
Capitated Payment Approaches for Medicaid-Financed Long-Term Care Services

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In the following analysis, the authors examine the capitated payment approaches for long-term care (LTC) services of five programs: the Program of All-Inclusive Care for the Elderly (PACE), the Arizona Long-Term Care System (ALTCS), the Texas STAR+PLUS, the Minnesota Senior Health Option (MSHO), and the Monroe County Continuing Care Networks (CCNs) in New York. The authors describe key aspects in the design of these programs, with an emphasis on Medicaid reimbursement, and discuss differences and commonalities in the approaches taken by the programs in setting capitation rates.

INTRODUCTION

Long-term care accounts for a sizable part of the Medicaid budget, almost \$54 billion in 1995. Three-fourths of Medicaid expenditures for the elderly were for LTC (about \$31 billion); 85 percent of these expenditures were for institutional care, and 10 percent were for home care services (Wiener and Stevenson, 1997).

The locus of LTC has been shifting from institutions to care based in the home and community. One reason is that beneficiaries often desire to remain in their homes and would prefer to receive LTC in non-institutional settings. Another reason is the potential cost-effectiveness of home and community-based care, although there are still conflicting results on this issue

(Alecxi, Lutzky, and Corea, 1996; U.S. General Accounting Office, 1994; Wiener and Stevenson, 1998). Nonetheless, various programs, especially those targeted to individuals eligible for both Medicare and Medicaid, are testing integrated health delivery systems and payment methodologies that reflect the shift toward home and community-based care.

Because Medicaid is the primary payer for LTC, there has been a movement to control costs in Medicaid through demonstrations that expand home and community-based services (HCBS) or integrate acute services and long-term services through managed care and through the use of capitation payments. HCFA has authority under certain statutes to waive certain provisions of the Medicare and Medicaid programs to implement demonstration projects. These waivers permit HCFA to pay for services that would otherwise not be reimbursable and to use different methods of paying for services and costs. The MSHO is an example of a program operating under Medicare and Medicaid demonstration waivers. This program attempts to address the issue of fragmented care for beneficiaries entitled to both Medicaid and Medicare by integrating acute care and LTC through a capitated system.

Other States are also exploring the integration of acute care and LTC through Medicare and Medicaid capitation. Our analysis examines the capitated payment approaches for LTC services of five programs: PACE, ALTCS, Texas STAR+PLUS,

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MSHO, and the Monroe County CCNs in New York. Under the Balanced Budget Act (BBA) of 1997, PACE became a regular part of the Medicare program with a limited number of site expansions available annually; the others are being implemented as demonstration programs, with the exception of Texas STAR+PLUS, which is operating under a program waiver.

These five programs were chosen to represent a range of capitated LTC programs financed through Medicaid, not because they are the only approaches. In addition, the programs either entirely target or have a strong component for dually eligible individuals. There has been much interest, but little has been written about the mechanisms for capitation of LTC services through Medicaid for these programs. In this article, we provide an insight into each program's LTC benefit package, method of capitation, and amount of capitation. In addition, the analysis highlights commonalities and differences in the methodologies and their implications. The study methodology consisted of a review of documents from each program, including program proposals, protocol documents, standard contracts, actuarial and evaluation reports, and informal interviews with program staff and HCFA project officers for the respective programs.

Each of the five programs has addressed the following key features in developing a Medicaid capitation: (1) defining the eligible population, (2) determining which services will be included in the capitated payment and which will be paid for on a fee-for-service (FFS) basis, (3) for the portion that is capitated, deciding whether there will be multiple rate cells for population subgroups or a single rate for all eligible persons, (4) determining which data will be used to calculate the rate, and (5) determining whether any discounts will be applied.

PROGRAM DESCRIPTIONS

PACE

PACE targets persons 55 years of age or over (65 in some States) who meet the Medicaid nursing home eligibility criteria. PACE is a voluntary program that integrates all primary, acute, and LTC services, uses a multidisciplinary team approach, and utilizes a staff-model delivery system. A combination of adult day health care and home care are the basis of the approach. Medicare, Medicaid, and private insurance funds are pooled. Originally a demonstration program, legislation in the BBA established PACE as a permanent program. As of November 1998, 15 program sites in 10 States had been implemented. An additional 13 sites and 6 States have PACE under development through Medicaid-only capitation contracts. Enrollment at PACE sites as of June 1998 was approximately 4,226 beneficiaries.

