

# **Florida Statewide Quality Assurance Program**

Quality Improvement Study  
Contract Year 8 (July 2008 – June 2009)

## **Impact of Social Capital as Measured by Eight Personal Outcome Measures Items**

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

In this study we examine the impact of social capital on various health and quality of life indicators for individuals receiving services through the Florida Developmental Disabilities and Family and Supported Living Home and Community-Based Services Medicaid waivers. Social capital is defined by the Council on Quality and Leadership (CQL), using eight of 25 outcome measures from the Personal Outcome Measures interviews, including items that measure if individuals have friends and intimate relationships, natural supports, community connections, and live in integrated environments. Delmarva's Quality Improvement Consultants are trained on the Personal Outcome Measures (POM) interview process and protocols and pass annual reliability, administered by CQL.

Face-to-face POM interviews are conducted as part of a Person Centered Review which also includes a Health and Behavioral Assessment and interview with the individual's Waiver Support Coordinator, all components of the Waiver Support Coordinator Consultation (WiSCC). Data were obtained from 2,453 POMs and Health and Behavioral Assessments completed between January 2007 and December 2008. In addition, the overall WSC's performance level was taken from the WiSCC completed during the same time period.

Health indicators include whether or not, during the past year, the individual was admitted to a hospital, visited an emergency room, had health problems, or reports health is better than during the previous year. Quality of life indicators include the 17 POM outcome items not used to construct the social capital indicator, including measures of choice, privacy, rights, and an individual's ability to use the environment. Results are summarized as follows:

- Social capital had little impact on indicators of health. However, individuals with a higher performing WSC appeared to have better health than in the previous year, were more likely to have the best possible health and be free from abuse, neglect, and exploitation.
- Having higher levels of social capital was associated with a greater number of POM present.
- All six elements of choice were positively impacted when individuals had higher levels of social capital (People choose personal goals, where to live, where to work, daily routine, services, and when to share personal information).
- Foundational outcomes indicating individuals are treated fairly, exercise their rights, and experience continuity and security were positively impacted with higher levels of social capital. Being safe was also positively impacted but with a slightly higher degree of error ( $p=0.055$ ).
- Measures of satisfaction do not appear to be impacted by the level of social capital an individual has (satisfied with services or satisfied with personal life situations).

- Individuals with low levels of social capital were less likely to have privacy, realize personal goals, or use their environment.

These and other results are discussed in the following study. Recommendations are provided to the state, for APD to:

- Develop a training session or curriculum to address the types of supports needed to help individuals develop friends, social roles, community ties, and natural support networks (social capital).
- Consider a more in-depth study of social capital that examines whether some types of social capital (family vs. friends vs. community members) are more important than others in improving personal outcomes, including information on the number/percent of individuals without family involvement in their lives.
- Ensure WSCs who are not higher performing, scoring Achieving or Implementing, are attending proper training and receiving technical support as needed to help improve their service deliveries systems.
- Consider a study that examines emergency room treatments of individuals with a developmental disability to determine the source of the health problem driving the visit.

## Introduction

Since 2001, Delmarva Foundation has provided Quality Assurance/Quality Improvement (QA/QI) for services provided through the Florida Developmental Disabilities (DD) or Family and Supported Living (FSL) Medicaid waivers, administered through the Agency for Persons with Disabilities.<sup>1</sup> Through this program, the Florida Statewide Quality Assurance Program (FSQAP), Delmarva Quality Improvement Consultants (QIC) monitor providers who offer Home and Community-Based Services to individuals with developmental disabilities. The process is consultative and begins by interviewing individuals receiving services and includes onsite observations, interviews with providers and other staff, interviews with other relevant family members and/or guardians, and record reviews.

All individuals receiving a waiver service have a Waiver Support Coordinator (WSC) to help them navigate the system and ensure they receive all necessary services in a way that helps them achieve their desired goals and outcomes. Delmarva monitors WSCs with the Waiver Support Coordinator Consultation (WiSCC) process, which includes a Person Centered Review (PCR). The PCR is comprised of an interview with individuals receiving services from the WSC, as well as a health and behavioral assessment survey. Delmarva partners with the Council on Quality and Leadership (CQL) who developed the Personal Outcome Measures (POM) instrument and interview process. CQL provides training, oversight, and annual reliability testing for all consultants who administer the POM interview. Delmarva's Nurse Administrator created the Health and Behavioral Assessment Survey from field experience, and also information contained in the Health Risk Screening Tool.<sup>2</sup>

During the POM interview, individuals are assessed on 25 different outcomes to determine if the outcome is present and if the individual has supports to help achieve the outcome.<sup>3</sup> CQL identified seven of the outcomes as indicators that help measure the social capital of individuals, by helping to determine the extent to which they have built social networks with family and friends and in their communities (discussed in the following section). The purpose of this study is to determine if an increased amount of social capital, as measured by the POM outcome elements, helps individuals make choices, improve their health, or generally improve other outcomes in their lives.

## Background

The concept of social capital is distinguished from other forms of capital such as economic, human, or political capital, and involves the extent to which individuals have various types of social networks

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<sup>1</sup> The contract is with the Agency for Health Care Administration and the Medicaid waivers are administered by the Agency for Persons with Disabilities.

<sup>2</sup> See <http://www.hrsonline.com/home.jsp> for more information on the HRST. Attachment 1 is the Health and Behavioral Assessment Survey.

<sup>3</sup> See Attachment 1 for a list of outcomes.

and supports in their lives. Definitions also seek to distinguish between social capital of peers, networks of equal friends and families in the community, and other networks that help vertical or upward movement within or between communities. Social support, community integration and social cohesion are incorporated into most concepts of social capital.<sup>4</sup> Basic to social capital is the concept of supporting social networks people have available to them to help improve their life's circumstances. According to Adam and Roncevic:<sup>5</sup>

“Despite problems with its definition as well as its operationalization, and despite its (almost) metaphorical character, social capital has facilitated a series of very important empirical investigations and theoretical debates which have stimulated reconsideration of the significance of human relations, of networks, of organizational forms for the quality of life and of developmental performance”.

The value of social capital for individuals lies in the social support they receive, not just from friends and family members, but from neighbors, friends of neighbors (other people's networks), and co-workers. We know it is not always who you are, but who you know, that helps you get the job. Improved social networks can help individuals navigate health care systems, find work, identify educational opportunities, or get a promotion. For individuals with a developmental disability, improved social networks may help them live more independently, improve their health, increase their ability to choose what they want for themselves in their lives, and generally improve their quality of life.

The Council on Quality and Leadership has identified eight Personal Outcome Measure indicators to measure some aspects of social capital. The degree to which individuals have a close circle of supports is identified by the presence of intimate relationships, friends, connections to natural supports, participation in the life of the community, and feeling respected. According to CQL these five personal outcomes are “the glue that holds us together”. The presence of these help provide cohesiveness and social support to individuals. Community inter-connections are present if the individuals live in integrated communities, interact with other members of the community or perform different social roles. By interacting with the community, individuals have increased chances of developing broader social networks that may help them move beyond their current life circumstances.

In this study we use the CQL definition of social capital and explore the extent to which having a high degree of social capital may help improve the quality of life for individuals. The impact of social

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<sup>4</sup> Benefits and Importance of Social Capital. [Http://www.gnudung.com/literature/genefits.html](http://www.gnudung.com/literature/genefits.html).

<sup>5</sup> *Social Capital: Recent Debates and Research Trends*, Frane Adam and Borut Roncevic, Social Science Information, 2003, p 177.

capital on various health outcomes as well as other POM outcomes is explored. Health indicators are measured by whether or not an individual has been admitted to the hospital or treated in an emergency room during the past year, if the individual self reported better health at the time of the interview than over the past year, and if the individual has any health problems. The extent to which individuals with social capital have an improved quality of life in other areas is examined through the use of the other personal outcomes as defined by CQL in the POM process, including a focus on choice and the foundation outcomes.<sup>6</sup>

## Data

Two individuals were randomly selected from the caseload of every WSC who receives a review (WiSCC), and participated in a Person Center Review (PCR).<sup>7</sup> Data for this study were taken from the results of 2,453 PCRs completed between January 2007 and December 2008. Results from the POM interviews as well as the Health and Behavioral Assessment were used in the analysis. In addition, the overall WiSCC results are used as an indicator of the WSC's performance level. Medicaid claims data are used to determine the type and number of services each individual received during the 12 month period prior to the interview date.

## Social Capital

CQL identified eight of the POM outcome elements that measure some degree of social capital. The elements indicate if individuals have friends, community connections, and natural supports:

- People have intimate relationships.
- People live in integrated environments.
- People participate in the life of the community.
- People interact with other members of the community.
- People perform different social roles.
- People have friends.
- People are respected.
- People are connected to natural support networks.

Each element is scored as present or not present. Responses are aggregated, resulting in a total social capital score for each individual. Scores range from 0 to 8 and are distributed as shown in the following table. Over 10 percent of individuals had none of the social capital elements scored as

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<sup>6</sup> Please see the reports on the Delmarva Website for a more detailed description and analysis of the foundational outcomes ([http://www.dfmc-florida.org/public/annual\\_quarterly\\_reports/index.aspx](http://www.dfmc-florida.org/public/annual_quarterly_reports/index.aspx)).

<sup>7</sup> Participation is voluntary. If the individual declines, another individual is chosen from the over sample.

present. Close to half of the individuals had one to three social capital elements scored as present, compared to approximately 16.6 percent (408) who had six or more social capital elements present. Only 59 (2.4%) individuals interviewed during this time period had all eight of the social capital indicators present.

Table 1: Social Capital		
Number of Elements Present		
Social Capital Present	Number of Individuals	Percent of Individuals
0	253	10.3%
1	425	17.3%
2	407	16.6%
3	375	15.3%
4	315	12.8%
5	270	11.0%
6	189	7.7%
7	160	6.5%
8	59	2.4%
Total	2,453	100.0%

Social capital is used as an independent or explanatory variable to help determine the impact various degrees of social networks has on several health outcomes, choice, and other POM outcomes. Because the variable is not normally distributed (bell shaped curve), we use three different categories to represent the degree to which individuals have social capital in their lives:

- Low Social Capital – N=1,085
- Moderate Social Capital – N=960
- High Social Capital – N=408

## Dependent Variables

### Health Indicators

Several dependent variables are used to help assess the impact of social capital on the lives of individuals with developmental disabilities. Variables used to measure elements of the health of individuals were taken from the Health and Behavioral Assessment and include the following:

- If the person had been admitted to the hospital in the past year (0=no, 1=yes).

- If the person had been treated in the emergency room in the past year (0=no, 1=yes).
- If in the past year the person's health is the same, better or worse (0=same/worse, 1=better).
- If the person has any health problems (0=no, 1=yes).

