

## The Effects of the 1997 Balanced Budget Act on Family Practice Residency Training Programs

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**Background and Objectives:** *This study assessed the impact of the Balanced Budget Act (BBA) of 1997 on family practice residency training programs in the United States. **Methods:** We surveyed 453 active family practice residency programs, asking about program closures and new program starts (including rural training tracks), changes in the number of residents and faculty, and curriculum changes. Programs were classified according to their urban or rural location, university or community hospital setting, and rural and/or urban underserved mission emphasis. **Results:** A total of 435 (96%) of the programs responded. Overall, the impact of the BBA was relatively small. In 1998 and 1999, nationwide, there were 11 program closures, a net decrease of only 82 residents, and a net increase of 52 faculty across program settings and mission emphasis. The rate of family practice residency program closures increased from an average of 3.0 per year between 1988–1997 to 4.8 per year in the 4 years following passage of the BBA. **Conclusions:** The 1997 BBA did not have an immediate significant negative impact on family practice residency programs. However, there is a worrisome increase in the rate of family practice residency closures since 1997. A mechanism needs to be established to monitor all primary care program closures to give an early warning should this trend continue.*

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The Balanced Budget Act (BBA) of 1997, designed to control Medicare costs, has had a major influence on graduate medical education (GME) programs and teaching hospitals. Teaching hospitals not only train future physicians and other health care professionals but also provide a substantial amount of care to the most vulnerable sectors of the population, including Medicare beneficiaries. It is in the public interest to ensure that these hospitals do not founder.<sup>1</sup>

The political outcry that followed the adoption of the BBA led Congress to pass the Balanced Budget Refinement Act (BBRA) in 1999, mitigating several of the potential adverse effects of the BBA. The BBRA increased exceptions to the resident cap for rural train-

ing programs, delayed the implementation of some of the reductions in GME funding, and softened some of the payment reductions (Table 1). The Benefits Improvement and Protection Act (BIPA) of 2000 further delayed the implementation of certain provisions of the 1997 BBA and increased some of the original reimbursement reductions. Despite these subsequent legislation changes, there is still concern that changes in federal support for GME will affect the ways in which physicians are trained. Indeed, the full effect of the BBA and the subsequent modifications can only be evaluated over time.

In 1998, Medicare paid \$7.09 billion in GME funding to teaching hospitals, down from \$8.41 billion in 1996, a 16% reduction.<sup>2</sup> Funding reductions resulting from the BBA had the potential to affect not only the numbers of residents in training but also their specialty distribution. A major concern was that the reductions in funding proposed by the BBA were likely to affect primary care physician training disproportionately since these programs accomplish a large part of their training outside the inpatient setting of the hospital. This is

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Table 1

### Key Provisions of the Balanced Budget Act (BBA) of 1997 and the Balanced Budget Refinement Act (BBRA) of 1999 Affecting Graduate Medical Education Funding

The BBA of 1997 made substantial changes to nearly all aspects of the Medicare program to contain spending. The BBRA of 1999 makes some revisions and delays to the BBA.

*Examples:*

Balanced Budget Act of 1997

- GME training payment reform (eg, cap on number of residents, reduction in IME payment increases)
- Reductions in payment via new prospective hospital outpatient payment system
- Reductions in payment for home health services per prospective payment system and other changes
- Phaseout of cost reimbursement requirement for FQHCs and RHCs
- Decrease in annual increase in hospital inpatient payment and reduction of DSH payments
- Reductions in payment for skilled nursing care via new prospective payment system
- Creation of Rural Hospitals Flexibility Program (ie, Critical Access Hospitals)
- Medicare + Choice Risk Contract payment

Balanced Budget Refinement Act of 1999

- Specifies exceptions to cap, delays IME reductions with phased-in implementation, and makes DME changes
- Restores 5.7% of BBA cuts, creates 3-year transition period to cushion PPS losses, and creates outlier protection for drugs/devices
- Delays implementation of 15% payment reduction for 1 year and increases BBA beneficiary limits
- Delays implementation until 2003
- Delays implementations through phases and adjustments
- Provides temporary increases in payments for 15 RUGs and makes other adjustments
- Broadens program inclusion criteria for cost-based reimbursement status
- Adds provisions to make managed care programs somewhat more attractive

