Fiscal Year 2009-2010

Report to the Legislature on the Agency's Plan for Implementing Individual Budgeting "iBudget Florida"

February 1, 2010

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Executive Summary

Like many other states, Florida faces a variety of challenges in serving individuals with developmental disabilities. These include difficulties managing funding for Home and Community-Based waiver services within a complex approval and delivery system that hinders consumer control. Another challenge is a growing wait list. Consistently running deficits means new funding has not been available to serve those waiting for services but must be used essentially to pay for services previously provided to current enrollees. In an effort to control deficits, new cost control measures were mandated that inadvertently made the system more complex and less able to respond to consumers' changing needs.

The Case for Individual Budgets

Individual budgeting is an approach to allocating funding within existing Agency resources for those services used by a consumer with a developmental disability. A mathematical formula (also known as an algorithm) is developed through statistical analysis to equitably distribute available funds based on historical funding patterns. This formula considers individual consumer characteristics which are statistically proven to correlate with costs and generates a budget amount for each person prior to the support planning process.

By determining the budget up front, many of the system controls that add complexity and frustration to consumers can be drastically reduced or eliminated. For instance, the prior service authorization process can be eliminated as it exists today. As budget amounts would be predetermined to fit APD's appropriation, there will be less need to intervene in the fine details of which services an individual chooses to purchase. The role of service review will shift to simply ensuring that health and safety are protected and that expenditures are in accordance with state and federal law.

A move to individual budgets would also fit well with other agency initiatives to simplify processes and improve efficiency. These initiatives should dramatically reduce the paperwork burdens on waiver support coordinators, allowing them to spend more time directly helping consumers. Their enhanced ability to provide person-centered planning and help consumers understand and access the array of supports available outside the waiver program should benefit consumers.

More specifically, consumers and families are expected to benefit from:

- Greater ability to choose services that matter to them, given their unique situations.
- Greater flexibility for consumers to respond to changing needs.
- Reduced bureaucracy and "red tape."

- Support coordinators freed to focus on providing help that makes a real difference.
- Confidence that their funding is equitable compared to other consumers who are similarly situated.
- Reduced likelihood of policy changes spurred by budget deficits that cause significant disruption.
- Security of a financially stable system that will be there to serve them down the road.
- Greater control over their lives.
- Greater opportunity for the Agency to use new funds to serve the wait list and meet consumers' changed needs rather than resolve deficits.

Benefits are expected to accrue to the State of Florida, the public, and policy makers as follows:

- Predictable spending that is within the Agency's budget.
- A system which requires less Legislative intervention.
- Having greater information about the needs of APD consumers who are waiting for waiver services and the funding required to serve them.
- Consumers and families who are more satisfied with the system of care.

A variety of other states use individual budgeting systems, and the federal government is encouraging more states to do so. APD has researched how other states design and implement individual budgeting systems to identify best practices. The Agency would continue actively pursuing knowledge to enhance Florida's individual budgeting system.

The Process

Agency staff conducted extensive research on individual budgets to learn about specific options and best practices. APD also used a variety of methods throughout the process to obtain input from the public.

While all of these methods provided APD with useful feedback, a formal iBudget Florida Stakeholders' Group was the primary means for receiving input. The Family Care Council Florida co-hosted the Stakeholders' Group, assisting in selecting the members and providing guidance on the content. Members represented self-advocates, families with loved ones receiving waiver services, families with loved ones on the wait list for waiver services, agency waiver support coordinators, independent waiver support coordinators, agency waiver service providers, solo waiver service providers, and advocacy organizations.

Due to the short timeframe for completing a very wide-ranging and in-depth report, APD was not able to gauge the level of stakeholder consensus on this final plan. Thus, participation in the stakeholder group does not indicate that a Stakeholder Group participant or the organization he or she represented supports all details of this plan. However, at the conclusion of the last of the

three stakeholder meetings, stakeholders expressed appreciation for the Agency's sincere efforts to gain their input and interest in continuing to partner with APD on iBudget even beyond the plan's submission, as much work still lies ahead.

APD engaged Dr. Xu-Feng Niu, Professor of Statistics at Florida State University, to develop and recommend options for an algorithm which is a key feature of any individual budget process. The agency also utilized free technical assistance from nationally-recognized experts that was provided through the federal Medicaid agency.

Plan Details

Algorithm

The recommended algorithm considers a consumer's age, living setting, the sum of scores from two sections of the Questionnaire for Situational Information (Behavioral and Functional) and scores from three individual questions (supports needed to transfer [Question 18], maintain hygiene [Question 20], and for self-protection [Question 23]).

APD proposes that individual budgets be redetermined on an as-needed basis; for example, if QSI results changed after a reassessment or a consumer turned 21. APD is hopeful that most consumers' budgets would change minimally from year to year.

Funding for Individuals with Extraordinary Needs

APD does not expect the algorithm to determine every consumer's budget. Some consumers have extraordinary needs that do not fit a formula. Also, all consumers are subject to unplanned, temporary service needs and changes in their personal circumstances that require reexamination of their budget. That change may be temporary or permanent. It may require a one-time expenditure or a permanent budget adjustment. Accordingly, the plan makes provision for these needs through reserving a portion of the overall agency budget. The agency proposes using a qualified actuary to establish the amount of required reserved funds.

Schedule

APD proposes to phase in individual budgets gradually. The Agency recommends an initial limited phase-in akin to a pilot to test iBudget processes. Data would be collected and refinements made to the iBudget systems. APD would then begin a broader phase-in, perhaps by APD service area. The Agency would also phase in individuals' budget amounts, perhaps along the lines of

Georgia's approach where the initial iBudget was 20% of the algorithm-determined amount and 80% of the previous year's budget, with the algorithm-determined percentage increasing the second year until it was 100% of the budget by the third year.

Impact Analysis

APD has conducted initial analyses of the impact of this algorithm on consumers. Based on certain assumptions about the Agency's appropriations and the amount of funds to reserve for individuals with exceptional, changed, and one-time needs, for the 19,000 consumers considered in this analysis[1], compared to adjusted FY08-09 expenditures,[2] 64% would be expected to experience increases in their budgets and 36% would be expected to experience decreases. APD would plan to phase in iBudgets to mitigate any reductions and allow consumers to plan for and adjust to any decreases or increases. APD is conducting a variety of other analyses to consider the impact of the algorithm.

Services Available

APD recommends adopting a modified version of a system proposed by Mercer Management Consulting. This system would group waiver services into eight (8) service families. Once approved for at least one (1) service within a service family, consumers would generally be able to add additional services within that family with little or no review, as long as those changes fit within the consumer's budget. Additionally, some existing similar services would be replaced by a single broader new service, enabling one worker to do a wider variety of tasks for a consumer. Finally, all services would be available to all waiver enrollees, in contrast to the current restrictions on services for consumers enrolled in Tier 4.

Service Review (Prior Service Authorization)

APD recommends adopting a system which involves graduated levels of review, ranging from no review for many service decisions to intensive review when health and safety is at critical risk or additional funding beyond that determined by the algorithm is requested. Reviews would be performed by a combination of area office staff, central office staff, and perhaps technical experts under contract

[1] Consumers excluded from this analysis are those whose expenditures were not considered in building the algorithm because they had fewer than 12 months' worth of services, triggered data accuracy audits, or had expenditures among the very lowest and highest roughly 4.7%. Criteria for evaluating consumers with exceptional needs for this analysis were those receiving intensive behavioral services or whose iBudgets were lower than their FY08-09 funding for certain core health and safety services, such as Residential Habilitation or nursing services; since each consumer's situation will be reviewed individually, these consumers may or may not receive exceptional need funding, and additional consumers may qualify.

[2] FY08-09 expenditures were adjusted to make them comparable by removing one-time expenditures and eliminated services and accounting for the deficit spending from that year.

with the Agency. Reviews would be performed for consumers in the following circumstances:

- First iBudget cost plan, whether new to the waiver or transitioning to an iBudget.
- Adding a new service family.
- Requesting to receive additional funding.
- Changes to certain services important to health and safety, such as Residential Habilitation, nursing services, behavioral services, or therapies.
- Changing the type of place where he or she lives.
- Experiencing challenges with self-direction.
- With previous or current forensic involvement.

Other changes, such as moving funds within or between service families for which a consumer is already approved, would require little or no review.

Waiver Support Coordination

APD recommends maintaining the current three (3) levels of support coordination—limited, full, and transitional—but renaming "transitional" support coordination to "enhanced" support coordination and revising the criteria for what options are available to which consumers.

- Children would receive funding in their iBudget for limited waiver support coordination, but could choose to use other funds in their iBudgets to receive full or enhanced waiver support coordination. APD is also recommending that consumers' caregivers receive an orientation to iBudget and self-direction, and that children whose caregivers do not do so within six (6) months after transitioning onto an iBudget be required to have full waiver support coordination.
- Adults would receive funding in their iBudget for full support coordination, but most could choose to receive limited support coordination after a six-month transition period and after they or their caregivers received an orientation to iBudget and self-direction. They would also be able to use the excess funds for other services.
- Certain consumers would be required to receive full support coordination for at least a period of time. Examples include consumers who are adults newly-enrolled in the waiver or who have had forensic involvement.
- Consumers living in APD-licensed homes would be required to have full support coordination unless there is a friend or family member actively involved in the individual's life.
- Consumers required to receive enhanced support coordination for a minimum period of time would include consumers discharged from an Intermediate Care Facility for the Developmentally Disabled (ICF/DD), from a forensic placement, or from foster care.

APD also recommends that waiver support coordinators continue performing certain general administrative tasks although the Agency hopes to significantly reduce the time and expenses associated with them. One change APD would consider is making a more meaningful distinction between limited waiver support coordination and full waiver support coordination since consumers would generally have greater ability to choose between them. Stakeholders, attendees at the recent presentations of the draft iBudget Florida plan, and APD staff identified a number of issues that would need to be addressed in these policies, and thus APD would explore them more fully with stakeholders before making final recommendations on this issue.

Needs Assessment

APD recommends maintaining the Agency's current approach to conducting needs assessments, where APD staff members trained and certified in administration of the Questionnaire for Situational Information (QSI) conduct the needs assessments rather than providers or waiver support coordinators. This protects the objectivity of the assessments. However, providers and waiver support coordinators are important sources of information for the needs assessment process, and APD would continue to encourage their involvement in that role.

Providers

APD proposes that providers continue to be limited to those who are enrolled in the Medicaid program (participants in the Consumer-Directed Care Plus [CDC+] program would still be allowed to use non-Medicaid-enrolled providers). APD is not recommending incorporating the flexibility for consumers to directly hire their own workers as is available under the CDC+ program.

iBudget and Consumer Directed Care Plus

APD recommends maintaining the CDC+ program as an option for its consumers. APD envisions that everyone—including participants in CDC+—would have their budgets determined through the individual budgeting process. Once the budgets are determined, however, CDC+ participants would follow the CDC+ program processes and policies rather than iBudget Florida processes and policies to select and manage their supports and services. However, CDC+ participants would be able to end their CDC+ participation and receive services using iBudget Florida processes and policies if they chose.

Quality Assurance and Quality Improvement

Quality assurance and quality improvement will be of even greater importance in a more self-directed system. APD is taking a broad approach to this issue, considering every stakeholder in its system as a partner in assuring and

improving quality. The Agency proposes using a variety of methods to do so, ranging from revising standards to providing training to consumers, families and waiver support coordinators to facilitating communications about potential problems to enhancing APD's response to any quality issues surfaced.

Implementation Issues for Consideration

Implementation issues to consider include the following:

- Individual budgets will not guarantee a fully funded system that all consumers feel is adequate to meet all needs. Consumers will have to set priorities and seek additional supports outside the Home and Community Based Services waiver. Reduced paperwork and administrative compliance activities will allow waiver support coordinators to become more active in assisting consumers. A process will exist to address substantial changes in a consumer's personal situation if additional funding is required
- The algorithm does not consider every possible variable that may affect an individual's need for services. Such comprehensiveness is impossible for any algorithm, given the variety of factors that impact a person's needs and the challenge of measuring them and translating them into variables in a formula. Some examples of factors that are theorized to impact a person's needs are the natural supports available to a consumer, the consumer's own goals and preferences for his or her life, and the availability of providers in an area. However, the recommended algorithm explains a large portion of the variability in funding patterns indicating that it captures much of what affects funding.
- A well-planned phase-in is necessary to minimize disruption for consumers and assure their health and safety.
- Some stakeholders have expressed concern that while individual budgets are designed to allocate available funds equitably, the budgets are not anchored in the true cost of care. APD did not evaluate provider rates during the development of the iBudget Florida plan. Providers have experienced rate reductions in recent years as the state has adopted measures to control deficits. Providers have admirably partnered with APD to continue serving the Agency's consumers in the face of great budget challenges. Provider rates will continue to be an issue regardless of how the state chooses to manage its waiver system.

While these are important issues, APD believes that they can be mitigated and that the overall outcomes of greater system simplicity, greater sustainability, more equitable funding, and increased self-direction are worthwhile.

Other Considerations

- Under individual budgeting, stakeholders strongly support moving from the four tier waiver system to one waiver. Stakeholders desire that the broad range of services be available to all consumers. Individual budgeting would allow that, since the person's individual budget limit would be the cost control mechanism rather than limiting the service array. In fact, it would be difficult to mesh a system of individual budgeting with the four tier waiver system as it exists today; the four tier waiver system would add great complexity without adding value. That is because individual budgeting should accomplish the same goals as the tiers, though in a more individualized manner that leads to greater consumer control. In some respects, individual budgeting is a refinement of the tier system in that it creates an individual tier for each consumer based on his or her individual characteristics.
- Most system changes would require federal government approval, requiring the Agency for Health Care Administration to submit an application for a waiver amendment or new waiver. Based on initial discussions with the federal government and other states' waivers approved by the federal government, APD believes the proposals contained in this plan have a good likelihood of being approved, but such approval is not guaranteed.
- Finally, while upon initial review the Agency believes these recommendations are feasible, upon actual implementation, issues may arise that require modification to these proposals. APD plans to continue working with stakeholders to examine and refine the recommendations.

Conclusion

In conclusion, an individual budgeting approach has the promise of making the system simpler, more sustainable, more equitable, and more supportive of self-direction. While there may be transitional issues to address, APD believes many can be mitigated through a careful phase-in. Consumers and families would benefit from having greater ability to choose services that fit their unique needs, more focused support from waiver support coordinators, less frustration from excessive red tape, and greater ability to control their own lives. By enhancing system sustainability, consumers will also benefit from a stronger system that can serve them now and into the future.

APD recognizes that this plan is only a first step. Much more analysis remains to be done, and many proposals require further development. Given the broad scope of this plan, the very short timeframe for its development, and the thorough and inclusive process the Agency has tried to use in developing it, this is not surprising. The Agency looks forward to continuing its research and analysis and

its dialogue with stakeholders about the ideas in the plan, since such work will ultimately benefit the consumers served.

Finally, it should again be pointed out that the iBudget Florida plan is not a panacea that addresses all stakeholder concerns and system problems. Under iBudget or any other system, issues such as the adequacy of overall system funding and provider rates will continue to be a recurring concern for stakeholders. The need for effective advocacy will endure. However, iBudget Florida could represent a significant improvement in system management that will benefit consumers, families, waiver support coordinators, providers, and the State of Florida as a whole.

Introduction

Like many other states, Florida faces a variety of challenges in serving individuals with developmental disabilities. These include difficulties managing funding for Home and Community Based waiver services within a complex approval and delivery system that hinders consumer control. Another challenge is a growing wait list. These are interrelated issues that make it difficult for the Agency for Persons with Disabilities (APD) to achieve the legislative intent stated in s. 393.062, F.S., to develop and implement "community-based services that will enable individuals with developmental disabilities to achieve their greatest potential for independent and productive living, enable them to live in their own homes or in residences located in their own communities, and permit them to be diverted or removed from unnecessary institutional placements." Consistently running deficits means new funding has not been available to serve those waiting for services (except for a small number in crisis). To seek to control deficits, new cost control measures have been mandated by the Legislature, making the system more complex and less able to respond to consumers' changing needs.

Individual budgets have been proposed as a possible solution to the challenges cited above. Individual budgeting is an approach to allocating funding within existing Agency resources for services, used by consumers with developmental disabilities, which are funded by the Home and Community Based Services waiver. A mathematical formula (also known as an algorithm) is developed through statistical analysis to equitably distribute available funds based on historical funding patterns. This formula considers individual consumer characteristics that are statistically proven to correlate with costs and generates a budget amount for each person. These budget amounts are identical for consumers in identical situations and different for consumers in different situations, as measured by the variables in the algorithm. This approach also allows for changes in budgets as consumers' needs change.

This contrasts with the current method of determining individual funding, where budget development begins with conversations between the consumer, his or her family, and his or her waiver support coordinator. The consumer, his or her family, and his or her waiver support coordinator develop a support plan and proposed cost plan listing the consumer's needs, identifying available resources, and choosing waiver services. This cost plan must comply with a variety of laws and rules, including limits on service availability for consumers enrolled in certain tier waivers. The cost plan must be reviewed and approved by the Agency's prior service authorization contractor. While statistical analysis shows there is an overall rationality to the decisions made in the current system, because of the level of human judgment involved, some fear that inequities still persist. The system is also complex, requiring the involvement of many persons and the submission of much paperwork to function.