The distribution of the health related indicators is shown in Table 2, across levels of social capital. On average, over 43 percent of individuals reported having some type of health problem. Only 13.4 percent of individuals had been admitted to the hospital during the previous year, and 28.6 percent had been treated in an emergency room. On average, individuals with low levels of social capital were somewhat more likely to be treated in an ER, or admitted to a hospital, have health problems, and somewhat less likely to report having better health than in the past year.<sup>8</sup>

<b>Table 2: Health Indicators by Level of Social Capital</b>				
<b>January 2007 - December 2008</b>				
<b>Health Indicators</b>	<b>Social Capital Level</b>			
	<b>High</b>	<b>Moderate</b>	<b>Low</b>	<b>Total</b>
<b>Treated ER</b>				
No	73.3%	73.0%	69.2%	71.4%
Yes	26.7%	27.0%	30.8%	28.6%
<b>Admitted to Hospital</b>				
No	90.0%	85.6%	86.2%	86.6%
Yes	10.0%	14.4%	13.8%	13.4%
<b>Have Health Problems</b>				
No	55.9%	61.3%	52.7%	56.6%
Yes	44.1%	38.8%	47.3%	43.4%
<b>Health Better</b>				
No	70.8%	73.8%	80.3%	76.2%
Yes	29.2%	26.3%	19.7%	23.8%
<b>Number of Individuals</b>	408	960	1,085	2,453

### Indicators of Choice

Six POM outcome indicators specifically target different aspects of choice, scored as present or not present. These are analyzed separately and include the following:

- People choose personal goals.

<sup>8</sup> It is important to note the associations shown in Tables 1 - 4 do not account for other factors that influence the dependent variables which are presented in the following section, with the regression analyses.

- People choose where and with whom they live.
- People choose where they work.
- People choose their daily routine.
- People decide when to share personal information.
- People choose services.

The percent scored as present for each choice indicator is shown in the following table, by the level of social capital. On average, fewer than half (42.7%) of the choice indicators were present for the individuals interviewed between January 2007 and December 2008. It is clear from the table that individuals with a high degree of social capital are much more likely to have choice about their personal goals, home, work, daily routine, personal information, and the services they receive. Fewer than 20 percent of individuals with low levels of social capital indicated being able to choose personal goals, where to work, or the services received.

<b>Table 3: Choice Indicators by Level of Social Capital</b>				
<b>January 2007 - December 2008</b>				
<b>Choice Indicators</b>	<b>Social Capital Level</b>			
	<b>High</b>	<b>Moderate</b>	<b>Low</b>	<b>Total</b>
<b>Chooses personal goals</b>				
Not Present	30.6%	48.5%	82.5%	60.6%
Present	69.4%	51.5%	17.5%	39.4%
<b>Chooses where and with whom to live</b>				
Not Present	19.1%	45.8%	75.7%	54.6%
Present	80.9%	54.2%	24.3%	45.4%
<b>Chooses work</b>				
Not Present	39.2%	55.8%	81.3%	64.3%
Present	60.8%	44.2%	18.7%	35.7%
<b>Chooses daily routine</b>				
Not Present	11.8%	35.0%	71.9%	47.5%
Present	88.2%	65.0%	28.1%	52.5%
<b>Decide when to share personal information</b>				
Not Present	21.1%	45.2%	73.6%	53.8%
Present	78.9%	54.8%	26.4%	46.2%
<b>Choose services</b>				
Not Present	27.9%	55.4%	83.6%	63.3%
Present	72.1%	44.6%	16.4%	36.7%
<b>Total Choice</b>				
Not Present	25.0%	47.6%	78.1%	57.3%
Present	75.0%	52.4%	21.9%	42.7%
<b>Total Number of Individuals</b>	408	960	1,085	2,453

Foundational Outcome Indicators

Seven POM outcome indicators are considered the foundational outcomes because they are basic to every person’s well-being. We use six in the analysis to determine if an increased amount of social capital helps individuals achieve these outcomes. The first foundational outcome, people are connected to natural support networks, is a component of social capital and therefore not included as part of the foundational outcomes in the analysis. The foundational outcomes are analyzed aggregately and separately.

<b>Table 4: Foundational Outcome Indicators by Level of Social Capital</b>				
<b>January 2007 - December 2008</b>				
<b>Foundational Outcome Indicators</b>	<b>Social Capital Level</b>			
	<b>High</b>	<b>Moderate</b>	<b>Low</b>	<b>Total</b>
<b>People are safe</b>				
Not Present	18.6%	21.0%	33.3%	26.0%
Present	81.4%	79.0%	66.7%	74.0%
<b>People exercise rights</b>				
Not Present	26.0%	53.0%	82.0%	61.4%
Present	74.0%	47.0%	18.0%	38.6%
<b>Treated fairly</b>				
Not Present	12.0%	27.2%	63.7%	40.8%
Present	88.0%	72.8%	36.3%	59.2%
<b>Have best possible health</b>				
Not Present	38.2%	40.2%	54.1%	46.0%
Present	61.8%	59.8%	45.9%	54.0%
<b>Free from abuse and neglect</b>				
Not Present	7.4%	9.4%	17.9%	12.8%
Present	92.6%	90.6%	82.1%	87.2%
<b>Experience continuity and security</b>				
Not Present	39.0%	55.6%	77.8%	62.7%
Present	61.0%	44.4%	22.2%	37.3%
<b>Total Foundational</b>				
Not Present	23.5%	34.4%	54.8%	41.6%
Present	76.5%	65.6%	45.2%	58.4%
<b>Total Number of Individuals</b>	408	960	1,085	2,453

The percent present for each foundational outcome is shown in Table 4, by level of social capital. On average, over 58 percent of the six foundational outcomes were present. For each outcome, individuals with low social capital were least likely to have the outcome present. However, the

outcomes that appear to show the greatest association with social capital pertain to exercising rights, being treated fairly and experiencing continuity and security

All Other POM Outcomes

The impact of social capital on each of the five remaining Personal Outcome Measure indicators, not used to measure social capital, choice or foundational outcomes, is explored. These include measures of satisfaction, use of the environment, and having time, space and opportunity for privacy. Each is listed in Table 5, showing the average percent present across levels of social capital. As seen in the previous tables, individuals with low social capital are least likely to have each POM indicator scored as present. This association appears to be strongest in response to using the environment. Only 13.8 percent of individuals with low social capital indicated using the environment, compared to over 71 percent of individuals with a high level of social capital.

<b>Table 5: Other Outcome Indicators by Level of Social Capital</b>				
<b>January 2007 - December 2008</b>				
<b>Other Outcome Indicators</b>	<b>Social Capital Level</b>			
	<b>High</b>	<b>Moderate</b>	<b>Low</b>	<b>Total</b>
<b>Satisfied with Services</b>				
Not Present	13.5%	24.4%	38.7%	28.9%
Present	86.5%	75.6%	61.3%	71.1%
<b>Satisfied with personal life situations</b>				
Not Present	10.0%	15.2%	35.1%	23.2%
Present	90.0%	84.8%	64.9%	76.8%
<b>Have privacy</b>				
Not Present	9.8%	22.9%	57.1%	35.8%
Present	90.2%	77.1%	42.9%	64.2%
<b>People use their environments</b>				
Not Present	28.7%	59.1%	86.2%	66.0%
Present	71.3%	40.9%	13.8%	34.0%
<b>Realize personal goals</b>				
Not Present	24.0%	33.6%	52.7%	40.5%
Present	76.0%	66.4%	47.3%	59.5%
<b>Total Other Outcomes</b>				
Not Present	20.8%	35.1%	57.9%	42.8%
Present	79.2%	64.9%	42.1%	57.2%
<b>Total Number of Individuals</b>	408	960	1,085	2,453

## Independent Variables

Multiple factors could influence health and other personal outcomes for individuals. We include factors in the model that may impact each outcome in order to help determine the net impact of social capital. Variables included are as follows:

- **Residential Type:** Residential type is categorized as follows.
  - Family home (N=1,204)
  - Independent/Supported Living (N=489)
  - Group Homes (Small N=549, Large N=130)
  - Other (ALF N=39, Foster home N=31, other/unknown N=11)
- **Primary Disability** is categorized as follows:
  - Intellectual Disability (N=1,885)
  - Cerebral Palsy (N=285)
  - Autism (N=191)
  - Other/unknown (N=92), includes Epilepsy (16), Spina Bifida (46), Prader Willi (5), and other or unknown (14).
- **Number of services:** The total number of services, excluding Support Coordination, received by the individual in the 12 month period prior to the interview. The variable is normally distributed with a mean of 2.95 and a median of 3.
- **Area Size:** Data from the Agency for Person's with Disabilities were used to identify the number of consumers in each Area as of October 2008. Areas with over 2,500 consumers were categorized as Large. These include the Broward, Orlando, Miami-Dade and Suncoast Areas. Medium size areas had from 1,400 to 2,500 consumers (e.g., Jacksonville, Pensacola, and Tallahassee) and Small areas fewer than 1,400 consumers. The categories contain the following APD Areas:
  - Large—7, 10, 11, 23 (N=1,281)
  - Medium—1, 2, 3, 4, 9, and 13 (N=827)
  - Small—8, 12, 14 and 15 (N=345)
- **Waiver Support Coordinator Performance:** Achieving and Implementing (N=1,726) vs Emerging and Not Emerging (N=727)
- **Gender:** Male=0 (N=1,449), Female=1 (N=1,004)
- **Individual's Age:** a continuous variable with a mean of 34.3 and a median of 33.
- **Race/Ethnicity:** Categorized as follows:
  - White (N=1,437)
  - Black (N=548)
  - Hispanic (N=187)
  - Other (N=281)

- **Other Outcomes:** Because individuals with high levels of social capital are also likely to have more outcomes met than individuals with lower levels of social capital, we control for the number of all other POM outcomes present in each model.
- Having better health over the past year and having health problems are used as dependent variables when assessing the impact of social capital on health. However, in models that assess the impact of social capital on outcomes which are not health-related, these are used as independent variables to help control for health issues.

## Methods

Multivariate regression models are used to test the impact of each explanatory variable on the dependent variable. Logistic regression is used when the dependent variable is binary, such as having a health problem versus not having a health problem. Multivariate linear regression is used when the dependent variable is continuous, such as the number of outcomes met. In regression models, the “net” impact of each variable is estimated. The influences of other variables in the model are “held constant” to help determine the unique influence of the specific explanatory variable. Essentially, if all other factors are the same (same Area size, same age, same number of services received, etc.), then what is the impact of social capital on each dependent variable?

For each type of regression analysis, the p-value, or probability value, is the probability the relationship between two variables is due to error. It is used to reflect the statistical significance of the relationship. A p-value of 0.05 or smaller is often used in social science research and indicates there is a five percent chance or less the results are due to error. A p-value of .10 indicates a 10 percent chance or less the results are due to error. Statistical significance levels are arbitrary and depend upon how much error you are willing to accept in the model or research area.

In logistic regression models, the odds ratio gives the strength of the relationship between the explanatory or independent variable and the dependent variable, holding other factors in the model constant. In the first regression model (Table 6), the odds ratio indicates the odds of being treated in an emergency room for every one unit change in the explanatory variable. For example, for individuals with Cerebral Palsy the odds of being admitted to the hospital were 1.37 times higher than the odds for individuals with an intellectual disability. Odds ratios greater than one indicate a positive relationship, such as the example just cited. Odds ratios between 0 and 1 indicate a negative or inverse relationship. An odds ratio of 1 means the odds of having a health problem are the same, regardless of the response on the explanatory variable. The farther away the odds ratio is from one, the stronger the relationship.

