IN HCBS Redesign Data Report: Review of Community and Home Options to Institutional Care for the Elderly and Disabled (CHOICE) Program

Background

Indiana's Family and Social Services Administration (FSSA) Division of Aging (DA) contracted with The Lewin Group (Lewin) in April of 2016 to help inform the state's work in redesigning home and community based services (HCBS) for older adults and adults with disabilities. In this effort, Lewin has prepared separate data reports on different aspects of Indiana's aging and disability service system. This data report focuses on the state-funded Community and Home Options to Institutional Care for the Elderly and Disabled (CHOICE) program providing analysis of CHOICE enrollment and expenditures.

CHOICE, a state-funded program administered by the Area Agencies on Aging (AAAs), began as a pilot in three counties in 1988 and expanded to all counties in the state by 1992. Program eligibility requires participants age 60 years or older or individuals to have a disability with assets under $500,000, and in need of assistance with two or more activities of daily living. CHOICE covers services similar to those covered by the Aged and Disabled (A&D) waiver and allows for self-direction of attendant care. In SFY 2015, CHOICE served 6,738 Hoosiers with 868 individuals on a waiting list at the end of that fiscal year.

CHOICE participants incur no costs when they have income at or below 150 percent of the federal poverty level (FPL). For those with incomes between 151 and 349 percent of FPL, enrollees share in the costs of their services based on a sliding scale which increases by 0.5 percent of those costs for each percentage point above 150 percent of FPL.

CHOICE does not have any income limits for participation. However, enrollees with incomes above 350 percent of the FPL are responsible for 100 percent of the total cost of their services with the exception of case management, their initial assessment, and development of a care plan.

CHOICE Pilot

In January 2015, Indiana began the CHOICE Pilot Program that reduced the asset limit while expanding the functional eligibility criteria for CHOICE in AAAs 1 and 4 in northern and central Indiana and 13 and 14 in the southern part of the state. The pilot seeks to reduce nursing facility admission rates, reduce the number of people on the wait list and time spent on the waitlist, reduce expenditures per person, and improve participants overall quality of life. It will conclude on June 30, 2017.

The pilot reduces the asset limits for eligibility in the pilot regions from $500,000 to $250,000 and allows for individuals with one or no ADL impairments if it can be demonstrated that a targeted intervention will have an influence on the risk of institutionalization. In addition, options counseling/case management shifted from an administrative activity to a service category and the pilot removes limits on the amount spent on case management.

Methods for Analysis

This report seeks to inform Indiana's Family and Social Services Administration (FSSA) Division of Aging (DA) efforts to potentially redesign the CHOICE program. To conduct this analysis, we used five datasets from the Roeing Corporation[1]:

[1] Roeing manages INSite, the case management system used to complete functional screens and tracking data for the CHOICE program and CHOICE waitlist.

1. CHOICE National Aging Program Information System (NAPIS) dataset with home delivered meals claims,
2. CHOICE Case Management dataset with all the care management claims, and
3. CHOICE Fiscal dataset with all the remaining CHOICE claims.
4. CHOICE waitlist.
5. Eligibility (functional) screen data.

In addition, this report draws upon fifteen extracts from Indiana's Enterprise Data Warehouse (EDW) datasets for CHOICE participants with Medicaid eligibility. A cross walk file linked the Roeing and EDW data to identify the population enrolled in Medicaid and the A&D waiver, as well as to calculate Medicaid expenditures for these populations.

CHOICE Enrollment: Roeing does not maintain a distinct enrollment file for the CHOICE program. For purposes of our analyses, the Lewin team determined enrollment in the CHOICE program based upon dates of CHOICE services rendered, instead of independent data on effective enrollment date into the program. The analyses assume enrollment occurs in the month of the first claim for CHOICE services and continues until no additional claims. In cases with a gap in monthly CHOICE claims, the analyses assume continued enrollment and impute claim amounts for the missing months. CHOICE enrollment from SFY 2013 through SFY 2015 from this analysis compares favorably to CHOICE membership data from Indiana's Family and Social Services Administration (FSSA) 2015 CHOICE Annual Report.

CHOICE and Medicaid Expenditures: The Lewin team examined CHOICE expenditures and Medicaid expenditures for CHOICE enrollees. The data received from Roeing included expenditures recorded only in INsite (Indiana's case management system). Roeing data excludes expenditures for CHOICE administration and non-care planned services. In addition, non-care planned services, administration, and case management expenditures use an aggregate expense-based reimbursement system based on claims submitted by each AAA, rather than by units of service provided. As a result, the case management dataset included complete records of case management units of service but not the associated spending amounts.

Lewin analyzed CHOICE care planned service expenditures and expenditures by service type for each of three state fiscal years (SFYs): SFY 2013, SFY 2014, and SFY 2015. Lewin also profiled total spending by selected population characteristics: enrollment in Medicaid or Medicaid and the A&D waiver, dual eligibility status, cost share requirements, receiving services from an AAA participating in the CHOICE Pilot Program, and acuity. In addition, Lewin analyzed total Medicaid State Plan expenditures and total A&D waiver services or each SFY for individuals enrolled in each of these programs. Similarly, we analyzed total spending by selected population characteristics.

CHOICE Waitlist: The CHOICE program maintains a waitlist for those who have applied for services. Individuals on the waitlist may appear in the data more than once if they are waiting to access more than one service. An analysis of the waitlist included an assessment of the total unduplicated count of individuals on the waitlist at the beginning and end of each SFY. Lewin calculated the average time to receipt of services for each fiscal year based on the first entry to the waitlist date to the first transition from the waitlist for the purposes of receiving CHOICE services. The first entry to the waitlist may have been before the start of SFY 2013; Lewin calculated the time to services based on the first date of entry onto the waitlist so this measure was not censored. Lewin excluded nine waitlist cases (<1 percent) with incomplete information for the date they entered the waitlist from the analyses.

Measurement of Acuity: The Lewin team established measures of acuity based on data available through the eligibility screen. This screen consists of separate sections covering severe medical

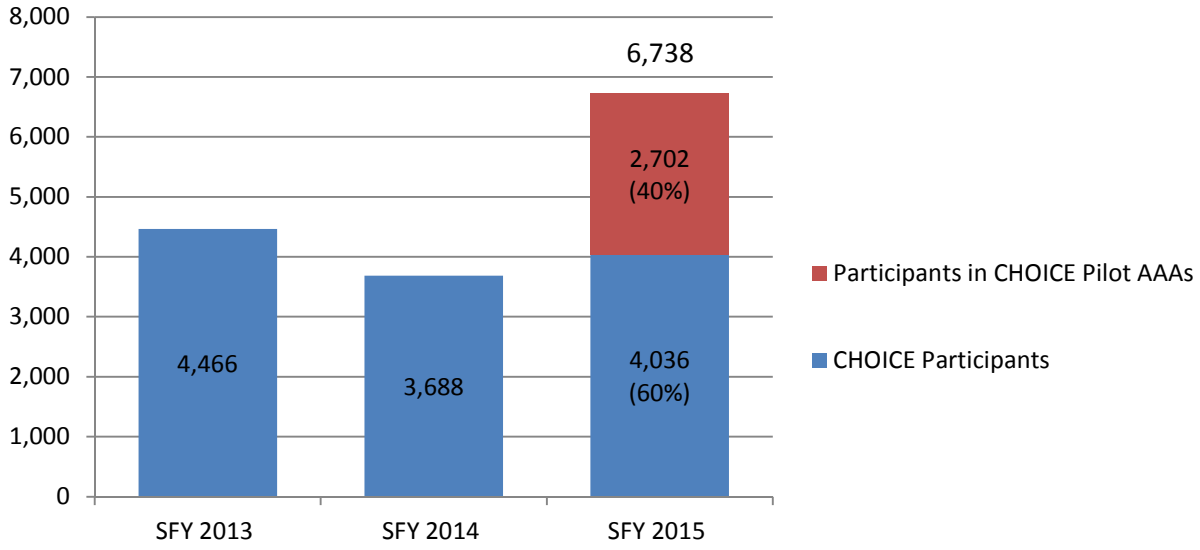
conditions, substantial medical conditions and Activities of Daily Living (ADLs), substantial mental health conditions, informal supports, and Instrumental Activities of Daily Living (IADLs). AAA staff assess every individual seeking CHOICE services using the eligibility screen; however, 7.4 percent of those with CHOICE claims across all SFYs lacked data for the eligibility screen. In cases when an individual had more than one eligibility screen completed in a SFY, Lewin used the first of these screens for analysis. We selected the first screen in a fiscal year as it is may be best reflective of need at the time that an initial care plan was developed for that individual.

