Perception of Impact of a Decade of Policy Initiatives among Missouri's Medicaid Dental Providers

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ABSTRACT

Access to oral health services by the low-income population is limited. The purpose of this study is to measure the impact of Missouri state policy changes designed to improve oral health care access in Missouri from the oral health care providers perspective. Over the past 10 years, a number of policy changes have occurred in Missouri to improve access to MoHealthNet dental services. The analysis explored the effects of a decade of policy changes on perception for dental practitioners participating in Medicaid/CHIP fee-for-service and managed care, focusing on the flow of legislative statutory change and budget appropriations to publicly funded oral health care services for low-income children and families. Policy changes in Missouri that were designed to increase participation in the program may have had very little effect.

INTRODUCTION

Over the past decade, numerous reports have documented the concern over the problem of access to oral health care for the low-income population. When Congress passed, and President Obama signed, the Childrens Health Insurance Program Reauthorization Act (CHIPRA), this recognition was codified in law through the addition of provisions to expand access to oral health care services, including changing the dental benefit for children from optional to mandatory. In addition, states have succeeded in expanding access, many times in partnership with the philanthropic community. Furthermore, the Centers for Medicare and Medicaid Services (CMS) has been conducting yearlong reviews of states with traditionally low child dental screening rates to encourage positive changes.

The purpose of this study is to measure the impact (policy effect) of Missouri state policy changes designed to improve oral health care access in Missouri for the Medicaid and Childrens Health Insurance Program (CHIP, now CHIPRA) enrolled population.[1] Over the past 10 years, a number of policy changes have occurred in Missouri to improve access to MoHealthNet dental services. The following summarizes some of the changes:

- Increases in appropriations to improve reimbursement;

- Streamlined administrative procedures, including standardized codes, electronic claims processing, reduced prior authorization, streamlined provider enrollment, and timeliness of reimbursement;

- Establishment of Medicaid managed care, through which administration of the program is through private dental benefits administrators (DBAs);

- Allowance of Registered Dental Hygienists (RDHs) to provide services in public health settings without supervision; and

- Establishment of a donated dental services program.

Figure 1 depicts the flow of policy enactment from public policy change, to effect of the change on provider behavior, to long-term utilization effects of the change:

Figure 1: Policy Goals and Effects

1.) Legislative or administrative enactment of policy

2.) Increase number of dentists participating in Medicaid/SCHIP

(Participation and Supply of Care)

3.) Increase utilization of dental care by children

(Access and Demand for Care)

This study focuses on the second effect participation in the program by oral health providers and the overall supply of care to the MoHealthNet enrolled population.

LITERATURE REVIEW

Factors Affecting Participation (Supply)

Reimbursement Level

The level of reimbursement received by *general* practice dentists is the critical factor in determining levels of participation in MoHealthNet. In heavily competitive commercial markets, providers have shown a willingness to accept fee discounts of up to 20 percent off their usual, customary, and reasonable rates (UCR) (American Dental Association,

2004). Prior to this study, 65% of Missouri dentists stated they would consider joining Medicaid if fees were closer to their UCR (McCunniff, 1999). However, even with adequate reimbursement, some dentists will elect to not participate because of various reasons with economic implications, such as administrative concerns with submitting claims to the state, or broken appointments (Borchgrevnik, Snyder & Gehshan, 2008). Nainar (2000) conducted a survey of *pediatric* dentists and found only one-third of dentists reported modifying their outlook or intake of new Medicaid children following an increase in Medicaid reimbursement rates, even though most were aware of the increase by the state. In addition, some racial or socioeconomic discrimination against Medicaid participants exists, although not formally documented in studies.

Table 1: Chronology of Dental Policy Changes Designed to Improve Oral Health Care System

2001

$6.1 million appropriation increase to improve reimbursement levels (SFY 2002)

2003

MO Department of Social Services (DSS) establishes mandated and non-mandated codes in attempt to require managed care to pass on increases in reimbursement (January 2003)

2003

Dental hygienists allowed to practice in public health settings without supervision of a dentist (SB 393). (effective July 1, 2004)

2004

State Audit finds managed care underpaying dentists because DSS not monitoring compliance with mandated codes from January 2002.

2005

Adult dental benefit removed (effective Sept. 1, 2005)

2007

Dental clinics allowed to enroll as Medicaid providers.

2007

Dental benefit reinstated to adults, but no monies appropriated.

$7 million appropriation increase to improve reimbursement levels to 38% UCR (SFY 2008)

MC+ renamed MoHealthNet; Division of Medical Services renamed MoHealthNet Division.

