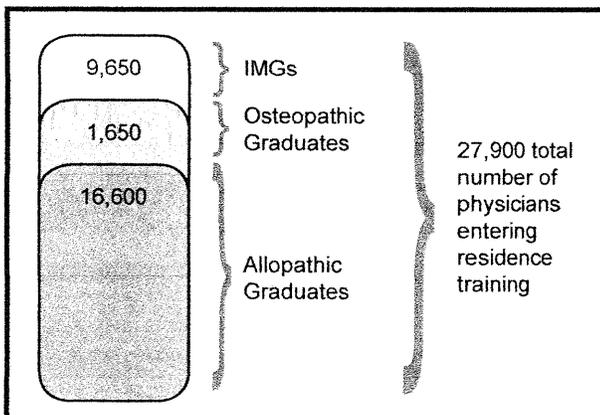


Education, Training and Recruitment of Family Physicians

Every year in the United States, approximately 1,650 and 16,600 (a total of 18,250) students graduate from accredited osteopathic and allopathic medical schools, respectively. In 2007, nearly 28,000 physicians entered into MD or DO graduate training programs in this country. The gap between these two numbers is filled by international medical graduates (IMGs). In 2007, over 9,650 new residents were IMGs, nearly 7,000 of which were non-U.S. IMGs. Thus, 35 percent of nearly 28,000 physicians entering into training are IMGs.

In 2005 the Council on Graduate Medical Education (COGME) and the Association of American Medical Colleges (AAMC) announced a physician shortage, respectively calling for a 15 percent and 30 percent increase in medical school enrollment. The 2005 COGME report to Congress estimated a physician shortage of at least 90,000 full-time physicians by 2020. In response to this predicted shortage, the AAMC has called for a 30 percent increase in medical school enrollment from the 2002 level over the next decade. The AAMC also has reported that existing medical schools can only expand by 7 percent. This will leave an annual shortage of 1,700 new physicians. While the answer may seem to be to build more medical schools, other policy options can help a state produce doctors who will practice where the state most needs them.

Simply increasing the current annual quantity of allopathic graduates by 30 percent (from a 2002 level of near 15,000 to 20,000) will only serve to increase the number of allopathic graduates and subsequently decrease the number of IMGs in residency programs across the United States. The number of total physicians in the U.S. will stay the same unless the total number of physicians training in residency programs is increased concurrently.

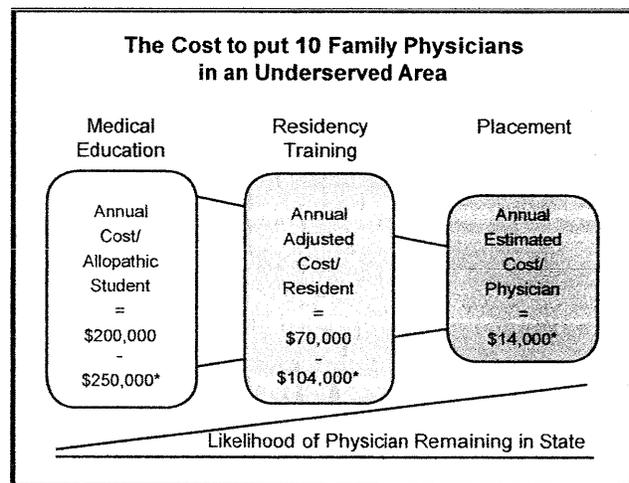


Source: National Resident Matching Program, 2007 (www.nrmp.org)

Cost Comparison between Medical School and Residency

Cost comparison between medical school and residency. Consider example State X. In response to the predicted physician shortage, State X would like to increase the number of physicians produced within the state every year from 800 to 1000, an increase of 200 physicians per year. State X may allot more funding to expand existing medical schools and/or build new medical schools or to support and sustain residency programs within the state. Compare the cost between funding medical schools and residency programs.

Producing 200 more graduates from existing medical schools will cost State X \$75,000 x 200 = \$15 million dollars (not including costs for building new facilities, if needed), as shown in the illustration below. In comparison, producing 200 more graduates from existing residency programs will cost State X \$39,000 x 200 = \$7.8 million.



Source: The Robert Graham Center, 2007.

Of the 200 medical school graduates, approximately historically 10 percent will go into family medicine, 13 percent into surgery, 5 percent into obstetrics-gynecology, 20 percent into internal medicine and 7 percent into pediatrics, while the other 45 percent will go into various other specialties. Typically, 50 percent or more leave the state upon graduation. On the other hand, graduates of residency programs have already chosen their specialty. Therefore, funding could be given to specialties that are most needed within State X. Family physicians distribute themselves more like the general population, unlike other specialties that tend to cluster in large urban areas and near university hospitals.

Education, Training and Recruiting, continued

State Support-for-Service Programs

In an effort to entice new physicians to practice in medically underserved and rural areas, many states offer support-for-service programs, including:

- Scholarships
- Service-option loans
- Loan repayment
- Direct financial incentives
- Resident support programs
- Practice subsidies
- Start-up grants

A 2004 study showed that compared to physicians without service obligations, physicians serving commitments to these state programs practiced in demonstrably medically-needier areas and cared for more uninsured patients and patients insured by Medicaid. The study also showed that service completion rates were greater than 90 percent for loan repayment, direct incentive and resident support programs. Furthermore, the study showed that these service-obligated physicians stayed in their practices longer than non-obligated physicians; 55 percent stayed at their service location over eight years.

Providing a sufficient physician workforce to meet health care access needs may require new medical schools in some states; however, supporting family medicine residency programs or providing incentives to practice in underserved areas—or both—may be a more cost-effective option.

**Plausible estimate that will vary by state.*

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Educating Family Physicians

AAFP Government Relations

June 2007

"Family medicine symbolizes a commitment to a style of practice that is focused on the patient, the family and the community, rather than on the disease. Family medicine has found a niche at the interface of scientific medicine and public service."

— John W. Saultz, *Textbook of Family Medicine*

What is Family Medicine?

Family medicine is the medical specialty that provides continuing, comprehensive health care for the individual and family. It is a specialty that integrates the biological, clinical and behavioral sciences. The scope of family medicine encompasses all ages, both sexes, each organ system and every disease entity.

Quality health care in family medicine is the achievement of optimal physical and mental health through accessible, safe, cost-effective care that is based on best evidence, responsive to the needs and preferences of patients and populations, and respectful of patients' families, personal values and beliefs. Because of their extensive training, family physicians are the only specialists qualified to treat most ailments and provide a medical home to integrate care in a fractured system of care for the most people — from pregnant women to newborns to seniors.

How are Family Physicians Educated?

A family physician's education is lengthy and involves three levels of education: undergraduate, medical school and graduate medical. The process begins with four years at a college or university to earn a bachelor's degree, usually with a strong emphasis on basic sciences. This is followed by four additional years of education at a medical school accredited by the Liaison Committee on Medical Education (LCME) or the American Osteopathic Association's Commission on Osteopathic College Accreditation (AOA COCA). After graduating medical school, students earn their doctor of medicine (MD) or doctor of osteopathy (DO) degrees. However, they must complete additional residency training program before they may practice on their own as a physician.

Through a national matching program, newly graduated MDs and DOs enter into a residency program that is usually three years or more of professional training under the supervision of senior physician educators. As part of a family medicine residency, new family physicians participate in integrated inpatient and outpatient learning and receive training in the care of children, adults, pregnant women, and the elderly. They also provide mental health care, as well as focus on personal, community and public health.

They also receive instruction in many other areas, such as geriatrics, gynecology, emergency medicine, neurology, ophthalmology, orthopedics, otolaryngology, radiology, surgery and urology.

After completing his or her education, a family physician must obtain a license to practice medicine from the state or territory in which he or she plans to practice. A permanent license is awarded in most states after completion of a series of exams and a residency training program in the physician's specialty.

Education, Training and Recruiting, continued

What is the difference between a medical school and a residency?

A medical school is an institution for the education and training of future physicians. Allopathic schools award MD degrees, osteopathic schools award DO degrees. As of July 2006, there were 151 accredited medical schools in the United States and 17 in Canada.

A residency program, though, as describe by the American Medical Association, is "... a program that is three to seven years or more of professional training under the supervision of senior physician educators."

For family physicians, as well as pediatricians and general internists, residency training lasts for three years. Additional years of residency training are required if the physician wishes to acquire a subspecialty, such as sports medicine.

How much does it cost to build and sustain a medical school versus a residency?

Recent estimates place the annual cost of running a medical school in the range of \$67,000 to \$80,000 per student, of which state appropriations cover anywhere from 50 percent to 90 percent of the cost. Each new medical school carries an additional operational cost. For example, the total projected capital cost of the proposed University of California Riverside Medical School is \$496 million; a 15-year estimate of total operating costs stands at \$192.5 million. The proposal for the new medical school at Florida State University included \$50 million for a new facility with an annual operating budget of \$39 million, of which \$34 million (87 percent) would come from the state; the facility's actual cost was nearly \$60 million.

A residency program, likewise, is not without costs, which were estimated in 2003 at about \$285,000 per resident. However, the same study estimated that each resident generated about \$246,000 in revenue, leaving an adjusted annual cost of only \$39,000 per resident.

The above numbers clearly show that building a new medical school requires an enormous initial investment with substantial capital up front as well as considerable annual operating costs. At the same time, financing graduate medical education is not an inexpensive endeavor in and of itself with an annual cost in the ballpark of \$200,000 to \$300,000 per resident. Both require a significant fiscal commitment, and the decision to finance one over the other must be carefully weighed.

We want to produce more physicians for our state. Don't we need another medical school?

Building new medical schools and expanding residency programs both have the same outcome: more physicians. However, the type of physician produced and where the physician settles down and opens his or her practice are not pre-determined. A simple increase in the number of physicians does not necessarily automatically equal greater access to health care for those who need it most. The decision of which to finance should be made based upon which program can increase the overall access to health care in your state for those who need it most.

The strength of financing primary care graduate medical education (GME) is the ability of the residency program to tailor itself to the needs of the community. Medical schools are much larger than individual residency programs and tend to draw a high

Twenty-seven residency programs requested to the Residency Review Committee for Family Practice to withdraw voluntarily between 2000 and 2003. This marked a significant increase in program closure, heralding a corresponding decrease in the likelihood of many medical students selecting primary care. Financial issues were a major factor in all of the closures, leaving many community-based, non-profit and university hospitals, not to mention patients, in the lurch.¹

¹Gonzalez EH, Phillips RL Jr, Pugno PA. "A study of closure of family practice residency programs." *Fam Med.* 2003 Nov-Dec;35(10):706-10

Educating Family Physicians, continued

We want to produce more physicians for our state. Don't we need another medical school?

continued

concentration of specialists and subspecialists. For this reason, it is difficult to place medical schools in rural and/or underpopulated regions. Primary care residency programs tend to be smaller and more flexible in terms of location. Because of this, they can be established in rural or less populated regions where increased access to health care is needed most.

For example, compare a rural, community-based **primary care** residency program to an urban, **tertiary-care** academic hospital. The level of access to health care that a primary care residency program can provide is much greater in comparison to a medical school. A 2000 study in the *New England Journal of Medicine* showed that in a given month, on average, less than one out of every 1,000 people are hospitalized in an academic medical center, whereas 113 of those 1,000 people visit a primary care office. Furthermore, a National Institute of Program Director Development report shows that community-based residency programs cost almost \$150,000 less per resident, per year when compared to university-based programs.

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Medical School Expansion: An Opportunity to Meet Your State's Rural Health Care Needs

AAFP Government Relations

June 2007

"Family medicine symbolizes a commitment to a style of practice that is focused on the patient, the family and the community, rather than on the disease. Family medicine has found a niche at the interface of scientific medicine and public service."

— John W. Saultz, *Textbook of Family Medicine*

What is family medicine?

State policy-makers play a key role in deciding what types of physicians are produced in their states. Announcement of a physician shortage is already producing expansion of medical school class size, largely with state funding. Medical school expansion, when done strategically, provides a timely opportunity to produce a workforce ready to meet the rural health care needs of states and the nation.

What are the current policy issues in the health care workforce?

Health care workforce policy debate is frequently reduced to a single issue:

- **Supply:** How many health care workers are needed to meet population needs?

However, two other issues of equal importance to workforce policy are:

- **Composition:** Which types of health care workers with what skills are needed to meet population needs?
- **Distribution:** Where would health care workers ideally be geographically distributed to meet population needs?

The effectiveness of public investment that supports the production of its workforce should be evaluated according to its success in meeting investor (taxpayer) aims: a skilled, diverse output of providers that delivers care accessible to all investors. More providers may increase provider access, but only if they offer the type and location of services demanded by the population.

Recently, much of the health care workforce talk has focused solely on supply - whether the United States will face a surplus or shortage of physicians in the near future^a. The American Association of Medical Colleges (AAMC) recently called for a 30 percent expansion of medical school enrollment from the 2002 level of approximately 16,400 over the next decade. **While ensuring adequate supply is a valuable consideration, policy-makers must additionally consider issues of composition and distribution of physicians in their states.** Nowhere is this issue more pressing than in rural populations.

Why should policy-makers be concerned about the rural physician workforce?

Problems with Composition: The United States lags behind other countries in its focus on primary care. Countries with primary care-based health systems have population health outcomes that are better than those of the United States, often at lower costs^b. There are indeed shortages of certain kinds of subspecialists (psychiatrists and some pediatric subspecialists); however, the overwhelming need in rural areas is access to primary care services. Expanding medical school slots and building new medical schools will not fix this composition problem if it is the only policy response.

Problems with Distribution: Professionals in most states are unevenly distributed, leaving many rural areas without access to a variety of health professionals. Although 21 percent of the nation's population lives in rural areas, less than 11 percent of the nation's physicians practice there. About 20 percent of the U.S. population resides in federally designated "primary care health professional shortage areas (HPSAs)." Some 50 million people live in more than 2,900 HPSAs; 29 million people are underserved, most of them in predominantly rural counties. To alleviate these gaps in access to basic health care (and eliminate primary care HPSAs), would take an additional 7,270 primary care physicians willing to serve in these areas^c.

Medical School Expansion, continued

What is family medicine and why is it so well-suited to rural healthcare needs?

FAMILY MEDICINE: The Distributional Specialty

Family medicine is unique in its provision of continuing, comprehensive health.

What is the "pipeline" to rural physician recruitment and retention?

