

Do Quality Improvement Strategies for Medicaid Enrollees Differ in Medicaid-Dominant Versus Commercial Managed Care Organizations?

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Objective: To examine whether it matters, in terms of quality improvement initiatives and access to commercial networks, whether states contract with Medicaid-dominant or commercial managed care plans.

Study Design: A 2001 telephone survey of Medicaid managed care plans in 11 states that together account for about half of the national Medicaid managed care enrollment.

Methods: The survey was developed in consultation with a panel of individuals knowledgeable about Medicaid managed care. Information on plan characteristics and network design was obtained from the plan CEO or person most knowledgeable about the topics. The rest of the data were obtained from the person the CEO named as most knowledgeable about quality improvement initiatives.

Results: Surveyed plans reported an extensive array of quality improvement initiatives. Programs are in many ways similar across Medicaid-dominant and commercial plans. Medicaid-dominant plans tend to specialize more in conditions of greatest priority to Medicaid beneficiaries. Commercial plans tend to develop programs for accreditation by the National Committee for Quality Assurance, and to limit measurement specific to the Medicaid population. They draw on their commercial networks to support the Medicaid product line, but how much they expand provider access is not clear. Both types of programs face barriers that limit the effectiveness of the plans' initiatives.

Conclusion: This study shows extensive development of quality improvement initiatives in Medicaid managed care plans, with limited differences across Medicaid-dominant and commercial plans.

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Managed care has become the dominant form of health care for many Medicaid beneficiaries. Fifty-six percent of Medicaid beneficiaries, predominantly low-income children and their parents, received care under a managed care arrangement in 2001.¹ States moving to managed care have diverse goals.²⁻⁶ Improved provider access and healthcare quality typically are among them. Ensuring adequate provider participation and access to care have long been outstanding challenges in state Medicaid programs.⁷⁻¹² In moving to managed care, states hope to expand physician participation and also to use the network-

based structure of managed care to improve accountability and quality of care.

Policymakers disagree fundamentally about whether Medicaid beneficiaries should be directed toward managed care plans specializing in serving Medicaid enrollees or whether it is better to attract plans with substantial commercial enrollments.¹³ Theoretical arguments exist for both perspectives. Specifically, to the extent Medicaid enrollees have characteristics and needs distinct from those in commercial managed care, Medicaid-focused managed care may provide better quality through specialization. Alternatively, the discipline of the private market that polices commercial plans could be used to maintain quality in commercial plans so Medicaid beneficiaries would be less likely to be taken advantage of. Many commercial plans may be unwilling to participate in Medicaid under the conditions states currently set for their participation and payment, but policy concern remains over the potential inequity of having different plans serve Medicaid and commercial enrollees.

In the context of this debate, there are few empirical data on how plan characteristics influence the quality of care Medicaid enrollees actually receive in managed care. Most studies focus on state policies, not plan practices¹⁴ or are highly specific to individual plans and states.¹⁵ An exception is a 1998 study of managed care plans in 11 states and the District of Columbia that found similarities in programs sponsored by Medicaid-dominant and commercial plans, but limitations in each.¹⁶ That survey showed 78% of Medicaid-dominant

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and 72% of commercial plans had programs in place for high-risk pregnancy; 66% and 68%, respectively, had programs for pediatric asthma. Medicaid-dominant plans were considerably more likely to have in place specialized programs targeting particular needs of the Medicaid population (eg, lack of telephone, illiteracy). Similar data that reflect the recent growth in managed care and changes in plan sponsorship would be valuable.

To address this need, this paper examines quality improvement structures in Medicaid-participating capitated plans in 2001. Although the review looks at self-reported practices rather than audited outcomes, the survey captured specific details of practice and provided insight into plan strategy, infrastructure, and what plans say they are doing to promote quality of care.

METHODS

Eligible Plans and Data Collection

This paper is based on data from capitated Medicaid participating plans in 11 states with major Medicaid managed care programs: California, Pennsylvania, Michigan, New York, Florida, New Jersey, Arizona, Maryland, Texas, Washington and Missouri.¹ In California we limited plans to those under contract in Los Angeles and Orange County because the state is large and experience varies substantially by county. To best target available resources, we excluded all plans with fewer than 5000 patients in combined Medicaid/State Children's Health Insurance Program (SCHIP) enrollment, but surveyed all of the rest. Although surveyed plans may not necessarily be nationally representative, they capture the experience of participating plans and enrollees representing about half of the risk-based enrollment of Medicaid and SCHIP plans nationwide in 2000.¹⁷

A total of 155 plans were surveyed, of whom 133 ultimately proved eligible for the survey. Overall, 109 plans responded to the survey for a response rate of 82%. Response rates varied by state from a high of 100% in New Jersey, Texas, and Washington to a low of 50% in Florida. Otherwise, plans with different characteristics had relatively similar response rates.¹ Of the 102 plans participating in Medicaid, 101 responded to the quality improvement component of the survey. The data reported here refer to these 101 plans. Plans were asked to respond for Medicaid (rather than SCHIP) even if they participated in both programs because managed care has been in place longer for Medicaid, allowing plans more time to develop, and amass data on, quality improvement initiatives. Item response rates are shown in the tables.

