Florida Statewide Quality Assurance Program

Quality Improvement Study

Contract Year 7

Provider Performance Analysis:
Impact of Waiver Services on CORE Element Scores

Florida DD HCBS Waiver

Prepared by the Delmarva Foundation

Submitted to the Agency for Health Care Administration
And
The Agency for Persons with Disabilities

Executive Summary

This study examines the relationship between Medicaid Developmental Disabilities (DD) and Family and Supported Living (FSL) Home and Community-Based Services (HCBS) Waiver services and evaluation scores on the Collaborative Outcomes Review and Enhancement (CORE) consult. The purpose of the study is to assess the impact of the type and number of DD and FSL HCBS Waiver services provided on the quality of services offered by providers as indicated by the CORE elements. Because providers generally render more than one service, during the CORE consult Delmarva Quality Improvement Consultants record, for each CORE element, the service responsible for the lowest rating—essentially, the service that is the "weakest link" for each element. In this study we explore the extent to which different services are associated with each CORE element in this context—the service linked to the "lower score".

Analyses are based on a sample of 2,019 providers who offered services through the waivers and completed a CORE consult between July 2004 and March 12, 2007. Regression analyses examine the impact of seven Waiver services, the number of Waiver services provided, and a set of control variables on the percent of CORE elements with a score of Not Met on the Minimum Service Requirements (MSR) or of less than Achieving on the CORE Results Elements (CRE), and on the likelihood of receiving a Not Met or less than Achieving (a lower score) on each individual CORE element independently.

A summary of results includes the following:

- Non-Residential Support Services (NRSS) and Residential Habilitation appear to have a broader impact on scoring Not-Met, or scoring less than Achieving than do providers of other services.
- Providers of Residential Habilitation services were less likely than their counterparts to receive Achieving, and were linked to a higher likelihood of receiving a lower score on eleven of the 25 CORE elements.
- NRSS providers were less likely than providers who do not offer this service to receive Achieving or Met on the CRE and MSR elements, and were linked to a higher likelihood of receiving one of these lower scores on four of the 25 CORE elements.
- Providers of Supported Employment were less likely to receive Achieving on the CREs overall. However, this was primarily due to only two of the twenty-five CORE elements.
- Providers of In-Home Support Services (IHSS) were more likely to receive a Not Met on MSR elements, and were more likely to receive a low score on four of the 25 CORE elements.

- Providers of Adult Day Training (ADT) were less likely to receive a lower score overall (CRE and MSR combined), but this was primarily due to better performance on the MSR elements.
- Supported Living Coaching is the only service that is not linked to higher rates of lower scores for any of the CORE elements. They were significantly more likely to receive Achieving on the CREs and Met on the MSRs.

The following is a summary of Recommendations provided to the state:

- APD should continue unannounced visits to group homes across the state on an ongoing basis and work with providers of Residential Habilitation to develop a technical assistance plan based on the most recent Quality Assurance Review.
- Encourage providers to offer the combination of Residential Habilitation with Supported Employment as it appears to help providers improve their service delivery systems.
- Because results from this and other studies continue to reflect issues in terms of provider performance as well as poorer quality of life for individuals living in a group home, APD and AHCA should strive to move individuals to independent and supported living facilities.
- APD should reinforce to providers the MSRs are a base from which to continue to develop systems that help implement policies and generate outcomes for individuals. APD should continue to emphasize an outcomes-based process that helps providers build outcome-oriented systems to ensure person-directed services are rendered.
- Area APD offices should help providers of IHSS develop systems to educate individuals on abuse and neglect and to ensure they know the appropriate reporting procedures. Local APD offices should consider strategies for ensuring that IHSS providers receive the required abuse and neglect training, as well as meet the other minimum service requirements.
- APD should construct a set of guidelines for providers of ADT services that outline strategies for implementing services in a manner that is respectful of the rights of all waiver recipients they serve.
- Delmarva and APD should meet informally and discuss the organizational systems that appear to work well for providers of Supported Living Coaching in an effort to determine what practices, systemic policies, or overarching procedures may be helpful to providers of other services.
- Because solo CORE providers have consistently performed better, on average, than agency providers, we recommend the quality management work group that has been developed by APD address this phenomenon. The work group should outline a procedure to implement technical assistance specific to the problems faced by Agency providers.

Introduction and Background

Funding for over 30,000 individuals with developmental disabilities in Florida is provided through two Medicaid Home and Community-Based Services (HCBS) Waivers, the Developmental Disabilities (DD) Waiver and the Family and Supported Living (FSL) Waiver. Administered by the Florida Agency for Healthcare Administration (AHCA), these HCBS waivers allow for the provision of services in community-based settings as an alternative to institutional care. The Delmarva Foundation, through a contract with AHCA, has provided a quality assurance program for persons served through the DD and FSL HCBS Waivers, called the Florida Statewide Quality Assurance Program (FSQAP).

The waivers offer up to 33 services to eligible individuals.[1] Individuals may receive services at home, in community centers, in businesses, in a therapist's office, or in other community settings. Services must be medically necessary and individuals receive prior authorization before expending allocated dollars. All individuals on the waiver receive Waiver Support Coordination which provides a support coordinator to assist individuals in getting the services they need. Waiver services are provided to ensure individuals with developmental disabilities have access to resources to be healthy, live well, and avoid institutional placement.

The CORE tool was developed in collaboration with The Agency for Persons with Disabilities, The Agency for Health Care Administration, The Council on Quality and Leadership, providers, and other stakeholders, and is used to consult with providers who render the following services: Adult Day Training (ADT), Residential Habilitation (ResHab), Non-Residential Support Services (NRSS), In-Home Support Services (IHSS), Supported Employment (SE) and Supported Living Coaching (SLC).[2] The Council on Quality and Leadership (CQL) has participated as a subcontractor with Delmarva in the program since its inception. As part of their responsibilities, CQL helps Quality Improvement Consultants to enhance interview techniques used during the CORE process.[3] The CORE process begins with individual interviews, followed by discussion with the providers, staff and other relevant personnel, observations of facilities, and record reviews. The process assesses the degree to which providers have processes and organizational systems in place to assist individuals in achieving results that are important to them and help improve their quality of life.

[1] See Attachment 1 for a complete list of the Waiver services. Provision of the FSL Waiver was implemented in July 2005. Throughout this study, service is synonymous with Waiver Service, unless otherwise indicated.
[2] The CORE tool is also used to monitor providers who render Special Medical Home Care services. However, there are too few of those to factor into the analyses in this study.
[3] See Attachment 2 for a list of the 25 CORE Results and CORE Minimum Service Requirement indicators. This study uses the 25 CORE indicators from the original CORE tool because only six months of data using the revised CORE, implemented March 13, 2007, was available.

The purpose of this study is to determine whether the type or number of services rendered impacts the quality of services offered by providers, as measured through the CORE consult, for providers who serve individuals with developmental disabilities on the DD or FSL HCBS waiver programs.

- Which waiver services are most often associated with lower scores on each CORE element? Which services have high rates of providers with scores less than Achieving and Not Met overall and on each element? We examine rates of provision for each waiver service, and rates of providers with scores less than Achieving or Not Met for each waiver service.
- Regression analysis is used to examine the impact of service provision, and the combination of certain services, on the percent of CORE elements with a score less than Achieving for CORE Results Elements (CRE) and Not Met on CORE Minimum Service Requirements (MSR). Do providers of certain waiver services have a higher percent of elements with a lower score (less than Achieving or Not Met) than providers who do not offer the services?
- Regression analysis is also used to examine the impact of waiver service provision on the likelihood that a provider receives a lower score (less than Achieving or Not Met) for each of the 25 CORE elements individually. Are certain waiver services associated with lower scores on specific CORE elements?

