# Impact of OK AuthentiCare Electronic Visit Verification (EVV) on ADvantage Program Budget

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# Impact of OK AuthentiCare Electronic Visit Verification (EVV) on ADvantage Program Budget

#### **Executive Summary**

In Fiscal Year 2011, the Oklahoma Department of Human Services Aging Services Division (OKDHS/ASD) began replacing paper-based time and attendance tracking of ADvantage and State Plan Personal Care (SPPC) in-home services with a telephony/web-based Electronic Visit Verification (EVV) system. In addition to improvements in service delivery, a project goal was to generate cost saving to the state.

The focus of this analysis is to evaluate the financial benefit to the state through EVV implementation and the reduction of inappropriate claims that putatively were being filed under the less precise and less scrutinized paper-based time and attendance tracking system. The difference in dollar amount paid for services under EVV compared to that paid using paper-tracking (putative savings) were estimated by multiplying the average number of members with claim services per month by the reduction in average units per member per month under EVV as compared to under paper-tracking units claimed multiplied by the average rate for the services under consideration.

Since implementation of EVV, the quantity of units per member per month claimed for each in-home ADvantage service has declined. This decline was significantly correlated with the increase in percentage of claims processed though EVV. The decline was more pronounced for services provided by non-licensed/non-credentialed staff.

This analysis indicates an EVV associated total savings of **\$21,359,209** since implementation in FY2011. Since these are Medicaid service expenditures the State portion of these savings are estimated to be approximately 35% of the total or **\$7,475,723**. The reduction in paid units per person is putatively due to providers submitting fewer inappropriate claims under EVV. Between FY2010 and FY2012, Oklahoma invested \$1,415,513 state only funds to implement OK AuthentiCare. Based on this analysis, the rate of return on investment thus far is approximately 528% (state total savings [\$7,475,723] divided by total state funds expended [\$1,415,513]).

Population variables, particularly assessed need for services, were evaluated to assess potential impact on the observed reduction in claimed in-home service delivery. All assessed need-for-service characteristics indicated that need for services significantly increased over this period. However, no evidence was found to indicate that EVV negatively impacted the ADvantage program goal of providing needed care in the home as an alternative to NF placement. The Medicaid NF census for frail elders and adults with physical disability declined by about 250 since FY2010 while complaints from ADvantage members about lack of services decreased in this time period.

### Introduction

In Fiscal Year 2011, the Oklahoma Department of Human Services Aging Services Division (OKDHS/ASD) began replacing paper-based time and attendance tracking of ADvantage and State Plan Personal Care (SPPC) in-home services with a telephony/web-based Electronic Visit Verification (EVV) system. The EVV system, called OK AuthentiCare, is supported by FirstData Corporation which was awarded the contract through the state RFP process.

The goals of this Initiative were to cost-effectively provide the following:

- To create a single jurisdictional view of home based care delivery, integrating across disparate systems for improved data collection and evaluation;
- To generate cost savings to the state through a reduction in inappropriate filling/payment of claims and to generate cost savings to service providers due to improved efficiencies and reduced paperwork;
- To improve quality assurance through a unified view of home health care activities across multiple agencies;
- To help identify emergency back-up care needs and help Service providers to respond timely to these needs;
- To assist members, direct care workers, support coordinators and care managers in identifying and responding to unmet member needs (missed visits, late visits);
- To capture visit and scheduling information in order to identify deficiencies;
- To provide data to inform policy decisions about how to address gaps in the delivery of home and community-based care;
- To optimize Service provider administrative processes;
- To automatically capture and electronically submit claims with accurate visit times with members;
- To provide industry-standard software to automate scheduling, time and attendance, and invoicing functions;
- To eliminate often burdensome paperwork for Service providers, direct care workers, and members; and
- To allow workers to easily report information about the supports and services they have provided and to remove the program participant from being in the sometimes awkward position of signing time and attendance time-sheets for needed services.

Although each of these important goals has been achieved (completely or partially), the focus of this report is to evaluate the financial benefit to the state through the reduction of inappropriate claims that putatively were being filed under the less precise and less scrutinized paper-based time and attendance tracking system.

