

Research Paper

Health services appraisal and the transition to Medicaid Managed Care from fee for service

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Abstract

Background: Many states are transitioning fee-for-service (FFS) Medicaid into Medicaid Managed Care (MMC) for people with disabilities.

Objective: This study examined managed care's impact on health services appraisal (HSA) and unmet medical needs of individuals with disabilities receiving Medicaid. Key questions included 1) Do participant demographics and enrollment in MMC impact unmet medical needs and HSA? 2) Within MMC, do demographics and continuity of care relate to unmet medical needs? 3) Within MMC, do demographics, unmet medical needs and continuity of care relate to HSA?

Methods: We collected cross-sectional survey data ($n = 1615$) from people with disabilities in MMC operated by for-profit insurance companies ($n = 849$) and a similar group remaining in FFS ($n = 766$) in one state. Regression analyses were conducted across these groups and within MMC only.

Results: Across Medicaid groups, MMC enrollment was not related to either HSA or unmet needs; health status, having a mental health disability and unmet transportation needs related to HSA and health status, unmet transportation needs and having a mental health or physical disability related to higher unmet medical needs. Within MMC, in addition to better health and fewer unmet medical needs, less continuity of care significantly decreased HSA. Higher unmet transportation needs, poorer health status, having a physical or mental health disability, and less continuity of care significantly decreased unmet medical needs.

Conclusions: This research points to the importance of meeting unmet needs of individuals in MMC and the need for increased continuity of care as people transition from FFS. © 2016 Elsevier Inc. All rights reserved.

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Historically, people with disabilities have not been included in Medicaid Managed Care (MMC), and instead received traditional fee-for-service (FFS) Medicaid.¹ However, potential Medicaid savings and the promise of better access and quality under MMC have persuaded many states to start MMC programs for this population.² Currently, 48 states use MMC for health care services; 28 states also include managed long-term services and supports (MLTSS).^{3,4}

Despite the increased use of MMC for people with disabilities, little is known about experiences with health care during the transition from FFS to MMC, including satisfaction and unmet needs. One relevant study in Kansas, found that only 63.8% of the 105 interviewees were satisfied with their care under MMC and 24.8% were unable to access medical services.⁵ That study reported demographics and health status of the participants but did not assess the relationships between these variables, nor compare MMC and the previous FFS system.

The present study addresses this research gap by examining the impact of MMC on the health services appraisal (HSA) of people with disabilities by comparing people enrolled in FFS with MMC and exploring the impact of demographics and enrollment in MMC on HSA and unmet medical needs (stage 1). Stage 2 explores relationships between demographics, continuity of care, unmet medical needs, and HSA for people who transitioned to MMC. This research includes people with disabilities who are Medicaid-only (not dually eligible for Medicare) and

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focuses on medical/health care services. It does not include MLTSS, because the program being evaluated did not include those services.

The importance of enrollee/patient satisfaction is a key theme in research evaluating health care and health care services.^{6–10} Satisfaction with health care is a construct that describes individuals' perceptions and attitudes regarding their experiences with health care compared to their expectations of that experience.^{11–14} Satisfaction is important for providers because it assesses quality of care and effectiveness of treatments,^{7,15} guides change in practices,¹⁶ and ensures that services are acceptable so providers remain competitive in the marketplace.^{9,10,17}

Individuals who are satisfied with services are more likely to follow treatment plans, continue regular health care services, seek continuity of care with a specific provider, and disclose critical information to a health care provider.^{18–21} Therefore, monitoring satisfaction during policy reforms, notably the transition to MMC, is critical to ensuring that access to and the quality of health care does not change.⁷ Reforms often include service changes and disruptions^{22,23} and continuity of care helps ensure effective transitions.