The Lewin team calculated the total number of ADL and IADL needs from a maximum of six ADLs – (eating, transferring, dressing, bathing, continence, and ambulation) and nine IADLs – (light meal preparation, light housework, grocery shopping, transportation, medication administration, answering the telephone, calling the operator, personal hygiene, financial management) based on data available from the eligibility screen. The measures of acuity were examined separately and as a single measure reflecting the total need for support with both ADLs and IADLs for all CHOICE enrollment (range: 0-15). This summary measure is useful for comparison as it has greater variability than the measures with a smaller range. Further, these measures of acuity were also profiled by select characteristics of the CHOICE population: enrollment in Medicaid or Medicaid and the A&D waiver, dual eligibility status, cost share requirements, receiving services from a AAA participating in the CHOICE Pilot Program, and by participation in self-direction. For purposes of comparing CHOICE and Medicaid expenditures, a bivariate measure of acuity was established, identifying those CHOICE enrollees in the top quartile of the distribution of the total count of ADLs and IADLs.

Enrollment Trends

The number of participants enrolled in CHOICE fluctuated over the study period as illustrated in **Figure 1**. The SFY 2013 CHOICE enrollment of 4,466 declined 17 percent to 3,688 in SFY 2014. In SFY 2015, however, enrollment rose to 6,738 reflecting a 82 percent increase from the prior year.

Figure 1: CHOICE Enrollment, by SFY



The initiation of the CHOICE Pilot explains some of the increase in CHOICE enrollment in SFY 2015. Enrollment in the AAA regions participating in the Pilot comprised 40 percent of the program in SFY 2015. These AAAs opened up the CHOICE program to new populations who had need for support with less than two ADL impairments. While some of the increase can be explained by this newly-eligible

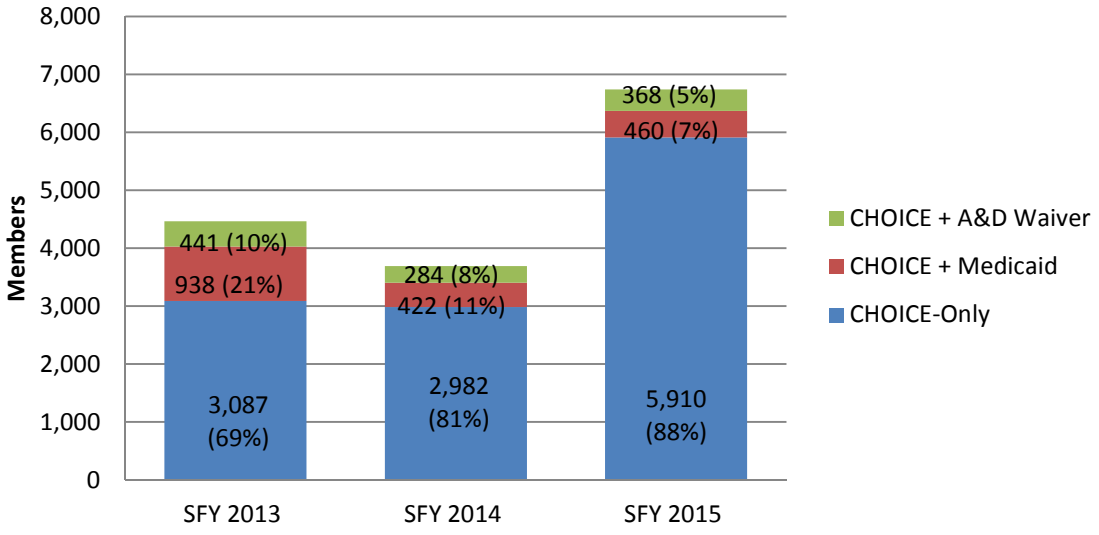
population enrolling in SFY 2015, not all of the increase was driven by the change in eligibility criteria in CHOICE Pilot sites. In the AAA regions participating in the Pilot, the proportion of the CHOICE population with less than two ADL needs was 37.6 percent (N=636 out of 2,327 enrolled in the Pilot regions)[2], accounting for approximately 20.9 percent of the increase between SFY 2014 and SFY 2015. The enrollment experience following the start of the Pilot is truncated because the program started mid-fiscal year. Analysis of SFY 2016 could provide insight into the full impact of the program on overall enrollment.

CHOICE Membership and Medicaid

CHOICE enrollees can participate in other programs simultaneously with CHOICE. Eligible CHOICE enrollees, for example, may be eligible for and enroll in Medicaid. For this population, however, CHOICE functions as the payer of last resort. CHOICE enrollees also may enroll in the A&D waiver although only a small subset are enrolled in both programs as they provide similar coverage. For individuals on the waiver and CHOICE, the CHOICE program only provides funding for services not covered through the waiver or Medicaid.

Over the period studied, the number of individuals simultaneously enrolled in CHOICE and Medicaid declined while the proportion of CHOICE enrollees not enrolled in Medicaid increased. This trend is illustrated in **Figure 2** shows that in SFY 2013, 22 percent of CHOICE enrollees were also enrolled in Medicaid and by SFY 2015 this had dropped to 7 percent. This reduction may be due in part to the state's choice to enroll everyone on the A&D waitlist onto the waiver program starting SFY 2014. Many of these individuals may have been on CHOICE and Medicaid before, but no longer needed to be enrolled in CHOICE once they were enrolled in to the waiver.

