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# Trends in the Health Status of Medicare Risk Contract Enrollees

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*Previous research has found Medicare risk contract enrollees to be healthier than beneficiaries in fee-for-service (FFS). Medicare Current Beneficiary Survey (MCBS) data were used to examine trends in health and functional status measures among risk contract and FFS enrollees from 1991 to 2004. Risk contract enrollees reported better health and functioning, but the differences tended to narrow over time. Most of the differences in trends were observed for functional status measures and institutionalization; differences in trends for perceived health status and prevalence rates of chronic conditions tended to be small or non-existent. The narrowing of functional and health status differences between the risk contract and FFS populations may have implications for payment policy, as well as implications for the role of private health plans in Medicare.*

## INTRODUCTION

Medicare's risk contracting program has been operational since 1985, following passage of the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). Under TEFRA, risk contracts were entered into by health maintenance organizations (HMOs), which received capitation payments in return for providing covered services to their enrollees. The program was designed to produce cost savings for Medicare, as well as to expand the range of health plan choices available to Medicare beneficiaries

(Brown et al., 1993). Risk-based plans were not available in all parts of the U.S., but tended to be concentrated in particular urban areas, where Medicare FFS expenditures (the basis of payment under risk contracts) were relatively high. The ability of risk-based plans to provide the Medicare benefit package for less than the level of expenditures in FFS enabled the plans to offer extra benefits and lower out-of-pocket costs, resulting in their ability to attract enrollees. Other factors also played a part in the extent to which Medicare plans attracted enrollment (Brown and Gold, 1999).

## Legislative History

Congress has attempted to improve and expand Medicare's risk contracting program on several occasions, notably through the 1997 Balanced Budget Act (BBA) and the 2003 Medicare Modernization Act (MMA). One goal of each of these laws was to expand the availability of plans to rural areas and to other areas that did not have risk plans available to Medicare beneficiaries. The BBA created the Medicare+Choice program, which expanded the types of health plans permitted to enter into risk contracts to include preferred provider organizations (PPOs), provider-sponsored organizations, and private FFS plans. It also significantly changed the payment formula, including the phased introduction of a new risk adjuster. The BBA also introduced a payment floor for risk-based plans which resulted in health plan payment rates doubling in some counties. Further payment changes and expansions in plan types were

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made in subsequent legislation, including the 2000 Benefits Improvement and Protection Act (BIPA), which introduced a payment floor applicable to metropolitan statistical areas.

The MMA created the Medicare Advantage (MA) program and introduced two new types of plans—regional and special needs plans (SNPs). Regional plans were intended to be the means by which every part of the country would have a Medicare private health plan available; such plans have to be offered on a region-wide basis, among the 26 designated regions. By contrast, local plans can operate in an area as small as a single county. SNPs are unique in that they may limit their enrollment to certain categories of Medicare beneficiaries—those with special needs. Special needs beneficiaries include Medicare/Medicaid dual eligibles, the institutionalized, and those with chronic or disabling conditions. However, the SNP restricted enrollment provision sunsets at the end of 2008. That is, unless Congress extends the provision, after 2008 SNPs may not limit their enrollment to only individuals with special needs.

Because the MMA added outpatient prescription drug coverage as a voluntary choice available to all Medicare beneficiaries, risk-based plans lost a feature that many Medicare beneficiaries found attractive in contrast to the traditional FFS program. However, MA plans are able to use savings they generate in covering Medicare Parts A and B benefits to reduce their premiums for the Part D (drug) benefit and/or increase the generosity of the Part D benefit. Presumably, health plans should generally be able to provide the drug benefit at a lower cost than stand-alone prescription drug plans because of their ability to coordinate drug coverage with other health care coverage through the same network of providers.

The MMA also authorized the comparative cost adjustment program. Beginning in 2010 and authorized for 6 years, the program calls for the Medicare FFS program to compete against private plans in certain areas. The premium for traditional FFS Medicare will be adjusted to reflect its costs in relation to private health plans available in the area (as opposed to the current situation in which the Medicare FFS premium is uniform throughout the country).

## **Enrollment History**

Medicare managed care enrollment grew rapidly throughout the 1990s, increasing from 1.8 million beneficiaries in 1990 to 6.7 million in 1999 (Centers for Medicare & Medicaid Services, 2005). Almost all of this increase was in risk-based plans. Enrollment decreased thereafter to 5.0 million beneficiaries in 2003, following widespread plan withdrawals and service area reductions in 1998-2002. Total managed care enrollment recovered to 6.1 million by December 2005 (Centers for Medicare & Medicaid Services, 2006), corresponding to increases in plan payments and other changes brought about by MMA as previously described.

## **Health Status in the Risk Program**

Since its inception, Medicare's risk contracting program has contained an atypical mix of beneficiaries. Studies of enrollment patterns have found disproportionately few enrollees from vulnerable subgroups, such as disabled beneficiaries under age 65, beneficiaries age 85 or over, dual eligibles, and institutionalized individuals (Zaragoza et al., 1996; Riley et al., 1996; Murgolo, 2002). In addition, Medicare risk-based plans have been found to have relatively healthy populations according to a variety of health-related measures, including

pre-enrollment costs, self-reported health and functional status measures, demographic factors, and mortality (Hellinger, 1995; Riley et al., 1996; Physician Payment Review Commission, 1996; Morgan et al., 1997; Call et al., 1999; Greenwald, Levy, and Ingber, 2000; Hellinger and Wong, 2000; Maciejewski et al., 2001; Mello et al., 2003). The health status of risk contract enrollees is of special policy concern because favorable selection may have led to overpayments under Medicare's capitation system (Brown et al., 1993; Riley et al., 1996). Such overpayments can arise if capitation payments do not account for the health status of plan members. In response to such payment concerns, a risk-adjustment system based on diagnoses has been developed to more appropriately match payments to enrollee health status (Pope et al., 2004). Risk adjustment is also meant to increase the viability of plans that serve vulnerable populations, thus safeguarding beneficiary access to appropriate care.

The health and functional status of Medicare's risk contract enrollees are also of interest as a measure of the risk program's appeal to vulnerable subpopulations. Individuals in poor health have complex health care needs and frequently have high out-of-pocket costs (Crystal et al., 2000). The Medicare managed care program may benefit many of these individuals through savings in out-of-pocket costs, improvements in coverage, and coordination of care.

The purpose of this study was to examine trends in the health and functional status of risk contract enrollees, in comparison to FFS. Several factors may have significantly influenced the mix of beneficiaries enrolled in risk-based plans. Such factors include the growth and subsequent decline in number of participating plans and in level of enrollment; legislative and regulatory developments in both the man-

aged care and FFS sectors of Medicare; and changes in the managed care market, including the non-Medicare market. The implementation of risk-adjusted payments may have removed some of the disincentives for risk-based plans to enroll chronically ill people, which could result in a trend toward worse health status within the risk contract sector. The growth of SNPs may also have increased the number of chronically ill beneficiaries enrolled under risk contracts in recent years. It is notable that most studies of enrollee health status were based on data from the mid-1990s or earlier, before major legislative changes and plan withdrawals took place. This analysis used data from the MCBS and covers the years 1991-2004. The MCBS contains a variety of health and functional status measures that are not available in Medicare administrative records.