# Description of the OK AuthentiCare (EVV) system

A brief description of the EVV system is provided below:

- 1. The worker initiates their visit by placing a toll-free call to the EVV system from the home of the program participant for whom they are delivering services.
- 2. After determining the language preference, the system will give the option of checking in or checking out.
- 3. If the worker elects to check in, the EVV will ask the worker to input (using the telephone keypad) a worker ID (TPIN). The EVV will search for a match and read back the worker and agency names and ask for confirmation.
  - a. In addition, EVV has voice authentication capability and a voice authentication procedure occurs with the system appending to the encounter record a "match" or "no match" for voice biometric.
- 4. The EVV will search for a match between the number called from and phone numbers associated with members in the EVV database. After finding a match, the system will then read back the participant name and ask for confirmation. The system will search for any special instructions or messages that have been left for the worker and provide this information.
- 5. Once a participant is identified, the system will search for authorized scheduled services from that Service Provider for that participant. The system will read the service and ask the worker to confirm. The worker will also have the option of selecting other services.
- 6. Once the worker has identified the service to be performed, the system will ask for a confirmation of all components worker and agency name, participant's name and service to be performed. When this is done the system writes the record to the database and informs the worker that the check in has been successful.
- 7. If the worker makes a second call from the same number after a successful check-in, the system will recognize the worker and ask the worker if s/he wants to check out. Depending upon the service, the system will prompt the worker to enter activity task codes for services delivered. Information is recorded and confirmed and the checkout is complete. [The calls for checking-in and checking-out average 1 minute and 15 seconds.]
- 8. This information is then available for electronic submission of the claim to the Medicaid Management Information System (MMIS) through the EVV by the provider agency.

# Estimate of Reduction in Inappropriate Service Claims and State Savings

The rationale used to evaluate the financial savings to the state through the reduction of inappropriate claims is as follows:

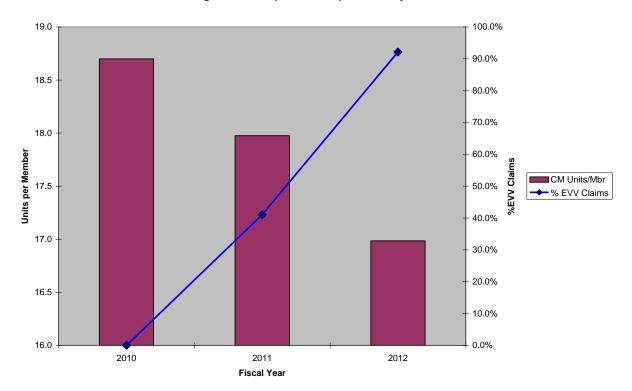
- For each service transitioned from paper-based tracking to EVV, the average paid service units per member per month was compared pre and post transition to EVV.
- The difference in dollar amount paid for services under EVV compared to that paid using paper-tracking (putative savings) were estimated by multiplying the average number of members with claim services per month by the reduction in average units per member per month under EVV as compared to under paper-tracking units claimed multiplied by the average rate for the services under consideration. [Annual Savings = (Average # Members per mo) X (Reduction in Avg Service Units per mo) X (Avg Service Rate) X 12 mo].
- For example, for Case Management Services in the table below, the average units/Member/Month change from 2010 to 2011 was 0.7 units (18.7 -18.0); this 0.7 unit reduction multiplied by the average of 16,682 members per month having Case Management claims in 2011 amounts to 11,677 units less per month times 12 equals 140,128 units less in the year which times the average CM unit rate of \$14.62 equals \$2,048,671 less expended in 2011 than would have been expended if the rate of CM utilization had been the same as under paper-based tracking in 2010. [Note: the projected saving amount in the table and this narrative example are slightly different due to rounding the table is more accurate.]
- For each year, each service is referenced back to averaged service units utilized in 2010 prior to formal implementation of the EVV system to estimate unit reductions and putative savings.