2008

DSS issues new rates to be paid by managed care and state (effective July 1) [2]

2009

Requested $14.7 million increase to improve reimbursement levels to 57% UCR (SFY 2010). Governor vetoed $3.5 million, leaving a 2% rate increase.

SB 577, passed in 2007, required the MO HealthNet Division to provide the Missouri Legislature with a four-year plan to achieve parity with UCR rates. The Division of Social Services (DSS) estimates the total cost to achieve reimbursement parity is $60.5 million (FY2010 DSS Budget Request). If the plan is followed, DSS estimates rates will improve to 57% in SFY 2010 and 71% in SFY 2011.

Administrative Improvements

States have improved the administrative processing of claims, a historical problem for Medicaid agencies (McCuniff, 1999; National Academy for State Health Policy, 2007). Dentists advocated for ease in submission of claims to state Medicaid agencies, quicker return on claims payments, and better access to assistance when problems with claims arose. As privatization of Medicaid administration grew in the 1990s, states contracted administration and delivery of services through managed care models. The National Academy of State Health Policy found that rate increases alone are not sufficient to improve access, citing the need for administrative changes and the ability to work with difficult patients (Borchgrevnik, Snyder & Gehshan, 2008). These findings were based on surveys and interviews with a broad range of professionals.

Workforce Participation

In addition to reimbursement increases, states attempt to increase the utilization of services by children through the improvement of workforce participation, expanding the supply of providers able to perform services to the public coverage population, such as dental hygienists, and also by providing mechanisms to provide charity care. Many states, including Missouri, have eased supervision requirements allowing hygienists to serve Medicaid children in certain settings without the child first having to see a dentist (SB 393 2003; RSMo 332.311). Missouri also authorized funds to expand the number dental students at the UMKC School of Dentistry.

Donated oral health services have many forms. Many oral health providers offer services pro bono in their office; others volunteer at private or public clinics in a rotation; and others volunteer at community organized free dental events. It is recognized that free services are beneficial to the population that may not be able to access services otherwise (Slott, 2005). For example, in St. Louis, many immigrant families that do not qualify for MoHealthNet utilize the bi-annual Give Kids a Smile events. The state of Missouri codified donation of services in 2003 legislation (SB 393) and is implemented by the Department of Health and Senior Services (DHSS) through contract with the Missouri Dental Board (RSMo 332.324).

Coding and Reimbursement Levels

In 2001, the MO legislature passed a $6.1 million appropriation increase for dental care. The Department of Social Services wanted to assure that managed care organizations understood it was a mandate to pass the increases on to the providers. DSS elected to do this by requiring certain dental claims codes to be reimbursed to the dentist by managed care at the state rate (maximum allowable rate). These were termed mandated codes. However, the non-mandated codes were still subject to much lower reimbursement (Squillace, 2009). A state audit in 2004 found that dentists were underpaid by managed care organizations for mandated codes and required DSS to more closely monitor reimbursement under the new dental claims code dichotomy (Missouri State Auditors Office, 2004). Even after improved monitoring, since most of these changes were done administratively there was very little knowledge of this at the provider level.

Medicaid Population Perceptions

There was much controversy in 2005 over the dropping of the dental coverage benefit for approximately 400,000 adults enrolled in Medicaid, in addition to the 90,000 adults cut from the MoHealthNet program altogether. Many expressed concern over the short and long term effects this policy decision would have on adult oral health care. For lower income populations, having to pay out-of-pocket for dental care may result in a delay of care, or competes with other financial constraints in a family budget, such as food, rent, utilities, or other basic necessities. In 2007 (SB 577), Missouri reinstated the dental benefit in statute, subject to appropriations, yet has not subsequently budgeted any funds to restore the benefit.

Additional Research Needed

Given the decade of policy changes in Missouri designed to improve both the supply and access to oral health care services, a survey was developed to gauge the impact of these changes on dentists providing the care to the MoHealthNet enrolled population. The importance of this study, which utilizes a cross-sectional survey to capture effects of policy improvements, allows for a point of comparison for public debate and accountability. The model of analysis is conceptualized in Table 2. The survey design

was intended to extract policy perceptions of dental offices as pertains to processes outlined in Table 2.

