Miami-Dade County
Prepaid Dental Health Plan Demonstration:
Less Value for State Dollars

Analysis commissioned by
The Collins Center for Public Policy / Community Voices Miami

AUGUST 2006

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August 10, 2006

SUMMARY

Florida has embarked on a program of Medicaid reform using a variety of initiatives including the *Miami-Dade County Prepaid Dental Health Plan*. This two-year demonstration—now under consideration for continuation or expansion—studied the effect of managed care contracting combined with capitation payment to dentists. Analysis of best available data from the State and its managed care vendor suggest that this alternative method of purchasing dental care has resulted in lower quality and no cost savings.

Medicaid Experimentation

States are today experiencing the most dynamic and fluid period in the 41 year history of Medicaid. Born out of the Johnson Administration's Great Society in 1965, Medicaid has grown in size, cost, and complexity until it has become the first or second most costly item for states. Governors of both political parties now seek opportunities to reign in and redesign the program by calling for flexibility, cost sharing, increased beneficiary responsibility, and emulation of private markets. Recent changes in law, regulation, and administrative options coupled with federal innovation grants to states currently encourage major reform.

Florida's Dental Demonstration

One example of Florida's Medicaid reform effort is the *Miami Dade County Prepaid Dental Health Plan* for children referred to as the "demonstration" or "pilot." This demonstration began on July 1, 2004 when Atlantic Dental Incorporated (ADI), a dental managed care vendor, assumed responsibility for the program from the state. Previously, Florida had contracted directly with dentists and paid them based on a fixed fee for each service (FFS) they provided to children. Under the demonstration, ADI developed a network of dentists and compensated them primarily through capitation, an approach well established in medicine but relatively rare in dentistry. Under capitation, dentists agree to be responsible for a panel of patients and their dental care needs and are paid a fixed dollar amount each month for each patient, whether or not the patient receives treatment.

Purpose of This Analysis

Experiments provide the basis for understanding what works and what doesn't. Objective analysis allows policymakers to determine when to expand, continue, modify, or abandon a novel demonstration. The purpose of this analysis is to provide policymakers with the best available evidence on the demonstration's performance in comparison with the pre-existing state-managed dental Medicaid program for children. Because of lag times in reporting data, this analysis utilized data from 2003 for the pre-pilot period and 2005 from the pilot period whenever possible.

Quality Framework

This analysis reports on value, the benefit to the state in terms of quality of care for Medicaid dollars expended. The National Academies of Science have proposed six measures of healthcare quality that are widely used by government and industry and are the basis for this evaluation. These are:

1. *Effectiveness*, a measure of achieving desired outcomes;
2. *Efficiency,* a measure of how outcomes relate to resources;

3. *Timeliness*, a measure of delay in receiving care;
4. *Safety*, a measure of actual or potential bodily harm;
5. *Patient Centeredness*, a measure of how well care meets patients' needs and preferences;
6. *Equity*, a measure of the pilot's ability to provide healthcare of equal quality to those who may differ in personal characteristics other than their clinical condition or preferences for care

Best Available Data

This analysis utilizes the best available data from the State of Florida as reported by the University of Florida in its July 27th analysis by the Institute for Child Health Policy ("University of Florida Report"). It also utilizes data obtained from AHCA by the Collins Center for Public Policy and additional federal governmental data available to the public. When more than one value was reported for the same measure, the value most that most favorably reflected the program's performance was utilized. Data sources are listed for each finding in the attached chart book and data chart.

Data obtained on the program both before and after the start of the demonstration may be flawed or difficult to interpret because of either over- or under- reporting by AHCA, the dental vendor ADI, participating dentists, or beneficiaries. In general, pre-pilot data is likely to reflect over-treatment because of perverse incentives created by deeply discounted fee schedules while pilot data are likely to understate care because of presumed poor reporting by dentists. Past studies suggest that findings from beneficiaries' surveys tend to overstate findings of satisfaction and utilization.

What Happened?

In short, costs stayed about the same (increased by 1%) while almost all measures of quality declined and the State of Florida lost value by paying the same amount for less care and less quality.

COST:

Aggregate costs increased by 1% (from $14.9 million to $15.1 million)

QUALITY:

1. Effectiveness

Children obtained less care

- The percent of children "continuously" enrolled in the program who received at least one dental visit declined by 42% (from 37% to 22%)
- The percent of children enrolled for any period of time in the program who received at least one dental visit declined 45% (from 29% to 16%)

Children had fewer dental visits

- The average number of dental visits for "continuously" enrolled children decreased by 54% (from 1.0 to 0.47 visits).
- The average number of dental visits per enrolled child decreased by 61% (from 0.60 visits to 0.24 visits)

Fewer dentists were available to children

- The number of Dade County dentists who provided services to at least one child declined 59% (from 669 dentists to 276 dentists.)

Fewer children had a dental prevention visit

Dental prophylaxis (tooth cleaning) is a sentinel marker for dental care of children because it is a routine procedure typically provided to all children and has a widely recommended frequency of twice annually.

- The number of dental cleanings provided to children declined by an estimated 59% (from 75,911 "prophylaxes" in 2003 to an annualized 31,106 in 2005)
- The percentage of children who had their teeth cleaned declined by an estimated 62% (from a 2003 Statewide rate reported by AHCA of 24% to an annualized 9% rate from ADI)

The majority of dentists reported seeing few of the children they contracted to care for.

- During the first half of 2005, only 18 of 191 dentists then listed in the pilot reported caring for a greater percentage of children than were cared for in the year prior to the demonstration. Taken together, these 18 practitioners provided a dental prophylaxis to 36% of their child patients while the remaining 173 dentists provided a cleaning to only 7% of their patients.

- During the first half of 2005, 10% of dentists did not report seeing any children for a prophylaxis, 79% reported seeing more than 1 but less than 20%, 8% reported seeing 20% or more but less than 50%, and only 2% (4 dentists) reported seeing more than 50%. Among dentists who reported providing any prophylaxes, the likelihood of a child getting a cleaning increases as panel size decreases. (The average panel size for dentists seeing less than 20% of children for prophylaxis is 993; the average for dentists seeing more than 20% but less than 50% is 652; and the average for dentists seeing more than 50% is 444.)

More children "had a dentist"

- The pilot assured that all children had a dentist of record by encouraging parents to select a dentist and by assigning dentists for those who had not done so. Of the 191 unique dental providers who participated in the program during the first half of calendar year 2005, the number of children enrolled in each office varied from 1 to 5,892. Of the 669 unique dental providers who participated in the program in the full year prior to the pilot, the number of children enrolled in each office varied from 1 to 1,940. The largest provider in the capitation program accepted responsibility for 3 times more children than the largest provider in the fee-for-service program.

Expenditures per child who obtained care decreased:

- The dollar value of services decreased 39% from $156 for each child who obtained care in the year prior to the pilot to $95 for each child who obtained care in the first year of the pilot based on Florida's Medicaid fee schedule.
- Because Florida state Medicaid fees are 42% lower than regional dental fees, the commercial market value of services provided before and after the pilot declined from roughly $372 per utilizer to $226 per utilizer.

Purchasing power of Medicaid dollars decreased:

- The overall purchasing power of state dollars decreased by 68%:
  - Each pre-pilot dollar bought approximately 79 cents worth of dental care at Medicaid rates while each pilot dollar bought roughly 25 cents worth of care at Medicaid rates.

- Each pre-pilot dollar bought approximately $1.89 worth of dental care at commercial rates while each pilot dollar bought roughly 60 cents worth of dental care at commercial rates.

2. Efficiency

Cost per beneficiary increased

- Dental care expenditures pro rated by number of beneficiaries increased by 14% (from $56 per enrollee per year to $64 per enrollee per year.)

Cost per utilizer increased

- Dental care expenditures pro rated by the number of children who received at least one dental service increased by 108% (from $192 per enrollee to $399 per enrollee per year.)

Cost per visit increased

- Dental care expenditures pro rated by the number of visits increased 188% (from $95 to $273.)

Cost per dentist increased

- Dental care expenditures pro rated by the number of dentists who provided one or more services increased 158% (from $22,317 to $57,609.)

3. Timeliness

Objectively, declines in care suggest loss of timeliness

- The 42% drop in utilization by continuously enrolled children and 45% drop in utilization for all enrolled children suggest a decrease in timeliness of care.

- The 54% drop in average numbers of visits for continuously enrolled children and 61% drop in numbers of visits for all enrolled children suggest a decrease in timeliness of care.

Subjectively, parent satisfaction was moderately high

- A very favorable 69% of families surveyed reported that they "always to usually" received a dental appointment for routine care as soon as they wanted.

4. Safety

There is no evidence to suggest any change in safety.

5. Patient centeredness

The University of Florida's comprehensive survey suggests high levels of consumer satisfaction with the program.

6. Equity

Federal law established the Medicaid EPSDT program for children in 1967 to ensure equity between low-income children and children from non-poverty families in obtaining healthcare that meets their needs. The "equal access provision" of EPSDT legislation specifically calls for care that is as accessible for children in Medicaid as for their non-Medicaid peers in the same locale. Nationally 25% of low-income and Hispanic children, like the majority of those in the pilot, access dental care (comparable to Dade County's pre-pilot performance of 29%) while 45% of children in families above the poverty level obtain dental examinations in a year. In the year prior to the demonstration, Florida fell 36% short of providing equitable access to dental care (29%

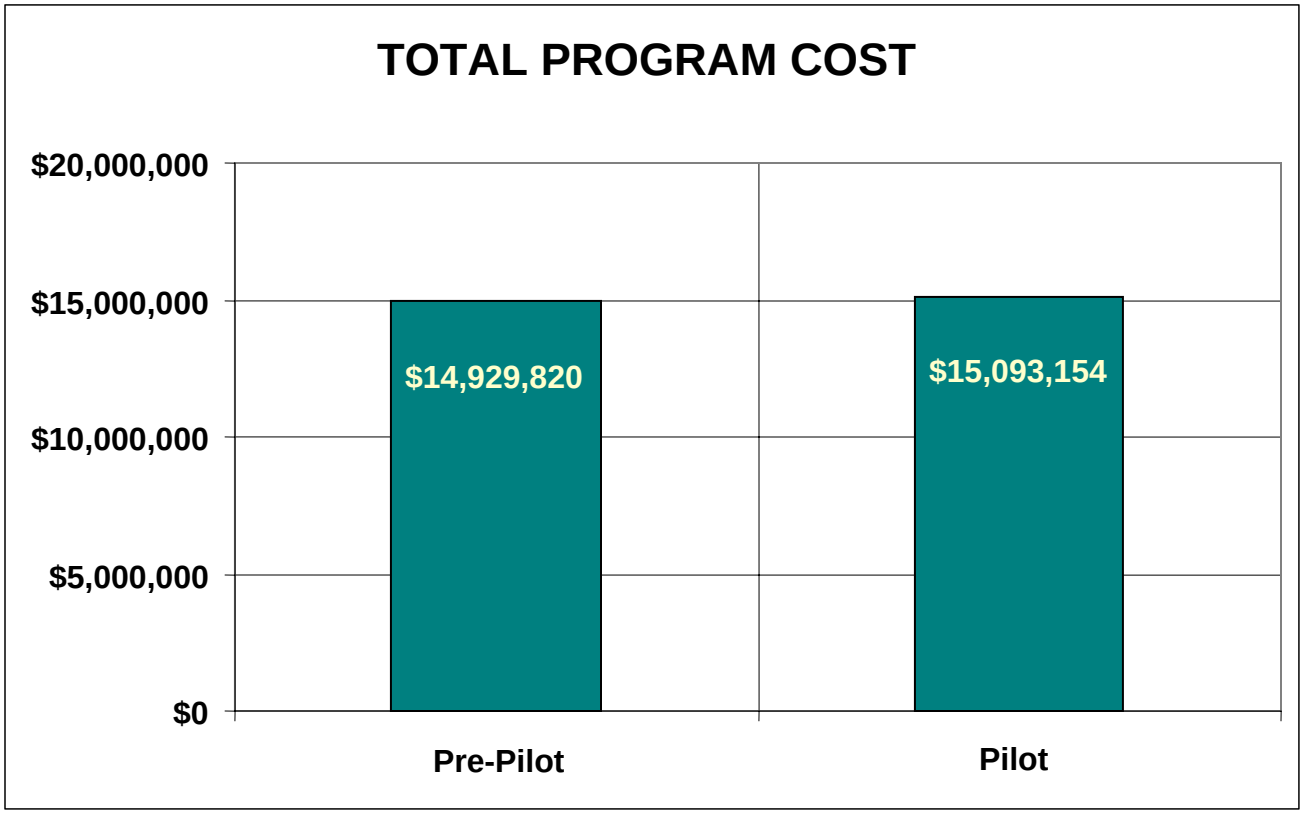
receiving care compared to benchmark of 45%). During the pilot this shortfall in equity increased to 64% (16% receiving care compared to benchmark of 45%).