Data were captured via a telephone survey developed in consultation with an expert panel of individuals

knowledgeable about Medicaid managed care in various states. The main body of the survey focused on plan participation and provider networks and was answered by the plan CEO or the person most knowledgeable about the topics. The information presented here on plan characteristics and provider network design comes from that part of the survey. The rest of the data reported come from a parallel instrument on quality improvement initiatives that was answered by the person the CEO named as most knowledgeable about quality improvement initiatives.

Interviews with quality improvement staff averaged 20 minutes and had 2 purposes. The first was to determine whether plans were pursuing for Medicaid patients any or all of 17 specific health improvement initiatives (eg, diabetes, asthma). These initiatives might or might not include non-Medicaid enrollees as well. Interviewees then were asked to complete and return a worksheet and include specific information on the design of and experience with up to 5 initiatives. Plans were automatically asked about any initiatives they offered for pregnancy, lead screening, sickle cell anemia screening, and general well-child screening or early periodic screening, diagnosis, and testing (EPSDT). Plans were asked to select the remaining initiatives from those that were most extensive and included Medicaid members. The second purpose of the quality interviews was to ask in considerable detail about operational pregnancy programs in place for Medicaid members and about well-child care. We selected these conditions for more intensive study because our advisory panel believed these types of care were particularly important given the demographics of enrollees in Medicaid managed care. The findings are limited because plans might not have viewed answers in the same light (eg, what constitutes a "yes") and because they are based on self-reports. However, the survey provides relatively detailed data on practices in the Medicaid program.

Analysis Plan

The analysis distinguishes between health plans for whom Medicaid/SCHIP enrollment accounts for 75% or more of plan enrollment ("Medicaid dominant") and others (which we defined as "commercial"). (Though SCHIP enrollment is included in the definition, Medicaid enrollment drives the classification because Medicaid is a much bigger program. For example, 34% of participating plans had fewer than 5000 SCHIP enrollees and 12% had fewer than 10000 SCHIP enrollees. In contrast, only 3% and 15% of surveyed plans had Medicaid enrollments this low.¹⁷) The distinction between Medicaid-dominant and commercial plans is consistent with earlier

Table 1. Characteristics of Surveyed Medicaid-Dominant and Commercial Plans Participating In Medicaid*

Characteristic	Percentage		
	All	Medicaid-Dominant Plans	Commercial Plans
Profit status[†]			
For profit	52	54	49
Public nonprofit	6	9	0
Nonprofit (nongovernment)	42	37	51
(n)	(102)	(65)	(37)
Plan operational			
Before 1985	32	29	39
1985-1989	14	10	22
1990-1994	11	11	11
1995-1997	36	43	25
1998 or later	6	43	25
(n)	(99)	(63)	(36)
Ownership[‡]			
Blue Cross/Blue Shield	15	9	24
Commercial insurer	19	9	35
National managed care company	12	10	13
Provider sponsored	39	50	22
Other	16	22	5
(n)	(95)	(58)	(37)
Part of multistate organization			
Four or more states	15	16	14
Three or fewer states	20	18	21
No	65	66	63
(n)	(97)	(62)	(35)
NCQA accredited[‡]			
Yes	31	12	61
Scheduled	13	17	6
No	57	71	33
(n)	(95)	(59)	(36)
Total enrollment[‡]			
25 000 or fewer	16	20	7
25 001-50 000	20	28	3
50 001-100 000	19	22	14
100 001-250 000	27	22	38
More than 250 000	18	9	38
(n)	(94)	(65)	(8)
Medicaid enrollment[‡]			
Fewer than 10 000	15	11	23
10 000-24 999	26	20	37
25 000-49 999	22	25	17
50 000-99 999	18	20	14
100 000 or more	18	23	9
(n)	(99)	(64)	(35)

*Source: Mathematica Policy Research Survey of Medicaid Managed Care Plan in 11 States for the Kaiser Family Foundation. NCQA indicates National Committee for Quality Assurance.

[†] $P \leq .10$ by the chi-square test.

[‡] $P \leq .05$ by the chi-square test.

research¹⁸⁻²⁰ and builds on Medicaid requirements that until recently stated that no more than 75% of a Medicaid-participating health plan's enrollment could come from that program.²¹ In the survey used here, 64% of responding plans were Medicaid dominant and 36% were commercial.

