Actuarial Soundness of Medicaid Managed Care

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Introduction

Throughout much of its history, the Medicaid program has been plagued by three major problems: insufficient access to care for beneficiaries, lack of coordination and continuity of care, and rapid growth in total program costs. Beginning in 1982 and accelerating in the 1990s, states began to address these problems by contracting with private health insurance companies to provide care for at least some Medicaid beneficiaries through capitated managed care arrangements, using Health Maintenance Organization (HMO) or Preferred Provider Organization (PPO)-like provider networks. By 2010, these Medicaid Managed Care Organizations (MCOs) provided coverage for 53 percent of all Medicaid beneficiaries in 35 of the 50 states, plus DC and Puerto Rico. Some states make MCO enrollment mandatory for all but a few categories of beneficiaries; others provide MCOs as an option along with a state-run fee-for-service plan.

MCOs have the ability to provide some services that cannot generally be provided in the fee-for-service framework, such as disease management and care coordination. These additional services can significantly benefit patients. In addition, MCOs can improve access to care for beneficiaries. Some evidence suggests that compared to state-run fee-for-service, managed care can reduce overall Medicaid program costs, while providing better patient outcomes.

From a state's perspective, the key difference between Medicaid managed care and the “traditional” fee-for-service arrangement is that instead of paying providers directly according to a fee schedule, the state pays the MCO a fixed monthly fee for each enrollee, in exchange for which the MCO provides all covered services for that enrollee. Another benefit a state derives from an MCO program is more predictability in budgeting by reducing the variability of program cost. By paying a specific amount per member per month, the state transfers the financial risk of variation in each beneficiary’s health care needs from taxpayers to private companies. One of the key challenges is to determine the appropriate monthly payments. Payments should be high enough to cover the MCO’s cost of providing care and to induce the MCO to stay in the Medicaid managed care business, but not so high as to provide above-market profits at taxpayer expense.

Why Medicaid Managed Care is Important

One of the perennial problems faced by beneficiaries in Medicaid fee-for-service programs is the lack of adequate access to providers, such as physicians (especially specialty physicians). States often set rates for physician services too low, so low that relatively few physicians accept Medicaid patients. Those who do often lose money on Medicaid patients but accept a limited number out of a sense of obligation to help the poor. However, the limited number of patient slots available is generally not enough to provide care for all Medicaid patients who need it.

MCOs have some ability to solve the access problem. In some cases, plans can adjust rates for individual services that are particularly in demand. Many MCOs also run PPO plans for private-sector clients, and may be able to leverage their PPO networks to obtain more participating providers for their MCO networks than are available to non-MCO Medicaid beneficiaries. In addition, MCOs have the flexibility to require small copayments, which is normally not the case for state-run FFS plans. Studies have shown that even very small copayments – at a level Medicaid recipients can afford –
can reduce utilization without adversely affecting health outcomes. In addition, care coordination, disease management, on-call nurses, and patient education can reduce unnecessary or duplicative utilization, and can in some cases reduce costs by reallocating some care to an equally capable lower cost setting (say, moving non-emergency care from an emergency room to a primary care office). By reducing unnecessary utilization in this way, MCOs can increase payments to providers for individual services without increasing overall per-patient program costs. MCOs may also be able to incorporate Medicaid beneficiaries into their existing private-sector HMO programs, deriving costs savings through economies of scale that enable them to treat Medicaid patients without losing money.

A critical benefit to patients is that MCOs have the ability to maintain continuity of care in a way that an atomistic fee-for-service plan generally cannot. HMO-style MCOs provide integrated care for Medicaid patients the same way they provide such care for private-sector patients. All types of MCOs may provide disease management services for patients with chronic conditions, on-call nurses available by phone to help a patient determine whether an emergency room visit is necessary, and other similar services that fall outside the fee-for-service structure. These services may be particularly important for patients with multiple chronic conditions – and they are generally not available in the state-run FFS systems.