This research uses Saultz's²⁴ conceptualization of continuity of care, which focuses on "a longitudinal relationship between patients and those who [provide] care" (p.135). Continuity of care is sustained relationships between a patient and a provider over time, which may be especially important for people with disabilities who may have complex health care needs. Often individuals spend years building rapport with their health care providers, developing trust and confidence between the doctor and the individual. During health care coverage transitions, it is important to maintain continuity of care with a provider; continuity of care helps an individual feel more satisfied during transitions.²⁵

Sustained continuity of care is associated with patient utilization, notably decreased hospitalizations and emergency department visits.^{26–29} The positive relationship between continuity of care and patient satisfaction is consistently documented for individuals,^{29–32} particularly people with chronic conditions like asthma and diabetes.^{33–35} Physicians who are familiar with the patient's history can more effectively manage chronic conditions.²⁵ Fan et al³⁶ evaluated continuity of care and patient satisfaction with 21,689 patients from Veterans Affairs medical centers across the United States; after controlling for patient, clinic, and provider characteristics, continuity of care was strongly associated with patient satisfaction. People who saw the same health care provider scored their provider higher for humanistic qualities and rated the organization higher than patients who rarely or never saw the same provider.

In addition to the relationship with patient satisfaction, continuity of care has been associated with improved health services,^{13,20} preventive care,³⁷ and care coordination.³⁸ Freeman et al³² found that care continuity leads to

decreased health care spending and improved staff and provider satisfaction levels.

Another factor related to enrollees' experiences with health care is whether they have unmet need. A study of mental health users showed that satisfaction decreased as the number of needs and unmet needs increased.³⁹ People with unmet needs rate quality of life measures lower.⁴⁰ Populations with unmet needs often are at risk for health disparities.

Research documents pervasive health disparities for people with disabilities regarding access to health care services and preventable secondary conditions,^{41,42} notably oral disease and diabetes.^{43,44} Thus, unmet needs may be both a cause and consequence of health disparities. A 2004 survey found that this population reports more unmet health care needs,⁴⁵ and research shows that prevalent unmet needs for adults with disabilities include primary care services, specialty, and mental health care, case management and disability-related services.⁴⁶ Persons with disabilities receive fewer routine and preventive services than the general population,^{47–50} and have higher risks for unmet medical, dental, and prescription needs.⁵¹ These disparities may be magnified by other disparities for this population, such as lower education levels, employment rates, and social activity.⁴² Henry, Long-Bellil, Zhang, & Himmelstein⁵² found that meeting the needs of persons with disabilities in Medicaid increased their employment rate. Thus, meeting the needs of persons with disabilities may improve the general health and wellbeing of the population, reduce disparities, and facilitate social efficacy.

Methods

Research aims

This research has two primary aims. Stage 1 aims to understand the impact of demographic differences and enrollment in MMC (v. FFS) on health services appraisal (HSA) and unmet medical needs for people with disabilities. Stage 2 focuses only on people receiving MMC and is similar to the first stage, except that another variable, continuity of care, is added to understand the impact of having to change providers on HSA and unmet medical needs. Additionally, the HSA model includes the number of unmet medical needs.

The research questions are:

1. Do participant demographics and enrollment in MMC impact unmet medical needs and HSA?
2. Within MMC, to what extent do demographics and continuity of care relate to unmet needs?
3. Within MMC, to what extent do demographics, unmet medical needs and continuity of care relate to HSA?

Data source

In May 2011, Illinois began a mandatory managed care program for people with disabilities receiving Medicaid (who were not also eligible for Medicare). The program,

the Integrated Care Program (ICP), was piloted for people in the suburbs of a large metropolitan city. The program covered 38,000 people with disabilities who were Medicaid-eligible in the suburbs. (Another 65,000 met the criteria for ICP, except for living outside the pilot region. This is the comparison group for this study; they continued to receive FFS.) ICP uses large, for-profit insurance companies MCOs to manage Medicaid services; initially ICP only covered medical care and LTSS continued through FFS. LTSS were included in ICP in spring 2014. Thus, this research includes only health care and not LTSS. ICP and FFS cover identical Medicaid services, although MCOs may choose to offer additional benefits beyond FFS. An advisory group of consumers and providers met regularly to advise the research team on study design, content, and differences between ICP and FFS.