While stakeholders should not expect that individual budgets will result in a perfectly functioning system, APD believes individual budgets would be an improvement over the current system. By determining an individualized budget amount that sets a maximum for each person's expenditures at the beginning of the service planning process, the prior service authorization process can be greatly minimized, simplifying the system and allowing for more expedited service delivery once the budget is established. These budget amounts would be predetermined to comply with APD's appropriation, thus greatly reducing the likelihood of deficits. APD also proposes that the prior service authorization system be dramatically scaled back to dovetail with a more self-directed system of planning and selecting supports. Between a new minimized and streamlined service review process and a virtually paperless electronic system, waiver support coordinators should be freed from much of the paperwork burdens they have shouldered. Instead, they will be able to focus on person-centered planning, problem-solving with consumers, developing natural and community supports to enhance consumers' lives, and expanding the array of supports to augment paid waiver supports.

Benefits to consumers and their families include:

- Greater ability to choose services that matter to them, given their unique situations.
- Greater flexibility for consumers to respond to changing needs.
- Reduced bureaucracy and "red tape."
- Support coordinators freed to focus on providing help that makes a real difference.
- Confidence that their funding is fair compared to other consumers who are similarly situated.
- Reduced likelihood of policy changes that cause significant disruption due to budget deficits.
- Security of a financially stable system that will be there to serve them down the road.
- Greater control over their lives.
- Greater opportunity for the Agency to use new funds to serve the wait list and fairly meet consumers' changed needs rather than resolve deficits.

The State of Florida will benefit from:

- Predictable spending that is within the Agency's budget.
- A system which requires less Legislative intervention.
- Having greater information about the needs of APD consumers who are waiting for waiver services and the funding required to serve them.
- Reduced spending on prior service authorization contracts.
- Consumers and families who are more satisfied with the system of care.

A variety of other states use individual budgeting systems, and the federal government is encouraging other states to do so. APD has researched how other states design and implement individual budgeting systems to identify best

practices. The Agency would continue actively pursuing knowledge to enhance Florida's individual budgeting system.

The Florida Legislature included proviso language in the 2009 General Appropriations Act requiring the Agency to submit a plan for individual budgets:

> From the funds in Specific Appropriation 243, the agency in consultation with the Agency for Health Care Administration shall develop a plan to establish individual budgets for individuals enrolled in the home and community based services waivers. The plan shall provide for the following: an equitable distribution of available resources among individuals based on an assessment process that includes client characteristics and a valid formal assessment instrument; client choice of services and providers once the individual budget is determined; any formulas necessary to predict resource needs and establish individual budgets; a recommended role for providers and support coordinators during the assessment process to avoid any potential conflicts of interest; a proposed schedule for implementation; and any suggested statutory revisions necessary to implement individual budgets. The agency shall consider input from stakeholder groups, including self-advocates, family members, service providers, waiver support coordinators, and advocacy organizations in developing the plan. The plan shall be delivered to the Governor, the chair of the Senate Policy and Steering Committee on Ways and Means, and the chair of the House Full Appropriations Council on General Government & Health Care no later than February 1, 2010.

In accordance with this proviso language, the following report contains an overview of individual budgeting systems and APD's recommendations on how Florida might implement such a system, which APD has named "iBudget Florida."

Project Background

This plan for individual budgets comes after the Agency, its consumers, their families, and the waiver support coordinators and providers who serve them have experienced several years of significant change in the Florida developmental disabilities system. APD, like other state agencies serving consumers with developmental disabilities, faces several challenges in meeting the needs of its consumers. The iBudget Florida system, as APD has termed its individual budgeting initiative, is intended to help the Agency both address these challenges and enhance consumers' self-direction.

APD Challenges to Overcome

Managing funding is difficult

The Florida Constitution requires the state's budget to be balanced. APD is legally required to stay within its appropriation, as enacted into law by the state's elected representatives. However, APD has run annual deficits during the last several years. Essentially, APD has carried forward debt from previous years it must pay out of its current appropriation. Consequently, funding that could be used to help people who are on the wait list must be used to pay for services provided previously to current waiver enrollees.

System is complex

Because of the difficulties of managing available funding across the ever-changing needs of thousands of people, policymakers have continually added new methods to control and cut costs. For instance, the waiver program moved from requiring prior service authorization for limited services to requiring it for all services. Then, in accordance with state law, the Agency implemented the tier waiver system. The tier waiver system features four (4) waivers, three (3) of which cap a consumer's total annual expenditures. Following the implementation of the tiers and also required by state law was rebasing. Rebasing reduced the cost plan of consumers to the amount actually spent in the previous fiscal year, under certain conditions. Along the way, additional limits on the scope or frequency of services were imposed. Most of these methods added a new set of rules to follow in determining appropriate services and delivering them. They have required significant APD staff and provider time to process service requests and monitor their implementation. This results in unacceptable delays in getting services to consumers who need them. It also frustrates and confuses consumers.

Wait list is growing

Because of the Agency's deficit spending, during Fiscal Years 2007-08 and 2008-09, APD was limited by state law to enrolling only wait list consumers in crisis if sufficient funds were available through attrition. The number of consumers the Agency has enrolled under these conditions has averaged only 640 per year for the last two fiscal years. However, an average of about 2,000 consumers per year joins the wait list. This means that the wait list is growing.

Consumer control is limited

The methods used to control costs have a downside for the consumers APD serves besides the loss of services. These measures also limit consumers' choices and flexibility to meet their needs. Ultimately, the system does not support consumers' self-direction to the degree that it could. Self-direction refers to the fact that consumers with developmental disabilities should have a say in the decisions that shape their day-to-day lives. It is further the belief that resources are most efficiently used when those closest to the situation—the consumer and his or her family—make informed decisions on how best to use limited resources.

Systems can be structured to support consumer self-direction to a greater or lesser degree. However, studies show that consumers are more satisfied with their services when they have greater control over their services. Because services are provided using public funds, it is appropriate for there to be some limits on consumer control to ensure that the public's goals for the program are met. However, a primary goal of the services is to help consumers live everyday lives in the community, and the experts on how to do that are the consumers themselves. Therefore, the system must allow consumers to express their unique needs and tailor their services to fit them.

iBudgets as a Potential Response to these Challenges

For several reasons, APD believes that individual budgets can help address these challenges.

Individual budgets and self-direction are an emerging best practice encouraged by the federal government

Some evidence of this is in the federal government's current application that states use to ask for new waivers or amendments to their waivers. For instance, in the section of the waiver application where states describe how funding for consumers will be determined, the federal Centers for Medicare and Medicaid Services (CMS) has a specific option which states can select. This is titled

"Prospective Individual Budget Amount," described in the waiver application technical guide as follows:

> Some states have developed and implemented methodologies that determine a specific budget amount that is uniquely assigned to each individual waiver participant. The assigned budget amount constitutes a limit on the overall amount of services that may be authorized in the service plan. This method is termed "prospective" because the amount that is assigned is determined in advance of the development of the participant's service plan.

Additionally, as CMS states in the Home and Community-Based Services Technical Guide, "CMS urges that all states afford waiver participants the opportunity to direct some or all of their waiver services. Participant direction of services has been demonstrated to promote positive outcomes for individuals and families, improve participant satisfaction and be a cost-effective service delivery method."

Can help with Agency challenges and achieve Agency goals

The Agency believes iBudgets can help increase system sustainability, facilitate more consumer control, enhance equity, and simplify the system.

- Increase system sustainability: By specifically determining what each person should receive within the Agency's total appropriation, this method should also increase APD's ability to stay within its appropriation.
- Simplify the system: For instance, the method of distributing funds should enable APD to eliminate the prior service authorization system as it exists today, reducing the paperwork volume, and making it more responsive to consumer needs.
- Facilitate consumer control: By simplifying the system and introducing more flexibility in selecting among services, it will also give consumers greater ability to make choices and manage resources within their budgets.
- Enhance equity: By determining identical individual budgets for consumers in like situations as measured by individual characteristics and needs, equity is enhanced.

Vulnerabilities no greater than under current system

Currently, the Florida Constitution requires the Legislature to determine agencies' budgets and to ensure that the entire state's budget is not larger than the available revenues. Because of the state's decreased revenues, the ability of the state to cover program deficits with new funding as it did for several years has been diminished. The Legislature instead has chosen to reduce expenditures by eliminating and reducing services, reducing provider rates, and requiring some

consumers to reduce their services through their tier assignment. For example, this has led to some adult consumers moving to Tier 4 no longer receiving waiver-funded dental care beyond the limited services provided under the Medicaid State Plan, since Tier 4 does not offer waiver-funded dental care for adults.

Individual budgets would not change the fundamental reality of the state's budget process. The Legislature will continue to decide how much to appropriate to APD and the Agency will have a lawful obligation to operate within this amount. Policymakers will still have the prerogative to reduce or increase the agency's budget. However, in contrast to the current system, individual budgeting would allow any budget adjustments—up or down—to be made more equitably and in a fashion that keeps maximum control about service decisions in the hands of the consumer and his or her family. The challenge of effective advocacy will not cease. Such efforts, however, will be much better informed and perhaps more effective as a result.

Other options raise concerns

There are three other general options besides individual budgets.

One is to maintain the status quo. Under current economic conditions, difficulties in managing the budget and the lack of other options would likely place the program at risk of further cost controls similar to those implemented in recent years. Unfortunately, this option would do nothing to enhance consumers' ability to make more choices about their services, simplify the program, or make the program more equitable. In fact, this approach would likely make the program more complex, less equitable, and involve more restrictions on consumer services and choice.

A second option is for consumers and families to turn to public or private institutions. This is an entitlement under the Medicaid State Plan for individuals meeting institutional level of care requirements. This would represent a huge step backwards for consumers, families, and advocates, who have worked hard to create options for consumers to live everyday lives in the community. It would also be much more expensive for the state given the higher average cost of institutional care compared to the average cost under the waiver and would force the state to develop additional resources in the institutions. Finally, it would run counter to past litigation which sought to decrease institutional capacity and transition consumers out of institutions if they chose.

Another option is to turn the program over to a managed care organization. Some consumers, families, providers, and advocates have expressed concerns about the possible limitation of consumer choice and funding necessary for organizational overhead. Individual budgets offer an opportunity to use the

elements of a managed care system that are appropriate for long-term care for consumers without some of the associated elements of concern.

Objectives for an Individual Budgeting System

The Agency has adopted the following objectives for an individual budgeting system, and in collaboration with stakeholders has used them to evaluate options:

- Empower consumers to direct their own lives.
  - Seamlessly fit with a system of more flexible services.
  - Provide for maximum control consistent with health and safety requirements.

- Help consumers address their own unique support needs.
  - Provide funding that is responsive to consumers' differing characteristics and situations.
  - Consumers with greater support needs receive greater amounts of funding.

- Protect consumers' health, safety, and welfare.

- Enhance consumer outcomes.

- Create budgets in a way that is fair and transparent.
  - Stakeholder involvement in development of the individual budget system.
  - Algorithm is public and understandable.
  - Similarly situated consumers receive similar amounts of funding; differently situated consumers receive different amounts of funding.

- Promote accountability.

- Make Agency spending more predictable.
  - Be able to forecast future needs for both consumers currently enrolled on the waiver and on the wait list.

- Live within the Agency's means.
  - Agency does not have cost overruns.
  - Budget-neutral in implementation.

- Meet Federal waiver requirements.

Process for Developing the iBudget Florida Plan

APD used the proviso language in statute to frame the overall requirements for the iBudget Florida plan. Then, Agency staff conducted extensive research on individual budgets to learn about specific options and best practices. APD also used a variety of methods throughout the process to obtain input from the public and from specific stakeholder groups.

Research

APD staff conducted extensive research on individual budgets in developing this plan. For instance, APD staff spoke with staff in eight other states that have implemented individual budgets or are in the process of doing so in order to learn about their programs and experiences. Additionally, APD staff reviewed consultant and research reports on developing and implementing individual budgeting programs. APD also received Florida-specific advice from several consultants. Finally, consultants engaged by the Florida Developmental Disabilities Council from the Human Services Research Institute offered recommendations on individual budgeting during the development of a strategic plan for serving consumers with developmental disabilities in Florida. APD intends for these research efforts to be ongoing to help the Agency continually enhance the iBudget Florida initiative.

Public and Stakeholder Input

APD used a multifaceted approach to gather comments from the public and stakeholder groups.

- APD circulated a draft concept paper to stakeholder groups to get initial feedback.
- APD held seven (7) public meetings across the state to broadly introduce the idea to consumers, families, waiver support coordinators, providers, advocates, and APD staff and to learn their concerns about the system generally and hear their questions and ideas.
- APD created a website featuring documents about the plan as it was developed and the opportunity to share feedback.
- APD convened a group of seventeen (17) stakeholders including consumers, families, waiver support coordinators, providers, advocates, and other state agency representatives. This Stakeholders' Group met three (3) times and also met in workgroups via conference call.
- After the plan was drafted and reviewed by the Stakeholders' Group, APD held a second set of five (5) public meetings across the state to share details of the plan with the public and stakeholders generally.

While all of these methods provided APD with useful feedback, the Stakeholders' Group was the primary means for receiving input. Because the success of the waiver service delivery system requires the dedicated efforts of a variety of parties, APD wanted to ensure that all parties' views were considered. The proviso language governing the plan's submission also required input from a variety of interested parties. Additionally, the technical nature of the iBudget system meant that the plan development would benefit from having a group of individuals get more in-depth information about the way individual budgeting systems work and policy options that were available. In this manner, the Agency could determine whether its proposals were consistent with stakeholders' preferences and identify potential implementation issues.

The Family Care Council Florida co-hosted the Stakeholders' Group, assisting in selecting the members and providing guidance on the content. Members represented self-advocates, families with loved ones receiving waiver services, families with loved ones on the wait list for waiver services, agency waiver support coordinators, independent waiver support coordinators, agency waiver service providers, solo waiver service providers, and advocacy organizations. A list of the individuals participating in the Stakeholders' Group and their affiliations is included as Appendix I of this plan. The Stakeholders' Group was facilitated by Chris Pederson of the FCRC Consensus Center, which is Florida State University center.

APD provided the Stakeholders' Group with a framework and a wide range of options for designing an individual budgeting system. This group was very attentive, thoughtful, and constructive. The Agency made every effort to listen to their ideas and concerns and to address them. The Stakeholders' Group's feedback is the foundation of this plan. APD is very grateful for their assistance.

Note that due to the short timeframe for completing a very wide-ranging and in-depth report, APD was not able to gauge the level of stakeholder consensus on this final plan. Thus, participation in the Stakeholders' Group does not indicate that a Stakeholders' Group participant or the organization he or she represented supports all details of this plan or the plan itself. However, at the conclusion of the last of the three (3) Stakeholders' Group meetings, stakeholders expressed appreciation for the Agency's sincere efforts to gain their input and interest in continuing to partner with APD on iBudget even beyond the plan's submission, as much work still lies ahead.

About the Agency for Persons with Disabilities (APD)

The Agency for Persons with Disabilities (APD) works in partnership with local communities to support people with developmental disabilities in living, learning, and working in their communities. APD provides critical services and supports for its consumers to reach their full potential. The Agency serves individuals with spina bifida, autism, cerebral palsy, Prader-Willi syndrome, and mental retardation, as well as children at risk of a developmental disability. Examples of services provided include supported employment coaching, day activities, therapies, behavior analysis, durable medical equipment, consumable medical supplies, in-home support services, personal care assistance, and residential habilitation.

As of January 1, 2010, APD served 29,903 consumers through the Agency's four (4) Medicaid Home- and Community-Based Services waivers. A total of 18,965 individuals were on a wait list for waiver services.

Overview of Individual Budgeting Systems

Generic System Elements

Through its Medicaid Home and Community-Based Services waiver program, the federal government offers states a wide array of choices for designing their systems for serving consumers with developmental disabilities. States have taken advantage of this flexibility with the result that no two (2) states' systems are alike, and some states even have multiple approaches to serving their consumers within their own system. (Florida is an example, with its Consumer-Directed Care Plus [CDC+] program operating alongside its Home and Community-Based Services waivers.) However, there are some generic system elements that each system must contain for it to function. The two (2) such elements that are most relevant to this plan are processes for:

- Determining and communicating funding available for each person's needs, and
- Selecting services that may be paid for with the funding.

The general approach to these two (2) processes under individual budgeting systems and under the current system used by the Agency for Persons with Disabilities (APD) system are described below.

Determining and Communicating Funding Available for Each Person's needs

The term "individual budget" can be confusing. This is because right now each consumer enrolled on the waiver has an amount of funding that he or she has been determined to receive—essentially, all waiver enrollees *have* an individual budget now. Currently, that budget is determined after services have been requested and prior services authorization has been completed.