In most cases, individual beneficiaries have the opportunity to select the MCO plan of their choice from among several options. Because of the need to attract beneficiaries many MCOs provide additional benefits beyond what Medicaid requires, such as adult dental care and vision care. In addition, the need to attract beneficiaries provides MCOs with an incentive to pursue innovation in the care of Medicaid populations, as higher quality care can result in higher enrollment and thus more revenue, as well as, in some cases, reduced total costs. There are many examples, including programs for self-management of diabetes, pre-natal care, and even managing links between diabetes and depression.

Even with additional benefits, Medicaid managed care can reduce overall per-beneficiary Medicaid spending. A review by the Lewin Group found that all 24 states studied experienced a reduction in per-beneficiary spending due to Medicaid managed care.

An additional benefit that the state derives from the MCO program is more predictability in budgeting by reducing the variability of program cost. By paying a specific amount per member per month, the state transfers the financial risk of variation in health care needs from taxpayers to private companies. The state retains only the risk of variation in the size (and to some extent, the demographic composition) of the Medicaid-eligible population.

**Actuarial Soundness**

“Actuarial soundness” is the concept that the monthly rates paid are sufficient for a health plan to meet its obligations to its population, taking into account all necessary costs including patient care and necessary administrative costs, and the need to maintain reserves for high-cost years. This concept applies equally to commercial health plans as well as Medicaid MCOS. States regulate private health plans to ensure that rates are sufficient to meet their obligations to patients, in order to avoid a situation in which insurance companies offer low rates to attract customers, then go bankrupt leaving customers unprotected in the event that costs or utilization turn out to be higher than anticipated. Similarly, in the case of MCOs, there is a concern that in their desire to protect taxpayer dollars, state Medicaid administrators might set rates too low, driving MCOs into bankruptcy or encouraging them to limit care for patients in some way.
In the case of private plans, state insurance commissioners are charged with verifying that rates are certified as actuarially sound. Generally speaking, they require certification by a Member of the American Academy of Actuaries that the capitation rates meet the requirements of the Actuarial Standards Board.

In the case of Medicaid managed care, the Centers for Medicare and Medicaid Services (CMS) is charged with approving rates states pay to MCOs based on an actuary's certification that the rates meet the appropriate requirements.

Of course, actuarial soundness is much easier to define in theory than to evaluate in practice. Actuaries must develop statistical estimates of patients' utilization of health care services, based on a variety of information including demographic and diagnostic information on the relevant population and assumptions or forecasts of how these factors may change over time. They must then combine these estimates of utilization with estimates of payment rates to produce a statistical distribution of required payouts. If complete and accurate information is unavailable, it might turn out that payment rates certified as actuarially sound ex ante might not turn out to be actuarially sound in practice, and could turn out to be inadequate ex post.

**Setting Actuarially Sound Rates**

The importance – to beneficiaries – of setting actuarially sound rates cannot be overstated. Clearly, overly generous rates would waste taxpayer funds. However, rates that are too low also carry substantial adverse consequences. For example, insufficient rates encourage MCOs to reduce payment rates to providers. This impairs access to care by making it more difficult to enroll providers and thus negates one of the main benefits of Medicaid managed care compared to Medicaid FFS. Low rates might also encourage MCOs to take steps to cut utilization below the optimal level, and cut back on services not required by the state plan, such as disease management, on-call nurse hotlines, and additional benefits. If MCOs are not able to make up the difference by reducing utilization, payment rates, and benefits, they may withdraw from the Medicaid program, or even go bankrupt altogether. And of course, if health insurers know that rates will be too low, they may decline to enter the Medicaid business in the first place. As discussed above, it is critical for states to use the best and most relevant actuarial data available when calculating capitation rates.