In linear regression models, the partial correlation coefficient ( $r$ ) is often used to determine the strength of the relationship between the explanatory and dependent variables, “partialling” out the impact of the other variables in the equation. Values for  $r$  range between -1 and 1. A negative value indicates a negative or inverse relationship exists between the explanatory and dependent variable, meaning as values on one variable increase values on the other decrease. A positive  $r$  value indicates values on two variables move in the same direction. Values closer to -1 or 1 indicate stronger associations exist between the variables.

When categorical variables are used in regression analysis, results are presented as compared to one of the categories. The comparison category is the reference category. In each model, reference categories are as follows:

- Social Capital – High Social Capital
- Residential Type – Family Home
- Primary Disability – Intellectual Disability
- APD Area Size – Large Areas
- Race/Ethnicity – White

## Results

A linear regression model is used to determine the impact of social capital on the number of other outcomes present for individuals. Logistic regression models were used for 21 different outcome elements, including four models to measure the impact of social capital on four different health indicators and one model for each of the POM outcomes not included in the social capital indicator.

### Health Indicators

#### Treated in an Emergency Room

Results in Table 6 show the impact of social capital and other factors on whether or not an individual had been treated in an emergency room (ER) in the 12 months previous to the interview. Findings indicate:

- Neither the presence of social capital nor the number of other outcomes present impacted an individual’s likelihood of being treated in the ER.
- The strongest predictor of being treated in the ER was if the person reported having health problems. Individuals with health problems were 103 percent  $((1-2.039)*100)$  more likely to visit an ER than individuals without health problems.

- Individuals who are Hispanic were two times more likely to have been treated in an ER than were white individuals.
- Residents of independent or supported living and group homes were more likely to be treated in an ER than were individuals who lived in a family home, odds ratios of 1.7 and 1.6 respectively.
- Individuals with Cerebral Palsy were about 1.4 times (40%) more likely to be treated at an ER than were individuals with an intellectual disability.

Table 6: Regression Results		
Treated in the Emergency Room		
Explanatory Variables	P-Value	Odds Ratio
Social Capital		
Low (0 - 2 Present)	0.880	1.026
Moderate (3 - 5 Present)	0.830	1.032
Residential Type		
Independent/Supported Living	0.000	1.709
Group Home	0.000	1.646
Other Home	0.746	1.092
Primary Disability		
Cerebral Palsy	0.028	1.369
Autism	0.765	1.058
Other Disability	0.003	1.969
Number of Services Received	0.041	1.066
APD Area Size		
Small	0.923	0.987
Medium	0.822	0.976
WSC Score: Achieving/Implementing	0.272	0.889
Female	0.117	1.160
Age	0.024	0.992
Race/Ethnicity		
Black	0.256	1.141
Hispanic	0.000	2.004
Other Race	0.438	1.130
Other POM Outcomes	0.387	0.986
Health Problems	0.000	2.039

[Admitted to a Hospital](#)

Results in Table 7 show the impact of social capital and other factors on whether or not an individual had been admitted to a hospital in the 12 months previous to the interview. Findings indicate:

- Individuals with a moderate level of social capital, compared to individuals with a high level of social capital, were 66 percent more likely to have been admitted to a hospital. This association does not appear to be significant for low levels of social capital.
- Individuals with health problems were three times more likely to have been admitted to the hospital.
- Type of disability appears to be a factor in the likelihood of being admitted to a hospital. Compared to individuals with an intellectual disability: individuals with Cerebral Palsy were 54 percent more likely to be admitted; individuals with autism were about half as likely (error rate of 6.9%) to be admitted; and, individuals with other disabilities were 75 percent more likely to be admitted.
- Individuals who are Hispanic, compared to individuals who are white, were 68 percent more likely to have been admitted to a hospital.

Table 7: Regression Results		
Admitted to the Hospital		
Explanatory Variables	P-Value	Odds Ratio
Social Capital		
Low (0 - 2 Present)	0.179	1.375
Moderate (3 - 5 Present)	0.012	1.667
Residential Type		
Independent/Supported Living	0.906	1.021
Group Home	0.449	1.130
Other Home	0.607	0.824
Primary Disability		
Cerebral Palsy	0.016	1.541
Autism	0.069	0.566
Other Disability	0.041	1.750
Number of Services Received	0.035	1.089
APD Area Size		
Small	0.277	0.813
Medium	0.949	0.991
WSC Score: Achieving/Implementing	0.529	0.915
Female	0.492	1.089
Age	0.289	1.005
Race/Ethnicity		
Black	0.454	1.123
Hispanic	0.032	1.683
Other Race	0.201	1.303
Other POM Outcomes	0.993	1.000
Health Problems	0.000	3.218

Health Problems

Results in Table 8 show the impact of social capital and other factors on whether or not an individual reported having health problems. Findings indicate:

- Individuals with moderate, compared to high, levels of social capital were about 28 percent less likely to have health problems. Low social capital was associated with a lowered risk of having health problems, but the chance of error was approximately 12 percent ( $p = 0.12$ ).
- For every additional POM outcome present, individuals were about nine percent less likely to have health problems.
- Living in small or medium sized Areas increases the likelihood of having health problems, compared to living in large Areas.
- Individuals with other disabilities, compared to intellectual disabilities, were 126 percent more likely to have health problems. Individuals with Cerebral Palsy were also more likely to have health problems (Odds ratio = 1.325).

Table 8: Regression Results		
Have Health Problems		
Explanatory Variables	P-Value	Odds Ratio
Social Capital		
Low (0 - 2 Present)	0.120	0.783
Moderate (3 - 5 Present)	0.013	0.720
Residential Type		
Independent/Supported Living	0.000	1.533
Group Home	0.071	0.815
Other Home	0.787	0.936
Primary Disability		
Cerebral Palsy	0.037	1.325
Autism	0.255	1.224
Other Disability	0.000	2.259
Number of Services Received	0.836	0.994
APD Area Size		
Small	0.000	1.720
Medium	0.000	2.088
WSC Score: Achieving/Implementing	0.140	1.159
Female	0.175	1.126
Age	0.000	1.013
Race/Ethnicity		
Black	0.389	0.912
Hispanic	0.177	0.783
Other Race	0.920	0.985
Other POM Outcomes	0.000	0.906

Health Better in the Past Year

Results in Table 9 show the impact of social capital and other factors on whether or not an individual reported having better health than in the past year. Findings indicate:

- Social capital does not appear to impact whether or not an individual has better health.
- The presence of all other outcomes is significantly associated with having better health than in the past year. Findings indicate that for every additional outcome that is present, individuals were about 10 percent more likely to report having better health.
- Individuals in group homes were about 1.7 times more likely to report having better health, compared to individuals in family homes.
- Individuals in small or medium size Areas were less than half as likely to have reported being in better health than were individuals in large Areas.
- Individuals who are Hispanic or of another race/ethnicity were approximately 75 percent more likely  $((1.756 - 1) * 100)$  to have reported being in better health, compared to individuals who are white.

Table 9: Regression Results		
Health Better Than Previous Year		
Explanatory Variables	P-Value	Odds Ratio
Social Capital		
Low (0 - 2 Present)	0.892	0.976
Moderate (3 - 5 Present)	0.807	1.036
Residential Type		
Independent/Supported Living	0.163	1.222
Group Home	0.000	1.697
Other Home	0.792	0.920
Primary Disability		
Cerebral Palsy	0.708	0.941
Autism	0.237	0.789
Other Disability	0.887	0.963
Number of Services Received	0.013	1.087
APD Area Size		
Small	0.000	0.452
Medium	0.000	0.376
WSC Score: Achieving/Implementing	0.005	1.426
Female	0.444	1.082
Age	0.136	0.994
Race/Ethnicity		
Black	0.365	1.122
Hispanic	0.002	1.756
Other Race	0.001	1.731
Other POM Outcomes	0.000	1.107

## Personal Outcome Measures

### All Other POM Outcomes

Regression analysis results for All Other POM Outcomes are shown in Table 10. All Other POM Outcomes is the total number of outcomes present that are not the eight POM indicators in the social capital measure. A summary of findings indicates the following:

- There is a statistically significant association between levels of social capital and the presence of other POM outcomes for individuals with developmental disabilities. Individuals with low or moderate levels of social capital were much less likely to have other outcomes present. Correlations inform us that having low levels of social capital, compared to high levels, is the strongest predictor of outcomes in the model ( $r = -.525$ ).
- Controlling for social capital and all other indicators in the model, individuals working with a Waiver Support Coordinator (WSC) who was evaluated as Achieving or Implementing were more likely to have other outcomes present, than if working with a WSC evaluated as Emerging or Not Emerging ( $r = .294$ ).
- Type of residence also showed a significant and moderate association with other outcomes, even when controlling for the level of social capital. Individuals in independent or supported living, compared to individuals in a family home, were more likely to have other outcomes present ( $r = 0.135$ ), but individuals in a group home were less likely to have other outcomes present ( $r = -0.159$ ).
- Health indicators reflected a significant and moderate association with the presence of other outcomes. Individuals indicating they had health problems were less likely to have outcomes met ( $r = -.140$ ), and individuals reporting their health was better than during the previous year were more likely to have outcomes present ( $r = 0.123$ ).
- Other explanatory variables in the model showed statistical significance, but results for the partial correlations indicate the associations were not that substantive.

<b>Table 10: Regression Results</b>		
<b>All Other POM Outcomes</b>		
<b>Explanatory Variable</b>	<b>P-Value</b>	<b>Partial Correlation</b>
Social Capital		
Low (0 - 2 Present)	0.000	-0.525
Moderate (3 - 5 Present)	0.000	-0.249
Residential Type		
Independent/Supported Living	0.000	0.135
Group Home	0.000	-0.159
Other Home	0.009	-0.053
Primary Disability		
Cerebral Palsy	0.131	0.031
Autism	0.001	0.069
Other Disability	0.010	0.052
Number of Services Received	0.039	-0.042
APD Area Size		
Small	0.739	0.007
Medium	0.000	0.095
WSC Score: Achieving/Implementing	0.000	0.294
Female	0.243	-0.024
Age	0.017	-0.049
Race/Ethnicity		
Black	0.844	-0.004
Hispanic	0.983	0.000
Other Race	0.730	0.007
Health Problems	0.000	-0.140
Health Better	0.000	0.123

### Foundational Outcomes

Six of the seven foundational outcomes were analyzed. Because the focus of this study is to explore the impact of social capital on various outcomes, results for levels of social capital for each foundational outcome are presented below. In the models, we control for all explanatory variables, including the total number of outcomes present. Complete results for each regression model are presented in Attachment 3.

- Having low levels of social capital appears to impact several of the foundational outcomes. Controlling for the total number of outcomes present, individuals with low levels of social capital were close to 65 percent less likely to report they are treated fairly.
- Individuals with low levels of social capital were about half as likely to exercise their rights and 60 percent less likely to indicate they have continuity and security in their lives.