DME—direct medical education reimbursement

DSH—disproportionate share hospital

FQHC—federally qualified health center

GME—graduate medical education

IME—indirect medical education reimbursement

PPS—prospective payment system

RHC—rural health center

RUG—resource utilization group

important since several authorities are on record indicating an ongoing need for primary care physicians and especially rural physicians.<sup>3-6</sup>

Family practice residency programs have always depended on federal support, both through Medicare GME funds and Title VII grants for postgraduate training. Eighty percent (378/472) of all family practice residency programs are located in community hospitals, and of these, 55% (209/378) are sole residencies in those hospitals. Community hospitals were especially affected by the cap on full-time equivalent (FTE) resident positions and their inability to shift FTEs from one program to another under their designated institutional cap. Larger teaching hospitals and academic medical centers with multiple residency programs were expected to have more flexibility in absorbing the potential funding cuts, although negative effects were expected for them too. It was feared that, faced with significant budget shortfalls, community hospitals would reduce or

eliminate programs that did not contribute directly to their bottom line. This is more than a parochial concern given that the majority of family practice residents are trained in community hospital settings, and family physicians are significantly more likely than general internists or pediatricians to locate in rural underserved areas (21% versus 8% versus 7%).<sup>7</sup>

In late 1998, the University of Washington Rural Health Research Center (RHRC) was funded by the Federal Office of Rural Health Policy to undertake a study of family practice resident training in rural settings. Because the survey had not yet been mailed when the BBA was enacted, we were able to add questions relating to the BBA's effect. This study's purpose was to replace anecdotal information about the effect of these measures with systematic research evidence and to create a baseline against which future changes can be measured.

## Methods

### Instruments

We surveyed every family practice residency program in the United States to determine the effect of the BBA changes in Medicare GME funding on family practice residency programs. We developed a 16-item questionnaire for this purpose. The questionnaire was reviewed by the 16 University of Washington-Affiliated Family Practice Residency Network directors and the Project Advisory Committee and modified according to their advice.

Closed-end questions on the questionnaire addressed changes in residency programs, including the number of residents and faculty, program closure, rural training track closure or start-up, and curriculum adjustments. Open-ended questions asked family practice residency directors to comment on the changes in their programs that they attributed to the BBA and the year these changes occurred, 1998–1999 or 1999–2000.

### Survey Methods

Surveys were mailed to the directors of all 478 family practice residency programs listed in the 2000 American Academy of Family Physicians (AAFP) *Directory of Family Practice Training Programs*.<sup>8</sup> Two subsequent mailings were sent to nonrespondents, and a regional encouragement network consisting of key contacts through the Association of Family Practice Residency Directors (AFPRD) was activated to ensure the highest possible response rate. The mailings took place during January 2000 to May 2000. The remaining nonresponding programs were contacted personally by one of the investigators. In cases where critical responses were contradictory or incomplete, the programs were contacted for clarification.

Out of the original 478 programs listed in the directory, two programs had actually closed and combined with a third in the same hospital system (a reduction of two programs and a net reduction in the number of residents), two had never opened, and two had been approved but had not recruited residents in 1998 and 1999 (n=6). Military programs (n=13), which do not receive Medicare GME, and programs in Puerto Rico (n=6) were excluded. There were thus 453 eligible programs in the final sample.

### Data Coding

Programs were classified as community based or university

based using the AAFP-designated criteria.<sup>8</sup> Programs that responded that urban-underserved or rural training were “very important” program objectives were classified as having an urban-underserved or rural mission emphasis, respectively. These categories were not mutually exclusive. Using the programs’ zip codes, we classified their geographic location by Rural-Urban Commuting Areas (RUCAs)<sup>9</sup> (Web address: [www.fammed.washington.edu/wwamirhrc/rucas.htm](http://www.fammed.washington.edu/wwamirhrc/rucas.htm)). This enabled us to divide the programs into urban settings (RUCAs 1.0–3.0, 4.1, 5.1 7.1, 8.1, 10.1), large rural towns (RUCAs 4.0, 5.0, 6.0), and small rural communities (RUCAs 7.0–10.5).