Data and Methods

Sample

Data for this study were taken from a review of 2,019 providers who offered services through the DD or FSL HCBS waiver and participated in a CORE consult with a Delmarva Quality Improvement Consultant (QIC) between July 2004 and March 12, 2007.[4] In the following section, descriptive statistics show the percent of providers by provider type, area-size, and the number of services provided.

Methods

When Delmarva QICs generate a CORE report for providers, they include in the report the service each provider is actively rendering at the time of the consult. While providing specific services (ADT, NRSS, ResHab, SE, SLC and IHSS) triggers the need for a CORE consult, QICs review the providers' systems for all services they render, and most providers render more than one service (Table 4). Therefore, results in this study may reference services other than the CORE services, such as Transportation, Companion and Respite Care. If providers only render non-CORE services, they receive a Desk Review. Results for Desk Reviews are not presented in this study.

[4] Some providers received more than one CORE consult during this time period. We control for this in the regression analyses.

From July 2004 through March 12, 2007, the CORE consult consisted of 18 CORE Results Elements (CRE) and seven Minimum Service Requirement (MSR) elements. The CREs are designed to help determine if the provider has systems in place to support individuals to achieve their communicated desired goals and outcomes. The MSRs are designed to verify documentation of service specific requirements such as training, background screening, and billing authorization. QICs use information gathered on all the services the providers render to determine a score or evaluation level for each of the elements. Evaluation levels for the CREs are Achiveing, Implementing, Emerging and Not Emerging.[5] The MSRs are scored as Met or Not Met. The lowest common denominator is used when the final determination is made—QICs record the service(s) that is linked to the lowest score for each element. For example, if the provider renders ADT and Transportation and for Element 1 (Exercising rights) receives an Implementing for ADT but an Emerging for Transportation, the final determination is Emerging, and Transportation is recorded as the service linked to that score. One or more services can be linked to the lowest score. In this study we use descriptive statistics to explore the services most often associated with the lower score on each element.

We also developed several regression models to test the net impact of type and number of services on scores for CORE elements, using various control variables as described in the following section. A measure of the number of services offered by each provider is included to control for any impact on the scores from offering multiple services. We use a general measure indicating the percent of elements with a lower score—scored less than Achieving or Not Met for each provider. It is important to note that a score of Implementing is not considered by Delmarva or APD to be a "low score". However, for the purposes of analysis, we compare scores for providers who achieved the highest level of evaluation with all others. The difference between Achieving and Implementing is often that organizational systems are in place for providers at the Implementing level, but results have not yet impacted all individuals served by the provider.

Three different regression models are used to test the impact of the type and number of services provided on percent of elements with a lower score--scored less than Achieving or Not Met: including all CORE elements, including only CREs, and including only MSRs. In addition, we test the impact of services on each of the twenty-five CORE elements individually. In each of these twenty-five regression models, a measure indicates whether or not a provider received a lower score on the individual element—less than Achieving or Not Met.

[5] See the Tools and Procedures on the Delmarva Web site for a complete description of these different levels (http://www.dfmc-florida.org/public/provider_resources.aspx).

Regression analyses using the percent of elements with a lower score as the dependent variable use ordinary least squares techniques. In these models a positive coefficient indicates a factor is associated with worse performance by a provider, or a higher percent of elements scored as less than Achieving or Not Met. Because the measure of whether a provider had a lower score on each individual element is a categorical measure (0=Scored less than Achieving/Not Met vs. 1=Scored Achieving or Met), regression analyses rely on logistic regression techniques. A significant positive (or negative) impact of a variable on the indicator of whether a provider received a lower score tells us the variable increases (or decreases) the likelihood that a provider had a lower score. We also use regression analyses to test the impact of the combination of CORE services on provider performance.

Dependent Variables

The dependent variables include an indicator of the percent of elements with a lower score (scored less than Achieving or scored Not Met) for each provider. The following table shows that across the 2,019 providers who participated in a CORE between July 2004 and March 12, 2007; an average of just under 63 percent of the 25 CORE elements received a lower score, an average of 76 percent of the CREs were scored less than Achieving, and an average of 28 percent of the MSRs were scored Not Met.

Table 1: Percent of CORE Elements with a Lower Score Across CRE, MSR, and All Elements
July 2004 - March 12, 2007

CORE Results Elements		76.3%
Minimum Service Requirements		28.4%
All Elements		62.9%

Twenty-five indicators of whether a provider received a score of less than Achieving or Not Met on each CORE element are used as Dependent Variables in the Logistic Regression models. The following table shows the percent of providers with a score of Achieving or Less Than Achieving for each CRE and the percent of providers who scored Met or Not Met on each CORE MSR.

- More providers received a lower score on Developing Social Roles, Exercise Rights, Personal Outcome Approach, and Participates in Review of the Implementation Plan (IP) than on other CORE Results Elements.
- Close to 89 percent of providers received a lower score on Element 10 which assesses whether provider services assist individuals in developing desired social roles.
- 87 percent of providers received a lower score on Element 1 which assesses whether provider services assist individuals in fully exercising rights.

- On average, providers showed the best performance on Element 18 (Satisfied with Services), with just over 66 percent with a lower score in this area.
- Among MSR elements, more providers scored 'Not Met' on Projected Service Outcomes and Required Documentation than on other MSR elements. Just under half of providers failed to meet service specific service outcomes, and close to 46 percent of providers did not maintain required documentation.
- Only nine percent of providers failed to show documentation indicating they were authorized to provide the specific service.

Table 2: Percent of Providers with a Lower Score by Element
CORE Consults July 1, 2004 - March 12, 2007

Results Elements	Achieving	Less Than Achieving	Total N
1 Exercise rights	13.0%	87.0%	2,019
2 Dignity and respect	40.5%	59.5%	2,019
3 Personal privacy	34.1%	65.9%	2,019
4 Participates in decisions	18.7%	81.3%	2,019
5 Integrated settings	20.2%	79.8%	2,019
6 Choice in services	18.2%	81.8%	2,019
7 Abuse and neglect	21.3%	78.7%	2,019
8 Individual is healthy	26.3%	73.7%	2,019
9 Individual is safe	36.4%	63.6%	2,019
10 Developing social roles	11.3%	88.7%	2,019
11 Personal outcome approach	14.5%	85.5%	2,016
12 Directs design of IP	16.8%	83.2%	1,922
13 Strategies facilitating outcomes	19.6%	80.4%	1,927
14 Participates in review of IP	14.7%	85.3%	1,923
15 Achieving desired outcomes	20.8%	79.2%	2,013
16 Responsible beyond mission/scope	26.8%	73.2%	2,018
17 Provider disseminates information	28.0%	72.0%	2,018
18 Satisfied with services	33.6%	66.4%	2,019
Minimum Service Requirements	**Met**	**Not Met**	**Total N**
19 Projected service outcomes	51.8%	48.2%	1,928
20 Background screenings	73.1%	26.9%	2,019
21 Training specific to individual	67.7%	32.3%	2,017
22 Abuse and neglect training	78.3%	21.7%	2,019
23 Provider authorized	90.7%	9.3%	2,019
24 Service as authorized	83.2%	16.8%	2,018
25 Required documentation	54.4%	45.6%	2,019