ALTCS

ALTCS is a capitated LTC program for the elderly, people with physical disabilities, and people with mental retardation and other developmental disabilities, who have been determined by State assessors to be at risk of institutionalization. ALTCS began in December 1988 for the people with mental retardation and developmental disabilities and in January 1989 for the elderly and people with physical disabilities. Arizona never had a traditional Medicaid program and receives Federal Medicaid funding as a demonstration project under its 1115 waiver. ALTCS is part of the mandatory State managed care program granted by the waiver and is administered by the Arizona Health Care Cost Containment System. Program contractors

are paid a capitation rate that covers both acute care and LTC services. Medicare services (for entitled enrollees) are paid on a FFS basis and are usually provided by the same contractors. As of October 1998, more than 25,000 were enrolled in the ALTCS program.

Texas STAR+PLUS

Texas STAR+PLUS is a Medicaid acute and long-term managed care program and was the first concurrent Medicaid 1915(b) managed care waiver and Medicaid 1915(c) HCBS waiver program to be implemented. The program integrates Medicaid funding and service delivery of long-term and acute health care. Enrollment is mandatory for Medicaid and voluntary for Medicare. As an incentive, dually eligible members who choose to receive their Medicare services from one of the three managed care organizations selected by the State receive an unlimited drug benefit. The program began enrollment in January 1998, and approximately 51,900 persons were enrolled as of May 1998.

MSHO

MSHO is a voluntary demonstration program that integrates acute care and LTC for dually eligible elderly people. The program is in seven counties in the Minneapolis/St. Paul area and offers a package of Medicaid and Medicare acute and LTC services through a choice of three managed care plans. MSHO is the first State-initiated program to function under dual Medicaid and Medicare waivers and the only program to date that provides for State management and oversight of both Medicaid and Medicare through a single contract. As of April 1998, there were 2,361 individuals enrolled in the program.

Monroe County CCNs

Monroe County (New York) CCN will be a voluntary demonstration program targeted to enroll at least 10,000 elderly Medicare and dually eligible persons in the county, including those who meet a nursing home level of care placement but who live in the community. The program will integrate primary, acute, and LTC services under combined Medicare and Medicaid capitation payments. These payments will be risk adjusted, using a methodology based on functional status. Waivers for the CCN demonstration were approved in September 1999.

DEFINING THE ELIGIBLE POPULATION

The determination of a target population is a crucial element of program design and has implications for the program's care goals (Muskie School of Public Service, University of Southern Maine, and National Academy for State Health Policy; 1997). Potential target populations may include: (1) the elderly or persons under age 65 with disabilities, or both, (2) those eligible for Medicare or Medicaid only, or for both, and (3) only those elderly or disabled who are in need of LTC services or beneficiaries who present a wide range of needs.

The PACE and ALTCS programs primarily target those at risk of institutionalization who meet the State's criteria for nursing facility level of care, i.e., nursing home certifiable (NHC). In PACE, the eligible population includes persons 55 years of age and over who live in the PACE organization's service area. Enrollees in ALTCS must have incomes less than 300 percent of the Supplemental Security Income (SSI) eligibility limits. Both the elderly and persons with disabilities are eligible for the program. ALTCS is a statewide (Arizona) program.

The eligible populations in Texas STAR+PLUS, MSHO, and CCN are not limited to those who are NHC. All three programs include individuals who are impaired, residing in nursing facilities or in the community, as well as the unimpaired, and are limited to certain geographic areas. MSHO and CCN limit their eligibility to the population 65 years of age or over; Texas STAR+PLUS includes the aged and the disabled age 21 or over meeting nursing facility level of care. Dually eligible beneficiaries are among the eligible population in all three programs. MSHO limits its program to dually eligible persons only; Texas STAR+PLUS includes those who are eligible for Medicaid only and who are eligible for both Medicare and Medicaid; CCN includes those who have Medicare only and those who are dually eligible.

BENEFITS COVERED IN THE CAPITATION

LTC benefit coverage for the different programs integrates institutional and community-based services with an emphasis on the latter. A summary of benefits covered by the programs included in the Medicaid capitation is provided in Table 1.

In addition to the LTC services, the programs also include Medicaid acute and ancillary services in the capitation with some variation. PACE, ALTCS, and CCN include transportation services. ALTCS also includes behavioral health. In Texas STAR+PLUS, the capitation amount for Medicaid-only participants includes acute care and LTC services. However, the Medicaid capitation amount for dually eligible persons includes LTC services only. For dually eligible beneficiaries, Medicare covers most acute care costs, and Medicaid FFS covers acute care services such as eyeglasses, hearing aids, coinsurance, and deductibles. In MSHO, the rate

structure differentiates between an institutional and non-institutional rate for Medicaid acute and ancillary services.

Nursing facility benefits covered in the capitation also vary among the programs. Room and board are included in the capitation for all of the programs except for MSHO. Nursing facility per diems are paid directly by the State for those who enroll in MSHO while in a nursing facility or after 180 days if a community-dwelling enrollee enters a nursing facility.