- The association between social capital and being safe indicates low levels of social capital may reduce the likelihood that people are safe. However, there is slightly higher than a five percent error rate, with a p-value of 0.055.
- Having moderate, compared to high, levels of social capital reduces the likelihood individuals can exercise their rights or experience continuity and security in their lives.
- Social capital does not appear to impact if individuals have the best possible health or if they are free from abuse, neglect or exploitation.

<b>Table 11: Impact of Social Capital and Other POM Outcomes on Foundational Outcomes</b>						
<b>Low and Moderate Levels Compared to High Levels of Social Capital</b>						
<b>January 2007 - December 2008</b>						
	<b>Low Social Capital</b>		<b>Moderate Social Capital</b>		<b>Total Other Outcomes</b>	
<b>POM Outcome</b>	<b>P-Value</b>	<b>Odds Ratio</b>	<b>P-Value</b>	<b>Odds Ratio</b>	<b>P-Value</b>	<b>Odds Ratio</b>
People are safe	0.055	0.701	0.915	0.983	0.000	1.113
People exercise rights	0.000	0.530	0.009	0.673	0.000	1.492
People are treated fairly	0.000	0.352	0.083	0.725	0.000	1.348
People have the best possible health	0.738	0.946	0.599	1.076	0.000	1.145
People are free from abuse and neglect	0.374	0.792	0.927	0.979	0.000	1.134
People experience continuity and security	0.000	0.403	0.000	0.614	0.000	1.164

Choice Indicators

Results showing the impact of social capital on six different elements of choice, as measured through the POM process, are presented in Table 12.<sup>9</sup> Findings indicate the following:

- On average, having choice in various aspects of life appears to be negatively impacted when social capital is limited.
- For each choice outcome, individuals with low, as compared to high, levels of social capital were considerably less likely to have choice present in their lives. This association was the strongest in choosing a daily routine, with an odds ratio of 0.345.

<sup>9</sup> See Attachment 4 for complete results for each regression model.

- Choices regarding residence, daily routine, and sharing personal information were also negatively impacted for individuals with moderate levels of social capital.
- For each choice outcome, having other outcomes present increased the likelihood of having choice present as well. This association appeared strongest for choosing services, with an odds ratio that indicates individuals with more outcomes, regardless of levels of social capital, were close to 47 percent more likely to choose their own services.

Table 12: Impact of Social Capital and Other POM Outcomes on Choice Outcomes						
Low and Moderate Levels Compared to High Levels of Social Capital						
January 2007 - December 2008						
	Low Social Capital		Moderate Social Capital		Total Other Outcomes	
POM Outcome	P-Value	Odds Ratio	P-Value	Odds Ratio	P-Value	Odds Ratio
People choose personal goals	0.000	0.475	0.983	1.003	0.000	1.391
People choose where and with whom to live	0.005	0.590	0.012	0.665	0.000	1.393
People choose where they work	0.008	0.639	0.521	0.916	0.000	1.288
People choose their daily routine	0.000	0.345	0.016	0.630	0.000	1.325
Decide when w/ whom to share personal info	0.000	0.433	0.003	0.634	0.000	1.296
People choose services	0.014	0.642	0.120	0.791	0.000	1.466

Other POM Outcomes

Analysis was completed for the five remaining POM outcomes, including measures of satisfaction, privacy, goals, and use of the environment. Results are presented in Table 13 and indicate the following:<sup>10</sup>

- Satisfaction with services and with personal life situations were not impacted by the presence or absence of social capital.
- Individuals with low, as compare to high, levels of social capital were about 75 percent less likely to use their environments. With moderate levels of social capital, individuals were about half as likely to use their environments.

<sup>10</sup> See Attachment 5 for complete results from each regression model.

- Individuals with low levels of social capital were approximately 53 percent less likely to have time, space, or opportunity for privacy.
- Having only low levels of social capital also impacts an individual’s ability to realize personal goals (odds ratio = 0.600).
- Having other outcomes present increased the likelihood of the presence of each POM outcome in the model.

<b>Table 13: Impact of Social Capital and Other POM Outcomes on All Other POM Outcomes</b>						
<b>Low and Moderate Levels Compared to High Levels of Social Capital</b>						
<b>January 2007 - December 2008</b>						
	<b>Low Social Capital</b>		<b>Moderate Social Capital</b>		<b>Total Other Outcomes</b>	
<b>POM Outcome</b>	<b>P-Value</b>	<b>Odds Ratio</b>	<b>P-Value</b>	<b>Odds Ratio</b>	<b>P-Value</b>	<b>Odds Ratio</b>
People are satisfied with services	0.911	1.023	0.433	0.870	0.000	1.229
People are satisfied with their personal life situations	0.180	0.745	0.998	1.000	0.000	1.252
People have time, space, and opportunity for privacy	0.000	0.467	0.305	0.815	0.000	1.275
People use their environments	0.000	0.254	0.000	0.492	0.000	1.258
People realize personal goals	0.003	0.600	0.290	0.854	0.000	1.130

### Additional Findings from Regression Analyses

While not the focus of the paper, several other trends were noted in this study. Regression analysis was completed for the 17 POM items not included in the social capital measure. Complete results from these models are included in Attachments 3 (Foundational Outcomes), 4 (Choice) and 5 (Other Outcomes), and noteworthy findings are summarized below. Results for Social Capital and Other Outcomes are not included.<sup>11</sup>

#### Impact on Foundational Outcomes:

- Having the best possible health is impacted by many indicators in the model, but in different ways. The likelihood improved with each additional service received, if the WSC is scored as Achieving or Implementing, and for residents of group homes or other home types (mostly

<sup>11</sup> Other studies have highlighted results for each POM item. See [http://www.dfmc-florida.org/public/quality\\_improvement\\_studies/index.aspx](http://www.dfmc-florida.org/public/quality_improvement_studies/index.aspx) for all studies completed as part of this contract.

- ALF and Foster Care) compared to individuals in family homes. However, the likelihood decreased for women, individuals with Cerebral Palsy (compared to intellectual disability), as individuals age, or when health problems exist.
- Individuals in a group home were more likely to be safe than individuals in a family home. However, individuals with Cerebral Palsy (compared to ID), individuals who are black (compared to white), and individuals with health problems were less likely to have this outcome present.
  - Older individuals and individuals working with an Achieving/Implementing WSC had an increased likelihood of being free from abuse, neglect and exploitation. However, individuals in group homes or other home types (compared to family home) and women were less likely to be free from abuse, neglect or exploitation.
  - Individuals who have better health than in the previous year, individuals with Cerebral Palsy (compared to ID), and residents of other home types (mostly ALF and Foster Care, compared to family home) were more likely to indicate they are treated fairly. Individuals living independently were less likely to report this, compared to individuals in a family home.
  - Individuals with Cerebral Palsy (compared to ID), individuals who are black (compared to white), and individuals who indicated their health was better than the previous year were more likely to exercise rights.
  - Individuals in independent or supported living and individuals with health problems were less likely to have continuity and security in their lives. However, continuity and security is enhanced with a higher performing WSC and for older individuals.

#### Impact on Choice Outcomes

- Individuals in independent or supported living, women, and individuals with better health than in the last year were more likely to choose where they worked. Having more services, health problems, or being older reduced the likelihood of being able to choose where to work.
- None of the indicators negatively impacted an individual's likelihood of choosing services. Individuals with Cerebral Palsy (compared to ID) and Other Disabilities, independent or supported living, having a higher performing WSC, and being female appear to positively impact an individual's ability to choose services.
- Individuals with an intellectual disability were less likely than all others to choose where and with whom to live. Women and individuals in independent or supported living were more likely to choose their own place to live. However, individuals with more services and residents of all other home types (compared to living at home) were less likely to have chosen their residence.
- Choosing personal goals was positively impacted by living in a group home (compared to a family home), having more services, having a higher performing WSC, being Hispanic and

having health problems. Aging was the only indicator that appeared to reduce the likelihood of choosing your own personal goals.

- Individuals with higher performing WSCs, Hispanics, and those with health problems were more likely to decide when to share personal information, while older individuals were less likely to do so.
- Choosing a daily routine was impacted by home type and health. Individuals in independent living were more likely than people in a family home to choose their own daily routines. However, living in group homes or other home types decreased that likelihood, compared to living in a family home.

#### Impact on Satisfaction Outcomes

- Individuals with health problems, and people in independent or supported living or group homes (compared to family homes) were less satisfied with their life's situation.
- Individuals with Autism were less likely than individuals with an intellectual disability to be satisfied with services.
- Having a higher performing WSC and being older positively impacted both measures of satisfaction.

#### Impact on Other Outcomes

- People who have Cerebral Palsy (compared to ID) and people who live in group homes (compared to family homes) were less likely to have the time, space, or opportunity for privacy.
- Individuals in independent or supported living, people who are black, and those who indicated their health was better than in the previous year were more likely to use their environment. However, an increased number of services and having Cerebral Palsy decreased the likelihood of having this outcome present.
- Independent living, a higher performing WSC, and better health improved the likelihood of realizing goals, whereas individuals who are black and older people were less likely to have this outcome present.

## Discussion and Recommendations

In this study we have used the CQL definition of social capital to help determine if having higher levels of social capital improves the quality of life for individuals receiving services through the DD or FSL Home and Community-Based Services waiver programs. Social capital is measured from results of face-to-face interviews using the Personal Outcome Measures interview process and protocols. Eight of the 25 measured outcomes are aggregated to determine if individuals have high, moderate, or low levels of social capital. These outcomes include items used to determine if

individuals have intimate relationships, friends, natural supports, and effective connections to their communities.

Evidence from this study suggests social capital does not have much impact on health related outcomes, including the POM outcomes that measure if the individual has the best possible health and if the person is free from abuse, neglect and exploitation. Compared to high levels of social capital, individuals with moderate levels of social capital were associated with an increased likelihood of hospitalization in the past year. The same group of individuals was also associated with a decreased likelihood of having health problems. In addition, social capital does not appear to impact an individual's satisfaction with life's personal situations or with services received through the DD and/or FSL waivers.

However, results from this study demonstrate social capital is linked to many quality of life outcomes, even when controlling for the total number of outcomes individuals had present in their lives. Individuals with higher levels of social capital were more likely to: exercise choices about a number of important life decisions, experience security and continuity, be treated fairly, exercise rights, have their privacy respected, use their environment, and realize personal goals. With a slightly higher chance of error ( $p=0.55$ ), individuals with higher levels of social capital were also more likely to be safe.

Each of the six outcomes that measure choice was impacted by social capital. Individuals were less likely to be able to choose a daily routine, where and with whom to live, and when to share personal information with low or moderate levels of social capital, indicating high levels of social capital may be essential to choice in these important areas. Individuals with low levels of social capital were approximately 35 percent less likely to choose services or choose work, two outcomes identified by APD as "driver outcomes". These driver outcomes, when present, have been shown to help individuals achieve other outcomes in their lives as well. Social capital may improve the choices of individuals through several routes. Family, friends, and community members may provide assistance and support to individuals when they are making choices. It is also possible that others advocate for persons, or encourage persons to advocate for themselves, to ensure they have choices over important aspects of their lives.