## DATA AND METHODS

### Data

The MCBS is a longitudinal, multipurpose survey of a nationally representative sample of the Medicare population (Adler, 1994). It has been conducted by CMS (formerly the Health Care Financing Administration) continuously since 1991. The survey employs a rotating panel design, with each panel consisting of about 4,000 respondents who participate in 12 interviews that produce data for three complete calendar years. The sample includes individuals residing in long-term care facilities, defined as nursing homes, retirement homes, domiciliary or personal care facilities, distinct long-term units in a hospital complex, mental health facilities and centers, assisted and foster care homes, and institutions for the mentally retarded and developmentally disabled (Centers for Medicare & Medicaid

Services, 2006). A supplemental sample of HMO enrollees was added to the survey in 1996-1998.

Respondents are asked about perceived health status, difficulties with six activities of daily living (ADLs) and six instrumental activities of daily living (IADLs), and whether a doctor has ever told them they have 20 specific conditions. Information on demographics, income (reported in \$5,000 intervals on the Access to Care Files), and supplemental health insurance is also collected. Medicare administrative records are routinely linked to survey information. This study used MCBS Access to Care Files, which contain survey information collected in the fall round (September–December) of each year.

## Methods

For each study year, Medicare administrative records were used to identify respondents in risk-based plans (including demonstration projects) and in FFS at the time of the fall round interview. Beneficiaries enrolled in plans with cost-based contracts were excluded from the study, as were any respondents who were not entitled to Medicare Parts A and B. Descriptive statistics on demographic, health, and functional status measures were computed separately for the risk contract and FFS samples for each year, using MCBS cross-sectional weights. These weights reflect the design of MCBS and represent the total Medicare population. Some measures are limited to the non-institutionalized population because of data limitations on institutionalized respondents.

Findings on health and functional status measures are presented graphically to highlight trends for the risk contract and FFS populations. In order to test whether trends were significantly different for the two populations, observations were pooled

across the study years and regression models were estimated with individual health and functional status measures as the dependent variables. Because all measures were dichotomous, logistic regression models were used. Independent variables were year (entered as a continuous variable with values from 1 to 14); enrollment status (1=risk contract enrollee, 0=FFS); and an interaction term (YEAR×ENROLLMENT). If the coefficient for the interaction term was significantly different from 0 there was a difference in trends between the risk contract and FFS populations. Standard errors of the regression coefficients were adjusted using a method developed by Bye et al. (1994), which accounts for the MCBS complex sampling design, as well as the panel nature of the survey (i.e., individuals could contribute multiple observations). Regression models were estimated using MCBS cross-sectional weights.

Trends in health and functional status could be strongly influenced by demographic changes, e.g., the aging of the risk contract population. In order to detect differences in health status trends that were not attributable to demographic shifts, we estimated an additional set of regression models that incorporated age-sex covariates. In these models, a statistically significant interaction term between year and enrollment indicated a difference in trends between the risk contract and FFS populations that was independent of changes in age and sex. In general, age and sex adjustment did not have a strong effect on the findings related to differences in trends.

## RESULTS

The demographic mix of the risk contract population has changed over time (Table 1). Females age 85 or over represented only 4.7 percent of risk contract enrollees in 1991, but accounted for 8.3 percent by

**Table 1**  
**Trends in Demographic Characteristics of the Medicare Risk Contract and**  
**Fee-for-Service (FFS) Populations: 1991-2004**

Characteristic	1991		1995		2000		2004	
	Risk Contract	FFS						
<i>N</i>	380	11,786	1,140	13,618	2,717	13,050	1,895	12,912
	Percent							
Age and Sex	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Male</b>								
< 65 Years	2.3	5.7*	2.4	6.6*	4.0	7.7*	4.3	8.0*
65-74 Years	25.0	21.2	24.9	19.8*	23.1	18.2*	17.2	18.7
75-84 Years	13.0	11.8	13.0	12.7	13.3	13.3	15.1	13.3
85 Years or Over	2.2	2.8	3.0	3.1	2.6	3.5*	3.3	3.7
<b>Female</b>								
< 65 Years	2.4	3.5*	2.4	4.6*	2.8	6.3*	3.3	7.5*
65-74 Years	30.5	27.5	29.2	25.2*	27.4	22.9*	26.8	21.6*
75-84 Years	20.0	19.7	19.4	19.6	20.1	19.8	21.7	18.8*
85 Years or Over	4.7	7.7*	5.7	8.3*	6.6	8.4*	8.3	8.4
<b>Race</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White	82.9	88.5*	87.0	88.1	84.8	86.6	83.4	84.5
Black	12.3	8.8	7.4	9.1	9.6	9.2	9.7	9.8
Other <sup>1</sup>	4.8	2.7	5.6	2.9*	5.6	4.2*	6.9	5.8
<b>Medicaid<sup>2</sup></b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Yes	4.3	14.8*	4.5	17.3*	5.9	18.4*	11.3	20.1*
No	95.7	85.2*	95.5	82.7*	94.1	81.6*	88.7	79.9*
<b>Census Region<sup>3</sup></b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Northeast	6.0	22.8*	11.9	22.1*	21.7	20.0	24.2	19.1
Midwest	14.1	24.8*	7.8	26.3*	15.3	25.8*	9.6	25.4*
South	20.7	36.0*	22.2	37.3*	23.3	39.8*	22.3	39.5*
West	59.2	16.4*	58.1	14.3*	39.7	14.4*	44.0	15.9*

\* $p < 0.05$  for difference between risk contract and FFS.

<sup>1</sup> Includes individuals reporting more than one race.

<sup>2</sup> Medicaid enrollment was defined from self reports and from administrative data on State buy-ins.

<sup>3</sup> Excludes Puerto Rico.

NOTES: Includes beneficiaries entitled to Parts A and B. Enrollees in cost contract plans are excluded. All percents are weighted.

SOURCE: Centers for Medicare & Medicaid Services: Data from the Medicare Current Beneficiary Survey Access to Care Files.

2004. The percent of risk contract enrollees who were female under age 65 remained relatively stable, but there was a large increase in this group in FFS. Medicaid enrollment increased substantially in the risk contract sector from 4.3 percent of risk contract enrollees in 1991 to 11.3 percent in 2004. Medicaid enrollment was measured from both self reports and from Medicare administrative records, which identify buy-in beneficiaries, i.e. those for whom a State pays the Medicare Part B premium.