Explaining the Findings

Whenever there is uncertainty, there is risk. In the case of Medicaid, what is uncertain is the cost of healthcare that will be used by the covered population. Since Medicaid is an individual entitlement, policymakers are always uncertain how much Medicaid will cost. This uncertainty makes it impossible to accurately predict and budget for Medicaid unless program costs can be fixed by passing financial risk to a vendor. During the past decade most states have shifted risk to vendors and changed their own roles from being "payers" of Medicaid healthcare to being "purchasers." This dental demonstration is an example of this approach in which the vendor, in turn, has passed financial risk on to dental providers through capitation.

The relationship between risk and reward strongly influences behavior. "Risk" may explain changes in quality that occurred between the preexisting fee-for-service dental program and the capitation demonstration. When providers assumed the financial risk for delivering care to this population of pediatric Medicaid beneficiaries, the economic incentives to "under treat" appear to have led to far poorer quality of care. However, it is impossible to determine how much of decline in quality measured by this report resulted from underreporting by dental providers.

CHARTBOOK

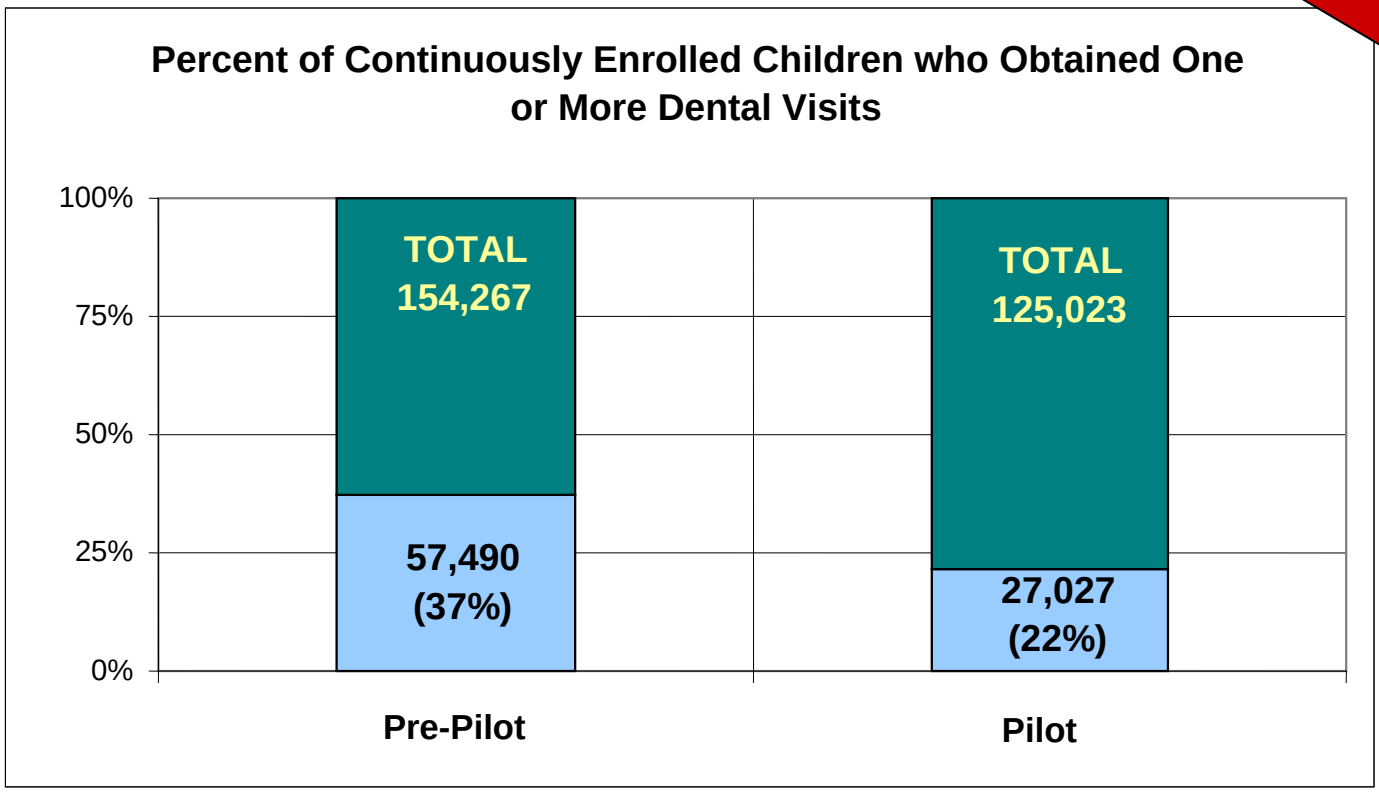


"2003 Dade County Total Claims" AHCA document received by Collins Center, July 2006; ADI quarterly financials provided to AHCA.

Quality Effectiveness Measure #1:

UTILIZATION

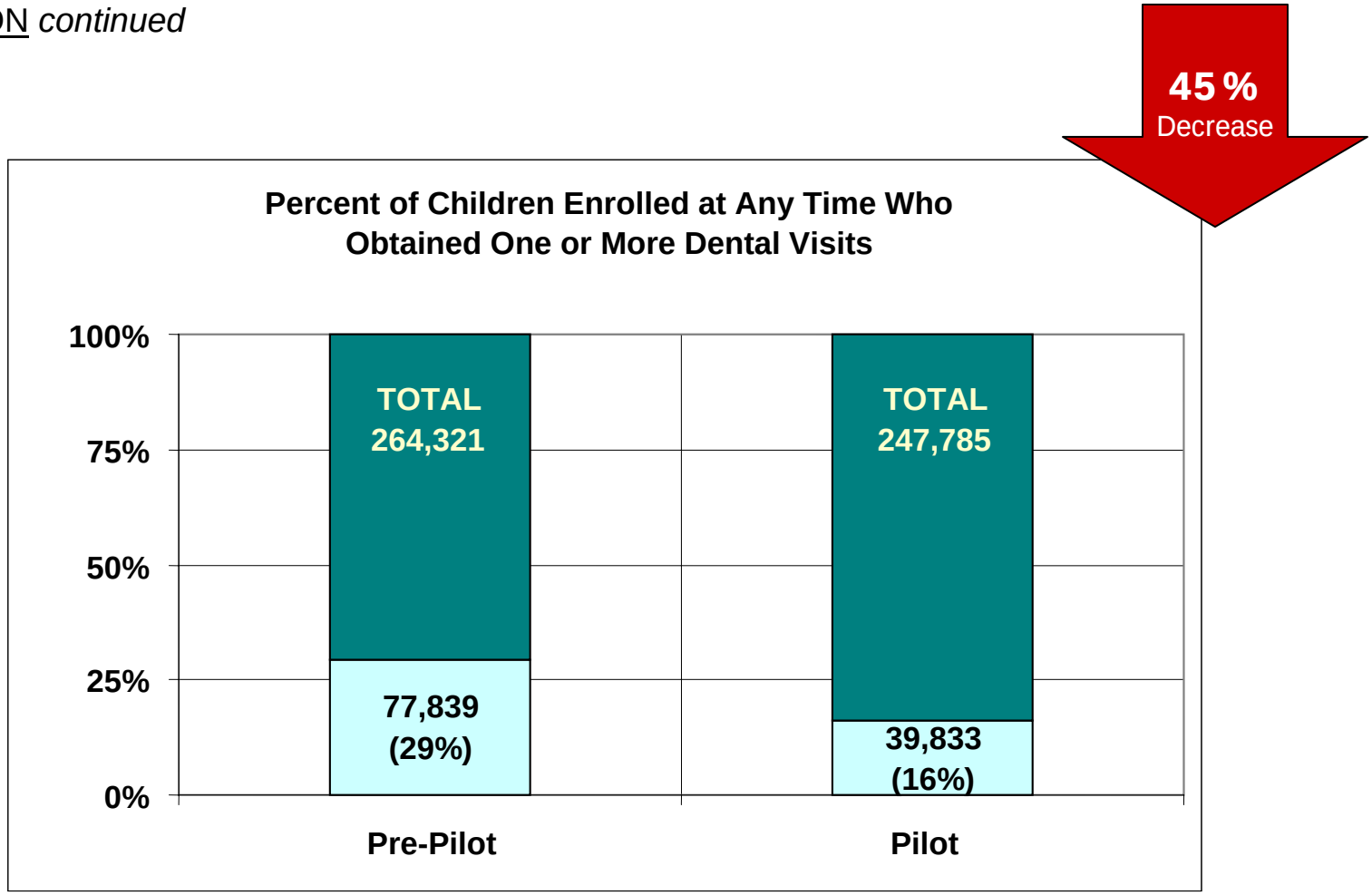
A.



University of Florida Report Tables 6 (pre-pilot) and 7(pilot).

Quality Effectiveness Measure #1:
UTILIZATION *continued*

B.