Table 2: Conceptualization Model of Study

Legislative Changes	**Implementation**	**Intervening Mediators**	**Outcomes Expected**
Appropriations to increase reimbursement	Rate increase announced through Provider Dental Bulletins; applied to specific codes		
	Missouri Dental Association reports changes through newsletters		
	DSS changes managed care contracts		
	Managed Care organizations (HMO)		
	Managed care subcontracts (DBAs)		
			Greater participation in Medicaid by dentists
			Greater volume of children seen
			Dentist sees rate increase in payouts
Dental hygienists in Public Health settings	Policy change announced through Provider Dental Bulletin		
	MO Dental Hygienist Association promotes new policy to RDHs		
Public Health settings must agree to employ RDH			
			Greater volume of children seen
			More dental offices, clinics, and programs (such as Head Start) participating in RDH outreach

Charity/Donated services

DHSS establishes Donated Services program

DHSS outreach to raise awareness of availability of program

More dentists participating in program

Administrative claims processing changes, including managed care

DSS promotes changes through Provider Bulletins and trainings

Managed care organizations promoted as ideal model and DSS contracts out services

DSS makes capacity changes, such as e-claims and timely processing

Dentists (and more importantly their front office staff) find greater ease in submitting claims and getting payouts

Dentists exhibit greater willingness to participate in Medicaid (volume).

METHODS

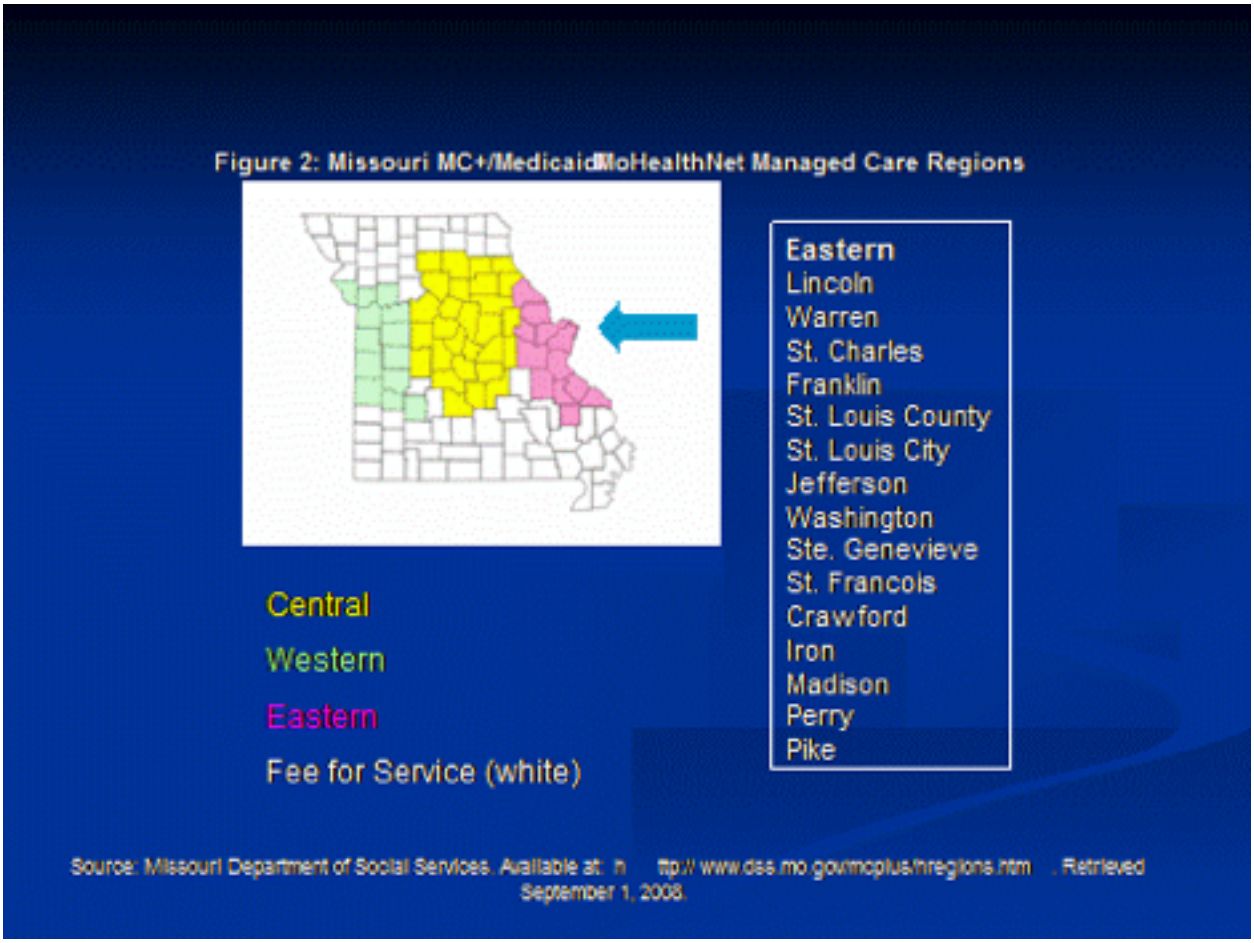
Few studies examine the awareness of oral health care providers currently active as public program providers in regards to state-level legislative and executive policy changes. Thus, a cross-sectional questionnaire survey was developed and sent to MoHealthNet participating Missouri dental providers. Looking at the MoHealthNet program in Missouri and the perceived adaptation and satisfaction of MoHealthNet dental providers regarding policy change requires examining demographic information as it relates to perceptions, and policy goals of the legislature and their effects. The research assesses perceived changes in public policy by dentists, participation in new programs by dental offices, and changes in reimbursement. We wanted to be sensitive to the time constraints of busy dental offices, so the survey included mostly close-ended questions that offer yes/no answers or categorical options.