There was a strong regional shift in risk contract enrollment to the Northeast, from 6.0 percent in 1991 to 24.2 percent in 2004 (Table 1). The percent of risk contract

enrollees residing in the West decreased during this period from 59.2 to 44.0 percent. During this extensive geographic shift, risk-based plans remained primarily an urban program. The percent of risk contract enrollees residing in non-metropolitan areas remained under 4.5 percent for all years (data not shown in tables).

## Health and Functional Status

Non-institutionalized risk contract enrollees were significantly less likely to report fair or poor health than non-institutionalized beneficiaries in FFS (Figure 1 and Table 2). Risk contract enrollees reported

**Table 2**  
**Results of Weighted Logistic Regressions for Trends in Health and Functional Status**  
**Differences Between Risk Contract and Fee-for Service Enrollees: 1992-2004**

Dependent Variable	Independent Variables					
	Year		Risk Contract Enrollee		Year×Risk Contract Enrollee	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Fair/Poor Health	-0.0005	0.0021	-0.5568	0.0711***	0.0145	0.0075
Heart Disease <sup>1</sup>	-0.0062	0.0027*	-0.1934	0.0853*	0.0038	0.0090
Cancer <sup>2</sup>	-0.0023	0.0029	-0.2821	0.0929**	0.0320	0.0096***
Diabetes	0.0284	0.0030***	-0.2004	0.0990*	0.0195	0.0100
Emphysema/Asthma/COPD	0.0132	0.0031***	-0.0829	0.1064	-0.0102	0.0110
Stroke	0.0168	0.0035***	-0.1852	0.1134	0.0019	0.0117
Any IADL Difficulty	-0.0068	0.0020***	-0.4638	0.0646***	0.0145	0.0068*
GT 2 IADL Difficulties	-0.0054	0.0025*	-0.6708	0.0935***	0.0340	0.0098***
Any ADL Difficulty <sup>3</sup>	-0.0015	0.0022	-0.4499	0.0695***	0.0220	0.0073**
GT 2 ADL Difficulties <sup>3</sup>	-0.0079	0.0031*	-0.6233	0.1048***	0.0296	0.0109**
Institutionalized	-0.0135	0.0036***	-1.9512	0.2309***	0.0802	0.0226***

\* $p < 0.05$

\*\* $p < 0.01$

\*\*\* $p < 0.001$

<sup>1</sup> Measure does not include other heart conditions such as congestive heart failure, problems with valves of the heart, or problems with rhythm of heartbeat.

<sup>2</sup> Measure does not include skin cancer.

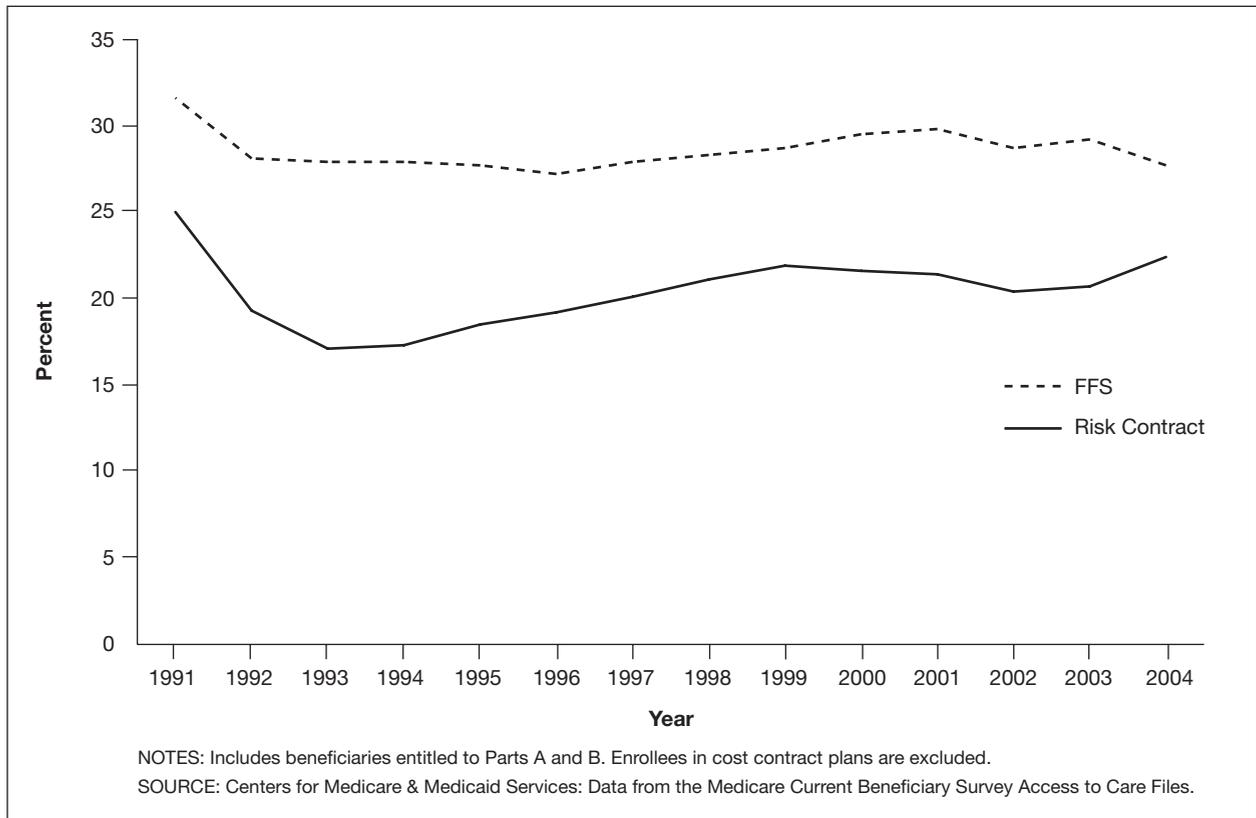
<sup>3</sup> Data on ADL difficulties were not available for 1991.

NOTES: Includes beneficiaries entitled to Parts A and B. Enrollees in cost contract plans are excluded. GT is greater than.

COPD is chronic obstructive pulmonary disease. IADL is instrumental activities of daily living. ADL is activities of daily living.

SOURCE: Centers for Medicare & Medicaid Services: Data from the Medicare Current Beneficiary Survey Access to Care Files.

**Figure 1**  
**Percent of Non-Institutionalized Medicare Beneficiaries Who Reported Fair or Poor Health,**  
**by Risk Contract and Fee-for-Service (FFS) Sector: 1991-2004**



lower rates of fair or poor health in each study year, with the difference between the two groups varying between 5.3 and 10.8 percent. The difference narrowed slightly over time; in the regression model the interaction between year and risk contract enrollment was positive and approached statistical significance ( $p = 0.052$ ).