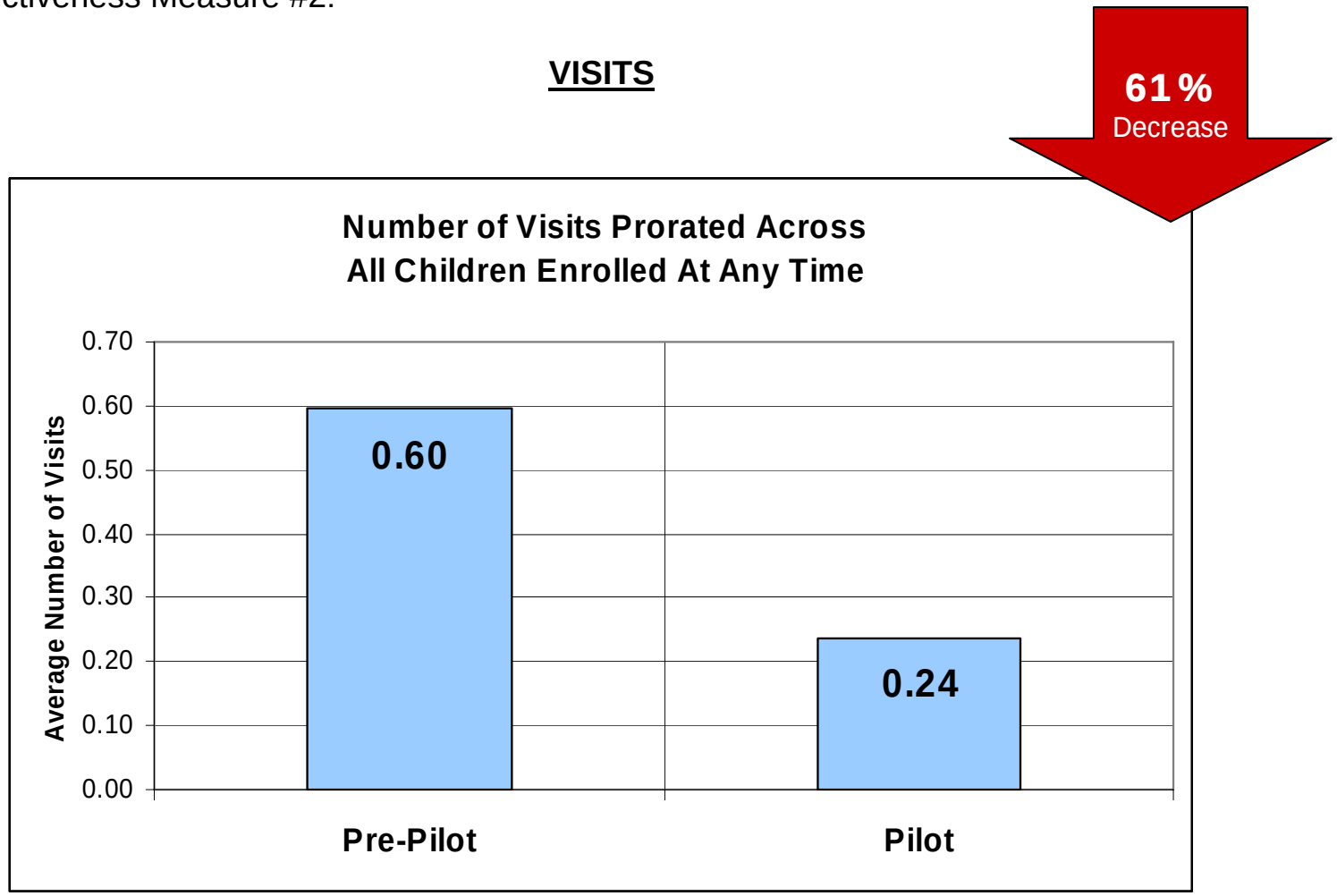


University of Florida report Tables 8 and 10(pre-pilot), 9 and 11(pilot).

Quality Effectiveness Measure #2:

A.

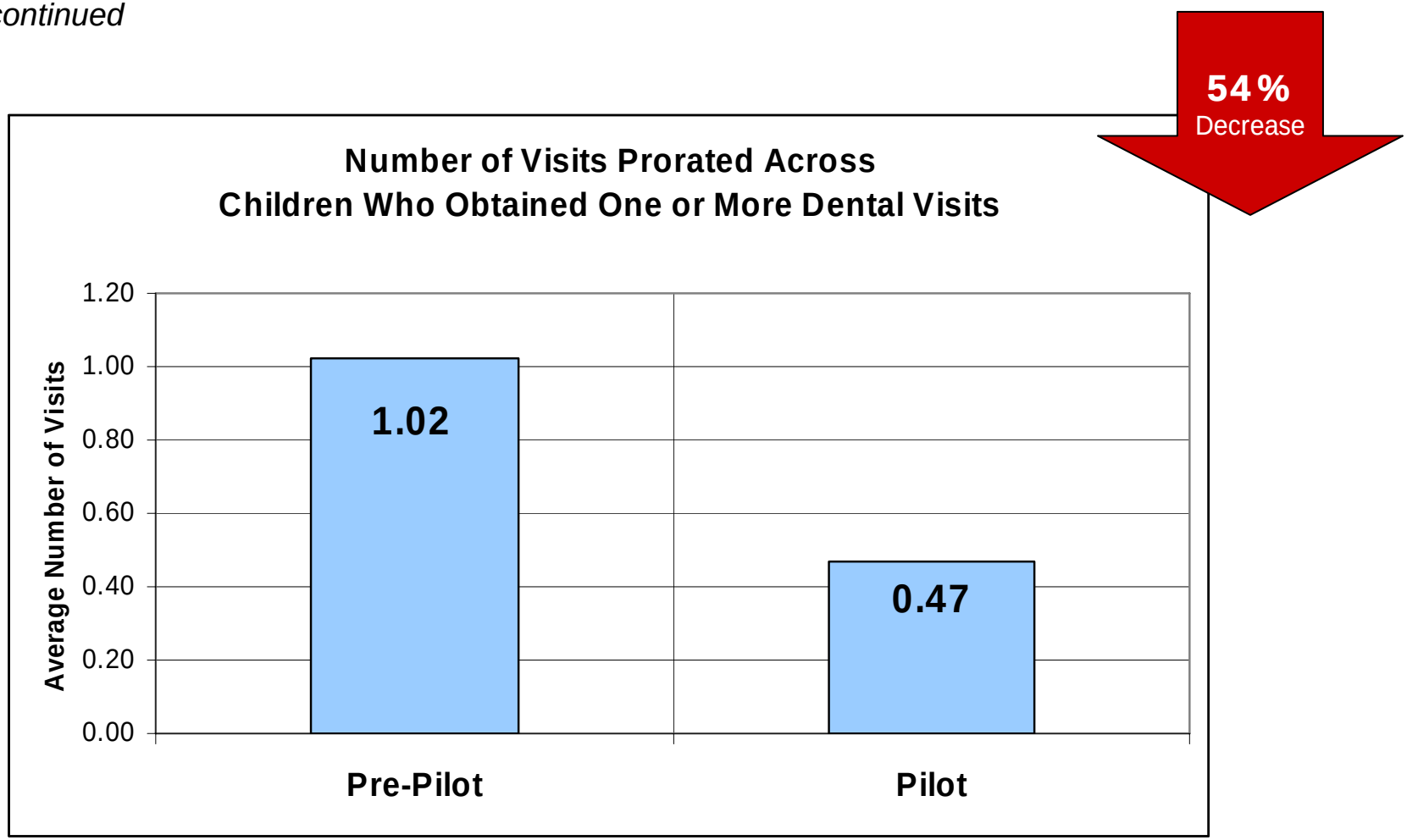
VISITS



University of Florida Report Tables 8 (pre-pilot) and 9 (pilot).

Quality Effectiveness Measure #2:
VISITS *continued*

B.

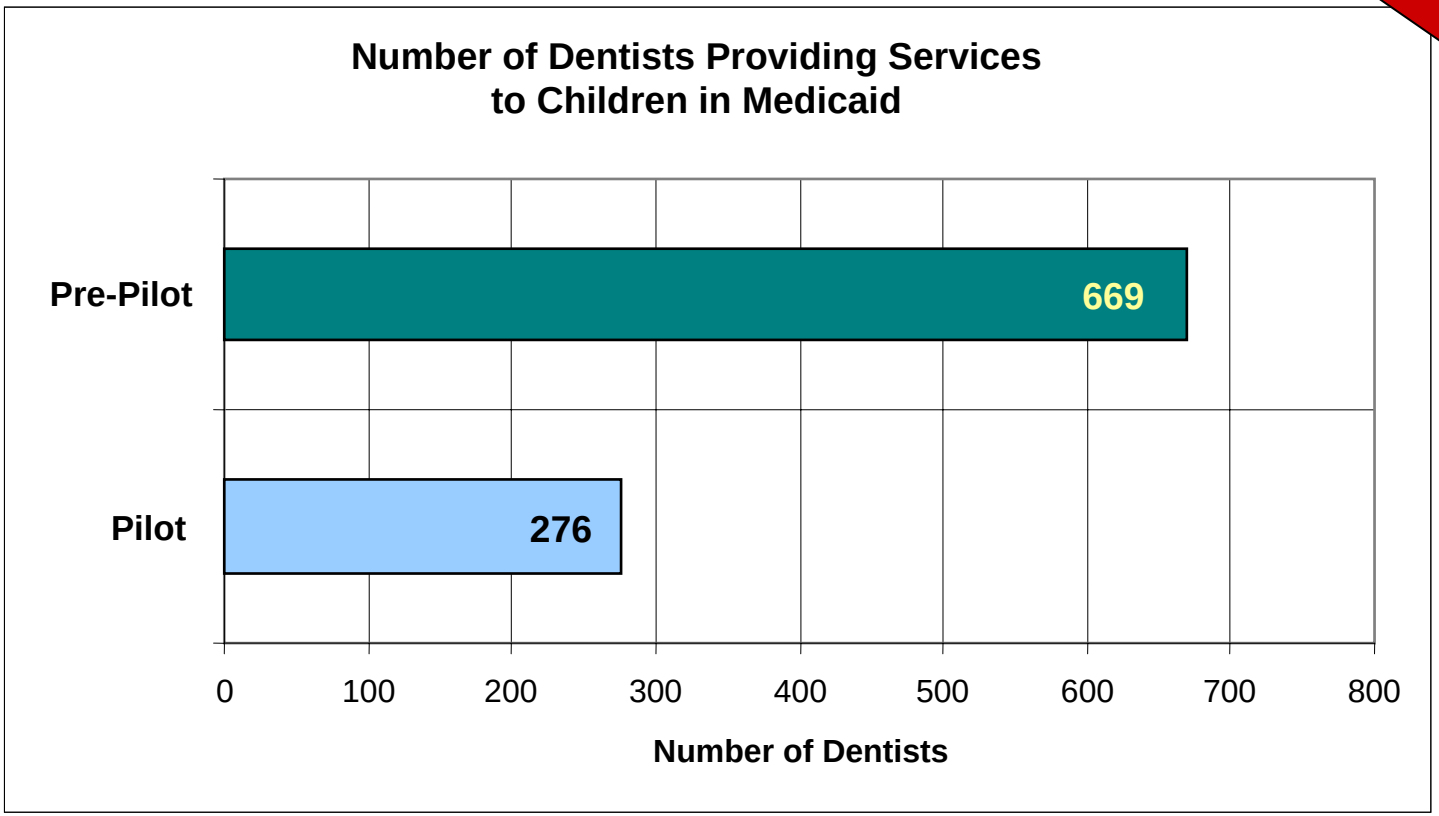


University of Florida Report Tables 6 and 8 (pre-pilot), 7 and 9(pilot).