The reported program closures, rural training track (RTT) closures, and startups between 1998 and 2001 were confirmed with the Residency Review Committee for Family Practice (RRC) and the American Board of Family Practice (ABFP). There is no single repository where this information is maintained, and it was necessary to reconcile small differences in which of the years the closures and startups occurred. The RRC only keeps records of program closures for 3 years, after which the data are purged.

### Data Analysis

This descriptive study includes nearly all family practice residency programs, making analytical statistics unnecessary. Any differences noted in fact do describe the reality, even though some of the numbers are small.

## Results

Ninety-six percent of all eligible programs (435/453) responded to the survey. Of these, 402 programs (92%) were located in an urban setting, 28 programs in a large rural town, and five programs in a small rural community (Table 1). For comparison, 93% of all family practice programs (402 respondents plus the 18 nonrespondents—430/453) are located in urban areas.

Table 2

Training Mission Emphasis by Rural/Urban Location of Parent Program

Location of Parent Program*	Total Number	MISSION EMPHASIS			
		Rural Very Important	Urban Underserved Very Important	Both Rural and Urban Underserved Very Important	Neither Important
Small rural	5	5 (100%)	0	0	0
Large rural	28	19 (68%)	0	4 (14%)	5 (18%)
Urban	402	96 (24%)	104 (26%)	54 (13%)	148 (37%)
Total	435	120 (28%)	104 (24%)	58 (13%)	153 (35%)

\* According to RUCA<sup>9</sup> (Rural-Urban Commuting Areas).

### Program Mission

The directors of all five programs located in small rural communities reported a rural mission emphasis. The majority (68%) of programs in large rural towns also stated that they had an explicit rural training mission, compared to only 24% of programs in urban settings. However, 65% (282/435) of all respondents reported having either a rural (n=120) or an urban-underserved (n=104) mission or both (n=58) (Table 2).

### Residency Size

A relatively small proportion of programs indicated that they experienced a decrease in the number of residents and faculty as a result of the BBA (Table 3). Twelve percent of programs in urban locations (48/402) and 11% in large rural towns (3/28) experienced an absolute decrease totaling 161 residents (Table 3). Fifty-four percent of this reduction (87/161) occurred in 24 urban-underserved mission emphasis programs (Table 4). The net decrease nationwide, however, was only 82 residents, with 56 coming from these urban-underserved mission emphasis programs. This represents a 2.5% reduction in the number of first-year family practice residency positions nationally. There was an overall net increase of 51.7 FTE faculty distributed across program settings and mission emphasis.

### Program Closures and Starts

Nine programs reported closing in 1998 and 1999 as a result of the BBA. All nine were located in urban settings (Table 3), but five of these were programs with

an underserved mission emphasis (Table 4). Four programs had rural training tracks, and directors attributed closure of their rural training track to the BBA. Seven programs reported that they planned to start a rural training track. The RRC and the ABFP identify 11 programs closing in 1998 and 1999, including the nine survey respondents plus the two programs that closed and combined with a third program in the same hospital system. Since completion of the survey, there have been an additional eight confirmed program closures (Table 5).

### Aftereffects of the BBA

Fifty-eight programs (13%) reported that they had to implement curriculum adjustments due to the BBA (Tables 3 and 4). Eighty-eight programs supplied written-in comments, with more than 99% having a largely negative and pessimistic tone. Some examples are shown in Table 6.

### Discussion

This national survey shows that contrary to widely held perceptions in 1998 and 1999, the 1997 BBA did not have a significant negative influence on the number of family practice residents in training. There was a net reduction of only 82 residents (2.5% compared to 1999) in the 2 years immediately following the passage of the BBA, although urban-underserved mission emphasis programs were affected disproportionately. There was also a net increase in the number of faculty in that same time period, but this is most likely attrib-