Prevalence rates for five relatively common and costly conditions are summarized in Figures 2-5 and Table 2. Risk contract enrollees reported significantly lower rates of heart disease than beneficiaries in FFS, with no significant difference in trends between the two groups. Cancer was less frequently reported by risk contract enrollees early in the study period, but was more frequently reported than in FFS after

1998; the difference in trends was highly significant. Levels of diabetes were somewhat lower among risk contract enrollees early on, but rates were similar in risk-based plans and FFS after 1996, with both increasing over time. The increase in diabetes prevalence was marginally greater in risk-based plans than in FFS ( $p = 0.051$ ). Reported rates of emphysema/asthma/chronic obstructive pulmonary disease, and stroke were non-significantly lower among risk contract enrollees and there were no differences in trends between the risk contract and FFS sectors.

Risk contract enrollees were significantly less likely to report any difficulties with IADLs and ADLs than beneficiaries in FFS (Figures 6-7 and Table 2). They were also

**Figure 2**  
**Percent of Non-Institutionalized Medicare Beneficiaries Who Reported a History of Heart Attack/Angina/Coronary Heart Disease, or Stroke, by Risk Contract and Fee-for-Service (FFS) Sector: 1991-2004**

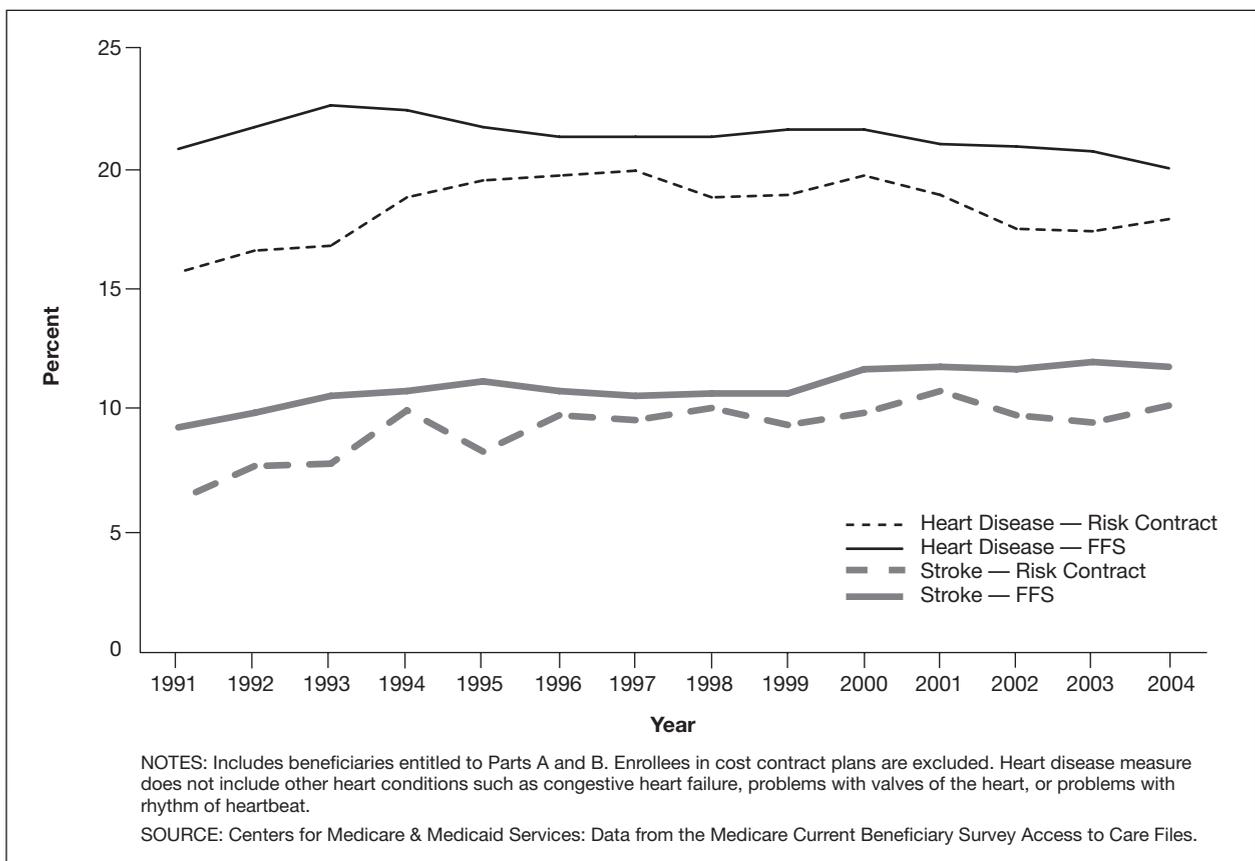
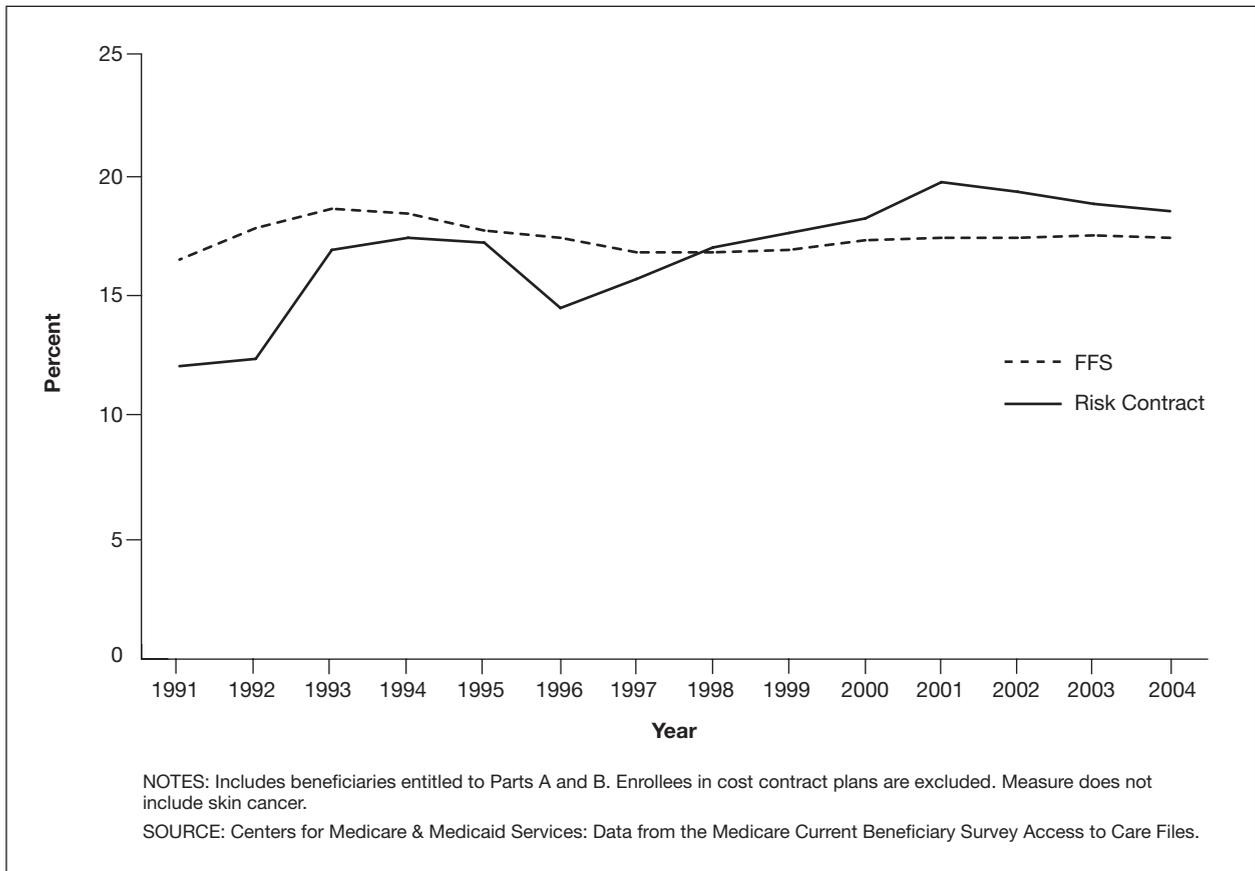