There are financial incentives built into the previously mentioned programs to keep enrollees out of institutional settings. All programs place plans at risk for some or all nursing home care. Among the programs, PACE provides the strongest incentive by placing the sites at risk for all institutional care regardless of duration. Texas STAR+PLUS places liability for nursing home services for the first 120 days on the plans. In MSHO, plans are at risk for the first 180 days of nursing home care for enrollees living in the community and thereafter are reimbursed at the FFS cost. The expected nursing facility use for the first 180 days of a nursing facility stay is built into the rate as the nursing facility add-on.

Under the CCN plan, for those who are not impaired on enrollment but who become impaired, it is proposed that plans be at risk for nursing home services for the remainder of the year. For example, if a person becomes impaired in the third month following enrollment in the program, the plan would be at risk for any and all services for the rest of the year (i.e., 9 months). If a person becomes impaired in the eleventh month following enrollment, the plan is at risk for institutional care (or any other care) for 1 month.

Similar to PACE, ALTCS places contractors at risk for all LTC services. The total capitation rate is set using a negotiated

Table 1
Summary of Covered Long-Term Care and Other Benefits, by Service Type and Program

Service Type	PACE	ALTCS	Texas STAR+PLUS	MSHO	Monroe County CCN
Medicaid					
Mandatory Benefit					
Nursing Facility	C	C	C	C	C
Home Health Services	C	C	NC	C	C
Optional Benefit					
Institutions for Mental Disease	NC	C	NC	NC	C
Hospice	NC	C	NC	NC	C
Rehabilitation Services	C	C	NC	NC	CCB
Personal Care Services ^{1,2}	C	C	NC	C	CCB
Therapy Services	C	NC	C	C	NC
Home and Community-Based Waiver Services					
Case Management ^{1,2}	C	NC	C	NC	C
Homemaker Services ¹	NC	C	NC	C	NC
Home Health Aid Services ¹	NC	NC	NC	C	CCB
Adult Day Health ¹	C	C	C	NC	NC
Habilitation Services ¹	NC	C	NC	NC	NC
Respite Care ¹	NC	C	C	C	CCB
Transportation ³	C	C	NC	NC	CCB
In-Home Support Services ³	NC	C	NC	C	NC
Meal Services ³	C	C	NC	C	CCB
Adult Day Care ³	C	C	C	C	CCB
Other Services					
Prescribed Drugs	C	C	C	NC	NC
Adaptive Aids/Non-Covered DME	C	NC	C	C	CCB
Dental Benefits	C	C	NC	NC	CCB
Optometry	C	NC	NC	NC	CCB
Minor Home Modifications	NC	NC	C	NC	CCB

¹ Defined in the Social Security Act as services that may be provided as home and community-based waiver services.

² Listed as both a Medicaid service and home and community-based waiver service.

³ Services that may be provided under the home and community-based waiver program but subject to Health Care Financing Administration approval.

NOTES: PACE is Program of All-Inclusive Care for the Elderly. ALTCS is Arizona Long-Term Care System. MSHO is Minnesota Senior Health Options. CCN is Continuing Care Network. C is covered. NC is not covered. CCB is covered under Monroe County CCNs' Chronic Care Benefit, administered at the discretion of the case management team. DME is durable medical equipment. Not all the covered benefits included in the capitation are included.

SOURCES: (Community Coalition for Long Term Care, New York State Department of Health, and New York State Department of Services, 1996; McCall, Wrightson, and Korb, 1996; Minnesota Department of Human Services, 1997; Texas Health and Human Services Commission, 1997.)

expected mix of HCBS and institutionalized enrollees. Because institutionalized enrollees are more expensive to care for, contractors have the incentive to keep enrollees out of institutions. The mix assumption is negotiated and differs by county. ALTCS contractors are placed at risk for nursing facility care on an enrolled-population level. This differs from MSHO, Texas STAR+PLUS, and CCN, which place plans at risk on an individual-enrollee level, limiting plan liability to a certain number of days.

The Monroe County CCN demonstration will have an additional benefit package different from the other programs, reflect-

ing the large number of Medicare-only beneficiaries who are targeted for the program. Medicare-only beneficiaries who have been determined to be NHC upon enrollment can buy coverage similar to the Medicaid LTC and home and community-based type benefits. These Medicare-only beneficiaries choosing this benefit pay the Medicaid capitation amount for NHC enrollees.

CCN will also offer an extended home and community care benefit package designed for all Medicare-only enrollees and available after a 6-month waiting period. This benefit is intended to prevent beneficiaries from becoming institutionalized.