Independent Variables

Multiple factors influence the quality of services offered by providers who assist individuals with a developmental disability. We are limited to the factors available in the Delmarva data, collected

during the consultation process: provider type, area size, type and number of Waiver services provided. The variables of primary interest are type and number of services provided. In this study we are able to determine the impact each of these independent variables has on the likelihood that a provider receives a lower score (less than Achieving or Not Met) on elements from the CORE consult. The independent variables used in the analysis are measured as follows:

- Provider Type: Solo (coded 1) and Agency (coded 0).
- Area Size: The Medicaid Claims data from AHCA were used to identify the number of consumers in each area during the study period. Areas with over 2,000 consumers on the DD or FSL HCBS waiver were categorized as Large. These include the Broward, Orlando, Miami-Dade and Suncoast areas. Medium size areas had from 1,000 to 1,999 consumers (e.g., Jacksonville, Pensacola, Tallahassee) and Small areas fewer than 1,000 consumers. The categories contain the following APD Areas:
  - Large—7, 10, 11, 23
  - Medium—1, 2, 3, 4, 9, and 13
  - Small—8, 12, 14 and 15
- Number of services: The total number of services provided by a provider.
- Services reviewed onsite. Measures indicate whether providers offered each of the following at the time of the consultation:[6]
  - Non-Residential Support Services (NRSS)
  - Adult Day Training (ADT)
  - Residential Habilitation (ResHab)
  - Supported Employment (SE)
  - Supported Living Coaching (SLC)
  - In-Home Support Services (IHSS)
  - Other Services – Includes speech therapy, physical therapy, occupational therapy, therapeutic massage, dietitian, medication review, transportation, specialized mental health, psychological assessment, behavior analysis and assistant, chore, homemaker, companion, respite care, respiratory therapy, special medical home care, private duty nursing, residential nursing, skilled nursing, and personal care assistance services.

Descriptive statistics for each of the independent variables are presented in the following tables. Table 3 shows the number and percent of CORE consults by provider type and Area size. The majority of providers in the sample are agency providers. Seventy-nine percent of providers are

[6] Special Medical Home Care has too few cases to analyze separately and is therefore included with the other "non-CORE" services. In addition, provider may render the following services that are not reviewed by Delmarva: adult dental, durable medical equipment, personal emergency response system, environmental accessibility adaptations, and consumable medical supplies.

agencies while twenty-one percent work as solo providers. Approximately 43 percent of providers operate within Large-size Areas. Providers in Medium-size Areas follow closely at 38 percent, and approximately 19 percent in small-size Areas.

Table 3: CORE Consults by Provider Type
July 1, 2004 - March 12, 2007

Provider Type	Number	Percent
Solo	424	21.0%
Agency	1,595	79.0%
Area Size	**Number**	**Percent**
Small-Size	377	18.7%
Medium-Size	777	38.5%
Large-Size	865	42.8%
Total	2,019	100%

The following table shows the number and percent of providers by the number of services provided. The majority of providers (78%) provided between 1 and 4 services at the time of the CORE consult, while 31 providers rendered over 10 services.

Table 4: Percent of CORE Providers by Number of Services Provided
July 1, 2004 - March 12, 2007

# of Services	Number	Percent
1	677	34%
2	409	20%
3	271	13%
4	212	11%
5	151	7%
6	120	6%
7	81	4%
8	44	2%
9	23	1%
10	19	1%
11	8	0%
12	4	0%
Total	2,019	100%

Results

Descriptive Analysis of Service Type by Score

The following two tables provide a description of the percent of times a particular service is associated with the lowest score on each CORE element. It is important to remember that non-CORE services are included if they are provided in conjunction with one of the services that triggers an onsite CORE review (ADT, NRSS, SLC, SE, ResHab, IHSS), and are otherwise reviewed with a Desk Review.

Table 5: Percent of Providers who Offer Service by Score on CORE Elements
July 1, 2004 - March 12, 2007

	Percent of Providers Scoring:*					
Service	Less than Achieving	I	E	NE	Not Met	Providing Service
Adult Day Training (ADT) Services	57%	23%	27%	2%	5%	15%
Behavior Analysis Services	37%	14%	18%	2%	2%	5%
Behavior Assistant Services	27%	10%	11%	2%	3%	3%
Chore	23%	7%	10%	1%	4%	1%
Companion	39%	14%	19%	2%	4%	30%
Homemaker	32%	10%	15%	2%	4%	10%
In-Home Support Services	41%	15%	19%	2%	5%	24%
Medication Review	25%	9%	16%	0%	0%	0%
Non-Residential Support Services	57%	19%	26%	3%	7%	41%
Occupational Therapy/Assessment	39%	17%	21%	0%	1%	1%
Personal Care Assistance	33%	11%	16%	1%	4%	24%
Physical Therapy and Assessment	35%	14%	18%	0%	2%	0%
Private Duty Nursing	30%	12%	14%	0%	4%	1%
Residential Habilitation	65%	23%	32%	3%	7%	49%
Residential Nursing Services	28%	9%	15%	2%	2%	2%
Respite Care	31%	11%	15%	1%	4%	28%
Skilled Nursing	31%	8%	19%	2%	3%	2%
Special Medical Home Care	36%	8%	28%	0%	0%	0%
Specialized Mental Health Services	26%	10%	11%	3%	2%	1%
Speech Therapy and Assessment	46%	17%	27%	0%	2%	1%
Supported Employment Services	44%	17%	20%	1%	5%	14%
Supported Living Coaching Services	48%	19%	21%	2%	5%	33%
Therapeutic Massage/Assessment	43%	18%	21%	2%	3%	0%
Transportation	23%	9%	12%	0%	2%	18%

*** I=Implementing, E=Emerging, NE=Not Emerging**

Table 5 presents the percent of times each service was associated with a lower score (less than Achieving or Not Met) across all CORE elements during the CORE consult. We also provide the

percent of times the service was associated with an element that scored as Implementing, Emerging, or Not Emerging, and the percent of providers in the sample who provided the service.[7]
To summarize the information in Table 5:

- Residential Habilitation was associated with less than Achieving on a CORE element more than any other service (65%).
- ADT and NRSS (no longer offered as a Waiver service) were also associated with a score of less than Achieving on the CREs at a high rate, each at 57 percent.
- NRSS and Residential Habilitation were also most likely to be associated with an MSR scored as Not Met.
- More providers in the sample offered Residential Habilitation, NRSS, Supported Living Coaching, and Companion services than any other Waiver service. Forty-nine percent offered Residential Habilitation services, and forty-one percent of providers offered NRSS.

Results in Table 6 on the following page show the percent of times services are associated with the lowest score, by element. This information is noted by the QICs during the consult. One or more service may be associated with the low score status per consult on each element. No service in the "Other" category was listed at or above 3 percent on any of the CORE elements.

- Residential Habilitation is most likely to be associated with the low score on each element, but is also offered by more providers than any other service.
- NRSS, Supported Living Coaching, and Companion services are also likely to be associated with each CORE Element as contributing to the lowest score status.
- Supported Employment and Transportation are fairly consistently least likely to be associated with the lowest score for each element.

[7] It is important to remember the sample consists of CORE service providers so the percent providing the CORE services is going to appear higher than it may be in the general provider population. This table does not include providers of services that are desk reviewed or Waiver Support Coordinators.