Family medicine is unique in its provision of continuing, comprehensive health care for individuals and families. It is a specialty that integrates the biological, clinical and behavioral sciences. The scope of family medicine encompasses all ages, sexes, each organ system and every disease entity^d. The specialty of family medicine has been demonstrated to lower the costs of care, improve health through access to more appropriate services and reduce inequities in the population's health^e.

Family medicine graduates, more than those of any other specialty, **practice where the people are, rather than clustering near urban areas and academic health centers like other specialties^f**. Millions of people in all segments of society in the United States rely on family physicians as their usual source of care. As early as the 1970s, research has shown a clear propensity for family medicine residency graduates to practice in rural settings at a higher rate than any other specialty. In fact, **family physicians supply 58 percent of physicians in isolated rural areas**. While rural areas are not the exclusive domain of family medicine, family medicine's tradition of service to this population, training in maternity and newborn care, and willingness to accept patients of any age or sex have made **family physicians critically important for people in rural areas^g**. Most other physician specialties do not have a business model that can be supported in rural areas. Limiting care by age, disease or gender requires larger populations to produce enough patients to support a physician.

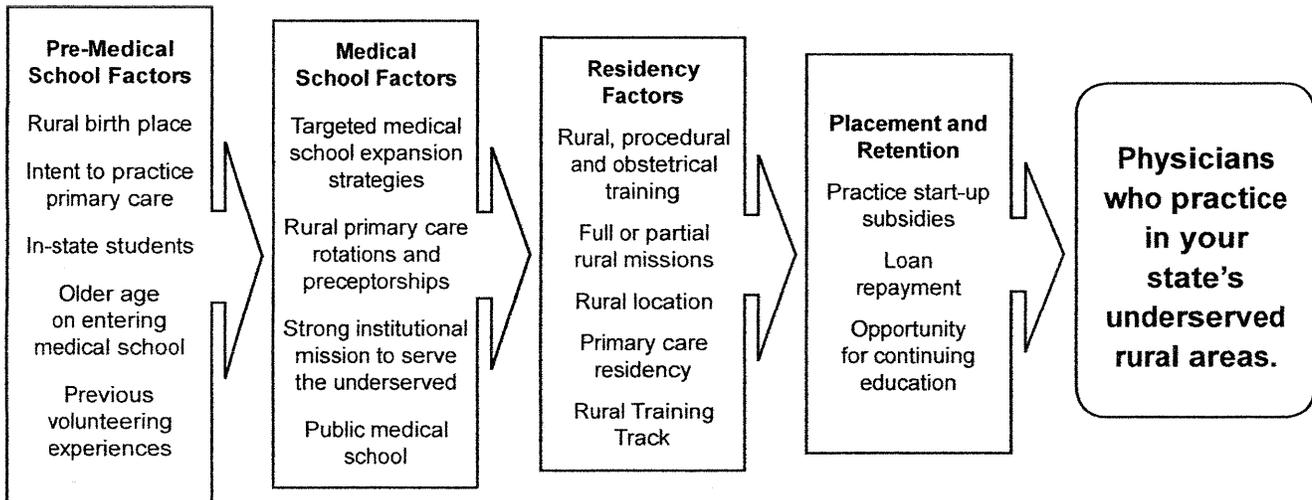
The term "rural pipeline" refers to the long and complex process of rural upbringing and education that leads a person to choose a career as a rural physician. The rural medicine pipeline addresses both recruitment and retention. Factors that increase the output of physicians practicing in rural areas can be explored at each of the advancing stages along the pipeline, which are diagrammed below^h:

- Pre-medical school factors
- Medical school factors
- Residency factors
- Placement and retention

The overall goal of supporting a rural pipeline is to provide quality physicians who practice in their state's underserved rural areas.

State policy-makers have a unique opportunity to increase the recruitment and retention of rural physicians in their states through targeted policy at all levels of the rural workforce pipeline.

Factors Supporting the Rural Pipeline



Medical School Expansion, continued

What do your state's future rural providers look like when they enter medical school?

Each state's rural health workforce depends on who gets into medical school in the state. **Growing up in a rural area is the single most important independent predictor of rural medical practice.** However, the percentage of rural students in medical schools has fallen 47 percent since 1976. This decline occurred without any change in the percentage of rural applicants¹.

Another factor strongly associated with future rural practice is the **student's expressed plan to eventually become a family physician.** When combined with rural origin, these two factors are associated with a 36 percent likelihood that a graduate will practice in a rural area, compared with a seven percent likelihood for individuals without these characteristics¹.

State schools can also favor in-state students, who are more likely to stay in-state after graduation.

What is the "ideal medical school" to meet your state's rural healthcare needs?

Evidence points to **three core features** that may increase a medical school's likelihood of producing rural physicians⁶:

- strong institutional mission of serving rural and underserved areas
- targeted selection of students likely to practice in rural areas
- a focus on family medicine

Other features that are associated with the production of more physicians practicing in rural communities include: medical school location in a rural state, public ownership, rotations that focus on rural primary care, rural preceptorships, and specialized medical school curriculum for applicants with rural background, or intentions to practice in rural areas.

What is the "ideal residency program" that trains physicians to meet your state's healthcare needs?

Residency programs that focus on family medicine with an integrated rural health component contain more graduates who go on to practice in rural areas. Data from nearly all of the 367 family medicine residency programs in the United States from 1994-1996 show that programs that graduate more rural physicians tend to have:

- (1) more required rural and obstetrical training months;
- (2) a full or partially rural mission;
- (3) locations in states that are more rural; and
- (4) an emphasis on procedural training¹.

A particular type of family medicine program called the **One-Two Rural Residency Track** deserves special note. These tracks require residents to complete their first year of training in an urban center and years two and three in a rural community. Of the graduates in these programs between 1988 and 1997, 76 percent were found to be practicing in rural locations with 61 percent of these practicing in HPSAs. Importantly, 72 percent of respondents indicated their intentions to stay in their current locations indefinitely. However, many of these programs do not receive the funding typically given by Medicare for residency training, and many have been forced to close.

Medical School Expansion, continued

Is medical school expansion the solution to a shortage of rural physicians?

The Council on Graduate Medical Education (COGME) and the American Association of Medical Colleges (AAMC) recently called for a 15 percent to 30 percent increase in medical school enrollment from the 2002 level of approximately 16,400 over the next decade. COGME provides an ongoing assessment of physician workforce trends, training issues and financing policies, and recommends appropriate federal and private sector efforts on these issues. COGME advises and makes recommendations to the Secretary of the U.S. Department of Health and Human Services (HHS), the Senate Committee on Health, Education, Labor and Pensions, and the House of Representatives Committee on Commerce^m. The suggested 30 percent increase is equal to an additional 4,946 medical school matriculants per yearⁿ. **This is a unique and timely opportunity.** The AAMC emphasizes the opportunity to affect physician distribution with this expansion, yet offers few ideas to guide policy-makers.

A recent AAMC survey of expanding medical schools found that 89 percent were expanding **“to meet a perceived need or physician shortage in their state/region.”** However, only 26 percent of these same programs reported that their enrollment increases would be targeted to specific populations or communities^o. The costs to states of making the investment required for this expansion is substantial and must be carefully directed to address the public good and population needs.

Expansion by itself does not guarantee that physicians are distributed where they are most needed. Expansion without targeted distribution and composition strategies risks perpetuating the concentration of physicians in high-income urban areas and medical centers, providing questionable benefit to rural America.

Physician workforce planning should **consider how we can improve health care for everyone in the United States and what workforce would be needed to do so.** Policy-makers must ensure that services are provided in the most appropriate places by the most appropriate people. Rather than “shooting” at the right number, we have an opportunity to decide the types of services we want to produce and how we align the physician workforce to participate in delivering them^p.

What are the most effective uses of rural workforce funds for your state?

Solutions must be aimed at *both* selecting the right medical students *and* giving them the content and rural-setting experiences necessary to introduce them to and train them in rural primary care.

- **First, evaluate how your state is doing in meeting its rural physician workforce:**
 - ♦ How effectively are your state’s publicly supported medical schools producing physicians to meet public needs?
 - ♦ How can the state government improve the chances that your publicly supported medical schools will prepare physicians to meet public needs?
 - ♦ **Is my state training the *right people with the right skills* to go to the right places?**

- **See the “Additional Resources” listed below for region and state specific statistics.** Every state in the United States is covered by a regional office of workforce studies. Contact your region’s workforce study center and let them know that you are interested in crafting state legislation that would best fit your state’s health care workforce needs.

- **The medical school admission policy is the key to increasing the number of graduates likely to practice in rural areas.** Pre-admission surveys of students’ attitudes and specialty interests can help direct the selection of medical students who are familiar with and interested in rural communities^q. This is a long-term strategy that has the potential to close the gap between the supply of and the demand for physicians in rural areas. **Rural background is the single most significant personal characteristic**

What are the most effective uses of rural workforce funds for your state? *continued*

influencing physicians' decisions to practice in rural locations. Strategies to ensure that rural students are not disadvantaged by the admissions policy could include:

- ♦ Providing scholarships and tuition relief to rural students
 - ♦ Including rural and primary care physicians on admissions committees
 - ♦ Applying a rural adjustment factor to grade point averages and Medical College Admissions Test (MCAT) scores
 - ♦ Setting medical school quotas for rural enrollment via the creation of a "rural medicine track."
- Medical school expansion needs to be strategic, targeting a selection of students likely to practice in rural, underserved areas. Any medical school expansion should be tied to a strong institutional mission with a focus on primary care and serving the state's underserved. Increased accountability of medical schools to achieve congruence between public need and the supply of physicians is necessary. **With the recent COGME and AAMC call for increased medical school admission, states have a unique opportunity to request that these increased admissions slots be filled with students most likely to fill the state's physician workforce needs.**
 - Mandate that all third-year medical students complete a **clerkship in family medicine** and that **all primary care residents be required to be offered a rotation** in a rural setting. Texas is one state that has such a mandate.
 - Develop and improve **links between community provider practice sites and health professional training programs**. Current education of students and residents occurs almost exclusively in large urban teaching hospitals, which rarely provide them with opportunities to learn about primary care delivered in rural settings. States have the power to require that some or all of Graduate Medical Education (GME) payments be linked to state policy goals intended to support primary care in underserved areas. In 2002, 10 states required that some or all Medicaid GME payments be directly linked to state policy goals intended to vary the distribution of, or limit, the health care workforce. The goal of encouraging training of physicians in certain specialties (e.g., primary care) is applied to GME payments by all 10 states. Five of the states use these payments to encourage training of physicians in certain settings (e.g., rural locations, and medically underserved communities)⁶.
 - **State support-for-service programs** are one strategy to entice new physicians to practice in medically underserved areas. These state-sponsored programs include scholarships, service-option loans, loan repayment, direct financial incentives and resident support programs.

Additional Resources

- **National Center for Health Workforce Analysis.** <http://bhpr.hrsa.gov/healthworkforce/>
- ♦ **Regional Centers for Health Workforce Studies:**
 - ▲ Northeast: State University of New York at Albany <http://chws.albany.edu/>
 - ▲ Southeast: University of North Carolina at Chapel Hill <http://www.healthworkforce.unc.edu/>
 - ▲ North Central: University of Illinois at Chicago <http://www.uic.edu/sph/ichws/>
 - ▲ South Central: University of Texas at San Antonio <http://www.uthscsa.edu/rchws/index.asp>
 - ▲ Northwest: University of Washington <http://depts.washington.edu/uwchws/>
 - ▲ Southwest: University of California at San Francisco <http://futurehealth.ucsf.edu/cchws.html>
- **National Conference of State Legislatures.** Effective state incentives to encourage health care professionals to work in rural areas. May 2000. <http://www.ncsl.org/programs/health/forum/caruralworkforce.htm>
- **The National Rural Health Association.** www.nrharural.org
- **American Association of Medical Colleges Center for Workforce Studies.** <http://www.aamc.org/workforce/start.htm>

Medical School Expansion, continued

Notes

- ^a AAMC. AAMC Position Statement on the Physician Workforce. July 2006.
- ^b Starfield B, et al. The effects of specialist supply on populations' health: assessing the evidence. *Health Affairs*. 15 March 2005.
- ^c HRSA. August 2006.
- ^d American Academy of Family Physicians. AAFP Policy Statement. Revised 2005. www.aafp.org
- ^e Starfield B, Shi L, Macinko. Contributions of primary care to health systems and health. *The Milbank Quarterly* 2005;83(3):457-502.
- ^f Robert Graham Center Workforce Paper.
- ^g Green LA, Dodoo MS, Ruddy M, et al. The physician workforce of the United States: a family medicine perspective. October 2004.
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- ⁿ AAMC. AAMC Position Statement on the Physician Workforce. July 2006.
- ^o AAMC. Medical school expansion plans: results of the 2005 survey of U.S. medical schools. April 2006.
- ^p Phillips RL, Martey D, Jaen CR, Green LA. COGME's 16th report to Congress: too many physicians could be worse than wasted. *Ann Fam Med* 2005;3(3):268-270.
- ^q Brooks RG, Walsh M, Mardon RE, Lewis M, Clawson A. The roles of nature and nurture in the recruitment and retention of primary care physicians in rural areas: a review of the literature. *Academic Med* 2002;77(8):790-798.
- ^r Rabinowitz HK, et al. *Ibid*.
- ^s Henderson T. Medicaid Direct and Indirect Graduate Medical Education Payments: A 50-State Survey (Washington, DC: Association of American Medical Colleges, December 2003).

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- "AAMC Statement on the Physician Workforce." June 2006. www.aamc.org/workforce/workforceposition.pdf.
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8. What are other states doing related to Primary Care Practices?
- **Joint Principles of the Patient-Centered Medical Home**
 - **Patient-Centered Medical Home: An Essential Option to Improve Quality and Efficiency in the Medicare Program**
 - **Patient-Centered Medical Home Fact Sheet**
 - **Patient-Centered Medical Home Background**
 - **Community Care of North Carolina Background Documents**
 1. **Full Report ***
 2. **Executive Summary**
 3. **Implications for Family Physicians**
 4. **Cost Savings Chart**
 5. **Comparison with Colorado Access**

* Full report available on request

**American Academy of Family Physicians (AAFP)
American Academy of Pediatrics (AAP)
American College of Physicians (ACP)
American Osteopathic Association (AOA)**

**Joint Principles of the Patient-Centered Medical Home
February 2007**

Introduction

The Patient-Centered Medical Home (PC-MH) is an approach to providing comprehensive primary care for children, youth and adults. The PC-MH is a health care setting that facilitates partnerships between individual patients, and their personal physicians, and when appropriate, the patient's family.