Quality Effectiveness Measure #3:

DENTISTS

59 %
Decrease

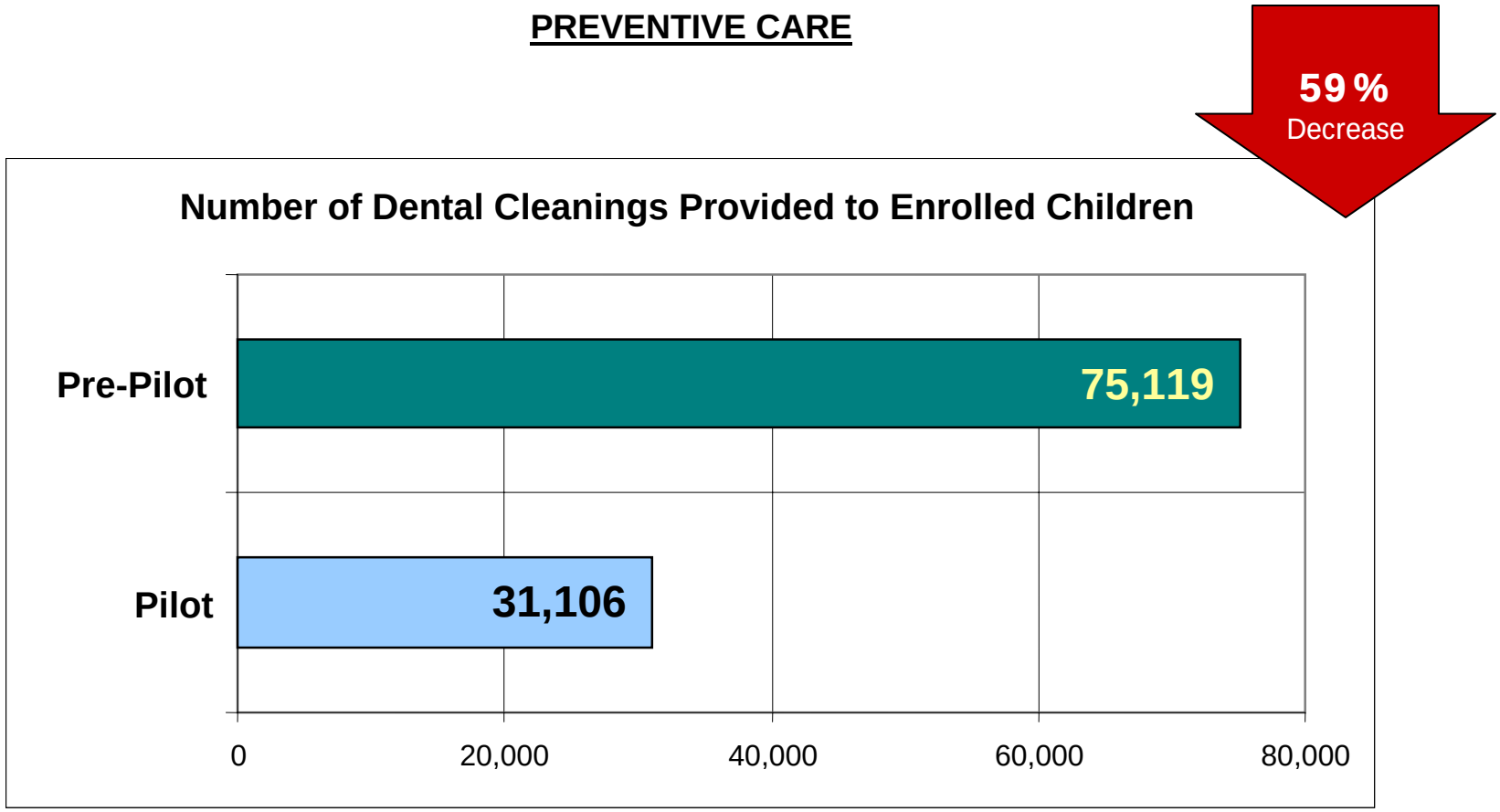


University of Florida Report Tables 13 (pre-pilot) and 15 (pilot).

Quality Effectiveness Measure #4:

PREVENTIVE CARE

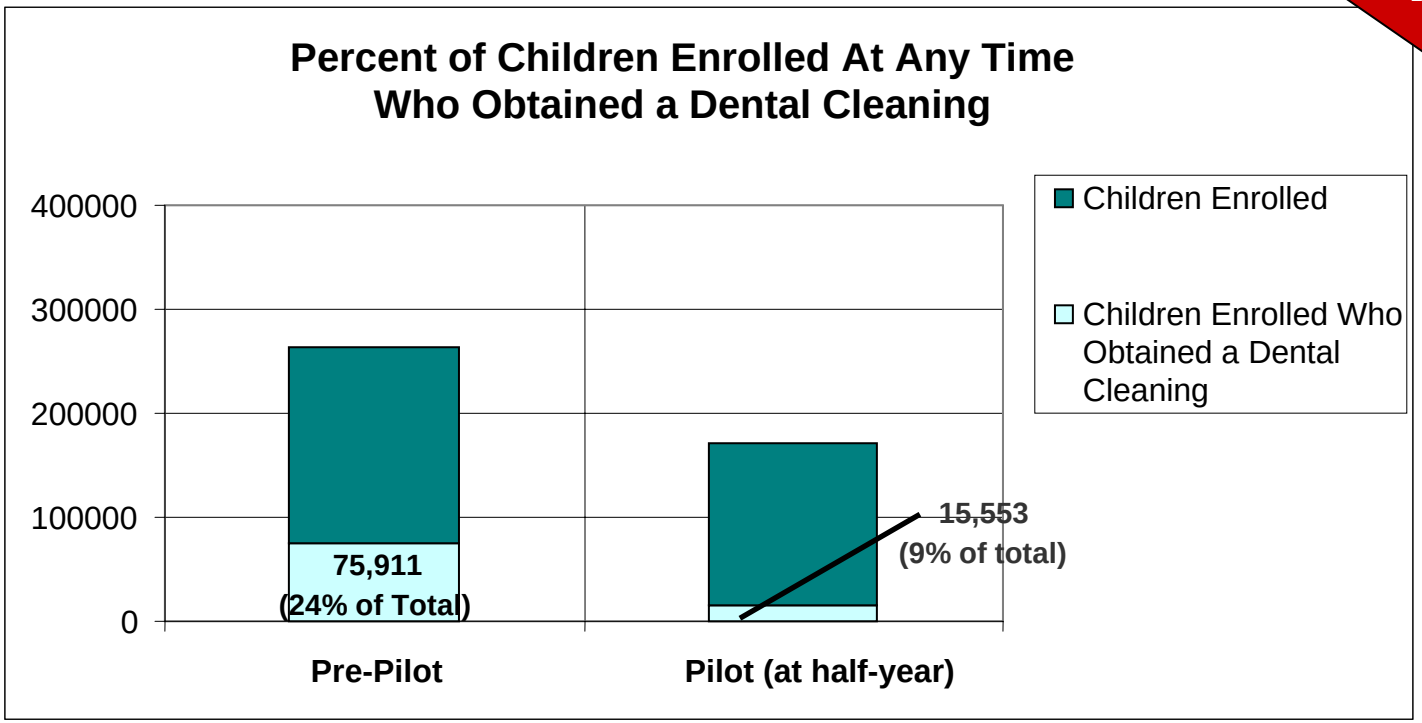
A.



"2003 Dade County Total Claims" AHCA document received by Collins Center, July 2006;
Child Preventive Dental Services Report received by Collins Center from AHCA in April 2006.

Quality Effectiveness Measure #4:
PREVENTIVE CARE, *continued:*

B.

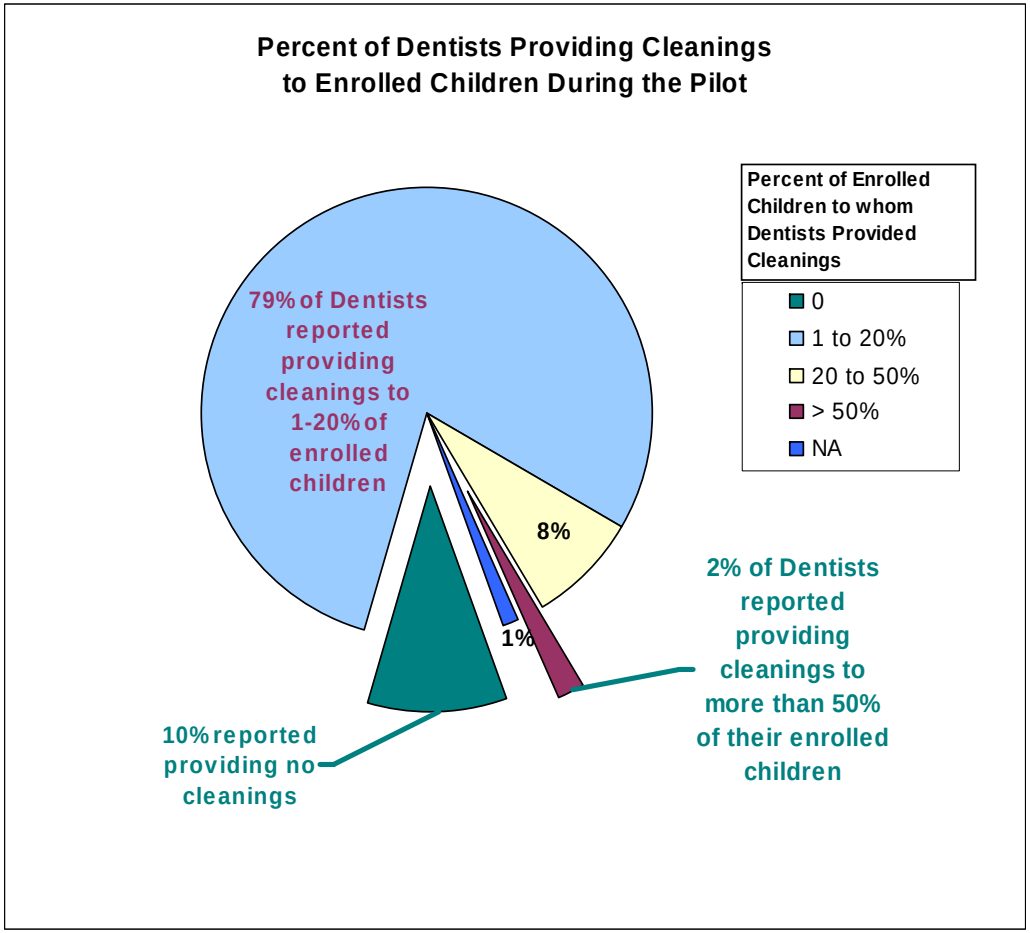


"2003 Dade County Total Claims" AHCA document received by Collins Center, July 2006;
Child Preventive Dental Services Report received by Collins Center from AHCA in April 2006.