Table 3

#### Changes Attributed to the Balanced Budget Act by Program Urban/Rural Location, July 1998 to June 2000

EFFECT	Urban Programs (n=402)			Large Rural Programs (n=28)			Small Rural Programs (n=5)			Total Programs (n=435)		
	#	%	Sum +/-	#	%	Sum +/-	#	%	Sum +/-	#	%	Sum +/-
<b>Resident changes</b>												
No change	298	74	—	24	86	—	5	100	—	327	75	—
Decrease	48	12	-154	3	11	-7	0	0	0	51	12	-161
Increase	16	4	+79	0	0	0	0	0	0	16	4	+79
Not reported	40	10	—	1	4	—	0	0	—	41	9	—
Total	402	100	-75	28	100	-7	5	100	0	435	100	-82
<b>Faculty changes</b>												
No change	286	71	—	18	64	—	2	40	—	306	70	—
Decrease	43	11	-75	3	11	-4	0	0	0	46	11	-79
Increase	36	9	+119	6	21	+9	2	40	+3	44	10	+133
Not reported	37	9	—	1	4	—	1	20	—	39	9	—
Total	402	100	+44	28	100	+5	5	100	+3	435	100	+52
<b>Program changes</b>												
Closed program	9	2	—	0	0	—	0	0	—	9	2.1	—
Discontinued RTT	4	1	—	0	0	—	0	0	—	4	.9	—
Implemented RTT	7	2	—	0	0	—	0	0	—	7	1.6	—
Curriculum adjustment	55	14	—	3	11	—	0	0	—	58	13.3	—

RTT—rural training track

Table 4

Changes Attributed to the Balanced Budget Act by Program Training Emphasis, July 1998 to June 2000

EFFECT	Urban Underserved Programs			Rural Programs			Both Programs			Neither Program			Total Programs		
	#	%	Sum +/-	#	%	Sum +/-	#	%	Sum +/-	#	%	Sum +/-	#	%	Sum +/-
Resident changes															
No change	74	71	—	96	80	—	43	74	—	114	81	—	327	75	—
Decrease	18	17	-69	11	9	-25	6	10	-18	16	10	-49	51	12	-161
Increase	4	4	+26	3	3	+31	3	5	+5	6	4	+17	16	4	+79
Not reported	8	8	—	10	8	—	6	10	—	17	11	—	41	9	—
Total	104	100	-43	120	100	+6	58	100	-13	153	100	-32	435	100	-82
Faculty changes															
No change	76	73		87	73	—	36	62	—	107	70	—	306	70	—
Decrease	13	13	-32.3	9	8	-10	8	14	-11.5	16	10	-24.9	46	11	-79
Increase	8	8	+24.5	15	13	+28.8	8	14	+51.4	13	8	+26.7	44	10	+133
Not reported	7	7		9	8	—	6	10	—	17	11	—	39	9	—
Total	104	100	-7.8	120	100	+18.8	58	100	+39.9	153	100	+3.8	435	100	+52
Program changes															
Closed program	4	4	—	1	1	—	0	0	—	4	3	—	9	2.1	—
Discontinued RTT	1	1	—	2	2	—	1	2	—	0	0	—	4	.9	—
Implemented RTT	0	0	—	3	3	—	3	5	—	1	1	—	7	1.6	—
Curriculum adjustment	18	17	—	17	14	—	5	9	—	18	12	—	58	13.3	—

RTT—rural training track

Table 5

Number of Program Closures and New Program Starts, 1988–2001 (Excludes Rural Training Tracks [RTT])\*

Year	Program Closures**		New Program Starts***	
	#	Mean/Year	#	Mean/Year
1988–1997	30	3.0	135	13.5
1998–2001§	19	4.8	22	5.5

\* Between 1998 and 2001, there were four RTT closures and 10 new RTT starts.

\*\* Data source: Accreditation Council for Graduate Medical Education Residency Review Committee for Family Practice (RRC) and the American Board of Family Practice

\*\*\* Data source: American Academy of Family Physicians Robert Graham Center—refers to year of RRC action

§ 1998—Three program closures and 16 new program starts  
 1999—Eight program closures and six new program starts  
 2000—Two program closures and 0 new program starts  
 2001—Six program closures and 0 new program starts

Table 6

Comments From Respondents About Effects of the Balanced Budget Act (BBA)

- “We eliminated our rural family practice rotation.”
- “Had to eliminate continuity clinic in rural area due to lack of support from hospital.”
- “Limited rotations away from the primary hospital to maximize resident FTE counts.”
- “BBA blocked our plan to go from a 12- to 18-resident program.”
- “Budget reductions decreased available funds for faculty to attend conferences.”
- “Much more time dedicated to faculty documentation than teaching residents.”
- “Had to discontinue community physician preceptors for compliance reasons.”
- “Almost lost the entire residency. To survive went from two training sites to one, reduced faculty from 11 to seven, and reduced resident number from 18 to 12.”