The AAP, AAFP, ACP, and AOA, representing approximately 333,000 physicians, have developed the following joint principles to describe the characteristics of the PC-MH.

Principles

Personal physician - each patient has an ongoing relationship with a personal physician trained to provide first contact, continuous and comprehensive care.

Physician directed medical practice – the personal physician leads a team of individuals at the practice level who collectively take responsibility for the ongoing care of patients.

Whole person orientation – the personal physician is responsible for providing for all the patient's health care needs or taking responsibility for appropriately arranging care with other qualified professionals. This includes care for all stages of life; acute care; chronic care; preventive services; and end of life care.

Care is coordinated and/or integrated across all elements of the complex health care system (e.g., subspecialty care, hospitals, home health agencies, nursing homes) and the patient's community (e.g., family, public and private community-based services). Care is facilitated by registries, information technology, health information exchange and other means to assure that patients get the indicated care when and where they need and want it in a culturally and linguistically appropriate manner.

Quality and safety are hallmarks of the medical home:

- Practices advocate for their patients to support the attainment of optimal, patient-centered outcomes that are defined by a care

planning process driven by a compassionate, robust partnership between physicians, patients, and the patient's family.

- Evidence-based medicine and clinical decision-support tools guide decision making
- Physicians in the practice accept accountability for continuous quality improvement through voluntary engagement in performance measurement and improvement.
- Patients actively participate in decision-making and feedback is sought to ensure patients' expectations are being met
- Information technology is utilized appropriately to support optimal patient care, performance measurement, patient education, and enhanced communication
- Practices go through a voluntary recognition process by an appropriate non-governmental entity to demonstrate that they have the capabilities to provide patient centered services consistent with the medical home model.
- Patients and families participate in quality improvement activities at the practice level.

Enhanced access to care is available through systems such as open scheduling, expanded hours and new options for communication between patients, their personal physician, and practice staff.

Payment appropriately recognizes the added value provided to patients who have a patient-centered medical home. The payment structure should be based on the following framework:

- It should reflect the value of physician and non-physician staff patient-centered care management work that falls outside of the face-to-face visit.
- It should pay for services associated with coordination of care both within a given practice and between consultants, ancillary providers, and community resources.
- It should support adoption and use of health information technology for quality improvement;
- It should support provision of enhanced communication access such as secure e-mail and telephone consultation;
- It should recognize the value of physician work associated with remote monitoring of clinical data using technology.
- It should allow for separate fee-for-service payments for face-to-face visits. (Payments for care management services that fall outside of the face-to-face visit, as described above, should not result in a reduction in the payments for face-to-face visits).
- It should recognize case mix differences in the patient population being treated within the practice.

- It should allow physicians to share in savings from reduced hospitalizations associated with physician-guided care management in the office setting.
- It should allow for additional payments for achieving measurable and continuous quality improvements.

Background of the Medical Home Concept

The American Academy of Pediatrics (AAP) introduced the medical home concept in 1967, initially referring to a central location for archiving a child's medical record. In its 2002 policy statement, the AAP expanded the medical home concept to include these operational characteristics: accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective care.

The American Academy of Family Physicians (AAFP) and the American College of Physicians (ACP) have since developed their own models for improving patient care called the "medical home" (AAFP, 2004) or "advanced medical home" (ACP, 2006).

For More Information:

American Academy of Family Physicians

<http://www.futurefamilymed.org>

American Academy of Pediatrics:

http://aappolicy.aappublications.org/policy_statement/index.dtl#M

American College of Physicians

<http://www.acponline.org/advocacy/?hp>

American Osteopathic Association

<http://www.osteopathic.org>

S **TATEMENT**
of the
American Academy
of Family Physicians

To the

House Ways and Means Subcommittee on Health

Concerning

Patient-Centered Medical Home:

An Essential Option to Improve Quality and Efficiency

in the Medicare Program

Presented by:

Rick Kellerman, M. D.
President

May 10, 2007

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Chairman Stark, and members of the subcommittee, I am Dr. Rick Kellerman of Wichita, Kansas, and I am president of the American Academy of Family Physicians representing 93,800 members nationwide. On behalf of the Academy, thank you for this opportunity to share with the subcommittee the proposals that AAFP believes to be important elements of physician payment reform under Medicare.

The AAFP appreciates the work this subcommittee has undertaken to examine how Medicare pays for services physicians deliver to Medicare beneficiaries and we share the subcommittee's concerns that the current system is inefficient, inaccurate and outdated. Finding a more efficient and effective method of reimbursing physicians for services delivered to Medicare beneficiaries with a large variety of health conditions is a necessary but difficult endeavor, and one that has tremendous implications for millions of patients and for the Medicare program itself.

We particularly appreciate your asking us to discuss what we are calling the Patient-Centered Medical Home as a component of a Medicare program that offers better health care more efficiently. Family physicians believe that the restructuring of Medicare payment should be done with the needs of Medicare patients foremost in mind. Since most of these patients have two or more chronic conditions that call for continuous management and that depend on differing pharmaceutical treatments, Medicare should focus on how physicians integrate the health care these patients receive from different providers and settings, with the goal of preventing duplicative tests and procedures and assuring the availability to each provider of the most accurate and complete information regarding each patient. We do not believe that the Patient Centered Medical Home is business as usual, but rather a significant step toward added value for the patient, for the complex array of health care providers and for the Medicare program.

Current Payment Environment

The environment in which U.S. physicians practice and are paid is challenging at best. Medicare has a history of making disproportionately low payments to family physicians, largely because its payment formula is based on a reimbursement scheme that rewards procedural volume and fails to foster comprehensive, coordinated management of patients. This formula has produced payment rates that have declined, except for Congressional intervention, by 5-7 percent annually for the last five years. As a result, the Medicare payment rate for physicians has fallen to the 2001 level. These steep annual cuts resulting from the flawed payment formula serve to undermine confidence in the Medicare program. In this current environment, physicians know that, without annual Congressional action, they will face a 10-percent cut in the Medicare payment rate for 2008 and cuts in the 5-percent range annually thereafter. Clearly, the

Sustainable Growth Rate (SGR) formula belies its name and simply is not sustainable.

Primary Care Physicians in the U.S.

This persistent payment imbalance has led to a decline in the numbers of graduates from US medical schools choosing primary care medicine. As a result, while other developed countries have a better balance of primary care doctors and subspecialists, primary care physicians make up less than one-third of the U.S. physician workforce. Compared to those in other developed countries, Americans spend the highest amount per capita on healthcare but have some of the worst healthcare outcomes.

However, more than 20 years of evidence shows that having a health care system based on primary care benefits the economy and the patients' health. Three years ago, a study comparing the health and economic outcomes of the physician workforce in the U.S. reached this conclusion (*Health Affairs*, April 2004). By using a system of health care that is not predicated on primary care physicians coordinating patients' care, the U.S. health care system pays a steep economic price and our Medicare beneficiaries pay a steeper one in terms of their quality of life.

The businesses that purchase health insurance for their employees are recognizing the value of a health care system based on primary care. For example, Martin-Jose Sepúlveda, MD, who is the Vice President for Global Well-being Services and Health Benefits for IMB, Corp., recently wrote "Why should major companies support patient-centered primary care? Because research shows that patient-centered primary care results in better health care, lower costs, greater satisfaction with the health-care system and more equal access to health care for all citizens."

A Chronic Care Model in Medicare

If we do not change the Medicare payment system, the aging population and the rising incidence of chronic disease will overwhelm Medicare's ability to provide health care. Currently, 82 percent of the Medicare population has at least one chronic condition and two-thirds have more than one illness. However, the 20 percent of beneficiaries with five or more chronic conditions account for two-thirds of all Medicare spending.

There is strong evidence the *Chronic Care Model* (Ed Wagner, Robert Wood Johnson Foundation) would improve health care quality and cost-effectiveness, integrate patient care, and increase patient satisfaction. This well-known model is based on the fact that most health care for the chronically ill takes place in primary care settings, such as the offices of family physicians. The model focuses on six components:

- self-management by patients of their disease
- an organized and sophisticated delivery system

- strong support by the sponsoring organization
- evidence-based support for clinical decisions
- information systems; and
- links to community organizations.

This model, with its emphasis on care-coordination, has been tested in some 39 studies and has repeatedly shown its value. While we believe reimbursement should be provided to any physician who agrees to coordinate a patient's care (and serve as a medical home), generally this will be provided by a primary care doctor, such as a family physician. According to the Institute of Medicine, primary care is "the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community." Family physicians are trained specifically to provide exactly this sort of coordinated health care to their patients.

The AAFP advocates for a new Medicare physician payment system that embraces the following:

- Adoption of the "Medical Home" model which would provide a per month care management fee for physicians whom beneficiaries designate as their "Patient-centered Medical Home;"
- Continued use of the resource-based relative value scale (RBRVS) using a conversion factor updated annually by the Medicare Economic Index (MEI);
- No geographic adjustment in Medicare allowances except as it relates to identified shortage areas;
- A phased-in voluntary pay-for-reporting, then pay-for-performance system consistent with the IOM recommendations.

Care Coordination and a Patient-Centered Medical Home

From the outset, the Medicare program has based physician payment on a fee-for-service system. As a result, Medicare currently is a system of misaligned incentives which rewards individual physicians for ordering more tests and performing more procedures. The system provides no incentive for physicians to coordinate the tests, procedures, or patient health care generally and it puts very little emphasis on preventive services and health maintenance. This payment method has produced an expensive, fragmented Medicare program.

To correct these inverted incentives, the AAFP recommends that beginning in 2008, Medicare compensate physicians for care coordination services. The Institute of Medicine (IOM) has repeatedly praised the value of, and cited the need for, care coordination as has the Medicare Payment Advisory Commission (MedPAC). And while there are a number of possible methods to build this into the Medicare program, AAFP recommends a blended model that combines fee-for-service with a per-beneficiary, per-month stipend for care coordination in

addition to meaningful incentives for delivery of high-quality and effective services in the Patient-Centered Medical Home.

The patient-centered, physician-guided medical home is being advanced jointly by the AAFP, the American Academy of Pediatrics (AAP), the American College of Physicians (ACP) and the American Osteopathic Association (AOA). This model would include the following elements:

- **Personal physician** - each patient has an ongoing relationship with a personal physician trained to provide first contact, continuous and comprehensive care.
- **Physician directed medical practice** – the personal physician leads a team of individuals at the practice level who collectively take responsibility for the ongoing care of patients.
- **Whole person orientation** – the personal physician is responsible for providing for all the patient's health care needs or taking responsibility for appropriately arranging care with other qualified professionals. This includes care for all stages of life; acute care; chronic care; preventive services; and end of life care.
- **Care is coordinated and/or integrated** across all providers and settings of the health care system (e.g., subspecialty care, hospitals, home health agencies, nursing homes) and the patient's community (e.g., family, public and private community-based services) facilitated by registries, information technology, health information exchange and other means to assure that patients get the indicated care when and where they need and want it in a culturally and linguistically appropriate manner.
- **Quality and safety** are hallmarks of the patient-centered medical home. Evidence-based medicine and clinical decision-support tools guide decision making. Physicians in the practice accept accountability for continuous quality improvement through voluntary engagement in performance measurement and improvement. Patients actively participate in decision-making and feedback is sought to ensure patients' expectations are being met.

Information technology is utilized appropriately to support optimal patient care, performance measurement, patient education, and enhanced communication.

Practices go through a voluntary recognition process by an appropriate non-governmental entity to demonstrate that they have the capabilities to provide patient-centered services consistent with the medical home model. To this end, the AAFP, AAFP, ACP and AOA are in discussions

with the National Committee for Quality Assurance (NCQA) on creating such a recognition program for the Patient-Centered Medical Home.

- **Enhanced access** to care through systems such as open scheduling, expanded hours and new options for communication between patients, their personal physician, and office staff.

A reimbursement system with appropriate incentives for the patient and the physician recognizes the time and effort involved in ongoing care management. The AAFP commends the Congress for incorporating the medical home demonstration into the Medicare physician payment provisions of the *Tax Reform and Health Act*. However, the statutory composition of the provision including the requirement of the development of a procedural code and establishing a value for same, will unduly delay the implementation of the medical home. Code development and valuation alone can take two plus years. Thus the results from a three-year demonstration will not be available until well beyond 2011. Because of the strength of the existing literature describing the effectiveness (both health and economic) of the medical home, AAFP would urge the committee to authorize the Centers for Medicare and Medicaid Services (CMS) to adopt the Patient-centered Medical Home as an interim component of physician payment while awaiting the implementation of and results from the demonstration project.

Payment of the care management fee for the medical home would reflect the value of physician and non-physician staff work that falls outside of the face-to-face visit associated with patient-centered care management, and it would pay for services associated with coordination of care both within a given practice and between consultants, ancillary providers, and community resources.

Patient-Centered Medical Home: A Gateway, not a "Gatekeeper"

It is important to note that the patient-centered Medical Home differs from the so-called "gatekeeper" model employed in the '80s and '90s. The PC-MH model expands access rather than decreases it as a capitated gatekeeper model could. The PC-MH model does not interfere with patient choice or patient self-referral but it offers appropriate incentives for physicians and patients to use resources more appropriately. The Academy believes this is what patients want and need and the mechanism that can improve quality of care and quality of life for beneficiaries and increase cost-effectiveness for the Medicare program.

In fact, patients and payers alike want a medical "network administrator" for their employees, beneficiaries and patients. AAFP, AAP, ACP and AOA have also conferred with major employers, like IBM, in determining what these employers envision as an appropriate medical home for their employees. The primary care physician organizations have been working with IBM in Austin, Texas, to create a demonstration project for their employees that will examine the characteristics of a successful patient-centered medical home. And AAFP, ACP, AOA and the National Association of Community Health Centers have joined with the ERISA

Industry Committee, the National Business Group on Health and several major employers to form the Patient Centered Primary Care Collaborative to advance the medical home as a way to improve the health care system generally.