Several of the Foundational Outcomes were positively impacted by the presence of social capital. People with low levels of social capital were much less likely to feel they are treated fairly, to experience continuity and security in their lives or to be able to exercise their rights. Because these help form the "foundation" of an individual's ability to live an every day life, they are key outcomes to support for individuals. Previous research completed as a Quality Improvement Study has

pointed to the importance of developing social roles, an integral component of social capital, to help individuals improve outcomes in their lives.

Exercising privacy and ultimately realizing personal goals were more likely to be present for individuals with moderate or high levels of social capital. However, the outcome that showed the greatest impact from a lack of social capital was an individual's ability to use the environment. Individuals with low levels of social capital were 75 percent less likely to have this present. This outcome measures access to not only the individual's home environment but also to the community: can the individual get in and out of the bathtub, into kitchen cabinets and into the refrigerator, or are modifications needed that are not available; and, does the individual have transportation to the community? Larger social networks will mean friends are coming to visit and can help bring attention to and solutions for home access issues. Transportation is a global issue for individuals with a disability and greater social networks means there are more family members and friends who can drive individuals to work, shopping, medical services or other appointments as needed.

**Recommendation 1: Findings from this study point to the importance of social capital, through social networks and personal relationships, in helping individuals attain a higher quality of life in areas such as choice, privacy, exercising rights and effectively using their environment. APD should develop a training session or curriculum to address the types of supports needed to help individuals develop friends, social roles, community ties, and natural support networks (social capital). This could be incorporated into a LENS person centered training session, to help increase the amount of social networks for individuals in each APD Area.**

**Recommendation 2: APD should consider a more in-depth study of social capital that examines whether some types of social capital (family vs. friends vs. community members) are more important than others in improving personal outcomes. Do individuals with strong ties to family members meet more outcomes than those with strong ties to friends or other community members? What social supports are of greatest assistance to people without family ties? Results from this study could help direct additional quality improvement initiatives.**

While evidence from this study suggests social capital is not an important factor in improving health, results did indicate that support coordinators with high levels of performance were associated with persons who reported better health than in the previous year. Having an Achieving or Implementing WSC was also associated with a better likelihood of having the best possible health and being free from abuse, neglect and exploitation.

**Recommendation 3: APD policies that assist support coordinators in providing the highest level of services may be an indirect route to improving the health of individuals receiving services. Local APD Area Administrators should ensure WSCs who are not scoring as Achieving or Implementing are attending proper training and receiving technical support as needed to help improve their attention to health issues of people served as a particularly important factor in improving their overall service deliveries systems.**

Other findings of interest were reported in this study. Persons living in a group home or independent/supported living were more likely than those living in a family home to be treated in an emergency room in the past year. Without additional information it is not possible to know why. Do individuals living in these settings experience less safe environments that result in emergency room trips? Or, are they at higher risk due to increased levels of community interaction? Does living independently result in less oversight and therefore more exposure to injury or errors in medication administration that require medical intervention? Is a lack of safety in group homes or proper residential oversight contributing to a higher rate of emergency room visits than for persons living in a family home?

**Recommendation 4: APD should consider a study that examines emergency room treatments of individuals with a developmental disability to determine the source of the health problem driving the visit.**

Persons of Hispanic descent were far more likely than white persons to have been treated in an emergency room or admitted to a hospital in the past year. However, it is interesting to note they were also more likely to report having better health than in the previous year, when compared to white persons. Feeling better could be a direct result of using the health care system more. However, as with the previous results, without additional data, it is not clear why these relationships were significant. Given the models contain no controls for income, it is possible Hispanic individuals in the sample are on average poorer than white individuals, and a lack of resources leads to poorer health, lowered access to preventative health measures, and more severe health outcomes that require treatment in an emergency room or hospital.

**Recommendation 5: APD should consider a study that examines the reasons Hispanic individuals receiving services through the waivers are more likely to visit the hospital or emergency room. This could be completed in conjunction with the study suggested in Recommendation 4.**

## Attachment 1: Health and Behavioral Assessment Survey

Have you seen a doctor in the past year? Y/N

What kind of doctor?

- |                     |                                    |
|---------------------|------------------------------------|
| 1. neurology        | 11. podiatry                       |
| 2. psychiatry       | 12. dermatology                    |
| 3. primary care     | 13. gynecology                     |
| 4. gastroenterology | 14. urology                        |
| 5. cardiology       | 15. orthopedics                    |
| 6. endocrinology    | 16. neurosurgery                   |
| 7. pediatrician     | 17. ear/nose/throat                |
| 8. hematology       | 18. oncology                       |
| 9. rheumatology     | 19. optometry/ophthalmology        |
| 10. allergy         | Add all others to the health notes |

2a. Do you currently have a dentist? Y/N

2b. Have you been to the dentist in the past year? Y/N

3. Have you been treated in the emergency room this past year? Y/N  
If yes, add when and why to the health note

4. Have you been admitted to the hospital this past year? Y/N  
If yes, add when and why to the health notes

5. Do you take any medicines? Y/N

If yes, what ones?

- |                                |                                |
|--------------------------------|--------------------------------|
| 1. Abilify (Aripiprazole)      | 26. Lopressor (Metoprolol)     |
| 2. Adderall                    | 27. Mellaril (Thioridazine)    |
| 3. Anafranil (Clomipramine)    | 28. Metformin (Glucophage)     |
| 4. Ativan (Lorazepam)          | 29. Mysoline (Primidone)       |
| 5. Baclofen (Liorasal)         | 30. Neurontin (Gabapentin)     |
| 6. Buspar (Buspirone)          | 31. Norvasc (Amlodipine)       |
| 7. Catapres (Clonidine)        | 32. Paxil (Paroxetine)         |
| 8. Celexa (Citalopram)         | 33. Phenobarbital              |
| 9. Cogentin (Benztropine)      | 34. Pravachol (Pravastatin)    |
| 10. Concerta (Methylphenidate) | 35. Prevacid (Lansoprazole)    |
| 11. Depakote (Divalproex)      | 36. Prinivil (Lisinopril)      |
| 12. Desyrel (Trazadone)        | 37. Prozac (Fluoxetine)        |
| 13. Detrol (Tolterodine)       | 38. Risperdal (Risperidone)    |
| 14. Dilantin (Phenytoin)       | 39. Ritalin (Methylphenidate)  |
| 15. Effexor (Venlafaxine)      | 40. Seroquel (Quetiapine)      |
| 16. Geodon (Ziprasidone)       | 41. Symmetrel (Amantadine)     |
| 17. Haldol (Haloperidol)       | 42. Synthroid (Levothyroxin)   |
| 18. Inderal (Propranolol)      | 43. Tegretol (Carbamezapine)   |
| 19. Keppra (Levetiracetam)     | 44. Thorazine (Chlorpromazine) |
| 20. Klonopin (Clonazepam)      | 45. Topamax (Topiramate)       |

- |                            |                            |
|----------------------------|----------------------------|
| 21. Lamictal (Lamotragine) | 46. Vasotec (Enalapril)    |
| 22. Lasix (Furosemide)     | 47. Wellbutrin (Bupropion) |
| 23. Lexapro (Escitalopram) | 48. Xanax (Alprazolam)     |
| 24. Lipitor (Atorvastin)   | 49. Zoloft (Sertraline)    |
| 25. Lithium (Eskalith)     | 50. Zyprexa (Olanzapine)   |

Add all others to the health notes

6. Do you have any problems with your health? Y/N  
If yes, add what to the health notes
7. In the past year is your health (better / worse / the same)?
8. Do you currently receive the following?
- |                          |     |
|--------------------------|-----|
| a. Speech therapy?       | Y/N |
| b. Occupational therapy? | Y/N |
| c. Physical therapy?     | Y/N |
| d. Nutritional supports? | Y/N |
| e. Respiratory therapy?  | Y/N |
| f. Massage therapy?      | Y/N |
9. Does the individual state a need for additional services/supports from?
- |                            |     |
|----------------------------|-----|
| a. Speech therapy?         | Y/N |
| b. Occupational therapy?   | Y/N |
| c. Physical therapy?       | Y/N |
| d. Nutritional evaluation? | Y/N |
| e. Respiratory therapy?    | Y/N |
| f. Massage therapy?        | Y/N |
10. Does the individual appear to need or state the need for:
- |                                     |     |
|-------------------------------------|-----|
| a. Speech therapy evaluation?       | Y/N |
| b. Occupational therapy evaluation? | Y/N |
| c. Physical therapy evaluation?     | Y/N |
| d. Nutritional evaluation?          | Y/N |
| e. Respiratory therapy evaluation?  | Y/N |
| f. Massage therapy evaluation?      | Y/N |
| g. Oral motor evaluation?           | Y/N |
11. Does the individual appear to need or state the need for:
- |                                   |     |
|-----------------------------------|-----|
| a. Adaptive equipment evaluation? | Y/N |
| b. Environmental modifications?   | Y/N |
12. Does the individual appear to need or state the need for:
- |                                     |     |
|-------------------------------------|-----|
| a. Male preventative health care?   | Y/N |
| b. Female preventative health care? | Y/N |
| c. Vision exam?                     | Y/N |
| d. Hearing exam?                    | Y/N |

- 13a. Does the individual take seizure medication?
- 13b. Is this medication prescribed by the primary care physician?
- 14a. Does the individual take behavior/psychiatric medication?
- 14b. Is this medication prescribed by the primary care physician?
15. Does the individual take medication for chronic conditions such as: diabetes, hypertension, thyroid, heart, gastrointestinal disorders, blood disorders, or respiratory disorders?
16. Does the individual appear to require or state the need for additional information/education about medications?
- 17a. Do behaviors exist that have not been addressed with a behavior review?
- 17b. Does the individual reside in a behavioral home without a current behavior review on file?
- 17c. Does the family/etc. indicate that a behavior review is needed?
- 18a. Has a behavior review recommended behavioral services that are not in place?
- 18b. Do behaviors currently exist that are not addressed in a behavior plan?
- 18c. Does a behavior plan exist without appropriate professional oversight?
- 18d. Does the family/etc. indicate that behavioral services or supports are needed?
19. Does any implemented behavior plan require a level of approval that it has not yet been received?
- 20a. Does the individual have unresolved issues from abuse, grief, interpersonal relationships?
- 20b. Does the individual/supports indicate the need for mental health counseling/support?
- 21a. Does the individual have Medicare?
- 21b. Does the individual have private insurance?
- 21c. Does the individual private pay?

**NOTE: For any additional health concerns or questions please call Linda in the Tampa office 1-866-254-2075 or on her cell 813-495-0147.**

## Attachment 2: Personal Outcome Measures Outcomes

### Identity

- People choose personal goals.
- People choose where and with whom they live.
- People choose where they work.
- People have intimate relationships.
- People are satisfied with services.
- People are satisfied with their personal life situations.