Figure 2: CHOICE Enrollment by Medicaid Status, by SFY



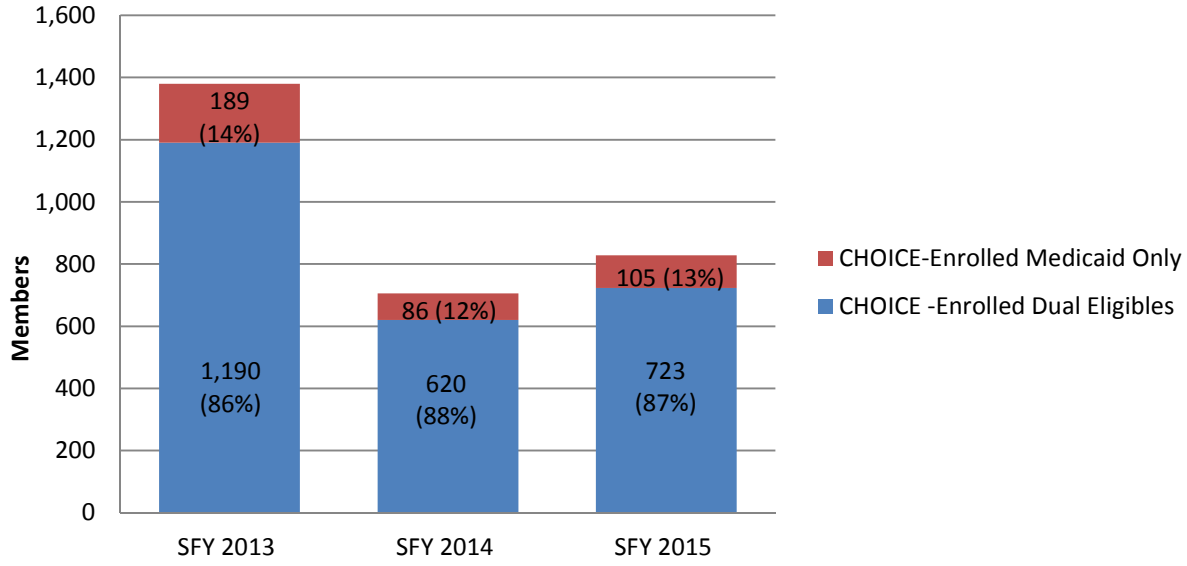
CHOICE Membership and Dual Eligibles

A high percentage of the CHOICE population enrolled in Medicaid in the study period also had Medicare coverage -- dually eligible for Medicare and Medicaid. **Figure 3** depicts the proportion of CHOICE enrollees participating in Medicaid who were dual eligibles from SFY 2013 through SFY 2015, displaying

[2] Based on those with at least one eligibility screen completed in the year. Eligibility screens are missing in SFY 2015 for approximately 13 percent of the population enrolled in CHOICE.

a fairly static trend. In SFY 2013, the proportion of CHOICE enrollees participating in Medicaid who were dual eligibles was 86 percent and in SFY 2014 this increased to 88 percent, but dropped slightly to 87 percent in SFY 2015. The observed decline in the total number of dual eligible enrolled in CHOICE follows the same pattern of decline in CHOICE enrollment for Medicaid beneficiaries overall. Presumably this reduction in the CHOICE population enrolled in Medicaid is the result of a portion of this population enrolling in the A&D waiver as the waiver waitlist was eliminated at the end of SFY 2013.

Figure 3: Dual Eligibles Enrolled in CHOICE, by SFY



CHOICE Waitlist

The CHOICE program maintains a waitlist for services separate from the waitlist for the A&D waiver. Reasons for being on the CHOICE waitlist include waiting for an open waiver slot or waiting to get supplemental services through non-waiver programs. An individual on the waitlist may also be Medicaid eligible and waiting for non-waiver services or may be Medicaid eligible, but does not meet waiver level of care. **Figure 4** reflects the total number of individuals on the waitlist at the start and end of each SFY. Over the course of the three years, the waitlist declined by 86 percent.

Figure 4: CHOICE Waitlist Counts, by SFY

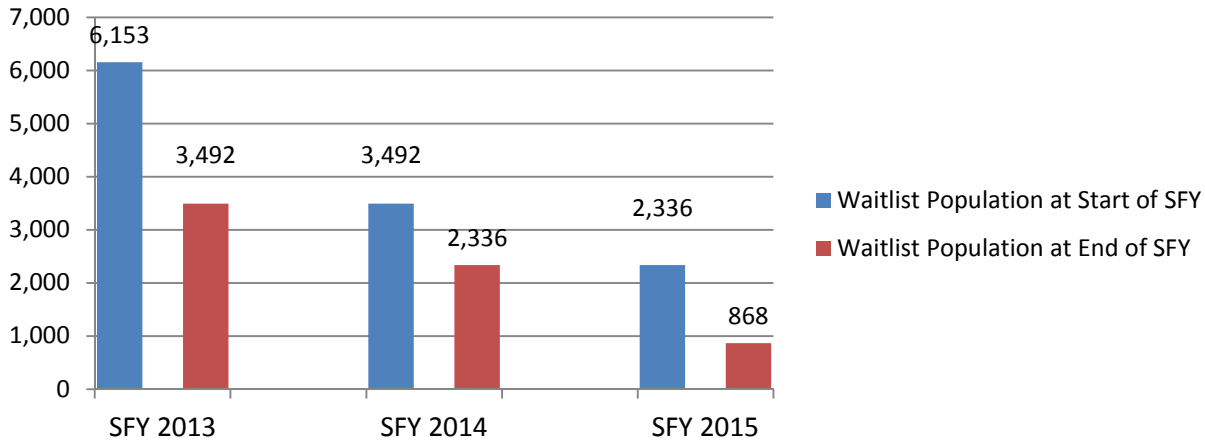


Table 1 details the total number of individuals on the waitlist at any time during each fiscal year and the total count and proportion that transitioned off the waitlist to receive services. The waitlist dataset provides three different transition codes: 1) transition to CHOICE; 2) transition to waiver services; and 3) transition to other HCBS. Less than one-quarter of all transitions in SFY 2013 and SFY 2014 resulted from CHOICE enrollment, but the proportion who transitioned to CHOICE in SFY 2015 more than doubled from prior years. This table also details the average time on the waitlist for those who transitioned to CHOICE services, with the average wait time for CHOICE exceeding one year in SFY 2014 and SFY 2015.

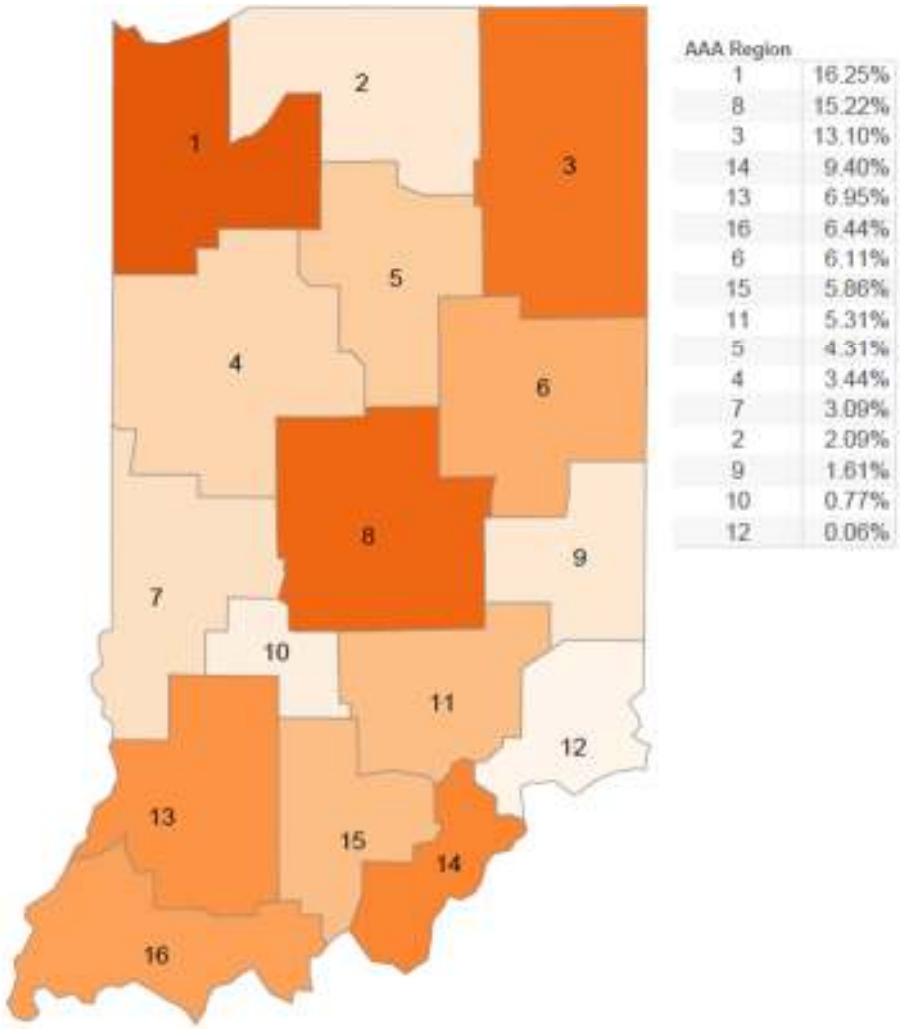
Table 1: Waitlist Counts and Reasons for Transition to Home and Community Based Services, by SFY