Figure 3

Percent of Non-Institutionalized Medicare Beneficiaries Who Reported a History of Cancer, by Risk Contract and Fee-for-Service (FFS) Sector: 1991-2004



less likely to report more than two IADL or ADL difficulties, which is a measure of greater frailty. The percents of risk contract enrollees reporting functional difficulties moved closer to FFS levels over the study period and approached some FFS levels in 2004. In the regression models the interactions between year and risk contract enrollment were positive and significant, indicating a significant narrowing of differences between the risk contract and FFS sectors (Table 2).

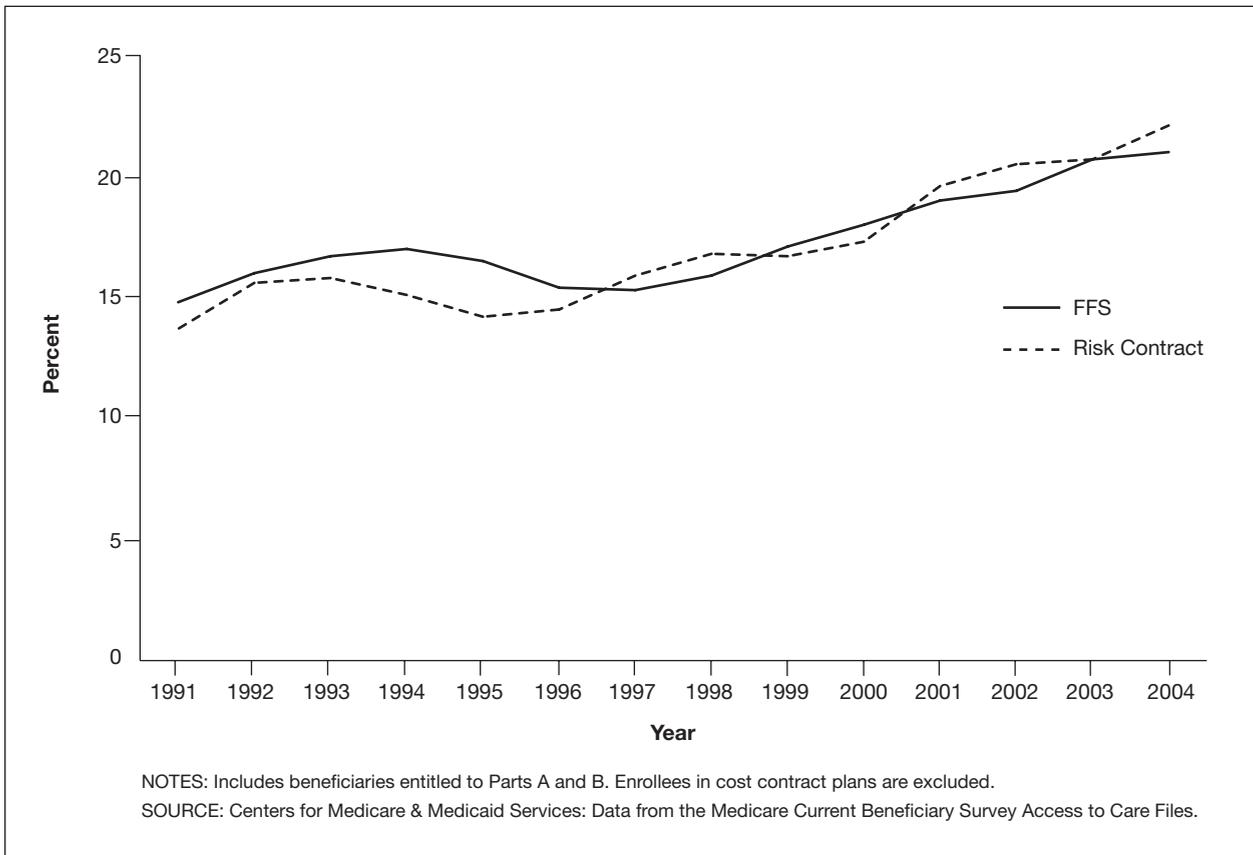
Rates of institutionalization among risk contract enrollees were one-half or less than those in FFS throughout the study period (Figure 8). In the FFS sector the rate of institutionalization decreased throughout much of the study period, whereas the rate generally increased among risk

contract enrollees. The difference in trends was highly significant (Table 2). Adjusting for age and sex attenuated somewhat the differences in trends for IADLs, ADLs, and institutionalization, but the differences in trends remained statistically significant (with the exception of any IADL difficulty) after incorporation of age and sex covariates in the regression models.

Trends in enrollee health status may be strongly influenced by the growth in risk-based plans that target chronically ill and frail beneficiaries. Such plans include Programs of All-Inclusive Care for the Elderly (PACE), Evercare plans that target the institutionalized population, SNPs, social HMOs, and various demonstration projects focusing on disease management, dual eligibles, etc. Although enrollment in

Figure 4

Percent of Non-Institutionalized Medicare Beneficiaries Who Reported a History of Diabetes, by Risk Contract and Fee-for-Service (FFS) Sector: 1991-2004