This research data from a cross-sectional survey conducted between fall 2013 and spring 2014, prior to including LTSS in ICP. Surveys were conducted on random samples of people with disabilities who received Medicaid services; one group was newly transitioned into MMC and the comparison group of people with similar characteristics who continued to receive FFS. 1615 surveys were collected (25% response rate — which is fairly low, but acceptable for this Medicaid population^{53–55}) by the research team through the mail. Telephone and Internet options were available, along with Spanish translations of materials.

Both samples consisted of adults (age 18 or over) who were identified by the state as people with disabilities. Power analysis estimated that a sample size of 321 participants in both ICP and FFS would have 80% power to

detect a slight difference in the group means using two-tailed test at $\alpha = .05$, and we over sampled each group so that we could create sub-groups (sub-groups were not used in this article). The ICP group consists of 849 people who live in the suburbs of a metropolitan city and transitioned to MMC about one year prior to completing the survey. The comparison group was 766 people who lived in the city, outside of the pilot area, and received Medicaid FFS. The group demographics are contained in Table 1.

Measures

Identical survey instruments were used for both groups, except that the ICP survey included six extra questions regarding the transition to MMC. The primary dependent variables were health services appraisal (HSA) and whether a person had unmet medical needs. HSA is a composite scale of six individual items on perceptions of quality and satisfaction: overall satisfaction, overall quality of health care services, satisfaction with primary care provider (note that these could be doctors or nurse practitioners, the survey did not identify who the primary care provider was), satisfaction with specialists, satisfaction with the medical/specialist services received, and satisfaction with the care coordinator ($\alpha = .77$; test-retest reliability of $r = 0.768$ using 21 respondents who completed a retest within two weeks). Each individual item is measured on a scale from 1 to 5; not everybody received each service, so HSA is the mean of those received (range 1–5). The items included in HSA are based on questions in various versions of the Consumer Assessment of Healthcare Providers and

Table 1
Demographics of survey respondents

Demographic	MMC (n = 849)		FFS (n = 766)		Significance
	# of respondents	% of respondents	# of respondents	% of respondents	
Female	496	59.4%	424	57.1%	$\chi^2 = 0.882$; df = 1; $p = .348$
Race/ethnicity					
White ^b	382	45.0%	117	15.3%	$\chi^2 = 166.59$; df = 1; $p < .000$
Black ^b	265	31.2%	461	60.2%	$\chi^2 = 136.57$; df = 1; $p < .000$
Asian ^b	61	7.2%	17	2.2%	$\chi^2 = 21.60$; df = 1; $p < .000$
Hawaiian/Pacific Islander	2	0.2%	3	0.4%	$\chi^2 = 0.318$; df = 1; $p = .573$
Native American	16	1.9%	25	3.3%	$\chi^2 = 3.10$; df = 1; $p = .079$
Hispanic ^a	78	9.2%	99	12.9%	$\chi^2 = 5.76$; df = 1; $p = .016$
Marital status					$\chi^2 = 0.727$; df = 1; $p = .394$
Married	114	13.4%	92	12.0%	
Single	721	86.3%	654	87.7%	
Live in community ^b	585	68.9%	630	82.2%	$\chi^2 = 38.46$; df = 1; $p < .000$
Unmet need for transportation services	176	20.7%	184	24.0%	$\chi^2 = 2.52$; df = 1; $p = .113$
Disability type					
IDD ^b	329	38.8%	203	26.5%	$\chi^2 = 27.6$; df = 1; $p < .000$
Physical dis. ^b	471	55.5%	484	63.2%	$\chi^2 = 9.09$; df = 1; $p = .002$
Mental health dis.	300	35.3%	272	35.5%	$\chi^2 = 0.005$; df = 1; $p = .942$
Age ^b	Mean = 49.25; SD = 16.2		Mean = 52.04; SD = 12.879		$t = 3.74$; df = 1565; $p < .000$
SF-12	Mean = 27.11; SD = 7.43		Mean = 26.33; SD = 6.99		$t = -1.95$; df = 1267; $p = .052$
Num of unmet needs ^b	Mean = 1.51; SD = 2.24		Mean = 1.82; SD = 2.53		$t = 2.63$; df = 1613; $p = .009$

^a The FFS and MMC groups are significantly different at the $p < .05$ level.