Only one response had a somewhat positive tone:

- Faculty are participating more in outpatient precepting and in personal lecture time.”

FTE—full-time equivalent

uted to some new programs still adding faculty and established programs needing more faculty to meet clinical service obligations. The 96% response rate makes these data highly representative.

As a result of the growth of managed care in the 1990s and the documented need for more primary care physicians, the number of family practice residency programs increased by 22% (381 to 465) between 1988 and 1997 and the number of residents by 45% (7,279 to 10,531).<sup>10</sup> Concomitant with this rapid growth, there were also program closures. The pace of program closures after the 1997 BBA, however, appears to be accelerating and increased from an average of 3.0 per year between 1988 and 1997 to 4.8 per year between 1998 and 2001 (Table 4). Out of 19 program closures recorded after 1997, 15 occurred in community hospital-based family practice residencies. In 1999, there were more program closures than new programs starting (eight versus six), which is the first time this had happened in the previous 2 decades. There were no new program starts in both 2000 and 2001, which is also a first. Although it is difficult to be absolutely sure about the true causes for these closures, the survey did ask program directors to note changes that they attributed to the BBA.

What is to be made of these findings? The immediate consequence of the BBA of 1997 appears to have been much less negative than initially feared by teaching hospitals and the advocates for primary care physician training. One might argue that government funding decisions are not a major factor in influencing the viability of primary care training programs. However, the increasing rate of family practice program closures in the past 4 years is worrisome and needs to be closely monitored. The residency directors surveyed in this study predicted further closures of residencies in the years to come as community hospitals struggle with decreasing revenues, making it more difficult to maintain family practice training programs despite the fact that the BBRA of 1999 mitigated some of the more concerning provisions of the BBA. An added concerning factor is the persistent and growing trend of US medical school graduates to choose specialty careers, making it harder to fill family practice residency positions with US medical school graduates. In 1996, only 75% of family practice positions offered in the Match were filled with US seniors, and this figure has decreased every year since 1996 to 50% in 2001.<sup>11</sup>

The decline in both student interest and new program starts in family practice is certainly affected by other contemporaneous factors as the health care system evolves. The retreat from managed care, the decline in hospital-supported primary care networks, and a push for open access to specialist care and technical procedures all contribute to diminishing the attractiveness of family practice as a career choice for US seniors.

Why is this important? The declining interest of US graduates in family practice is troubling because it portends a potential crisis in health care delivery similar to the mid-1960s, with once again growing physician specialty and geographic maldistribution. Specialty-trained physicians are much less likely to locate in rural areas, especially the smaller or more remote towns.<sup>12</sup> Family physicians are more likely to locate in rural underserved areas than any other primary care specialty.<sup>13</sup> An ever-increasing proportion of specialty-trained physicians will likely drive up the costs in the provision of health care.<sup>14-18</sup> A critical factor in controlling costs is continuing to strive for a better balance between specialty and generalist physicians.

What should be done? Access to health care and controlling health care costs must continue to be an important focus of government policy. Care must be exercised that the very training programs that are the most needed to address both these problems are not damaged by changes in government support for graduate medical education. The effects of current and future government policy changes need to be monitored by ongoing studies such as this one. The AAFP, through the Robert Graham Center for Health Policy, could identify counterparts in the American College of Physicians and the American Academy of Pediatrics to establish a consolidated database to monitor program closures and other changes. More should be done to establish linkages to citizen groups advocating for access to health care on behalf of vulnerable and underserved populations.

We enter the new millennium with a great deal of uncertainty surrounding the future of the health care delivery system in the United States. It behooves advocates for access to high-quality, cost-effective medical care for all Americans to be vigilant regarding government policies that could affect GME funding and reimbursement for primary care physician services, unintentionally or otherwise. Further funding changes are inevitable, and proactive steps need to be taken now to be able to monitor the effects of such changes and respond in a timely fashion.

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