Table 6: Services Linked to the Lowest Score for each CORE Results Element
July 2004 - March 12, 2007

Result Element	ADT	Comp	IHSS	NRSS	PCA	Res Hab	Respite	SE	SLC	Trans	Other
1 Exercise rights	5.7%	9.9%	8.1%	14.6%	7.6%	19.7%	8.3%	4.4%	10.1%	4.3%	7.4%
2 Dignity and respect	7.4%	8.5%	7.8%	13.3%	6.4%	24.1%	7.2%	4.0%	9.6%	4.3%	7.3%
3 Personal privacy	5.8%	9.1%	7.8%	13.3%	7.0%	24.8%	7.6%	3.9%	9.9%	3.8%	7.1%
4 Participates in decisions	6.4%	10.0%	7.6%	15.9%	6.2%	22.9%	6.6%	4.4%	10.3%	3.1%	6.6%
5 Integrated settings	6.7%	10.9%	8.1%	16.4%	4.6%	24.2%	6.2%	3.3%	11.5%	3.1%	4.9%
6 Choice in services	6.1%	10.8%	7.8%	16.2%	6.1%	22.0%	6.7%	4.0%	10.4%	3.2%	6.7%
7 Abuse and neglect	5.6%	10.2%	8.2%	14.1%	7.9%	19.3%	8.7%	4.4%	10.4%	4.2%	7.1%
8 Individual is healthy	6.1%	9.0%	8.7%	13.0%	7.4%	23.1%	7.6%	4.0%	10.9%	3.1%	7.1%
9 Individual is safe	5.7%	9.0%	8.4%	14.1%	7.5%	22.9%	8.1%	3.4%	10.3%	3.4%	7.0%
10 Developing social roles	6.4%	11.2%	8.6%	16.1%	5.5%	21.9%	6.0%	3.9%	12.1%	2.7%	5.6%
11 Personal outcome approach	7.1%	7.5%	6.9%	17.7%	5.1%	23.9%	5.5%	4.8%	12.3%	3.0%	6.2%
12 Directs design of IP	9.3%	2.5%	2.1%	23.3%	1.6%	31.8%	2.4%	6.3%	15.3%	1.8%	3.5%
13 Strategies Facilitate outcomes	7.9%	5.0%	4.1%	21.5%	3.2%	28.3%	3.5%	5.5%	14.2%	2.3%	4.5%
14 Participates in review of IP	9.4%	2.5%	2.4%	24.2%	1.6%	31.6%	2.0%	6.4%	14.7%	1.8%	3.4%
15 Achieving desired outcomes	8.0%	6.7%	6.6%	19.7%	3.6%	26.1%	3.9%	5.5%	12.8%	2.2%	4.8%
16 Responsible beyond scope	5.6%	9.4%	8.2%	15.3%	6.2%	23.1%	6.2%	4.1%	11.6%	3.0%	7.3%
17 Provider disseminates info	6.1%	8.3%	7.4%	17.1%	6.0%	23.0%	6.6%	4.8%	10.7%	3.2%	6.8%
18 Satisfied with services	5.3%	10.8%	7.9%	15.1%	7.3%	21.0%	8.1%	4.1%	9.8%	3.5%	7.0%
All CREs	6.6%	8.6%	7.2%	16.5%	5.7%	23.7%	6.3%	4.5%	11.4%	3.2%	6.2%

Table 7 provides the same information as Table 6 but for the CORE Minimum Service Requirements. Projected Service Outcomes, Element 19, is only required for ADT, NRSS, Residential Habilitation, Supported Employment and Supported Living Coaching.

- Results are similar to the CREs in that Residential Habilitation and NRSS are most likely to be associated with a score of Not Met on the CORE MSRs on average.
- Supported Living Coaching is associated with a score of Not Met on the projected service outcomes almost 20 percent of the time it was scored as Not Met.
- Companion is relatively often (over 10%) associated with a Not Met on four of the MSRs.
- On average for the CORE services, Supported Employment and ADT are least often associated with a score of Not Met on the CORE MSRs.

Table 7: Services Linked to the Lowest Score for each CORE MSR Element
July 2004 - March 12, 2007

MSR Elements	ADT	Comp	IHSS	NRSS	PCA	Res Hab	Respite	SE	SLC	Trans	Other
19 Projected service outcomes	6.2%	0.5%	0.7%	32.9%	0.2%	32.5%	0.4%	6.6%	19.2%	0.3%	0.4%
20 Background screenings	5.2%	10.3%	10.0%	14.7%	9.5%	19.9%	9.3%	3.0%	7.9%	3.3%	6.9%
21 Individual-specific training	3.3%	11.7%	9.6%	15.2%	9.2%	18.2%	10.2%	3.7%	8.6%	2.9%	7.5%
22 Abuse and neglect training	3.6%	12.1%	9.4%	16.0%	9.8%	17.4%	10.8%	3.0%	7.5%	3.6%	6.8%
23 Provider authorized	5.4%	7.4%	7.6%	14.2%	6.8%	29.2%	5.7%	3.1%	7.4%	7.1%	6.2%
24 Service as authorized	5.5%	10.0%	10.0%	19.4%	7.0%	19.4%	5.5%	4.7%	9.2%	3.9%	5.5%
25 Required documentation	4.5%	7.6%	8.2%	20.5%	6.8%	20.7%	8.1%	4.4%	10.8%	1.9%	6.3%
All MSRs	4.7%	8.2%	7.6%	20.0%	6.8%	22.1%	7.3%	4.3%	10.9%	2.6%	5.5%

Regression Analysis Results

Regression results present the coefficients or odds ratios and the statistical significance for each variable in the regression models. The coefficient indicates the direction of the relationship between the independent and dependent variable as well as the size of the change in the dependent variable for a unit change in the independent variable. For example, the coefficient for number of services in Table 8 tells us that when the number of services a provider offers increases by one, the percent of

elements with a score less than Achieving or Not Met increases by 1.12. A positive coefficient indicates that increasing values of the independent variable result in increasing values of the dependent variable. A negative coefficient indicates that increasing values of the independent variable result in decreasing values of the dependent variable.

In the logistic regression models, the odds ratio tells us the percent change in the odds of receiving a lower score for a unit change in the independent variable. For example, for providers who offer Supported Living Coaching as compared to providers who do not provide Supported Living Coaching (Table 9), the odds of receiving a lower score on *Exercises Rights* decreases by 63 percent ((odds ratio .37 – 1) * 100 = percent change). The odds of receiving a lower score (less than Achieving) on CORE Element 2 is 77 percent ((1.77-1)*100) higher for providers of Residential Habilitation services than for providers who do not provide this service. The p-value reflects the statistical significance of the relationship between each variable and the dependent variable. A p-value of .05 or smaller indicates that there is a real impact of the variable on the dependent variable, and the chance of this being an error is five percent or less. Coefficients and odds ratios are presented in bold type (red) when the impact of the variable is statistically significant at a p-value of .05 or smaller.

Provider-type, Area size, and Waiver services are examined in the form of discrete or categorical variables. This means they are grouped into several categories, and the results are interpreted in relation to a reference group. Results for Solo providers are compared to the reference group, Agency providers. For example, data in Table 8 inform us that Solo providers are less likely than Agency providers to receiving Achieving on the CREs. The reference group for Area Size is Large-Size Areas, meaning Small and Medium Size Area results are in comparison to Large Areas. For each service rendered by the provider, the reference group is providers who do not offer the service.

Results for All CORE Elements, Results Elements (CRE), and MSRs

Table 8 presents results from three regression models that assess the impact of variables on the percent of all CORE elements with a lower score (less than Achieving (CREs) or Not Met (MSRs)). Results are shown from three different models: using All Elements (Total) together as the dependent variable, using only the CREs as the dependent variable, and using only the MSRs as the dependent variable. Coefficients presented in bold type were statistically significant at p=.05 or less and a negative coefficient indicates a smaller percent of elements with a lower score.