^b The FFS and MMC groups are significantly different at the $p < .01$ level.

Systems (CAHPS) survey. The structure and content of the questions remain the same, although slight rewording was necessary to make the questions better for people with disabilities and the answer choices have been simplified from a scale of 0–10 to a scale from 1 to 5. Exceptional progress has been made on measuring patient experience and satisfaction after the development and widespread use of CAHPS.¹⁶ Crow et al¹⁵ argue that it is important to include a reliable standardized instrument to assess satisfaction, and CAHPS is used by many MMMC plans,⁵⁶ including ICP. HSA's validity is improved because the questions are based on CAHPS.

The HSA question about quality of health care is not included in CAHPS. However, the research team felt it was important to include quality within HSA in addition to satisfaction, together these 6 items work well as a scale and provide a robust measure of overall experiences within a health care plan. This measure is particularly useful as a single outcome when studying health care transitions and changes in policy.

Whether a person had unmet medical needs is a second dependent variable. The survey contains 18 medical services that a person indicates they received, needed but did not receive, or neither needed nor received. This is a dichotomous variable; 1 indicates at least one unmet need and 0 indicates no unmet medical needs.

The survey also included demographics, enrollment status, and continuity of care (MMC only) that are used as independent variables in this research.

- *Demographic* variables, including gender, white, black, Asian, and other race (includes Native American or Hawaiian/Pacific Islander), whether a person is married, whether the person had unmet transportation needs, whether the person lives in the community (versus an institutional setting, such as a nursing home or hospital), and disability type (intellectual/developmental, physical, mental health) are coded as dichotomous variables. Disability and race variables are independent of one another; a person can have more than one disability type (e.g. somebody could have a physical and a mental health disability or someone may be white and Hispanic). Age is a continuous variable. Overall health status is continuous and uses SF-12, which has mixed outcomes for people with disabilities.^{57,58} People with missing SF-12 values were noted in a dummy variable so they could be included in the analyses.
- *Enrollment status* was a dichotomous variable coded as 0 (FFS) or 1 (MMC).
- *Continuity of care* asked respondents whether they could see their same providers after transitioning to ICP. Possible ordinal responses included 'Yes, I can still see all of them,' 'Yes, I can still see some of them,' 'No, I have to see all new providers,' and missing values (MMC only).

Table 2

Frequencies of responses to survey items

Survey items	MMC (n = 849)		FFS (n = 766)	
	# of respondents	% of respondents	# of respondents	% of respondents
Continuity of care				
Yes, see all	338	39.8	—	—
Yes, see some	187	22.0	—	—
No, see all new	240	28.3	—	—
No response/NA	84	9.9	—	—
Number of unmet needs				
0	391	46.1	310	40.5
1	175	20.6	160	20.9
2	95	11.2	92	12.0
3 or more	188	22.1	204	26.7

Table 2 summarizes these variables and Table 3 reports frequencies of unmet medical needs for individual services.

Analytic approach

Two regression analyses were used to determine the impact of these factors on the dependent variables for each stage, one with HSA as the dependent variable (OLS regression after normalizing HSA using a log transformation) and one with the unmet medical needs as the outcome (multivariate logistic regression).

Stage 1 (MMC and FFS)

The first regression has HSA as the dependent variable and uses dichotomous (gender, race/ethnicity, disability type, marital status, having unmet transportation needs, living in the community, and receiving MMC or FFS), and continuous (age and overall health status) independent variables.