Table 1 summarizes the characteristics of these plans. Though many similarities exist, Medicaid-dominant plans were more likely to be provider sponsored and public sponsorship is unique to this type of plan. In contrast, commercial plans tended to be larger but to have a smaller Medicaid enrollment base. That means commercial plans have a larger enrollment base upon which to spread any fixed costs, but may have less incentive to modify their systems to accommodate specific requirements of Medicaid, which constitutes a typically small share of enrollment. Reflecting their commercial base, these plans also were much more likely to be accredited by the National Committee for Quality Assurance (NCQA) because many large employers require it.²² Accreditation means the organization has undergone a rigorous external survey and meets specified standards on clinical and administrative systems in the area of patient safety, confidentiality, consumer protection, access, service, and continuous improvement. Medicaid is less likely than commercial payers to require such accreditation,

though Medicaid agencies may impose similar standards for plans participating in their programs.

The analysis used in the paper is descriptive, showing for the most part the proportion of plans reporting a particular practice. In comparing Medicaid-dominant and commercial plans, we calculated the chi-square statistic to provide evidence of the likelihood the differences were by chance. We show significance at both the conventional 0.05 level and at a more expansive 0.10 level and identify in the text statistically significant findings. Though few differences are statistically significant (the survey size is small), we noted patterns that appear consistent and substantively large, a practice we believe appropriate, particularly because we were dealing with a census of all qualified plans in the 11 states, not a sample. Although most of the findings are reported in tables, we include additional information in the text to elaborate or provide context.

FINDINGS

Quality Improvement Initiatives by Plan Type

More than three quarters of the surveyed plans had initiatives targeting asthma, immunizations, pregnancy, well-child screenings/EPSTD, diabetes, and breast and cervical cancer screening (Table 2). At least half had initiatives on tobacco cessation, prevention of HIV or other sexually transmitted diseases (STDs), depression, and nutrition counseling. Ninety-five percent of plans with lead screening programs said the state required those plans, as did 93% of plans with well-child/EPSTD programs and 89% of plans with pregnancy programs (data not shown). This was much less likely to be the case for immunizations, asthma, diabetes, and sickle cell screenings.

Among the 17 health improvement initiatives, the mean number offered was 12 per plan, a figure that differed little between Medicaid-dominant and commercial plans (12 versus 11). The top 7 conditions most frequently addressed for Medicaid enrollees were the same in both types of plans: immunizations, asthma, well-child screenings/EPSTD, pregnancy, diabetes, breast cancer screening, and cervical cancer screening. Commercial plans were more likely to have programs targeting diabetes, tobacco cessation, congestive heart failure, coronary artery disease, depression, and nutrition counseling. Medicaid-dominant plans were more likely to have programs targeting asthma, violence prevention, HIV or other STD prevention, lead screenings, and sickle cell anemia screenings. Most of these differ-

Table 2. Percentage of Plans With Health Improvement Initiatives That Include Medicaid by Plan Type*

Health Improvement Initiative	All Plans	Medicaid-Dominant Plans [†]	Commercial Plans [‡]
Immunizations (n = 100)	100	100	100
Asthma [§] (n = 100)	97	100	92
Well-child screenings or EPSTD (n = 100)	97	98	95
Pregnancy (n = 100)	96	95	97
Diabetes (n = 99)	89	85	95
Breast cancer screening (n = 100)	84	84	84
Cervical cancer screening (n = 99)	81	81	81
Lead screening (n = 100)	74	78	68
HIV or other STD prevention [§] (n = 100)	68	76	54
Tobacco cessation (n = 100)	65	62	70
Depression [¶] (n = 97)	56	49	67
Nutrition counseling (n = 97)	55	58	49
Congestive heart failure (n = 99)	47	44	54
Sickle cell anemia screening [§] (n = 99)	45	55	30
Coronary artery disease (n = 96)	39	36	43
Violence prevention (n = 99)	36	40	30
Weight loss programs (n = 99)	35	34	38
None of the above	0	0	0
Mean number of initiatives (out of 17)	12	12	11

*Source: Mathematica Policy Research Survey of Medicaid Managed Care Plan in 11 States for the Kaiser Family Foundation. EPSTD indicates early periodic screening, diagnosis, and testing; HIV, human immunodeficiency virus; STD, sexually transmitted disease.

[†]Seventy-five percent or more of enrollees were in Medicaid or the State Children's Health Insurance Program.

[‡]All other plans.

[§]P ≤ .05 by the chi-square test.

^{||}General or other than lead or sickle cell screenings, which are listed separately.

[¶]P ≤ .10 by the chi-square test.