### Autonomy

- People choose their daily routine.
- People have time, space and opportunity for privacy.
- People decide when to share personal information.
- People use their environments.

### Affiliation

- People live in integrated environments.
- People participate in the life of the community.
- People perform different social roles.
- People have friends.
- People are respected.

### Attainment

- People choose services.
- People realize personal goals.

### Safeguards

- People are connected to natural support networks.
- People are safe.

### Rights

- People exercise rights.
- People are treated fairly.

### Health and Wellness

- People have the best possible health.
- People are free from abuse and neglect.
- People experience continuity and security.

## Attachment 3: Foundational Outcomes Regression Analysis Results

Exhibit A3-1: Regression Results		
People Are Safe		
	P-Value	Odds Ratio
Social Capital		
Low (0 - 2 Present)	0.055	0.701
Moderate (3 - 5 Present)	0.915	0.983
Residential Type		
Independent/Supported Living	0.156	1.223
Group Home	0.000	2.336
Other Home	0.004	2.310
Primary Disability		
Cerebral Palsy	0.000	0.584
Autism	0.057	0.699
Other Disability	0.156	1.498
Number of Services Received	0.352	1.032
APD Area Size		
Small	0.007	0.679
Medium	0.643	1.055
WSC Score: Achieving/Implementing	0.217	1.146
Female	0.123	0.857
Age	0.204	1.005
Race/Ethnicity		
Black	0.017	0.750
Hispanic	0.974	0.993
Other Race	0.255	0.833
Other POM Outcomes	0.000	1.113
Health Problems	0.000	0.516
Health Better	0.220	1.164

### People Feel Safe:

- Controlling for other outcomes present, individuals with low level of social capital compared to high levels, were about 30 percent less likely to be safe. However, the error term for this is just over five percent ( $p=0.055$ ).
- Residents in group homes or other homes were over two times more likely to be safe than individuals living in family homes.
- Individuals with Cerebral Palsy were almost half as likely to be safe as were individuals with an intellectual disability.

- Residents of small areas were over 30 percent less likely to be safe than residents of large areas.
- Individuals who are black were 25 percent less likely to be safe than individuals who are white.
- For each additional outcome present, individuals were about 11 percent more likely to be safe.
- Individuals with health problems were half as likely to be safe as were individuals without health problems.

Exhibit A3-2: Regression Results		
People Exercise Rights		
	P-Value	Odds Ratio
Social Capital		
Low (0 - 2 Present)	0.000	0.530
Moderate (3 - 5 Present)	0.009	0.673
Residential Type		
Independent/Supported Living	0.057	1.316
Group Home	0.641	0.934
Other Home	0.192	1.502
Primary Disability		
Cerebral Palsy	0.000	1.824
Autism	0.161	1.343
Other Disability	0.151	1.452
Number of Services Received	0.362	0.967
APD Area Size		
Small	0.000	2.523
Medium	0.585	0.935
WSC Score: Achieving/Implementing	0.826	1.029
Female	0.832	1.023
Age	0.054	0.992
Race/Ethnicity		
Black	0.008	1.417
Hispanic	0.334	0.081
Other Race	0.544	1.114
Other POM Outcomes	0.000	1.492
Health Problems	0.316	0.895
Health Better	0.007	1.399

People Exercise Rights:

- Social capital appears to have a relatively strong impact on an individual’s ability to exercise rights. Individuals with low or moderate levels of social capital were considerably less likely to exercise rights compared to individuals with high levels of social capital, 47 percent and 33 percent less respectively.
- Individuals with Cerebral Palsy were 80 percent more likely to exercise rights than individuals with an intellectual disability.
- Residents in small areas were two and a half time more likely to exercise rights than residents in large Areas.
- Individuals who are black were 42 percent more likely to exercise rights than individuals who are white.

- For each additional outcome presents, individuals were about 49 percent more likely to exercise rights.
- If individuals believed their health was better than in the previous year, then they were 40 percent more likely to exercise rights.

<b>Exhibit A3-3: Regression Results</b>		
<b>People Are Treated Fairly</b>		
	<b>P-Value</b>	<b>Odds Ratio</b>
Social Capital		
Low (0 - 2 Present)	0.000	0.352
Moderate (3 - 5 Present)	0.083	0.725
Residential Type		
Independent/Supported Living	0.001	0.595
Group Home	0.727	1.047
Other Home	0.017	1.926
Primary Disability		
Cerebral Palsy	0.005	1.586
Autism	0.649	0.910
Other Disability	0.493	1.203
Number of Services Received	0.265	1.039
APD Area Size		
Small	0.000	2.258
Medium	0.000	2.009
WSC Score: Achieving/Implementing	0.068	1.229
Female	0.989	0.999
Age	0.872	0.999
Race/Ethnicity		
Black	0.147	1.202
Hispanic	0.744	0.936
Other Race	0.584	1.098
Other POM Outcomes	0.000	1.348
Health Problems	0.137	0.856
Health Better	0.000	1.612

People are Treated Fairly

- Controlling for all the other outcomes and variables in the model, individuals with low levels of social capital were close to 65 percent less likely to feel they are treated fairly. The association for moderate levels is not as strong (Odds ratios = 0.725), and there is an eight percent chance it is due to error.
- Compared to individuals living in a family home, residents of independent or supported living were about 40 percent less likely to feel they are treated fairly. However, residents of

- other home types (mostly ALFs and Foster Homes) were about two times as likely to report being treated fairly.
- Compared to individuals with an intellectual disability, individuals with Cerebral Palsy were close to 59 percent more likely to report being treated fairly.
  - Residents in small areas were 2.26 times more likely to feel they are treated fairly than residents in large areas.
  - Residents in medium areas were two times more likely to feel they are treated fairly than residents in large areas.
  - For each additional outcome that is present, individuals were about 35 percent more likely to feel they are treated fairly.
  - If individuals believed their health was better than in the previous year, they were 62 percent more likely to feel they are treated fairly.

<b>Exhibit A3-4: Regression Results</b>		
<b>People Have the Best Possible Health</b>		
	<b>P-Value</b>	<b>Odds Ratio</b>
Social Capital		
Low (0 - 2 Present)	0.738	0.946
Moderate (3 - 5 Present)	0.599	1.076
Residential Type		
Independent/Supported Living	0.818	1.030
Group Home	0.000	1.997
Other Home	0.030	1.739
Primary Disability		
Cerebral Palsy	0.007	0.681
Autism	0.208	1.267
Other Disability	0.976	1.007
Number of Services Received	0.009	1.083
APD Area Size		
Small	0.000	0.429
Medium	0.003	0.734
WSC Score: Achieving/Implementing	0.000	1.550
Female	0.000	0.657
Age	0.009	0.991
Race/Ethnicity		
Black	0.150	0.851
Hispanic	0.321	1.204
Other Race	0.315	1.165
Other POM Outcomes	0.000	1.145
Health Problems	0.000	0.432
Health Better	0.140	1.176

People Have the Best Possible Health

- Social capital did not appear to have a significant impact on whether an individual has the best possible health.
- Residents in group homes were two times more likely to have the best possible health as were individuals living in family homes.
- Residents in other types of homes were 74 percent more likely to have the best possible health than were individuals living in family homes.
- Individuals with Cerebral Palsy were almost 32 percent less likely to have the best possible health than individuals with an intellectual disability.
- For each additional service an individual received, he or she was eight percent more likely to have the best possible health.
- Residents in small Areas were 57 percent less likely to have the best possible health than residents in large areas.
- Residents in medium Areas were 27 percent less likely to have the best possible health than residents in large areas.
- Individuals whose waiver support coordinator (WSC) scored Achieving or Implementing were 55 percent more likely to have the best possible health than were individuals with a WSC who scored Emerging or Not Emerging.
- Females were 34 percent less likely to have the best possible health than males.
- With each additional year, the likelihood individuals have the best possible health decreased by one percent.
- For each additional outcome present, individuals were about 15 percent more likely to have the best possible health.
- Individuals with health problems were 57 percent less likely to have the best possible health as individuals without health problems.

<b>Exhibit A3-5: Regression Results</b>		
<b>People are Free from Abuse and Neglect</b>		
	<b>P-Value</b>	<b>Odds Ratio</b>
Social Capital		
Low (0 - 2 Present)	0.374	0.792
Moderate (3 - 5 Present)	0.927	0.979
Residential Type		
Independent/Supported Living	0.000	0.276
Group Home	0.012	0.654
Other Home	0.001	0.361
Primary Disability		
Cerebral Palsy	0.425	1.181
Autism	0.633	1.141
Other Disability	0.062	2.287
Number of Services Received	0.413	0.965
APD Area Size		
Small	0.013	0.645
Medium	0.117	0.790
WSC Score: Achieving/Implementing	0.000	1.693
Female	0.001	0.641
Age	0.000	1.023
Race/Ethnicity		
Black	0.098	1.310
Hispanic	0.051	1.897
Other Race	0.441	1.184
Other POM Outcomes	0.000	1.134
Health Problems	0.481	0.912
Health Better	0.772	1.049

People are Free from Abuse, Neglect, or Exploitation

- Social capital did not appear to have a significant impact on whether an individual is free from abuse and neglect.
- Residents in independent/supported living were 72 percent less likely to be free from abuse and neglect than individuals living in family homes.
- Residents in group homes were 35 percent less likely to be free from abuse and neglect than individuals living in family homes.
- Residents in other types of homes were 64 percent less likely to be free from abuse and neglect than were individuals living in family homes.
- Residents in small Areas were 35 percent less likely to be free from abuse and neglect than residents in large Areas.

- Individuals whose WSC scored Achieving or Implementing were 69 percent more likely to be free from abuse and neglect than were individuals with a WSC who scored Emerging or Not Emerging.
- Females were 36 percent less likely to be free from abuse and neglect than males.
- With each additional year, individuals were two percent more likely to be free from abuse and neglect.
- For each additional outcome present, individuals were about 13 percent more likely to be free from abuse and neglect.

<b>Exhibit A3-6: Regression Results</b>		
<b>People Experience Continuity and Security</b>		
	<b>P-Value</b>	<b>Odds Ratio</b>
Social Capital		
Low (0 - 2 Present)	0.000	0.403
Moderate (3 - 5 Present)	0.000	0.614
Residential Type		
Independent/Supported Living	0.000	0.268
Group Home	0.000	0.609
Other Home	0.038	0.549
Primary Disability		
Cerebral Palsy	0.783	0.960
Autism	0.339	1.195
Other Disability	0.681	0.903
Number of Services Received	0.847	0.994
APD Area Size		
Small	0.027	1.382
Medium	0.000	1.491
WSC Score: Achieving/Implementing	0.001	1.441
Female	0.187	0.881
Age	0.001	1.012
Race/Ethnicity		
Black	0.485	0.921
Hispanic	0.273	0.814
Other Race	0.304	0.850
Other POM Outcomes	0.000	1.164
Health Problems	0.000	0.537
Health Better	0.123	0.839

People Experience Continuity and Security

- Social capital appears to have a relatively strong impact on whether an individual experiences continuity and security. Individuals with low or moderate levels of social capital were

- considerably less likely to experience continuity and security compared to individuals with high levels of social capital, 60 percent and 39 percent less respectively.
- Compared to individuals living in a family home, residents of independent or supported living, residents of group home, and residents of other home types were less likely to experience continuity and security, 73 percent, 39 percent, and 45 percent less respectively.
  - Residents in small Areas were 38 percent more likely to experience continuity and security than residents in large Areas.
  - Residents in medium areas were 49 percent more likely to experience continuity and security than residents in large areas.
  - Individuals whose WSC scored Achieving or Implementing were 1.44 times more likely to experience continuity and security than individuals whose WSC scored Emerging or Not Emerging.
  - With each additional year, individuals were one percent more likely to experience continuity and security.
  - For each additional outcome present, individuals were about 16 percent more likely to experience continuity and security.
  - Individuals with health problems were 46 percent less likely to experience continuity and security than individuals without health problems.