Data Collection

Studying provider populations using state provider data presents social scientists with a major difficulty since there are known inaccuracies with state lists, in addition to variation in services provided. For example, dentists may take only a segment of the population (children 12-18 yrs), or may only see MoHealthNet patients once per month, or even may not be taking any new patients; yet, they all would be listed in the state database. The state list may also be outdated, for example, in one follow up call

researchers were told a dentist had moved to Florida months ago. Thus, we were unable to rely on randomization to evaluate the effectiveness of policy impact. Because of the unavailability of a sampling frame, the researchers used convenience sample in order to overcome this difficulty. In addition, the survey was designed as a pilot study of the Eastern Region of Missouri, where anecdotally more providers claimed dissatisfaction with managed care models.

There are 3,081 licensed dentists in the state of Missouri, and 634 specialists, totaling 3,715 total oral health providers (MO Div. of Professional Registration, 2007). Of this number, 82.6% are male. There are 853 dentists listed in the total Missouri MoHealthNet statewide list (January 2009), or 23% of the total oral health service delivery population. We chose to administer the pilot survey to the Eastern region participating MoHealthNet dentists [Figure 2]. This subset consisted of 276 dentists listed. The list was filtered for duplicate names, resulting in 205 total dentists. The state Medicaid list was compared to both the Bridgeport and Doral DBA managed care lists, and any providers listed in the managed care network and *not* on the state list were added. The list was then analyzed to assess which addresses were public or private health clinics, even though multiple providers may have been listed. For example, a clinic may show 10 providers (each considered a unique MoHealthNet provider on the state list), but only one provider was chosen for the sample. After removing all other remaining clinic dentists, 128 remained. Of this amount, 66 were in group practice at 23 unique addresses. Additional dentists were removed because of lack of address in the state file, miscoding by the state (i.e. out of state addresses with Missouri counties), etc., leaving 67 dentists. Ten single clinic providers were added, resulting in a total of 77 oral health providers to receive the pilot survey.



A 20-minute survey was mailed to the dentists, followed by a telephone reminder. During administration of the mail survey and follow-up phone calls, incorrections were further identified, and this information was used in the calculation response rate. There was a 33.8% adjusted response rate. Compared to other surveys of dentists, we did not have the advantage of backing by a state or national professional society, and believe this would improve response rate when the survey is expanded statewide. A four-page, 20 question survey instrument was developed to measure awareness of policy changes in Missouri. Dichotomous (yes/no) and likert-type questions were developed. Content validity was established through the review of the instrument by a rural dentist with a large Medicaid practice, a large Medicaid practice clinic administrator, and two academicians.

Pilot testing

The mailing included an introductory letter on Saint Louis University letterhead, the survey instrument (available upon request), and a postage-paid return envelope. Dentists were notified the survey was confidential. Due to incorrect address or other information, some dentists were determined to be outside the scope of study.

Data Analysis

The information from the returned surveys was coded, and data analysis was performed using SPSS Statistical Software Version 15.0. Data was checked for systematic errors, and imputations were performed when appropriate. Data analyses included frequency distributions and Chi Square tests (categorical variable analysis).

RESULTS

Demographics (Table3)

Two-thirds of the dental providers responding to the survey were in solo practice (64%, N=16). Twenty percent of the sample was no longer accepting Medicaid, although they all reported having taken Medicaid in the past. Two providers were actually unaware they were on the state list. This reflects the voluntary nature of the program, and the market flux that families in MoHealthNet must confront when seeking services. Forty-four percent of the respondents had been practicing as a MoHealthNet provider for over 10 years, indicating some longevity of serving the MoHealthNet population in our sample. More dentists (40%) receive less than one-quarter (<25%) of their revenue from MoHealthNet than higher revenue categories. The majority (52%) were accepting both straight Medicaid patients and at least one of the managed care providers. The geographic distribution of responses was close to equal: 12 from more rural counties (Crawford, Franklin, Iron, Lincoln, Jefferson, Madison, Perry, Pike, St. Francois and St. Genevieve) and 13 responses from urban/suburban counties (St. Louis City and County, and St. Charles) [note: researchers did not utilize standard accepted classifications of rural/urban/suburban]. While some providers limit services to one MoHealthNet population, others saw patients across eligibility categories (pregnant women, seniors, and adults when eligible).