The Cost-Effectiveness of the Medical Home

We understand the very difficult budget constraints that Congress faces as you try to determine how to improve Medicare. The restructuring of payment that we are suggesting will include an additional investment in the short term. But there is ample evidence already that the potential savings are large and near-term. Community Care of North Carolina (CCNC) is a state-wide health care delivery program developed by Allan Dobson, MD, Assistant Secretary for the North Carolina Department of Health and Human Services. The program provides a primary care medical home for all the Medicaid recipients in the state. It joins health care providers, like hospitals and nursing homes, and necessary social service providers, like substance abuse and mental health services, with the local physicians. The system pays the physician practice an additional per-patient, per-month fee to coordinate the care of the Medicaid patients, while also paying a regional network administrator, who makes sure the necessary technical and ancillary services (like transportation, health education counselors and trained translators) are available within the region.

The state legislature has received a report from an independent audit by Mercer that showed from July 1, 2003 to June 30, 2004 the state spent \$10.2 million on the CCNC program, but saved \$124 million compared to the previous fiscal year and \$225 million if the same population was served by the fee-for-service only system. The conclusion is that for every Medicaid dollar spent on the medical home in North Carolina, the state is saving \$8. We realize that the Congressional Budget Office is reluctant to include savings in how it calculates the cost of a program, but a realistic view of what Medicare patients need shows that a medical home will provide them their health care at less cost to them and to the system. Somehow, CBO should take that into account.

Information Technology in the Medical Office Setting

An effective system emphasizing coordinated care is predicated on the presence of health information technology, i.e., the electronic health record (EHR) in the physician's office. Using advances in health information technology (HIT) also aids in reducing errors and allows for ongoing care assessment and quality improvement in the practice setting – two additional goals of recent IOM reports. We have learned from the experience of the Integrated Healthcare Association (IHA) in California that when physicians and practices invested in EHRs and other electronic tools to automate data reporting, they were both more efficient and more effective, achieving improved quality results at a more rapid pace than those that lacked advanced HIT capacity.

Family physicians are leading the transition to EHR systems in large part due to the efforts of AAFP's Center for Health Information Technology (CHiT). The AAFP created the CHiT in 2003 to increase the availability and use of low-cost,

standards-based information technology among family physicians with the goal of improving the quality and safety of medical care and increasing the efficiency of medical practice. Since 2003, the rate of EHR adoption among AAFP members has more than doubled, with over 30 percent of our family physician members now utilizing these systems in their practices.

In an HHS-supported EHR Pilot Project conducted by the AAFP, we learned that practices with a well-defined implementation plan and analysis of workflow and processes had greater success in implementing an EHR. CHIT used this information to develop a practice assessment tool on its Web site, allowing physicians to assess their readiness for EHRs.

In any discussion of increasing utilization of an EHR system, there are a number of barriers, and cost is a top concern for family physicians. The AAFP has worked aggressively with the vendor community through our Partners for Patients Program to lower the prices of appropriate information technology. The AAFP's Executive Vice President serves on the American Health Information Community (AHIC), which is working to increase confidence in these systems by developing recommendations on interoperability. The AAFP sponsored the development of the Continuity of Care Record (CCR) standard, now successfully balloted through the American Society for Testing and Materials (ASTM). We initiated the Physician EHR Coalition, now jointly chaired by ACP and AAFP, to engage a broad base of medical specialties to advance EHR adoption in small and medium size ambulatory care practices. In preparation for greater adoption of EHR systems, every family medicine residency will implement EHRs by the end of this year.

To accelerate care coordination, the AAFP joins the IOM in encouraging federal funding for health care providers to purchase HIT systems. According to the US Department of Health & Human Services, billions of dollars will be saved each year with the wide-spread adoption of HIT systems. While the federal government has already made a financial commitment to this technology, the funding, unfortunately, is not directed to the systems that will truly have the most impact and where ultimately all health care is practiced - at the individual patient level. We encourage you to include funding in the form of grants, low interest loans or tax credits for those physicians committed to integrating an HIT system in their practice.

Aligning Incentives

In replacing the outdated and dysfunctional SGR formula, Congress should look to a method of determining physician reimbursement that is sensitive to the costs of providing care, creates a stable and predictable economic environment, and aligns the incentives to encourage evidence-based practice and foster the delivery of services that are known to be more effective and result in better health outcomes for patients. Just as importantly, the reformed system should facilitate efficient use of Medicare resources by paying for appropriate utilization of effective services and not paying for services that are unnecessary, redundant or

known to be ineffective. Such an approach is endorsed by the IOM in its 2001 publication *Crossing the Quality Chasm*.

Another IOM report released in autumn of 2006 entitled *Rewarding Provider Performance: Aligning Incentives in Medicare* states that aligning payment incentives with quality improvement goals represents a promising opportunity to encourage higher levels of quality and provide better value for all Americans. The objective of aligning incentives through pay-for-performance is to create payment incentives that will: (1) encourage the most rapidly feasible performance improvement by all providers; (2) support innovation and constructive change throughout the health care system; and (3) promote better outcomes of care, especially through coordination of care across provider settings and time. The Academy concurs with the IOM recommendations that state:

- Measures should allow for shared accountability and more coordinated care across provider settings.
- P4P programs should reward care that is patient-centered and efficient. And they should reward providers who improve performance as well as those who achieve high performance.
- Providers should be offered (adequate) incentives to report performance measures.
- Because electronic health information technology will increase the probability of a successful pay-for-performance program, the Secretary should explore ways to assist providers in implementing electronic data collection and reporting to strengthen the use of consistent performance measures.

Aligning the incentives requires collecting and reporting data through the use of meaningful quality measures. AAFP is supportive of collecting and reporting quality measures and has demonstrated leadership in the physician community in the development of such measures. It is the Academy's belief that measures of quality and efficiency should include a mix of outcome, process and structural measures. Clinical care measures must be evidence-based and physicians should be directly involved in determining the measures used for assessing their performance.

Quality Reporting

AAFP is supportive of collecting and reporting quality measures and has led the physician community in the development of meaningful measures. Consistent with the philosophy of aligning incentives, the reward for collecting and reporting data must be commensurate with the effort and processes necessary to comply and must be sufficient to obtain the desired response from providers. The Academy is skeptical that the incentive of 1.5 percent of a physician's covered charges for collecting and reporting quality measurement data will be sufficient to cover the actual cost of operationalizing such a program. However, we are

generally and conceptually supportive of the policy and will monitor its implementation closely.

A Framework for Pay-for-performance

The following is a proposed framework for phasing in a Medicare pay-for-performance program for physicians that is designed to improve the quality and safety of medical care for patients and to increase the efficiency of medical practice.

- *Phase 1*
All physicians would receive a positive update in 2008, consistent with recommendations of MedPAC. Congress should establish a floor for such updates in subsequent years.
- *Phase 2*
Following the implementation of the Physician Quality Reporting Initiative, Medicare would encourage structural and system changes in practice, such as electronic health records and registries, through a "pay for reporting" incentive system such that physicians could improve their capacity to deliver quality care. The update floor would apply to all physicians.
- *Phase 3*
Pay-for-reporting transitions to pay-for performance and particular effort is made to ensure that the quality bonus is sufficient to cover the costs of administration as well as providing sufficient incentive to participate. Medicare continues to encourage reporting of data on evidence-based performance measures that have been appropriately vetted through mechanisms such as the National Quality Forum and the Ambulatory Care Quality Alliance. The update floor would apply to all physicians.
- *Phase 4*
Contingent on repeal of the SGR formula and development of a long term solution allowing for annual payment updates linked to inflation, Medicare would encourage continuous improvement in the quality of care through incentive payments to physicians for demonstrated improvements in outcomes and processes, using evidence-based measures.

This type of phased-in approach is crucial for appropriate implementation. While there is general agreement that initial incentives should foster structural and system improvements in practice, decisions about such structural measures, their reporting, patient registries, threshold for rewards, etc., remain to be determined.

The program must provide incentives – not punishment – to encourage continuous quality improvement. For example, physicians are being asked to bear the costs of acquiring, using and maintaining health information technology in their offices, with benefits accruing across the health care system – to patients, payers and insurance plans. Appropriate incentives must be explicitly integrated

into a Medicare pay-for-performance program if we are to achieve the level of infrastructure at the medical practice to support collection and reporting of data.

Conclusion

It is time to stabilize and modernize Medicare by recognizing the importance of, and appropriately valuing, primary care and by embracing the patient-centered medical home model as an integral part of the Medicare program.

Specifically, the AAFP encourages Congressional action to reform the Medicare physician reimbursement system in the following manner:

- Repeal the Sustainable Growth Rate formula at a date certain and replace it with a stable and predictable annual update based on changes in the costs of providing care as calculated by the Medicare Economic Index.
- Adopt the patient-centered medical home by giving patients incentives to use this model and compensate physicians who provide this function. The physician designated by the beneficiary as the patient-centered medical home shall receive a per-member, per-month stipend in addition to payment under the fee schedule for services delivered.
- Phase in value-based purchasing by starting with the Physician Quality Reporting Initiative. Analyze compensation for reporting and ensure that it is sufficient to cover costs associated with the program and provide a sufficient incentive to report the required data.
- Ultimately, payment should be linked to health care quality and efficiency and should reward the most effective patient and physician behavior.

The Academy commends the Subcommittee for its commitment to identify a more accurate and contemporary Medicare payment methodology for physician services. Moreover, the AAFP is eager to work with Congress toward the needed system changes that will improve not only the efficiency of the program but also the effectiveness of the services delivered to our nation's elderly.

PATIENT-CENTERED MEDICAL HOME

Everyone is talking about their goals to improve America's beleaguered health care system: renewed emphasis on primary and preventive care; wide-scale adoption of electronic medical records and other state of the art technologies; tools to empower consumers to make smart health care decisions; greater transparency in pricing; and incentives that promote quality – all while controlling costs and increasing access.

This sounds like a tall task. But there is a way to accomplish these goals.

The nation's leading medical groups have come together behind a proven model in health care delivery: the Patient-Centered Medical Home (PC-MH). In this new model, the traditional doctor's office is transformed into the central point for Americans to organize and coordinate their health care, based on their needs and priorities.

At its core is an ongoing partnership between each person and a specially-trained primary care physician. This new model provides modern conveniences, like email communication and same-day appointments; quality ratings and pricing information; and secure online tools to help consumers manage their health information, review the latest medical findings and make informed decisions. Consumers receive reminders about necessary appointments and screenings, as well as other support to help them and their families manage chronic conditions such as diabetes or heart disease.

The primary care physician helps each person assemble a team when he or she needs specialists and other health care providers such as nutritionists and physical trainers. The consumer decides who is on his or her team and the primary care physician makes sure they are working together to meet all of the patient's needs in an integrated, "whole person" fashion.

It's a whole new way to approach health care based on a proven model. In fact, the Patient-Centered Medical Home (PC-MH) will be accredited by an independent organization so that payers can be assured that their small investment in this model of care delivery will result in a higher standard of care.

FOR MORE INFORMATION:

American Academy of Family Physicians
<http://www.futurefamilymed.org>

American Academy of Pediatrics
http://aappolicy.aappublications.org/policy_statement/index.dtl#M

American College of Physicians
<http://www.acponline.org/advocacy/?hp>

American Osteopathic Association
<http://www.osteopathic.org>

Description of the Patient-Centered Medical Home Concept:

The traditional doctor's office is transformed into the central point to organize, integrate and coordinate all aspects of your health care. At its core it is an ongoing partnership between you and a personal physician built around preventive and primary care. This new model, centered in a physician practice, provides modern conveniences like e-mail communication and same-day appointments; quality ratings and pricing information; and secure online tools to help you manage your health information, review the latest medical findings and make informed decisions. You receive reminders about necessary appointments and screenings as well as other support to help you and your family manage chronic conditions such as diabetes or heart disease. Your personal physician helps you assemble a team when you need specialists and other health care providers such as nutritionists and physical therapists. You decide who is on your team, and your personal physician makes sure they are working together to meet your needs. This new model of care will be accredited and would cost you, your employer or your insurer roughly \$15 more per month.

Benefits to Consumers:

- It is **organized around your needs and wishes**, rather than the doctor or the insurance company.
- At its core it is an **ongoing partnership between you and your personal doctor** focusing on excellent prevention and primary care.
- It offers you **close-up support from your personal physician** to help you navigate the health care system in which more of us have to spend more of our own money.
- It is **consumer-friendly**—meaning you can get same-day appointments, get the doctor on the phone within a reasonable period of time and use e-mail if you choose to talk to your doctor.
- Doctors will reach out to **help people manage their chronic conditions**, such as diabetes, heart disease, high blood pressure and cholesterol. They will remind patients to get their checkups, take their medications, exercise regularly and maintain a nutritious diet.
- Instead of paper files and medical records spread out among various doctors, hospitals, labs and clinics, the new style of practice eventually will rely on **secure, confidential electronic medical records that you own and control**. You will be able to grant access to the record to any hospital or specialist you choose.
- Your doctor will **help you coordinate all your care needs involving other physicians, labs and hospitals**, but you can still see any doctor you wish.
- You will be able to **know how your doctor does on quality measures**, and prices will be posted so you can make informed consumer choices.

Benefits to Payers:

- This new style of care has proven to **improve the quality of health care and hold the line on costs**.
- Many studies have shown that a **reliance on preventive and primary care improves outcomes and lowers costs**.
 - Average cost for patients using primary care as usual source of care: \$340
 - Average cost for patients using sub-specialists as usual source of care: \$506
 - SOURCE: *Lewin Group estimates, as reported in "Report on Financing the New Model of Family Medicine," Annals of Family Medicine, Vol. 2, Supp. 3, Nov-Dec 2004.*
- Connecting providers and information in a patient-centered system improves value and outcomes. IBM has tracked quality and costs using many elements of the new model of care. IBM reports **health care premiums are 6 percent lower for family coverage and 15 percent lower for single coverage** than industry norms. IBM employees also benefit with costs that are 26 to 60 percent lower than industry norms.
- The state of North Carolina ran a multi-year test of this new model of care. The state **saved more than \$200 million per year**.

- Many studies show that patients who have a **regular source of preventive and primary care** have:
 - Lower per person costs
 - Lower emergency room utilization
 - Fewer hospital admissions
 - Fewer unnecessary tests and procedures
 - Less illness and injury
 - Higher satisfaction
- Additionally, employees in a primary care-centered system are more likely to value their employer-provided health benefits and be better health care consumers. They take fewer sick days and are more productive on the job.

Key Partnerships and Pilot Projects — In Process

The Academy is working with key allies and building new partnerships to promote physician payment reform as part of the patient-centered medical home concept.