	SFY 2013	SFY 2014	SFY 2015
Any Enrollment on Waitlist in the Year	10,570	5,348	3,107
Total Population that Transitioned Off Waitlist to Receive Services	3,724 (35.2%)	1,838 (34.4%)	1,412 (45.5%)
a. Transitioned to CHOICE	785 (21%)	444 (24%)	730 (52%)
b. Transitioned to Waiver	735 (20%)	686 (37%)	339 (39%)
c. Transitioned to Other HCBS[3]	2,204 (59%)	708 (39%)	343 (24%)
Average Months to CHOICE Enrollment	11.4	15.5	13.8

Figure 5 offers geographic context to the waitlist illustrating the distribution of the population on the waitlist at any point in Indiana's AAA regions for SFY 2015. The darker spots denote areas that comprise a larger percentage of the population on the waitlist at any time in the year. As depicted below, AAA regions 1, 3, and 8 have the largest proportion of the population on the waitlist at any time in SFY 2015. These AAAs cover the larger population centers in the state. AAA 1, for example, is a suburb of Chicago and AAA 8 covers Indianapolis.

[3] A breakdown of all the different services in the other HCBS category is not provided in our CHOICE waitlist dataset provided by Roeing so it is not possible to further determine what other services this population is receiving.

Figure 5: Percent of Individuals on the Waitlist by Region, SFY 2015



AAA Region	
1	16.25%
8	15.22%
3	13.10%
14	9.40%
13	6.95%
16	6.44%
6	6.11%
15	5.86%
11	5.31%
5	4.31%
4	3.44%
7	3.09%
2	2.09%
9	1.61%
10	0.77%
12	0.06%

CHOICE Membership and Cost Sharing

CHOICE enrollees with income above 150 percent must pay cost-share. **Table 2** presents the enrollment for participants by cost sharing status from SFY 2013 through SFY 2015. The table also shows the percentage of enrollees without cost sharing for these years. The proportion of members who had cost sharing was stable between SFY 2013 and SFY 2014, but rose substantially in SFY 2015. In SFY 2013 and 2014 only 7 percent of members had cost sharing, but this increased to 11 percent in SFY 2015. The initiation of the CHOICE Pilot likely explains the increase in the proportion with cost share observed in SFY 2015.

Table 2: CHOICE Members by Cost Sharing Category, by SFY

	SFY 2013	SFY 2014	SFY 2015
Members with Cost-Sharing	297	257	724
Members without Cost-Sharing	4,168	3,431	6,014
Percentage of Members with Cost-Sharing	7%	7%	11%

Table 3 below provides additional information about this population showing the proportion of members in different income brackets based on Federal Poverty Level (FPL). As illustrated in **Table 3**, the individuals enrolled in CHOICE in SFY 2015 were more likely to be in the higher income brackets that required cost sharing compared to members in other years in the study period. For example, in SFY 2015 a total of 10.11 percent of members had incomes greater or equal to 151 percent of FPL and less than or equal to 300 percent compared to 6.70 percent of members in SFY 2014 and 6.56 percent in SFY 2013.

Table 3: CHOICE Members by Federal Poverty Level Bracket, by SFY

	SFY 2013	SFY 2014	SFY 2015
FPL ≤ 150%	4,168 (93.33%)	3,431 (93.03%)	6,014 (89.25%)
150% < FPL ≤ 300%	293 (6.56%)	247 (6.70%)	681 (10.11%)
300% < FPL ≤ 350%	** (0.07%)	** (0.16%)	20 (0.30%)
FPL > 350%	** (0.04%)	** (0.11%)	23 (0.34%)

**** Selected cells had counts less than 10 and are not reported.**

CHOICE Membership and Self-Direction

While not a significant part of the CHOICE program, CHOICE enrollees can choose to self-direct their care if they meet all needed eligibility requirements. **Table 4** below reflects the number of members that chose to self-direct for SFY 2013 through SFY 2015. The table also shows the proportion of members that chose to self-direct for each of the years studied. From SFY 2013 through SFY 2015, a small proportion of CHOICE enrollees chose to self-direct. The proportion of CHOICE enrollees self-directing their care never exceeded two percent.

Table 4: CHOICE Members by Decision to Self-Direct, by SFY

	SFY 2013	SFY 2014	SFY 2015
CHOICE Not Self-Directed	4,410	3,636	6,699
CHOICE Self-Directed	55	52	40
Percentage Self-Directed	1.23%	1.41%	0.59%

CHOICE Members and Measures of Acuity

As noted in the methods section of this report, we obtained the eligibility screen files from Roeing to evaluate acuity in the various program populations of interest. Lewin selected from these data the eligibility screens completed for those enrolled in CHOICE and examined measures of function based on the reported need for support with ADLs and IADLs (see the Methods section for more detailed description of the variables constructed). The tables and figures that follow present our analyses of the eligibility screen data for each individual that had at least one completed screen, by SFY. If there was more than one completed screen in a SFY, we selected the first one completed for that year for our analyses.

Tables 5, 6, and 7 present the average count of ADLs, IADLs, and the sum of ADLs and IADLs, respectively. In each table, the averages are presented for the total CHOICE enrollment and by selected

population characteristics. The evaluation of acuity by pilot status is only presented for SFY 2015 given the pilot was not operational until this year.