In general, states have several options when it comes to setting rates. In order to prevent MCOs from “cream-skimming” by finding ways to disproportionately attract healthy enrollees, it is necessary to do some sort of risk adjustment. The idea is for the state to pay appropriately higher rates for enrollees who, based on their demographic or other observable characteristics, are likely to have higher costs, and likewise lower rates for those likely to have lower costs.

One way states accomplish this adjustment is to establish “risk cohorts” for patients with similar observable demographic characteristics and similar average health care needs. For example, the Medicaid-eligible population may be divided into cohorts based on age range, disability status, gender, and similar factors. A rate would then be established for each cohort. For example, there might be a rate for “age 18-45, female, non-disabled, TANF-eligible” and a different rate for “age 45-65, male, disabled.” There could also be different rates for “infants” (age 0-1) and “children” (age 1-17). Pregnant women, as well as different rates for residents of different parts of the state based on regional variation in costs.

Another approach is to do risk-adjustment at the individual patient level, based on known diagnoses for specific patients deduced from their past claims. In this approach, there would be adjustment factors applied based not only on demographic factors, but also on diagnoses such as diabetes, heart disease, and other conditions that affect costs in a somewhat predictable way. Because this requires detailed health information on individuals, patients new to Medicaid might have to be rated initially based on their cohort, and then re-rated after a period of time when their claims can be observed and analyzed.

In both approaches, the overall goal is to adjust payments based on factors not under the control of the MCO, but allow the MCO to control other factors that can result in better care at lower costs. Aside from setting adjustment factors based on beneficiary characteristics, most states set “take-it-or-leave-it” rate schedules for each cohort, and others negotiate individually with each prospective MCO.

**Rate Basis**

An important consideration is the choice of a fee schedule on which to base payment rates. It might be relatively straightforward to estimate (say) the average number of office visits in a particular rate cohort, but to convert this to dollars requires some sort of assumption about the price of office visits. While most states have price schedules for their Medicaid FFS programs, these prices may or may not apply to MCOs.

In many cases, complete and accurate information about the relevant population might not be available, requiring actuaries to make assumptions based on data for populations that are thought to be similar. For example, when a state begins a new MCO program, the data available may be based on that state’s fee-for-service history. Estimates based on that history might turn out to be incorrect if, for example, it turns out that MCO enrollees differ from non-enrollees in systematic ways, if enrollment in an MCO changes patients' propensity to use health care services, or if MCO payment rates turn out to be significantly different from fee-for-service rates. The state’s fee-for-service data might be supplemented by MCO data from neighboring or demographically similar states, but other states might have different supply conditions or different regulatory environments.

In the case of states with mature MCO programs, it may be possible to use utilization data from the MCO population (excluding the fee-for-service population, if any) to obtain more accurate actuarial estimates. However, relying too naively on data from existing MCOs can result in a feedback loop, as, for example, MCO provider payment rates are used to determine MCO capitation rates, which in turn affect provider payment rates.

If monthly rates are based on existing Medicaid fee-for-service payments combined with more optimistic utilization rates due to MCO services (such as disease management), there is the danger that monthly rates might turn out to be too low to overcome existing barriers to access. State Medicaid programs need to understand that access problems are partly the result of low payment rates, and MCOs must have the flexibility to retain some of the benefits of lower utilization in order to increase payment rates and pay for MCO services.

In addition, it is important that rates be based on the most accurate and complete utilization data available, keeping in mind that Medicaid utilization patterns may differ from those of private-sector health plans, and MCO utilization patterns may differ from those of Medicaid FFS programs.

Risk-Sharing

As noted above, setting specific per-patient monthly rates transfers the risk of statistical variation in health care needs from the state and the federal governments to the MCOs. While this is a benefit for the governments, it is a downside for the MCOs. As a result, MCOs must require rates that take into account, and compensate for, the additional risk that they take on.17

A compromise between the two extremes involves risk-sharing, in which the Medicaid program and the MCO share the risk of variation in utilization outside a specified “risk corridor.” For example, an expected utilization level could be calculated for a particular MCO based on its enrollment (including characteristics of its enrolled population). In the event that actual utilization exceeds the expected level by more than a specified percentage, the MCO would receive additional payments to make up for part or all of the difference. Conversely, if actual utilization is below the expected level by more than a specified percentage, the MCO would have to provide a partial refund to the Medicaid program.