Table 3. Stage of Development of Disease and Health Management Programs by Plan Type*

Program Type and Stage	Percentage		
	All Plans [†]	Medicaid-Dominant Plans [‡]	Commercial Plans [§]
All programs			
Fully implemented	65	64	67
Implementation	25	29	19
Design	10	7	14
(n)	(453)	(279)	(174)
Pregnancy programs			
Fully implemented	76	70	83
Implementation	20	26	11
Design	4	4	6
(n)	(90)	(54)	(36)
Well-child screening			
Fully implemented	67	69	64
Implementation	26	27	23
Design	7	4	13
(n)	(86)	(55)	(31)
Lead screening			
Fully implemented	61	67	52
Implementation	23	18	32
Design	16	16	16
(n)	(70)	(45)	(25)
Sickle cell screening			
Fully implemented	47	52	36
Implementation	35	30	45
Design	18	17	18
(n)	(34)	(23)	(11)
Asthma			
Fully implemented	71	67	76
Implementation	20	27	10
Design	10	7	14
(n)	(51)	(30)	(21)
Immunization			
Fully implemented	70	75	62
Implementation	24	25	23
Design	6	0	15
(n)	(33)	(20)	(13)
Diabetes			
Fully implemented	58	38	80
Implementation	29	50	7
Design	13	13	13
(n)	(31)	(16)	(15)

*Source: Mathematica Policy Research Survey of Medicaid Managed Care Plan in 11 States for the Kaiser Family Foundation.

[†]Reflects response from 95 plans, 59 of whom were Medicaid and 36 of whom were commercial.

[‡]Seventy-five percent or more of enrollees were in Medicaid or the State Children's Health Insurance Program.

[§]All other plans.

^{||} $P \leq .05$ by the chi-square test.

Note: No additional results by the chi-square test are significant at $P \leq .10$.

ences were small and not statistically significant, but they were consistent with differences in plan membership. Enrollees with employment-based coverage made up the majority in commercial plans, and these members spanned the income and age spectrum; dealing with chronic disease associated with aging is an important need of this population. Though these conditions also are relevant to Medicaid, the Medicaid population is younger and poorer; well-child screenings, pregnancy, and health problems associated with poverty dominate care needs.

Characteristics of Quality Initiatives

The surveyed plans completed worksheets that provided more detail on specific quality initiatives. The worksheets reported on up to 5 types of programs (for a total of 453 programs across the plans). Though plan reports of practices were not audited, the worksheet data provided supporting evidence to indicate that initiatives are "real." Plans said that 65% of initiatives have been fully implemented, 25% are in the process of being implemented and 10% are still in the design stage (Table 3). Medicaid-dominant and commercial plans have similar shares of fully implemented programs (64% vs 67%). Statistically significant differences by type of plan were seen only in diabetes programs.

Measuring quality before and after an initiative has been implemented is central to continuous quality improvement. Plan performance on this indicator was mixed (Table 4). The vast majority (97%) of plans reported being able to show improvement in the quality of care for at least 1 of the

programs about which they provided information. The ability to show improvement was most likely for immunizations (100%) and least likely for diabetes (63%) (data not shown).

To draw clinicians more closely into quality improvement initiatives, some plans provide them with feedback on performance and use financial incentives to promote improvements in quality (Figure). About a third (32%-41%) of plans provide feedback to clinicians on the 5 types of programs most commonly reported on the worksheets. Plans typically give feedback to individual clinicians or a practice rather than a larger aggregation of physicians (data not shown). Commercial and Medicaid-dominant plans did not differ dramatically in their use of clinical feedback (see Table 4).

Financial incentives to improve quality were used less often than feedback. They were most common for well-child/EPSTD care and for immunizations. This probably reflects the fact that plans use these incentives to encourage physicians to submit data needed to construct Health Plan Employer Data and Information Set (HEDIS) indicators for these conditions, as findings we report later show.

Pregnancy Initiatives

Virtually all plans (99%) have a fully implemented pregnancy program that includes Medicaid members. Most programs (76%) serve all pregnant enrollees, or they have a component that does so (Table 5). Forty-two percent of the programs have at least 1 component that is targeted to 1 or more specific subgroups of pregnant women—typically subgroups whose characteristics mean they may be at higher risk. Though commercial plans were no more likely than Medicaid-dominant plans to have targeted programs, when they did they were more like-

ly than Medicaid plans to target by geographic area or provider. (Service areas for Medicaid-dominant plans probably are targeted already by the plan's design.)

The pregnancy programs of Medicaid-dominant and commercial plans differ in some other respects, though few of these differences are statistically significant.

Table 4. Collection, Use, and Feedback of Quality Data, Selected Measures by Plan Type*

Data Used	Percentage		
	All Plans	Medicaid-Dominant Plans [†]	Commercial Plans [‡]
Any quality measures			
All programs	55	53	58
Some programs	42	43	39
No programs	3	3	3
(n)	(96)	(60)	(36)
Medicaid-specific quality measures			
All programs	14	17	8
Some programs	39	33	47
No programs	48	50	44
(n)	(96)	(60)	(36)
HEDIS measures unmodified			
All programs [§]	29	26	34
Some programs	42	39	46
No programs	29	35	20
(n)	(89)	(54)	(35)
Confidence in accuracy of data for Medicaid population[§]			
All programs	41	42	40
Some programs	27	37	37
No programs	22	21	23
(n)	(92)	(57)	(35)
Both confident about data and provide feedback to clinicians[§]			
All programs	11	41	35
Some programs	56	24	35
No programs	33	35	31
(n)	(72)	(46)	(26)
Financial incentive to physicians for quality			
All programs	9	9	9
Some programs	30	34	23
No programs	61	57	69
(n)	(93)	(58)	(35)

*Source: Mathematica Policy Research Survey of Medicaid Managed Care Plan in 11 States for the Kaiser Family Foundation. HEDIS indicates Health Plan Employer Data and Information Set.