The individual budgets envisioned in this plan are:

- Determined through an algorithm, or mathematical formula that predicts funding based on an individual assessment process and other consumer characteristics; and
- Provided at the beginning of the service planning process, instead of determined at the conclusion or being based on a tier cap set through statutory criteria. This is called "prospective budgeting."

APD also envisions providing more control over and flexibility in service selection for consumers and families within the system to promote greater self-direction.

Algorithm

The core of the individual budgeting process is an algorithm which determines waiver-enrolled consumers' budgets. The variables, or elements, of this formula are consumers' characteristics, such as their age, living situation, and needs assessment process results.

While the term "algorithm" is intimidating, algorithms are widely used by organizations as a standardized, objective, data-based method to make decisions. One example of an algorithm is a person's credit score, which indicates to potential creditors what kind of a credit risk an individual presents. These scores are generated by algorithms which consider data on an individual's credit history compared to other people's patterns of credit and repayment. Another example is online commerce, where a website recommends to the online shopper some alternative products that might be of interest. Those recommendations are developed using an algorithm. The algorithm is comparing the products viewed by the user to a database of patterns of other shoppers' viewing and purchasing histories. Based on that, it uses its formula to determine which products the shopper is statistically most likely to purchase and recommends those products.

APD's proposed formula or algorithm for determining individual consumers' budget amounts has been developed through careful research and study to reflect the differences among individual needs, as will be described later in this report and at length in the technical report (Appendix II). The data used in the formula is determined to be reliable and valid; that is, it accurately measures what it is supposed to measure.

In this system, consumers in identical situations as measured by the algorithm will receive identical budget amounts. Those in different situations will receive different budget amounts: those with higher levels of need will receive more, and those with lesser needs will receive less. This arrangement is designed to enhance the equity of the system.

The algorithm-based iBudget Florida approach contrasts with Florida's current system, where budgets are determined through conversations between the consumer, his or her family, and his or her waiver support coordinator. They develop a support plan listing the consumer's needs and services desired, from which is created a proposed cost plan. This cost plan must comply with a variety of laws and rules and is subject to review and approval by the Agency's third-party prior service authorization contractor. The portion of the submitted cost plan that is approved by the prior service authorization contractor becomes the consumer's budget or cost plan.

The current process is subject to greater variation in budget amounts between similar consumers. Examples of possible causes for inequities include the

varying skill of waiver support coordinators in justifying funding requests or the availability of family members who can advocate on the consumer's behalf. However, the current process has an underlying rationality. This is evidenced by APD's statistician's being able to create an algorithm that has a good fit to the historical cost data in the reference year and also the previous year. If the system during the reference (FY 2007-08) and test (FY 2006-07) years had been completely irrational and inequitable, any algorithm would model the funding patterns poorly. The individual budgeting approach builds on the basic underlying rationality of the previous system but seeks to enhance its equity.

Prospective Budgeting

An important difference between an individual budgeting system and APD's current system is when the budget amount is provided to the consumer. With individual budgeting, the consumer learns what his or her budget is prospectively, at the outset of the planning process. This can make the service planning process simpler for the consumer, his or her family, and his or her waiver support coordinator. By knowing the amount of resources the state will provide, the consumer, his or her family, and his or her waiver support coordinator can plan based on their priorities. The prospective approach mitigates any possible conflict of interest or pressure the support coordinator might feel to either reduce the costs or increase services unnecessarily. The prospective approach also encourages the use of community and natural supports.

The National Association of State Directors of Developmental Disabilities Services (NASDDDS) studied states' individual budgeting processes. In their report, they differentiated individual budgeting approaches from more traditional approaches saying, "In many states, the . . . budget is built through a developmental process in which people receiving support and their planning teams actively participate in a series of structured decisions. . . The statistical analysis. . . essentially takes the place of the step-by-step decision-making procedure."[3]

[3] Moseley, C., Gettings, R., Cooper, R., "Having It Your Way: Understanding State Individual Budgeting Strategies", National Association of State Directors of Developmental Disabilities Services, 2003.

Selecting Services that May Be Paid for with the Funding

While a goal of the iBudget Florida initiative is to enhance consumers' self direction, some individual budgeting systems in use in other states do not provide for much self-direction. For instance, in such systems, the algorithm-based processes determine a prospective budget, but restrictive system policies and procedures or limited provider availability leave little room for consumers to make real choices.

However, APD wishes to increase consumers' opportunities for self-direction. The proposed elements that enhance self-direction are a key feature of this plan. Accordingly, APD envisions revising the array of waiver services available and the way that services are selected and approved to make it much more flexible and responsive. An important step would be to eliminate the current prior service authorization system and replace it with a limited service review that would be required only in certain circumstances. For example, one way to increase system responsiveness might be to broaden the scope of some services so that a support worker would be able to provide assistance for a greater variety of needs (this is the concept of the new Flexible Benefit Service being developed by APD now). That way a consumer would have more flexibility in meeting his or her needs day-to-day. This new flexible service delivery system would be a very important part of iBudget Florida.

Note that APD recommends maintaining the Consumer Directed Care Plus (CDC+) program as an option for its consumers. APD envisions that everyone—including participants in CDC+—would have their budgets determined through the individual budgeting process. Once the budgets are determined, however, CDC+ participants would follow the CDC+ program processes and policies rather than iBudget Florida processes and policies to select and manage their supports and services. However, in accordance with federal requirements, CDC+ participants would be able to end their CDC+ participation and receive services using iBudget Florida processes and policies if they chose.

Individual Budgeting in Other States

Several states use or are in the process of implementing individual budgeting approaches with at least some portion of their waiver enrollees. Some examples are Colorado, Connecticut, Georgia, Minnesota, and Oregon.

In speaking with APD staff, Jon Fortune, Ed.D., (a consultant with the Human Services Research Institute who has extensive experience in developing and implementing individual budgeting programs) said that states can implement individual budgeting system in a budget-neutral manner and through them have been able to contain costs.

An independent evaluation of Wyoming's DOORS² program, which is one of the longest-running individual budgeting initiatives, stated that its program "...continues to perform as it was originally intended: distributing waiver funds equitably across the population of individuals enrolled in the Home and Community-Based Services waivers while matching consumer needs with available supports." This evaluation also stated that consumers, families, and providers were all generally satisfied with the approach. However, the report noted that system costs did increase over time and attributed them to increased waiver enrollment and the nature of that state's process for funding exceptional and changed needs.

Discussions with officials in other states lead APD staff to believe that Florida is well-positioned to implement an individual budgeting approach coupled with a self-directed system. Florida already has many of the necessary elements for successful implementation: a relatively simple administrative structure, standardized fee-for-service rates, independent waiver support coordination, a large number of providers, and a valid and reliable assessment instrument with which the entire population of waiver enrollees has been assessed. These elements support consumer choice and self-direction and simplify implementation. For instance, Connecticut still uses provider contracts in some instances, and Oregon's and Colorado's systems use intermediary organizations to coordinate services (counties in Oregon's case and community centered boards in Colorado's); both of these situations provide challenges to implementation. South Dakota has nineteen (19) providers, which limits consumer choice. Wyoming's budgets are equitable, but the rates vary by provider, which means some consumers' purchasing power is less than others. [4]

Individual Budgets in Florida

An individual budget determined through an algorithm and provided prospectively in the planning process is not a new idea in Florida. The concept has been explored twice. An early program was implemented in the late 1990's in District 13 of the Developmental Services program then administered by the Department of Children & Families. This approach considered a consumer's living setting, primary challenge, and level of need to place him or her in one of forty-three (43) cost models, each establishing a funding range. While this program was not formally evaluated and ran for a short time, it was reported to have been well-received by consumers and providers and simplified processes significantly.

[4] Due to major changes underway in its waiver program, Wyoming recently discontinued its use of the DOORS model. Wyoming is moving to standardized rates and significantly revising its array of waiver services. State staff says that as a result, historical service patterns are an inappropriate basis for determining future budgets.

The concept was also proposed in Fiscal Year 2002-03 by a contractor, Mercer Management Consulting, which was assisting the Developmental Disabilities Program in a redesign effort. In concert with a standard statewide rate structure, Mercer recommended using an assessment instrument to determine budget amounts with consumers and families having greater flexibility in selecting and managing services. Only the statewide rate structure was implemented. This experience points to the need for comprehensive implementation of the Agency's plan if the many potential benefits of the approach are to be realized.

Algorithms

As stated previously, individual budgeting uses a mathematical formula, or algorithm, to determine budget amounts for waiver enrollees. This section describes how algorithms are developed and discusses other states' algorithms.

Development of Algorithm Options

The process for developing an algorithm involves statistical analysis and modeling. The goal is to develop a formula that fits a data pattern of past expenditures or service use; essentially, the formula tries to replicate mathematically the decisions that were arrived at through the process of discussions between waiver support coordinators and consumers and the functioning of laws, rules, and policies governing service approval and use.

This formula is then used to generate future budget amounts similar to those patterns of past expenditures or service use based on current characteristics of people. For instance, if in the reference year the 50-year-olds in supported living with assessment scores indicating higher levels of need generally received more funding than 30-year-olds in supported living with assessment scores indicating lower levels of need, the algorithm will duplicate those general relative patterns for future funding for similar people.

Algorithms are developed through research and trial and error. Statisticians test different combinations of variables to see which combination works best to describe previous funding patterns. There are several criteria used to determine which algorithm out of several possible alternatives is the best choice; these criteria are that it has a higher R^2 value, has fewer variables rather than many, uses valid and reliable data, and is administratively implementable.

- "R^2" is a statistical measure of how well an algorithm "fits" the data it is trying to explain. A value of 1.0 is perfect fit; a value of 0 indicates no relationship. The reported R^2 of some other states' algorithms include:
  - Louisiana: .46
  - Georgia: .75
  - Colorado: .26 & .51 (two waivers)

    - Oregon: .45
    - Minnesota: .55
    - Wyoming: .80
- An algorithm that uses fewer variables works better statistically; the more variables, the more complicated the formula is and the more likely the variables are to interact with each other, which decreases the algorithm's accuracy. Other states' algorithms also vary in the number of variables they use. For instance, Colorado's uses four (4) variables, while Minnesota's uses twenty-eight (28).
- Valid and reliable data is important to accurately build a model. If it is built on inaccurate information, it will predict inaccurately.
- An algorithm must work in the real world. For example, the agency must be able to obtain the data to calculate it, and its calculation must fit with Agency processes and procedures.

Algorithms are refined over time as experience is gained in their use and new data is collected and tested. For instance, Wyoming's algorithm had an initial R^2 value of .50 but is now about .80 after refinement. Note, that due to inequities that are present in any human system, it is not appropriate to seek perfect correlation with the algorithm's reference year. Additionally, no algorithm is perfect in its predictability. There are always some consumers with extraordinary needs for whom use of the algorithm is not appropriate. States initially may see as many as 2-25% of consumers falling outside the algorithm. Over time, refinements to the assessment process and data elements increase algorithm accuracy and reduce this percentage. However, APD expects that for a number of consumers with very unique needs, funding decision will continue to be made using a method other than the algorithm. APD will establish guidelines for how budgets will be established for consumers who are not accommodated in the algorithm.

APD chose the Fiscal Year 2007-08 as the algorithm's reference year; that is, APD sought to pattern its individual budgets after the funding patterns of that year. APD felt that this year was recent enough to be linked to current assessment data. Additionally, APD felt that in general during that year consumers' service patterns more accurately reflected consumers' service needs compared to other recent years. That is because the policies governing the system were less restrictive during FY2007-08 than in more recent years, such as after the implementation of the tier system which capped many consumers' expenditures. FY2007-08 also had the highest level of expenditures ever experienced by the system. The recommended algorithm has a relatively high R^2 of .6757, which indicates that the funding patterns of Fiscal Year 2007-08 were overall rational and thus appropriate for basing an algorithm.

The algorithm recommended by APD in this report considers a consumer's age, living setting, and assessment subscores from the Questionnaire for Situational Information (QSI) as well as answers on some individual questions from the QSI.

This data is valid and reliable, according to researchers. The algorithm also features fewer variables rather than many, and has a relatively high R^2. Thus, this algorithm meets the criteria outlined above. Further details are contained later in the body of the report and in Appendix II.

APD's contracted statistician tested the consistency of the recommended algorithm against data from FY 2006-07. The recommended algorithm had a similar fit to the FY 2006-07 data. This supports the algorithm and the approach of individual budgeting generally, since it indicates that APD's funding patterns are consistent year to year and the algorithm successfully models them.

APD is interested in refining this algorithm as other states have done, and is planning to collect additional data for testing for use in future algorithms. APD views the algorithm proposed in this plan as a starting point to be used in the initial stage of a phase-in of individual budgets. APD sought to test all variables proposed by stakeholders where data was available. However, for most variables, APD did not have reliable and valid data available to test their suggestions since we did not have standardized processes in place for collecting it. APD would like to collect data that might be used for new variables, test its predictiveness, and refine the algorithm for use in the later stages of the phase-in of individual budgets.

Please see Appendix II for a full discussion of the statistical aspects of the development of the algorithm recommended in this report.

Elements of Other States' Algorithms

As discussed above, each state's system is unique, and thus each state must develop its own algorithm. For instance, some states serve children and adults in the same waiver, while other states serve children and adults in separate waivers. Disability diagnoses served differ among states. States offer different arrays of services and have different rates. States also differ in the assessment instruments used to supply some data for their algorithms. Accordingly, state algorithms vary. For instance, some algorithms have a large number of elements, or variables, and others just a few. The specific variables themselves also vary. Some examples of variables in other states' algorithms are:

- Subscales or sections from assessments
- Overall scores from assessments
- Individual questions from assessments
- Diagnosis
- Age
- Living situation
- Services received
- Chronic health conditions
- Mental health status

- Community safety risk

Some states' algorithms include all of these variables, while others use just a few. A table listing elements of some other states' algorithms is included as Appendix III of this report.

Needs Assessment Instruments

A recommended element of individual budgeting is the use of a standardized needs assessment instrument to collect information about consumers. In fact, the federal government is encouraging states to implement needs assessment-informed individual budgets. Using a standardized needs assessment instrument with established reliability and validity allows a state to have important information about each person served.

There are a limited number of needs assessment instruments with established validity and reliability for individuals with developmental disabilities for use by states. The two (2) primary instruments promoted nationally are the Inventory for Client and Agency Planning (ICAP) and the Supports Intensity Scale (SIS). States use data from both of these instruments in algorithms. For instance, Georgia, Colorado, and Oregon use the SIS, while Wyoming and Indiana use the ICAP. States have also developed their own instruments, as Florida has done with the Questionnaire for Situational Information (QSI); additional examples of states with "homegrown" assessments are Minnesota and Connecticut. States that use national instruments still generally have a state supplement to collect information they need but that the national instruments do not collect.

APD has assessed the full population of waiver enrollees and the majority of individuals on the wait list using the QSI. The QSI was developed by melding components of two (2) previous needs assessment instruments developed by Florida, the Florida Status Tracking Survey and the Individual Cost Guidelines.

APD proposes using data from the QSI in the algorithm. Reasons for doing so include:

- More than 50,000 assessments have been completed, including the full population of consumers enrolled on the waiver and a large portion of individuals on the wait list. This provides a very strong base for development of an algorithm since it includes a vast range of experiences compared to using a limited sample of a few hundred or few thousand consumers to develop an algorithm, as some other states have done.
- Validity and reliability studies by an independent researcher have established the validity and reliability of the QSI. Additionally, these studies indicate the QSI is comparable to similar instruments, including the Supports Intensity Scale. Further information is available in Appendix V.
- The QSI contributes to the algorithm which has a relatively high R^2. This means the QSI performs a useful function in cost prediction.

- APD can revise the QSI to meet state needs. As noted previously, other states using national instruments typically use a state supplement to gather additional necessary data. Thus, even if APD were to use a national instrument, APD would likely still use a Florida-specific instrument like the QSI to obtain more information about its consumers. APD can revise the QSI to gather new information as the need for such information emerges.
- The QSI is administered by APD staff members who have been trained and certified in QSI administration. This avoids problems that some other states have experienced where needs assessment administrators with a strong stake in the results have intentionally or unintentionally biased the results.

APD acknowledges that some consumers, families, and other stakeholders have expressed concerns about the QSI. Some consumers, families, and other stakeholders say that the predecessor instrument on which the QSI was based (the FSTS) was not designed for the purpose of individual budgeting or to meet the needs of all of the subpopulations that APD serves, such as children, and that the QSI has not been validated for specific subpopulations. Others expressed concerns that their input was not considered appropriately during the assessment process. Consumers and families have questions about how their unique needs are highlighted through the QSI assessment, and have pointed out how many relevant factors besides the consumer's characteristics—such as the level and nature of the natural supports they receive—are not captured in that assessment.

As outlined above, APD believes the QSI has many advantages for use in an individual budgeting system. Also, it is important to remember that the data from the assessment is only one part of the algorithm. That is, the assessment scores alone would not determine a consumer's iBudget. In fact, in the recommended algorithm presented in this report, the living setting contributes more to determining the iBudget than does the assessment, and the consumer's age contributes almost as much.