A logistic regression was used to understand the factors that contribute to whether a person has unmet medical needs. The regression contains the same independent variables as the regression for HSA.

Stage 2 (Medicaid Managed Care only)

The regressions from stage 1 were repeated using only the MMC population's data. Medicaid enrollment status was removed as an independent variable and continuity of care was added. The regression for HSA also includes the number of unmet needs as an independent variable.

Results

There were several significant group differences between MMC and FFS, most notably in race/ethnicity and disability type (Table 1). More white people were in the MMC group (45% compared to 15.3% in FFS, $p < .001$), while FFS included more people from other racial identities. Physical disability was more prevalent

Table 3
Unmet needs of medical/specialty services

Demographic	MMC (n = 849)		FFS (n = 766)		Significance
	# of respondents	% of respondents	# of respondents	% of respondents	
Dental ^b	274	32.3	299	39	$\chi^2 = 8.04$; df = 1; $p = .005$
Physical therapy	118	13.9	127	16.6	$\chi^2 = 2.25$; df = 1; $p = .134$
Dietician ^b	107	12.8	137	17.9	$\chi^2 = 8.76$; df = 1; $p = .003$
Podiatrist	105	12.4	107	14	$\chi^2 = 0.905$; df = 1; $p = .341$
Occupational therapy ^b	77	9.1	100	13.1	$\chi^2 = 6.56$; df = 1; $p = .010$
Home health service ^b	68	8.0	97	12.7	$\chi^2 = 9.51$; df = 1; $p = .002$
Skin doctor	67	7.9	60	7.8	$\chi^2 = 0.002$; df = 1; $p = .965$
Neurologist	62	7.3	57	7.4	$\chi^2 = 0.011$; df = 1; $p = .915$
Allergist	56	6.6	50	6.5	$\chi^2 = 0.003$; df = 1; $p = .956$
Behavioral health counseling ^a	56	6.6	72	9.4	$\chi^2 = 4.34$; df = 1; $p = .037$
Psychologist	55	6.5	41	5.4	$\chi^2 = 0.913$; df = 1; $p = .339$
Psychiatrist	50	5.9	45	5.9	$\chi^2 = 0.000$; df = 1; $p = .990$
Cardiologist	47	5.5	37	4.8	$\chi^2 = 0.407$; df = 1; $p = .524$
Speech therapy	41	4.8	51	6.7	$\chi^2 = 2.51$; df = 1; $p = .113$
Non-residential substance abuse treatment	30	3.5	35	4.6	$\chi^2 = 1.12$; df = 1; $p = .290$
Surgeon	30	3.5	23	3.0	$\chi^2 = 0.358$; df = 1; $p = .550$
Residential substance abuse treatment	22	2.6	33	4.3	$\chi^2 = 3.61$; df = 1; $p = .058$
Oncologist	17	2.0	25	3.3	$\chi^2 = 2.53$; df = 1; $p = .112$

^a The FFS and MMC groups are significantly different at the $p < .05$ level.

^b The FFS and MMC groups are significantly different at the $p < .01$ level.

in FFS (63.2% and 55.5% in MMC, $p = .002$), and intellectual/developmental disability was more prevalent in MMC (38.8% versus 26.5% in FFS, $p < .001$). People in FFS were more likely than people in MMC to live in the community (82.2% versus 68.9% in MMC, $p < .001$). The FFS group was older (mean of 52.04 in FFS and 49.25 in MMC; $p < .001$) and had a higher number of unmet medical needs (1.82 compared to 1.51; $p = .008$).

Table 3 shows differences in specific unmet medical needs between the two groups. Five of the 18 medical services are significantly different: e dietitian services, occupational therapy, home health services, and behavioral health counseling (for each, the FFS group had a higher proportion of unmet needs). Dental care is especially important; literature emphasizes the link between overall health care and dental care.⁴³ A high number of people, 32% of MMC and 39% of FFS, reported unmet dental care needs.