Table 3: Demographic characteristics of dentists in the Eastern Region of Missouri sample, 2009.

Characteristic	N	Percentage of Total
TOTAL	25	100.0
Type of Practice		

Solo Practice	16	64.0
Group Practice	2	8.0
Clinic	5	20.0
Rotation both Solo and Clinic	2	8.0
Currently accepting MoHealthNet?		
Yes	20	79.2
No	5	20.8
Years participating in MoHealthNet		

Less than 1 year to 5 years	5	20.0
6-10 years	4	16.0
11+ years	11	44.0
Missing/Refused	5	20.0

Medicaid revenue as percent of gross income*

1-25%	10	
26-50%	2	
51-75%	2	
76-100%		
Missing/Refused		

	3
	7
	40.0
	8.0
	8.0
	12.0
	28.0
Type of MoHealthNet participant accepted	
Straight Medicaid only	1
Managed care only	6
Both	13
Missing/Refused	5
	4.0
	24.0
	52.0
	20.0

Other Medicaid Populations Accepted *

Pregnant Women

Seniors in Nursing Homes

Adults (between 1997-2008)

8 of 25

4 of 25

9 of 25

32.0% of sample

16.0% of sample

36.0% of sample

Workforce Participation(Table 4)

While most were aware of the relaxed supervision rules of hygienists in public health settings, only 16% percent were implementing the change. An equal amount was unaware of the change. Fewer were participating in DHSSs Donated Dental program, and just under one-third (28%) were unaware the program existed. It is well-known in the field that many dentists would rather provide pro bono charity services than participate in MoHealthNet formally. We found within the MoHealthNet sample, just under half (44%) the dentists were providing charity services to the population, *in addition to* serving the MoHealthNet population.

Table 4: Service Provision and Policy Changes by Dentists in the Eastern Region of Missouri sample, 2009.

Characteristic

N

	Percentage of Total
TOTAL	
	25
	100.0
Utilizing Hygienists in Public Health Settings	
Yes	4
No	17
Not Aware of this Policy Change	4
	16.0
	68.0
	16.0
Participating in DHSS Donated Dental Services Program	
Yes	
No	
Not Aware of this Policy Change	
Missing/Refused	

	2	
	15	
	7	
	1	
	8.0	
	60.0	
	28.0	
	4.0	
Provide pro bono-Charity services		
Yes		
No		
	11	
	14	
	44.0	
	56.0	

Reimbursement Levels (Table 5)

Forty-eight percent (N=12) of the sample said rate increases had no influence on their participation in MoHealthNet. Caution should be used when interpreting this data. Their longevity in the program may show a commitment to the population outside of any reimbursement increase, and the consistent reimbursement below 50% UCR over the past 10 years in the Missouri program may frustrate their participation through lack of

state response to adequate levels, thus biasing the response. Therefore, this should be viewed in combination with other data. For example, while just under half said their participation in the program was not influenced by past reimbursement increases, just over half (52%, N=13) agreed that increasing reimbursements would result in greater overall participation in the program.

An equal amount of providers split in their perception of whether the increase in reimbursements that did occur over the past years actually increased their payouts (5 yes and 5 no). However, 36% (N=9) did not know whether their payouts increased (the largest group of responders). A chi-square test was used to determine the variance of this factor based on overall MoHealthNet gross income for the practice. Dentists with less than a quarter of total MoHealthNet income were more likely to *not* know whether their payout has increased based on appropriations increases applied to greater reimbursement (x^2 (9) = 16.757, p = .05). Qualitative commentary on reimbursement and payouts manifested some frustrations:

> We have submitted many straight Medicaid claims, for example, for foster children and nursing home patients and never received payment for dental services.

> I was told no money was allocated for an increase, so I would not get it until it was authorized.

> if they increase the compensation which did not even increase since I joined in 1992.

> the lower reimbursement rate than they are accustomed to I feel will still persuade them not to participate.

Table 5: Dental Perceptions of Policy Changes by Dentists in the Eastern Region of Missouri sample, 2009.

Characteristic	N	Percentage of Total
TOTAL	25	100.0
Impact of Rate Increase		
No influence		

Some influence	12	48.0
Much Influence	5	20.0
Missing/Refused	2	8.0
	6	24

If parity in rates achieved, do you believe participation will increase?