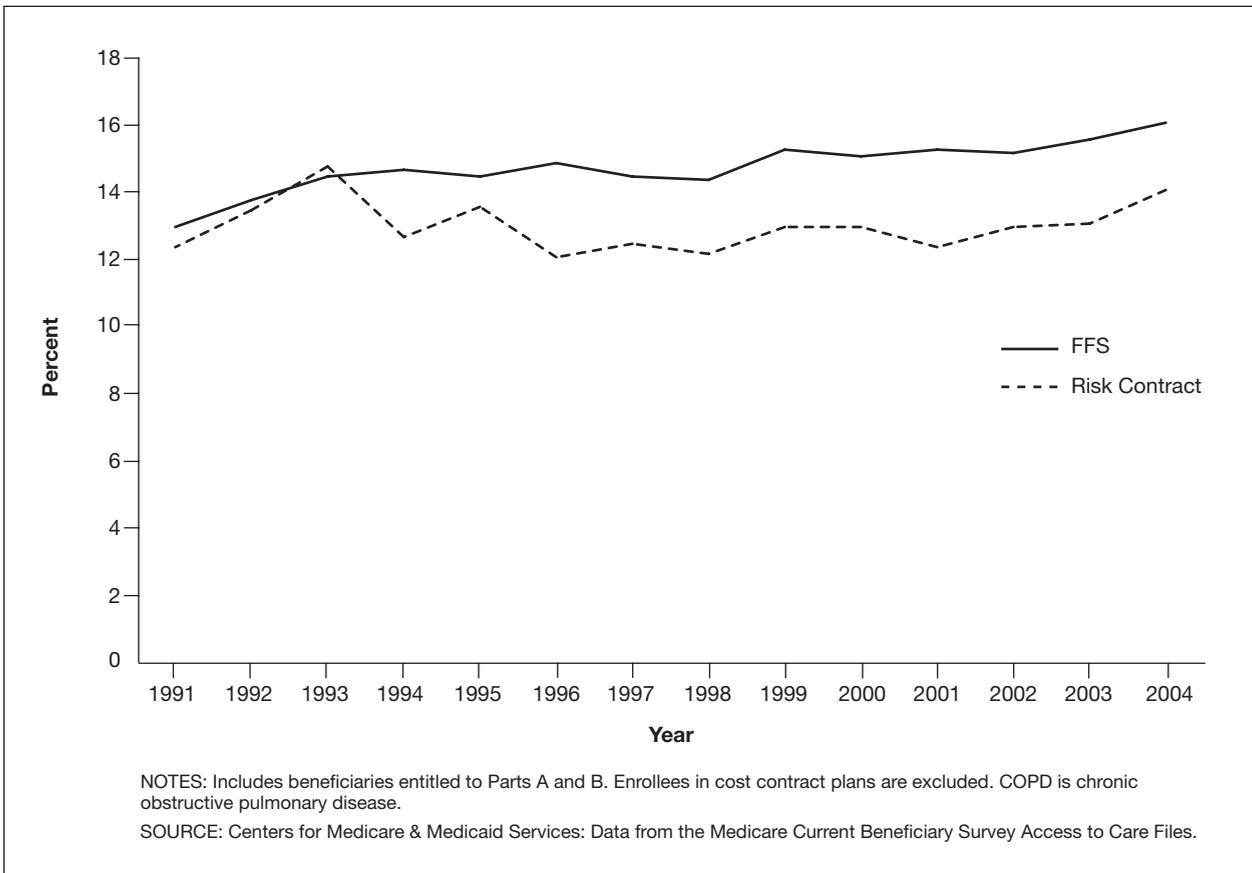


such plans comprises only a small portion of total risk contract enrollment, there has been significant growth in this area over the last several years. In order to evaluate the impact of this subset of plans on our findings, we re-estimated the regression models after excluding enrollees in plans that target chronically ill and frail beneficiaries. These exclusions varied from 1 percent of enrollees in 1992-1996 to 5 percent of enrollees in 2004. The exclusion of enrollees from selected plans resulted in some attenuation of the trend differences between risk contract and FFS enrollees in the area of functional status. However, most of these trends continued to show some significant narrowing of the difference between the risk contract and FFS sectors over time.

## DISCUSSION

As Medicare's risk contracting program has matured, the characteristics of the enrolled population have evolved. The health and functional status of risk contract enrollees has become more similar to that of beneficiaries in FFS, although risk contract enrollees continue to report more favorable health over several domains. Most of the differences in trends were observed for functional status measures and institutionalization; differences in trends for perceived health status and prevalence rates of chronic conditions tended to be small or non-existent, with the exception of cancer. Part of the difference in trends for functional status and institutionalization was attributable to the aging of the risk contract

**Figure 5**  
**Percent of Non-Institutionalized Medicare Beneficiaries Who Reported a History of Emphysema/Asthma/COPD, by Risk Contract and Fee-for-Service (FFS) Sector: 1991-2004**



population, but we found a narrowing of differences between the risk contract and FFS sectors even after controlling for age and sex.

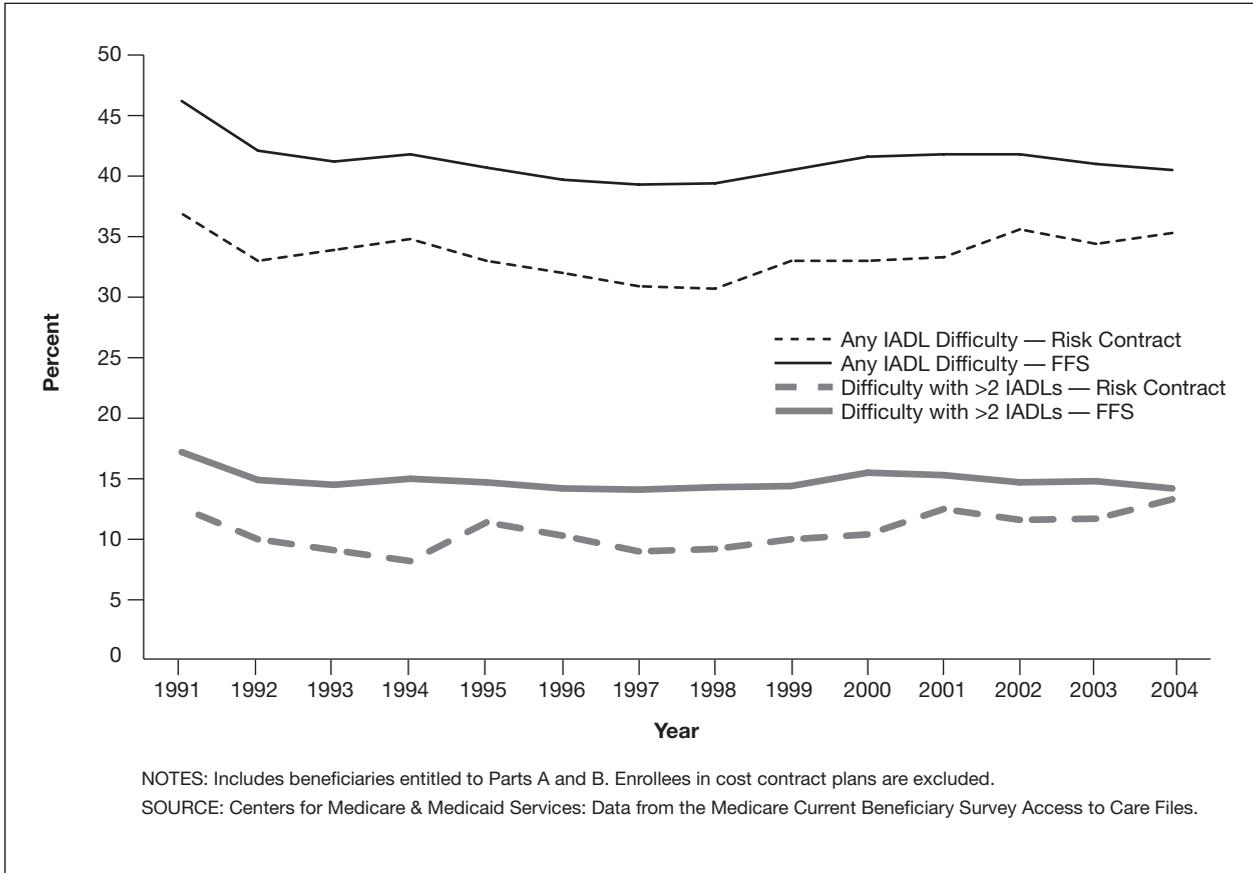
The narrowing of functional and health status differences between the two populations may have implications for payment policy. The principal inpatient diagnostic cost group model (implemented in 2000), and the CMS hierarchical condition categories (HCC) model (implemented in 2004) adjusted capitation payments to reflect the health status of enrollees in risk-based plans. The adjustments were designed to reduce payment distortions resulting from biased selection, remove disincentives for plans to enroll and retain beneficiaries with chronic illnesses, and improve the viability

