

Acknowledgments

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References

1. Centers for Disease Control. Consensus set of health status indicators for the general

assessment of community health status—United States. *MMWR*. 1991;40:449–451.

2. Year 2000 Planning Act, Pub L No. 101-582, 42 USC § 246 (1990).
3. *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. Washington, DC: US Dept of Health and Human Services, Public Health Service; 1990. DHHS publication PHS 91-50212.

4. Institute of Medicine. *The Future of Public Health*. Washington, DC: National Academy Press; 1988.

5. Klein RJ, Hawk SA. Health status indicators: definitions and national data. *Healthy People 2000 Statistical Notes*. (Hyattsville Md: National Center for Health Statistics.) Spring 1992;1(3):1–8. DHHS publication PHS 92–1237.

ABSTRACT

The number of Medicare-certified home health agencies nearly doubled from 1980 to 1990. Using Health Care Financing Administration data, this study documented national and regional patterns of entry and exit by Medicare home health providers from 1980 to 1990. Nationally, agency origination rates accelerated during the early 1980s and then dropped abruptly in the second half of the decade. The proprietary sector, accounting for approximately 42% of agencies in existence during the period of the study, exhibited the greatest volatility. Regional differences are also evident. Both expansion and contraction in Medicare home health services appear to be a response to the incentives of legislation implemented during this period. (*Am J Public Health*. 1994;84:1646–1648)

Medicare-Certified Home Health Services: National and Regional Supply in the 1980s

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Introduction

Between 1967 and 1990, Medicare payments for home health care increased from \$25 million to an estimated \$4 billion, making such care the fastest growing sector of Medicare expenditures.^{1–3} Although demand factors are consistent with continuing industry growth, exit from the Medicare market by home health care providers has been more common than entry since 1987.⁴ This study documented variations in the national and regional distribution of Medicare-certified home health agencies during the 1980s.

Methods

Using Health Care Financing Administration (HCFA) data, we constructed a database consisting of all Medicare-certified home health agencies in existence from January 1, 1980, through June 30, 1990 (n = 8593). Agencies were grouped into one of four categories assigned by the Medicare program. A proprietary agency is owned and operated for profit by an individual or a business corporation. Government agencies are run by state, county, or city or other local municipalities. Voluntary agencies are governed by community-based boards and financed by earnings and contributions (mainly visiting nurse associations). Non-profit agency is a residual category consisting of private, nonprofit facilities operated by all other entities. From these data, we calculated (1) the rate of home health

agency origination and termination nationally between 1980 and 1990, (2) regional patterns of origination and termination in each of the 10 HCFA designated fiscal intermediary regions, and (3) variation in Medicare home health agency market entry and exit by agency category. Although identified by the city location of the HCFA regional office, each region represents several states. For example, the Boston region covers all of New England.

The origination rate, defined as the annual incidence of newly certified home health agencies, was calculated as the number of newly certified agencies in the current year divided by the number of operating agencies in the prior year. Agencies established before 1980 were included in the denominator, but not the numerator, of the calculation. The termination rate, defined as the annual rate of attrition from the Medicare program, was calculated as the number of home health agencies terminating participation in the current year divided by the peak number

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of certified agencies in operation in the current year.

Results

The origination rate for Medicare-certified home health agencies accelerated during the early 1980s and then dropped abruptly during the latter part of the decade (Figure 1). The Medicare program certified only 233 new agencies in 1980. That number peaked at 1213 in 1984 and then declined to 297 in 1988. Medicare termination rates peaked later in the decade than did origination rates. In 1980, 89 agencies lost their Medicare certification; this number increased to 523 in 1987 and dropped to 263 in 1989. Six regions (Atlanta, Chicago, Denver, Kansas City, Philadelphia, and Seattle) exhibit patterns of market entry across time that approximate the national experience. In Dallas and San Francisco, market entry peaked slightly earlier, in 1983, but exhibited the same pattern of decline and leveling through the remainder of the decade. By contrast, the patterns of origination over time in the Boston and New York regions are relatively flat. All regions approximate the national pattern of terminations portrayed in Figure 1, with rates peaking in 1987 or 1988.

Of the 8593 certified agencies in operation at any time from 1980 to mid-1990, 1508 (17.6%) were voluntary, 2007 (23.4%) were governmental, 3620 (42.1%) were proprietary, and 1458 (17.0%) were private nonprofit. Nationally, rates of origination and termination vary by agency category. Of the 1508 voluntary agencies in operation at any time during the decade, 659 (43.9%) originated and 333 (22.1%) terminated. In comparison, 3284 (90.7%) of the 3620 proprietary agencies originated, and 1551 (42.9%) terminated, during the decade. Originations among private nonprofit home health agencies occurred almost as rapidly: 1078 (73.9%) during the decade. Terminations among private nonprofit agencies were less frequent. Of the 1458 existing, 371 (25.5%) terminated during the decade. For the 2007 government agencies, origination and termination rates were essentially the same: 29.4% (591) and 31.7% (637), respectively.