However, APD recognizes that it is important that consumers, families, and stakeholders feel comfortable with the QSI assessment and wishes to work with them to address their concerns. In fact, assessment instruments generally undergo a continual process of refinement. There are a variety of ways to improve an instrument, from changing the way that assessors are trained or administer an instrument, to revising the scoring formula, to rewording questions, or adding or deleting questions for purposes of calculating subscale and overall level scores. APD intends to work with stakeholders and expert consultants to continually enhance the QSI. These enhancements are expected to enable the QSI to be an even better predictor of individual budgets in the future.

Accordingly, APD would begin implementation with a limited phase-in to test the iBudget processes and collect baseline data. In the meantime, APD would work with stakeholders to refine the QSI, collect additional data, and test its suitability in a revised algorithm in preparation for a broader phase-in.

The Questionnaire for Situational Information is included as Appendix IV of this report.

Other System Elements

As stated previously, APD is interested in simplifying the system and enhancing its consumers' ability for self-direction. Accordingly, APD recommends a variety of changes to its system in addition to the process for determining budget amounts. These changes will give consumers more control and flexibility. Simultaneously, they will reduce the bureaucracy that our partners in the system such as waiver support coordinators and providers encounter day-to-day in serving our consumers. APD is also looking to implement new processes for quality assurance and monitoring of health and safety that are necessary under a new system of greater consumer control and flexibility. Some of these changes are:

- Increasing the flexibility in the service array. This primarily involves grouping similar services into service families, allowing consumers to switch among services in a service family with limited or no review. It might also involve broadening the scope of some services, so that one worker could do a wider array of tasks, simplifying service coordination and billing.
- Elimination of the prior service authorization process. It would be replaced with a streamlined, expedited and more personalized process that would require little to no review for many decisions, reserving more intensive review for situations involving health and safety concerns or extraordinary funding requests.
- Creating a virtually paperless system. For instance, consumers' central records would be online and service authorizations would be submitted electronically.
- Freeing up waiver support coordinators' time and reframing their role to refocus on person-centered planning, locating and developing community resources, and coordinating supports. For instance, a good deal of their time is currently spent on paperwork related to the prior service authorization process. The new process envisions a much reduced paperwork burden on waiver support coordinators, with the intent that they use their time to support consumers instead and assist them in accessing community resources and other available federal, state, and local resources.

- Increasing monitoring of consumers' service patterns to ensure health and safety and appropriate use of funding. For instance, having service records maintained electronically will provide APD insight into what services consumers have chosen to receive. APD can search for indicators of potential health and safety risks and provider manipulation and take action to investigate and address them.
- Providing training, information, and tools for managing budgets and making good decisions to consumers and families. These might include online budget development and management tools, provider directories including quality evaluations by consumers and families, and training on decision-making delivered via the internet, by waiver support coordinators, and through group meetings held by the area office or Family Care Council. It would also include a renewed emphasis on identifying and using non-waiver-funded community supports.
- Creating a process for consumers with extraordinary needs or significantly changed needs to apply for additional funding. There are consumers served by APD whose needs are so unique that an algorithm cannot be designed to accommodate them. This is typical in any process of modeling, or creating an algorithm, simply because of the variability in most populations. Prior to informing a consumer about his or her iBudget, APD would review the consumer's situation to determine whether the budget generated by the algorithm met critical health and safety needs, and if the budget did not, would determine a revised, increased amount. However, whether or not a consumer were initially granted additional exceptional need funding by APD, if a consumer still felt that his or her exceptional situation required additional funding to address critical health and safety needs, he or she could apply for additional exceptional need funding. Also, some consumers may have significant changes in their needs during a fiscal year which require additional funding. A process would be instituted to allow consumers who truly need additional funds to address critical health and safety risks to apply for such funding.

Implementation Issues for Consideration

As stated in the introduction, individual budgeting will not guarantee a perfect system, though APD leadership believes it will be an improvement over the current system. Implementation issues to consider include:

- Individual budgets will distribute APD's available funding equitably according to the variables in the algorithm. This funding will be generally responsive to individual needs, so that consumers requiring more support will receive more funding than consumers with fewer support needs. However, as is the case for most consumers under the current system, there will be a limit on the amount of funding available for a person. This limit may be more than the consumer's current cost plan, but it may be less. This may require the consumer to prioritize which needs are paid for

under the waiver and find community resources to help address others. Note that under federal law, the waiver is the payer of last resort and is designed to work in conjunction with other paid and unpaid resources to meet a person's needs. To mitigate this issue, under this system, waiver support coordinators will be freed to spend more time doing person-centered service planning and obtaining natural and community resources to assist consumers in augmenting APD-funded budgets. Consumers may also apply for additional funding if they feel their budgets are insufficient, though any request for any additional funding will receive thorough review.

- Individual budgets will not precisely tailor funding to a consumer's needs. That is impossible for any algorithm, given the variety of factors that impact a person's needs and the challenge of measuring them and translating them into variables in a formula. Some examples of factors that are theorized to impact a person's needs are the natural supports available to a consumer, the consumer's own goals and preferences for his or her life, and the availability of providers in an area. However, the recommended algorithm explains a large portion of the variability in funding patterns—67.57%, indicating that it captures much of what affects funding. Also, note that the new system would allow consumers to more precisely tailor services to their needs. If a consumer felt the funding determined by the algorithm was insufficient, he or she could apply for additional funding, though the request would be subject to thorough review. Conversely, if a consumer felt all funding determined by the algorithm was not needed, he or she could use only what was needed.

- Some consumers may experience increases in their iBudgets compared to current cost plan amounts, while others may experience decreases. APD has performed initial reviews to assess health and safety under this initial iBudget, as will be described below. APD is proposing a phase-in of the new budgets, as many other states have done. This will allow consumers time to adjust to new budget amounts. It will also allow APD to study the way the system works and fine-tune as needed. Note that when the tier waiver system was implemented, no phase-in period was provided even though some consumers experienced reductions to their cost plans of at least 50%. Again, if a consumer's health and safety would be compromised by the iBudget amount as determined by the algorithm, he or she could apply for additional funding.

- Some stakeholders have expressed concern that while individual budgets are designed to allocate available funds equitably, the budgets are not anchored in the true cost of care and thus do not reflect consumers' true funding needs. They state that the system is underfunded currently and that individual budgets will not address that funding concern.

There are two elements to the cost of care: the rates paid for services and the quantity of services provided to consumers.

Given the short timeframe to develop this plan and the state's current tight fiscal situation, APD did not evaluate provider rates during the development of the iBudget Florida plan. Providers have, in fact, experienced rate reductions in recent years as the state has struggled to maintain services in the face of revenue shortfalls. Providers have admirably partnered with APD to continue serving the Agency's consumers in the face of great budget challenges.

Unfortunately, the state's near-term budget outlook remains cloudy. Accordingly, every state agency is expected to do more with less. Along with the desire to simplify the system and increase equity and self direction, the need to better control costs is one factor leading APD to explore an individual budgeting system.

That said, in the strategic plan they developed for the Florida Developmental Disabilities Council (FDDC), the Human Services Research Institute (HSRI) recommended that APD study provider rates to determine whether they are sufficient. As the state's fiscal outlook improves, making more funding available for rate increases, APD would be open to conducting such a study. However, APD also recognizes that there may be competing requests for the use of increased Agency funding, such as for increasing services to current waiver enrollees and providing services to individuals on the wait list. Regardless, provider rates will continue to be an issue regardless of how the state chooses to manage its waiver system. According to HSRI in their strategic plan for the FDDC, states can build individual budgeting systems using their current rate structures.

Regarding the quantity of services provided to consumers, it should be noted that APD expenditures for waiver services reached their all-time peak of nearly $1 billion to serve 30,585 consumers in the reference year used to develop the algorithm (FY07-08). There were fewer restrictions on the quantity of services that could be received at that time, and in fact the system was experiencing dramatic annual utilization growth of more than 10%. Waiver support coordinators chosen by consumers developed support plans and associated cost plans at consumers' direction. While it is likely that some consumer needs went unmet during this year as in any year, APD believes that this year adequately reflects the appropriate quantity of services.

- Ultimately, this plan requires accountability on the part of all participants in the system. Consumers and families will need to be accountable for identifying their needs, prioritizing services for waiver funding, working

with waiver support coordinators to find non-waiver resources to meet their needs, requesting additional funding only if it is truly needed, and monitoring the quality of care and taking appropriate action when care does not meet quality standards. Waiver support coordinators will need to be accountable for supporting consumers' self-direction, working creatively to meet their needs, and being vigilant about monitoring consumers' health and safety. Providers will need to be accountable for respecting consumers' choices, working with other system participants to deliver high-quality services to consumers, and providing necessary information in a timely manner to facilitate consumers' budget management. APD will be need to be accountable for implementing required processes, providing necessary training, measuring how well the iBudget system meets its goals, being receptive to feedback about how the system works, and implementing necessary changes. The Legislature will need to be accountable for policymaking, appropriations, and oversight necessary to carry out the provisions of s. 20.197 and s. 393.062, F.S., to ensure high-quality community-based services are delivered to as many individuals with developmental disabilities as possible. Finally, all participants in the developmental disabilities system will be accountable for communicating with each other to ensure the best outcomes for the consumers served.

While these are important issues, APD believes that they can be mitigated and that the overall outcomes of greater system simplicity, greater sustainability, more equitable funding, and increased self-direction are worthwhile.

Detailed Agency Proposals

Following are discussions about the various elements of the system. For each element, the report describes the current functioning of the system, the feedback received by the Agency for Persons with Disabilities (APD) from stakeholders and the public about that element, and the APD proposal for revising that element. For the most part, APD adopted the options that received the most support from the stakeholders participating in the iBudget Florida Stakeholders' Group. Please see Appendix VI for some of the handouts provided to the stakeholders listing a range of options for their consideration. Additional materials from the Stakeholders' Group meetings are posted on the Agency's website. These materials were intended to be a starting point for discussion, and stakeholders were also encouraged to suggest additional options.

A few caveats:

- This set of system changes would require federal government approval. For instance, the Agency for Health Care Administration would need to submit a request for waiver amendments or even an entire new waiver. Based on initial discussions with the federal government and a review of other states' waivers approved by the federal government, APD believes the proposals contained in this plan have a good likelihood of being approved, but such approval is not guaranteed.
- Finally, while upon initial review the Agency believes these recommendations are feasible, upon actual implementation, issues may arise that require modification to these proposals.

Element 1: Funding Determination

As its name implies, individual budgeting approaches begin with changes to the way that systems determine the funding available for each person. This change involves using a mathematical formula, or algorithm, to set budgets. Along with the Ph.D.-level statistician that APD engaged to advise on this initiative, APD has put much thought and effort into selecting an algorithm that is as fair and equitable as possible given the limitations of the reliable and valid data that are currently available to the Agency. The relatively high R^2 value of the algorithm indicates that it does a good job of generally replicating the funding patterns of the reference year, Fiscal Year 2007-08, as well as another test year, Fiscal Year 2006-07. However, besides the selection of an algorithm, an individual budgeting system requires three (3) other key decisions: a process for handling requests for meeting extraordinary and changed needs; the overall allotment of Agency appropriations between individual budgets, one-time expenditures, and meeting extraordinary and changed needs; and a schedule for phasing in individual budgets over time.

Important to note is that algorithms can be works in progress. They can be refined over time as states see how they function in practice, identify and collect data that can be used in a new version, and test refinements that improve an algorithm's ability to predict appropriate amounts of funding for each person. With nearly thirty thousand (30,000) waiver enrollees, Florida would be one of the largest states to adopt an individual budgeting approach. The large number of enrollees with the wide range of variation in individual circumstances is a challenge for algorithm development. However, with the relatively high R^2, APD believes that this initial algorithm would function well, and believes that refinements over time could enhance it even more. APD would be committed to ongoing enhancement of its algorithm.

Element 1: Funding Determination—Current System

Budget development begins with conversations between the consumer, his or her family, and his or her waiver support coordinator. They develop a support plan and proposed cost plan listing the consumer's needs, resources, and services desired. This cost plan must comply with a variety of specific laws and rules, including tier limits on service availability, and then is subject to review and approval by several entities, including the Agency's prior service authorization contractor. If needs change, the waiver support coordinator requests additional services through the prior service authorization process.

Element 1: Funding Determination—Feedback from Stakeholders and the Public

Following is a paraphrasing of quotes that summarizes stakeholder and public feedback received by APD prior to the release of the draft iBudget Florida plan:

- Want to build a model tailored to Florida rather than simply adopting another state's algorithm.
- Concern that funding for meaningful day activities will be eroded or insufficient.
- Using diagnosis in the model is not appropriate.
- Want to know the model details, including statistical details.
- Questions on how to ensure validity and reliability of data used in model.
- Want fairness to those living at home.
- Consider how to adequately fund transportation costs through the algorithm.
- Concern that consumers enrolled in the Family and Supported Living (FSL) Waiver had their expenditures artificially capped during the reference year (FY 2007-08).
- Want fairness to those with significant support needs.

- Want the availability (or lack thereof) of natural supports in a home considered in the funding process.
- Concern that iBudgets will not provide allocations sufficient to meet consumers' needs.
- Concern that some consumers will receive higher iBudgets than they really need.
- Concern that iBudgets are a way to make cutting Legislative funding for the APD program easier.
- Concern that rates are inadequate in both the reference year and currently, which would lead to inadequate budgets.
- Interest in using algorithm to identify a consumer's level of need for determining the appropriate specific rate where rates differ by level of need (for example, residential habilitation or personal care services).
- Concern on how children are treated by the QSI, since it was not specifically validated for that population, and in the services provided by APD.
- Desire for a due process system that involves truly impartial hearing officers or administrative law judges.

Element 1: Funding Determination—Recommendations

Algorithm

Development Process

APD engaged Dr. Xu-Feng Niu, Professor of Statistics at Florida State University, to develop and recommend options for an algorithm.

The work of developing the algorithm involved several steps. These are described in detail in the technical report, included as Appendix II. In summary, these were:

- Identifying the reference year, or dependent variable, and making appropriate adjustments. As previously noted, Fiscal Year 2007-08 was selected. The policy decisions which impacted the funding patterns of this year compared to previous and later years were analyzed, and some adjustments made to account for changes, such as removing expenditures for services that were eliminated. As is standard procedure, consumers whose expenditures were atypical (among the very highest and lowest expenditures—APD chose those whose expenditures were among the highest and lowest approximately 4.7%) were removed. Since the algorithm is not designed to predict the expenditures of those with extraordinary needs, this is appropriate and makes the algorithm more accurate in determining budget amounts for the other consumers.

- Examining the Agency's data to ensure it is reliable. Due to concerns about the accuracy of the living setting data during FY2007-08, about 1,370 consumers' expenditures were removed.
- Testing fifty-three (53) variables to identify the combination of variables that best met the criteria for selecting an algorithm. This process involved allowing the computer to select the best variables among different sets of them; the computer would select the variables for inclusion in models that met basic statistical and best practice requirements.
- After best candidate models were identified, APD evaluated them based on non-statistical criteria, such as the ability to implement them and their estimated broad impact on consumers.

A major challenge in developing an algorithm was the lack of valid and reliable data to use as variables. Stakeholders suggested a variety of factors which might correlate with funding; age of a consumer's caregiver, the number of children a consumer has, and the public safety risk consumer poses are three (3) examples. However, for many of these factors, APD did not have data available to operationalize and test them. APD intends to collect data to test for use in future versions of an algorithm. However, this recommended algorithm more than adequately meets the criteria for selecting an algorithm. APD proposes using this algorithm in the initial phase-in of individual budgets while the Agency works with stakeholders to define new variables to test, collect necessary data, evaluate the variables' predictiveness, and refine the algorithm.

Recommended Algorithm

Based on Dr. Niu's work, APD recommends an algorithm including the elements listed in Table 1 on the next page. This algorithm best met the criteria outlined previously in the report: a higher R^2 value (.6757), fewer variables rather than many, use of valid and reliable data, and administratively implementable. Full details regarding the development of the algorithm are in Appendix II.

Please note that the algorithm does not assign a consumer the specific funding that he or she had in Fiscal Year 2007-08. Rather, the consumer's current information will be considered, and the algorithm will determine funding based on the patterns relevant to similar consumers during that year. For example, say in Fiscal Year 2007-08, a consumer was thirty-five (35) years old and lived in the family home, but by the time that consumer transitions onto an iBudget, she is forty (40) years old and lives in a group home. The algorithm will determine her funding based the patterns from Fiscal Year 2007-08 for people with her current characteristics: forty (40) year old consumers who live in group homes with similar Questionnaire for Situational Information (QSI) results.