Agree or Somewhat Agree	13	52.0
Neutral	7	
Disagree or Somewhat Disagree	5	

	28.0
	20.0

Have appropriation increases also increased your payouts?

Yes	
No	
I dont know	
Missing/Refused	

	5
	5
	9
	6

	20.0
	20.0
	36.0
	24.0

Aware of claims coding payout distinction?

Yes	
No	
Missing/Refused	

5

13

7

20.0

52.0

28.0

Easier to submit claims *to* and get payout *from* state (MO)? Managed care (MCO)?

Agree or Somewhat Agree

Neutral

Disagree or Somewhat Disagree

Missing/Refused

MO	**MCO**
11	8
5	7
4	4
5	6

MO	**MCO**
44.0	32.0
20.0	28.0
16.0	16.0

	20.0	24.0

More adults paying out of pocket?

Agree or Somewhat Agree	13
Neutral	3
Disagree or Somewhat Disagree	7
Missing/Refused	2
	52.0
	12.0
	28.0
	8.0

Are children better off today?

Agree or Somewhat Agree	8
Neutral	
Disagree or Somewhat Disagree	
Missing/Refused	

9

6

2

32.0

36.0

24.0

8.0

Administrative Improvements (Table 5)

Those who did not know (52%, N=13) about the DSS administrative policy creating mandated and non-mandated codes was over double the amount that were aware (20%, N=5) of the distinction (in existence since 2002). Dentists with Solo practices were less likely to not know the dichotomy in dental coding applied to managed care reimbursements (x^2 (3) = 7.283, p = .06). Dentists with less than a quarter of total Medicaid income were significantly less likely to not know the distinction in dental coding applied to managed care reimbursements (x^2 (3) = 13.295, p < .05). Forty-four percent of those answering the question on administrative improvements agreed that it was easier to submit claims and get a payout from the state, compared to the 16% who disagreed. However, only 32% agreed that administrative billing processes through managed care organizations were easier. The commentary also echoed varying frustration by dentists toward administrative management:

> Each layer reduces money available for dentists.
>
> Concerned because the state is slower than others.
>
> We use e-claims and actually its easier [with the State] because straight Medicaid allows 12 months retroactive submission whereas managed care only allows 6 months.
>
> The state makes it hard to get information from them. The toll free number is a joke. You can never contact someone if you have a question. The staff dislike dealing with Medicaid because it is harder and different than any other insurance company we deal with.

Medicaid Population Perceptions (Table 5)

Over half of those responding (56%, N=13) agreed that more adults were paying out-of-pocket for services rendered since the 2005 Medicaid cuts that removed the dental benefit. One dentist stated, it would be a great improvement to provide preventative care for adults, and another said greater participation by providers can only be realized if dental benefits are restored for adults. Only 32% (N=8) of the responders agreed children were better off today than 10 years ago, and an additional 36% were neutral on the subject.

Medicaid Reimbursement Payouts (Table 6)

Only 10 respondents provided information regarding their market rate charges and managed care payouts. However, analysis of the data provides a basis for public discussion. Means were calculated, and percent UCR was calculated using the means. Analysis in Table 6 also includes market rate ranges in the sample, comparison to local market charges, and comparison of managed care and state payouts reported. A general exam, which is a non-mandated code, had the greatest range in market charges, the highest UCR percentage, yet managed care payouts are below the state rate. All other codes showed managed care payouts in the 40-50 percent UCR range. Directly related to policy change effects, our sample shows managed care mean payouts being less than state payouts for X-rays [D0330] which are a mandated code requiring reimbursement at the state level.

Table 6: Sample Means of Market Charges and Payouts, 2008

Dental Service	Mean Market Charge	Mean Managed Care Payout	Mean % UCR, managed care	Sample Mean	Range	NDAS Fee 80th Percentile*	Missouri State rate	Managed Care Payout

D0150 General Exam (established or new patient) [**non**-mandated code]

58.00

28.00-107.00

81.00

38.50

33.85

58%

D0272 Bitewings, two films [mandated code]

29.42

20.00-40.00

42.00

13.09

13.20

45%

D0330 X-ray/ Panoramic film [mandated code]

75.43

50.00-100.00

101.00

32.73

31.88

42%

D1120 Prophylaxis child [**non**-mandated code]

44.36

30.00-53.00

62.00

19.25

21.43

48%

D2140 Amalgam, one surface [mandated code]

87.08

55.00-113.00

129.00

37.73

36.73

42%

* National Dental Advisory Service (NDAS) Data provided by Bender, Weltman, Thomas, Perry and Co., PC, CPAs, 1067 North Mason Road, Suite 7, St. Louis, MO 63141.

While comparing means provides data for the total sample, looking at frequencies in amount reported gives a slightly different market picture [Table 7].