For example, suppose that after enrollment, it is calculated that a particular MCO has expected utilization on average that corresponds to a cost of $5,000 per enrollee per year, with a risk corridor of plus or minus 10 percent. At the end of the year, if the actual average cost per enrollee turned out to be between $4,500 and $5,500, the MCO would incur the full amount of the loss or keep the full amount of the surplus. However, if actual average cost turned out to be higher than $5,500, the MCO would receive an additional payment based on the difference between actual average cost and $5,500. This could be the full amount of the excess cost (making it equivalent to stop-loss insurance), or a percentage of the excess cost (sharing a portion of the risk). On the other hand, if actual average cost turned out to be lower than $4,500, the MCO would be required to give a refund to the Medicaid program based on the difference between the actual cost and $4,500. Again, the refund could be the full amount of the difference (amounting to a profit cap), or a percentage of the difference.

Conclusion

Medicaid managed care has the potential to significantly improve access to health care and health outcomes for the Medicaid population. It may also have the potential to reduce program costs. However, these goals can be achieved only if payment rates are set at appropriate, actuarially sound, and sustainable levels. Policymakers are understandably concerned that high payment rates might result in above-market profits for health insurers who participate in Medicaid MCO programs. However, an excessive desire to cut rates and limit profit may be counterproductive, as it may reduce quality and access and drive health insurers out of the MCO business.
Requirements for the Actuarial Certification of Small Employer Health Benefit Plans

Certification by an M.A.A.A., just as accounting statements might need to be certified by Certified Public Accountant (C.P.A.) qualification in one of the actuarial fields. In general, when a governmental entity requires actuarial certification, this means certification by an M.A.A.A., just as accounting statements might need to be certified by Certified Public Accountant (C.P.A.).

As explained below, the states still bear some risk, for example, that related to the possibility that the Medicaid population might increase.


The post-nominal designation is “M.A.A.A.” This designation is available to individuals who have achieved an appropriate qualification in one of the actuarial fields. In general, when a governmental entity requires actuarial certification, this means certification by an M.A.A.A., just as accounting statements might need to be certified by Certified Public Accountant (C.P.A.).

For example, see Actuarial Standards Board, Actuarial Standard of Practice No. 26: Compliance with Statutory and Regulatory Requirements for the Actuarial Certification of Small Employer Health Benefit Plans, Oct. 1996.

American Academy of Actuaries, Health Practice Council, Actuarial Certification of Rates for Medicaid Managed Care Programs, Aug. 2005.

This is similar to “expected” health care costs, in the sense of statistical expected value.

This method is similar to that used by the federal government for adjusting payments in the Medicare Advantage program.

Except Arizona, which has only managed care, and does not have a Medicaid FFS program.

This is no different from the risk aversion phenomenon in any other line of business.

Endnotes


2 Author's calculations based on Kaiser Family Foundation, http://www.statehealthfacts.org/comparetable.jsp?ind=218&cat=4 and http://www.statehealthfacts.org/comparetable.jsp?ind=794&cat=4&sub=52&yr=207&typ=1&sort=a&o=a&sortc=1. These figures do not include patients in Primary Care Case Management (PCCM) programs, which are often counted as “managed care” but which do not involve capitated payments. The designated provider manages and coordinates care for a small monthly per-patient fee, but the state pays for treatments and direct health care services on a fee-for-service basis.


4 For examples, see footnotes .8, 9, and 10.

5 As explained below, the states still bear some risk, for example, that related to the possibility that the Medicaid population might increase.


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