Stage 1 (MMC and FFS)

Table 4 shows regression results for both the MMC and FFS groups. Significant factors were overall health status (people with higher health status reported higher HSA, $p < .001$), and whether the person had unmet transportation needs ($p < .001$) or a mental health disability ($p < .001$) (both decreased HSA levels).

Table 4 also shows a regression for whether the person had unmet medical needs. Overall health status was a significant variable (people who reported a higher health status were less likely to have unmet medical needs, $p < .001$).

Having unmet transportation needs ($p < .001$) or a physical ($p < .001$) or mental health disability ($p < .001$) were significantly associated with an increased likelihood of unmet medical needs.

Enrollment in FFS or MMC was not significantly related to HSA or the likelihood of having unmet medical needs.

Stage 2 (MMC only)

Table 5 shows that in the HSA regression, only the variables added to this model, the number of unmet medical needs and continuity of care, were significantly related to HSA; people who reported more unmet medical needs ($p < .001$) or who saw more new providers following transition to MMC ($p < .001$) have lower HSA.

Table 5 also shows the logistic regression for whether an MMC enrollee has unmet medical needs. Enrollees who report better overall health are less likely to have unmet medical needs ($p < .001$). Enrollees who have unmet transportation needs are more likely to have unmet medical needs ($p = .001$), as are people with mental health disabilities ($p < .0001$). Continuity of care significantly increased the likelihood of having unmet needs for people who had to see some new providers versus being able to see all the same providers ($p < .001$) and people who had to see all new health care providers versus being able to see all the same health care providers ($p < .001$). People with physical disabilities were also more likely to have unmet medical needs than people without physical disabilities, although this difference was not quite statistically significant ($p = .051$).

Table 4
Regression for HSA and unmet medical needs (managed care and FFS)

Variable	HSA (n = 1556)		Unmet medical needs (n = 1560)	
	Beta estimate	p-value	Or (95% CI)	p-value
Age	0.000	0.860	0.998 (0.990–1.006)	0.626
Female ^a	–0.017	0.172	1.199 (0.963–1.493)	0.105
White ^a	–0.009	0.611	0.771 (0.567–1.048)	0.097
Black ^a	0.006	0.737	0.888 (0.658–1.198)	0.436
Asian ^a	–0.041	0.181	0.96 (0.557–1.654)	0.884
Other race ^a	–0.003	0.936	1.347 (0.672–2.699)	0.402
Hispanic ^a	–0.005	0.796	0.730 (0.505–1.056)	0.094
Married ^a	0.009	0.637	0.925 (0.667–1.283)	0.642
Live in community ^a	0.011	0.446	1.051 (0.812–1.361)	0.703
Unmet transportation need ^a	–0.064	<0.001***	1.683 (1.290–2.195)	<0.001***
Overall health status	0.006	<0.001***	0.939 (0.921–0.956)	<0.001***
Int./dev. disability ^a	–0.015	0.310	0.858 (0.662–1.112)	0.246
Physical disability ^a	–0.011	0.408	1.755 (1.399–2.201)	<0.001***
Mental health disability ^a	–0.035	0.006**	1.352 (1.072–1.704)	0.011**
Enrolled in managed care ^a	0.012	0.364	0.946 (0.750–1.193)	0.641
Missing health status ^a	0.115	<0.001***	0.213 (0.120–0.377)	<0.001***
R ²	0.057			

p < .01; *p < .001.

^a This is a dichotomous variable. For the logistic regression, the reference group is people who did not identify with that characteristic (i.e. female versus male, white versus nonwhite, married versus nonmarried, physical disability versus non-physical disability).

Discussion

Stage 1 (MMC and FFS)

Higher overall health status was significantly related to a person's appraisal of the health services and likelihood of unmet medical needs; as might be expected, when enrollees have poorer health status, they have lower appraisals of

their health care and are more likely to have unmet needs. People with unmet transportation needs also reported lower HSA and were more likely to have unmet medical needs, emphasizing the importance of transportation in order for a person to receive adequate medical care.