of plans that enrolled significant numbers of such beneficiaries. Recent trends in enrollee health status may in part reflect the impact of risk-adjustment policies.

The current CMS-HCC model incorporates diagnoses established through physician and hospital encounters, as well as demographic factors (Pope et al., 2004). It does not contain explicit measures of functional status. Although this model represents a significant improvement over previous risk adjusters, it does not capture all expected costs associated with risk contract enrollees. Any narrowing of differences between the risk contract and FFS sectors, particularly in the area of functional status, may result in more appropriate payments to risk-based plans to the extent that

Figure 6

Percent of Non-Institutionalized Medicare Beneficiaries Who Reported Difficulties with Instrumental Activities of Daily Living (IADL), by Risk Contract and Fee-for-Service (FFS) Sector: 1991-2004



risk adjustment becomes less important. It should be noted, however, that risk adjustment is implemented on a plan-specific basis and is designed to account for health status differences among plans, and not only overall differences between the risk contract and FFS sectors. We were unable to address plan-by-plan patterns of health status or their corresponding trends, due to sample size limitations.

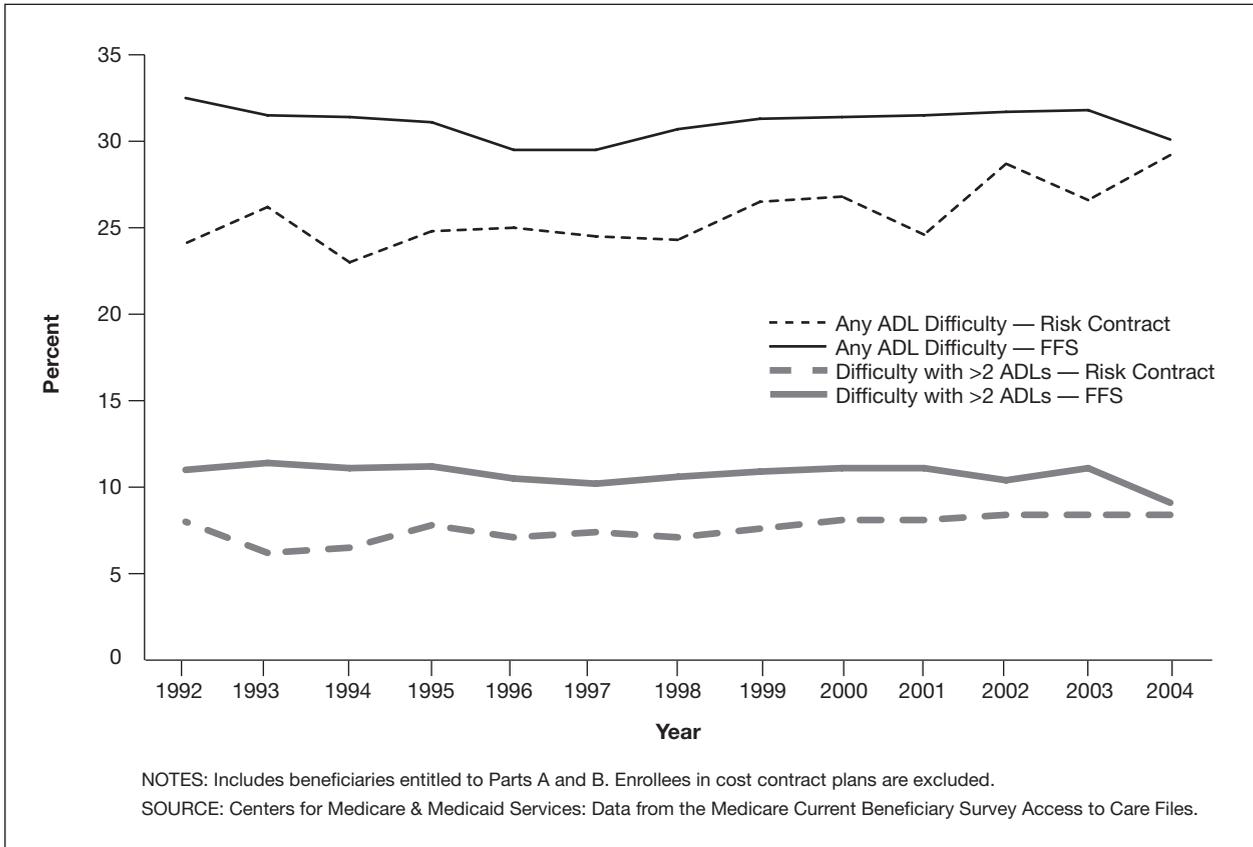
Several factors may be responsible for the growing similarity of the risk contract and FFS populations. As previously noted, the emergence of PACE, Evercare, SNPs, and various demonstration projects has expanded the target population for managed care to specifically include frail and chronically ill beneficiaries. Although enrollment

in such plans is small, it is growing and appears to be affecting the composition of the Medicare risk contract population.

The expansions and contractions of the Medicare managed care market may have influenced the composition of the enrolled population. During expansion in the 1990s, a large percentage of risk contract enrollees tended to be recent joiners, who may be healthier than long-term enrollees because of regression toward the mean (Welch, 1985; Riley, Rabey, and Kasper, 1989). During market contraction (1998-2002), there were fewer new enrollees and the health status of the remaining long-term enrollees may have been more similar to that of beneficiaries in FFS.