Table 7: Distribution of dental providers reporting managed care payouts compared to state payout, 2008 [Over, Under, or Exactly]

Dental Service

Managed Care Payout

Over

Under

Exact

D0150 General Exam (established or new patient) [**non**-mandated code]

1

4

5

D0272 Bitewings, two films [mandated code]

1

4

7

D0330 X-ray/ Panoramic film [mandated code]

1

3

5

D1120 Prophylaxis child [**non**-mandated code]

5

4

2

D2140 Amalgam, one surface [mandated code]

2

4

5

The data reflects that managed care organizations negotiate separate contracts with each provider, and therefore, separate fee schedules. If policy on mandated codes were being implemented properly (as according to the 2004 state audit), and dental offices reported the information properly on the survey, the column labeled Under should have zeros for the three mandated codes listed.

DISCUSSION

This study was a pilot test of a survey designed to measure the policy effects in the provision of oral health care services to the MoHealthNet population. Responses and administration of the survey shed light on improvements than can be made to the survey instrument and design. However, our 34% adjusted response rate and information collected from the sample provides data with important policy implications.

Workforce Participation

Theres typically resistance to practice changes in any medical profession, and movement to public health models takes time. The fact that 4 locations were using

hygienists in public health settings we found quite positive for a four-year old program. Restrictions in Missouri regulation require an RDH to be employed by the public health setting, whereas in other states they only need to be sponsored and can work more independently when serving the Medicaid population. The state could be doing more to support the efforts of hygienists in public health settings, and coordinate those efforts with follow-up care in dental offices when appropriate. Andrilla, Lishner, and Hart (2006) found less than half of rural dentists in Missouri (44%) employ hygienists (compared to 77% nationally), partly attributable to the comparatively higher hourly wage demanded by Missouri hygienists ($26.68). A coordinated effort by Mo HealthNet, DHSS, the Missouri Dental Hygienist Association, the Missouri Oral Health Coalition, and other oral health advocates could help craft measures to support and improve the existing legislation.

While charity care is important, it does not meet the capacity of need in the population. However, MoHealthNet dentists appear to be dedicated to serving those with oral health needs, as our sample had many dentists accepting Medicaid rates below 50% UCR *and* providing charity care.

Administrative Improvements

The Missouri legislature implemented managed care arrangements utilizing the argument that bureaucratic agencies are more difficult to deal with, and the private market, through managed care organizations, can provide better services with cost efficiencies. However, our data contrasts with this position, showing dentists may not believe this is a better arrangement. They continue to experience frustrations submitting claims and receiving appropriate payouts at adequate reimbursement. A report issued by the Wisconsin Legislative Audit Bureau states that the Wisconsin Medicaid agency estimated that costs were $2.7 million higher under managed care than they would have been under a fee for service system (Wisconsin Legislative Audit Bureau, 2008). While Missouri publishes annual cost avoidance figures attributed to managed care models, it is not clear whether this also applies to subcontracting arrangements. The Legislature and the MoHealthNet Division should provide public data assessing cost savings in dental, comparing it to participation, utilization and quality of services.

With some dentists on the state MoHealthNet list sample stating they no longer take Medicaid, and with incorrect addresses and other inaccuracies (e.g one dentist had moved to another state), there exists a flux in participation in the program and difficulty for the enrolled population to receive accurate information. These are continuing barriers to access and utilization. States should utilize technologies to keep their lists regularly updated. Consideration of public-private partnerships in this issue would provide staff deficient state Medicaid agencies a venue to adequately address this need.

Both provider responses and survey payout information demonstrate administrative problems with dental coding and associated reimbursements. While DSS is attempting to ensure managed care organizations pass on legislative appropriation increases

through the distinction between mandated and non-mandated codes, dentists are significantly less likely to know or be aware of these policy distinctions. The MoHealthNet Division should ensure that codes do not have any distinction between mandated and non-mandated. The distinction is arbitrary and provides loopholes for the MCOs to decrease overall payouts to dentists (Squillace, 2009). As outlined in House Bill 2011 (the Social Services/Medicaid Appropriation bill) for State Fiscal Year 2009:

> There is appropriated out of the State Treasury, to be expended only as provided in Article IV, Section 28 of the Constitution of Missouri, for the purpose of funding each department, division, agency, and program enumerated in each section for the item or items stated, and provided that no funds shall be spent on health care delivered by any managed care company ***unless the Department of Social Services has received assurance in writing from such managed care company that any physician or dental rate increase contained herein shall be passed on to the physicians or dentists providing such health care, and for no other purpose whatsoever*** chargeable to the fund designated for the period beginning July 1, 2008 and ending June 30, 2009[authors emphasis]