Table 5: Average Activities of Daily Living by Characteristics of CHOICE Members, by SFY

Population Characteristic	SFY 2013 (N=4,104)	SFY 2014 (N=3,665)	SFY 2015 (N=5,921)
Total CHOICE Enrollment	2.84	2.72	2.72
CHOICE ONLY	2.78	2.70	2.64
CHOICE + Medicaid	2.83	2.47	3.10
CHOICE + Medicaid + Waiver	3.31	3.28	3.49
CHOICE Duals	2.94	2.77	3.30
CHOICE Non Duals	3.28	2.96	3.07
CHOICE with Cost Sharing	3.19	3.19	3.06
CHOICE without Cost Sharing	2.82	2.68	2.68
CHOICE Members with Self Direction	3.65	3.82	3.97
CHOICE Members Not Self Directing	2.83	2.70	2.72
CHOICE Members in Pilot AAAs	2.95	2.74	2.54
CHOICE Members in Non-Pilot AAAs	2.79	2.71	2.85

Over the period studied there is a slight decline in average function in the total population. However, this pattern is not observed uniformly across sub-populations of CHOICE enrollees. For example, the measures of function in the population enrolled in CHOICE and eligible for Medicaid reveal a decrease in acuity between SFY 2013 and SFY 2014 followed by an increase in acuity between SFY 2014 and SFY 2015. This same pattern is observed for those enrolled simultaneously in CHOICE and the A&D waiver, for the CHOICE dual eligible population, for those who self-direct their services, and those enrolled in CHOICE in the non-Pilot AAAs. Acuity in these five groups is higher in SFY 2015 than at baseline (SFY 2013).

Table 6: Average Instrumental Activities of Daily Living by Characteristics of CHOICE Members, by SFY

Population Characteristic	SFY 2013 (N=4,104)	SFY 2014 (N=3,665)	SFY 2015 (N=5,921)
Total CHOICE Enrollment	5.16	5.14	5.12
People on CHOICE ONLY	5.18	5.15	5.06
CHOICE + Standard Medicaid	5.02	4.85	5.34
CHOICE + Medicaid + Waiver	5.34	5.52	5.66
CHOICE Duals	5.15	5.17	5.53
CHOICE Non Duals	4.99	4.76	5.14
CHOICE with Cost Sharing	5.69	5.70	5.50
CHOICE without Cost Sharing	5.13	5.10	5.07
CHOICE Members with Self Direction	5.87	5.86	5.94
CHOICE Members Not Self Directing	5.16	5.13	5.12
CHOICE Members in Pilot AAAs	5.19	5.11	4.95
CHOICE Members in Non-Pilot AAAs	5.15	5.16	5.23

Table 7: Average Sum of Activities of Daily Living and Instrumental Activities of Daily Living by Characteristics of CHOICE Members, by SFY

Population Characteristic	SFY 2013 (N=4,104)	SFY 2014 (N=3,665)	SFY 2015 (N=5,921)
Total CHOICE Enrollment	7.99	7.85	7.82
People on CHOICE ONLY	7.95	7.83	7.68
CHOICE + Standard Medicaid	7.81	7.29	8.42
CHOICE + Medicaid + Waiver	8.61	8.78	9.13
CHOICE Duals	8.06	7.93	8.82
CHOICE Non Duals	8.24	7.66	8.18
CHOICE with Cost Sharing	8.86	8.87	8.54
CHOICE without Cost Sharing	7.93	7.77	7.73
CHOICE Members with Self Direction	9.53	9.68	9.91
CHOICE Members Not Self Directing	7.97	7.82	7.81
CHOICE Members in Pilot AAAs	8.11	7.83	7.46
CHOICE Members in Non-Pilot AAAs	7.93	7.85	8.06

The slight decline in acuity in the population enrolled in CHOICE is partially the result of the inclusion of the Pilot program enrollees, who can enroll in CHOICE with one or even zero ADLs. This hypothesis is

supported by the observation that the average ADL score for those enrolled in CHOICE in a Pilot AAA is lower as compared to that in other non-Pilot AAAs. Further, we observe that the average ADL score in the AAA regions who operate the Pilot was higher in both SFYs prior to the start of the program.

Figures 6, 7, and 8 present the proportion of the CHOICE population by the counts of ADLs, IADLs, or the sum of ADLs and IADLs in each SFY, respectively. As expected, the proportion of the population with no ADL needs is highest in SFY 2015 due in part to the commencement of the CHOICE Pilot Program in that year. The pattern of the counts of ADLs as displayed in **Figure 6** are similar across all SFYs although we see a slightly higher proportion of individuals with need for support with only two ADLs in SFY 2013 and SFY 2014 as compared to SFY 2015.