[†]Seventy-five percent or more of enrollees were in Medicaid or the State Children's Health Insurance Program.

[‡]All other plans.

[§]Asked only for programs where plans collect quality measures.

Note: No additional results by the chi-square test are significant at $P \leq .10$.

Table 5. Characteristics of Pregnancy Programs by Plan Type*

Characteristic	Percentage		
	All Plans	Medicaid-Dominant Plans	Commercial Plans [‡]
Years operational			
<2	14	10	19
2-5	73	75	69
6 or more	14	15	11
(n)	(95)	(59)	(36)
Population of pregnant women[§]			
Broadly focused	76	73	81
Targeted	42	48	33
(n)	(99)	(63)	(36)
Populations targeted (if targeted)			
High-risk pregnancies	100	100	100
Low income or Medicaid	86	87	83
Teen mothers	83	83	83
Substance abusers	86	90	75
Women in certain geographic areas	21	13	42
Care at certain health providers	26	17	50
(n)	(42)	(30)	(12)
Program features			
Telephonic case management	96	94	100
Mailed educational materials	93	94	92
Free or discounted childbirth classes	71	76	63
Free or discounted parenting classes	55	59	49
Other free or discounted classes	48	43	58
Incentives for prenatal visits	41	47	31
Incentives for postnatal visits	28	33	19
Other special support [¶]	82	75	94
(n)	(99) [¶]	(63)	(36)
Percentage of program participants receiving active case management			
<10	32	33	30
10-49	32	25	44
50-89	20	22	15
90-100	17	20	11
(n)	(82)	(55)	(27)
Percentage of program participants receiving a call from a case manager			
<10	13	18	6
10-49	21	14	32
50-89	18	18	19
90-100	48	51	42
(n)	(82)	(51)	(31)
Feedback to providers			
No comparative data feedback	30	29	31
Timely postpartum visits	48	48	49
Timely first prenatal care	47	47	49
Number/timing of prenatal visits	39	40	37
Content of prenatal visits	32	34	29
One or more outcome measures	42	39	49
Other feedback	15	19	9
(n)	(97)	(62)	(35)
Reported ability to show improvement in past 24 mo			
No improvement	20	22	18
Improvement	80	78	82
Medicaid population, specifically	61	66	53
(n)	(93)	(59)	(34)

*Source: Mathematica Policy Research Survey of Medicaid Managed Care Plan in 11 States for the Kaiser Family Foundation.

[‡]Seventy-five percent or more of enrollees were in Medicaid or the State Children's Health Insurance Program.

[§]All other plans.

[¶]Plans' program may be broadly focused, targeted, or both.

^{||} $P \leq .05$ by the chi-square test.

[¶]One plan failed to respond to all items.

Note: No additional results by the chi-square test are significant at $P \leq .10$.

Medicaid-dominant plans much more frequently offer incentives for prenatal and postnatal visits, and they more often offer free or discounted childbirth and parenting classes. They also put more emphasis on the case management component of their programs. Although three quarters or more of both commercial and Medicaid-dominant plans reported being able to show improvement in the past 24 months, only 53% of commercial plans (versus 66% of Medicaid-dominant plans) could show improvement specifically for the Medicaid population.

Member characteristics and behaviors were most often cited by plans as the top 2 substantial barriers to improvements in pregnancy care (these factors account for two thirds of the barriers cited by plans surveyed; data not shown). Failure to seek care early in pregnancy was a particular concern that plans attributed to lack of awareness or education regarding the value of prenatal care, or inability to see the value of prenatal care relative to other priorities in patients' lives. Other concerns included the absence of babysitting and transportation to support care seeking, population mobility, and enrollees' young age, cultural values, or substance abuse, leading to poorer outcomes.