Quality Effectiveness Measure #5:

DENTISTS' PERFORMANCE DURING THE PILOT

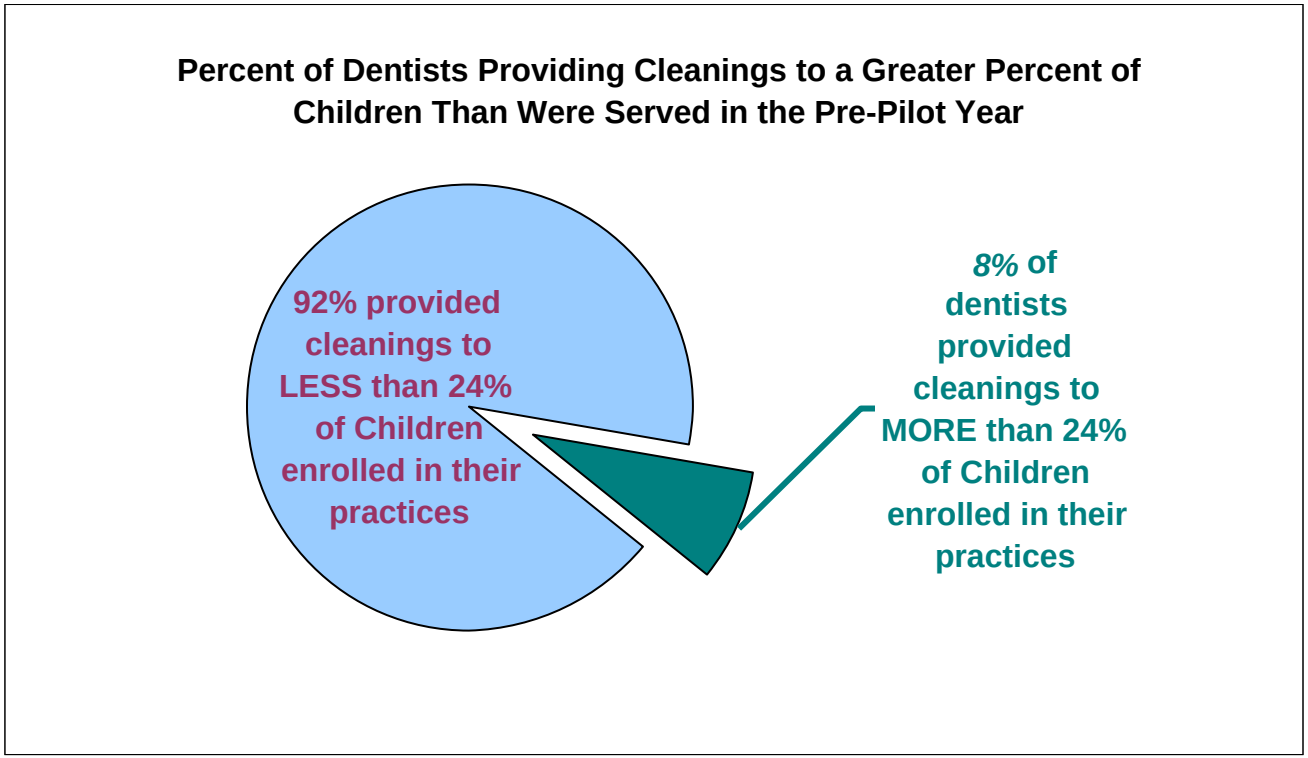
A.



Child Preventive Dental Services Report received by Collins Center from AHCA in April 2006.

Quality Effectiveness Measure #5:
DENTISTS' PERFORMANCE, *continued*

B.



Child Preventive Dental Services Report received by Collins Center from AHCA in April 2006.

Quality Effectiveness Measure #6:

DENTISTS OF RECORD

Each figure represents 1000 children

Pre-Pilot

1 Dental Office

Served between 1 and 1940 Children

Pilot

1 Dental Office

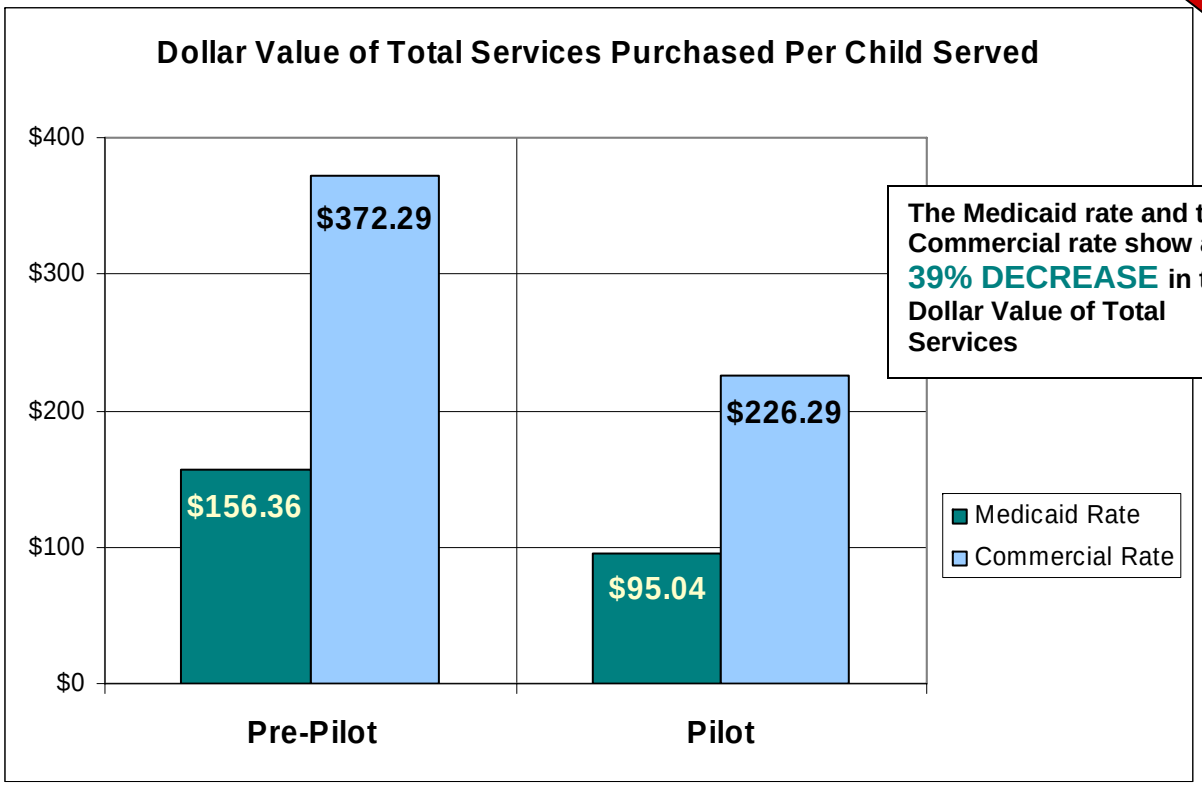
Assumed responsibility for 1 to 5892 Children

University of Florida report, page 13; Child Preventive Dental Services Report received by Collins Center from AHCA in April 2006.

Quality Effectiveness Measure #7:

EXPENDITURES PER CHILD

39%
Decrease

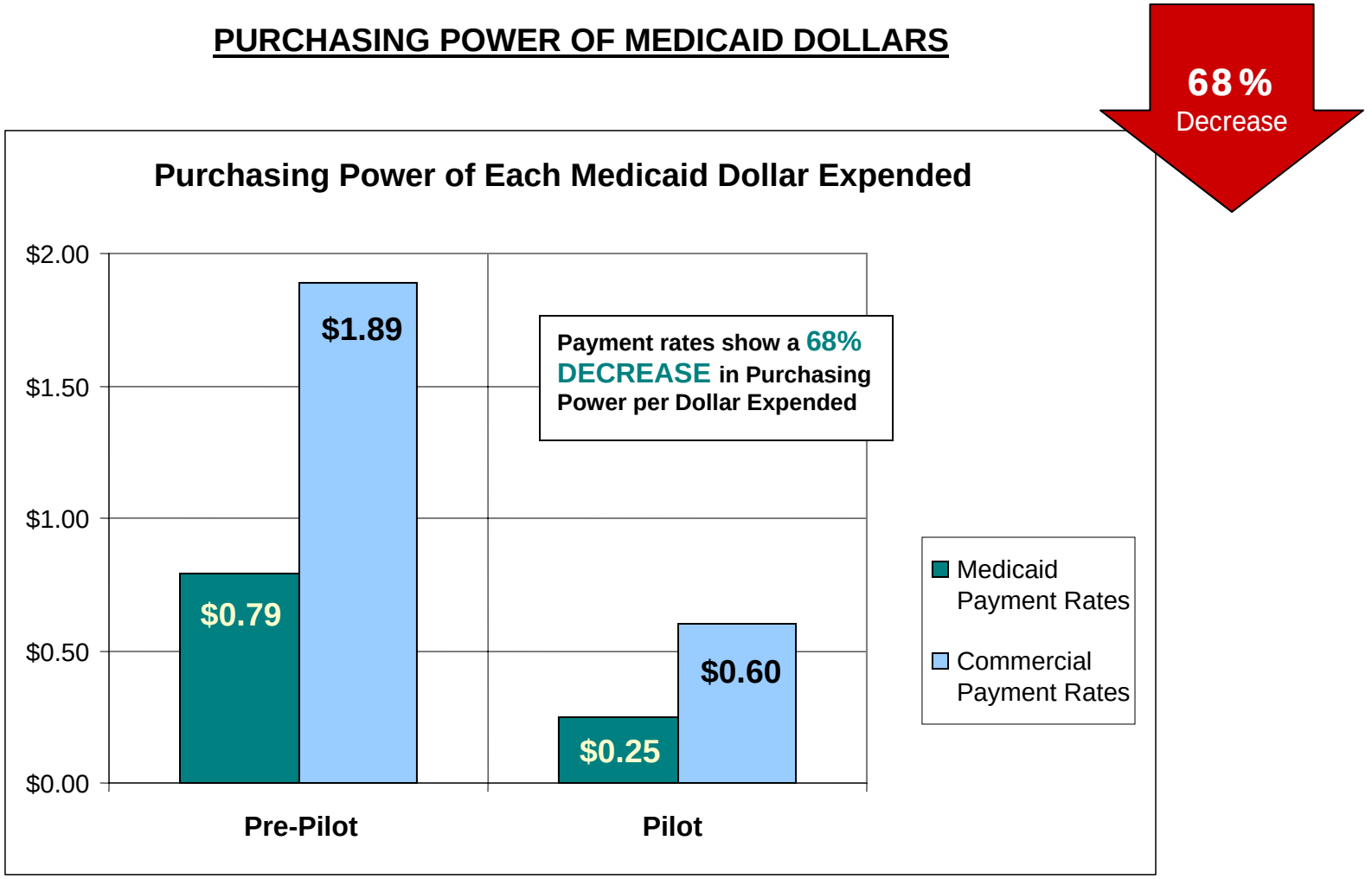


University of Florida Report, Tables 10 (pre-pilot) and 11 (pilot); "2003 Dade County Total Claims" AHCA document received by Collins Center, July 2006

Quality Effectiveness Measure #8:

PURCHASING POWER OF MEDICAID DOLLARS

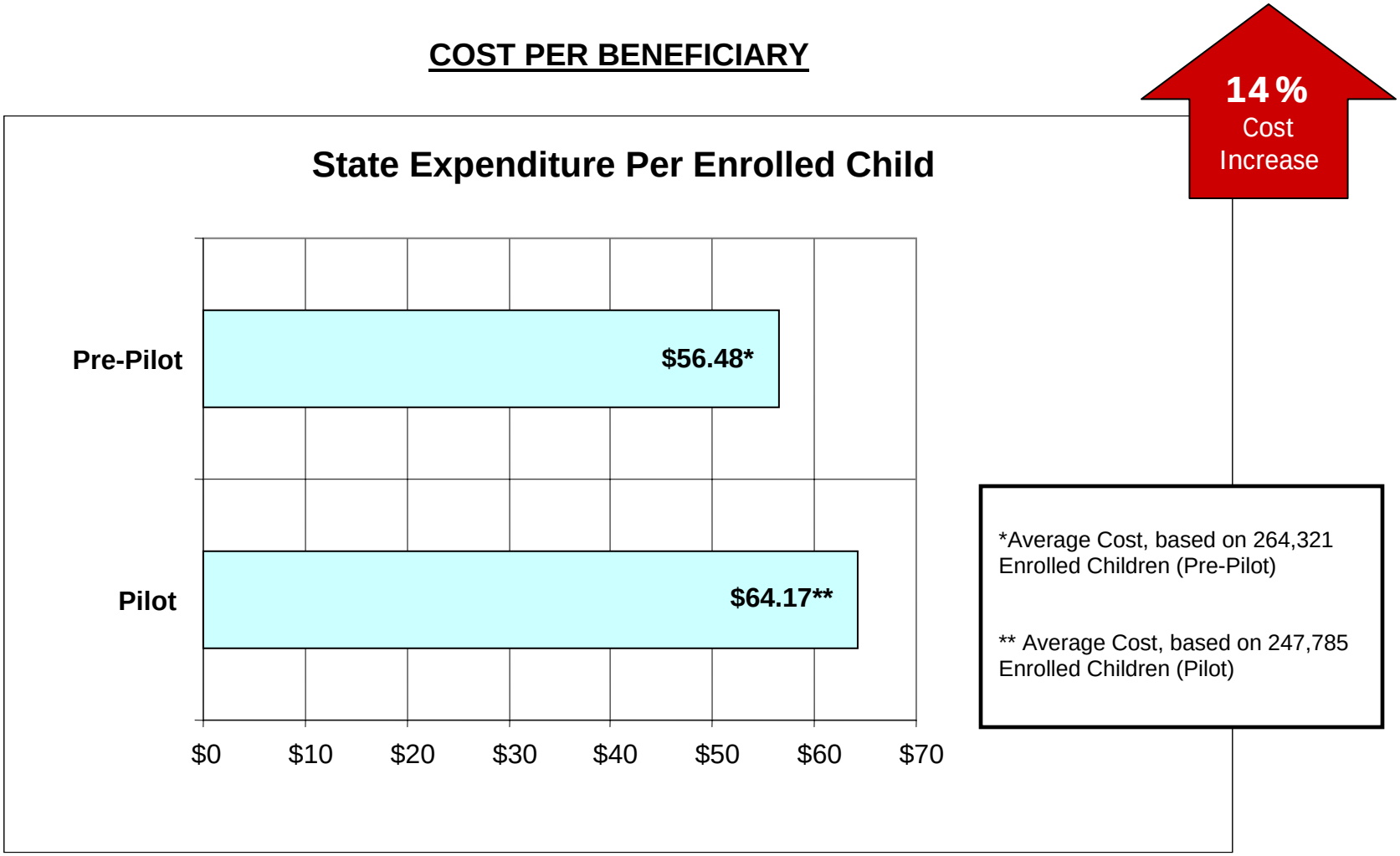
A.



University of Florida report Table 11; "2003 Dade County Total Claims" AHCA document received by Collins Center, July 2006; Quarterly Financials Provided by ADI to AHCA obtained from Collins Center.

Quality Efficiency Measure #1:

COST PER BENEFICIARY



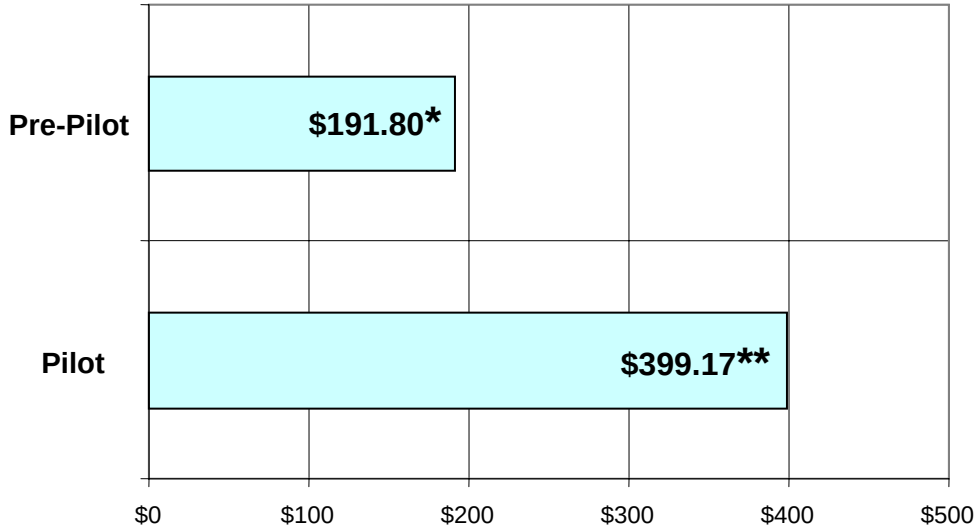
University of Florida Tables 10 (pre-pilot) and 11(pilot).

Quality Efficiency Measure #2:

COST PER UTILIZER

108%
Cost
Increase

State Expenditure Per Enrolled Child
Who Obtained at One or More Dental Visits



*Average Cost, based on 77,839 Enrolled Children Who Received at Least One Dental Visit (Pre-Pilot)

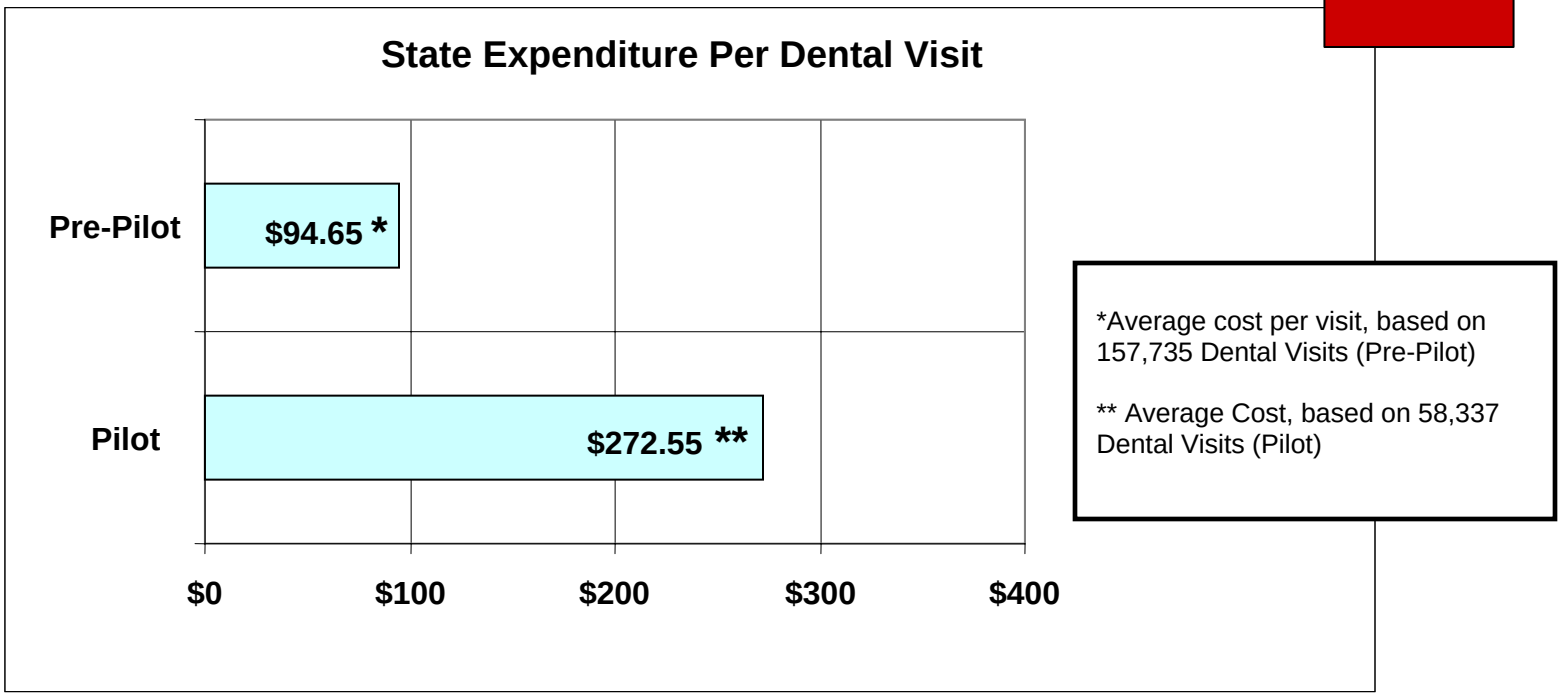
** Average Cost, based on 39,833 Enrolled Children Who Received At Least One Dental Visit (Pilot)

University of Florida Tables 10 (pre-pilot) and 11(pilot).

Quality Efficiency Measure #3:

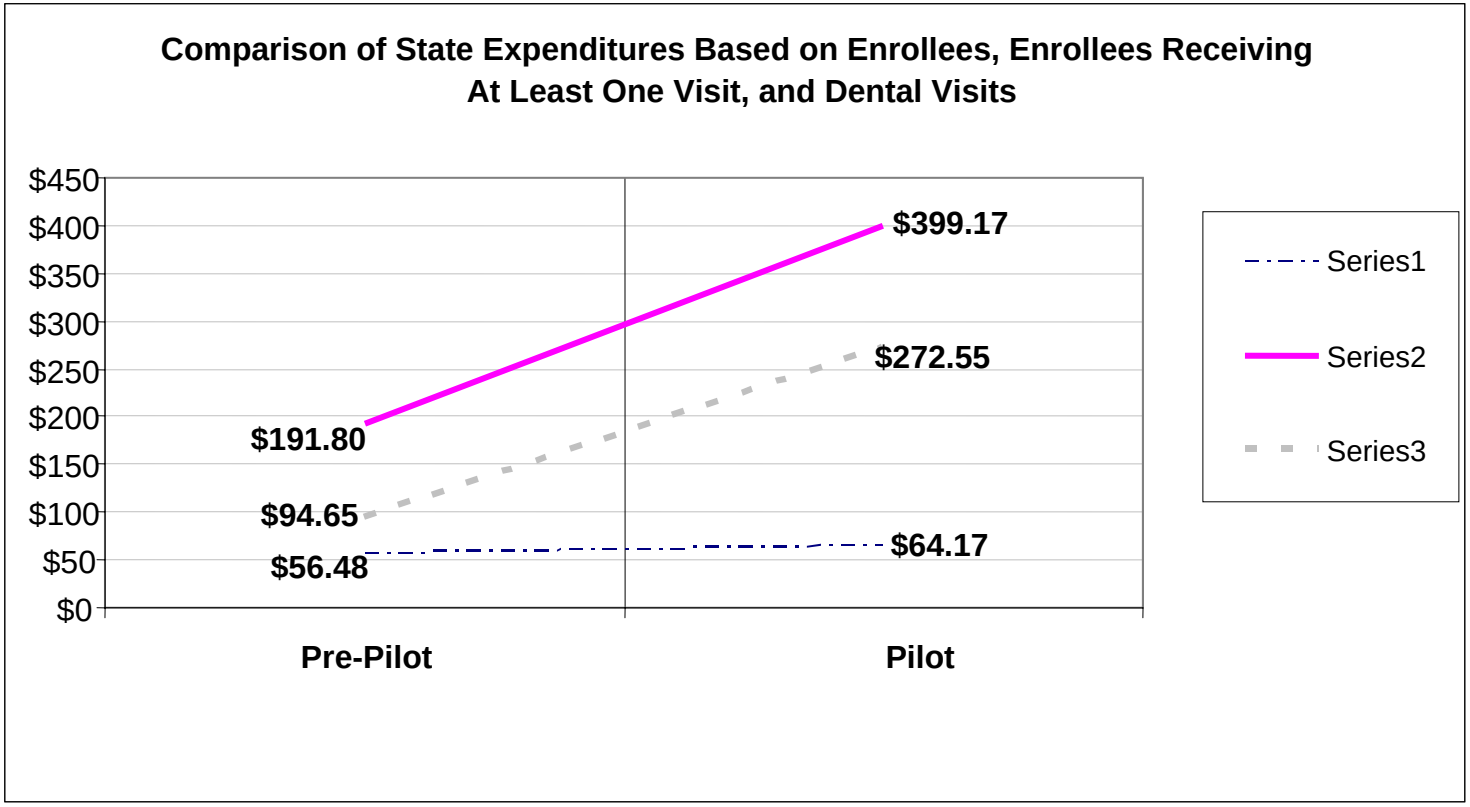
COST PER VISIT

188%
Cost
Increase



University of Florida Tables 8 (pre-pilot) and 9 (pilot).