Figure 6: Proportion of CHOICE Population by Count of ADLs, by SFY

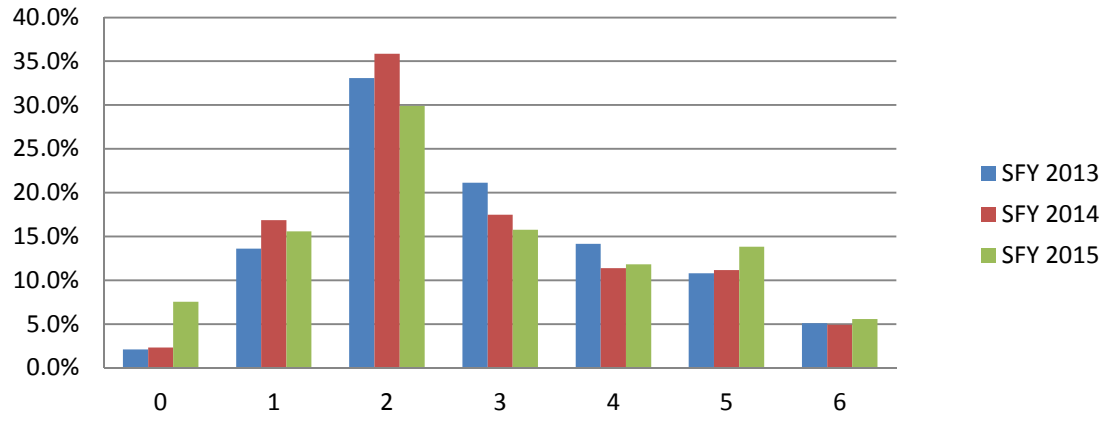


Figure 7: Proportion of CHOICE Population by Count of IADLs, by SFY

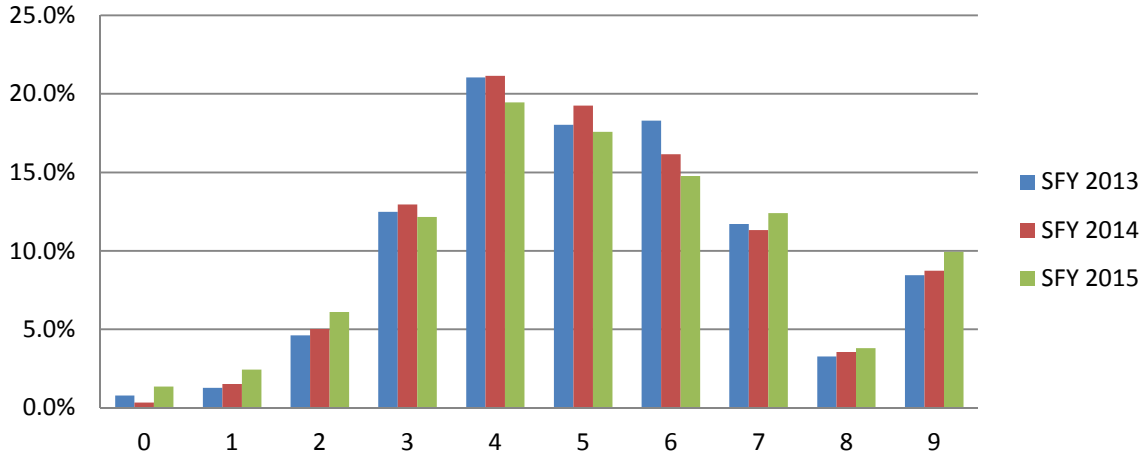


Figure 8: Proportion of CHOICE Population by Count of ADLs and IADLs, by SFY

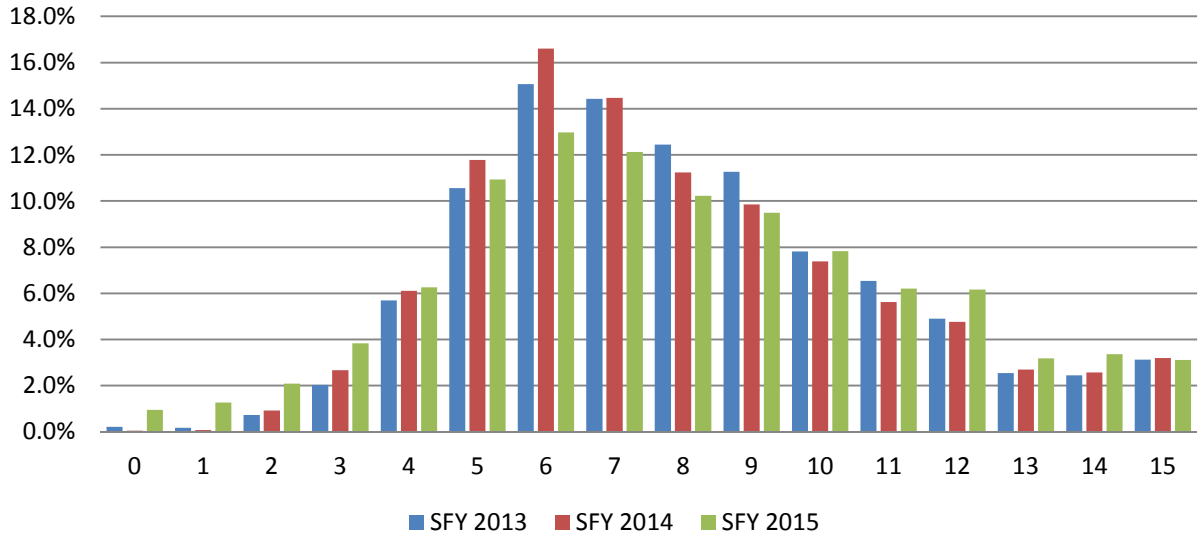
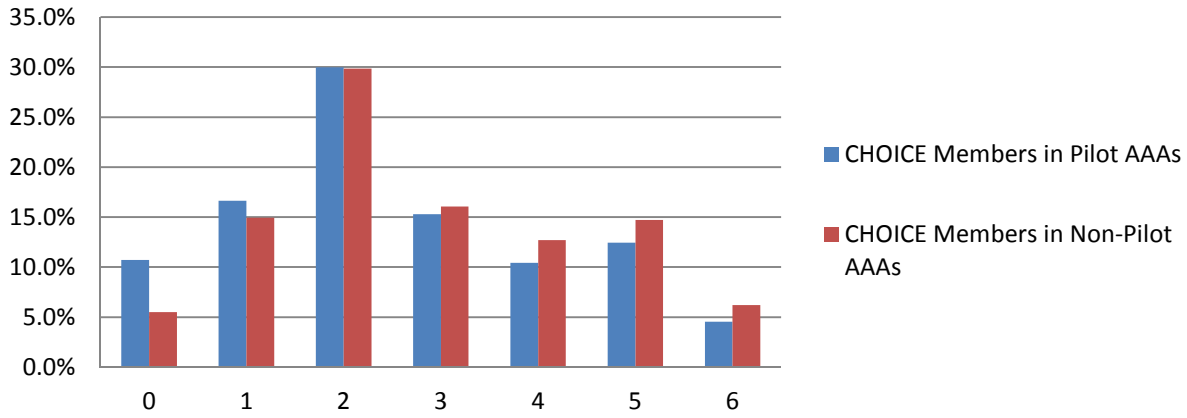


Figure 9 profiles the distribution of ADLs for those enrolled in CHOICE by Pilot status. A larger proportion of the enrolled population in the Pilot regions had zero ADL needs as compared to those in the non-Pilot regions (10.7 percent vs. 5.5 percent).

Figure 9: Proportion of CHOICE Population Count of ADLs, by Pilot Region Status, SFY 2015



CHOICE and Expenditures for CHOICE Members

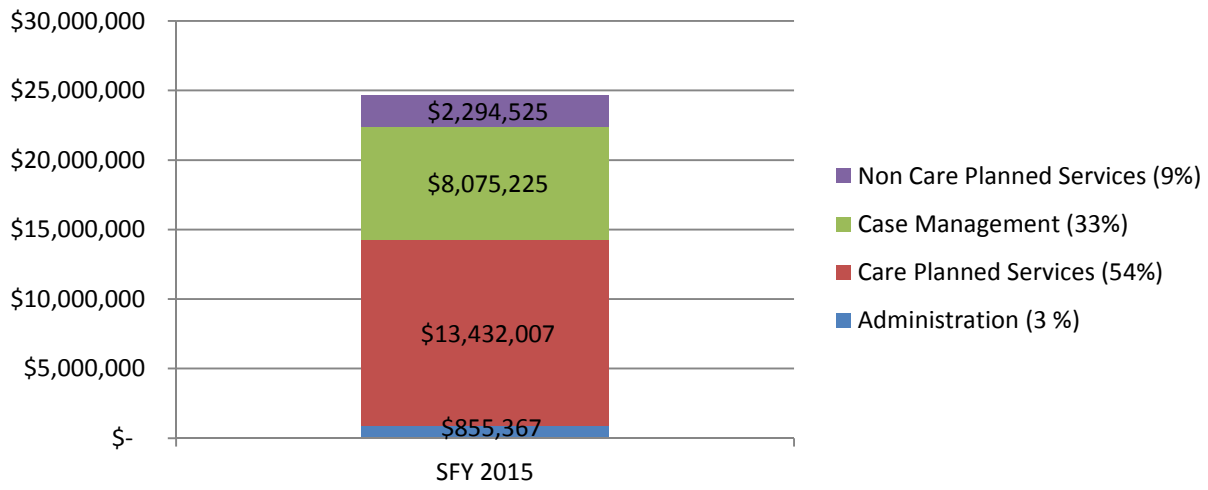
As noted in the methods section, analysis of CHOICE expenditures in this report includes care planned services[4] expenditures only. **Figure 10** is the sole exception to this and shows total CHOICE program expenditures for SFY 2015 based on data reported in the FSSA 2015 annual report. Total CHOICE expenditures as shown in **Figure 10** equaled $24,657,124 in SFY 2015.[5] The component of total CHOICE spending presented in the rest of this report are the care planned services, reflecting the expenditure

[4] Care planned services are services approved in the individuals care plan. There are also non-care planned services which are funds for information, assistance and outreach that are part of the CHOICE program.

[5] Based on expenditures reported in the 2015 FSSA Annual Report.

type as in the red section of the stacked bar chart in **Figure 10**. The percentage of total CHOICE expenditures each component represents is listed in the parentheses in the graph's key.

Figure 10: Total CHOICE Expenditures, SFY 2015



In the remainder of this report, CHOICE expenditures reflect care planned services only. Over the period studied, we observe a small decline in total CHOICE service expenditures. Indiana spent a total of $13,559,980 in SFY 2015 for CHOICE care planned services, reflecting an approximately 10% reduction in spending since SFY 2013 **(see Table 8)**. Notably, this reduction in expenditures occurred despite an increase in CHOICE membership in the same period. CHOICE membership in the three year period increased from 4,466 to 6,738.