Stakeholders' Group members highlighted a number of issues and concerns during algorithm development. A few included:

- Age of consumer: age was tested in different ways. It always proved to be correlated to cost. Age as a continuous variable (the specific age, say, thirty-six [36] or fifty-two [52]) is not recommended in algorithms because it requires new algorithm determinations every year, posing administrative challenges and requiring frequent changes for consumers. Thus, APD turned to two (2) age bands, one including consumers from age three (3) through age twenty (20) and the other including consumers age twenty (21) and over. Some Stakeholders' Group members urged APD to consider age bands specifically for older consumers, such as from forty-five (45) years of age and above. However, this approach ran counter to what those stakeholders desired since it resulted in funding *reductions* for older consumers, based on FY2007-08 funding patterns. Thus APD selected a model which includes only two (2) age bands breaking at age twenty-one (21), when consumers lose certain state plan services.
- Former membership on the Family and Supported Living (FSL) waiver: Some Stakeholders' Group members were also concerned about the impact of the limitations on services for those who were on the FSL waiver in FY 2007-08. Analysis shows that, counterintuitively, this factor accounted for only a small percent of the variance in FY2007-08 expenditures (about 1.1%), meaning that it had little impact on expenditures.
- Some Stakeholders' Group members asked APD to examine how consumers' iBudgets would accommodate transportation costs. Consumers' expenses for transportation rates vary significantly, since the rates are not uniform and consumers' usage patterns can differ. APD's contracted statistician tested transportation-related variables but none proved significant enough to include in the proposed algorithm. APD intends to continue analyzing this issue and could propose modifications to the algorithm or other policies to address it.
- The proposed algorithm uses scores from two (2) of the three (3) subscales from the QSI. The Physical Status subscore did not meet the statistical requirements for inclusion in the algorithm. Note that Dr. Niu tested another measure of physical health (participation in one of the Agency for Health Care Administration's Medicaid disease management programs), and this also did not meet the statistical criteria for inclusion in the algorithm. Some stakeholders expressed concerns about the lack of a measure for physical, or health, status. However, the Physical Status score covaried to a great extent with the Functional Status raw score, so the Physical Status raw score coupled with other variables may adequately address that factor even if there's not a specific physical-health related variable in the algorithm. APD will continue to analyze this issue.

Implementation and Further Refinement

APD proposes that individual budgets be determined on an as-needed basis. For instance, consumers who turn twenty-one (21) would need a new iBudget since they would be losing state plan services and would be in a new age range, as would individuals who had new QSI assessments revealing changes in their scores. Since the Agency currently plans to readminister the QSI to consumers every three (3) years unless a consumer experiences a significant change in condition before the scheduled reassessment (in which case the individual would be reassessed ahead of schedule), APD is hopeful that most consumers' budgets would change minimally from year to year.

APD also proposes refinement of the algorithm on an ongoing basis, including analysis of the algorithm's impact, collection of new data for potential use in the algorithm, and development of new versions of the algorithm.

Table 1: PROPOSED iBUDGET FLORIDA ALGORITHM

Variable Name	*Definition*	*Weights*	*Possible Codes*	*Example: Consumer, Age 27, in Supported Living with QSI Scores as below*	
				Example Coding	*Example Value (Weight times Example Level)*
Age		26.7080		1	26.7080
Age	The age of the consumer as of implementation of the algorithm	53.1104	0 (if under 21), 1 (if 21 or older)	1	53.1104
Living Setting 2*	Supported or independent living	62.5319	1 (if in setting), 0 (if not)	1	62.5319
Living Setting 3*	APD licensed foster or group home; non APD-licensed congregate home	92.1163	1 (if in setting), 0 (if not)	0	0
Living Setting 4*	Residential Habilitation Center	121.5095	1 (if in setting), 0 (if not)	0	0
QSI Behavioral Status Raw Score	Sum of the scores of the individual questions in the QSI Behavioral Status Subscale	2.5457	0-24	5	12.7284
QSI Functional Status Raw Score	Sum of the scores of the individual questions in the QSI Functional Status Subscale	0.4124	0-44	10	4.1245
QSI Question 18 (Transfer)	Response on this question	7.1686	0, 1, 2, 3, or 4 (see below for explanation)	2	14.3371
QSI Question 20 (Hygiene)	Response on this question	5.8770	0, 1, 2, 3, or 4 (see below for explanation)	1	5.8770
QSI Question 23 (Self-Protection)	Response on this question	7.6807	0, 1, 2, 3, or 4 (see below for explanation)	2	15.3614
Total in the Square-Root Scale (must be squared, or multiplied by itself, to determine predicted support)					194.7787
Predicted Support: This amount will then be uniformly adjusted across the board up or down based on appropriations and requirements for reserving funds for extraordinary needs, temporarily and permanently increased needs, and one- time expenses. Additional funding would be granted if the consumer met exceptional need criteria.					37,938.74
** Individuals living in family homes receive a code of 0 for all living settings.*					

Text of Individual QSI Questions used in algorithm above:

18. Transfers:

0 = Transfers INDEPENDENTLY (may require verbal prompts but no physical assistance.) Self-explanatory.

1 = Needs someone to SUPERVISE the transfer for safety. Self-explanatory.

2 = Needs PHYSICAL ASSISTANCE of ONE person to transfer or to change position. Self-explanatory.

3 = Needs PHYSICAL ASSISTANCE of TWO people to transfer or to change position. Individuals at this level require the assistance of two people to transfer and position safely.

4 = Needs LIFTING EQUIPMENT/PROCEDURES to safely transfer person. Individuals at this level may require specialized equipment to provide safe transfers due to severe spasticity, history of bone fragility, potential for injury due to size, or the degree of physical deformity. Individuals may also need a range of specially designed positions.

20. Hygiene:

0 = INDEPENDENTLY takes care of all personal hygiene. An individual with this rating is able to bathe; wash, dry, and style hair; brush teeth; trim fingernails and toenails; and all other aspects of personal hygiene. For women, this applies to all aspects of monthly feminine hygiene needs. Minor adaptations to accommodate physical limitations may be needed.

1 = MINIMAL SUPERVISION OR ASSISTANCE IS REQUIRED. An individual with this rating may require occasional reminders or minimal physical assistance to maintain hygienic practice or manage clothing adjustments. Beyond this, the individual is generally able to manage hygiene skills with minimal or no assistance from others.

2 = Generally aware of hygiene needs and activities, but routine prompting and/or MODERATE physical assistance are needed. An individual with this rating requires prompting or physical assistance to complete hygiene tasks, such as combing, brushing, hand washing, and clothing repositioning.

3 = Requires SUBSTANTIAL prompting and/or physical assistance to meet personal hygiene needs. An individual with this rating generally is not able to recognize or remember when personal hygiene activities are to be performed or is physically

unable to manage hygiene needs. May require scheduled hygiene activities or substantial physical assistance. Generally cooperative when assisted.

4 = TOTALLY DEPENDENT upon staff for personal hygiene. An individual with this rating requires maximum assistance with all aspects of personal hygiene due to his/her level of mental and/or physical functioning. An individual with this rating may have special care requirements or may not be cooperative when others provide him/her physical assistance in hygiene activities.

23. Self-protection:

Due to the potential risk of harm to him/herself, this person may require supervision, training, or assistance to protect him/herself from harm, including that arising from physical injury and sexual exploitation. Rate the special precautions and/or supervision currently in place, if any, to ensure that the person is safe from physical or sexual exploitation. Score this item based on supports needed without regard to age.

0 = None required. No concerns with regard to exploitation.

1 = Frequent reminders or instructions are provided regarding dangers related to exploitation, but the person moves about his/her home, school, work site, neighborhood, and community without supervision or restriction.

2 = The person's movement beyond the boundaries of his/her home, school, or work site requires adult supervision or accompaniment of a more capable peer.
OR The person is not allowed to go to certain places due to the potential of exploitation.

3 = The person's movement beyond the boundaries of his/her home, school, or work site requires supervision or accompaniment of a competent adult no matter where the person goes.

4 = Special precautions (e.g., selection of the other persons with whom the person lives, alarms on bedroom doors, exceptional care in the selection of caregivers) are in place and the person requires close supervision at all times and in all settings because the person has no ready means of alerting others should exploitation occur.

Process for Funding Extraordinary Needs, Changed Needs, and One-time Expenditures

As stated previously, APD does not expect the algorithm to determine every consumer's budget. Some consumers have extraordinary needs that are so unique that the model cannot determine appropriate funding for them. Also, at times both consumers with more typical needs and those with extraordinary needs experience a change in those needs. That change may be temporary or it may be permanent. Consumers may also require funding for expensive one-time items that are difficult to accommodate within an iBudget. Accordingly, APD must have policies and processes for identifying and funding extraordinary needs, temporarily changed needs, permanently changed needs, and one-time expenditures.

- Extraordinary needs: Prior to determining a consumer's initial iBudget, APD would review to determine whether the consumer would be considered to have extraordinary needs. APD would strive to review each consumer's situation. Some indicators of consumers who might have extraordinary needs could be:
  - Involvement in the child welfare system.
  - Current or previous forensic involvement.
  - iBudget would be a decrease from either of a consumer's previous two (2) years' budgets of twenty percent (20%) or $5,000 or more, whichever is less.
  - Considered extraordinary case during algorithm development.
  - At least one of three QSI subscale scores of five (5) or six (6).
  - Recent transition from an intermediate care facility for the developmentally disabled (ICF/DD) or state mental health hospital.

  The review would determine whether the consumer met criteria for exceptional need funding. APD would work with stakeholders to develop these criteria. Since reserving additional funds for consumers with extraordinary needs would lead to less funding being available for all other consumers, APD would recommend that exceptional need funding be reserved only for those with critical situations where lack of additional funds would lead to immediate and serious jeopardy of health and safety for the consumer, his or her caregiver, or the public. The Agency would develop policies and processes for determining the budgets for consumers with extraordinary needs; these would likely consider the individual's expenditure history and current situation, using professional judgment to determine services and funding needed.
- Temporarily changed needs: Consumers could apply for additional funding on a temporary basis. While APD would refine criteria with stakeholders, examples of situations where APD would consider temporarily increasing funding for a consumer if funding were not available in the existing iBudget might include:
  - Temporary incapacitation of primary caregiver with other supports unavailable.

  - Temporary change in consumer's condition posing a serious, significant threat to the health or safety of the consumer, caregiver, or public.
  - Significant temporary change in needs due to consumer injury or illness.

  Funding would be determined by the Agency according to policies and processes for such funding, but like funding for extraordinary needs would require some level of determination by APD. Also like funding for extraordinary needs, the criteria for funding changed needs would need to limit funding to those situations where health and safety is under serious threat. That is for the same reason: the more funding that must be reserved for temporarily changed needs, the less funding is available for allocation to consumers up-front at the beginning of the year.
- Permanently changed needs: Consumers could apply for additional funding on a permanent basis. This would be determined by whether the algorithm inputs for a consumer changed, such as if they turned twenty-one (21) or if the QSI scores changed. Individuals with permanently changed needs could also be evaluated for exceptional need funding using the processes and criteria outlined above.
- One-time expenditures: Most states allow consumers to apply for funding for one-time or very infrequent purchases such as environmental adaptations, durable medical equipment, or non-routine dental procedures. Consumers would be required to demonstrate that these purchases were needed, were not available through the state plan or another source, and could not be made using their iBudget without placing health and safety at critical risk.

APD envisions the process for determining and communicating initial iBudgets as follows:

- APD runs the algorithm and calculates the iBudget for the consumer.
- APD evaluates whether the consumer meets criteria for exceptional need funding. If the Agency determines that he or she does, the Agency will determine the amount of exceptional need funding for the consumer.
- APD pre-approves service families for the consumer. For instance, if the consumer has previously received physical therapy or behavior analysis, he or she might be pre-approved for the Therapeutic Supports service family (see Table 2
- APD communicates to the consumer the information used as inputs to the algorithm for the individual, the consumer's iBudget including any exceptional need funding granted, and the pre-approved service families.
- If the consumer disagreed with any of the Agency's determinations, the consumer could then avail himself or herself of his or her due process rights, requesting a hearing to contest them.
- The consumer and his or her family and waiver support coordinator develop a support plan using the iBudget and identifying all other available

resources to assist the person including unpaid, natural supports, community supports and other government programs.

Consumers would also have rights for due process for succeeding Agency determinations with which they disagreed, such as if APD rejected their application for future exceptional need funding, temporary or permanent funding increases, funding for one-time purchases, or denied requested services.

Determining Overall System Funding

As described previously in this plan, APD is bound to remain within the Agency's appropriation. The previous section described several types of funding that APD would provide to consumers from this appropriation. Thus the Agency must determine how much funding of each type to reserve. The more funding that must be reserved for consumers with exceptional or changed needs or for one-time purchases, the less is available to allocate to consumers generally. However, not reserving enough could lead to concerns about some consumers' health and safety. Because of the importance of the decisions about the amount of funding to reserve and the challenge of making these decisions under the brand-new iBudget approach, APD would contract with actuaries to recommend how much funding to reserve for these different purposes and what criteria should be used to evaluate consumer eligibility for that funding.

Estimating actual utilization of iBudgets presents another issue. Historically some consumers have spent nearly all of their cost plans, while others have spent only a small portion. With consumers potentially having greater understanding of and control over their funding, such as the ability to move funding from unused services to obtain other services, it's possible that in the iBudget system consumers will spend a greater amount of their cost plans (have increased utilization) than they typically have. APD will obtain actuaries' advice on this topic as well. It's likely that at the outset of implementing the iBudget system, APD will need to conservatively estimate utilization. However, once APD has some experience with iBudgets, a utilization rate could probably be projected. Thus, APD would anticipate that a portion of iBudgets will be unspent and adjust budget amounts and reserve funds accordingly to ensure that APD does not end up with a surplus at the end of the year.

Phase-In of Individual Budgets

States implementing individual budgets often provide an extended phase-in period to help consumers transition to their new budget amounts. For example, this allows them time to identify what additional services would be purchased with increased funding or secure community resources to substitute for paid services when funding decreases. Additionally, since the federal government prefers extended phase-in periods rather than pilot projects, a gradual phase-in can also allow a state to test its individual budgeting system. APD would recommend a gradual, extended phase-in for both reasons.

The Agency recommends an initial phase-in limited to a smaller geographic area (perhaps up to three [3] APD service areas) and to consumers whose budgets would change only modestly. The purpose would be primarily to test the iBudget policies and processes, such as the on-line budget development tool, the service review process, and the training for consumers, family members, waiver support coordinators, and providers. This initial phase-in would extend for about a year, and APD would evaluate its results.

For the next step of a broader phase-in, APD recommends a phase-in approach similar to that used by Georgia. During the first year of implementation, Georgia consumers' budgets were calculated using eighty percent (80%) of the most recent cost plan amount and twenty percent (20%) of the individual budget amount. The second year's budgets were calculated using sixty percent (60%) of the most recent cost plan amount and forty percent (40%) of the individual budget amount. The third year will be 100% of the individual budget amount. These percentages may need to be adjusted depending on Florida's budget situation, the degree of change consumers would experience between their previous cost plan and their iBudgets, and the length of the phase-in period desired. Depending on the results of the initial phase-in and an evaluation of APD's administrative capacity, the Agency may also choose to transition individuals gradually to iBudgets, working with a few service areas at a time. This phase-in period might last about a year. APD would have to balance the challenge of operating two (2) systems side-by-side (the current system and the iBudget system) with the administrative capacity needed to prepare a consumer and his or her family, waiver support coordinator, and providers for transitioning into the iBudget system.

Projected Impacts of the Algorithm

APD has conducted initial analyses of the impact of this algorithm on consumers. Results are presented in Appendix VII. As discussed previously, to make these projections, APD had to make assumptions about future Agency appropriations and the portion of those appropriations that must be reserved for individuals with extraordinary needs, temporarily or permanently changed needs, or one-time

needs. (These assumptions will be evaluated by actuaries and may be revised, with the result that these projected impacts may change.) These assumptions are also included in Appendix VII. In summary, based on these assumptions, of the subset of consumers whose expenditures were used to build the model and who did not meet certain exceptional need criteria[5], compared to adjusted FY08-09 expenditures,[6] 63.63% would be expected to experience increases in their budgets and 36.37% would be expected to experience decreases. However, note that some in the group expected to receive decreases would be considered consumers with exceptional need whose iBudgets would be adjusted upward; this is not reflected in this analysis. Also, a number of consumers were excluded from this analysis; the distribution of increases and decreases for them may differ.[7]

Initial analyses demonstrate that the increases and decreases are spread among both adults and children and across all living settings. Two groups, both small in number, appeared to receive changes that were more pronounced in one direction. One was children who do not live in a family home; they received more decreases than increases. Note that under this algorithm, APD would carefully evaluate each child in this situation to assess whether exceptional need funding was appropriate. Another was adults living in residential habilitation centers; they received more increases than decreases.

APD is conducting a variety of other analyses to consider the impact of the algorithm and any refinements to the algorithm or policies and procedures for implementing it. For instance, the Agency is analyzing the situations of about 3,000 consumers whose previous expenditures for services addressing critical health and safety needs are above their projected iBudget amounts. The Agency will also be examining in detail how the algorithm treats consumers who are both similarly and differently situated to ensure that iBudgets are appropriately responsive to their needs.