Table 8: Regression Coefficients for Impact of Services on All, CRE, and MSR CORE Elements *July 1, 2004 - March 12, 2007*			
	Total	**CREs**	**MSRs**
Solo Provider	**-9.01**	**-10.37**	**-5.55**
Small-Size Area	**3.90**	**2.20**	**8.28**
Medium-Size Area	**-3.86**	**-6.55**	**3.05**
In-Home Support Services	0.25	**-1.49**	**4.71**
Adult Day Training (ADT) Services	**-2.50**	0.05	**-9.08**
Non-Residential Support Services	**2.90**	**2.30**	**4.39**
Residential Habilitation	**5.20**	**8.20**	**-2.55**
Supported Employment Services	**1.53**	**2.15**	-0.09
Supported Living Coaching Services	**-7.75**	**-8.68**	**-5.35**
Other Services	**1.21**	**1.27**	1.06
Number of Services	**1.12**	**1.16**	**1.01**

Results from Table 8 show, that when controlling for all variables in the equation:

- Solo providers were more likely to score Achieving on the CREs and Met on the MSRs than agency providers. The percent of elements with a lower score was consistently lower for Solo than for Agency providers for both the CORE Results Elements and the MSRs.
- For both CRE and MSR elements, providers in Small-size Areas did not do as well as providers in Large Areas—with a higher percent of elements with a lower score.
- Providers in Medium-sized Areas appear to do better than providers in Large Areas on the CREs but not as well on the MSRs. Compared to providers in Large-size Areas, providers in Medium-size Areas had a lower percent of CREs scored as less than Achieving, and a higher percent of MSRs scored as Not Met.
- Providers of ADT did better on the MSRs than other providers in the sample.
- Providers who offered Non-Residential Support Services (NRSS) were less likely to score Achieving on the CREs or Met on the MSRs than other providers of CORE services. However, this service has been discontinued as part of the HCBS waivers.
- Providers of In-Home Support Services (IHSS) were less likely to score the MSRs as Met than other providers of CORE services.
- Providers of Residential Habilitation services were less likely than other providers to score Achieving on the CREs, but appear to be more likely to score the MSRs as Met.
- Providers of Supported Employment were less likely to score CREs as Achieving.

- The more services a provider supplies, the higher the percent of elements with a lower score, for both CREs and MSRs. Providing a greater number of services appears to have a somewhat negative impact on provider performance.

Results for Individual CORE Elements (Logistic Regression models)

The following table presents results from 18 regression models which assess the impact of the independent variables on the likelihood of receiving a score of less than achieving for each CORE Results Element. An odds ratio of less than one indicates the impact is negative and an odds ratio of greater than one indicates a positive impact. A negative odds ratio indicates the variable of interest is associated with a lower likelihood of receiving a lower score (less than Achieving) for that element. Odds ratios closer to one are weaker relationships, an odds ratio of one would mean the odds are the same. Ratios in bold indicate significance at p=.05 or less.

Results presented in Table 9 indicate:

- Solo providers performed better than Agencies on almost every CRE. They were less likely than Agency providers to receive a lower score for all but two CORE Results elements.
- Providers in Small-size Areas, compared to Large Areas, were much less likely to score Achieving in two specific areas: to ensure individuals can exercise their rights and to ensure individuals participate in the review of their Implementation Plan.
- Providers in Small Areas were more likely than providers in Large Areas to receive a score of Achieving regarding individuals' personal privacy.
- Providers in Medium-size Areas were more likely than providers in Large Areas to receive a score of Achieving on half of the CREs. Large Area providers performed relatively better in terms of providing services in integrated environments and facilitating outcomes.
- Providers of In-Home Support Services were less likely to receive a score of Achieving on only one CRE, compared to providers who do not render this service. They were less likely to obtain Achieving on the element that ensures systems are in place to educate individuals on abuse, neglect and exploitation and ensure they are free from abuse, neglect and exploitation.
- Providers of Adult Day Training were less likely to receive a score of Achieving for Dignity and Respect than were providers who did not provide this service. They were more likely to receive a score of Achieving in taking responsibility for the individual beyond the mission and scope of this service and in serving individuals who are satisfied with their services.
- Providers of Residential Habilitation were less likely to receive a score of Achieving on 11 of the 18 CREs: Dignity and Respect, Personal Privacy, Participates in Decisions, Integrated Settings, Choice in Services, Healthy, Personal Outcome Approach, Participates in Review

of the IP, Responsible Beyond the Mission/Scope of the Service, Disseminates Information, and Satisfied with Services than are providers who do not supply these services. They showed no significant relationship indicating they were more likely to obtain a score of Achieving on any CREs.

Table 9: Odds Ratios for Impact of Services on 18 CORE Results Elements
July 1, 2004 - March 12, 2007

Results Element	Solo	Small Area	Medium Area	IHSS	ADT	NRSS	Res Hab	SE	SLC	Other	# of Srvs
1 Exercise rights	**0.49**	**1.98**	0.83	0.98	0.78	0.95	1.19	1.30	**0.37**	1.20	1.14
2 Dignity and respect	**0.54**	1.00	**0.46**	1.05	**1.82**	0.95	**1.77**	0.86	0.83	0.88	1.06
3 Personal privacy	1.03	**0.69**	**0.32**	0.95	1.37	0.89	**2.27**	**0.67**	0.84	0.89	1.10
4 Participates in decisions	**0.54**	1.13	**0.53**	0.77	0.83	1.16	**1.70**	**1.70**	**0.42**	**1.51**	1.08
5 Integrated settings	**0.55**	1.24	**1.55**	1.18	0.88	**0.73**	**2.05**	1.06	**0.49**	1.14	1.14
6 Choice in services	**0.56**	1.20	0.80	0.86	0.74	0.98	**1.64**	1.14	**0.45**	1.22	**1.19**
7 Abuse and neglect	**0.56**	**1.57**	0.97	**1.41**	0.75	0.98	1.05	1.22	**0.52**	0.96	1.06
8 Individual is healthy	**0.62**	1.40	**0.42**	1.14	1.13	0.91	**1.49**	0.87	0.87	0.88	1.10
9 Individual is safe	**0.60**	1.06	**0.29**	1.10	1.12	0.96	1.12	**0.66**	**0.63**	0.87	**1.14**
10 Developing social roles	**0.43**	1.52	**0.72**	0.88	0.73	**0.60**	1.38	0.97	**0.49**	1.03	**1.24**
11 Personal outcome approach	**0.42**	**1.67**	1.19	0.95	0.89	0.98	**1.65**	1.22	**0.49**	1.14	1.07
12 Directs design of IP	**0.55**	**2.01**	**0.66**	1.27	0.90	1.09	1.41	1.45	**0.38**	1.18	1.06
13 Strategies facilitate outcomes	**0.62**	1.34	**1.36**	0.87	0.87	1.09	1.35	0.99	**0.43**	0.92	**1.16**
14 Participates in review of IP	0.81	1.06	0.80	1.42	1.46	**1.72**	**2.47**	1.42	**0.43**	1.35	0.95
15 Achieving desired outcomes	**0.62**	0.95	**0.75**	0.91	1.21	1.25	1.34	1.34	**0.49**	0.80	**1.15**
16 Responsible beyond scope	**0.69**	1.04	0.92	0.86	**0.68**	1.03	**1.40**	1.03	**0.64**	0.84	1.11
17 Provider disseminates info	**0.70**	0.94	0.97	1.19	0.88	**1.38**	**1.73**	**1.63**	**0.56**	1.15	0.99
18 Satisfied with services	**0.71**	0.99	**0.59**	1.16	**0.62**	1.09	**1.42**	1.06	**0.57**	**1.45**	1.03

- Providers of Supported Employment were more likely than are providers who do not offer this service to receive a lower score on only two elements: Participates in Decisions and Disseminates Information. However, they appear to do better in terms of supporting individuals to have personal privacy and ensuring individuals are safe.
- Providers of Supported Living Coaching were more likely than providers who did not provide this service to receive a score of Achieving on 15 of the 18 CREs.
- Offering a greater number of services is significantly linked to a higher likelihood of receiving a lower score on five CREs: Choice in Services, Individual is Safe, developing Social Roles, Strategies Facilitate Outcomes, and Achieving Desired Outcomes.