The Legislature clearly intended for DSS to monitor compliance of the MOHealthNet MCOs and their subcontractors in passing on increases in fees. DSS should issue a directive that the MCOs fee schedules be no lower than the Medicaid fee schedule for any codes. Managed care models are supposed to engage in cost-saving measures through efficient management of patient care. However, it is equally important to acknowledge the difficulty in public administration of programs, especially when the Missouri Legislature sends mixed messages to the agency. There is language in the contracts with the managed care organizations stating the MoHealthNet Division is not allowed to be involved with contractual arrangements between service providers and the plan.[3] The Legislature needs to provide clear directives of its political will for the agency to manage the program properly.

Reimbursement Effects

Nainar (2000) found a significant difference in the acceptance of new Medicaid children into [Connecticut] Medicaid practices when the provider *perceived* Medicaid reimbursement rates to be acceptable, concluding that Medicaid rates are an important factor for participation in Medicaid. Our data supports that dentists *believe* when parity exists in reimbursement levels, there will be a resulting greater participation in Medicaid programs. However, from their responses about whether it *currently* influences them, it appears the current level of reimbursements, which are below 50% UCR even with $17.3 million of appropriation increases over the past 10 years, are less influential. The increases may have had the effect of preventing some from dropping Medicaid, but it remains unclear whether it has increased participation or utilization patterns. Borchgrevink, Snyder, and Gehshan (2008) found reimbursements alone were not enough to increase participation in Medicaid. Providers live in communities, whether rural or urban, where they choose to serve the population because they are caring, it is

part of a principle they live by to serve those in need, or because they have high enough volume of private pay patients that the low reimbursement from Medicaid may not be of much influence. Dentists in the sample were overall split in their perception of both the influence of reimbursement increases and the future potential of reimbursements to increase provider participation.

Missouri was subject to federal scrutiny in 2008 through a CMS review since Missouri child utilization rates are so low comparative to other states. Our data reflects Missouris inadequate design for children when the majority of respondents stated their disagreement or neutrality that children are actually better off over the past 10 years.

The majority of respondents of the survey reported more adults were showing up at their offices paying out-of-pocket for needed care since the 2005 Medicaid dental benefit cuts. This creates greater financial constraints for the working class labor force. Generally, people will delay needed care, forego care altogether leading to more complications, or pay cash for any immediate procedures to alleviate pain while foregoing that months rent, utility bills, or other basic needs. In addition, it creates greater constraints on the local health safety net infrastructure. After Maryland cut the dental benefit to adults, one study found a 12 percent increase in visits to the emergency room for dental care (Mullins, Cohen, Magder and Manski, 2004). Reinstating the dental benefit for the 400,000 adults who lost it in 2005 will *not* overburden the existing provider network. While there may be an initial spike in persons requesting appointments, it will level off. Most current MoHealthNet providers have the capacity (dental chairs, etc.) from pre-2005 levels to absorb the new patient increase adequately. The Missouri Legislature should invest budget funds into reinstating the MoHealthNet dental benefit for adults.

STUDY LIMITATIONS

With only 25 dentists responding, we are unable to generalize to the total population. Non-respondent dentists may be different than the respondents, resulting in bias of the sample. While we did have an equal split between rural county dentists and urban/ suburban dentists, a greater sample size is needed to obtain statistical power.

Fox and Phua (1994) claim using provider survey data to measure increased participation based on increased payment levels has inherent bias. However, we attempt to study the self-reported payout levels and UCR percentages by requesting the actual data on the survey, not just the perception. Fee schedule payout information is highly sensitive to contract negotiations, which may be why only 10 dentists responded. Thus, a greater concerted and collaborative effort may be needed to study actual claims and payout information.

Lastly, Medicaid policy is in constant flux, with changes deriving from both the Missouri Legislature and MoHealthNet agency. The limitation in a cross-sectional survey is that policies may have changed by completion of the analysis and distribution of findings.

CONCLUSION

This analysis explored the effects of a decade of policy changes on perception for dental practitioners participating in Medicaid/CHIP fee-for-service and managed care, focusing on the flow of legislative statutory change and budget appropriations to publicly funded oral health care services for low-income children and families. Policy changes in Missouri that were designed to increase participation in the program may have had very little effect.

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[1] Missouri changed the name of Medicaid and CHIP programs, including managed care components (also known as MC+) to MoHealthNet in 2007-2008. Any reference to Medicaid/CHIP hereafter will be deemed MoHealthNet.

[2] Dental Bulletin Volume 31, Number 05, issued August 22, 2008.

[3] 2.4 of contract, RFP bid number B3Z06118