Note that for all consumers, APD would plan to phase in iBudgets to mitigate any reductions and allow consumers to plan for and adjust to any increases. A sample phase-in schedule is also included in Appendix VII.

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[5] For reasons such as changes in their living situation mid-year, lack of 12 months' worth of claims, triggering data accuracy audits, or having expenditures among the very lowest and highest approximately 4.7%, some individuals' experiences were not considered appropriate for use in building the model. A total of 22,887 individuals' experiences were used to build the model.

[6] FY08-09 expenditures were adjusted to make them comparable by removing one-time expenditures and eliminated services and accounting for the deficit spending from that year. Neither FY08-09 expenditures nor the model prediction include waiver support coordination or geographic differential funding, which will be added back in at current rates.

[7] Consumers excluded from these analyses are those whose expenditures were not considered in building the algorithm. Also, consumers receiving intensive behavioral services or whose iBudgets were lower than their FY08-09 funding for certain core health and safety services, such as Residential Habilitation or nursing services, were also excluded.

APD is very open to suggestions for enhancing this proposed algorithm, keeping in mind the criteria for evaluating algorithms cited above.

Other Issues

Some stakeholders have proposed developing an algorithm to identify a person's support level, such as for residential habilitation services. Some states do use algorithms for this purpose. The Agency also intends to research this issue.

Some stakeholders have expressed concern that individual budgets would be used as a means to reduce funding for waiver-enrolled consumers. They see this as potentially being accomplished in two ways:

- By reducing the total appropriation, so that the available funding to be allocated to consumers is less.
- By enrolling some or all individuals on the wait list on the waiver and then allocating current funding to them as well as to the current enrollees.

Recent history offers ample evidence that it is quite possible to reduce the Agency's budget for waiver services under the current system. Similarly, it would be quite possible for the Legislature right now to implement reductions to existing enrollees in order to provide services to wait list consumers. No management approach will ever negate the need for effective advocacy. It could very well be the case that advocacy efforts will be more successful as this approach will generate clear and credible information related to service needs that is not available today. For example, once QSI assessments have been completed for individuals on the wait list, APD would be able to specify the funding necessary to serve all or some portion of the wait list.

Element 1: Funding Determination—Implementation Issues

The main challenge will be to strike the delicate balance between reserving funds for access by consumers whose iBudgets will not be sufficient to meet their critical health and safety needs with the desire to allocate as much funding as possible to the general group of APD consumers. APD will work with actuaries and stakeholders to analyze funding and determine the appropriate criteria for increased funding. Similarly, APD will need to consider consumers' needs and overall agency capacity and budget requirements in determining a phase-in approach.

APD will also need to develop its policies and procedures for determining funding and making due process available. The Agency will also have to educate consumers, families, and waiver support coordinators about these policies and

procedures so that they can apply for funding and avail themselves of due process if desired.

The Agency may encounter a number of issues in determining the timeframe and process for phasing-in iBudgets. For example, the rate at which APD can phase-in iBudgets will be determined by the availability of information technology, the ability to transition some APD staff to new roles, and availability of training for consumers, families, waiver support coordinators, and providers, as well as by the Agency's and its partners' capacity to simultaneously run the current system and the iBudget system side-by-side. This may either require a slower phase-in than originally planned or support a more rapid phase-in.

Element 2: Consumer and Family Control

At the heart of self-direction are opportunities for consumers and families to have increased control over the services they receive. Policies and processes should offer real choices. The system should provide supports to facilitate good decision-making, such as information about available paid and unpaid services, service quality, and likely outcomes of different choices. However, under the agreement with the federal government, APD is responsible for ensuring the health, safety, and welfare of the consumers it serves. Accordingly, APD must implement reasonable limits on self-direction so that health, safety, and welfare are protected. This is clearly a delicate balance to strike, and APD has come to the recommendations listed below through thoughtful discussions with stakeholders and the public. The general approach advocated by some stakeholders is to begin with enhanced self-direction, though not to the extent ultimately possible. That is because so much of the iBudget processes will be new, and there will be a learning curve for all involved in the system. As everyone gains experience and implementation is successful, self-direction could be expanded over time.

APD also recognizes that some consumers and families will not wish to change the services themselves or the processes by which they are selected and managed. The Agency believes that such consumers will be able to basically maintain their status quo if desired, though if the algorithm determines a different budget amount for them, they may need to make some changes to their service package.

Element 2: Consumer and Family Control—Feedback from Stakeholders and the Public

Following is a paraphrasing of quotes that summarizes stakeholder and public feedback received by APD prior to the release of the draft iBudget Florida plan:

- There is interest in greater consumer control.

- Concern that consumers and families would be required to do more paperwork.
- Current system *does* provide for adequate consumer control.
- Current system does *not* provide for adequate consumer control.
- Some consumers don't have natural supports to help exercise self-direction.
- Some families will be unable to manage a budget.
- Concern that consumers' natural supports might not let them make desired choices.
- Concern that some providers may not cooperate or may be manipulative.
- Consumers may make poor choices that put them at risk.
- Consumers need opportunities to make choices and learn from the poor ones.

Element 2: Consumer and Family Control—Recommendations

APD recommends enhancing consumer and family control by dramatically revising the service selection process, such as by scaling back the service review process and by offering a revised service array. The role of waiver support coordinators will also be reframed so that they can use their time more effectively to be a strong support to the consumer and family as they exercise self-direction and help them to get involved in the community. Within this framework, however, APD must institute policies and procedures to ensure that choice is exercised in ways that comply with state and federal laws and regulations and in manners that still protect health and safety. Thus, APD proposes the following policies, procedures, and tools for supporting consumers and families in making wise choices:

- Development of technology systems that provide accurate and up-to-date information regarding service utilization and spending and controls to alert the consumer, waiver support coordinator, and APD if there are issues.
- Effective budgeting: To help consumers make their funds last through the entire fiscal year, APD proposes the following:
  - Periodic allocation of funds: Limits on spending to ensure funds last through the year (the payment system will not pay more than this amount for services billed during this period): eighty-five (85%) of the consumer's iBudget would be allocated at the beginning of each month over twelve (12) months; however, ten percent (10%) would be allocated at the beginning of the plan year, and five percent (5%) would be held in emergency reserve until needed. This would allow consumers to meet unusually high service requirements. Funds not used in early months would be carried over to later months, though unused funds could not be carried over to a succeeding fiscal year.
  - The waiver support coordinator issues service authorizations, so that person monitors service usage.

    - Use of point-of-sale "swipe" cards, if technologically possible, to track budget use real-time and refuse services if insufficient funds are available.
- If consumers were not budgeting effectively to meet their needs, APD would:
    - Work with the consumer and support coordinator to adjust his or her budget.
    - Require additional reviews for future changes (limit flexibility to make changes).
    - Consider allocating additional funds temporarily to meet critical health and safety needs. These funds would come from the reserve for increases to meet extraordinary needs, temporary and permanently changed needs, and one-time expenses.
    - Identifying a representative to assist in decision-making. This would be an unpaid family member or friend.
    - For consumers who continue to have challenges in budgeting effectively, require the use of a mentor paid from the consumer's budget.
- There would be a requirement to set aside funding for residential habilitation services, nursing services, therapies, and behavioral services, with no reductions to these amounts made without area office review.
- Consumers would be allowed to negotiate some rates with providers up to the maximum permitted in rule. Note that some stakeholders felt that rate negotiation would not be appropriate for certain services, such as residential habilitation or behavior analysis. With stakeholders, APD would conduct a service-by-service review to evaluate the appropriateness of negotiating the rates. Also note that a stakeholder requested providers to be willing to negotiate rates for private-pay services to individuals *waiting* for waiver services; families with loved ones on the wait list would be willing to privately pay for some services but have sometimes found that providers are not willing to reduce rates to be affordable for them.

Please see the sections on service array and service review for more information about the processes for providing consumer and family control.

Element 2: Consumer and Family Control—Implementation Issues

Providing training to consumers and families about the new opportunities for self-direction would be critical. Waiver support coordinators, providers, and Agency staff would also need training in the new processes and system philosophy so that they could function in their new roles. Additionally, the Agency must have information technology systems that accurately capture information about spending of service dollars so that all parties are able to review this information to help manage iBudgets effectively.

Enhancing consumer control will also require enhancing the Agency's information technology. For instance, APD is interested in adopting a system like Indiana's online budget development tool, which helps consumers clearly see what the budgetary tradeoffs would be between using different amounts and types of services. Such a system would need to include timely information about services provided so that accurate budget amounts remaining can be displayed. The Agency's main information technology system, known as the Allocation, Budget, and Control (ABC) system would also need to be enhanced.

Ongoing, timely, and effective communication will be a prerequisite under this system. APD will bear great responsibility for facilitating this, but all parties will be responsible to some extent for making the system change happen.

Element 3: Services Available under the Waiver

As stated previously, three of Florida's waivers (Tier 1, 2, and 3) already offer a wide range of services to its consumers. (The array offered in Tier 4 is more limited.) Thus some might ask why the array should be revised. APD is proposing doing so because the way in which services are defined affects the process of selecting, coordinating, and managing them. For instance, the narrow service definitions which differ slightly from one another require very specific and detailed prior service authorization review. It also limits the work that one worker can do, limiting consumers' flexibility day to day. Accordingly, APD is suggesting changes, which are outlined below.

Element 3: Services Available under the Waiver—Current System

Currently, the Tier 1, 2, and 3 waivers offer twenty-seven (27) services. The Tier 4 waiver (the former Family and Supported Living Waiver) offers thirteen (13) services. These are listed in Appendix VIII. The services to be offered to waiver enrollees are specified in the waiver application, which is approved by the federal government. The scope and allowable frequency, duration, and intensity of each service are specified in the Florida Medicaid Services Handbook, which is adopted in rule. The waiver application and the handbook also specify provider qualifications. The medical necessity of each service requested by a consumer must be reviewed and determined by the state's prior service authorization contractor, APS. Only those services determined medically necessary may be provided to a consumer.

Florida tends to define its services more narrowly than some other states. Florida also offers a larger number of services to its enrollees than most other states.

Element 3: Services Available under the Waiver—Feedback from Stakeholders and the Public

Following is a paraphrasing of quotes that summarizes stakeholder and public feedback received by APD prior to the release of the draft iBudget Florida plan:

- Start from scratch with a new handbook rather than revising the current handbook.
- Eliminate the tiers and rebasing. This system will not work with those two (2) elements.
- Like the idea of very broad services. This gives flexibility to meet the real needs of the consumer.
- If services are grouped in service families, make sure they are logically grouped.
- Very broad services might be more challenging for consumers to navigate—for instance, it may be hard to know exactly how to meet their needs.
- Questions about how rates would be determined for services that are broadened to encompass existing services.
- Concern that children are not getting the services they need from the school system, Medicaid State Plan, or waiver, particularly given the limits of Tier 4.
- Questions about how much more flexibility the service families and broadened services would truly give to consumers.
- Concerns about the services that would be encompassed in broadened services; some of them have different rates and provider qualifications that don't mesh and may lead to dilution of service quality.

Element 3: Services Available under the Waiver—Recommendations

APD recommends adopting a modified version of a system proposed by Mercer Management Consulting. This system would group waiver services into eight (8) service families; examples are the Support Coordination, Personal Supports, and Residential Services service families. Once approved for at least one service within a service family, consumers would generally be able to add additional services within that family with little or no review, as long as those changes fit within the consumer's budget. The proposed service families and the services they would encompass include are depicted in Table 1, Proposed iBudget Florida Waiver Service Array.

This structure should require minimal changes to individual services, except where services are combined into one broader service. Where new rates are required, they would be made so as to have as neutral an impact as possible.

Under individual budgeting, stakeholders strongly support moving from the four tier waiver system to one waiver. Stakeholders desire that the broad range of

services be available to all consumers. Individual budgeting would allow that, since the person's individual budget limit would be the cost control mechanism rather than limiting the service array. In fact, it would be difficult to mesh a system of individual budgeting with the four tier waiver system as it exists today; the four tier waiver system would add great complexity to an individual budgeting system without adding value. That is because individual budgeting should accomplish the same goals as the tiers, though in a more individualized manner that leads to greater consumer control.

APD suggests offering four new services:

- Mentoring—training in self-advocacy, planning, choice-making, service coordination, and iBudget policies and procedures for consumers.
- Parent and Guardian training—training in planning, choice-making, service coordination, and iBudget policies and procedures for parents or guardians.
- Community Training Services—similar to the former Non-Residential Supports and Services service.
- Person-Centered Planning—support in creating a detailed and in-depth person-centered plan.

Element 3: Services Available under the Waiver—Implementation Issues

Replacing a group of services with a broadened single service would require addressing several important issues, such as the definition of the service, the rate, any training required for providers, and the minimum provider qualifications. Some of the services proposed for combining into one service have different provider qualifications, for example. There would also be the requirement to update the Medicaid system to reflect the new services for billing purposes. Affected providers would need to be informed about the change and assisted in transitioning to the new arrangement.

There would be some similar issues for the brand-new services proposed, though in that instance APD would need to recruit a new set of providers. However, it's likely that at least some existing providers of other waiver services may be willing to also offer the new services.

Table 2: Proposed iBudget Florida Waiver Service Array

Group	Service Family	Service
1	Life Skills Development	Meaningful Day Activities and Training (A new service that would replace and encompass the current Adult Day Training, Supported Employment, Residential Habilitation billed by quarter hours, and new Mentoring & Community Training Services)
2	Environmental and Adaptive Equipment	Durable Medical Equipment and Supplies
		Environmental Accessibility Adaptations
		Personal Emergency Response Systems (Unit and Services)
3	Personal Supports	Personal Supports (A new service that would replace and encompass the current In-Home Supports, Respite, Personal Care & Companion)
4	Residential Services	Residential Habilitation (Standard)
		Residential Habilitation (Behavior Focused)
		Residential Habilitation (Intensive Behavior)
		Specialized Medical Home Care
		Supported Living Coaching
		Residential Nursing
		In-Home Support Services (daily rate)
5	Support Coordination (Some consumers will have limitations on their ability to choose a different level of Support Coordination).	Support Coordination—Limited
		Support Coordination—Full
		Support Coordination—Enhanced (formerly Transitional)
		New Service - Person Centered Planning
		New Services - Family & Guardian Training
6	Therapeutic Supports	Therapies (PT/OT/ST/RT)
		Specialized Mental Health Counseling
		Behavior Analysis Services
		Behavior Assistant Services
7	Transportation	Transportation
8	Wellness Management	Consumable Medical Supplies
		Dietician Services
		Adult Dental Services
		Private Duty Nursing
		Skilled Nursing

Consumers would generally be able to move iBudget funds within and between UNSHADED service families without further service review. Moving funds to and within a SHADED service family would generally require some level of service review. Exceptions would apply for consumers meeting certain criteria. Each consumer would be required to have some form of support coordination in accord with federal requirements.

The Agency for Health Care Administration, in conjunction with the Agency, would need to revise the Medicaid Waiver Provider Handbook or essentially write a new one. The handbook is adopted in rule to govern many elements of the waiver. This process could be lengthy depending on the changes made.

Element 4: Service Review (Prior Service Authorization)

Every state must provide for some review and authorization of requested services. The federal government requires that states be effective and efficient in their use of Medicaid funds. The entity that oversees states' waiver programs, the Centers for Medicare and Medicaid Services (CMS), expects that assessed needs be the basis for paid services and supports. States have some flexibility in the design of their service review processes; for instance, they can go beyond the federal minimum requirements for service review. Florida is one state that has done so. The drawback has been a complex process that is expensive, time-consuming and detracts from consumer flexibility. Accordingly, this is one of the main system changes envisioned under individual budgeting.

Element 4: Service Review (Prior Service Authorization)—Current System

Based on a 2001 legislative mandate, APD implemented the Prior Service Authorization (PSA) review process to address the growing needs for services for consumers enrolled on a waiver. The PSA process provides a standardized review of services to ensure that consumers receive medically necessary services, which is a requirement for the provision of Medicaid services. The Agency currently contracts with APS Healthcare to conduct PSA reviews on waiver services. The purpose of the PSA review process is to ensure that consumers on waivers receive medically necessary services at the appropriate intensity, frequency, and duration. The program ensures statewide consistency in the approval of medically necessary waiver services for consumers in accordance with state and federal laws and regulations.

The PSA review process starts when the waiver support coordinator assists the consumer and his or her family in developing a support plan and cost plan. PSA reviews are conducted by contractors who are knowledgeable about the services that are covered by the tier waivers, the criteria for the use of waiver services, as well as services covered under the Florida Medicaid State Plan.

The PSA contract is fixed-priced—the contractor receives the same amount of money whether waiver services are approved, denied, reduced, or terminated. PSA contractors are paid for the number of reviews that they complete, with a minimum yearly amount built into their contracts. There is no monetary incentive for denying, reducing, or terminating services. The PSA program continuously strives to help consumers with developmental disabilities receive the services

and supports which are medically necessary to help them to live and work as they choose.