Quality Efficiency Measures 1,2 & 3 combined:



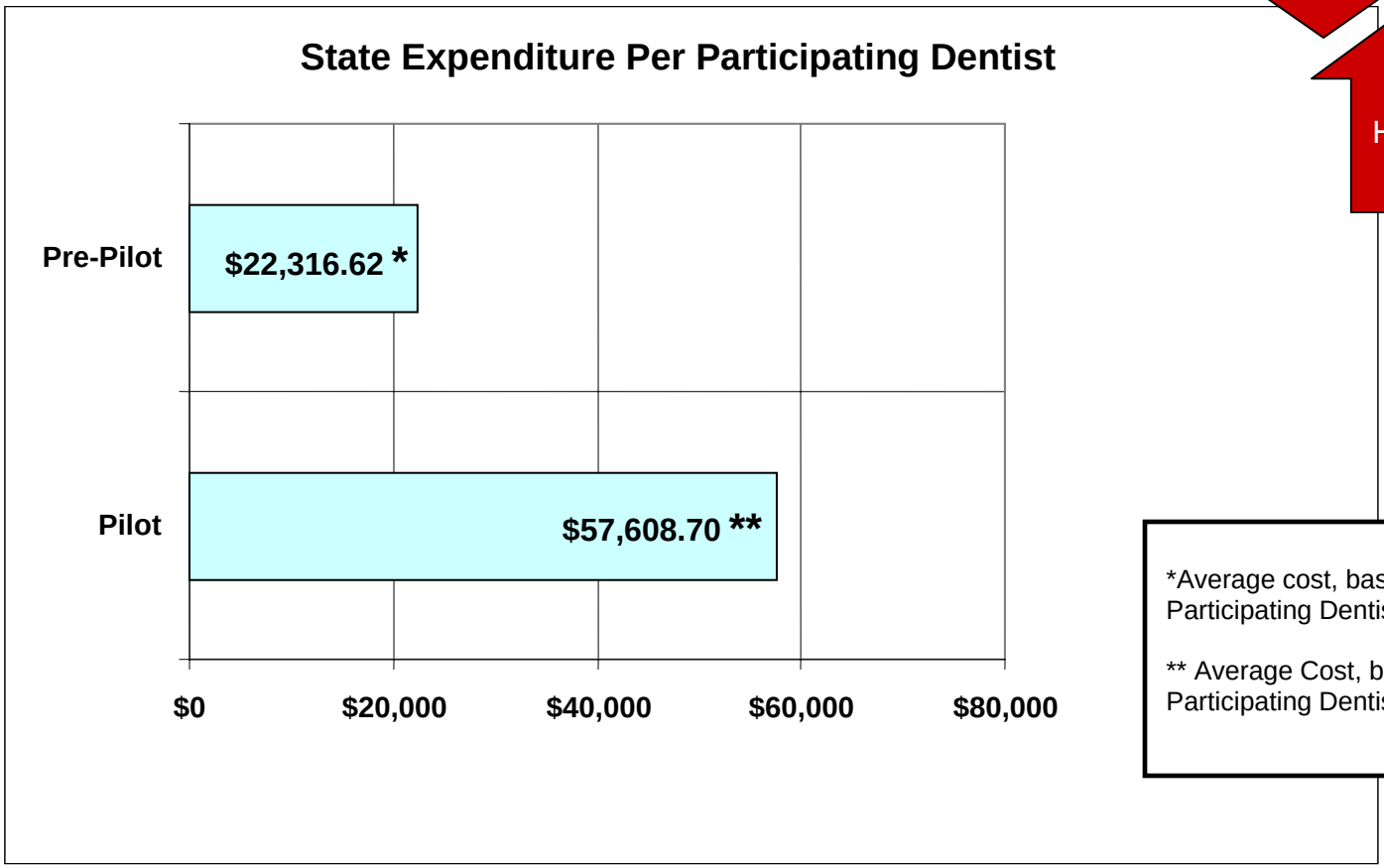
University of Florida Tables 8, 9, 10 and 11.

Quality Efficiency Measure #4:

COST PER PARTICIPATING DENTIST

59 %
Fewer Participating Dentists

158 %
Higher Cost



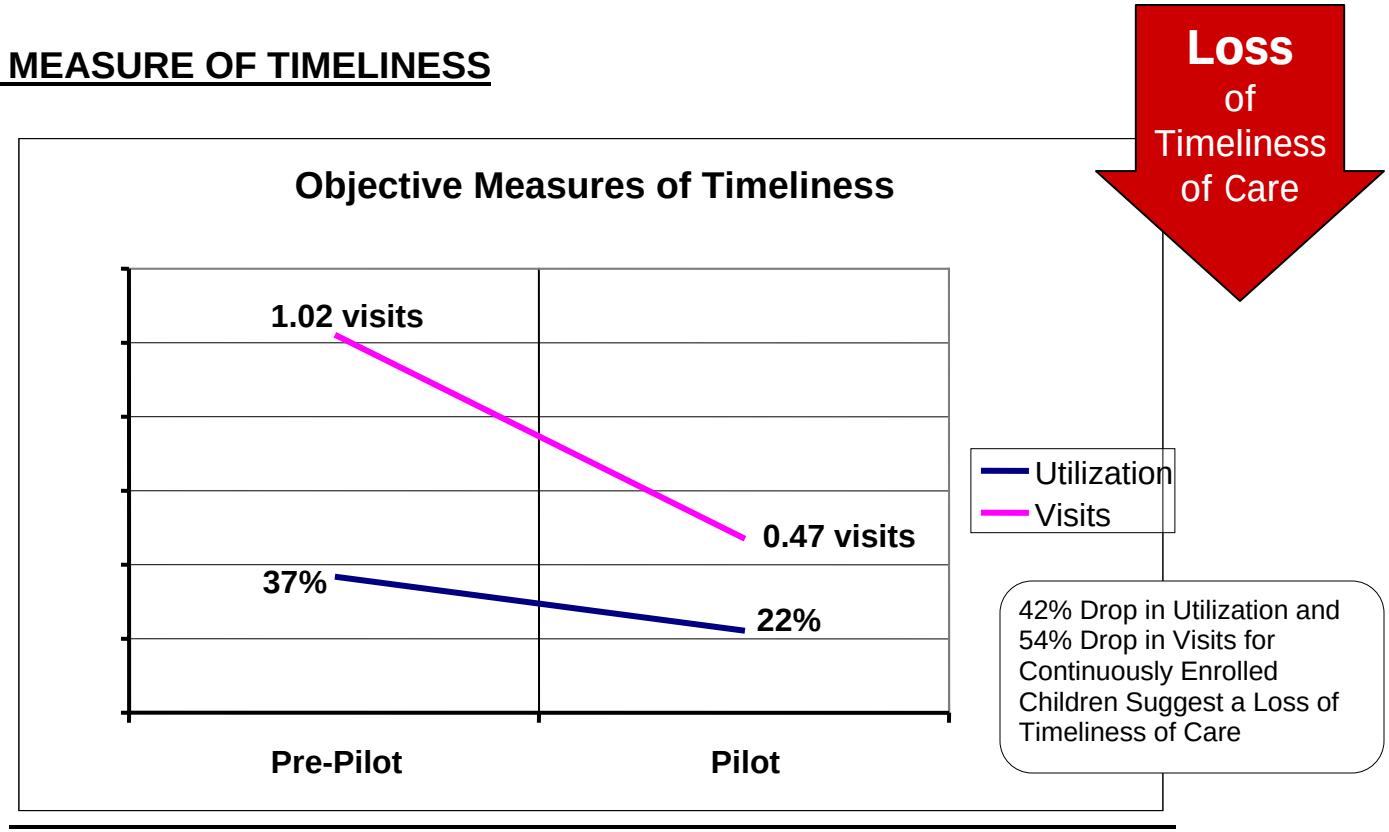
*Average cost, based on 669 Participating Dentists (Pre-Pilot)

** Average Cost, based on 276 Participating Dentists (Pilot)

University of Florida report Tables 13 (pre-pilot) and 15 (pilot).

Quality Timeliness Measure:

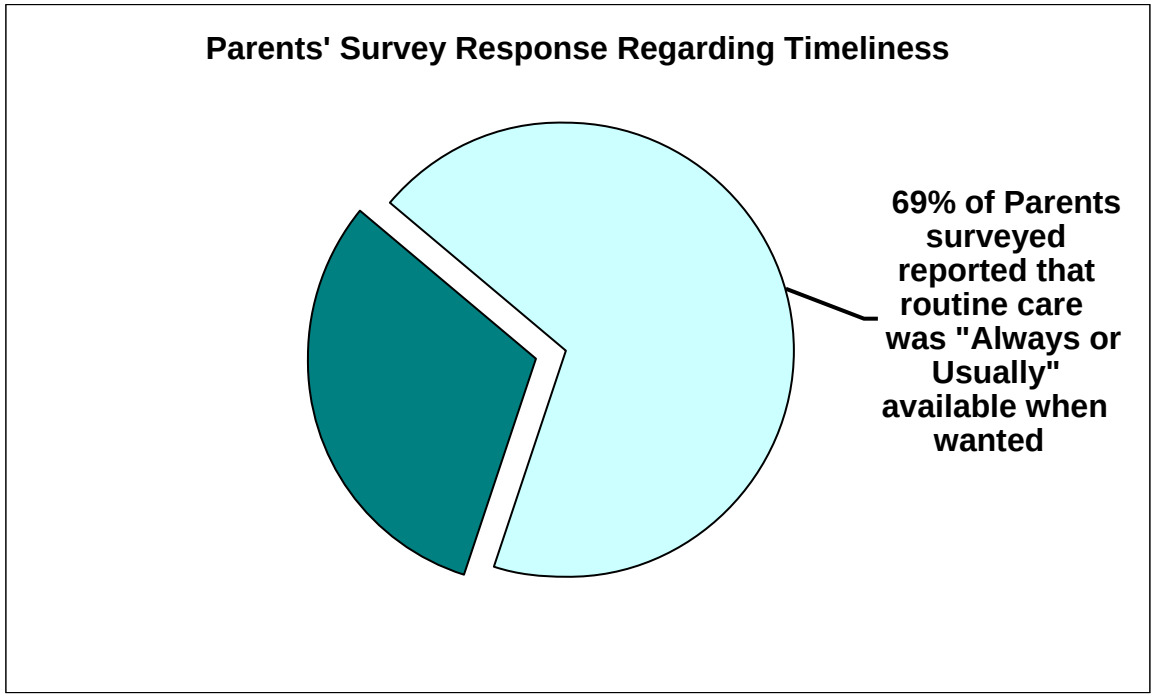
A. OBJECTIVE MEASURE OF TIMELINESS



University of Florida Report Tables 6, 7, 8 and 9.