There were no significant differences between people receiving MMC and FFS for either outcome. MMC has been

Table 5
Regressions for HSA and unmet medical needs (MMC only)

Variable	HSA (n = 745)		Unmet medical needs (n = 747)	
	Beta estimate	p-value	OR (95% CI)	p-value
Age	0.001	0.274	0.996 (0.984–1.008)	0.525
Female ^a	–0.015	0.391	1.285 (0.923–1.790)	0.138
White ^a	–0.044	0.058	0.729 (0.464–1.146)	0.171
Black ^a	–0.021	0.400	0.916 (0.564–1.487)	0.722
Asian ^a	–0.043	0.247	0.864 (0.419–1.780)	0.692
Other race ^a	–0.023	0.689	0.859 (0.270–2.735)	0.797
Hispanic ^a	–0.020	0.515	0.726 (0.404–1.302)	0.282
Married ^a	–0.021	0.404	1.169 (0.721–1.896)	0.526
Live in community ^a	0.011	0.546	1.201 (0.848–1.702)	0.303
Unmet transportation need ^a	–0.027	0.194	1.955 (1.304–2.932)	0.001**
Overall health status	0.002	0.080	0.941 (0.916–0.967)	<0.001***
Int./dev. disability ^a	0.004	0.821	0.838 (0.570–1.231)	0.367
Physical disability	–0.013	0.486	1.401 (0.999–1.967)	0.051
Mental health disability ^a	–0.007	0.682	1.684 (1.188–2.387)	0.003**
Unmet medical needs	–0.036	<0.001***	n/a	n/a
Continuity of care	–0.057	<0.001***		
See some new providers (vs see all same)			2.21 (1.485–3.288)	<0.001***
See all new providers (vs see all same)			2.132 (1.473–3.085)	<0.001***
Missing health status ^a	0.039	0.368	0.199 (0.086–0.460)	<0.001***
R ²	0.216			

p < .01; *p < .001.

^a This is a dichotomous variable. For the logistic regression, the reference group is people who did not identify with that characteristic (i.e. female versus male, white versus nonwhite, married versus nonmarried, physical disability versus non-physical disability).

targeted by advocates worried that managed care cannot effectively deliver health care for people with disabilities and people will not be satisfied with MMC. These findings suggest that enrollees have a similar level of appraisal and unmet medical needs between MMC and FFS.

Stage 2 (MMC only)

Stage 2 is helpful for specifying areas for MCOs to address during the transition from FFS: reducing unmet needs and improving continuity of care. Unsurprisingly, the number of unmet needs are significantly related to HSA: as people have more unmet medical needs, they appraise their services lower. Further, continuity of care was significantly related to HSA and having unmet medical needs. When people could see more of the same providers, they had higher HSA and were less likely to have unmet medical needs. Table 2 showed that only 338 of the 849 (39.8%) MMC enrollees could see all of the same providers after transitioning from FFS. Most enrollees could not see least one provider, and 28.3% had to find all new providers. While these numbers are high, continuity of care is challenging for providers and MCOs during the transition from FFS to MMC. MMC was new to this population and the state and networks were slow to develop, so disruptions in continuity of care were likely.

These findings highlight the importance of continuity of care and robust provider networks when transitioning to MMC. Many MMC programs require transition periods where MCOs are required to accept out of network claims during the transition or requiring MCOs to have single case agreements with providers to continue care for at least six months. Often a provider will then join the network, because they are more comfortable with the MCO. Such agreements are important, although it may be necessary to lengthen mandatory continuity of care periods and find ways to encourage providers to join networks. Improving networks may help to improve HSA and decrease the number of enrollees with unmet medical needs. Future research should explore which enrollees have continuity of care and ways to improve continuity.