Seven regions had net percentage increases in the number of home health agencies in operation between 1979 and 1990 that exceeded the national average of 99% (Table 1). The vast majority of agencies in all regions in 1979 were classified as either voluntary or govern-

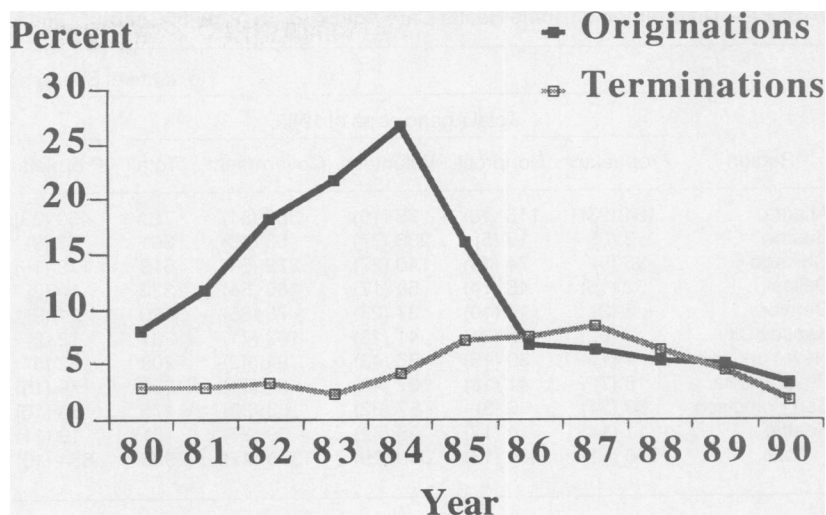


FIGURE 1—Annual rates of origination and termination of Medicare-certified home health agencies in the United States, 1980 to 1989.

TABLE 1—Regional Patterns of Home Health Care Agency Originations, Terminations, and Net Change, 1979 to 1990

	Total of Region as of 1979	Total Agency Originations, 1980–1990	Total Agency Terminations, 1980–1990	Total Agencies as of 1990	Net Increase, 1979–1990, %
All agencies	2935	5747	2847	5836	99
Atlanta	721	1050	379	1392	93
Boston	301	345	113	533	77
Chicago	519	1128	449	1198	131
Dallas	336	951	875	412	23
Denver	120	268	145	243	103
Kansas City	231	510	186	555	140
New York	200	301	38	463	132
Philadelphia	250	579	287	542	117
San Francisco	176	542	308	410	133
Seattle	81	154	66	169	109

mental (Table 2). As indicated in Table 3, originations by agency type of control showed substantial regional effects. In virtually all regions, the agency category with the greatest market share at the beginning of the decade also accounted for the highest proportion of new entrants during the decade. In seven of the regional markets, the highest proportion of terminations occurred in the proprietary category (Table 3). In every region, with the exception of Kansas City, the control type with the greatest percentage of originations during the decade also experienced the greatest percentage of terminations.

It is clear from the difference in the rates of origination and termination that

some regional markets were more volatile than others. For example, 70% of San Francisco region proprietary agencies in existence at any time during the decade terminated Medicare participation (Table 2). Some regions, notably Kansas City and New York, showed very little change in market share by agency type from the beginning to the end of the decade.

Discussion

Industry growth early in the decade may be linked to legislation that deregulated the industry and stimulated privatization. With the passage of the Omnibus Budget Reconciliation Acts of 1980 and 1981, state licensure requirements for

TABLE 2—Distribution of Home Health Care Agencies, by Type of Control, 1980 to 1990

Region	No. (Market Share, %)									
	Total Agencies as of 1980					Total Agencies as of 1990				
	Proprietary	Nonprofit	Voluntary	Government	Total	Proprietary	Nonprofit	Voluntary	Government	Total
Atlanta	164 (23)	116 (16)	75 (10)	366 (51)	721	460 (33)	270 (19)	122 (9)	540 (39)	1392
Boston	0 (0)	15 (5)	233 (77)	53 (18)	301	47 (9)	52 (10)	375 (70)	59 (11)	533
Chicago	26 (5)	74 (14)	140 (27)	279 (54)	519	119 (10)	236 (20)	325 (27)	518 (43)	1198
Dallas	52 (15)	46 (14)	58 (17)	180 (54)	336	10 (2)	90 (22)	78 (19)	234 (57)	412
Denver	3 (3)	12 (10)	27 (23)	78 (65)	120	21 (9)	65 (27)	57 (23)	100 (41)	243
Kansas City	1 (0)	26 (11)	41 (18)	163 (71)	231	12 (2)	79 (14)	119 (21)	345 (62)	555
New York	1 (1)	30 (15)	85 (43)	84 (42)	200	22 (5)	83 (18)	201 (43)	157 (34)	463
Philadelphia	18 (7)	41 (16)	107 (43)	84 (34)	250	79 (15)	129 (24)	227 (42)	107 (20)	542
San Francisco	60 (34)	6 (3)	57 (32)	53 (30)	176	65 (16)	46 (11)	172 (42)	127 (31)	410
Seattle	11 (14)	14 (17)	26 (32)	30 (37)	81	19 (11)	46 (27)	58 (34)	46 (27)	169
Total	336 (11)	380 (13)	849 (29)	1370 (47)	2935	854 (15)	1096 (19)	1690 (29)	2195 (38)	5836