# Detail by Service of EVV Impact Since FY2010

### **EVV Case Management Impact**

Case	Managem	ent					
Fiscal Year	% EVV Claims	Avg Units/Mbr/Mo	Avg Unit/Mbr /Mo change from 2010	% Decrease in Units/Mbr/ Mo from 2010	Avg Mbrs per Mo Served	Avg Rate per Unit	Savings referenced to 2010 Units/Mbr/Mo
2010	0.0%	18.7					
2011	41.0%	18.0	0.7	3.7%	16,682	\$14.62	\$2,048,632
2012	92.1%	17.0	1.7	9.1%	16,206	\$14.57	\$4,816,778
Total						\$6,865,410	

In the baseline year 2010, essentially 0% of claims were processed/paid through EVV and the average CM paid units per member per month were 18.7. In 2011 with 41% of CM claims paid through EVV, the average paid units per member per month were 18.0 (a 3.7% decrease from 2010) and projected savings related to this putative reduction in inappropriate claims was just over \$2.0 million. In 2012 with 92.1% of CM claims paid through EVV, the average paid units per member per decrease from 2010) and projected savings related to this putative reduction in inappropriate claims was just over \$2.0 million. In 2012 with 92.1% of CM claims paid through EVV, the average paid units per member per month were 17.0 (a 9.1% decrease from 2010) and projected savings related to this putative reduction in inappropriate claims was over \$4.8 million for a total of over \$6.8 million savings since EVV implementation.



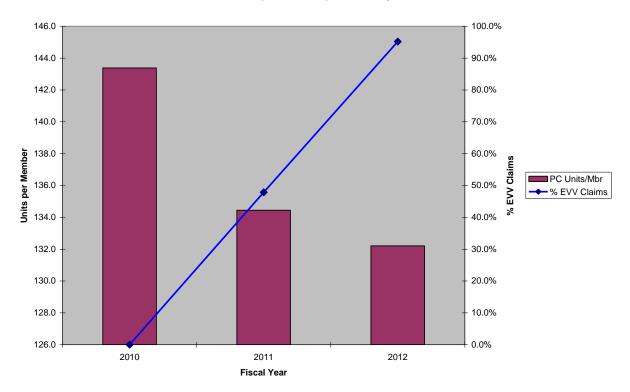
Case Management Units per Member per Month by %EVV Claims

The above graph illustrates by Fiscal Year the change in percentage of CM claims processed/paid through EVV (the blue trend line and percentage levels shown on right-side Y-axis) and the corresponding reduction in paid units per member per month (red bars and Units per member shown on left-side Y-axis).

#### **EVV Personal Care Impact**

Persor	nal Care						
Fiscal Year	% EVV Claims	Avg Units/Mbr/ Mo	Avg Unit/Mbr /Mo change from 2010	% Decrease in Units/Mbr/ Mo from 2010	Avg Mbrs per Mo Served	Avg Rate per Unit	Savings referenced to 2010 Units/Mbr/Mo
2010	0.0%	143.4					
2011	47.9%	134.4	8.9	6.2%	14,087	\$3.63	\$5,484,741
2012	95.2%	132.2	11.2	7.8%	13,535	\$3.63	\$6,587,012
		Total					\$12,071,753

In the baseline year 2010, essentially 0% of claims were processed/paid through EVV and the average paid PC units per ADvantage member per month were 143.4. In 2011 with 47.9% of PC claims paid through EVV, the average paid units per member per month were 134.4 (a 6.2% decrease from 2010) and projected savings related to this putative reduction in inappropriate claims was almost \$5.5 million. In 2012 with 95.2% of PC claims paid through EVV, the average per month were 132.2 (a 7.8% decrease from 2010) and projected savings related to this putative reduction in inappropriate savings related to this putative reduction in inappropriate claims was over \$6.5 million for a total of over \$12 million savings since EVV implementation in ADvantage.



#### Personal Care Units per Member per Month by % EVV Claims

The above graph illustrates by Fiscal Year the change in percentage of ADvantage PC claims processed/paid through EVV (the blue trend line and percentage levels shown on right-side Y-axis) and the corresponding reduction in paid units per member per month (red bars and Units per member shown on left-side Y-axis).