Table 2

Medicaid Monthly Capitation Amounts for Long-Term Care Services, by Program: 1998

Program	Amount per Member per Month
PACE	\$1,786-4,632
ALTCS ¹	1,849-2,338
MSHO²	
Institutional	301-565
NHC Conversion	1,460-2,322
Community NHC	1,048-1,513
Community non-NHC	394-741
CCN³	
Institutional	3,896-4,493
NHC Conversion	3,896-4,493
Community NHC	
DMS-1 Score of 1	1,544
DMS-1 Score of 2	2,164
DMS-1 Score of 3	3,183
Community non-NHC	323-451
Medical Assistance Only	418
Supplemental Security Income	133
Texas STAR+PLUS⁴	
Nursing Facility Clients	
Medical Assistance Only	1,461
Supplemental Security Income	1,710
HCBS Waiver Clients ⁵	1,428
Other Community Clients	77

¹ Capitation for elderly and physically disabled enrollees. Includes acute care services, LTC services, and behavioral health. Varies by contractor.

² Rates vary by age, sex, and county. Prepaid Medical Assistance Program rate component of institutional and NHC conversion rate cells includes Medicaid acute and ancillary services only; does not include nursing home room and board, and nursing services.

³ CCN institutional rate includes room and board, ancillary costs, and transportation costs. CCN institutional and NHC conversion rates vary by facility. CCN community non-NHC rate represents average across elderly age groups.

⁴ Per member per month for dually eligible beneficiaries. Includes LTC services only.

⁵ Meets NHC criteria.

NOTES: PACE is Program of All-Inclusive Care for the Elderly. ALTCS is Arizona Long-Term Care System. MSHO is Minnesota Senior Health Options. NHC is nursing home certifiable. CCN is Continuing Care Networks. DMS is division of medical services. HCBS is home and community-based services. LTC is long-term care.

SOURCE: (Arizona Health Care Cost Containment System, 1999; Community Coalition for Long Term Care, New York Department of Health, and New York State Department of Social Services 1996; National PACE Association, 1999; Minnesota Department of Human Services, 1999; Texas Health and Human Services Commission, 1997.)

The value of services that a beneficiary can receive will be capped at \$2,600 per beneficiary per year, with a \$6,000 lifetime limit. These limits were determined through an actuarial analysis of expected use, combined with an assessment of a competitive health maintenance organization premium in the market area. The services to be offered include adult day care, respite care, home-delivered meals, and transportation, plus other services such as social work interventions. Payment for this benefit package will be in the form of a premium charged to all Medicare-only enrollees.

SETTING THE CAPITATION RATE

There are a number of factors to consider in ratesetting for these programs. They include: (1) deciding whether there will be multiple rate cells for population subgroups or a single rate for all eligible persons, (2) determining the data that will be used as the basis for the rate, and (3) determining whether any discounts will be applied. In this section, we discuss the specific rate-setting methodologies used by each program; in the next section, we provide an examination of these three key

factors. A summary of Medicaid capitation amounts paid to program contractors is provided in Table 2.

PACE

The PACE Medicaid capitation rate is based on Medicaid FFS expenditures for individuals who meet the program's eligibility criteria, 55 years of age and over (65 in some States), and who are NHC. Acute and LTC costs for these individuals are included in the rate. Medicaid rate methodologies used in the sites are summarized in Table 3. As the table shows, in some States, the PACE capitation was based on costs for the nursing facility populations. In others, it was an average that blended the per capita costs of the nursing facility population with other groups in different care settings, such as those receiving HCBS. Many States used discount factors to ensure savings to the State.

ALTCS

The ALTCS capitation payment is an example of a single rate derived from a blend of several components: institutional costs, HCBS costs, the mix of HCBS and institutional costs, and other costs (acute care, behavioral health care, case management, administration, and profit). The rate is a weighted average of the per capita costs of the institutional and HCBS populations, with extra weighting of the HCBS group to provide an incentive to reduce institutionalization. As previously stated, ALTCS is comprised of two population groups: the elderly and physically disabled and the mentally retarded/developmentally disabled. However, only the rates for the elderly and physically disabled are discussed. A single contractor serves all the elderly and physically disabled enrollees in a county.

Before fiscal year 1994, the institutional component rate was based on nursing home rates, the HCBS component rate was based on historical costs, and the HCBS/institutional mix assumption was based on historical experience and the cap placed on the amount of HCBS use. Adjustments were made retrospectively based on actual experience because of the absence of experience under ALTCS. Retroactive adjustments were made after the end of the contract year and included adjustments for actual Medicare and third-party liability recoveries, patient share of cost, therapies, and the HCBS/institutional service mix.