On May 10, 2007 American employers united with AAFP and other major physician groups to form a Patient-Centered Primary Care Collaborative (PCPCC). The Collaborative brings together employers, physicians and consumers to:

- advance the patient-centered medical home model of care
- transform how primary care is organized and financed
- provide better outcomes to patients and more appropriate payment to physicians
- deliver better value, accountability and transparency to purchasers and consumers

In addition to the AAFP, the Patient Centered Primary Care Collaborative members include:

- American Academy of Pediatrics
- American College of Physicians
- American Osteopathic Association
- IBM
- Exelon Corp
- General Motors
- Wyeth
- The ERISA Industry Committee
- Human Resource Policy Association
- National Association of Community Health Centers
- National Business Group on Health
- Walgreens Strategic Health Initiatives
- CVS/Caremark
- Foundation for Informed Medical Decision Making
- AARP

The Patient Centered Primary Care Collaborative will be a focal point for setting medical home parameters and standards, for promulgating the concept and advocating for payment systems that will make the concept work in practice.

Community Care of North Carolina:

**A Provider-Led Strategy for Delivering
Cost-Effective Primary Care to Medicaid Beneficiaries**

Executive Summary
June 2006

Stephen Wilhide & Tim Henderson
Consultants



Government Relations

**American Academy of Family Physicians
2021 Massachusetts Avenue, NW
Washington, DC 20036**

Executive Summary

Community Care of North Carolina (CCNC) is a Medicaid care management program that has demonstrated significant cost savings, improved health outcomes, and increased access to care for almost 700,000 Medicaid beneficiaries. Evolving from the Medicaid managed care programs of case management and capitated HMOs of the 1990s, CCNC has become a proven model of community-based, integrated care coordination and management.

Background

North Carolina has a rich history of developing community-based health care systems. The core belief guiding the state's role in providing health care to underserved populations is that if improvement in health care and service is the goal, those responsible for making it happen must have true ownership of the improvement process. While most states were considering a more traditional managed care option for Medicaid in the 1990s, North Carolina's Office of Research, Demonstrations and Rural Health Development, in concert with the North Carolina Academy of Family Physicians and the North Carolina Pediatric Society, decided in 1991 to pilot an alternative to traditional managed care—an expansion of the primary care case management model known as Carolina Access. By 1998, Carolina Access had grown to include nine networks and 20 primary care practices, prompting the state to require Medicaid recipients in those locations to choose an Access practice/primary care provider.

That same year the state piloted Community Care of North Carolina in the nine Access networks with the aim of further improving quality and containing costs. The objective was to develop health care systems able to support programs and infrastructures that manage the Medicaid population through "integrated community management." These pilot programs identified several core components for such systems, including disease and care management, population management, utilization management, quality improvement, and guidelines for evidence-based practice.

Principles, Planning and Payment

As state government and health providers analyzed how best to build an optimum health care system for Medicaid recipients, four key concepts emerged:

- The importance of local control and physician leadership in building sustained community care systems;
- A primary focus on improving quality of care through population management;
- The necessity of creating a true public/private partnership that brings together all the key local healthcare and social service providers, or face control by 'outside forces;' and
- A shared state/local responsibility to develop tools needed to manage the Medicaid population, including a system of new incentives that better align state and community goals with desired outcomes.

Through local networks, primary care physicians work with other community providers and case managers to develop tools, information and support needed to coordinate prevention, treatment, referral and institutional services for Medicaid beneficiaries.



Today, Community Care of North Carolina consists of 15 local networks across the state, including more than 3,000 physicians practicing in collaboration with local health departments, hospitals, social service agencies, and other community providers, that manage the care of about 74 percent of all eligible Medicaid beneficiaries in the state.

Through CCNC, the state provides resources, information and technical support to the local networks, enabling them to take responsibility for planning and developing programs to manage the care of these enrollees—from the provision of preventive services to the development of processes by which at-risk patients are identified and their care managed before high cost interventions are necessary. All CCNC networks are 501(c)(3) non-profit organizations that receive a \$2.50 per member per month (PMPM) Medicaid enhanced care management fee which is used to hire local case managers or otherwise pay for the resources necessary to manage enrollees. Each network elects a physician to serve as their medical director. Local medical directors participate on a statewide board of clinical directors responsible for steering disease and case management initiatives of the CCNC program. These medical directors have designed and implemented program-wide clinical improvement initiatives in several areas, including:

- Asthma and diabetes management
- Congestive heart failure
- Pharmacy initiatives addressing cost and utilization
- Hospital emergency department utilization
- Management of enrollees and services at highest risk and cost

CCNC primary care providers (PCPs) are required to participate in network activities, including following recommended clinical practice guidelines, assessing patients and developing treatment plans, educating patients about how to manage their own care and using appropriate medical equipment, providing clinical information for management systems, providing '24/7' coverage under program rules, and carrying minimum liability insurance. PCPs receive an enhanced case management fee of \$2.50 PMPM, and are paid 95 percent of the Medicare fee schedule for Medicaid covered services.

Case Management

Case management is a critical component of CCNC. Case managers are responsible for helping identify patients with high risk conditions or needs, assisting the providers in disease management education and/or follow-up, helping patients coordinate their care or access needed services, and collecting data on processes and outcomes measures. Case managers may serve as a patient advocate and intervene with other community-based health and social service organizations to assure the patient receives all necessary and coordinated services for optimal health outcomes.

Case managers also utilize a web based case management information system to document interventions. A case identification data base, which enables case managers to identify individuals who might benefit from their services, contains claims information on network enrollees, such as diagnosis, cost, procedure/drug information and utilization. Each case, once identified and recorded in the CCNC Care Management Information System or similar data base, provides a clear illustration of problems, interventions, goals and cost savings. The data base is examined to identify implementation of best practice guidelines, achievement of clinical outcomes (e.g., reduction in HbA1c in patients with diabetes), and changes in utilization patterns (e.g., reduction in hospital emergency room visits).



Demonstrated Cost Savings and Quality Improvement

To date, two major evaluations of the CCNC and Carolina Access programs reveal considerable cost savings and quality improvement. A study performed by Mercer Government Human Services Consulting found *the Carolina Access program*, when compared to historical fee-for-service program benchmarks, *saved the state \$195 to \$215 million in 2003 and between \$230 and \$260 million in 2004.*

In comparison to what the Carolina Access program would have cost with any concerted effort to control costs, Mercer also found the program *saved between \$50 and \$70 million in 2003 and between \$118 and \$130 million in 2004.*

Moreover, an evaluation of CCNC disease management initiatives performed by the University of North Carolina found the costs to CCNC of caring for Medicaid patients with asthma and diabetes to be much less than for those Medicaid patients served in the Access program. *The study concluded that over three years (2000-2002) the state would have saved about \$3.3 million for CCNC enrollees with asthma (especially individuals 45 years of age and older) and approximately \$2.1 million for CCNC patients needing diabetes care, both associated with significant changes in utilization and other practice measures (i.e., reduction in hospital emergency room visits).* The evaluation focused primarily on the effects of disease management and adherence to practice guidelines; no evaluation of the effect of case management services independent of disease management has been performed.

In 2006-2007, CCNC plans to implement additional disease management programs, including managing enrollees with congestive heart failure and chronic pulmonary disease. In 2005, four local CCNC networks also began piloting a collaborative approach to managing Medicaid enrollees with both behavioral and physical health needs to serve them in the most appropriate setting.

Conclusion

Primary care physicians interviewed reported their Medicaid patients received overall better care, and caring for Medicaid patients was more desirable, due to their participation in CCNC, particularly for the following reasons:

- Added services of case managers;
- Added PMPM care management fee *and* enhanced Medicaid fee-for-service payment (95% of the Medicare fee schedule); and the
- Opportunity to participate in development/application of evidence-based clinical guidelines.

Nationwide, family medicine is in a unique position to improve the quality and lower the cost of care delivered to Medicaid patients by advocating that states re-design their Medicaid care management programs based on this proven CCNC model.



**The Transferability of
Community Care of North Carolina:**
A Provider-Led Strategy for Delivering Cost-Effective
Primary Care to Medicaid Beneficiaries

Implications and Opportunities for Family Physicians

June 2006

Stephen Wilhide & Tim Henderson
Consultants



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The Transferability of *Community Care of North Carolina*: Implications and Opportunities for Family Physicians

Community Care of North Carolina (CCNC) is a patient care management program consisting of 15 local networks and more than 3,000 primary care physicians that has demonstrated significant cost savings, improved health outcomes, and increased access to care for almost 700,000 Medicaid beneficiaries. Originating as an expanded primary care case management program, CCNC has become a proven model of community-based, integrated care coordination that applies a range of tools such as disease and population management, quality improvement, and guidelines for evidence-based practice.

The CCNC program demonstrates that when primary care physicians formally share responsibility for a patient population—with the assistance and cooperation of staff, other community providers, state government, and patients—positive behavior change will occur. Physicians participating in CCNC report their Medicaid patients receive overall better care—and caring for Medicaid patients is more desirable—particularly because of the:

- Added services of case managers.
- Opportunity to participate in development/application of evidence-based clinical guidelines.
- Added per patient per month care management fee and enhanced Medicaid fee-for-service payment (95% of the Medicare fee schedule).

Nationwide, family medicine is in a unique position to improve quality and lower the cost of care delivered to Medicaid patients by advocating that states re-design their Medicaid care management programs based on this proven CCNC model. States continue to struggle to find ways to improve their Medicaid programs, and state legislatures are demanding greater accountability and a reduction in spending for high cost programs such as Medicaid.

Family physicians must provide states the guidance and leadership to design successful programs to accomplish these goals. **In each state, family medicine is charged to accomplish the following:**

1. Identify and support a visionary leader(s) who can articulate a statewide redesign of the health care system that incorporates innovations in clinical care and public health to lower costs and improve quality, access and health outcomes for Medicaid beneficiaries.
2. Communicate the necessity of creating true local public/private partnerships that bring together all key area healthcare and social service providers, or face control by ‘outside forces.’
3. The importance of local control and physician leadership in building sustained community care systems must be ‘sold’ to health care provider groups, Medicaid officials, and state legislators.
4. Help create a new system of shared state-local responsibility to develop tools needed to manage the Medicaid population, including new incentives that better align state and community goals with desired outcomes. Such a system should include financial and technical support from state government and private sources.
5. Make the primary focus for improving care quality on population management and the development/application of evidence-based clinical guidelines.



Medicaid Cost Savings Attributable to Primary Care Management in Carolina Access and Community Care of North Carolina (CCNC)

"[CCNC/Access] is a practical solution to rising health care costs in Medicaid. The General Assembly is quite supportive of this program." Senator Bill Purcell, Co-Chair, Health Care Committee May 11, 2006.

Savings from Carolina Access Compared to Historical Fee-for-Service Costs:

State Fiscal Year 2004 between \$230-260 million
State Fiscal Year 2003 between \$195-215 million

Savings from Carolina Access Compared to Program Expenditures Without Any Concerted Cost Control Efforts:

State Fiscal Year 2004 between \$118-130 million
State Fiscal Year 2003 between \$50-70 million

State Fiscal Year 2004 Cost to operate CCNC: \$10.2 million

Savings Resulting From CCNC Disease Management

For people with asthma:

- Average Per Member Per Month costs (2002): *CCNC-participating Access patients:* \$378*
Access-only patients: \$534*
- Anticipated Savings (2000-2002) to *CCNC-participating Access patients:* \$3.3 million*
- Hospitalizations Per 1,000 Members under age 21 (2000): 23% fewer for CCNC patients
compared to Access-only patients.

Note: These differences between CCNC and Access-only enrollees widened in 2001 and 2002.

For people with diabetes:

- Average Per Member Per Month Costs (2002): *CCNC-participating Access patients:* \$859*
Access-only patients: \$880*
- Anticipated Savings (2000-2002) to *CCNC-participating Access patients:* \$2.1 million*
- Hospital Admissions (2000-2002): *CCNC-participating Access patients:* 288-318 days
Access-only patients: 337-352 days

* These estimates include all Medicaid costs, including the physician case management fee and the additional CCNC network fee. The data were further adjusted to reflect the age-cohort differences in savings. Cost savings are associated with significant changes in utilization and other practice measures (i.e., reduction in hospital emergency room visits).

Sources:

1. "Access Cost Savings-State Fiscal Year 2003 Analysis", Letter to Jeffrey Simms from Mercer Government Human Services Consulting, June 25, 2004. "Access Cost Savings-State Fiscal Year 2004 Analysis", Letter to Jeffrey Simms from Mercer Government Human Services Consulting, March 24, 2005. CCNC program officials.

Note: The Mercer Cost Effectiveness Analysis included AFDC only for Inpatient, Outpatient, ED, Physician Services, Pharmacy, Administrative Costs, Other.

2. T. Ricketts et al, Evaluation of Community Care of North Carolina Asthma and Diabetes Management Initiatives: January 2000-December 2002. North Carolina Rural Health Research and Policy Analysis Program, The Cecil G. Sheps Center for Health Services Research, The University of North Carolina at Chapel Hill, April 15, 2004.



Medicaid Case Study – Community of Care of North Carolina
American Academy of Family Physicians
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Trends in Medicaid Managed Care: Lessons Learned from the Colorado Access Experience

Tim M. Henderson, AAFP Medicaid Consultant

March 2007

Background

Like most states, Colorado began experimenting with Medicaid managed care in the early 1980s. In 1995, Colorado Access, a private nonprofit health plan serving Medicaid and Medicare beneficiaries, was founded and eventually became the state's largest Medicaid managed care provider. Colorado Access is owned by three major health care providers: Children's Hospital, Community Managed Care Network¹, and the University of Colorado Hospital/University Physicians, Inc. In September 2006, Colorado Access, in response to a proposed 15 percent rate reduction, decided to end its risk-based capitation contract with Medicaid to provide physical health services to over 65,000 beneficiaries. Colorado Access continues to provide children's health and behavioral health services to Medicaid patients on a fee-for-service basis.