In comparing the graphs for CM and PC, it appears that the impact on PC was much more dramatic than on CM in the first year of implementation when less than 50% of claims from service providers were processed through EVV. Although we know of no data that sheds any light on why this differential impact on PC as compared to CM occurred, informal feedback from some providers may provide insight. A number of PC providers expressed surprise (and a degree of concern) at the number of PC staff that quit rather than track their time and attendance using EVV even before EVV was implemented in their agency. No similar report of an exodus of CM staff was reported. It may be that the greater decline in units per member for personal care disproportionate to the percentage of members covered under EVV could be attributed to the voluntary advance departure of bad actors among Personal Care staff, a population that did not exist or was significantly less represented among Case Management staff.

EVV was implemented in the same time-frame for members served in State Plan Personal Care (SPPC). Claims data for SPPC were not available for this analysis. Since providers of PC services to ADvantage and SPPC members are the same, a similar magnitude of savings could be expected to have occurred in the SPPC program which served approximately 2,500 members per month through this period of 2010 to 2012. If proportional to ADvantage, the total savings within the SPPC Program would have been an additional \$1.7 million.

Advanced Supportive/ Restorative (ASR)							
Fiscal Year	% EVV Claims	Avg Units/Mbr/ Mo	Avg Unit/Mbr /Mo change from 2010	% Decrease in Units/Mbr/ Mo from 2010	Avg Mbrs per Mo Served	Avg Rate per Unit	Savings referenced to 2010 Units/Mbr/Mo
2010	0.0%	97.1					
2011	47.9%	83.7	13.4	13.8%	458	\$3.91	\$287,731
2012	95.2%	75.7	21.4	22.0%	453	\$3.91	\$453,830
Total						\$741,561	

### EVV Advanced Supportive/Restorative Impact

In the baseline year 2010, no claims were processed/paid through EVV and the average paid ASR units per ADvantage member per month using ASR services were 97.1. In 2011 over 40% of ASR claims paid through EVV and the average paid units per member per month were 83.7 (a 13.8% decrease from 2010) and projected savings related to this putative reduction in

inappropriate claims was almost \$290 thousand. In 2012 over 90% of ASR claims paid through EVV and the average paid units per member per month were 75.7 (a 22% decrease from 2010) and projected savings related to this putative reduction in inappropriate claims was over \$450 thousand for a total of over \$740 thousand savings since EVV implementation in ADvantage.

CD-PASS Services	Personal Assistance (	PSA)					
Fiscal Year	% EVV Claims	Avg Units/ Mbr/M o	Avg Unit/Mbr /Mo change from 2010	% Decrease in Units/Mbr/ Mo from 2010	Avg Mbrs per Mo Served	Avg Rate per Unit	Savings referenced to 2010 Units/Mbr/Mo
2010	0.0%	303.0					
2011	47.9%	274.2	28.8	9.5%	469	\$2.88	\$466,356
2012	95.2%	259.8	43.1	14.2%	527	\$2.86	\$780,735
		Total					\$1,247,091

## EVV CD-PASS Personal Services Assistance (PSA) Impact

In the baseline year 2010, no claims were processed/paid through EVV and the average paid PSA units per ADvantage member per month using CD-PASS services were 303. In 2011, over 35% of PSA claims paid through EVV and the average paid units per member per month were 274.2 (a 9.5% decrease from 2010) and projected savings related to this putative reduction in inappropriate claims was over \$460 thousand. In 2012 over 95% of PSA claims paid through EVV and the average paid units per member per month were 259.8 (a 14.2% decrease from 2010) and projected savings related to this putative claims was over \$780 thousand for a total of over \$1.2 million savings since EVV implementation in ADvantage.