In 1994 and 1995, rates paid to ALTCS contractors were developed based on bids on each of 11 capitation rate components: monthly institutional costs, monthly HCBS costs, HCBS/institutional mix, Medicare or third-party liability, patient share of cost, capitation lag, case-management costs, administration costs, mental health services costs, acute care services costs, and profit (for private contractors). The bids were compared with ranges developed by the State. Bids above the top of the rate ranges for each component were reduced to the midpoint of the range as an incentive not to overbid. Component rates were then added to get the monthly capitation payment. Retroactive adjustments were made for actual experience with mental health service costs, Medicare payments, patient share of cost, and the HCBS/institutional mix. The mix-assumption adjustment was subject to a risk corridor, where the State and the contractor shared the financial risk if there were more institutional beneficiaries than had been assumed in the rate calculation.

In fiscal years 1996 and 1997, ALTCS made several changes to the rate-setting methodology. Contractors submitted bids for five capitation rate components (month-

Table 3
Summary of PACE Rate-Setting Methodologies for Medicaid by State

State	Rate-Setting is Based on:	Per Member per Month Rates
California	State's expenditures for a nursing facility population in comparable geographic area, age, and sex adjusted to match PACE program's enrollment. The rate is discounted 15 percent.	\$1,988
Colorado	Net costs to the State of nursing facility and home and community-based services populations (weighted based on current distribution of LTC enrollees, which is 82 percent nursing facility/18 percent home and community-based services). The rate is discounted 5 percent.	1,486 2,100
Hawaii	State expenditures for the nursing facility population.	1,588
Illinois	Based on blended average of costs of nursing facility and home and community-based services populations (weighted 75 percent nursing facility/25 percent home and community-based services)	2,044
Massachusetts	Blended average of nursing facility and home and community-based services.	
Maryland	Blended average of the total costs to the State for 3 population groups: nursing facility (30 percent), adult day care (60 percent), and other home and community-based services (10 percent). State has developed 4 separate rates based on eligibility for Medicare and Supplemental Security Income.	11,781 1,841
Michigan	FFS costs of a nursing facility population institutionalized for the full year. State is currently reviewing methodology.	2,046
New Mexico	95 percent of net nursing facility costs plus prescription drug costs for nursing facility population. The net nursing facility costs are reduced by 5 percent.	123,965 32,298
New York	Initial rates are based on FFS costs of nursing facility and comparable LTC populations. Subsequent rates take into consideration two major components: plan's projected operations and FFS equivalent.	2,296
Ohio	FFS costs of nursing facility and home and community-based services recipients weighted based on their distribution in the service area. The rate is discounted by 5 percent.	1,706
Oregon	Assisted living facility rate plus average acute care costs of assisted living facility population plus \$13 enrollment fee. The assisted living facility rate is discounted by 5 percent.	2,473
Pennsylvania	Statewide average costs (net expenditures) for a nursing facility population. The rate is discounted by 5 percent.	2,021
South Carolina	State's net expenditures for a nursing facility population in a comparable geographic area. The rate is discounted by 5 percent.	
Texas	Average nursing facility rates weighted by El Paso County nursing facility case mix distribution, less the average statewide applied income plus actual average additional expenditures for nursing facility population. The rate is discounted by 5 percent.	1,819
Virginia	Costs for all LTC populations. An adjustment was made to reduce the weighting for those who were 100 percent skilled nursing facility. State plans to use 6 rates based on aid code and Medicare eligibility. The rate is discounted by 5 percent.	1,824
Washington	Total costs of care for nursing facility residents in King County--those in a nursing facility for 3 or more months in the year. The rate is discounted by 5 percent.	3,096
Wisconsin	Three components: the average nursing facility rate less the average statewide recipient nursing facility liability, plus the average additional costs for the nursing facility population. Nursing facility component blended skilled nursing facility/intermediate care facility based on PACE site's actual enrollee mix. Other costs are adjusted for age mix of enrollees as well. The rate is discounted by 5 percent.	2,153

¹ Average.

² Bronx.

³ Rochester.

NOTES: In some States, the actual payments to these programs are reduced by the Medicaid enrollee's average share of cost. PACE is Program of All-Inclusive Care for the Elderly. LTC is long-term care. FFS is fee-for-service.

SOURCE: Adapted from (Iverson and Shen, 1996).

ly institutional costs, monthly HCBS costs, monthly acute care costs including mental health services, administration, and profit/risk/contingency). Bids above the rate ranges for each of these components were reduced to below the midpoint of the range. ALTCS set the amount for case management, patient share of cost, and the HCBS/institutional mix. Two items are reconciled to actual experience after the end of the contract year: HCBS/institutional mix and patient share of cost.