The largest decline in total CHOICE dollars came from the population that was enrolled in CHOICE and were dual eligibles. CHOICE expenditures decreased by $1,699,440 from SFY 2013 to SFY 2015 for dual eligible CHOICE enrollees, reflecting a 74 percent decrease. In contrast, CHOICE expenditures for members with cost sharing actually increased in the period. Expenditures for the CHOICE population with cost sharing increased by 8 percent in the study period. The total expenditures for this group, however, were relatively small, comprising only 7 percent of total CHOICE spending. The increase in expenditures among this group, therefore, did not change the overall trend of lower CHOICE expenditures.

Interestingly, CHOICE expenditures did not vary based on acuity. We compared spending for those who were in the top quartile of the distribution of the sum of ADLs and IADLs, which included those with 10 or more combined ADL/IADL impairments in each study period. In SFY 2013, 28 percent of all CHOICE expenditures were allocated to the 25.2 percent of the enrolled population who had high functional acuity. By SFY 2015, this proportion had increased to 32.6 percent of all CHOICE expenditures for 26.3 percent of the enrolled population who had high functional acuity.

Table 8: Total CHOICE Service Expenditures and by CHOICE Enrollee Characteristics, by SFY

	SFY 2013	SFY 2014	SFY 2015
Total CHOICE Expenditures	$15,087,767	$13,972,990	$13,559,980
CHOICE ONLY	$12,518,934	$12,583,206	$12,867,456
CHOICE + Medicaid	$2,119,598	$1,100,468	$505,620
CHOICE + Medicaid + Waiver	$449,236	$289,316	$186,904
CHOICE Dual Eligibles	$2,285,208	$1,228,239	$585,768
CHOICE Non-Dual Eligibles	$283,625	$161,545	$106,756
CHOICE with Cost Sharing	$1,039,780	$974,277	$1,123,768
CHOICE without Cost Sharing	$14,047,987	$12,998,713	$12,436,211
CHOICE with High ADL Acuity	$4,222,120	$4,462,397	$4,414,091
CHOICE with Low ADL Acuity	$10,865,647	$9,510,593	$9,145,888
CHOICE Members in Pilot AAAs	$3,917,072	$3,765,291	$3,798,108
CHOICE Members in Non-Pilot AAAs	$11,170,695	$10,207,699	$9,761,871

Analysis of CHOICE expenditures for each service further illuminates trends in CHOICE spending. **Table 9** displays CHOICE expenditures by service across the three years studied. Services that were in the top fifteen expenditures averaged across the three years are displayed in the table. The expenditures detailed in this table reveal that that the drop in CHOICE expenditures in the three year period mostly came from a reduction in spending on attendant care, home health aides, and respite. Combined, expenditures for these three services dropped by $1,418,207 in the three year period. This accounted for 93 percent of the total decrease in total CHOICE expenditures from SFY 2013 to SFY 2015.

The Roeing case management dataset includes total CHOICE case management units for the enrolled population for the study period. Case management expenditures from the Roeing dataset are not reported because CHOICE case management expenditures are reimbursed on an expense incurred basis rather than units of service provided. **Table 10** summarizes these total counts of case management units to describe relative utilization of case management services in the CHOICE-enrolled population overall and by selected characteristics. Although there was an overall net decline in case management units over the study period, we observed an increase in case management units for the CHOICE Only-enrolled population, reflecting a 17 percent increase in case management activity between SFY 2013 and SFY 2015. There was also a small increase for those who have a cost share requirement to participate in the program.

In contrast, the largest decrease in case management units came from the population on CHOICE and the A&D Waiver. From SFY 2013 to SFY 2015 case management units for this population dropped by 28,840 reflecting a 70 percent reduction. Case management units also decreased dramatically for the dual eligible population on CHOICE. From SFY 2013 to SFY 2015 case management units decreased for this population by 26,819 equating to a 66 percent reduction.

Case management units for those with high functional acuity increased over the study period but, as noted with CHOICE expenditures, the proportion of case management units for the high acuity population were low compared to the proportion of the population deemed high need. For example, in SFY 2015, 26.3 percent of the CHOICE-enrolled population was deemed high acuity, but only 22.7 percent of case management units were allocated to this group. Case management units for CHOICE enrollees in the Pilot Program regions were nearly half those of the enrolled population in non-pilot counties.

Table 9: CHOICE Expenditures by Type of Service, by SFY

Type of Service	SFY 2013	SFY 2014	SFY 2015
Attendant Care	$7,310,340	$6,765,388	$6,522,149
Homemaker	$2,409,459	$2,391,935	$2,317,732
Case Management	$2,184,545	$1,672,781	$2,044,080
Home Health Aide	$1,467,067	$1,347,115	$1,237,482
Home Delivered Meals	$718,192	$691,367	$981,025
Respite	$982,626	$742,148	$582,195
Self-Directed Care	$452,081	$461,281	$441,524
Adult Day Service	$447,800	$408,166	$410,661
Personal Response System	$442,343	$404,032	$378,852
Environmental Modifications	$255,639	$165,234	$186,912
Home Health Supplies	$194,583	$180,931	$151,040
Nursing	$98,765	$120,991	$94,866
Transportation	$75,652	$95,420	$105,412
Minor Home Maintenance	$63,329	$59,462	$70,092
Durable and Specialized Medical Equipment	$47,079	$32,886	$28,337

Table 10: CHOICE Case Management Units by Type of CHOICE Members, by SFY

	SFY 2013	SFY 2014	SFY 2015
Total CHOICE Case Management Units	208,597	164,793	204,895
CHOICE ONLY	162,048	143,687	188,899
CHOICE + Standard Medicaid	41,154	19,172	12,314
CHOICE + Medicaid + Waiver	5,395	1,934	3,682
CHOICE Duals	40,348	18,056	13,529
CHOICE Non Duals	6,201	3,050	2,467
CHOICE with Cost Sharing	14,914	11,585	19,559
CHOICE without Cost Sharing	193,683	153,208	185,336
CHOICE with High ADL Acuity	47,690	40,282	46,611
CHOICE with Low ADL Acuity	160,907	124,511	158,284
CHOICE Members in Pilot AAAs	49,922	38,990	70,530
CHOICE Members in non-Pilot AAAs	158,675	125,803	134,365

Medicaid Expenditures for CHOICE Enrollees

In contrast to CHOICE care planned service expenditures, total Medicaid State Plan expenditures increased over the study period. From SFY 2013 to SFY 2015 Medicaid State Plan expenditures increased from $13,351,156 to $16,420,674, reflecting a 23 percent increase in spending over that time period. These expenditures, however, did not increase steadily throughout the study period. Medicaid State Plan expenditures declined between SFY 2013 and SFY 2014 and increased between SFY 2014 and SFY 2015. **Table 11** below illustrates these fluctuations in expenditures displaying total Medicaid State Plan expenditures and Medicaid State Plan expenditures by categories of CHOICE enrollees. The table also presents Medicaid A&D Waiver expenditures for the small subset of CHOICE enrollees enrolled in both the waiver and CHOICE program.