CD-PASS Advanced Personal Services Assistance (APSA)						
Fiscal Year	% EVV Claims	Avg Units/Mbr/ Mo	Avg Unit/Mbr /Mo change from 2010	% Decrease in Units/Mbr/ Mo from 2010	Avg Mbrs per Mo Served	Savings referenced to 2010 Units/Mbr/Mo
2010	0.0%	158.7				
2011	47.9%	141.8	16.9	10.6%	55	\$37,937
2012	95.2%	137.8	20.9	13.2%	58	\$48,382
		Total				\$86,320

#### EVV CD-PASS Advanced Personal Services Assistance (APSA) Impact

In the baseline year 2010, no claims were processed/paid through EVV and the average paid APSA units per ADvantage member per month using CD-PASS services were 158.7. In 2011, over 35% of APSA claims paid through EVV and the average paid units per member per month were 141.8 (a 10.6% decrease from 2010) and projected savings related to this putative reduction in inappropriate claims was almost \$38 thousand. In 2012 over 95% of APSA claims paid through EVV and the average paid units per member per month were 137.8 (a 13.2% decrease from 2010) and projected savings related to this putative reduction in inappropriate savings related to this putative per month were 137.8 (a 13.2% decrease from 2010) and projected savings related to this putative reduction in inappropriate claims was over \$48 thousand for a total of over \$86 thousand savings since EVV implementation in ADvantage.

Nursing							
Fiscal Year	% EVV Claims	Avg Units/Mbr/ Mo	Avg Unit/Mbr /Mo change from 2010	% Decrease in Units/Mbr/ Mo from 2010	Avg Mbrs per Mo Served	Avg Rate per Unit	Savings referenced to 2010 Units/Mbr/Mo
2010	0.0%	5.9					
2011	47.9%	5.6	0.3	3.9%	4,008	\$13.26	\$146,835
2012	95.2%	5.7	0.2	3.7%	3,845	\$13.45	\$136,432
		Total					\$283,267

### EVV Nursing Services Impact

In the baseline year 2010, no claims were processed/paid through EVV and the average paid Nursing units per ADvantage member per month were 5.9. In 2011, over 40% of Nursing claims paid through EVV and the average paid units per member per month were 5.6 (a 3.9% decrease from 2010) and projected savings related to this putative reduction in inappropriate claims was over \$146 thousand. In 2012 over 95% of Nursing claims paid through EVV and the average paid units per month were 5.7 (a 3.7% decrease from 2010) and projected savings related to this putative reduction in inappropriate claims was over \$136 thousand for a total of over \$280 thousand savings since EVV implementation in ADvantage.

### EVV In-Home Respite Services Impact

In-Hom	e Respite						
Fiscal Year	% EVV Claims	Avg Units/Mbr/ Mo	Avg Unit/Mbr /Mo change from 2010	% Decrease in Units/Mbr/ Mo from 2010	Avg Mbrs per Mo Served	Avg Rate per Unit	Savings referenced to 2010 Units/Mbr/Mo
2010	0.0%	67.6					
2011	47.9%	59.7	7.9	11.6%	90	\$3.63	\$30,992
2012	95.2%	60.6	6.9	10.3%	108	\$3.63	\$32,815
		Total					\$63,807

In the baseline year 2010, no claims were processed/paid through EVV and the average paid In-Home Respite units per ADvantage member per month were 67.6. In 2011, over 40% of Respite claims paid through EVV and the average paid units per member per month were 59.7 (an 11.6% decrease from 2010) and projected savings related to this putative reduction in inappropriate claims was over \$30 thousand. In 2012 over 95% of Respite claims paid through EVV and the average paid units per month were 60.6 (a 10.3% decrease from 2010) and projected savings related to this putative reduction in inappropriate claims paid units per member per month were 60.6 (a 10.3% decrease from 2010) and projected savings related to this putative reduction in inappropriate claims was over \$32 thousand for a total of over \$63 thousand savings since EVV implementation in ADvantage.

### **Cumulative Total Budgetary Impact of EVV Since 2010**

This analysis indicates a total savings of **\$21,359,209** since implementation of EVV in FY2011 for tracking ADvantage in-home service delivery time and attendance in place of paper time sheets. Since these are Medicaid service expenditures the State portion of these savings are estimated to be approximately 35% of the total or **\$7,475,723**<sup>1</sup>. The reduction in paid units per person is putatively due to providers submitting fewer inappropriate claims under EVV. The exact reasons for this EVV impact are unknown. However, some (or all) of the following are possible:

- Individual service workers who previously were producing fraudulent paper claims discontinued their ADvantage Provider employment;
- Service visits not made, but previously claimed, were no longer submitted under EVV;
- Claims that previously may have been intentionally, or mistakenly, fudged (increased) a unit or two on some visits were more accurately submitted under EVV;
- Claims that previously may have been mistakenly submitted for a higher level service (for example for ASR instead of PC) were more accurately submitted under EVV.