Texas STAR+PLUS

The Texas STAR+PLUS, MSHO, and Monroe County CCNs use a methodology involving multiple rate cells. In Texas, the rate cells are based on two eligibility classes: Medicaid-only and dually eligible. Within each class, there are four groups, based on place of service:

- HCBS waiver clients.
- Other community clients.
- Nursing facility clients (medical assistance).
- Nursing facility clients (Supplemental Security Income) (Table 3).

Enrollees assigned to the category of nursing facility clients (medical assistance) have incomes above the Supplemental Security Income limit but below 300 percent of that limit.

In Texas STAR+PLUS, the capitation amount for Medicaid-only participants is based on FFS costs for both acute care and LTC services. The Medicaid capitation amount for dually eligible persons includes LTC services only. For dually eligible beneficiaries, Medicare covers most of their acute care costs, and Medicaid FFS covers the Medicaid acute care services, such as eyeglasses, hearing aids, and Medicare coinsurance and deductibles. In the rate calculation, nursing home costs were discounted by 2 percent from FFS costs, and

community care, HCBS, and acute care costs were discounted by 5 percent. The State will monitor enrollment and determine whether a disproportionate number of heavy users of LTC or acute care enroll in one plan or another. Similar to ALTCS, the State proposes to make adjustments either during the first year or at the end of the year to account for these differences.

MSHO

Minnesota developed four rate categories: (1) for residents in institutions, (2) for those institutionalized for 180 days who then move to the community, (3) for NHC persons living in the community, and (4) for community-dwelling non-NHC persons. The MSHO capitation for institutionalized residents is comprised of the institutional Prepaid Medical Assistance Program (PMAP) rate. The PMAP rate covers Medicaid acute and ancillary services and is based on historical experience in the FFS environment, trended forward, and specific to the following demographic factors: age, sex, geographic region, institutional status, and Medicare eligibility. The nursing facility costs (i.e., room, board, and nursing care) remain FFS.

MSHO's Medicaid capitation for the category of persons who are institutionalized but then return to the community includes the amount of 95 percent of twice the average monthly elderly waiver payment, plus the institutional PMAP rate. The elderly waiver program provides HCBS in place of nursing facility services for the elderly who want to remain in the community. The average monthly elderly waiver payment is calculated using an NHC population, adjusted for age, sex, and geographic region, and reflects a 5-percent discount from the FFS average monthly payment equivalent. Persons who convert from institutionalized to community-dwelling are limited to 1 year in that rate cell.

The community NHC rate includes the non-institutional PMAP rate, plus 95 percent of the average monthly elderly waiver payment, and a nursing facility add-on. The nursing facility add-on estimates the expected cost of the first 180 days of nursing facility use by a community population. This allows MSHO to hold health plans liable for the first 180 days of nursing facility use. After 180 days, nursing facility costs are reimbursed at the FFS level. For the community non-NHC category, the rate includes the non-institutional PMAP rate plus the nursing facility add-on.

CCNs

Similar to MSHO, the Monroe County CCN rate will be structured around four population groups: (1) those who are nursing home residents, (2) those who were institutionalized for more than 5 months and then moved into community settings, (3) those who are impaired and NHC, living in the community, and (4) those who are unimpaired and living in the community. The ratesetting methodology will use risk-adjusted rates for both Medicare and Medicaid, based on age, sex, Medicaid category eligibility, and functional status based on a Division of Medical Services-1 (DMS-1) score. (The DMS-1 is an assessment tool used by the State of New York to determine nursing home certifiability. Questions on the DMS-1 cover activities of daily living, skilled care needs, and behavioral status. The DMS-1-based model of nursing home certifiability predicts 18 percent of the variance in Medicaid chronic care service costs of the NHC dually eligible population.)

The Medicaid payment for nursing home residents who enroll in the program is calculated based on a facility-specific per diem rate derived from an annual case-mix review, adjusted to include appropriate ancillary costs and discounted at 98 per-

cent of current cost. Those who are not eligible for Medicaid will pay the facility's discounted private charge. Medicaid capitation or private payment for those who were institutionalized and then moved into the community is the same as those for nursing home residents.

Medicaid capitation for the impaired (NHC) in the community will be based on three levels of functional status as determined by their DMS-1 score. The Medicaid rate structure for community-based unimpaired persons is derived from historic FFS expenditures and uses rate cells based on Medicaid category and age.

DISCUSSION

There are important differences and commonalities in the approaches taken by the various programs in setting capitation rates. The programs differ in how payment varies by enrollee characteristics and on the data used to determine the basis for the rate. Financial incentives to reduce institutionalization and discounts from FFS costs are common in all the programs, but the methodology varies across sites.