Medicaid State Plan expenditures followed similar trends when profiled across all characteristics of CHOICE enrollees, with expenditures decreasing between SFY 2013 and SFY 2014 and then increasing the following year. This observed trend may be the result of the changes in total membership in the period. From SFY 2013 to SFY 2014 the number of CHOICE enrollees also participating in Medicaid decreased from 1,379 to 706. The subsequent year in SFY 2015 the membership in Medicaid and CHOICE increased to 828. These shifts in the enrolled population may have contributed to the observed pattern of expenditures.

Table 11: Medicaid State Plan and Waiver Expenditures, by SFY

	SFY 2013	SFY 2014	SFY 2015
Total Medicaid State Plan Expenditures	$13,351,156	$10,884,139	$16,420,674
Total Waiver Expenditures	$1,279,380	$1,088,572	$1,140,579
CHOICE + Medicaid	$10,940,927	$9,110,669	$14,105,571
CHOICE + A&D Waiver	$2,410,229	$1,773,470	$2,315,102
CHOICE Dual Eligible	$5,990,443	$5,138,244	$7,707,320
CHOICE Not Dual Eligible	$7,360,714	$5,745,895	$8,713,353
CHOICE With Cost Share	$29,093	$24,496	$353,907
CHOICE With No Cost Share	$13,322,063	$10,859,643	$16,066,766
CHOICE with High ADL Acuity	$3,032,479	$2,356,146	$4,425,475
CHOICE with Low ADL Acuity	$10,318,678	$8,527,993	$11,995,199
CHOICE Members in Pilot AAAs	$3,647,921	$2,701,145	$5,325,801
CHOICE Members in non-Pilot AAAs	$9,697,356	$8,182,993	$11,094,872

Additional information on this trend and Medicaid expenditures for the CHOICE population more generally can be found in **Table 12**. The table includes Medicaid state plan expenditures for CHOICE enrollees by type of service. Services that were in the top fifteen expenditures averaged across the three years are displayed in the table.

Notably, an increase in inpatient hospital expenditures and nursing home expenditures were drivers in the increase in Medicaid State Plan expenditures from SFY 2014 to SFY 2015. These two services combined accounted for 51 percent of the increase in Medicaid State Plan expenditures between SFY 2014 and SFY 2015. Pharmacy and physician and clinic services were also significant factors increasing by a combined $1,259,910 and accounting for 23 percent of the total increase in expenditures in between the two years.

Table 12: Medicaid State Plan Expenditures for CHOICE Enrollees by Type of Service, by SFY

Type of Service	SFY 2013	SFY 2014	SFY 2015
Home Health	$4,942,932	$3,655,844	$4,025,332
Inpatient Hospital	$1,991,484	$1,568,042	$2,746,261
Pharmacy	$1,469,122	$1,307,503	$1,988,177
Nursing Home	$689,029	$837,280	$2,480,264
Outpatient Hospital	$947,746	$847,576	$1,032,103
Therapy Services - Mental Health Services	$695,384	$627,324	$919,873
Physician and Clinic Services	$573,284	$502,724	$1,081,960
Medical Equipment and Supplies	$781,817	$617,756	$730,779
Waiver Services NEC	$438,114	$347,859	$383,219
Transportation	$310,942	$214,181	$339,172
Adult Dental Services	$125,406	$87,476	$129,190
Hospice Services	$43,552	$17,218	$200,714
Other	$48,413	$52,025	$75,815
Freestanding Dialysis Services	$52,273	$51,712	$41,950
Lab Services	$39,579	$39,963	$63,822

In our analysis we noticed a large increase in nursing facility expenditures between SFY 2014 and SFY 2015. We investigated these expenditures and identified an unusual pattern of service utilization in the data for a small number of individuals who were simultaneously enrolled in CHOICE and residing in a nursing facility in the same month. They were also determined to be only receiving case management services during this time. **Table 13** provides some information about this population. The largest group of individuals simultaneously enrolled in CHOICE and residing in a nursing facility and receiving case management services only were observed in SFY 2015. Prior to 2015, less than 20 such cases were observed in each year. Most of these individuals had a nursing facility admission paid for by Medicaid. Understandably, much of the observed nursing facility expenditures in **Table 13** can be explained by this small group of CHOICE enrollees. More than half of nursing home expenditures in SFY 2015 are attributed to those enrolled in CHOICE and simultaneously in a nursing home. We examined further whether this phenomenon was universal across all AAAs or could be explained by specific AAAs. Approximately 70 percent of all cases in SFY 2015 were in AAA region 2, followed by 13.8 percent of all cases in AAA region 1. This pattern of spending requires further exploration; it may reflect efforts to actively transition residents out of nursing facilities who have been deemed eligible for CHOICE services.

Table 13: Analysis of Nursing Facility Utilization Among CHOICE Enrollees, by SFY

	SFY 2013	SFY 2014	SFY 2015
Total CHOICE Enrollees in a Nursing Home and Receiving Case Management Only	18	**	377
Proportion with Medicaid-Funded Nursing Home Admission	61%	**	67%
Total Medicaid State Plan Nursing Home Expenditures	$36,170	$46,005	$1,457,862

** Selected cells had counts less than 9 and are not reported.

In addition to Medicaid State Plan Expenditures, we examined A&D waiver expenditures for the CHOICE population. **Table 14** provides a list of spending by type waiver service for CHOICE enrollees on the A&D Waiver. Services that were in the top 10 expenditures averaged across the three years are displayed in the table. As illustrated in the table, attendant care by agencies' is the primary driver of the decrease in waiver expenditures for the CHOICE population on the A&D Waiver. Over the three years studied, expenditures for attendant care by agencies decreased by $201,437. This large drop in expenditures contributed to the overall waiver expenditures for the CHOICE population dropping from $1,279,380 in SFY 203 to $1,140,579 in SFY 2015.

Table 14: Medicaid Waiver Expenditures for CHOICE Members by Type of Service, by SFY

Type of Service	SFY 2013	SFY 2014	SFY 2015
Agency Attendant Care	$619,389	$458,136	$417,952
Case Management	$138,089	$99,868	$117,297
Homemaker	$94,244	$86,770	$107,703
Respite Care	$91,344	$84,281	$95,066
Assisted Living	$81,938	$55,739	$92,393
Home Delivered Meals	$77,928	$64,809	$79,269
Adult Day Services	$41,874	$66,675	$82,952
Self Directed Care	$64,368	$49,838	$35,634
Home Modification	$11,237	$59,399	$33,274
Emergency Response	$28,546	$26,474	$23,528

Conclusion

The CHOICE program has provided critical HCBS to the elderly and disabled and expanded substantially during the study period with important impacts on total expenditures (SFY 2013 through SFY 2015). In the first two years of the study period CHOICE provided services to an average of roughly 4,075 Hoosiers. With commencement of the CHOICE pilot, the program expanded to 6,738 people. Despite this increase in CHOICE enrollees, CHOICE expenditures declined in the period as a result of significant drops in expenditures on attendant care, home health aides, and respite. An increase in Medicaid expenditures for the CHOICE population in the period more than offset this decline as expenditures increased dramatically for this population in the three years studied. Nursing facility expenditures for

the population simultaneously enrolled in CHOICE increased substantially in SFY 2015 and most of those expenditures can be isolated to two AAA regions. This may be evidence of efforts to transition these individuals out of the institutional setting and back into the community and warrants further investigation to understand the phenomenon observed. Interestingly, the acuity of the CHOICE population did not change substantially throughout the period. This relationship, or lack thereof, between expenditures and acuity for the CHOICE programs may be an area for future research and examination.