During this period, the state of Colorado experienced significant political and fiscal changes. A shift from a 3-term Democratic governor to a 2-term Republican governor in 1998, followed by Democrats regaining control of the General Assembly in 2004 for the first time since 1960 and the return of a Democratic governor in 2007, has resulted in several leadership changes in the Medicaid program, and—along with an economic downturn, passage of a constitutional amendment limiting growth in the state budget², and new federal rules governing Medicaid managed care—created several stumbling blocks for the state Medicaid managed care program and Colorado Access. These include:

- *Fluctuation in Medicaid caseloads.*
- *Provider lawsuits over adequacy of reimbursement rates.*
- *New solvency requirements for risk-based capitation rates and contracts.*
- *Loss of participating providers.*

At the same time, Colorado Access employed a number of new provider-led primary care strategies aimed at lowering costs and improving health care quality. These efforts centered on an **intensive care management program** directed at patients and families, not individual diseases. Each month, a team of nurses and social workers stratified patients for health risks with a predictive modeler (a diagnostic classification system that Medicaid programs use to make health-based capitated payments), and then visited them in their homes to assess their

various risks and institute improved coordinated care remedies, including patient education and better self management.

By 2006, outcomes of the intensive care management program included a 70 percent rise in primary care provider office visits, a 25 percent decline each in emergency room visits and hospital admissions, and a 50 percent reduction in depression scores. The program also reported a nearly 13 percent reduction in costs for high-cost, high-risk patients and an estimated per patient savings of over \$2,000 a year. Moreover, well-child care is provided to about 90 percent of all children in the Access managed care program; a much lower proportion of Medicaid kids receive such services under the traditional fee-for-service program. Until recently, Medicaid and Colorado Access offered participating primary care providers additional case management fees in exchange for their close coordination with intensive care program managers. (*Thomas testimony, 2006*) (*Rohlfing interview, 2006*)

Issues and Lessons Learned

1. Reach a working consensus on the purpose and goals of the Medicaid managed care program.

Medicaid managed care programs nationwide are challenged to effectively balance the often conflicting objectives of lowering costs, improving quality and expanding access. Colorado's Medicaid managed care program has lacked a clear and consistent vision and strategy for addressing these challenges. In recent years, the state's changing economic and fiscal condition and shifting political interests during a time of growing, more-costly Medicaid enrollment has coincided with frequent turnover in Medicaid program leadership and policy, creating an uncertain climate for innovation and provider participation in managed care.

Effective resolution of these issues must begin, as it has in North Carolina and other states, with the **presence of a statewide bold and visionary leader(s)**, who has the:

- ongoing confidence of the governor, legislature and health provider community, and
- commitment to gaining consensus for a new mission and structure for Medicaid managed care—a mission and structure that provides primary care physicians more clinical control and financial incentive to expand access, improve quality and lower costs.

¹ The network is composed of 11-13 community health centers (mainly located in the greater Denver area) who serve as the medical home for a significant number of Medicaid beneficiaries.

² Colorado's Taxpayer Bill of Rights, or TABOR, is a 1992 constitutional amendment that sharply restricts the state's ability to finance public services such as education, health and public safety. TABOR limits revenue the state can retain to the previous year's allowed tax collections plus a percentage adjustment equal to the percentage growth in population and rate of inflation. Any change in this formula must be approved by a voter referendum.

Colorado Access Experience, continued

2. Understand the impact of state enrollment, eligibility and rate-setting policies on health plan risk pool costs and financial solvency.

In response to several lawsuits from managed care organizations (MCOs) regarding the adequacy of payment rates and federal rule changes³, the Colorado legislature in 2002 passed a law that eliminated the requirement that 75 percent of the Medicaid population be served in a MCO, and required that all MCOs annually certify through a qualified actuary: 1) their financial stability pursuant to state insurance rules, and 2) that capitation payments set forth in contract with the state comply with all federal and state requirements. The measure also continued to provide that under no circumstance shall the state pay a capitation rate that exceeds 95 percent of the direct costs of providing the same services to an actuarially equivalent fee-for-service program. The state was also directed to recalculate the base calculation for capitation payments every three years. (JBC memo, 2006)

In 2002, at the height of Medicaid risk-based capitation, the program enrolled half of the total Medicaid caseload, and the state was contracting with 6 different MCOs (including Colorado Access). By early 2006, Medicaid enrollment in MCOs was under 20 percent of total caseload, and only Colorado Access remained as a provider in the risk-based capitation program. (JBC memo, 2006)

If a state wishes to encourage MCO participation in the Medicaid program:

- a) The **state** must recognize the importance of:
 - **A significant risk pool for MCOs, by enacting policies that ensure new and balanced enrollment.** Without new enrollment, MCO risk pools are increasingly expensive, and state enrollment practices can affect case mix severity and costs of service for the enrolled population.
 - **A rate-setting methodology that supports better quality care for under or low-utilizing population groups and provides greater incentives to adopt effective care management programs.** Colorado's most recent MCO rate structure did not support quality care improvements for low-income families, children and other under-utilizing groups. In 2005, the state Medicaid program also stopped paying participating primary care physicians separate case management fees to ensure MCO rates remained at or below 95 percent of fee-for-service per capita costs.
- b) The **MCO** must recognize the importance of:
 - **Creating/maintaining diversified revenue sources** beyond Medicaid and Medicare to cover low (lower) payment rates and high-cost membership groups.

3. Realize the influence of state enrollment policies on health plan provider participation and care management activities.

Medicaid enrollees in Colorado's Medicaid managed care program are serviced largely by primary care providers in the greater Denver area and participating community health centers. However, the highest number of family medicine and other primary care physicians serving Medicaid patients in the state are not located in these markets. Thus, most primary care physicians have better access to Medicaid beneficiaries through Colorado's traditional fee-for-service program where payment rates are higher, but little or no provider-led care management initiatives exist. (COCAP, 2002) (*Colorado Access Provider Directory*) During the last several years, Colorado's overall Medicaid caseload has grown; while total enrollment in the Medicaid managed care program has been steady or declined. (JBC Memo, 2006)

Important to the long-term success of any Medicaid managed care program and the development of effective care management initiatives are the **statewide expansion of managed care enrollment and network of primary care physicians serving those enrollees**. In order to survive financially, provider risk-based capitation plans need a steady and growing pool of patients. Moreover, as seen from North Carolina and other states, a larger and broader enrollment base and network of participating primary care physicians may lead to greater improvements in quality of care (through implementation of locally-administered care management programs) as well as significant cost savings.

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³ Final rules issued in 2002 by the Centers for Medicare and Medicaid Services (CMS) for the 1997 Balanced Budget Act eliminated requirements on enrollment composition in MCOs and required that capitation rates in risk contracts meet a standard of being actuarially sound. CMS also acknowledged that state budget issues may be taken into account in negotiating rates with MCOs and deciding whether the state can afford to base MCO rates on fee-for-service rates or continue a Medicaid managed care program altogether. (JBC memo, 2006)

Community Care of North Carolina:

**A Provider-Led Strategy for Delivering
Cost-Effective Primary Care to Medicaid Beneficiaries**

June 2006

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Community Care of the North Carolina: A Case Study

Background

North Carolina's Medicaid program has a unique provider led managed care strategy. What begun in 1991 as Carolina Access, a primary care case management demonstration program initially operating in five counties, has developed into a "coordinated community management system" known as Community Care of North Carolina (CCNC), which manages nearly three-fourths of the state's entire Medicaid population. Carolina Access "was developed to enhance recipient access to community-based primary care, to improve the coordination of care, and to reduce reliance on hospital emergency departments."¹

North Carolina has a rich history of developing community-based health care systems. In 1973, the nation's first state office of rural health was established in North Carolina, known today as the Office of Research, Demonstrations and Rural Health Development (ORDRHD). Jim Bernstein, the founding director of the Office, summed up the core belief guiding the Office since its inception as, "if improvement in [health] care or service is the goal, then those who are responsible for making it happen must have ownership of the improvement process." This core belief is put into practice through a state/local partnership approach and a focus on community investment as the cornerstone of all project and improvement strategies.

Five key principles, which continue to shape the Office's partnership initiatives, have significantly influenced the development of primary care networks, Carolina Access, and CCNC:

- Ownership is vested with community participants;
- Roles and responsibilities of participants (both community and government) are clearly defined;
- In-depth technical assistance is provided by the state on a continuous basis;
- Accountability is clear and measured; and
- Meeting patient and community needs remains the focus of all activities.²

To address rising Medicaid costs and state budget shortfalls in the 1990s, North Carolina, like most states, instituted a managed care option. The state tested a traditional capitation payment model in its most populous urban county involving the operation of commercial managed care organizations (MCOs). At the same time, ORDRHD—along with the North Carolina Academy of Family Physicians and the North Carolina Pediatric Society, with full support of the Secretary of the Department of Health and Human Services (a pediatrician)—decided to pilot an alternative to traditional Medicaid managed care—an expansion of the fee-for-service primary care case management model known as Carolina Access. By 1998, Carolina Access had grown to include nine networks and 20 primary care practices, prompting the state to mandate Medicaid recipients in those locations to choose an Access practice/primary care provider.³ Carolina Access enrolled primary care physicians to serve as patients'

¹ Community Care of North Carolina website: www.communitycarenc.com

² Wade, Radford and Price, "Building Local and State Partnerships in North Carolina: Lessons Learned." North Carolina Medical Journal. January/February 2006, Vol. 67, No.1.

³ April 25th 2006 interview with Allen Dobson, MD, Assistant Secretary for Health Policy and Medical Assistance, North Carolina Department of Health and Human Services.



gatekeepers to more specialized—and expensive—services. In return, Medicaid agreed to pay participating physicians a modest care coordination fee in addition to the fee-for-service payment. In 1991, Carolina Access started in five counties, and by 1999 covered 99 of the state’s 100 counties. These Medicaid managed care expansions were called Access II and Access III.⁴ With the success of Carolina Access, most commercial MCOs have left the market, leaving the Access program as the sole Medicaid managed care strategy.⁵

While Carolina Access accomplished its original objective of providing Medicaid recipients with a medical home and primary care providers who effectively rendered care⁶, participating providers found they lacked the resources to effectively manage the care of an enrolled population. In 1998, the state decided to pilot a new initiative in the nine Access networks to develop health care systems able to support programs and infrastructures that manage the Medicaid population through “integrated community management.” ORDRHD, in concert with the pilot network sites, identified the core program components needed to manage the Medicaid population with the aim of improving quality and containing costs. These components included disease and care management, population management, utilization management and quality improvement initiatives (implementing evidence-based practice guidelines).⁷

Development of program parameters for the pilot networks occurred through a collaborative planning process involving state government and key health provider groups⁸, including the North Carolina Academy of Family Physicians, North Carolina Pediatric Society, North Carolina Medical Society and the North Carolina Hospital Association.⁹ The development of these primary care case management networks became known as Community Care of North Carolina.

The role of the health provider associations was to convince Access physicians that the CCNC model:

- Was the most desirable Medicaid managed care option,

⁴ Certain Medicaid recipients, including families receiving cash assistance under the Temporary Aid to Needy Families (TANF) program, children, and people with disabilities who are not also receiving Medicare, are generally required to enroll in managed care. Pregnant women, dual eligibles (individuals covered by both Medicaid and Medicare), and foster children are enrolled on a voluntary basis. The medically needy, institutionalized individuals and immigrants are excluded from participation in Medicaid managed care. Enrollment by the Medicaid beneficiary into one of the managed care programs is more a function of the choice of primary care physician or practice than a conscious choice between managed care models.

⁵ Mecklenburg County initiated a fully capitated managed care program in 1996 and by 2002 became the last of the 100 counties to start an Access program. The last MCO contract in the county was not renewed by the state in May 2006.

⁶ Primary care is generally defined as the patient’s primary medical home, and includes the practice of family medicine, pediatrics and general internal medicine provided in community settings such as private physician offices, community health centers and rural health clinics. Midlevel providers such as nurse practitioners and physician assistants are used more frequently to deliver primary care in the state’s rural areas. A specialist or specialty practice may participate if they agree to the patient’s medical home and see them for all their non-urgent and preventive needs. The Medicaid recipient normally chooses a practice, not a single physician, as their medical home.

⁷ Ibid., CCNC website. Dr. Allen Dobson, a family physician from Cabarrus County, North Carolina who has since been appointed Assistant Secretary for Health Policy and Medical Assistance in North Carolina’s Department of Health and Human Services, was the clinical director of one of the initial pilot networks. Dr. Dobson has continued to be a strong leader, spokesperson and advocate for the CCNC program.

⁸ A memorandum of agreement between the state’s Medicaid program and ORDRHD delegated development, implementation and administration of this collaborative planning process to ORDRHD. Small planning grants (\$20,000) were made available by the state to develop nine networks and their operations.

⁹ While most of the state’s hospitals enthusiastically support the local community care management concept because it lowers inappropriate emergency department use, improves quality management, and reinvests local cost savings in the local networks, a few hospitals remain skeptical of this physician control model and loss of market share (Interview with Hugh Tilson, Jr. and Jeffery Spaid, North Carolina Hospital Association, May 8, 2006.)



- Provided them an opportunity to plan services/programs in which they would participate, and
- Would give them the chance to implement services that would significantly improve care for their Medicaid patients.

Moreover, Access providers that participate in CCNC receive an additional case management fee to implement the new enrollee management initiatives in their networks. For physicians as a whole, the alternative was to serve under an outside Medicaid managed care organization over which they would have little or no control. Virtually all primary care Medicaid providers in the county agreed to participate in the local networks. Under CCNC, Medicaid enrollees choose the physician practice rather than the physician.

In 1998, each CCNC-funded network's designated clinical director began meeting together as a statewide board and, along with ORDHRD and the health provider associations, started to analyze how best to build an optimum health care system for Medicaid recipients that could improve quality, access and contain costs. Four key concepts emerged to guide these developments:

- The importance of local control and physician leadership in building sustained community care systems;
- A primary focus on improving quality of care through population management;
- The necessity of creating a public/private partnership that would bring together all the key local healthcare and social service providers, or face control by an outside entity; and
- A shared state/local responsibility to develop the tools needed to manage the Medicaid population, including a system of new incentives that better align state and community goals with desired outcomes.

CCNC was designed to support the development of community care systems that have the ability to develop programs and infrastructures to manage health care needs of the Medicaid population and to improve the quality of their care through integrated community management. Primary care providers (PCPs) are given the opportunity through local networks to work together with other community providers and network case managers to develop the tools, information and support needed to coordinate prevention, treatment, referral and institutional services for Medicaid beneficiaries.