Single Rate Versus Multiple Rate Cells

The PACE and ALTCS capitation payments are examples of a single rate for all eligible persons, i.e., NHC populations. Most States pay a single rate to PACE providers, but California, Wisconsin, and New York are exceptions. In California, PACE rates vary according to age, sex, and region; in New York and Wisconsin, PACE rates differ according to whether the patient is at the skilled or intermediate care level. In ALTCS, rates do not vary prospectively according to patient characteristics, but as noted, there can be adjustments if the HCBS/institutional mix varies from projections.

Table 4

Factors Used in Determination of Capitation Amounts for Long-Term Care Services, by Program

Program	Comparison Groups Used to Establish Current FFS Costs			Discount Factors
	Nursing Facility	Nursing Facility and HCBS	Variation	
PACE				
California ¹	Yes	No	No	Yes
Colorado ¹	No	Yes	No	Yes
Hawaii	Yes	No	No	Yes
Illinois	No	Yes	No	Yes
Massachusetts ¹	Yes	Yes	No	Yes
Maryland	No	Yes	Adult Day Care	Yes
Michigan ¹	Yes	Yes	No	Yes
New Mexico	Yes	No	No	Yes
New York ¹	Yes	No	No	Yes
Ohio	No	Yes	No	Yes
Oregon ¹	No	No	Assisted Living Facility	Yes
Pennsylvania	Yes	No	No	Yes
South Carolina ¹	Yes	No	No	Yes
Texas ¹	Yes	No	No	Yes
Virginia	No	Yes	No	Yes
Washington ¹	Yes	No	No	Yes
Wisconsin ^{1,2}	Yes	No	No	Yes
ALTCS	Yes	Yes	No	No
Texas STAR+PLUS	No	Yes	No	Yes
MSHO	No	Yes	No	Yes
CCN	Yes	Yes	No	Yes

¹ State operating PACE site.

² Nursing facility component of rate is blended skilled nursing facility/intermediate care facility based on the site's enrollee mix.

NOTES: FFS is fee-for-service. HCBS is home and community-based services. PACE is Program of All-Inclusive Care for the Elderly. ALTCS is Arizona Long-Term Care System. MSHO is Minnesota Senior Health Options. CCN is Continuing Care Networks.

SOURCES: (Community Coalition for Long Term Care, New York State Department of Health, and New York State Department of Social Services, 1996; Iversen and Shen, 1996; McCall, Wrightson, and Korb, 1996; Minnesota Department of Human Services, 1997; Texas Health and Human Services Commission, 1997.)

Texas STAR+PLUS, MSHO, and Monroe County CCNs use a methodology involving multiple rate cells. All three programs vary payment according to whether the patient is institutionalized, impaired in the community (NHC), or unimpaired. In addition, both MSHO and CCN have a nursing home conversion rate to provide a financial incentive for deinstitutionalization. CCN is unique in that it will establish three payment cells within the NHC group to vary payment by functional status.

Data to Determine Rate Bases

All of the programs described in this study base capitation amounts, at least initially, on the FFS equivalents for a comparable population in their respective Medicaid

programs. This involves: (1) identifying the appropriate comparison group, (2) identifying the total costs of the comparable benefits, and (3) applying a discount. Comparison populations used include the nursing facility population or a blend of nursing facility, home care, and HCBS populations' costs. Some States also use other comparison populations, such as those receiving adult day care and personal care. Table 4 summarizes the various State approaches.

Some States use only nursing facility population costs as a basis for setting PACE rates. Other States base their Medicaid PACE rate on a blend of nursing facility and home and community-based costs. These costs are generally weighted based on the current distribution of enrollees.

Extent to Which Plans Face Risk

All the programs have financial incentives to reduce institutionalization. In Texas STAR+PLUS, MSHO, and CCN, plans are responsible for the first 4 to 6 months of nursing facility care; PACE plans are completely at risk. The ALTCS approach also places plans at risk, though there are retrospective adjustments to reflect the actual HCBS/institutional mix. In addition, MSHO and CCN provide a financial incentive for deinstitutionalization. In CCN, plans will be at risk for care for enrollees entering a nursing facility until the anniversary of the person's enrollment.

Discounts

Most of the programs incorporate a discount from the historical, current, or projected FFS costs to ensure savings to Medicaid. The Medicaid rate in various PACE sites is discounted between 5 and 15 percent. In Texas STAR+PLUS, the nursing facility costs are discounted by 2 percent from projected FFS costs. Community care, home and community-based care, and acute care costs per member per month are discounted by 5 percent from projected FFS costs. The MSHO rate structure reflects a 5-percent discount in some of its rate components. In the CCN program, rate cells for nursing home residents and those who were institutionalized and then returned to the community are each discounted by 2 percent of current costs. The rates for the community-based unimpaired and impaired populations are discounted by 5 percent of the FFS costs.