Element 4: Service Review (Prior Service Authorization)—Feedback from Stakeholders and the Public

Following is a paraphrasing of quotes that summarizes stakeholder and public feedback received by APD prior to the release of the draft iBudget Florida plan:

- There is general dislike of the current prior service authorization process.
- Scaling back the prior service authorization process is great but we need something to meet federal requirements for assessing necessity of services.
- There are concerns about granting consumers too much control such that health and safety are compromised, especially considering the variety of changes being contemplated in the APD system.
- Tailor level of review to the nature of the need; for instance, more intensive, medically-oriented, complex needs would require more in-depth review.
- If APD uses different entities to review (such as the fourteen [14] area offices), institute policies and processes to standardize and refine them as much as possible to ensure consistent results across the state.

Element 4: Service Review (Prior Service Authorization)—Recommendations

APD recommends adopting a system which involves graduated levels of review, ranging from no review for many service decisions to intensive review when health and safety is at critical risk or additional funding beyond that determined by the algorithm is requested. Reviews would be performed by a combination of area office staff, central office staff, and perhaps technical experts under contract with the Agency.

- First iBudget cost plan, whether new to the waiver or transitioning to iBudgets: The Area office will conduct an informal service review to identify the medical necessity of service groups identified on a consumer's first cost plan under iBudget. Additional reviews will not be required for many consumers.

- Adding a new service family: Consumers will have the flexibility to choose between the services within service families on their plan as long as they stay within their budget. If a consumer chooses to access a new service family for which he or she is not yet approved, a service approval will be required.

- Request to receive additional funding (permanent or temporary): Consumers will be required to work within their individual budgets. There may be circumstances where the consumer experiences a significant life change and the current budget no longer meets their need. If a consumer requests services that exceed their individualized budget amount, the services must be reviewed for medical necessity.

- Trigger Services: The following services will trigger a service review if they are added as a new service, or if their amount changes:
    - Residential Habilitation
    - Nursing Services
    - Therapies

- One Time Services: Consumers would be required to access services within their budget allocation. If there is a one-time service need that cannot be met within their budget without jeopardizing health and safety, a service and funding approval process can be initiated for the following one-time services:
    - Environmental Accessibility Adaptations.
    - Durable Medical Equipment.
    - Non-routine dental procedures.

- Changes in the type of place where a consumer lives: If a consumer is changing his or her living setting, requiring a new service family and new individual budget amount, a service review will be required.

- Difficulties managing budgets: Consumers who have recently had difficulties managing their iBudgets will require a service review on an annual basis. Additional reviews (such as when they desire to adjust their services) may be required as part of a corrective action plan.

- Forensic Involvement: Consumers who have criminal or forensic involvement may require a service and approval process to ensure that their needs are met and to protect the safety of others.

Element 4: Service Review (Prior Service Authorization)—Implementation Issues

APD may need additional staff in the central office or area offices to conduct reviews. This could be accommodated by shifting resources currently expended on the prior service authorization process or reprioritizing activities of existing staff. APD may also need to contract with technical specialists to assist with reviews.

Training would also be necessary to help all parties in the system understand how the new service review process would work.

APD will need information technology systems that facilitate area and central office service reviews and for central office monitoring for consistency and appropriateness of decision-making across the state.

Element 5: Waiver Support Coordination

Waiver support coordinators currently play a critical role in the system. With individual budgets, APD envisions that their role will change but will still remain an important one. Waiver support coordinators will continue to help coordinate consumers' chosen services with an added emphasis on seeking unpaid supports, natural supports, community supports, and other government program services. They will also be called upon to support and encourage consumers' self-direction even more than they are now. Their monitoring role will also grow given the new system design and emphasis on self-direction. This will be offset by decreasing the amount of time they have to spend on paperwork and through the implementation of the electronic forms system. As in other elements, the availability of information technology will be critical for success.

Element 5: Waiver Support Coordination—Current System

Once enrolled on the waiver, the consumer selects a waiver support coordinator who advocates on behalf of the consumer and helps to get their needs met through natural and community resources, state agency programs, and the Medicaid waiver program. The waiver support coordinator makes referrals to other agencies or programs, develops the support and cost plan that identifies services needed, and coordinates overall service delivery. Although a support coordinator is selected when the consumer first enrolls on the waiver for services, a request for a change can be made if for any reason the consumer is not satisfied with their support coordination services.

Waiver support coordinators are independent contractors who are certified and enrolled as Medicaid providers charged with the responsibility of assisting consumers on the waiver to obtained chosen supports and services that will allow consumers to continue to remain in their communities. When the waiver support coordinator works with a consumer and family to plan and coordinate services, they perform the following key activities:

- Meet with the consumer and his or her family and develop a support plan.
- Identify all available resources for the consumer and coordinate all resources, with waiver funding being the last resort.
- To seek funds for the supports and services identified in the support plan, the waiver support coordinator develops a cost plan to identify services, cost, frequency, and duration of services, and service providers.

- The waiver support coordinator develops, locates, and coordinates with the providers to provide the supports and services once they are approved.

There are currently three (3) levels of support coordination which are offered—limited, full, and transitional—though many consumers are constrained in their selection. Some adults may choose either limited or full support coordination. Children must use limited support coordination. Transitional support coordination is reserved for consumers who are being discharged from a public or private Intermediate Care Facility for the Developmentally Disabled (ICF/DD). These levels of support coordination differ by the number and nature of required contacts with the consumer.

Element 5: Waiver Support Coordination—Feedback from Stakeholders and the Public

Following is a paraphrasing of quotes that summarizes stakeholder and public feedback received by APD prior to the release of the draft iBudget Florida plan:

- Desire for greater flexibility in choosing level of support coordination.
- If they have more flexibility, some consumers may choose a level of support coordination that is less than they really need. Some consumers truly need a greater level of support coordination.
- Waiver support coordinators play an important and multifaceted role in the APD system. We need to ensure they are still available to help consumers and families.

Element 5: Waiver Support Coordination—Recommendations

APD recommends maintaining the current three (3) levels of support coordination but renaming “transitional” support coordination to “enhanced” support coordination and revising the criteria for what options are available to which consumers.

- Children would receive funding in their iBudget for limited waiver support coordination, but could choose to use other funds in their iBudgets to receive full or enhanced waiver support coordination. APD is also recommending that consumers’ caregivers receive an orientation to iBudget and self-direction, and that children whose caregivers do not do so within six months after transitioning onto an iBudget be required to have full waiver support coordination.
- Adults would receive funding in their iBudget for full support coordination, but most could choose to receive limited support coordination after a six-month transition period and after they or their caregivers received an orientation to iBudget and self-direction. They would also be able to use the excess funds for other services.

- Certain consumers would be required to receive full support coordination for at least a period of time. These might include consumers who:
  - Are newly-enrolled in the waiver.
  - Have had forensic involvement.
  - Have complex medical needs.
  - Have complex behavioral needs.
  - Will soon be or are transitioning from school.
  - Are changing their residential setting to group home or supported living from a different setting.
  - Have a recent alcohol or drug abuse history.
  - Are having difficulty managing their care or funding.
- Consumers living in APD-licensed homes or in a supported living situation would be required to have full support coordination unless there was a friend or family member actively involved in the consumer's life.
- Consumers required to receive enhanced support coordination for a minimum period of time would include consumers discharged from an ICF/DD, from a forensic placement, or from foster care.

APD also recommends that waiver support coordinators continue performing the general tasks as they currently do. As stated previously, APD envisions that the tasks related to processing prior service authorizations should decrease significantly for most consumers, which should reduce their workload. Thus APD proposes reframing their role to emphasize those activities which truly support consumers with developmental disabilities: person-centered planning, helping create social connections, increasing access to community resources, and training consumers and families in self-direction and budget management. APD would provide additional training to waiver support coordinators to help them understand and carry out their revised role in a new system.

One change APD would consider is making a more meaningful distinction between limited waiver support coordination and full waiver support coordination since consumers would generally have greater ability to choose between them. One way to do so might be to provide for a limited number of consumer contacts per month or to restrict consumer calls to a specified window of time as agreed upon between the support coordinator and consumer (basically, the support coordinator would not be on call "24/7"). However, if a consumer had unexpected needs beyond this, they could switch to full waiver support coordination for the month and pay for it out of their iBudget. Stakeholders, attendees at recent presentations of the draft iBudget Florida plan, and APD staff identified a number of issues that would need to be addressed in these policies, and thus APD would explore them more fully with stakeholders before making final recommendations on this issue.

APD recommends maintaining the Agency's current approach to conducting needs assessments, where trained and certified APD staff conducts the needs assessments rather than providers or waiver support coordinators. This protects

the objectivity of the assessments. However, providers and waiver support coordinators are important sources of information for the needs assessment process, and APD would continue to encourage their involvement in that role.

Element 5: Waiver Support Coordination—Implementation Issues

Significant training will be required for waiver support coordinators. This will be to introduce the waiver support coordinators to their revised role and the new processes. It will also provide them with additional skills and knowledge so that they can enhance their abilities to develop and locate natural and community supports. It will also enable them to provide education and training on budget management and smart decision-making to the consumers they serve.

Consumers, families, and providers will also need training to understand waiver support coordinators' role in the new system.

APD will also need to fully implement the envisioned electronic system for maintaining client records and processing service authorizations and other paperwork. This will be essential if waiver support coordinators are to be truly freed up from their current paper-oriented responsibilities to provide greater support to consumers.

Element 6: Providers

Element 6: Providers—Current System

The Agency for Persons with Disabilities relies heavily on the private sector in its efforts to provide waiver services for consumers with developmental disabilities. With the exception of services provided in the APD Developmental Disability Centers (DDC's) and forensic programs, all direct service is privatized. Agencies providing services must be approved by APD. The service provider must be under contract as a provider or willing to become a contracted provider in order for the Agency to pay for the service. The client has the right to choose the provider that is most cost-effective and best suited to their needs. If a service is to be paid for by one of the Medicaid waivers, the provider also will be required to meet Medicaid and Medicaid Waiver requirements. APD currently has over ten thousand (10,000) actively enrolled waiver providers.

Element 6: Providers—Feedback from Stakeholders and the Public

Following is a paraphrasing of quotes that summarizes stakeholder and public feedback received by APD prior to the release of the draft iBudget Florida plan:

- Providers are a critical element of the system. Services can't be provided without them. Please ensure that providers are still able to provide services under this system and be paid for doing so.
- Providers may be interested in expanding the range of services they might offer and the range of consumers they might offer them to.
- Please guard against the potential risk of exploitation of consumers by some providers who don't have consumers' best interests at heart.
- APD should provide more training to providers, and consumers should have the opportunity to be present at those training sessions. Consumers themselves will gain new information and will be able to help teach providers from a consumer's perspective.
- Questions on how the service authorization process and scheduling of individual providers would work under iBudget system. While greater consumer flexibility is a good thing, providers usually serve multiple consumers and need to be able to schedule appropriately to do so.

Element 6: Providers—Recommendations

APD proposes that providers be limited to those who are enrolled in the Medicaid program (participants in the Consumer-Directed Care Plus [CDC+] program would still be allowed to use non-Medicaid-enrolled providers). APD is not recommending incorporating the flexibility for consumers to directly hire their own workers in the iBudget system.

Element 6: Providers—Implementation Issues

APD recommends enhancing training for providers to ensure that they fully understand the new self-direction afforded to consumers under the new system as well as any new policies and processes. The Agency would also seek to revise waiver assurances, handbook provisions, and other governing documents to dovetail with any relevant new policies and processes.

Again, the availability of information technology that streamlines processes and enhances timeliness and accuracy of information will be critical.

Element 7: Quality Assurance and Quality Improvement

Quality assurance and quality improvement will be of even greater importance in a more self-directed system. For instance, since consumers and families will have greater control over service decisions, this will be balanced with more intense scrutiny of the results of those decisions and intervention as necessary to assure health and safety. APD is taking a broad approach to this issue, considering every stakeholder in its system as a partner in assuring and improving quality.

Element 7: Quality Assurance and Quality Improvement—Current System

The Agency for Health Care Administration, in cooperation with APD, is in the process of engaging a new quality assurance contractor under a new quality assurance program. The new quality assurance program is based on the Centers for Medicaid and Medicare Quality Framework. This structure has four levels: design, discovery; remedy and continuous improvement.

- Design: The key design element of the new APD model is the maximization of technology-based resources in order to overcome the effects of limited time, long distances, and a small pool of contract labor. The strategy is to automate the consumer central record and allow the contracted quality assurance provider to remotely monitor required documentation via secure internet connections.
- Discovery: This activity is chiefly the responsibility of the contracted quality assurance provider. Discovery occurs through the process of remotely reviewing the provider-submitted documentation contained in the consumer central record and conducting face-to-face provider reviews following a person-centered approach. Discovery data is to be submitted electronically to the Agency. Discovery can also be initiated by the Agency as necessary.
- Remedy: This level involves the APD Area Offices and the Central Office as necessary. The areas will react to information identified through the discovery process by taking such steps as may be necessary to remedy reported deficiencies.
- Continuous Improvement: This level is the joint responsibility of the contracted provider, APD area offices, and the APD central office. Under the leadership of designated staff from the central office, structured and continuous quality improvement activities will be initiated and managed.

Element 7: Quality Assurance and Quality Improvement—Feedback from Stakeholders and the Public

Following is a paraphrasing of quotes that summarizes stakeholder and public feedback received by APD prior to the release of the draft iBudget Florida plan:

- Support revision of the quality assurance system to be more understandable, less bureaucratic, and more person-centered.
- Concern that consumers may make poor choices that put their health and safety at risk.
- Concern that consumers may be at risk of exploitation by providers and natural supports.

Element 7: Quality Assurance and Quality Improvement—Recommendations

APD recommends enhancing the current quality assurance and quality improvement system in four main areas:

- Health and safety
- Budget management
- Outcomes
- Compliance

Some methods of doing so for each area include:

- Health and safety:
  - Requirement for use of full or enhanced waiver support coordination by certain consumers who present higher risks to their own health and safety or that of others (e.g., those with forensic involvement).
  - Competency-based training for providers.
  - Utilization reviews by the central office and area offices to identify service patterns of concern.
  - Review of services by area certified behavior analysts and nursing staff based on QSI scores or other indicators.
  - Limits on certain flexibility in selecting and changing critical services, such as nursing, therapies, or residential habilitation.

- Budget management:
  - Training for consumers and families at all levels of skill.
  - Timely information on spending through web-based tools. This would facilitate smart decision-making and monitoring:
    - Consumers & families.
    - Waiver support coordinators.
    - Area office staff.
    - Contracted Quality Assurance reviewers.
  - Policies to encourage consumers to budget in a way that meets needs through the year and corrective action plans for problem situations.
  - Corrective action plans to address consumers having difficulty managing their iBudgets.
  - Data analysis of spending patterns to identify consumers at risk of overspending and review spending in the aggregate to see if additional

policies or controls are necessary to help consumers spend appropriately.

- Outcomes:
  - Training for all parties in the system on outcomes under a more self-directed system so all will have reasonable expectations and be able to support achievement of these outcomes.
  - Training for support coordinators on handling issues of poor choice-making so that they may have reasonable expectations and be able to support consumer choice while protecting health and safety.
  - Central Office review of support plans to assess consumer goals under the new system to review the outcomes that are being pursued.
  - Procedures for waiver support coordinators to access area office support and direction in addressing problematic consumer choice-making.

- Compliance:
  - Training for consumers and families on provider responsibilities so that they have appropriate expectations and know how to evaluate whether they are or are not met, and how to respond appropriately.
  - Revise relevant waiver assurances signed by providers and the Medicaid Developmental Disabilities handbook to clarify expectations for and responsibilities of providers under a more self-directed system.
  - Central office review of service patterns to identify provider non-compliance.
  - Review of service delivery against support plans to assess whether services are being delivered.
  - Publicly share information about non-compliant providers to inform consumer and family decision-making.

Element 7: Quality Assurance and Quality Improvement—Implementation Issues

Revisions to the quality assurance contract may be necessary to ensure its processes align with the revised system, though APD is hopeful that given the design of the revised system, few significant changes would be necessary.

As stated, training on the new system, processes, and expectations will be necessary for all partners in the system: consumers, families, waiver support coordinators, providers, APD staff, and advocates.

Also critical will be implementation of information technology that allows for on-line monitoring and management of budget status and service usage. For instance, the system will need to be able to link provider information on services delivered so that consumers and waiver support coordinators know what funds

have been spent or are still available. Information technology systems and APD processes will also need to support on-line maintenance of consumer central records. These will have to be searchable so that APD can conduct data analysis to identify service patterns of concern or otherwise learn about APD consumers' status and experiences.

APD will also need staff available in the central office and area offices to follow up on indicators of problems, such as consumers with health and safety risks or providers suspected of taking advantage of consumers' increased control. For example, one stakeholder was concerned about whether areas employed a sufficient number of certified behavior analysts.

Public Feedback on Draft iBudget Florida Plan

After the conclusion of the third Stakeholders' Group meeting, APD sought feedback on the draft iBudget Florida plan through two (2) methods. The first method was through five (5) meetings across the state at which APD's Director presented an overview of the draft iBudget Florida plan. These meetings were held in Jacksonville, Tampa, Orlando, Hollywood, and Panama City. They were open to the public and attendees had the chance to provide comments in writing and orally. The other method was by posting the draft plan on the Agency website and inviting individuals to submit comments via email or telephone.