Provider associations were also charged with convincing the state legislature to support this type of Medicaid managed care program. Initially, the appeal to the legislature of the commercial managed care approach was quick savings and no budget risk ("predictable cost"). Cost savings to the state under the community care management approach were shown not to be immediate, but would accrue as the program is implemented. The legislature became largely supportive of the CCNC approach, allowing the state to pilot the alternative models in the rural and urban areas where commercial managed care had no market presence or interest.¹⁰

Moreover, as savings were realized, the legislature approved statewide expansion of the CCNC program in 2002, and directed the Division of Medical Assistance (DMA) to monitor cost savings and quality indicators for the Medicaid population enrolled in CCNC. Accordingly, the state initiated two

¹⁰ The success of previous community-based primary care programs developed by ORDHRD as well as the recent reports of significant Medicaid cost savings were key factors behind the initial and ongoing support granted by the legislature (May 11th 2006 phone interview with state Senator Bill Purcell, Chair of the Health and Human Services Committee).



assessments of the program. The first focused on overall CCNC program costs to DMA, and the other was to focus on the effects of specific disease management efforts within CCNC.¹¹

Community Care of North Carolina Today

In 2006, Community Care of North Carolina (CCNC) consists of 15 local networks across the state, including more than 3,000 physicians practicing in collaboration with local health departments, hospitals, social service agencies, and other community providers, that manage the care of over 681,000 Medicaid enrollees—about 74 percent of all eligible Medicaid beneficiaries in the state.¹²

CCNC is a state/local partnership that develops networks of local essential health providers and strengthens the community health care delivery infrastructure. Two state agencies—the Division of Medical Assistance (Medicaid) and the Office of Research, Demonstrations and Rural Health Development—agree to jointly administer and supervise the local networks. The state provides funding, information and technical support to help the networks effectively deliver and manage care to Medicaid enrollees, while encouraging the networks to ‘localize their strategies.’

CCNC achieves its objectives by anchoring its work to a handful of key philosophies that involve:

- Working directly with community providers who have traditionally cared for North Carolina’s low income residents;
- Building partnerships where community providers cooperatively plan to meet patients needs and where existing resources can be used most efficiently;
- Conveying responsibility for managing care of a specific Medicaid population to an independent network;
- Placing responsibility for performance (and improvement) in the hands of those who actually deliver the care;
- Ensuring that all funds are kept local and go to providing care; and
- Putting in place independent local networks that can manage all Medicaid patients and services, and can address larger community health issues.

Community Care of North Carolina incorporates many of the principles for reform of the U.S. healthcare system recommended in the 2001 Institute of Medicine report, Crossing the Quality Chasm. Network services are designed to meet the most common needs of their patients and provide information and education to enable the Medicaid beneficiary to make informed decisions. Care is based upon evidence-based best practice guidelines, and resources are used efficiently and in appropriate settings. Collaboration and coordination among clinicians is promoted and assured and duplication is minimized.

¹¹ The first study by the Mercer Consulting Group focused on overall cost and utilization of the CCNC program compared to an anticipated cost without managed care (CCNC website: www.communitycarenc.com). The second study by the Sheps Center of the University of North Carolina assessed utilization and cost savings in CCNC in comparison with similar enrollees in the Access program. The assessment focused on expenditures and utilization of services for Medicaid beneficiaries with asthma and diabetes (Thomas Ricketts, Sandra Greene, Pam Silberman, Hilda A. Howard,, Stephanie Poley, Evaluation of Community Care of North Carolina Asthma and Diabetes Management Initiatives: January 2000-December 2002. North Carolina Rural Health Research and Policy Analysis Program, The Cecil G. Sheps Center for Health Services Research, The University of North Carolina at Chapel Hill, April 15, 2004, p. 3.) See Appendix A for more information on these studies.

¹² Ibid, CCNC website. Because patient enrollment in Carolina Access is mandatory and since the state has almost all the Access practices (minus 5 counties) participating in CCNC, nearly 700,000 of the 730,000 eligible Medicaid recipients are served by CCNC.



Local Networks

Local networks take responsibility for managing the care of an enrolled population. The networks plan programs to provide preventive services and develop processes by which at-risk patients can be identified and their care managed before high cost interventions are necessary. By employing tools such as risk stratification, disease and case management, the networks establish the care management processes and support mechanisms needed to improve enrollee care and achieve program objectives.¹³

All local CCNC networks are 501 C(3) non-profit organizations which, at a minimum, include area primary care providers (PCPs), a hospital, the county Department of Social Services (Medicaid) office, and county health department. Each network receives a \$2.50 per member per month (PMPM) Medicaid enhanced care management fee, which is used to hire local case managers or otherwise pay for the resources necessary to manage enrollees.¹⁴ Using information gathered both locally and through Medicaid's claims system, the networks assess the needs and severity of their Medicaid enrollees to target care and disease management initiatives toward those enrollees at greatest risk. Networks then develop care management initiatives needed to improve patient care outcomes.¹⁵

Each network is responsible for population management which involves identifying individuals with certain high-cost or complex health conditions in need of case management, assisting PCPs with disease management education, helping patients coordinate care, and collecting and reporting program and patient data to the CCNC statewide office.

Clinical Directors and Quality Improvement

Each network elects a physician to serve as their medical director who participates on a statewide board of clinical directors responsible for steering disease and case management initiatives of the CCNC program. The clinical directors group identifies the quality improvement, cost containment and care management initiatives to be undertaken by their networks, and establishes the processes and strategies to accomplish program goals, including measures to assess the initiatives' impact on quality and outcomes.¹⁶

Some disease management initiatives such as diabetes, asthma and congestive heart failure care management are implemented statewide, while others are tested or operate in individual networks and later may be implemented more widely. Asthma and diabetes were chosen as two of the first statewide disease management initiatives because they met the guidelines established by the clinical directors. Guidelines for disease management are selected in consultation with 'field experts', and are based on

¹³ Each network determines its own drug formulary. Several networks have begun a "standing orders" initiative with local pharmacies where they ask them to always give the most cost effective drug. It is not yet known the impact of this effort on costs. Many practices also voluntarily use CCNC's 'list' which gives physicians the cost of drugs in tiers. North Carolina Medicaid currently does not provide a drug formulary.

¹⁴ Each network determines its budget based on the PMPM fee. Based on the expected revenue from their enrollment, they must submit a budget to CCNC for approval a year in advance. Then, they submit a 6 month report with expenditures to date and a year end report. The state reviews each network's budget to see that the bulk of funds go to enhancing case and disease management activities for the enrollees to justify those expenditures in case of a state or federal audit. CCNC has informally discussed the possibility of altering (reducing) the PMPM fee for the larger, more mature networks that receive some 'economies of scale' due to their size and experience.

¹⁵ Ibid, CCNC website.

¹⁶ Most network medical directors are compensated for their work. A couple of networks are moving towards hiring their medical director as a .5 or .75 FTE. Other networks pay the physicians separately for their time when working on CCNC activities.



existing, disease-specific, evidence-based models of care management. The disease management process involves continuous coordination between PCPs and the CCNC network care coordinators.

Physician leaders from participating networks routinely come together to design, develop and implement statewide clinical improvement initiatives in several areas, including:

- Asthma and diabetes management programs;
- Congestive heart failure
- Pharmacy initiatives addressing cost and utilization;
- Emergency department utilization; and
- Managing those enrollees and services at highest risk and cost.¹⁷

Many communities use the relationships and infrastructures developed through the networks to address the needs and problems of other populations such as the uninsured, indigent populations or nursing home residents. A number of pilot initiatives are being pursued that focus on therapy services, low birth weight, health disparities, mental health integration, in-home care and sickle cell anemia.¹⁸

Other Network Staff

The success of CCNC depends on its ability to have local networks implement system changes needed at the physician practice level, which enables targeted care and disease management initiatives to occur. Other network staff needed to accomplish this objective include:

- Network coordinator/director
- Case managers
- Quality improvement champions
- Information and administrative support staff

Network coordinators oversee the daily operation of the clinical care coordination team (case managers and clerical support) for each network. They assist in the planning, implementation and assessment of new initiatives by establishing collaborative relationships with physicians and community partners to ensure that patients are cared for in the most appropriate setting. The coordinator is accountable to achieve effective and measurable clinical, financial and functional outcomes.

The networks follow a rapid cycle quality improvement model which stresses setting aims, establishing measures and making system changes that remove barriers to excellent care. The quality improvement model is being implemented in each network through both the clinical directors and local medical management committee meetings. Focus is on implementing evidence-based practices in medicine at each individual practice where quality improvement (QI) champions are identified. This clinician attends the network's medical management meetings and represents the providers in the practice. QI experts focus on implementing processes that will improve care of the Medicaid population within their practice. Importantly, each participating practice also has access to dedicated case managers that will assist them in managing Medicaid enrollees.¹⁹ The role of case managers is discussed below.

¹⁷ CCNC-U.S. Centers for Medicare and Medicaid Services Partnership Proposal, December 1, 2005.

¹⁸ The Commonwealth Fund. Improving Access to Primary Care: Community Care of North Carolina, 2006.

¹⁹ Ibid., Ricketts et al, 2004. p 6-7.



Participating Primary Care Providers

Primary care providers are expected to participate in various network functions, including:

- Following recommended practice guidelines to assess patients and develop treatment plans,
- Helping educate patients to manage their own care and use appropriate medical equipment,
- Provide clinical information for network and CCNC management systems,
- Provide '24/7' coverage under program rules, and
- Carry minimum liability insurance.

PCPs enrolled in CCNC receive an enhanced case management fee from Medicaid of \$2.50 PMPM. The goal of the program and the purpose of the enhanced management fees are to develop local disease management and care coordination systems that reduce Medicaid expenditures by encouraging efficient and appropriate health care utilization and improve health outcomes through the quality improvement initiatives.²⁰

Case Management

Case management plays a central role in CCNC network operations. Participating networks receive a case management fee of \$2.50 PMPM, and use these funds to hire case managers to work with physician practices and provide the resources and support needed for physician practices to better manage the care of enrollees. Case managers are primarily responsible for:

- Helping identify patients with high risk conditions or needs,
- Assisting PCPs in disease management education and/or follow-up,
- Helping patients coordinate their care or access needed services, and
- Collecting data on process and outcomes measures.

Case managers may be social workers, nurses or other clinicians. Some networks contract for the services of case managers from local health departments and community health centers.²¹ They assume different responsibilities depending on local community and provider needs, but always have an integral part in managing the Medicaid population. They may serve as a patient advocate, and intervene with other community based health and social service organizations to assure the patient receives all necessary and coordinated services for optimal health outcomes. Examples of such services include mental health and addiction treatment, housing, transportation, dental care, education, emergency food and nutrition services.²²

Several Access networks have developed information systems to support documentation of case management interventions. One network, AccessCare, instituted a web-based case management system whose development and operation was funded by a Medicaid \$2.50 PMPM fee paid to the network and a small foundation grant. AccessCare case managers, in collaboration with case managers of the other networks, designed the case management system in conjunction with an outside software program development firm.

²⁰ Ibid., CCNC-CMS proposal.

²¹ Ibid., CCNC website.

²² Interviews with CCNC network directors, April 24-27 2006.



The AccessCare case management system eventually became the statewide model for networks after it was ceded to ORDRHD in 2004 for continued operation and maintenance.²³ A statewide case identification data base was developed to assist case managers in identifying individuals who might benefit from their services. The data base contains claims information on a network's enrollees, such as diagnosis, cost, procedure/drug information, and quarterly utilization.

Each case, once identified, is intended to have a clear illustration of problems, interventions, goals and cost savings which are recorded in the CCNC Care Management Information System (CMIS) or a similar database. CCNC staff retrieves all medical and utilization outcomes data for that individual from CMIS and the Medicaid claims database. Data are then analyzed for meaningful trends in quality and cost of care. Case managers look for implementation of best practice guidelines, achievement of clinical outcomes (such as reduction in HbA1c in patients with diabetes), and changes in utilization patterns (such as a reduction in number of visits to the hospital emergency room).²⁴

Demonstrated Cost Savings

There have been two major evaluations of the CCNC and Carolina Access programs that reveal considerable cost savings and quality improvement. A study performed by Mercer Government Human Services Consulting found the Carolina Access program, when compared to historical fee-for-service program benchmarks, saved the state \$195 to \$215 million in 2003 and between \$230 and \$260 million in 2004. In comparison to what the Carolina Access program would have cost with any concerted effort to control costs, Mercer also found the program saved between \$50 and \$70 million in 2003 and between \$118 and \$130 million in 2004.²⁵

Moreover, an evaluation of CCNC disease management initiatives performed by the University of North Carolina found the costs to CCNC of caring for Medicaid patients with asthma and diabetes to be much less than for those Medicaid patients served in the Access program, resulting in estimated savings in 2002 of over \$1.5 million for asthma patients (especially individuals 45 years of age and older) and \$306,000 for patients with diabetes associated with significant changes in utilization and other practice measures (i.e., reduction in hospital emergency room visits). Over three years (2000-2002), the study concluded the state would have saved about \$3.3 million for CCNC enrollees with asthma and approximately \$2.1 million for CCNC patients needing diabetes care. *Summaries of these evaluations are found in Appendix A of this report.*

Future Program Enhancements and Expansions

In 2006-2007, CCNC plans to implement additional programs and services, including:

Chronic disease management. A plan to manage enrollees with congestive heart failure and chronic pulmonary disease is being driven in part by a 2005 directive from the state legislature to the North Carolina Department of Health and Human Services "to expand the scope of Community Care of

²³ Interview with John J. Bristol, Vice President for Finance and Operations, AccessCare, Inc., April 25, 2006.

²⁴ Ibid., CCNC website.

²⁵ These estimated savings take into account the additional expenditure of the \$2.50 PMPM fee.



North Carolina care management model to recipients of Medicaid and dually eligible individuals with a chronic condition and long-term care needs...”²⁶

Behavioral health management. In response to a growing presence in several CCNC primary care practices of Medicaid enrollees with both behavioral and physical health care needs, four networks in 2005 began piloting a collaborative care management approach for these patients. This mental health integration pilot is a state-level collaboration between the Division of Mental Health; the Division of Medical Assistance, The Office of Research, Demonstrations and Rural Health Development (CCNC Program Office) and the North Carolina Foundation for Advanced Health Programs. Strategies and plan design models developed and implemented in these pilots will support the replication and expansion efforts in other networks and communities.²⁷

Electronic health records. Local networks cite the need for an electronic health record to enable them to provide more timely and coordinated care with improved quality and adherence to practice guidelines. While it is widely recognized that such technology can greatly improve overall patient care and reduce unnecessary duplication of services, such a system is costly and will involve a major financial commitment from CCNC and the networks. It is hoped that future cost savings will be invested in the development and operation of an electronic health record system.