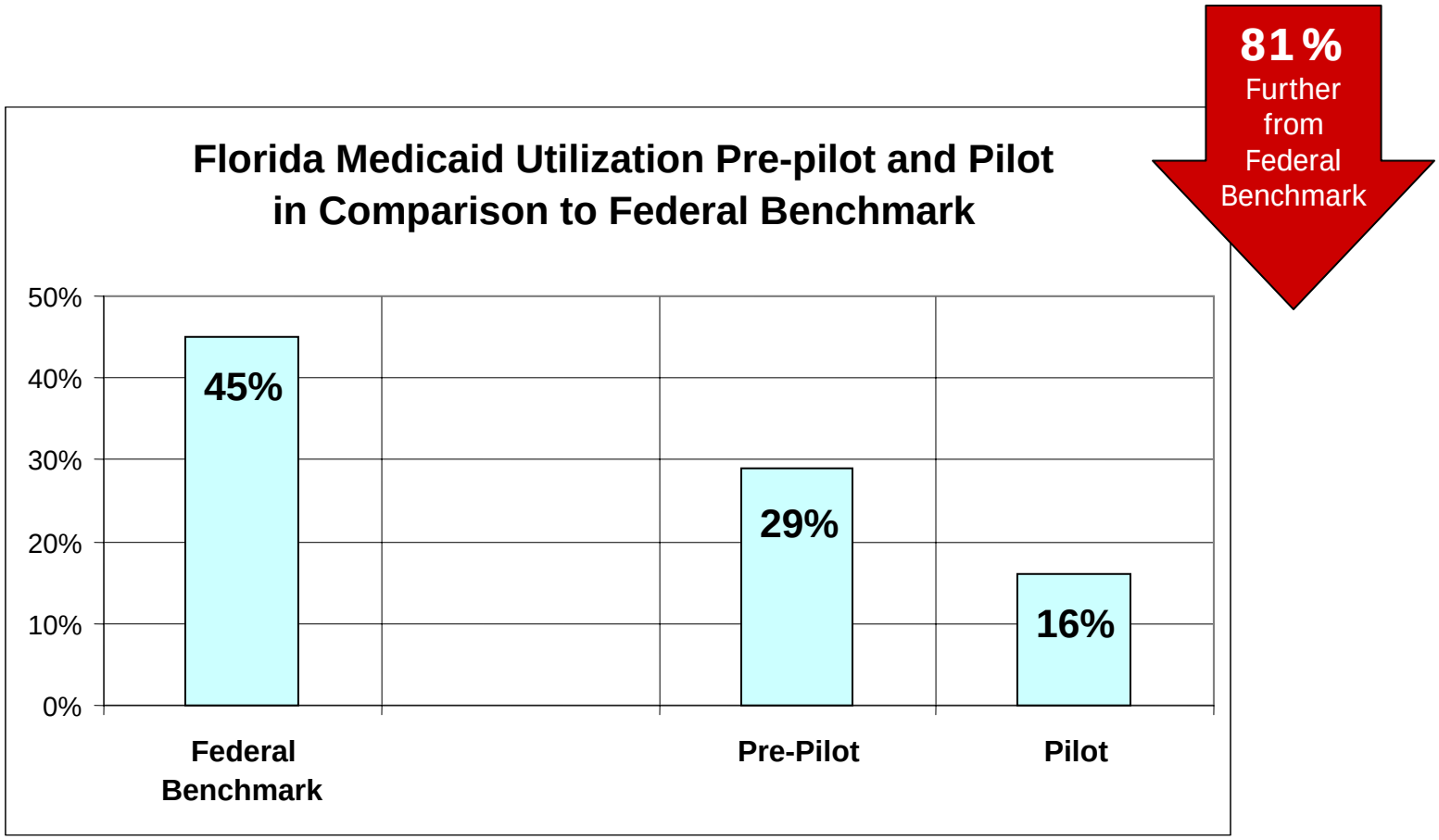
Quality Timeliness Measure, *continued*

B. SUBJECTIVE MEASURE OF TIMELINESS



University of Florida Report page 17.

Quality Equity Measure:



University of Florida Tables 8 and 10 (pre-pilot); 9 and 11 (pilot).

Measure	Indicator	Pre-Pilot Fee For Service State Program			Pilot Capitation ADI Program			Percent Change	Pre-Pilot Fee For Service State Program Data source	Pilot Capitation ADI Program Data Source
Cost	Total Program Cost		Total	$ 14,929,820	Qtr 1 $ 3,609,050 Qtr 2 $ 3,750,767 Qtr 3 $ 3,849,847 Qtr 4 $ 3,883,490	Total	$ 15,093,154	1%	"2003 Dade County Total Claims" AHCA document received by Collins Center, July 2006	Quarterly Financials Provided by ADI to AHCA obtained from Collins Center
Quality Effectiveness Measure #1: Utilization	Percent of Continuously Enrolled Children who Obtained One or More Dental Visits	percent 37.3%	utilizers 57,490	children 154,267	percent 21.6%	utilizers 27,027	children 125,023	-42.0%	UF Table 6	UF Table 7
	Percent of Children Enrolled At Any Time With One or More Dental Visits	29.4%	77839	264321	16.1%	39833	247785	-45.4%	UF Tables 8 and 10	UF Tables 9 and 11
Quality Effectiveness Measure #2: Visits	Number of Visits Prorated Across All Children Enrolled At Any Time	visits/child 0.60	visits 157735	children 264321	visits/child 0.24	visits 58337	children 247785	-60.5%	UF Table 8	UF Table 9
	Number of Visits Prorated Across Children Who Obtained One or More Dental Visits	1.02	157735	154267	0.47	58337	125023	-54.4%	UF Tables 8 and 6	UF Table 9 and 7
Quality Effectiveness Measure #3: Dentists	Number of Dentists Providing Services to Children in Medicaid		Total	669		Total	276	-58.7%	UF Table 13	UF Table 15
Quality Effectiveness Measure #4: Preventive Care	Number of Dental Cleanings Provided to Continuously Enrolled Children		75911			31106		-59.0%	2003 Dade County Total Claims AHCA document received by Collins Center, July	Child Preventive Dental Services Report received by Collins Center from AHCA in April 2006.
	Percent of Children Enrolled At Any Time Who Obtained A Dental Cleaning	24%	75911	322400	9%	15553	171364	-61.8%	2003 Dade County Total Claims AHCA document received by Collins Center, July 2006	Child Preventive Dental Services Report received by Collins Center from AHCA in April 2006.
Quality Effectiveness Measure #5: Dentists' Performance	Percent of Dentists Providing Cleanings to Enrolled Children	no data available			10% of dentists reported providing no cleanings; 79% reported providing cleanings to 1-20% of enrolled					Child Preventive Dental Services Report received by Collins Center from AHCA in April 2006.
	Percent of Dentists Providing Cleanings to a Greater Percent of Children Than Were Served In The Pre-Pilot Year				8% of dentists (n=15) provided cleanings to more than 24% of children enrolled in their practices; conversely, 92% of dentists saw less than 24% of their patients for cleanings					Child Preventive Dental Services Report received by Collins Center from AHCA in April 2006.
Quality Effectiveness Measure #6: Dentist of Record	Number of Children Per Dental Provider	range: 1 to 1940			range: 1 to 5892				UF page13	Child Preventive Dental Services Report received by Collins Center from AHCA in April 2006.
Quality Effectiveness Measure #7: Expenditures Per Child	Dollar Value of Services Purchased Per Child Served: Medicaid Payment Rates		PMPM/Utilizer $ 13.03	annualized $ 156.36		PMPM/Utilizer $ 7.92	Annualized $ 95.04	-39.2%	UF table 10; "2003 Dade County Total Claims" AHCA document received by Collins Center, July 2006	UF Table 11; "2003 Dade County Total Claims" AHCA document received by Collins Center, July 2006
	Dollar Value of Services Purchased Per Child Served: Commercial Payment Rates			$ 372.29			$ 226.29	-39.2%	Same as above calculation inflated by 42% to compensate for discounted fees	
Qaulity Effectiveness Meausure #8: Purchasing Power of Medicaid Dollars	Purchasing Power of Each Medicaid Dollar Expended: Medicaid Payment Rates									
	Annual program cost		*$ 14,929,820*			*$ 15,093,154*			"2003 Dade County Total Claims" AHCA document received by Collins Center, July 2006	Quarterly financials provided by ADI to AHCA obtained from the Collins Center
	Utilizers		*75,603*			*39,833*			2003 Dade County Total Claims AHCA document received by Collins Center, July 2006	UF Table 11
	Cost per utilizer		*$ 197.48*			*$ 378.91*			division of above two statistics	
	Dollar expended per utilizer		*$ 156.36*			*$ 95.04*			from prior calcuation above	
	Medicaid dollar purchasing power at Medicaid payment rates			$ 0.79			$ 0.25	-68.3%	division of above two statistics	
	Purchasing Power of Each Medicaid Dollar Expended: Commercial Payment Rates									
	Annual program cost		*$ 14,929,820*			*$ 15,093,154*			2003 Dade County Total Claims AHCA document received by Collins Center, July 2006	Quarterly financials provided by ADI to AHCA obtained from the Collins Center
	Utilizers		*75,603*			*39,833*			2003 Dade County Total Claims AHCA document received by Collins Center, July 2006	UF Table 11
	Cost per utilizer		*$ 197.48*			*$ 378.91*			division of above two statistics	
	Commercial dollar value purchased		*$ 372.29*			*$ 226.29*			from prior calcuation above	
	Medicaid dollar purchasing power at Commercial payment rates			$ 1.89			$ 0.60	-68.3%	division of above two statistics	
Quality Efficiency Measure #1: Cost per Beneficiary	State Expenditure Per Enrolled Child		264321	$ 56.48		247785	$ 64.17	13.6%	UF Table 10	UF Table 11
Quality Efficiency Measure #2: Cost per Utilizer	State Expenditure Per Enrolled Child Who One or More Dental Visits		77,839	$ 191.80		39833	$ 399.17	108.1%	UF Table 10	UF Table 11
Quality Efficiency Measure #3: Cost per Visit	State Expenditure Per Dental Visit		157735	$ 94.65		58337	$ 272.55	188.0%	UF Table 8	UF Table 9
Quality Efficiency Measure #4: Cost per Participating Dentist	State Expenditure Per Participating Dentist		669	$ 22,316.62		276	$ 57,608.70	158.1%	UF Table 13	UF Table 15
Quality Timeliness Measure	Objective Measures of Timliness	no data available			42% Drop In Utilization and 54% Drop in Visits For Continuously Enrolled Children Suggests a Loss of Timeliness of Care					from above calculations
	Subjective Measure of Timliness				69% of Parents Surveyd Reported That Routine Care was "Always or Usually" Available When Wanted					UF report page 17
Quality Equity Measure	Equity standard is dental utilization rate for US non-poor children from federal MEPS survey: 45%	utilization rate 29% % short of target: -36%			utilization rate 16% % short of target -64%			-81.3%	UF Tables 8 and 10	UF Tables 9 and 11 See quality effectiveness measure #1 above