Of course there have been costs associated with the design and implementation of EVV. Over the period covered by this report (FY2010 through FY2012), \$2,831,025 has been paid to FirstData Corporation for development and implementation of OK AuthentiCare. These expenditures are considered ADvantage administrative costs with half from State and half from Federal funds. Consequently, during this time period, Oklahoma has invested \$1,415,513 in OK AuthentiCare EVV between FY2010 and FY2012. Based on this analysis, the rate of return on investment thus far is approximately 528% (state total savings [\$7,475,723] divided by total state funds expended [\$1,415,513]).

## **Consideration of Other Potential Impact Variables**

<sup>&</sup>lt;sup>1</sup> This estimate of savings does not include savings due to SPPC. If reduction in inappropriate claims in SPPC was similar to ADvantage, the additional state savings would be an additional \$600,000.

Other changes besides the implementation of EVV occurred between FY2010 and FY2012 that may have impacted the average unit per member per month paid for ADvantage services. Below is a table listing ADvantage population major demographic and assessment variables across this same time period.

Fiscal Year	2010	2011	2012
Total Members	22,830	21,308	20,969
Average Age	71.5	70.7	69.7
% Female	75.1%	70.9%	70.8%
Average ADL	8.9	9.4	9.2
Average IADL	15.6	16.0	15.8
Average MSQ	5.4	5.5	5.5
Average Health Assessment Score	15.1	15.2	15.2
Average Consumer Support Score	14.7	14.9	15.0
Average Subjective Evaluation of Health Score	16.0	16.2	16.2
Assessment Risk Score	96.9	98.4	97.9
Statistically Significant Decrease from 2010			
Statistically Significant Increase from 2010			

#### Summary of ADvantage Demographics and Assessed Need by FY

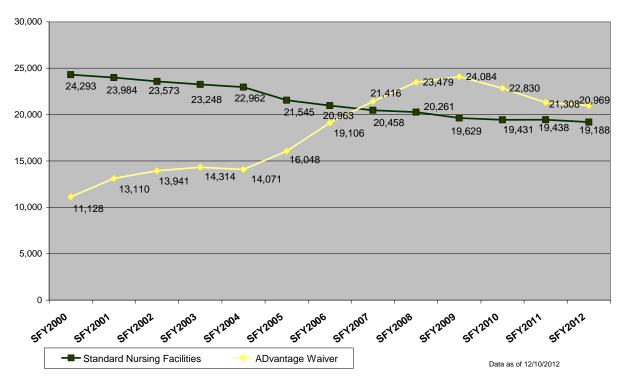
The table indicates that assessed need for services in the ADvantage population significantly increased from FY2010 to FY2011 and remained at this increased level in FY2012. More specifically, need for personal care assistance with Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs), increased; measures of memory and cognitive function showed decline in functional level (increased Mental Status Quotient (MSQ) scores); general Health was worse (higher Health Assessment score), Consumer Support networks were weaker (higher Consumer Support scores), Subjective Evaluation of Health was worse (higher scores) and over-all Assessment Risk Scores for NF care were greater. All of this would lead one to expect an increase from 2010 to 2011 and to 2012 in average paid units per person per month to meet these increased needs instead of the decrease observed since implementation of EVV.

In 2011 and 2012 the total number of ADvantage members served declined from 2010 levels. This decline in ADvantage participation in 2011 and 2012 was the continuation of a trend that began in the FY2009 to FY2010 time period. In FY2009, ADvantage served more persons than in any year prior to or since [See graph below]. Beginning in late FY2009 and continuing in subsequent years, OKDHS implemented a Federal requirement to re-evaluate Medical Level of Care for all ADvantage members annually. This annual systematic re-evaluation identified many persons who had improved and were disenrolled because they no longer met NF level of care criteria.