Conclusion

The following elements have been critical to the success of Carolina Access and Community Care of North Carolina:

- *A statewide visionary leader(s) who can articulate a redesign of the health care system that incorporates innovations in clinical care and public health to lower costs and improve quality, access and health outcomes for Medicaid beneficiaries.*
- *Local and statewide physician leadership and support.*
- *Recognition that the best source for enabling long-term reform and sustainability must be local.*
- *Financial and technical support from state government and private sources.*

The CCNC program demonstrates that when physicians formally share responsibility for a patient population—with the assistance of case managers and cooperation of staff and patients—positive behavior change will occur. CCNC physicians interviewed for this study felt their Medicaid patients received overall better care and in more appropriate settings, and that caring for Medicaid patients was more desirable, particularly because of the:

- Added services of case managers;
- Added PMPM care management fee and enhanced Medicaid fee-for-service payment (95% of the Medicare fee schedule); and
- Opportunity to participate in the development and application of evidence-based clinical guidelines.

²⁶ Ibid.

²⁷ “Piloting Mental Health Integration in the Community Care of North Carolina Program.” North Carolina Medical Journal, January/February 2006, Vol. 67. No. 1.



Family medicine is in a unique position to improve the quality and lower the cost of care delivered to Medicaid patients by advocating that states re-design their Medicaid care management programs based on this proven CCNC model. There is sufficient evidence now to demonstrate that by developing local care networks with strong physician leadership, applying evidence-based practice guidelines, integrating the concepts of case management and care management, and paying additional fees will result in improved care, reduced costs and increased access for Medicaid patients. States continue to struggle to find ways to improve their Medicaid programs, and state legislatures are demanding greater accountability and a reduction in spending for high cost programs such as Medicaid. Family physicians must provide the guidance and leadership to states to design successful programs to accomplish these goals.



Appendix A: Program Evaluations

Evaluation of Program Cost Savings

The North Carolina Division of Medical Assistance contracted with Mercer Government Human Services Consulting to evaluate cost savings in the Carolina Access program for specified services provided to Medicaid patients for state fiscal years 2003 and 2004.²⁸ Statewide Medicaid claims experience and eligibility data for dates of service in state fiscal years 2000, 2001 and 2002 were used as a program benchmark against which to compare costs and savings, and included all categories of service.

The Mercer Consulting evaluation found considerable Medicaid cost savings in 2003 and 2004 attributable to the Carolina Access program. When compared to statewide historical fee-for-service benchmarks, the study found Carolina Access saved the state between \$195 and \$215 million in 2003, and between \$230 and 260 million in 2004. In comparison to what the Carolina Access program would have cost with any concerted effort to control costs, Mercer also found the program saved between \$50 and \$70 million in 2003 and between \$118 and \$130 million in 2004.

Inpatient services continue to cost significantly less under the Access program (when compared to fee-for-service), and emerging cost savings are indicated for outpatient services as well.

²⁸ "Access Cost Savings-State Fiscal Year 2003 Analysis", Letter to Jeffrey Simms from Mercer Government Human Services Consulting, June 25, 2004. "Access Cost Savings-State Fiscal Year 2004 Analysis", Letter to Jeffrey Simms from Mercer Government Human Services Consulting, March 24, 2005.



Disease Management Study

The state also contracted with the Sheps Center for Health Service Research of the University of North Carolina²⁹ to assess the effectiveness of North Carolina's Medicaid disease management programs. Understanding the effects of a primary care case management and disease management initiative in a statewide Medicaid program is challenging for several reasons.³⁰ Using Medicaid claims and enrollment data, the Sheps study compared the costs and utilization of Medicaid beneficiaries diagnosed with asthma or diabetes who were enrolled in Carolina Access and participated in CCNC (CCNC participation) versus those enrolled in Carolina Access without CCNC participation (Access only).

Asthma Costs

In 2002, the average per member per month (PMPM) costs for people with asthma in 'Access only' was \$534 compared to \$378 for CCNC-participating Access patients. These estimates include all Medicaid costs, including the physician case management fee and the additional CCNC network fee. The data were further adjusted to reflect the age-cohort differences in savings.³¹ The greatest cost savings for CCNC participants were concentrated among individuals 45 years of age and older. 'CCNC care' was more expensive than 'Access only' care for 6-20 year olds (7.1%) and slightly greater for 21-44 year olds (.7%). These two more costly groups comprised 62 percent of the enrolled populations of CCNC. Assuming a constant population for all 12 months, the estimated annual cost savings in 2002 for CCNC was \$1,580,040.

Asthma Utilization

One of the goals of the CCNC program is to better coordinate care to allow disease and its consequences to be prevented or its effects diminished. One indicator of use which has high costs is hospitalization. Medicaid asthma-related hospitalizations on a per-enrollee basis in North Carolina have been historically higher than in the non-Medicaid population. During the three-year study period (state fiscal years 2000-2002), the asthma hospitalization rate among Medicaid enrollees was at least twice that of the non-Medicaid population (except for 2001). Hospitalization rates decreased by 10 percent for all Medicaid patients, but just three percent for the non-Medicaid population.

²⁹ Ibid., Ricketts et al.

³⁰ As the Access program was piloted and later implemented more widely, there is little opportunity to identify clear starting and ending points and to isolate specific program effects. Medicaid patients may switch between Medicaid managed care programs while under care for the same episode of disease or even lose Medicaid coverage entirely. Likewise, the training of care managers and practitioners can only be accomplished incrementally. It is widely accepted that disease management programs do not produce immediate improvements in costs and utilization; in fact, better adherence to drug therapies, which lead to long-term decreases in utilization, can actually lead to short-term increases in costs. Further, the research design must carefully select the measurements on which performance comparisons will be made. The primary foci of Medicaid disease management program evaluations are costs and quality. A wide range of indicators may be used to measure quality, including such process measures as number of health education sessions, essential (disease-specific) screenings and provider adherence to clinical practice guidelines. Outcome measures may include improved clinical indicators (e.g. weight, HbA1c levels) or decreased utilization of inpatient or emergency department services). The decision of which measures to include is important to evaluate the state's initiative and each requires different considerations of the methodological issues used.

³¹ CCNC had a younger enrolled population than Access. A concerted effort was made to enroll pediatric Medicaid providers in the CCNC networks. Eighty-three percent of the CCNC enrollees are under 21 years of age, compared to only 57 percent of the Access enrollees. The cost data were adjusted by the researchers to reflect the differences in age distribution across the two programs.



In 2000, there were 23 percent fewer hospitalizations per 1,000 CCNC enrollees under age 21 than for Access only enrollees. These differences between CCNC and Access only enrollees widened in 2001 and 2002.

A closely related measure of utilization is the intensity of the hospitalizations that do occur, commonly measured as inpatient days, or days spent in the hospital per 1,000 enrollees. Again, the average number of inpatient days per 1,000 asthmatic enrollees was consistently lower for CCNC participants than Access only participants. Overall, inpatient days per 1,000 declined 28 percent for people with asthma enrolled in Access only, and 30 percent for CCNC enrollees. The greatest improvements over the period were observed in the under age 21 cohort. The trends for asthma-related inpatient days are similar to those observed in admissions. Overall, asthma-related admissions per 1,000 declined 48 percent in Access only and 54 percent in CCNC over the three year period. The decline in utilization by asthmatics of the hospital emergency department (ED) was most significant. Overall, the use of the ED declined most substantially for asthma-related conditions in both CCNC and Access only, and the decline was slightly greater among Access only enrollees.

Another measure of utilization that reflects changes in need and/or the effects of preventive services are the use of prescription drugs. Higher costs for prescription drugs may reflect appropriate long-term and measurable cost-savings if subsequent episodes of illness are prevented. The number of prescriptions per enrollee with a diagnosis of asthma has decreased over time for both Access only and CCNC enrollees.

Diabetes Costs

With all age cohorts combined, the average PMPM cost for diabetes in 2002 was \$880 for Access only patients and \$859 for CCNC patients. Based on this difference, the overall savings to CCNC was estimated to be \$306,432 annually or \$2,083,824 over the three years of the study.

Diabetes Utilization

When all hospital admissions for diabetics are counted regardless of the discharge diagnosis, the rate for Access only diabetics ranged from 337 to 352 days, while the rate for CCNC ranged from 288 to 318 days. In all three years, the rate of hospitalization was lower in CCNC, which is one of the goals of the disease management approach.

The diabetic population uses the emergency room with high frequency. While the overall rates are high, there is evidence of some decline over the three years of the study. Overall, there were fewer ED visits for CCNC diabetics than for Access only diabetics. Rates are significantly lower when just examining ED visits for the diagnoses of diabetes. These rates were almost half in 2002 what they were in 2000. Fewer ER visits with the primary diagnosis of diabetes indicates that this population has co-morbidities that may be exacerbated by diabetes. The rate of prescription drug use for the diabetic population has increased over the three years for both Access only and CCNC patients, even though each year the rate is lower for CCNC diabetics by about nine percent.



Conclusion

The Sheps study concludes that the CCNC program has helped reduce overall health care expenditures for individuals with asthma and diabetes, with greater savings for the treatment of individuals diagnosed with asthma than among those with diabetes. Much of the projected savings for people with asthma is due to a reduction in hospital use among enrollees, suggesting that CCNC does a better job helping individuals with chronic illness manage their health care problems. The Medicaid program may have saved approximately \$3.3 million in the three year time period for CCNC enrollees with asthma over what the state would have spent if these individuals were enrolled only in Access. The projected savings for diabetes care for the three year period totals nearly \$2.1 million. The CCNC program appears to have had more impact at reducing costs among older groups than among younger populations. The authors projected a potential savings of an additional \$5.9 million in 2002 if all the Access enrollees had been enrolled in CCNC.³²

The authors conclude that it may take several years for CCNC to see a real improvement in health status with the related reduction in health care costs. The state may be able to achieve additional cost savings as the program is rolled out across the state and an older population is enrolled. The authors observe that the greatest potential for future cost savings lies in reducing practice variations among network sites toward the patterns of the more effective practices. For example, the average PMPM costs of treating children with asthma varied from a low of \$153 in Wilson County to a high of \$403 in Buncombe County, with a statewide average of \$286.

Discussion and Further Study

Future savings may be difficult to achieve and sustain. Practice patterns of decision making are not easily changed. The success of the CCNC program is largely dependent on the cooperation of primary care providers willing to follow prescribed practice guidelines and disease management initiatives. The CCNC program has primarily operated in communities where the providers voluntarily chose to participate. These providers have expressed a willingness to follow new treatment guidelines, to work closely with case management staff, and to have their caseloads closely monitored to determine if they are adhering to practice guidelines, and therefore are more likely to "buy in" to the program.

The Sheps Center evaluation focused primarily on the effects of disease management and adherence to practice guidelines on asthma and diabetes. It would be a serious mistake to assume that the positive outcomes and savings are attributed solely to adherence to these criteria. There is no independent evaluation of the effect of the case management services independent of disease management. Disease management is an integral part but only one of the critical components of the CCNC program. The case managers intervene in issues of transportation to get to an appointment for the enrollee, eliminate barriers to services, assist in the coordination of care thereby potentially avoiding duplication and redundancy, provide education, provide information and feedback to the providers and coordinate with other health and social service agencies to arrange for meeting the human service needs of the enrollees. Also, the interagency coordination between the County social services department, health department and mental health services can not be quantified or adequately evaluated.

³² Since the number of Medicaid beneficiaries was low during the period of these studies and is now substantially larger, there are plans to replicate the study.



The clinical directors of the networks universally indicated that the case managers are a critical component of the overall success of the program and stated that the providers have found their services to be invaluable in meeting the myriad of education, health and social service needs of their patients.

Since initiating the asthma and diabetes disease management initiatives, an independent chart audit demonstrated a 21 percent increase in the number of patients with asthma who have been staged and a 112 percent increase in the number of asthma patients receiving flu vaccines. Early results from the diabetes initiative demonstrate improvement in process measures and implementation of evidence-based best practice guidelines. Randomized chart audits demonstrated a 7 percent increase in referrals for dilated eye exams and a 23 percent increase in foot exams being performed on a bi-annual basis.



Appendix B: Persons Interviewed for the Case Study

Allen Dobson, MD, Assistant Secretary for Health Policy and Medical Assistance, North Carolina
Department of Health and Human Services, Raleigh

Jeffrey Simms, MPH, Assistant Director, North Carolina Division of Medical Assistance, Raleigh

Denise Levis, BSN, MSPH, Director of Quality Improvement/Senior Consultant, CCNC Program,
Raleigh

Torlen Wade, MPH, Director, North Carolina Office of Research, Demonstrations and Rural Health
Development and Community Care of North Carolina, Raleigh

Rob Sullivan, MD, Medical Director, Community Care of North Carolina, Raleigh

Steve Crane MD, Vice Chair, Access II Care of Western North Carolina and Residency Program
Director, Hendersonville Family Practice Residency Program, Hendersonville

Susan Mims, MD, Chair, Access II Care of Western North Carolina and Medical Director, Buncombe
County Health Center, Asheville

Jennifer Wehe, Interim Executive Director, Access II Care of Western North Carolina, Asheville

Claudette Johnson, RN, Executive Director, Partnership for Health Management, Greensboro

Marian Earls, MD, Medical Director, Guilford Child Health, Greensboro

Steve Wegner, MD, JD, President and Medical Director, AccessCare Inc., Morrisville

John Bristol, MBA, Vice President of Operations, AccessCare, Inc., Morrisville

Chuck Wilson, MD, Medical Director, Community Care Plan of Eastern Carolina, Greenville

Michelle Brooks, RN, Executive Director, Community Care Plan of Eastern Carolina, Greenville

Sue Makey, Executive Vice President, North Carolina Academy of Family Physicians, Raleigh

Peyton Maynard, Legislative Consultant, North Carolina Academy of Family Physicians, Raleigh

Sonya Bruton, MS, Executive Director, North Carolina Community Health Center Association,
Morrisville

E. Benjamin Money, Jr. MPH, Associate Director, North Carolina Community Health Center
Association, Morrisville

Anne Marie Lester, Healthy Communities Access Program Coordinator, Hendersonville

State Senator Bill Purcell, 25th District

Hugh Tilson, Jr. and Jeff Spaid, North Carolina Hospital Association, Raleigh

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