## Attachment 4: Choice Outcomes Regression Analysis Results

<b>Exhibit A4-1: Regression Results</b>		
<b>People Choose Personal Goals</b>		
	<b>P-Value</b>	<b>Odds Ratio</b>
Social Capital		
Low (0 - 2 Present)	0.000	0.475
Moderate (3 - 5 Present)	0.983	1.003
Residential Type		
Independent/Supported Living	0.103	1.258
Group Home	0.001	1.629
Other Home	0.281	1.396
Primary Disability		
Cerebral Palsy	0.150	1.256
Autism	0.321	1.227
Other Disability	0.065	1.603
Number of Services Received	0.026	1.082
APD Area Size		
Small	0.132	1.276
Medium	0.020	1.316
WSC Score: Achieving/Implementing	0.000	2.023
Female	0.059	1.218
Age	0.013	0.990
Race/Ethnicity		
Black	0.997	1.000
Hispanic	0.028	1.570
Other Race	0.704	0.936
Other POM Outcomes	0.000	1.391
Health Problems	0.011	1.316
Health Better	0.713	0.957

### People Choose Personal Goals

- Controlling for all the other outcomes and variables in the model, individuals with low levels of social capital were close to 52 percent less likely to choose their personal goals than individuals with high levels of social capital. This difference was not statistically significant between moderate vs. high levels of social capital.
- Residents in group homes were 63 percent more likely to choose their personal goals as were individuals living in family homes.
- For each additional service received, individuals were eight percent more likely to choose personal goals.

- Residents in medium Areas were 32 percent more likely to choose their personal goals than residents in large Areas.
- Individuals whose WSC scored Achieving or Implementing were two times as likely to choose their personal goals as individuals whose WSC scored Emerging or Not Emerging.
- With each additional year, the likelihood individuals were able to choose personal goals decreased by one percent.
- Individuals who are Hispanic were 57 percent more likely to choose their personal goals than individuals who are white.
- For each additional outcome present, individuals were about 39 percent more likely to choose their personal goals.

<b>Exhibit A4-2: Regression Results</b>		
<b>Choose Where and W/Whom to Live</b>		
	<b>P-Value</b>	<b>Odds Ratio</b>
Social Capital		
Low (0 - 2 Present)	0.005	0.590
Moderate (3 - 5 Present)	0.012	0.665
Residential Type		
Independent/Supported Living	0.000	2.024
Group Home	0.000	0.421
Other Home	0.008	0.426
Primary Disability		
Cerebral Palsy	0.000	1.982
Autism	0.000	2.574
Other Disability	0.042	1.732
Number of Services Received	0.021	0.922
APD Area Size		
Small	0.958	0.991
Medium	0.118	1.206
WSC Score: Achieving/Implementing	0.577	0.934
Female	0.012	1.306
Age	0.792	0.999
Race/Ethnicity		
Black	0.759	0.961
Hispanic	0.263	1.255
Other Race	0.008	1.582
Other POM Outcomes	0.000	1.393
Health Problems	0.300	0.894
Health Better	0.178	0.845

People Choose Where and With Whom to Live

- Social capital appears to have a relatively strong impact on whether an individual could choose where and with whom to live. Individuals with low or moderate levels of social capital were considerably less likely to choose where and with whom to live compared to individuals with high levels of social capital, 41 percent and 33 percent less respectively.
- Residents in independent/supported living homes were two times more likely to choose where and with whom to live as were individuals living in family homes.
- Residents in group homes or other home types were 58 percent less likely to choose where and with whom to live than individuals living in family homes.
- Individuals with Cerebral Palsy were almost two times more likely to choose where and with whom to live as individuals with an intellectual disability.
- Individuals with Autism were almost 2.6 times more likely to choose where and with whom to live as individuals with an intellectual disability.
- Individuals with other types of disability were 1.7 times as likely to choose where and with whom to live as individuals with an intellectual disability.
- For each additional service received, individuals were eight percent less likely to choose where and with whom to live.
- Females were 30 percent more likely to choose where and with whom to live than males.
- Individuals who are other types of ethnicity (other than white, black, or Hispanic) were 58 percent more likely to choose where and with whom to live than individuals who are white.
- For each additional outcome present, individuals were about 39 percent more likely to choose where and with whom to live.

<b>Exhibit A4-3: Regression Results</b>		
<b>People Choose Where They Work</b>		
	<b>P-Value</b>	<b>Odds Ratio</b>
Social Capital		
Low (0 - 2 Present)	0.008	0.639
Moderate (3 - 5 Present)	0.521	0.916
Residential Type		
Independent/Supported Living	0.009	1.422
Group Home	0.400	1.121
Other Home	0.076	1.663
Primary Disability		
Cerebral Palsy	0.294	1.171
Autism	0.247	1.254
Other Disability	0.024	0.560
Number of Services Received	0.000	0.884
APD Area Size		
Small	0.035	0.714
Medium	0.325	0.895
WSC Score: Achieving/Implementing	0.637	1.058
Female	0.045	1.222
Age	0.000	0.985
Race/Ethnicity		
Black	0.150	0.837
Hispanic	0.145	0.751
Other Race	0.026	1.432
Other POM Outcomes	0.000	1.288
Health Problems	0.003	0.734
Health Better	0.052	1.251

#### People Choose Where They Work

- Controlling for all the other outcomes and variables in the model, individuals with low levels of social capital were 36 percent less likely to choose where they work than individuals with high levels of social capital. This difference was not statistically significant between moderate and high levels of social capital.
- Residents in independent/supported living were 42 percent more likely to choose where they work than individuals living in family homes.
- Individuals with other types of disabilities (other than cerebral palsy and autism) were 20 percent more likely to choose where they work than individuals with an intellectual disability.
- For each additional service individual received, they were 22 percent less likely to choose where they work.

- Residents in small Areas were 29 percent less likely to choose where they work than residents in large Areas.
- With each additional year, the likelihood individuals choose where they work decreased by one percent.
- For each additional outcome present, individuals were about 29 percent more likely to choose where they work.
- Individuals with health problems were 27 percent less likely to choose where they work as were individuals without health problems.

<b>Exhibit A4-4: Regression Results</b>		
<b>People Choose Their Daily Routine</b>		
	<b>P-Value</b>	<b>Odds Ratio</b>
Social Capital		
Low (0 - 2 Present)	0.000	0.345
Moderate (3 - 5 Present)	0.016	0.630
Residential Type		
Independent/Supported Living	0.000	2.636
Group Home	0.000	0.170
Other Home	0.000	0.244
Primary Disability		
Cerebral Palsy	0.876	0.974
Autism	0.950	1.013
Other Disability	0.668	1.133
Number of Services Received	0.065	0.934
APD Area Size		
Small	0.058	1.376
Medium	0.397	0.899
WSC Score: Achieving/Implementing	0.340	0.887
Female	0.427	1.092
Age	0.176	0.994
Race/Ethnicity		
Black	0.513	1.094
Hispanic	0.538	0.880
Other Race	0.055	0.712
Other POM Outcomes	0.000	1.325
Health Problems	0.073	1.226
Health Better	0.000	0.623

People Choose Their Daily Routines

- Social capital appears to have a relatively strong impact on an individual's chance to choose their daily routine. Individuals with low or moderate levels of social capital were

- considerably less likely to choose their daily routine compared to individuals with high levels of social capital, 65 percent and 37 percent less respectively.
- Residents in independent/supported living homes were 2.6 times more likely to choose their daily routine as were individuals living in family homes.
  - Residents in group homes were 83 percent less likely to choose their routine than individuals living in family homes
  - Residents in other home types were 76 percent less likely to choose their routine than individuals living in family homes.
  - For each additional outcome present, individuals were about 33 percent more likely to choose their daily routine.
  - If individuals believed their health improved in the previous year, they were 38 percent less likely to choose their daily routines.

<b>Exhibit A4-5: Regression Results</b>		
<b>Decide When and W/Whom to Share Information</b>		
	<b>P-Value</b>	<b>Odds Ratio</b>
Social Capital		
Low (0 - 2 Present)	0.000	0.433
Moderate (3 - 5 Present)	0.003	0.634
Residential Type		
Independent/Supported Living	0.144	1.228
Group Home	0.472	1.099
Other Home	0.056	1.692
Primary Disability		
Cerebral Palsy	0.000	1.812
Autism	0.690	1.082
Other Disability	0.034	1.722
Number of Services Received	0.470	0.976
APD Area Size		
Small	0.029	1.396
Medium	0.000	1.606
WSC Score: Achieving/Implementing	0.000	2.060
Female	0.189	1.142
Age	0.000	0.985
Race/Ethnicity		
Black	0.097	1.227
Hispanic	0.361	0.834
Other Race	0.871	0.973
Other POM Outcomes	0.000	1.296
Health Problems	0.000	1.947
Health Better	0.000	1.751

People Decide When and With Whom to Share Information

- Social capital appears to have a relatively strong impact on whether an individual's ability to decide when and with whom to share information. Individuals with low or moderate levels of social capital were considerably less likely to decide when and with whom to share information compared to individuals with high levels of social capital, 57 percent and 37 percent less respectively.
- Individuals with Cerebral Palsy were 80 percent more likely to be able to decide when and with whom to share information than individuals with an intellectual disability.
- Individuals who lived in small Areas were 40 percent more likely to be able to decide when and with whom to share information than individuals in large Areas.
- Individuals who lived in medium Areas were 60 percent more likely to be able to decide when and with whom to share information than individuals in large Areas.
- Individuals whose WSC scored Achieving or Implementing were two times more likely to be able to decide when and with whom to share information than individuals whose WSC scored Emerging or Not Emerging.
- As an individual gets one year older, the likelihood of him or her deciding when and with whom to share information decreased one percent.
- For each additional outcome presents, individuals were about 30 percent more likely to be able to decide when and with whom to share information.
- Individuals with health problems were 95 percent more likely to be able to decide when and with whom to share information than individuals without health problems.
- Individuals who felt their health improved in the past year were 75 percent more likely to be able to decide when and with whom to share information than individuals who did not feel better.