TABLE 3—Distribution of Home Health Care Agency Terminations and Originations, by Type of Control, 1980 to 1990

Region	No. (% of All Originations or Terminations)									
	Originations					Terminations				
	Proprietary	Nonprofit	Voluntary	Government	Total	Proprietary	Nonprofit	Voluntary	Government	Total
Atlanta	460 (44)	205 (20)	85 (8)	300 (29)	1050	164 (43)	51 (13)	38 (10)	126 (33)	379
Boston	75 (22)	41 (12)	199 (58)	30 (9)	345	28 (24)	4 (4)	57 (50)	24 (21)	113
Chicago	352 (31)	227 (20)	238 (21)	311 (28)	1128	259 (58)	65 (14)	53 (12)	72 (16)	449
Dallas	488 (51)	169 (18)	78 (8)	216 (23)	951	530 (61)	125 (14)	58 (7)	162 (19)	875
Denver	68 (25)	73 (27)	48 (18)	79 (29)	268	50 (34)	20 (14)	18 (12)	57 (39)	145
Kansas City	107 (21)	80 (16)	97 (19)	226 (44)	510	96 (52)	27 (15)	19 (10)	44 (24)	186
New York	28 (9)	59 (20)	134 (45)	80 (27)	301	7 (18)	6 (16)	18 (47)	7 (18)	38
Philadelphia	229 (40)	130 (22)	150 (26)	70 (12)	579	168 (59)	42 (15)	30 (10)	47 (16)	287
San Francisco	220 (41)	65 (12)	150 (27)	107 (20)	542	215 (70)	25 (8)	35 (11)	33 (11)	308
Seattle	42 (27)	38 (25)	39 (25)	35 (23)	154	34 (52)	6 (9)	7 (11)	19 (29)	66
Total	2069 (36)	1087 (19)	1175 (20)	1416 (25)	5747	1551 (54)	371 (13)	334 (12)	591 (21)	2847

Note. Originations and terminations occurring prior to 1980 are not included.

Medicare certification were gradually eliminated, opening a floodgate for the entry of proprietary agencies in the home care field.⁴⁻⁵ The Tax Equity and Fiscal Responsibility Act of 1982 introduced prospective payment for hospitals while retaining cost-based retrospective reimbursement for home care, contributing to the proliferation of hospital-sponsored agencies.^{1,7} Paradoxically, whereas for-profit agencies aggressively entered markets in virtually all regions, there was also a higher percentage of terminations among such agencies, averaging 43% nationally as compared with 22% for voluntary agencies and 26% for private nonprofit agencies. Lack of policy coordination may well have contributed to these patterns of

growth and decline. In 1985 and 1986, fiscal intermediaries took measures that placed more restrictive conditions on eligibility for home health services under Medicare. As a result, increasing numbers of claims were retrospectively denied on the basis of lack of medical necessity or procedural technicalities.⁷ Thus, while some federal policies were intended to stimulate private sector growth and competition, the reimbursement policies of Medicare intermediaries may have thwarted that intent, leading to an increasing termination of participation that peaked in 1987. Further research is needed to assess the impact of growth and decline in Medicare home health participation on access in selected markets. □

References

1. Wood JB. The effects of cost-containment on home health agencies. *Home Health Services Q.* 1986;10(4):59-78.
2. *Health Care Financing: Program Statistics.* Washington, DC: Health Care Financing Administration; 1989. HFCA publication 03270.
3. Rappaport M, Wood JB. Financing and home health agencies. *Home Health Services Q.* 1989;10(3/4):131-147.
4. Scalzi C, Meyer M. Model of factors impacting closures and mergers of VNA home care agencies. *Home Health Services Q.* 1992;12(4):113-124.
5. Omnibus Budget Reconciliation Act of 1980. Pub L No. 96-499.
6. Omnibus Budget Reconciliation Act of 1981. Pub L No. 97-35.
7. Keenan JM, Fanale JE, Ripsin C, Billows L. A review of federal home-care legislation. *J Am Geriatr. Soc.* 1990;38:1041-1048.