Data limitations also serve as barriers to achieving better outcomes (accounting for 36 of 181 factors mentioned; data not shown). The most typical problems were that plans did not have correct address or telephone information for enrollees and that

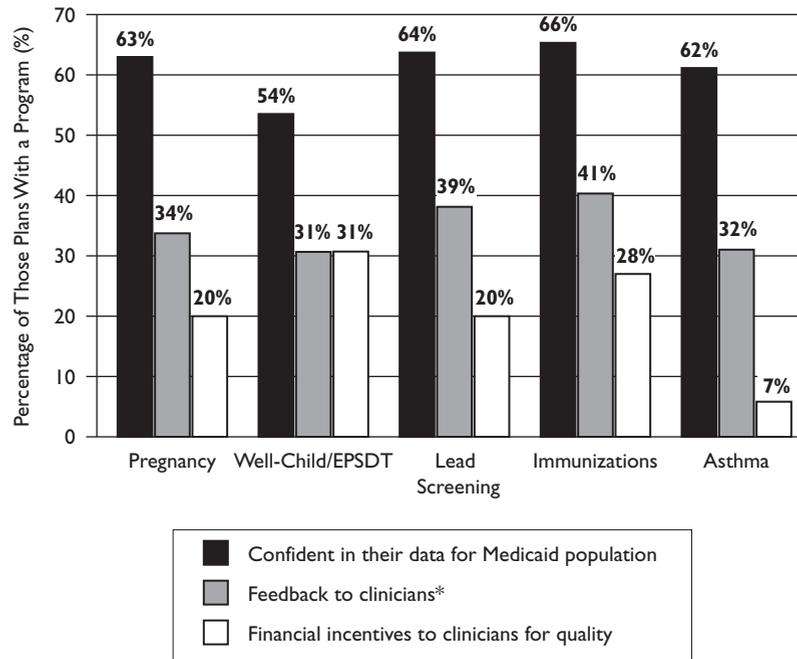
they had difficulty identifying pregnant women. Seventy-seven percent of plans found it difficult or very difficult to identify pregnant plan members early enough in pregnancy so that they could benefit substantially from the program. Thirty-seven percent reported global billing for pregnancy as a barrier to timely identification of pregnant women, and 88% reported other significant problems (eg, women not seeking care early enough in their pregnancy or not enrolling in the plan until late in the pregnancy). Medicaid-dominant plans were more likely than commercial plans to use pharmacy and claims or encounter data to identify pregnant women (52% of Medicaid-dominant plans used pharmacy data and 84% used claims data, versus 31% and 63% of commercial plans).

Well-Child Initiatives

Virtually all (96%) of surveyed plans had a well-child initiative targeted to Medicaid enrollees. All include childhood immunizations, and almost all included EPSDT (see **Table 6**). Lead screening and an adolescent immunization component also were common, whereas fewer included a sickle cell anemia screening component. Almost all the well-child programs included educating providers on the importance of well-child screening and EPSDT, sending newsletters to parents that include well-child immunization schedules, and sending personalized reminders to parents about age-appropriate immunization schedules. Medicaid-dominant plans were more likely to provide feedback to clinicians on when patients are due for a visit. Commercial plans were more likely to send personalized reminders to parents, though the differences were not statistically significant.

Eighty-eight percent of the plans reported the ability to show improvement over the past 24 months. Though the differences were not statistically significant, Medicaid-dominant plans were somewhat less likely than commercial plans to have shown improvement for their program as a whole (85% versus 94%), but only 63% of commercial plans could show improvement in

Figure. Information Feedback and Financial Incentives by Type of Program



Source: Mathematica Policy Research Survey of Medicaid Managed Care Plan in 11 States for the Kaiser Family Foundation. EPSDT indicates early periodic screening, diagnosis, and testing.

well-child care specifically for the Medicaid population.

As with pregnancy care, enrollee characteristics were cited most commonly as the major barrier to improving well-child care (accounting for 113 of 179 factors mentioned; data not shown). Many plans reported that enrollees are not aware of the importance of well-child care and that socioeconomic factors are important barriers, or simply stated that parents do not comply with the schedule for well-child care. Sixteen plans specifically cited a lack of transportation or babysitters as important barriers. Data issues also create barriers (37 mentions). The most common data problem stems from the fragmentation of care, with difficulties obtaining data from the public health department or schools and the absence of a central registry for care. Getting encounter data from doctors and coding problems also were mentioned.

Because we anticipated the latter kind of problem, we probed for additional information on it. Almost half (44%) of plans said they receive complete data for fewer than half of the well-child visits of their enrollees, with this problem more prevalent for Medicaid-dominant than commercial plans (47% vs 37%). Medicaid-dominant plans that receive complete data frequently have a

Table 6. Characteristics of Well-Child Programs by Plan Type*

Characteristic	Percentage		
	All Plans	Medicaid-Dominant Plans [†]	Commercial Plans [‡]
Procedures included			
Childhood immunizations	100	100	100
Adolescent immunizations	83	82	84
Lead screening	88	85	94
Sickle cell anemia screening	60	63	55
Other EPSDT	92	92	91
Other	31	34	24
(n)	(95) [§]	(62)	(33)
Program features			
Education of providers on importance of EPSDT	96	97	94
Newsletters with immunization schedules	93	92	94
Personalized reminders sent	90	87	97
Disseminated checklist for providers to use with medical charts	80	80	78
Free record-keeping materials for parents	78	75	82
Feedback to clinicians on when patients are due for visit	73	81	57
Calls to parents of children missing well-child visits or immunizations	67	70	59
Feedback to clinicians on when patients are overdue for visit	66	65	69
(n)	(95) [§]	(62)	(33)
Reported ability to show improvement in past 24 months			
No improvement	12	15	6
Improvement	88	85	94
Medicaid population specifically	58	55	63
(n)	(93)	(61)	(32)

*Source: Mathematica Policy Research Survey of Medicaid Managed Care Plan in 11 States for the Kaiser Family Foundation. EPSDT indicates early periodic screening, diagnosis, and testing.