Table 10 presents the odds ratios for each independent variable and the seven Minimum Service Requirement Elements. Results indicate:

- Solo providers were less likely to score Not Met on Background Screenings and training elements.
- Providers in Small versus Large Areas were more likely to score Not Met on four of the seven MSRs: projected service outcomes, background screening, abuse and neglect training and maintaining documentation required for billing.
- Providers in Medium versus Large Areas were over twice as likely to score Not Met on projected service outcomes and required documentation for billing, but less likely to score Not Met on training requirements.
- IHSS providers were more likely to score Not Met on Background Screening, abuse and neglect training and required documentation.
- ADT providers appear to perform well on the process elements compared to other service providers. They were less likely to score Not Met on five of the seven MSRs than providers who did not render this service.
- Providers who offered Residential Habilitation were less likely to score Not Met in areas of training.
- Supported Living Coaching providers also performed relatively well on the process elements. There were less likely to score Not Met on four of the seven CORE MSRs.
- Offering a greater number of services appears to impact only one MSR. Providers with more services were more likely to score Not Met on training specific to the needs and characteristics of the individuals.

Table 10: Odds Ratios for Impact of Services on 7 MSR Elements
July 1, 2004 - March 12, 2007

MSR Elements	Solo	Small Area	Medium Area	IHSS	ADT	NRSS	Res Hab	SE	SLC	Other	# of Srvs
19 Projected Service Outcomes	0.96	**1.80**	**2.03**	1.08	**0.51**	**2.08**	1.05	1.05	0.95	1.09	0.96
20 Background screenings	**0.39**	**1.93**	1.19	**1.56**	0.85	1.14	0.88	0.87	**0.66**	1.23	1.03
21 Individual-specific training	**0.66**	1.14	**0.74**	1.24	**0.38**	1.08	**0.64**	1.02	**0.60**	0.77	**1.12**
22 Abuse and neglect training	**0.57**	**1.68**	**0.75**	**1.69**	**0.60**	1.08	**0.60**	0.84	**0.61**	1.01	1.04
23 Provider authorized	1.30	1.19	0.80	1.36	**0.53**	0.87	1.43	1.22	0.72	1.53	1.00
24 Bill as authorized	1.02	1.16	0.83	1.40	0.91	1.03	0.94	0.99	0.85	1.19	1.11
25 Required documentation	0.80	**1.92**	**2.10**	**1.57**	**0.61**	**1.31**	0.86	1.13	**0.60**	1.08	1.09

Results for Service Combinations for All CORE Elements, CREs, and MSRs

In this section we present results for combinations of services and the impact that providing the specific services in combination has on the percent of elements scored as less than Achieving or as Not Met. Table 11 shows results from three regression models that assess the impact of the various Waiver service combinations. Results in bold were significant at p=.05 or less. A negative impact indicates a smaller percent of elements with a lower score--scored as less than Achieving or Not Met.

Results from Table 11 show:

- Three service combinations appear to enhance the provider's performance on both the CREs and the MSRs: NRSS with ADT, ADT with IHSS, and Supported Employment with Residential Habilitation. Providers who offered these were more likely to have a higher percent of CREs scored as Achieving and MSRs scored as Met than providers who did not offer these combinations of services.
- Three service combinations reflected better performance on the CORE Results Elements only, and each included Supported Living Coaching: SLC when offered in combination with NRSS, Supported Employment or IHSS. Providers who offered these service combinations were more likely to have a greater percent of the CREs scored as Achieving. However, SLC with IHSS providers were less likely to score Met on the MSRs, while the other two combinations did not impact performance on the process elements.

- Three service combinations resulted in a reduced likelihood of receiving an Achieving on the CREs: Adult Day Training and either Residential Habilitation or Supported Living Coaching, and Supported Employment with IHSS. However, providers who offered ADT with SLC were more likely to score Met on the MSRs.

Table 11: Regression Coefficients for Service Combinations on All, CRE, and MSR CORE Elements
July 2004 - March 12, 2007

	Total	CREs	MSRs
Solo Provider	**-11.21**	**-14.55**	**-2.61**
Small-Size Area	**4.90**	**3.54**	**8.36**
Medium-Size Area	**-4.98**	**-7.90**	**2.50**
NRSS/ResHab	**5.73**	**7.19**	**2.00**
NRSS/SLC	**-1.67**	**-2.72**	1.04
NRSS/IHSS	**3.32**	**3.29**	**3.32**
NRSS/ADT	**-4.52**	**-4.25**	**-5.21**
ADT/ResHab	**7.19**	**9.05**	2.39
ADT/SLC	-1.29	**2.73**	**-11.62**
ADT/IHSS	**-8.78**	**-8.80**	**-8.73**
SE/ResHab	**-4.17**	**-3.79**	**-5.17**
SE/SLC	**-2.13**	**-2.79**	-0.44
SE/IHSS	**5.71**	**7.29**	1.63
SLC/IHSS	0.01	**-1.79**	**4.68**
Other non-CORE Services	**2.25**	**2.48**	**1.68**
Number of Services	**0.76**	**0.56**	**1.27**

Logistic Regression Results for Service Combinations for Individual CORE Elements

The following two tables present results from twenty-five logistic regression models which assess the impact of Waiver service combinations on the likelihood of receiving a lower score (less than Achieving or Not Met) for each CORE element. To simplify the presentation we do not present results for the control variables (Type of provider, Area Size, and other services). Also, because the Medicaid Waiver no longer provides NRSS, we do not present results from combinations that included this service.[8] Odds ratios in bold were statistically significant at p=.05 or less.

Information in Table 12 shows, where significant, the difference between providers who render the specific combination of services, and those who do not. Results indicate the following:

[8] Results are available upon request.

- A combination of ADT and IHSS appears to be beneficial on five of the 18 CREs, more than for any other combination of services: ensuring individuals can exercise their rights, dignity and respect, providing services in integrated settings, ensuring the individuals participate in the design and review of their IP, and being responsible for the individual beyond the mission or scope of the service.
- However, ADT in combination with Residential Habilitation resulted in a much smaller likelihood of receiving Achieving on four of the CREs: dignity and respect, ensuring individuals have personal privacy, the individuals are healthy, and they participates in the review of the Implementation Plan.
- Providers who offered both Supported Employment and IHSS were much less likely to receive Achieving on three CRSs than were providers who did not supply this combination services: providing services in integrated settings, ensuring the individuals participate in the review of their implementation plan, and ensuring individuals are satisfied with services.
- Two CREs were significantly impacted when providers offered both Supported Living Coaching and IHSS. They were more likely to receive a score of Achieving in allowing individuals to participate in the review of their Implementation Plan and achieving desired results.
- Providers who offered both Supported Employment and Residential Habilitation services were more likely to receive Achieving for ensuring personal privacy than were providers who did not supply this combination of services.
- Supported Employment in combination with Supported Living Coaching impacted one CRE. These providers were more likely to score Achieving in allowing individual to participate in the design and review of their Implementation Plan.
- Ten of the CREs were not significantly impacted by any combination of services in the model and Element 14, review of the IP, was impacted more often than any other CRE.