<b>Exhibit A4-6: Regression Results</b>		
<b>People Choose Services</b>		
	<b>P-Value</b>	<b>Odds Ratio</b>
Social Capital		
Low (0 - 2 Present)	0.014	0.642
Moderate (3 - 5 Present)	0.120	0.791
Residential Type		
Independent/Supported Living	0.000	2.040
Group Home	0.147	0.805
Other Home	0.510	0.796
Primary Disability		
Cerebral Palsy	0.002	1.655
Autism	0.489	0.861
Other Disability	0.006	2.048
Number of Services Received	0.450	1.028
APD Area Size		
Small	0.308	1.192
Medium	0.011	1.368
WSC Score: Achieving/Implementing	0.000	1.717
Female	0.005	1.361
Age	0.951	1.000
Race/Ethnicity		
Black	0.071	1.273
Hispanic	0.216	1.301
Other Race	0.923	0.982
Other POM Outcomes	0.000	1.466
Health Problems	0.696	1.045
Health Better	0.395	1.114

People Choose Services

- Controlling for all the other outcomes and variables in the model, individuals with low levels of social capital were 36 percent less likely to choose their own services than individuals with high levels of social capital. This difference was not statistically significant between moderate and high levels of social capital.
- Residents in independent/supported living were two times more likely to choose services as were individuals living in family homes.
- Individuals with Cerebral Palsy were 60 percent more likely to choose services as individuals with an intellectual disability.
- Individuals with other types of disabilities (other than cerebral palsy and autism) were two times more likely to choose services than individuals with an intellectual disability.

- Residents in medium Areas were 37 percent more likely to choose services than residents in large areas.
- Individuals whose WSC scored Achieving or Implementing were 72 percent more likely to choose services than individuals whose WSC scored Emerging or Not Emerging.
- Females were 36 percent more likely to choose services than males.
- For each additional outcome present, individuals were about 47 percent more likely to choose services.

## Attachment 5: Other Outcomes Regression Analysis Results

Exhibit A5-1: Regression Results		
People Are Satisfied With Services		
	P-Value	Odds Ratio
Social Capital		
Low (0 - 2 Present)	0.911	1.023
Moderate (3 - 5 Present)	0.433	0.870
Residential Type		
Independent/Supported Living	0.514	0.906
Group Home	0.236	0.864
Other Home	0.907	1.031
Primary Disability		
Cerebral Palsy	0.124	0.788
Autism	0.001	0.544
Other Disability	0.008	0.519
Number of Services Received	0.368	1.030
APD Area Size		
Small	0.063	1.309
Medium	0.000	1.687
WSC Score: Achieving/Implementing	0.000	1.525
Female	0.407	0.920
Age	0.000	1.016
Race/Ethnicity		
Black	0.407	0.904
Hispanic	0.203	1.284
Other Race	0.610	1.085
Other POM Outcomes	0.000	1.229
Health Problems	0.693	0.961
Health Better	0.236	1.156

### People Are Satisfied With Services

- Social capital did not appear to have a significant impact on whether or not an individual was satisfied with services.
- Individuals with Autism were almost 46 percent less likely to be satisfied with services than individuals with an intellectual disability.
- Individuals with other types of disabilities (other than cerebral palsy and autism) were 48 percent less likely to be satisfied with services than individuals with an intellectual disability.
- Residents in medium Areas were 69 percent more likely to be satisfied with services than residents in large Areas.

- Individuals whose WSC scored Achieving or Implementing were 53 percent more likely to choose their personal goals than individuals with a WSC who scored Emerging or Not Emerging.
- With each additional year, the likelihood individuals were satisfied with services increased two percent.
- For each additional outcome present, individuals were about 23 percent more likely to be satisfied with services.

<b>Exhibit A5-2: Regression Results</b>		
<b>Satisfied W/ Their Personal Life Situations</b>		
	<b>P-Value</b>	<b>Odds Ratio</b>
Social Capital		
Low (0 - 2 Present)	0.180	0.745
Moderate (3 - 5 Present)	0.998	1.000
Residential Type		
Independent/Supported Living	0.000	0.480
Group Home	0.001	0.633
Other Home	0.094	0.638
Primary Disability		
Cerebral Palsy	0.132	0.778
Autism	0.780	1.064
Other Disability	0.011	0.514
Number of Services Received	0.309	1.037
APD Area Size		
Small	0.050	0.744
Medium	0.998	1.000
WSC Score: Achieving/Implementing	0.487	0.921
Female	0.137	0.852
Age	0.000	1.016
Race/Ethnicity		
Black	0.086	0.798
Hispanic	0.155	0.740
Other Race	0.803	1.046
Other POM Outcomes	0.000	1.252
Health Problems	0.000	0.635
Health Better	0.181	0.839

People Are Satisfied With Their Personal Life Situations

- Social capital did not appear to have a significant impact on whether or not an individual was satisfied with their personal life situations.
- Residents in independent/supported living were almost 52 percent less likely to be satisfied with their personal life situations than residents in family homes.
- Residents in group homes were almost 37 percent less likely to be satisfied with their personal life situations than residents in family homes.
- Individuals with other types of disabilities (other than cerebral palsy and autism) were 49 percent less likely to be satisfied with their personal life situations than individuals with an intellectual disability.
- Residents in small Areas were 26 percent less likely to be satisfied with their personal life situations than residents in large Areas.
- As an individual gets one year older, the likelihood of him or her being satisfied with personal life situations increased two percent.
- For each additional outcome present, individuals were about 25 percent more likely to be satisfied with their personal life situations.
- Individuals with health problems were 36 percent less likely to be satisfied with their personal life situations than individuals without health problems.

<b>Exhibit A5-3: Regression Results</b>		
<b>Have Time/Space/Opportunity for Privacy</b>		
	<b>P-Value</b>	<b>Odds Ratio</b>
Social Capital		
Low (0 - 2 Present)	0.000	0.467
Moderate (3 - 5 Present)	0.305	0.815
Residential Type		
Independent/Supported Living	0.599	1.087
Group Home	0.000	0.362
Other Home	0.000	0.296
Primary Disability		
Cerebral Palsy	0.003	0.621
Autism	0.535	1.137
Other Disability	0.597	0.864
Number of Services Received	0.368	1.032
APD Area Size		
Small	0.121	0.792
Medium	0.080	1.234
WSC Score: Achieving/Implementing	0.283	1.130
Female	0.279	0.893
Age	0.011	1.010
Race/Ethnicity		
Black	0.874	0.980
Hispanic	0.384	1.195
Other Race	0.129	0.775
Other POM Outcomes	0.000	1.275
Health Problems	0.446	0.923
Health Better	0.368	0.893

Have Time/Space/Opportunity for Privacy

- Controlling for all the other outcomes and variables in the model, individuals with low levels of social capital were 53 percent less likely to have time/space/opportunity for privacy than individuals with high levels of social capital. This difference was not statistically significant between moderate and high levels of social capital.
- Compared to individuals living in a family home, residents of group homes and residents of other home types were less likely to have time/space/opportunity for privacy, 64 percent and 70 percent less respectively.
- Individuals with Cerebral Palsy were almost 38 percent less likely to have time/space/opportunity for privacy than individuals with an intellectual disability.
- With each additional year, the likelihood individuals have time/space/opportunity for privacy increased one percent.

- For each additional outcome present, individuals were about 28 percent more likely to have time/space/opportunity for privacy.

<b>Exhibit A5-4: Regression Results</b>		
<b>People Use Their Environments</b>		
	<b>P-Value</b>	<b>Odds Ratio</b>
Social Capital		
Low (0 - 2 Present)	0.000	0.254
Moderate (3 - 5 Present)	0.000	0.492
Residential Type		
Independent/Supported Living	0.000	4.106
Group Home	0.953	0.991
Other Home	0.145	1.560
Primary Disability		
Cerebral Palsy	0.009	0.644
Autism	0.243	1.267
Other Disability	0.177	0.703
Number of Services Received	0.000	0.835
APD Area Size		
Small	0.044	0.711
Medium	0.386	0.901
WSC Score: Achieving/Implementing	0.087	0.804
Female	0.872	1.017
Age	0.666	1.002
Race/Ethnicity		
Black	0.012	1.385
Hispanic	0.631	1.103
Other Race	0.289	0.829
Other POM Outcomes	0.000	1.258
Health Problems	0.243	0.880
Health Better	0.062	0.792

People Use Their Environment

- Social capital appears to have a relatively strong impact on an individual's ability to use the environment. Individuals with low or moderate levels of social capital were considerably less likely to use their environment compared to individuals with high levels of social capital, 85 percent and 51 percent less respectively.
- Residents in independent/supported living were four times more likely to use their environment as were individuals living in family homes.
- Individuals with Cerebral Palsy were almost 36 percent less likely to use their environment than individuals with an intellectual disability.

- For each additional service received, individuals were 26 percent less likely to use their environment.
- Residents in small Areas were 29 percent less likely to use their environment than residents in large Areas.
- Individuals who are black were 36 percent more likely to use their environment than individuals who are white.
- For each additional outcome present, individuals were about 26 percent more likely to use their environment.

<b>Exhibit A5-5: Regression Results</b>		
<b>People Realize Personal Goals</b>		
	<b>P-Value</b>	<b>Odds Ratio</b>
Social Capital		
Low (0 - 2 Present)	0.003	0.600
Moderate (3 - 5 Present)	0.290	0.854
Residential Type		
Independent/Supported Living	0.023	1.357
Group Home	0.209	1.162
Other Home	0.320	0.775
Primary Disability		
Cerebral Palsy	0.893	1.020
Autism	0.557	1.117
Other Disability	0.499	1.185
Number of Services Received	0.623	1.016
APD Area Size		
Small	0.029	0.738
Medium	0.000	0.471
WSC Score: Achieving/Implementing	0.000	1.567
Female	0.431	1.077
Age	0.000	0.982
Race/Ethnicity		
Black	0.026	0.776
Hispanic	0.070	0.714
Other Race	0.916	1.017
Other POM Outcomes	0.000	1.130
Health Problems	0.000	2.114
Health Better	0.000	2.368

People Realize Personal Goals

- Controlling for all the other outcomes and variables in the model, individuals with low levels of social capital were 40 percent less likely to realize personal goals than individuals with

- high levels of social capital. This difference was not statistically significant between moderate and high levels of social capital.
- Residents in independent/supported living were 36 percent more likely to realize personal goals as were individuals living in family homes.
  - Residents in small Areas were 26 percent less likely to realize personal goals than residents in large areas.
  - Residents in medium Areas were 53 percent less likely to realize personal goals than residents in large Areas.
  - Individuals whose WSC scored Achieving or Implementing were 57 percent more likely to realize personal goals than individuals whose WSC scored Emerging or Not Emerging.
  - With each additional year, the likelihood individuals realize personal goals decreases by two percent.
  - Individuals who are black were 32 percent less likely to realize personal goals than individuals who are white.
  - For each additional outcome present, individuals were about 13 percent more likely to realize personal goals.
  - Individuals with health problems were two times more likely to realize personal goals as were individuals without health problems
  - Individuals who believed their health this year was better than the previous year were 2.4 times more likely to realize personal goals as those who did not feel better.