The findings related to disparities regarding unmet medical needs follow most literature. Especially for people with mental health disabilities, disparities are large compared to people without mental health disabilities.⁵⁹ They more frequently report unmet medical needs, similar to previous research.^{60–64} People with mental health disabilities often have complex clinical and social needs, requiring specialized treatment, pharmaceutical regimens, and care coordination. This research suggests that the needs of this population are not being met within MMC and Medicaid overall. Specific attention to this population is warranted and future research should address ways to ensure that needs are met, which may include assertive care coordination and addressing the financial and practical accessibility of specialty care.

Limitations

There are a few limitations to this study. First, the response rate to the survey was 25%, which may be considered low and hurt the representativeness of this study. However, researchers have noted that nonresponse is a serious problem for Medicaid surveys, with response rates as low as 20%.⁵³ The average response rate for Medicaid CAHPS is only 29.5%, about 10 percentage points less than the commercial CAHPS survey.⁶⁵ Other Medicaid surveys report response rates between 21.8% and 29%.^{7,54,55} Thus, 25% is acceptable for the Medicaid population, which is often hard to reach (e.g. Fredrickson et al⁶⁶ reported that 23% of the 1056 original households in their study were undeliverable). This research experienced similar problems, and each person in the sampling frame received at least one phone call reminder about the survey to reduce nonresponse.

The SF-12 measure was not available for 20% of the survey respondents. In order to ensure that they were included in the regressions, we used a dummy variable to control for this. That dummy variable was significant for 3 of the 4 regressions, significantly increasing HSA (for Medicaid overall, but not for MMC only) and decreasing the likelihood of having unmet medical needs in both the overall (MMC and FFS) and MMC regressions. It appears that people who do not answer all of the SF-12 are more likely to have unmet needs and are less happy with their health care services; more research on these non-respondents is needed.

The measures for HSA and continuity of care also need more validation. HSA draws on previously validated CAHPS questions, which increases its validity. The continuity of care measure was developed with content experts on the advisory panel and is simple enough for its intended purpose in this research. As with most survey measures, more research is needed to continue improving them. In particular, continuity of care measures should be validated using Medicaid claims in the future.

This study was conducted in a single state where MMC is operated by for-profit companies, so results in other states may be different where MMC is designed differently.

Finally, this study only includes medical care. In many locations, managed care also includes long-term services and supports. Future research is needed to determine the impact that MMC has on MLTSS appraisal and unmet needs.

Conclusion and implications

This research has helped to identify frequent unmet health care needs (e.g. dental care) and the population groups for which unmet health care needs are higher. For example, across MMC and FFS, unmet needs are higher for people with mental health disabilities. Thus, these groups may warrant specific attention from MCOs to ensure that the needs of these groups are being met.

Notably, receiving MMC or FFS was not a significant factor HSA or unmet medical needs. This suggests that concerns about MMC for people with disabilities may not be as salient as feared. Yet, this research only includes medical services and could not address long-term services and supports, which are essential for many people with disabilities. LTSS is fundamentally different from medical care, and because MCOs are primarily medical insurance companies, further research is needed to assess whether they can adequately manage LTSS.

Within MMC, continuity of care significantly impacts both HSA and the likelihood of having unmet medical needs. Compared to people who can see all of the same providers following transition, people who had to see all new providers reported lower HSA. The groups of people who had to see all new providers or some new providers following transition to MMC were more likely to have unmet medical needs compared to people who could see all of the same providers. In addition, people with a higher number of unmet needs reported higher HSA within MMC, showing that the two measures are linked. Reducing unmet needs for specific groups within MMC (e.g. people with mental health disabilities), and ensuring continuity of care are pivotal in a successful transition to MMC. Contracting with providers who previously saw Medicaid patients is essential. Provider networks are fundamental for MMC patients, and help improve health services appraisal/satisfaction and unmet needs. MCOs need to develop and continuously monitor their networks to ensure that they meet the needs of enrollees.

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