Table 12: Odds Ratios for Service Combinations on 18 CORE Results Elements
July 2004 - March 12, 2007

	ADT/ ResHab	ADT/ SLC	ADT/ IHSS	SE/ ResHab	SE/ SLC	SE/ IHSS	SLC/ IHSS	# of Srvs
1 Exercise rights	2.32	1.43	**0.64**	0.26	0.88	1.65	0.66	**1.20**
2 Dignity and respect	**3.12**	1.71	**0.30**	0.51	0.81	1.96	1.14	1.01
3 Personal privacy	**3.19**	1.21	0.85	**0.39**	0.87	1.24	1.49	1.02
4 Participates in decisions	0.94	1.67	0.48	0.86	1.04	1.39	0.59	1.07
5 Integrated settings	2.02	2.00	**0.24**	1.10	0.57	**2.94**	1.06	1.11
6 Choice in services	1.18	0.57	0.97	1.88	0.77	1.79	0.74	1.13
7 Abuse and neglect	1.34	0.93	0.71	0.64	0.97	1.15	1.19	1.07
8 Individual is healthy	**3.36**	0.72	1.02	0.42	1.24	0.66	1.35	1.08
9 Individual is safe	1.32	0.95	0.86	0.85	0.60	1.38	1.00	1.10
10 Developing social roles	1.16	1.54	0.79	1.12	0.82	0.85	0.96	**1.24**
11 Personal outcome approach	1.21	0.73	0.41	2.04	0.80	2.10	0.74	1.04
12 Directs design of IP	1.94	1.17	0.45	0.75	1.04	1.77	0.75	1.03
13 Strategies facilitate outcomes	0.97	1.63	0.53	1.18	0.66	1.28	0.69	1.11
14 Participates in review of IP	**5.18**	2.35	**0.25**	0.97	**0.39**	**4.82**	**0.37**	0.97
15 Achieving desired outcomes	2.03	1.62	0.43	0.94	0.78	2.04	**0.52**	1.11
16 Responsible beyond scope	1.63	1.31	**0.32**	0.87	0.75	1.74	0.74	1.08
17 Provider disseminates info	1.86	1.19	0.67	0.74	1.12	1.41	0.74	0.98
18 Satisfied with services	1.47	0.84	0.69	0.93	0.72	**2.39**	0.90	1.00

Table 13 presents results for the combination of services and their impact on the likelihood of receiving a score of Not Met on each of the seven CORE MSR Elements. Results indicate if there is a significant difference between providers who render the specific combination of services and those who do not.

- Providers who rendered ADT and Supported Living Coaching in combination were more likely to score Met on the projected service outcomes and maintaining documentation required for billing. ADT in combination with IHSS appears to be beneficial in terms of obtaining required training that is specific to the needs of the individual.
- Supported Employment was tested in combination with three different services and only one combination resulted in one significant relationship. This service in combination with Residential Habilitation appears to decrease the likelihood the provider will have necessary documentation to show authorization to provide the service.
- Providers who offered both Supported Living Coaching and IHSS were less likely to score Met for Elements 21 and 24, training specific to the needs of the individual and providing the service as authorized, than were providers who did not supply this combination services. However, they were more likely to score Met on the projected service outcomes element.
- Data also indicate that an increased number of services is likely to result in a score of Not Met for Elements 21, 24, and 25: training specific to the individual, providing the service as authorized and maintaining documentation required for billing.

Table 13: Odds Ratios for Service Combinations on 7 CORE MSR Elements
July 2004 - March 12, 2007

	ADT/ ResHab	ADT/ SLC	ADT/ IHSS	SE/ ResHab	SE/ SLC	SE/ IHSS	SLC/ IHSS	# of Srvs
19 Projected Service Outcomes	1.34	**0.36**	0.88	0.60	0.91	1.93	**0.53**	0.96
20 Background screenings	1.73	0.50	0.66	0.64	0.94	1.13	1.26	1.04
21 Training specific to individual	0.60	0.92	**0.23**	0.74	0.91	0.97	**1.62**	**1.15**
22 Abuse and neglect training	0.76	0.44	1.15	0.60	0.63	1.43	1.50	1.10
23 Provider authorized	1.09	0.34	0.61	**4.29**	0.85	0.75	1.33	0.99
24 Service as authorized	1.59	0.49	0.80	0.65	1.61	0.60	**2.53**	**1.15**
25 Required documentation	1.33	**0.48**	0.53	0.70	1.12	0.98	1.29	**1.11**

Discussion and Recommendations

The purpose of this study is to assess the impact of the type and number of DD and FSL HCBS Waiver services on the quality of services offered by providers as indicated by the CORE elements. The impact of seven Waiver service categories, the number of Waiver services, and a set of demographic characteristics on the likelihood of receiving a score of less than Achieving or Not Met on CORE elements is examined using regression analysis.

NRSS and Residential Habilitation were particularly important in understanding the link between service provision and scores on CORE elements. Results indicate that providers who offer NRSS are more likely than providers who do not offer this service to have a higher percent of CREs scored as less than Achieving and Not Met on the MSR elements, and these providers are linked to a higher likelihood of receiving less than Achieving or Not Met on four of the twenty-five CORE elements. However, this service is no longer offered through the Medicaid Waiver programs.

Providers of Residential Habilitation services are more likely than their counterparts to have a higher percent of CREs scored as less than Achieving, and are linked to a higher likelihood of receiving less than Achieving on eleven of the 18 CORE Results elements. Residential Habilitation providers were also more likely to be associated with CREs that scored Emerging. In combination with ADT, providers are less likely to score Achieving on the CREs, but in combination with Supported Living they are more likely to score Achieving and more likely to score MSRs at Met. In addition, results from various Quality Improvement Studies and reports suggest that individuals living in group homes have fewer outcomes in their lives than individuals in family or independent home settings.[9]

Recommendation 1: Results from this and other studies indicate a systemic problem in Residential Habilitation may exist. APD has recently started unannounced visits to group homes across the state. Results from this study suggest these visits should continue for all group homes on an ongoing basis. APD should work with the providers and Delmarva, when needed, to develop a technical assistance plan based on the most recent Quality Assurance Review, to help Residential Habilitation providers better their service delivery systems.

Recommendation 2: Combining Residential Habilitation with Supported Employment appears to help providers improve their service delivery systems, particularly in providing personal privacy for residents. APD should encourage providers of

[9] See studies posted on the Delmarva Website: http://www.dfmc-florida.org/public/quality_improvement_studies/index.aspx.

Residential Habilitation to also offer Supported Employment, and to help move their residents from ADT to employment in the community with an adequate amount of support to do so.

Recommendation 3: Because results from this and other studies continue to reflect issues in terms of provider performance as well as poorer quality of life for individuals living in a group home, APD and AHCA should strive to move individuals to independent and supported living facilities.

Results for providers of Residential Habilitation and providers of ADT indicate that having quality assurance in place does not necessarily translate to organizational systems that ensure outcomes are achieved for individuals. Providers of Residential Habilitation were less likely to score Achieving on the CREs but more likely to score Met on the MSRs, and this was particularly evident for training requirements. ADT providers were neither more nor less likely to score Achieving on the CREs but were more likely to score Met on five of the seven MSRs. These results are similar to findings in an earlier Quality Improvement Study, showing that documentation of policies and procedures did not improve the providers' capacity to generate outcomes for individuals, but that implementation of those policies and procedures did.[10]

Recommendation 4: Results for Residential Habilitation and IHSS provide evidence that while providers may do well in certain process/procedural areas (MSRs), this does not always translate to organizational systems that ensure results are generated for individuals being served (CREs). While documentation and process/policy is important, APD should reinforce to providers they are only a base from which to continue to develop systems that help implement those policies and generate outcomes for individuals. APD should continue to emphasize an outcomes-based process that helps providers build outcome-oriented systems to ensure person-directed services are rendered.