Although there are some commonalities among the programs, it is evident that the overall approach chosen by each program is different. The differences largely stem from a State's LTC environment in which the program is being developed, a State's

infrastructure, political considerations, and market conditions. For example, multiple States are involved with the PACE program. All of them share a similar approach in that the capitation is based on current FFS expenditures for a comparable population and for a comprehensive Medicaid package of services. However, there is no standard method for PACE Medicaid capitation. Development of PACE programs and the ratesetting reflects State policy decisions as to where PACE should be positioned within the existing LTC system or State desires to encourage expansion of community-based alternatives (Iversen and Shen, 1996). For States where PACE is viewed as an alternative to nursing facility care, the current spending for the nursing facility population is used for ratesetting. In other States where PACE is viewed as one option among many, including nursing facility care or HCBS programs, the States use a blend of current nursing facility and HCBS program enrollee spending to calculate the rate. The differences in risk assumption may depend upon the incentives a particular program or State wants to develop, the political interactions between State agencies and provider organizations, and the market forces that factor into provider decisions on how much risk to assume.

These different approaches raise questions as to the likely consequences (of each approach) in terms of provider behavior and the potential for cost-shifting or adverse selection. Assuming that HCBS care is more cost-effective than institutionalized care, it might be expected that the more a plan is at risk for nursing facility care, the more care would be provided in the community, and the greater would be the incentive to develop approaches to reduce institutionalization. For example, PACE providers (who are at full risk for nursing home cost) have more of an incen-

tive to maintain the enrollee at maximum functional level than do MSHO providers, who are reimbursed under FFS after 180 days.

Evaluation results of the ALTCS program found that home care was being used as a substitute for nursing home care and was cost-effective (McCall et al., 1997). Preliminary results of the PACE evaluation revealed an increased use of the adult day centers and ambulatory services and a reduction in utilization of hospital and nursing home services (Burstein, White, and Kidder, 1996). Beneficiary survey data were used rather than Medicare and/or Medicaid utilization data. Further study to compare the survey results with secondary claims data would be desirable to confirm these findings. The effect of the degree of financial risk for nursing home care on the share of LTC provided in the community versus the nursing facility should be explored for other programs that place providers at risk for nursing facility care.

The potential for cost shifting to Medicare is greater in programs such as ALTCS and Texas STAR+PLUS, which capitate only Medicaid. Having both the Medicare and Medicaid benefits provided through capitation is one way to ensure that there is no cost shifting from one payer to another. Another way to ensure no cost shifting back to FFS is to lock in the payment until the beneficiary dies or chooses to disenroll.

A single contractor serves all ALTCS enrollees in a county. This differentiates the ALTCS program from the other programs in that having all eligible participants enrolling in a single plan provides some protection from the consequences associated with adverse risk selection (Muskie School of Public Service, University of Southern Maine, and the National Academy for State Health Policy, 1997). The mandatory nature of Medicaid

in the ALTCS and Texas STAR+PLUS programs also reduces the potential effects of adverse risk selection. Concern has been raised about the CCN program design element that allows impaired Medicare-only enrollees to elect to have their chronic care services covered by privately paying the equivalent of the Medicaid capitation rate to cover all such services. This might expose the plans to considerable financial risk if a large number of impaired enrollees choose this option and their cost of care exceeds the capitated payment rate.

Movement toward community-based care could, in theory, be promoted by capitation because capitation should remove the financial incentive to institutionalize. There is evidence among evaluations of acute care programs that managed care may reduce the use of costly institutional services such as hospitalizations or emergency rooms (Riley, Coburn, and Kilbreth, 1990; Hurley, Freund, and Paul, 1993; McCall, Korb, and Driver, 1995). These results may apply to LTC programs. Capitation seems to provide an incentive to delay or avoid institutionalization. The theory is that a managed care plan would choose the best setting for LTC, although there would now be an incentive to avoid the most expensive setting. The planned evaluations of Texas STAR+PLUS, MSHO, and CCN should provide data on the extent to which capitation has, in fact, promoted community care.

The described programs provide evidence for the increasing interest in capitation for LTC services. Interest also stems from cost-containment pressures and the perceived cost-effectiveness of community-based programs and from the desire to provide financial incentives to maintain patients in the community.

It will be important to evaluate the success of these approaches in terms of cost savings, incentives for appropriate place-

ment and care delivery, and impact on Medicaid and Medicare costs. Because plans are placed at risk for the care of one of the most vulnerable segments of the Medicaid population, it is crucial that payment systems achieve a balance between incentives for cost savings and appropriate care delivery.

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