Figure 7

Percent of Non-Institutionalized Medicare Beneficiaries Who Reported Difficulties with Activities of Daily Living (ADL), by Risk Contract and Fee-for-Service (FFS) Sector: 1992-2004



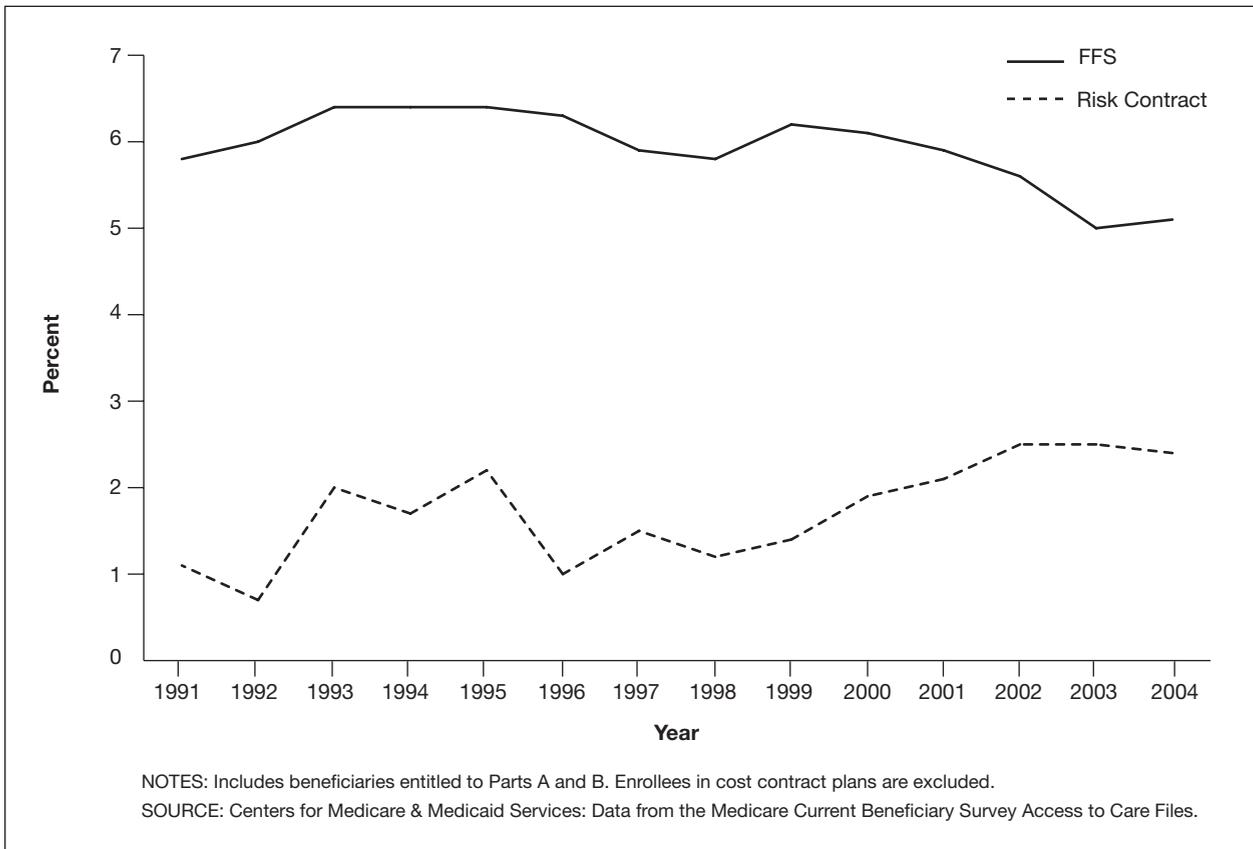
Geographic factors may also have affected the composition of the risk contract population. The percent of beneficiaries with access to a Medicare managed care plan has changed considerably over time (Centers for Medicare & Medicaid Services, 2006), and our findings show there has been a marked interregional shift in enrollment. Health status has also been shown to vary significantly among geographic areas within the U.S. (Blumberg, 1987). Changes in the geographic distribution of risk contract enrollees over time may have resulted in higher enrollments from areas tending to exhibit worse health.

Lastly, trends in the health and functional status of risk contract enrollees could be attributable in part to the effects of managed care on access to and quality of care.

Many studies have examined quality of care in managed care plans, and findings have been mixed (Miller and Luft, 1997; 2002). It was beyond the scope of this study to address whether observed health status differences between the risk contract and FFS populations were due to beneficiary selection or to sector effects.

Several vulnerable subpopulations, such as the very old, the dually eligible, and the institutionalized have grown as a proportion of the risk contract population over time. The recent increase in Medicaid enrollment within the risk contract population could be related to outreach efforts begun in 1999 to enroll eligible individuals into Medicare savings programs, which provide various levels of Medicaid benefits (Haber et al., 2003). Managed care may be

**Figure 8**  
**Percent of Medicare Beneficiaries Who Are Institutionalized, by Risk Contract and Fee-for-Service (FFS) Sector: 1991-2004**



attractive to dual eligibles with less than full Medicaid benefits because it tends to reduce their out-of-pocket costs.

Disabled beneficiaries under age 65 continue to be underrepresented in risk-based plans. This may reflect reluctance on the part of these beneficiaries to sever ties with their own network of providers that they rely on for their care. The high percentage of disabled beneficiaries with dual eligibility also may continue to depress their levels of risk contract enrollment.

Some limitations should be noted: First, risk contract sample sizes tended to be small in the early years of the analysis, producing some instability in the estimates. Second, the health and functional status measures analyzed herein are relatively crude and do not distinguish levels of severity for chronic

conditions. Survey-based measures of this type are not well suited to identifying the sickest individuals, who account for a very high percentage of total Medicare expenditures (Mello et al., 2003). It was therefore not possible to determine whether there has been a change in the proportion of very sick and high cost individuals within the risk contract population. Lastly, as previously noted the study did not have sufficient sample size to address plan-by-plan differences in enrollee characteristics.

Enrollment in risk-based plans has increased in recent months (Centers for Medicare & Medicaid Services, 2006) following recent improvements in benefits, cost sharing, and premiums (Achman and Harris, 2005). If enrollment continues to increase as expected under the MMA, it

is unclear how the composition of the risk contract population will evolve. The recent growth in SNPs, focusing on individuals who are institutionalized, dually eligible, and/or have severe or disabling chronic conditions, may produce a more chronically ill risk contract population. On the other hand, a large influx of new enrollees, particularly in areas that previously did not have access to risk contracts, may produce a relatively healthy case mix, as happened early in the risk contracting program. The creation of regional PPOs may also affect the case mix of the risk contract population. Moreover, the introduction of the Part D drug benefit has radically altered the nature of choices Medicare beneficiaries face with regard to their health insurance options and may significantly affect selection into risk contracts. If the traditional FFS Medicare Program will one day be competing with private plans, each Medicare beneficiary should have a private plan option that is suitable for their needs. The narrowing of differences in health and functional status between the two sectors would indicate that private health plans are becoming an accepted choice for vulnerable populations. Continued monitoring of enrollee health status will be essential to understanding the long-term impacts of the MA program.

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