Providers of In-Home Support Services were less likely than providers who do not offer this service to receive Achieving on ensuring individuals are free from abuse, neglect and exploitation. This may not mean individuals are more likely to be suffering from abuse but rather that these providers are not as likely as others to ensure the proper education and training is in place for all individuals. No other service or combination of services reflected this result. IHSS providers were also more likely to receive a Not Met on Abuse and Neglect Training. Because these services are provided to

[10] See the Element to PPR comparison study on the Delmarva website (http://www.dfmc-florida.org/public/quality_improvement_studies/2004_2005.aspx).

individuals who live independently in their own home, the providers are subject to less immediate oversight of service provision than are providers who render services within a residential setting that includes other residents or family members. This may help to explain the lower scores for the CORE element measuring organizational systems for providing information and education about abuse and neglect and ensuring individuals are free from abuse, neglect and exploitation. In addition, it is possible the lower scores for Element 7 (Abuse and Neglect) are the result of a lack of training as indicated by the lower scores on Abuse and Neglect Training element. IHSS providers were also less likely to score Met for background screening and billing documentation.

Recommendation 5: Area APD offices should help ensure providers of IHSS have systems in place to educate individuals on abuse and neglect and to ensure they know the appropriate reporting procedures. Targeted training to providers who render this service is recommended.

Recommendation 6: Local APD offices should consider strategies for ensuring that In-Home Support Service providers receive the required abuse and neglect training, as well as meet the other minimum service requirements. Results for these are reported to the local APD office after each Delmarva Review (Provider Reports). APD should ensure they have a system in place to review each report and address inadequacies in terms of abuse and neglect training and/or organizational systems to prevent abuse and neglect as a top priority.

Providers of Adult-Day Training services are less likely to receive Achieving on the CORE element that measures the extent to which they ensure each individual is treated with dignity and respect.

Recommendation 7: APD should construct a set of guidelines for providers of Adult Day Training services that outline strategies for implementing services in a manner that is respectful of the rights of all waiver recipients. A procedure should be in place in each local APD office to provide oversight and assistance to ADT providers who score this element as Emerging or Not Emerging. This is reported to the Area office on the Delmarva Provider Reports following each CORE consult.

A very positive outcome of this study is that providers who render Supported Living Coaching were more likely to receive an evaluation of Achieving on 15 of the 18 CORE Results Elements, and more likely to score Met on four of the seven MSRs, when compared to providers who did not provide this service. It is not clear why this may be true. Perhaps because Supported Living Coaching has a caseload cap of 10 individuals, SLC providers are better able to provide individualized supports and services.

Recommendation 8: Delmarva and APD should meet informally and discuss the organizational systems that appear to work well for providers of Supported Living

Coaching in an effort to determine what practices, systemic policies, or overarching procedures may be helpful to providers of other services.

Results from this study suggest solo providers of CORE services consistently perform better than agency providers, and this is true for 16 of the 18 CREs and three of the seven MSRs, which includes compliance with background screening and training requirements. Results reflecting these findings have been reported in various other quarterly and annual reports. However, this is the first study showing a statistically significant difference when controlling for various other factors that might impact providers' systems. It is not clear why solo providers are more likely to have CORE elements evaluated as Achieving or Met. Perhaps the higher caseload for agencies providers contributes to less consistency in service delivery systems and less oversight of documentation and minimum requirements. Perhaps it is easier for solo providers to get to know the people they serve and to render individualized supports, which is an integral aspect of the CORE evaluation. It is clear, however, that close to 80 percent of CORE providers are agencies.

Recommendation 9: Because solo CORE providers have consistently performed better, on average, than agency providers, we recommend the quality management work group that has been developed by APD address this phenomenon. The work group should outline a procedure to implement technical assistance specific to the problems faced by Agency providers. Delmarva should be included in this work group as needed.

In this study we found that providers who offered a greater number of services were less likely than providers who offered fewer services to score Achieving on five of the CREs, and less likely to score Met on training specific to the individual's needs and characteristics. These results suggest providers may reach an optimal number of services that can be provided before suffering a decline in the quality of services. The CORE elements affected suggest providers' ability to enhance and support outcomes as well as to offer choice to individuals is compromised when the optimal number of services is surpassed. However, results do not indicate the number of services that can be offered before quality of services provided begins to suffer. The number of people served may also impact this result as well as the potential interaction between the number of services provided and whether the provider works alone or with an agency. Because this was not the focus of this study, and the number of services was used as a control variable, we have not explored this relationship further. However, the quality improvement study that will examine provider performance over time will examine more closely the impact of the number of services offered on provider performance.

Attachment 1

HCBS Waiver Services

Adult Day Training
Behavior Assistant Services
Consumable Medical Supplies
Environmental Accessibility Adaptations
Medication Review
Personal Care Assistance
Private Duty Nursing
Residential Nursing Services
Skilled Nursing
Speech Therapy
Supported Living Coaching
Adult Dental Services
Chore Services
Dietician Services
Homemaker Services
Non-Residential Support Services
Personal Emergency Response System
Psychological Assessment
Respiratory Therapy
Special Medical Home Care
Support Coordination
Therapeutic Massage
Behavior Analysis Services
Companion Services
Durable Medical Equipment
In-Home Support Services
Occupational Therapy
Physical Therapy
Residential Habilitation Services
Respite Care
Specialized Mental Health Services
Supported Employment Services
Transportation Services

Attachment 2
Description of Collaborative Outcomes Review and Enhancement (CORE) Elements

CORE Results Elements

1 The individual is educated and assisted by the provider to fully exercise rights.

2 The individual is treated with dignity and respect.

3 The individual's personal privacy is observed.

4 The individual actively participates in decisions concerning his or her life.

5 Individual is provided with opportunities to receive services in the most integrated settings appropriate to his/her need and choice.

6 Individual is afforded choice or services and supports.

7 Individual is free from abuse, neglect and exploitation.

8 Individual is healthy.

9 Individual is safe.

10 The individual is developing desired social roles that are of value to the individual.

11 Personal outcome approach is used to design person-centered supports, to enhance service delivery, and assist in achieving personal outcomes.

12 Individual directs the design of implementation plan, identifying needed skills and strategies to accomplish personal desired goals.

13 The provider organizes its resources, strategies and interventions to facilitate each individual's outcome achievement.

14 The individual participates in the routine review of his/her implementation plan and directs changes desired to assure outcomes/goals are met.

15 Individual is achieving his/her desired outcomes/goals or receiving supports that demonstrate progress toward personal outcomes/goals.

16 Provider takes responsibility for addressing individual outcomes beyond the provider's mission/scope through referral, advocacy or consultation.

17 Provider actively coordinates the dissemination of information in order to promote a cohesive person centered planning and support process.

18 Individual is satisfied with services.

Minimum Service Requirements

19 Provider meets service specific projected service outcome(s) for each service.

20 Level 2 background screenings and 5 year re-screenings are completed for all direct service employees.

21 Providers/staff receive training specific to needs/characteristics of individual to successfully provide services/supports.

22 Proof of required training in abuse and neglect and required reporting procedures are available.

23 Provider is authorized to provide the service.

24 The service is provided and billed as authorized.

25 Provider maintains required documentation.