[†]Seventy-five percent or more of enrollees were in Medicaid or the State Children's Health Insurance Program.

[‡]All other plans.

[§]A few plans failed to respond to all items.

^{||} $P \leq .05$ by the chi-square test.

Note: No additional results by the chi-square test are significant at $P \leq .10$.

payment method or other financial incentive for clinician to accurately code and report on well-child visits (57%); only 25% of commercial plans do.

Provider Networks by Plan Type

In the context of the Medicaid program, there is a history of assuming that commercial enrollment is, by

its nature, associated with higher quality of care because consumer demand for quality is viewed as more effective in the commercial sector, where many privately insured people have higher incomes, more education, and more options than those on Medicaid. This argument is behind the historical federal requirement (subject to waivers and now defunct) that no more than 75% of the patients in health plans participating in Medicaid be Medicaid enrollees. Commercial plans, some believe, benefit Medicaid enrollees because they have a broader network of providers who might otherwise be unwilling to treat Medicaid beneficiaries. Conversely, however, some are concerned about whether such providers will be familiar with the special needs of the Medicaid population and about how their involvement affects the traditional safety net of providers that serve low-income people, whether on Medicaid or off it.

The survey provides insight on how provider networks differ between Medicaid-dominant and commercial plans on both these dimensions. Within a commercial plan, Medicaid enrollees do not necessarily have access to the same providers as commercial enrollees (data not shown). Only 19% of the commercial plans surveyed ($n = 37$) require that providers in their

commercial products participate in Medicaid, with 57% including providers in the Medicaid network that are not in the commercial network. Most plans say these outside providers render a "little" (40%) or "some" (55%) of care, not most (5%) or all (none). These findings mean that attracting commercial plans to Medicaid may increase the number of providers willing to treat Medicaid patients, but this outcome is not as effective

as commercial plans bringing entire commercial networks to the Medicaid product.

In establishing the provider network for the Medicaid product, 29% of the surveyed commercial plans said they give strong preference to providers experienced in serving Medicaid, 33% expressed a mild preference, and 38% expressed no preference. The most common reasons given for using providers outside the commercial network were maintaining existing care arrangements for Medicaid enrollees, making care geographically accessible, including safety net providers that traditionally served the Medicaid population, or ensuring cultural/linguistic competency. However, some commercial plans said they use outside providers because there are not enough providers in the commercial network to serve both. Some also go outside the commercial network for Medicaid because the state requires it, there are needs for specific specialty types, or a Medicaid beneficiary requests a specific provider type.

Medicaid-dominant plans that consider themselves safety net plans (85% of plans that are both Medicaid dominant and provider sponsored) also make use of providers from outside the organization.¹⁷ On average, such providers account for 56% of the network in such plans. Provider-sponsored plans say they go outside their system to build a provider network to ensure sufficient providers, provide geographic accessibility, meet state requirements, respond to member demands, and compete with other plans.

More detail on provider participation and on payment is provided elsewhere.^{17,23} Unfortunately, the survey was unable to capture information important to assessing access to providers, such as the share of patients treated by diverse kinds of providers or the size of networks.

CONCLUSIONS

The survey provides encouragement for states seeking to use managed care to improve quality of care for low-income beneficiaries. We have no data on initiatives under the traditional Medicaid program. However, without the infrastructure of managed care, such initiatives are extremely challenging to create, suggesting that managed care has the potential to enhance care delivery.

States considering how to structure their Medicaid managed care programs and what emphasis to place on attracting different kinds of plans can take some comfort in the findings of this study. They show that both Medicaid-dominant and commercial plans can and do mount an extensive array of quality improvement initiatives. Medicaid-dominant plans have the advantage of

being able to specialize in programs tailored to the needs of Medicaid enrollees. Commercial plans have the advantage of the quality structure (and resources) available on the commercial side to support quality improvement. Though commercial plans do not bring their entire provider network to the Medicaid product line, there is some evidence that contracting with a commercial plan could bring in some additional providers. Further, at least some commercial plans appear willing to modify their systems to address specific needs and requirements of Medicaid, though such requirements may limit participation by other plans.