In addition, this was a period of severe budget constraints and additional efforts were implemented during FY2010 and subsequent years to verify that new persons applying for ADvantage met the minimum medical level of care need criteria required for program eligibility. These efforts to tighten program evaluations for medical level of care were probably responsible for many of the significant changes in the table above indicating that in FY2011 and FY2012, ADvantage served a population with higher assessed needs than in FY2010.

In FY2011 and FY2012, a higher need ADvantage population registered less per member program paid service units than in FY2010. However, whether the actual delivered services was less than in FY2011 and FY2012 than in FY2010, or whether delivered services were about the same (or more) but paid for units were less, is unknown. If delivered services were inadequate to meet member needs, one would expect that those obtaining services in NFs to have increased. However, as indicated in the graph below of growth in persons served in ADvantage and NFs, although the numbers served in ADvantage declined in FY2011 and FY2012 (as previously discussed), the numbers served in NFs changed very little and even decreased by 250 between 2011 and 2012.

Finally, if delivered services were inadequate to meet member needs, one would expect that the ADvantage Complaint and Inquiry System (CIS) would have received an increased number of complaints from members or member families about not receiving needed services. However, during FY2011, CIS received 109 fewer complaints about inadequate service delivery than in FY2010 – a 39% reduction from FY2010.



#### Unduplicated Consumers, Annual Count SoonerCare Nursing Facility vs. ADvantage Waiver

In summary, the reduction in paid ADvantage in-home service units per member since implementation of EVV in FY2011 does not appear to be attributable to population characteristics indicative of less need for services. In fact, all such assessed characteristics indicate that, if anything, need for services increased during the time period. On the other hand, there is no evidence that EVV negatively impacted the ADvantage program goal of providing needed care in the home as an alternative to NF placement. The Medicaid NF census for frail elders and adults with physical disability declined by about 250 since FY2010 while complaints from ADvantage members about lack of services decreased in this time period.

#### Finding of Lower Average Age and Lower Proportion of Females Served Since FY2010

Among the results from the Demographic analysis shown in the table on page 11 are that the average age of ADvantage members declined from FY2010 to FY2011 and continued to decline from FY2011 to FY2012. This is a continuation of a trend that has been observed in the ADvantage population for a number of years. We believe this trend is tied to two factors, one programmatic and the other demographic. The programmatic factor is that ADvantage has had several periods of rapid growth. The most significant growth period started in FY1997 when ADvantage began its statewide expansion from Tulsa County. Between FY1996 and FY2003, when this growth period peaked, ADvantage increased 2400% (from 592 to 14,314). In FY2011 and FY2012, almost a decade later when the program is in a period of declining census and when more persons are leaving the programs (most due to death or due to need for NF care), many of these persons that came into the program during the programs rapid period of growth are now the oldest and are disproportionately represented among those exiting the program. This is the programmatic factor related to the observed decline in ADvantage population age.

The demographic factor is the increased entry into ADvantage of leading edge members of the baby boom population who because of larger cohort numbers become disproportionately represented among new entries to ADvantage – and they are much younger than those currently being served in ADvantage. This influx of mostly younger new members as the oldest are disproportionately leaving the program most likely contributes to the observed decline in age over this period.

The other significant demographic change shown in the table on page 11 is that the proportion of females declined significantly from FY2010 to FY2011. This proportion was still significantly less in FY2012 than in FY2010 but not significantly less than in FY2011. We believe this trend is tied to the programmatic growth discussed previously. Between FY1996 and FY2003, ADvantage increased 2400% (from 592 to 14,314). In FY2011 and FY2012, almost a decade later when the program is in a period of declining census and when more persons are leaving the programs (most due to death or due to need for NF care), many of these persons that came into the program during the programs rapid period of growth are now not only the oldest but also are mostly female and are disproportionately represented (relative to the rest of the ADvantage population) among those exiting the program. This is the programmatic factor related to the observed decline in ADvantage population age and that proportionately fewer females are being served.

Logically neither age nor gender, per se, should have a significant effect on ADvantage service delivery and these demographic changes are not believed to have effected the reduction in units per member per month observed since implementation of EVV.