The survey also highlights quality improvement challenges. When care is fragmented among multiple providers, data are particularly important for quality improvement but may be difficult to secure. Facing many demands, individuals served by public programs often are noncompliant with preventive services guidelines. To be successful, plans participating in Medicaid may require outreach, education, and support beyond that provided in the commercial network. More research into this problem is warranted to provide insight on data collection techniques, tools, and information systems that work.

Absent true outcomes data, this study cannot determine whether the apparently greater Medicaid specialization in Medicaid-dominant plans results in better or worse quality of care for Medicaid beneficiaries than they would receive in a commercial plan. The results support flexibility for states contracting to accommodate differences in the managed care markets. They also highlight the barriers and challenges both commercial and Medicaid-dominant plans face in developing quality improvement initiatives to improve health outcomes for Medicaid beneficiaries.

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REFERENCES

1. Gold MR, Mittler J, Draper DA, Felt-Lisk S, Ingels J, Sinclair M. *Participation, Provider Networks, and Quality Improvement: Results from an 11 State Survey of Medicaid and SCHIP Managed Care Plans*. Washington, DC: Kaiser Family Foundation, 2003. Available at: <http://www.kff.org/content/2003/4145/>. Accessed October 6, 2003.
2. Gold MR, Sparer M, Chu K. Medicaid managed care: lessons from five states. *Health Aff.* 1996;15(3):153-166.
3. Holahan J, Zuckerman S, Evans A, et al. Medicaid managed care in thirteen states. *Health Aff.* 1998;17(3):43-63.

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4. Hurley RE, Freund, D, Paul J. *Managed Care in Medicaid*. Ann Arbor, Mich: Health Administration Press; 1993.
5. Hurley RE, Somers SA. Medicaid managed care: a lasting relationship. *Health Aff*. 2003;22(1):77-88.
6. Gold MR, Mittler J. Second generation Medicaid managed care: can it deliver? *Health Care Financ Rev*. 2000;22(2):29-40.
7. Bindman AB, Huen W, Vranizan K, Yoon J, Grumbach K, Street L. *Physician Participation in Medi-Cal, 1996-1998*. Oakland, Calif: Medi-Cal Policy Institute; February 2002.
8. Perloff JD, Kletke P, Fossett J, Banks S. Medicaid participation among urban primary care physicians. *Med Care*. 1997;35:142-157.
9. Perloff JD, Kletke P, Fossett JW. Which physicians limit their Medicaid participation, and why. *Health Serv Res*. April 1995;30(1 Pt 1):7-26.
10. Gifford B. Obstetricians' receptiveness to teen prenatal patients who are Medicaid recipients. *Health Serv Res*. August 1997;32(3):265-282.
11. Coburn AF, Long SH, Marquis MS. Effects of changing Medicaid fees on physician participation and enrollee access. *Inquiry*. Fall 1999; 36:265-279.
12. Mitchell J. Physician participation in Medicaid revisited. *Med Care*. 1991;29:645-653.
13. Fagan A, Riley T. *Medicaid-Only Managed Care Organizations. The Kaiser-HCFA State Symposia Series: Transitioning to Medicaid Managed Care*. Portland, Me: National Academy for State Health Policy; 1998.
14. Landon BE, Huskamp HA, Tobias C, Epstein AM. The evolution of quality management in state Medicaid agencies: a national survey of states with comprehensive managed care programs. *Jt Comm J Qual Improv*. 2002;28:72-82.
15. Moreno L, Hoag SD, Foster L, Razafindrakoto C. *HMO Characteristics and the Experiences of Medicaid Beneficiaries: An Analysis from Four States*. Princeton, NJ: Mathematica Policy Research; 2001.
16. Landon BE, Epstein AM. Quality management practices in Medicaid managed care: a national survey of Medicaid and commercial health plans *JAMA*. 1999;282:1769-1775.
17. Gold MR, Mittler J, Draper DA, Rosseau D. Participation of plans and providers in Medicaid and SCHIP managed care. *Health Aff*. 2003;22(1):230-240.
18. Felt-Lisk S, Yang S. Changes in health plans serving Medicaid, 1993-1996. *Health Aff*. 1997;16(5):125-133.
19. Felt-Lisk S. *The Characteristics and Roles of Medicaid-Dominated Managed Care Plans*. Washington, DC: Kaiser Commission on Medicaid and The Uninsured; February 2000.
20. Felt-Lisk S, Dodge R, McHugh M. *Trends in Health Plans Serving Medicaid—2000 Data Update*. Washington, DC: Kaiser Commission on Medicaid and the Uninsured; November 2001.
21. Kaiser Commission on Medicaid and the Uninsured. *Medicaid and Managed Care*. Washington, DC: Kaiser Family Foundation; December 2001.
22. National Committee for Quality Assurance. *NCQA Overview: Measuring the Quality of America's Health Care*. Washington, DC: NCQA; January 2003.
23. Draper DA, Gold MR. Risk sharing in Medicaid managed care plans. *Health Aff*. 2003;22(3):159-167.