Most comments received are presented below exactly as written by the person making the comment, though a few are summarized, especially those provided orally during the recent meetings or in telephone conversations thereafter.[8]

Algorithm/Funding

- Living situation is a good criterion to look at in determining iBudgets. Is it being considered that some people change living situation often? People are encouraged to live independently. If they choose to do so, can iBudget change their funding quickly enough to accommodate this need? If iBudget makes it harder/less appealing to change living situation, then people will not make these changes in their lives.
- Although a person receiving services lives at home, the better the chances are for supports to be in place BUT most parents work full time and are not at home for nine (9) to ten (10) hours per day, a minimum of five (5) days a week to offer needed supports for a safe and healthy concerns. Services should not be of lesser amount because an individual lives at home if the other people who live at the home are not present to offer supports due to employment.
- The transportation question could make or break this new funding. This needs to be evaluated ASAP.
- APD should launch an incentive plan to encourage cost savings while meeting needs.
- The final model seems to capture functional areas quite well, along with behavioral areas. Pure medical not so much, and I wonder if you will have a lot of exceptional need activity in and around this area.
- It must be recognized that there is not enough money in the system to adequately serve those who are already receiving services. The only

[8] APD also received a number of questions at the meeting and through the website requesting clarifications about plan provisions; APD's director and staff have responded to those questions, and they have not been included in this summary.

reason the system functions is the continued donated support of provider agencies – which are not able to continue to absorb unmet costs. There must be additional money added to the system in order to serve the waitlist. Decreasing services to current consumers who need them in order to be safe and functional will not accomplish this. We will just end up with more and more underserved people.

- If we pass up this opportunity to determine the actual cost of care we will be doing a grave injustice to the people we serve, APD, the Legislature and to the State of Florida as a whole. As cuts to the total allocation are made and/or additional people are added to the waiver the iBudget process will experience “drift” which will eventually make it irrelevant. We will then be back to where we started.
- The current service system does not cover the actual cost of care which means the iBudget process must be implemented cautiously. While factors such as living site and diagnoses will certainly influence service plans, the State’s effort to ratchet down service rates has compromised the integrity of the rate structure adopted in July 2003. This is of particular concern for individuals who require residential care.
- We need to standardize transportation rates to be one general trip rate and one wheelchair/out of town trip rate, or going to per mile rates with one rate for a general trip and one rate for a wheelchair trip. I have individuals that are transported literally less than one (1) mile to an ADT for the same rate as ones transported five (5) or ten (10) miles. Doesn't make much sense.
- It is my concern that additional consideration be given to the fact that adult 'children' who are often living in the family home, are there because their intense and/or unique needs are not able to be adequately met in other currently available residential models. Often parents are keeping their adult children at home out of a desperate concern for their safety knowing that the alternatives are truly an unfortunate last resort; NOT because there are additional supports in the family home. I respectfully ask that if the residential location such as living in the family home, is one of the contributing factors for determining need and iBudget allotment, that the following also be considered:
  - The age and health of the parent(s) in addition to the age of the consumer.
  - The presence of one or both parents.
  - The level of disability of the individual.
  - The consumer's ability or inability for effective communication.

Needs Assessment Instruments

- The Questionnaire for Situational Information (QSI) assessor should spend time observing the service provider serving the person.
- QSI should be overhauled or re-done before being used in calculations.
- I was not impressed with the ability and level of training of the individual who administered the QSI for my adult son. Her supervisor agreed with an appropriate change in the way at least one of the questions was answered based on my input for a correction. However, the APD does need to base the algorithm on a survey instrument and that is probably the best solution for now.

Waiver Support Coordination

- Give waiver support coordinators limited power to give consent to medical, dental, and behavior treatments for waiver recipients.
- Include child welfare case managers in the waiver support coordinators training/iBudget Florida training.
- Please ensure that children in the child welfare system have case managers who understand the APD system. Too often, children in the child welfare system do not. They need support in ensuring their needs are properly met, especially at critical intervals of time such as when they “age out” of child welfare and are often left on their own in their transition into adulthood.
- Please stop calling waiver support coordinators social workers; they are not!
- I am glad that they plan to reduce waiver support coordinators’ paperwork; however I think they are going to put too much responsibility on waiver support coordinators to find natural/generic/community resources to fill in the gaps when individuals get services cut. They do not understand that many of our clients basically need supervision; therefore it is not reasonable to expect to find free services that will guarantee they can consistently provide the level of supervision needed.
- Be careful of how change in role of waiver support coordinators is presented. Many already see themselves only as a facilitator and guide, which translates to only processing paperwork and no real advocacy and/or follow through. Most waiver support coordinators will not do more to connect with community resources – they may well do LESS if not held accountable for the results.
- The iBudget seems to be a far better approach than the current system. Support Coordinators and State Workers spend an inordinate amount of time with the red tape of the PSA process. Eighty percent (80%) of the work of waiver support coordinators is related to paper work.

- I find there is no such thing as limited waiver support coordinator. You don't tell a family in need they have limited access to the very person that is supposed to be there for them.
- Concerns regarding support coordination and being able to change levels. Health and safety concerns regarding folks in Residential Habilitation or supported living with limited support coordination.
- People who may choose limited may do so to be able to maximize funds for other services that are more "fun", but this may be to their detriment if they don't get the support coordination they need.
- I do not favor the current path of expanding limited support coordination. This system will make support coordination even more important to the consumer as the waiver support coordinators would be required to make the iBudget changes that the consumer wishes. The iBudget will only work if the waiver support coordinator is well versed on the consumer's needs, barriers and wishes in order to assist in their self-direction. This will require full support coordination in most instances for this system to work effectively.

Waiver Services and Providers

- Please do not have constant restraints on the provision of services, such as In-Home Supports.
- Residential providers should only provide Residential Habilitation services, so they would provide better quality. Individuals should interview more providers.
- It is a shame that the consumer cannot choose to purchase some products outside of the Medicaid providers. For instance, the $600 allowed for bowel management supplies does not cover a full years' supply of product when purchased through Medicaid provider, but with use of coupons or purchase through Costco or Wal-mart, the $600 is more than enough for a year's supply. This is also true of diapers and wipes.
- Ensuring the credibility and capability of each service provider is essential for the delivery of good services and for individuals to make informed decisions.

Prior Service Authorization

- Elimination/reduction of prior service authorization will be very beneficial to all consumers, providers, and APD staff.

Implementation

- Attempt to identify the potential problems of the system before implementation. Too many times things get implemented without being thought out.
- Go slow, try, but move forward.
- APD must look to engage in "LEAN" – continuous improvement initiatives that local, state, and federal agencies are embracing to eliminate waste, deliver what the customer wants by creating value.
- The iBudget is a good plan and let's hope it is not just another new plan or idea that falls short of statewide implementation as the others.
- Transition is always difficult. Taking it slow so it is not overwhelming for everyone is best.
- Good start. Keep moving forward. Stay on schedule and focus on the people we seek to assist.
- We encourage the Agency to move cautiously to ensure that the iBudget system is implemented in a manner that truly benefits individuals with developmental disabilities. We also encourage APD to conduct impact evaluations and give consideration to the system the State of Washington ran which was to conduct a "paper demonstration" alongside its existing service system for one year to compare actual service costs to the new system, thus giving decision makers the opportunity to objectively weigh the impact of the new budget process.
- The biggest concern of an individual budget program is the phase-in strategy. It seems that making a broader initial approach involving people from across the state and at all levels of budget/algorithm criteria will make the most sense.
- Implementation of iBudgets must include a Safety Net factor similar to what the Georgia system featured to prevent drastic changes in cost plans and should not increase or decrease more than 5% during year one as a result of iBudget adjustments.

General Comments

- This is a logical extension of the tier system, a refinement consistent with those pursued in other states.
- Legislature has a moral imperative to ensure at least minimal funding for people with developmental disabilities.
- Giving the opportunity to review the individual's iBudget before it is set in stone might reduce appeals.

- Hopes that iBudget is better at treating people like individuals than the tier system, as the tier system does not accommodate people's unique needs.
- Feel it is moving in a positive and realistic direction.
- Let's try it sooner than later, as tiers are a nightmare.
- Sounds awesome, the sooner the better.
- Looking forward to finally seeing and working in a program that is going to have to it roots of person-centered service delivery. I love social work and not administrative duties!
- Keep it individualized.
- Be sure to have questions on the website so answers can be researched.

Implementation

The Agency for Persons with Disabilities (APD) plans to phase individual budgets in over time, with the schedule dependent upon receipt of required federal approvals for changes in the waiver system. APD would like to begin the first phase-in in October 2010, involving a limited number of consumers in up to three (3) APD service areas. During the initial phase-in, APD would gather data to evaluate implementation. Such a first step would enable the Agency to explore how the system works in practice and make refinements as needed. During this time, the Agency would also be enhancing its needs assessment instrument and refining the algorithm. Based on the results of the initial phase-in, a wider phase-in would begin in late 2011 or early 2012, using the approaches discussed previously in the report.

Conclusion

In conclusion, an individual budgeting approach has the promise of making the system simpler, more sustainable, more equitable, and more supportive of self-direction. While there may be transitional issues to address, the Agency for Persons with Disabilities (APD) believes many can be mitigated through a careful phase-in. Consumers and families would benefit from having greater ability to choose services that fit their unique needs, stronger support from support coordinators, less frustration from excessive red tape, and greater ability to control their own lives. By enhancing system sustainability, they will also benefit from a stronger system that can serve them now and into the future.

However, APD recognizes that this plan is only a first step. Much more analysis remains to be done, and many proposals require further development. Given the broad scope of this plan, the very short timeframe for its development, and the thorough and inclusive process the Agency has tried to use in developing it, this is not surprising. APD could be submitting a more complete plan had it not involved stakeholders to the extent it did and had it not conducted as much research and analysis as it has. However, the Agency believes that taking the time to use this approach will ultimately lead to a better plan with a more successful implementation, should the Legislature direct APD to proceed. The Agency looks forward to continuing its research and analysis and its dialogue with stakeholders about the ideas in the plan, since such work will ultimately benefit the consumers served.

Glossary

Area or Region—The name for the Agency's local service district. The areas and region and the respective counties they comprise are:

- Area 1: Escambia, Okaloosa, Santa Rosa, and Walton
- Area 2: Bay, Calhoun, Franklin, Gadsden, Gulf, Holmes, Jackson, Jefferson, Liberty, Leon, Madison, Taylor, Wakulla, and Washington
- Area 3: Alachua, Bradford, Columbia, Dixie, Gilchrist, Hamilton, Lafayette, Levy, Putnam, Suwannee, and Union
- Area 4: Baker, Clay, Duval, St. Johns, and Nassau
- Area 7: Brevard, Orange, Osceola, and Seminole
- Area 8: Charlotte, Collier, Glades, Hendry, and Lee
- Area 9: Palm Beach
- Area 10: Broward
- Area 11: Dade and Monroe
- Area 12: Flagler and Volusia
- Area 13 Citrus, Hernando, Lake, Marion, and Sumter
- Area 14: Hardee, Highlands, and Polk
- Area 15: Indian River, Martin, Okeechobee, and St. Lucie
- Suncoast Region: De Soto, Hillsborough, Manatee, Pasco, Pinellas, and Sarasota
- *Note that there is no Area 5 or 6.*

Home and Community-Based Services (HCBS) Waiver—A program which offers supports and services to assist consumers with developmental disabilities to live in their community. A few examples of the 28 services that APD consumers enrolled in one of the Agency's HCBS waivers may be able to receive are adult day training, respite, and residential habilitation services. HCBS waiver services are funded with state and federal monies.

Reliability—A statistical concept involving evaluating an instrument's consistency in its measurement across time and across interviewers.

SIS—Supports Intensity Scale. This assessment instrument is designed to measure the relative intensity of support that an individual with a developmental disability needs to participate fully in the community.

Subscale—A measure of a specific element of a construct. For example, the main construct measured by the QSI is an individual's need for support. The subscales of the QSI measure specific elements of this need: need for functional support, physical support, and behavioral support.

Validity—A statistical concept involving evaluating whether an assessment instrument measures what it was intended to measure.

Wait list—The Agency's record of consumers who have expressed a desire to receive Medicaid Waiver services and have met initial eligibility standards.

Waiver Support Coordinator—A Medicaid waiver-enrolled provider who assists a consumer with obtaining needed supports and services.

Appendix I: List of Stakeholders' Group Members

Representative	Organization/Role
Maryellen McDonald	Advocacy Center for Persons with Disabilities
Andrea Moore	Advocate for foster children
Pam Kyllonen	Agency for Health Care Administration
Jim DeBeaugrine	Agency for Persons with Disabilities
Ryan Chandler	Agency Support Coordinator
Patty Houghland	Family Care Council Florida
Phil Pearson	Family Care Council Florida (wait list parent)
Betty Kay Clements	Family Care Council Florida
Mark Barry	The ARC of Florida
Sherry White, Ph.D.	Florida Association of Rehabilitation Facilities
Margaret Hooper	Florida Developmental Disabilities Council
Bryan Vaughan	Governor's Commission on Disabilities
Steve Mason	Hillsborough Achievement and Resource Centers
Tiffany Solomon	Independent Support Coordinator
Jim Freyvogel	MacDonald Training Center
Arizona Jenkins III	Self-advocate
Bert Paige	Self-advocate
Cymande Jacobs	Solo Waiver Services Provider

Appendix II: Technical Report

Statistical Models for Predicting Resource Needs and Establishing Individual Budgets for Individuals served by the Florida Agency for Persons with Disabilities

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October 15, 2009 – January 28, 2010

Technical Report Submitted to the
Florida Agency for Persons with Disabilities

I. Background and Introduction

The Florida Agency for Persons with Disabilities (APD) serves individuals with mental retardation, autism, cerebral palsy, spina bifida, and Prader-Willi syndrome as well as children at risk of a developmental disability. Based on the information provided by the APD, "the majority of the individuals served live in the community with family members, in their own home, or in a congregate living setting such as a group home. The agency provides services such as companion, adult dental services, physical therapy, respite, adult day training, transportation, residential habilitation, nursing, supported living, and supported employment to support these individuals in living, learning, and working in their communities. Approximately 29,000 individuals receive services through a Medicaid waiver, and about 19,000 are waiting for waiver services."

In response to increasing need, concerns about the current system, and a mandate from the Florida Legislature, APD seeks to develop a new plan for serving its waiver-enrolled consumers. According to the 2009-2010 General Appropriations Act, the plan shall provide (1) a way to distribute resources equitably based on assessment and client characteristics, (2) consumer choice concerning services and providers, (3) formulas for predicting resource needs and establishing individual budgets, and (4) recommended roles for providers and support coordinators during the assessment process. The goal of this document is to provide a detailed description of the proposed models for predicting resource needs and developing individual budgets. The methodology for developing the formulas will also be given in technical detail.

In addition to the mandate from the Florida Legislature, some further motivations for developing a new plan are considered. The proposed plan is referred to as iBudget Florida corresponding to the individual budgets developed. This section briefly compares and contrasts the current system with the proposed iBudget and concludes with an outline for the remaining document.

In the current system, a consumer's services are decided upon first. Needs are determined by the consumer, his or her family, and waiver support coordinator (WSC) with the help of assessment processes such as the Questionnaire for Situational Information (QSI). The QSI was developed by APD and contains questions that "reflect

a person's needs for assistance in key life roles and areas of daily living." After many independent evaluations for validity and reliability, the QSI has been found to be a sound instrument. The purpose of the QSI is to describe a consumer's needs for determining supports. With this purpose and the full population of waiver enrollees and many of those waiting for services having completed QSI assessments, it makes sense that this instrument be used in the new iBudget formula as well.

It is only after needs have been determined in the current system that funding is allocated through prior service authorization (PSA). Services are limited based on tier placement and rules outlined in the handbook. If a change in services must occur, then a new PSA review is most likely needed. It is clear that the current process requires a great deal of time and paperwork dedicated to these areas. With its complexity, retrospective nature, and difficulties in managing funding, the current system is in great need of change, especially when considering the growing wait list of consumers in need of service.

The approach to developing a system based on individual budgets is an emerging best practice. Several states including Georgia, Oregon, Wyoming, Minnesota, Connecticut, and Louisiana have implemented similar systems with positive results. That is, the consumers, families, and providers are generally satisfied according to an evaluation of Wyoming's DOORS program by Navigant Consulting. The work done in these states is considered as an example for the process of developing iBudget Florida.

In contrast to the current system, funding would be determined first under the proposed iBudget system. For most waiver-enrolled consumers, funding would be established using the model discussed in the remaining portions of this document (certain individuals who have extraordinary needs for whom use of a model is not appropriate would have their budgets determined through alternative means). As previously stated, the model building process incorporates QSI assessments, concerns raised by members at a series of stakeholder meetings, and considerations from models used by other states. Based on significant factors, individual budgets are determined and every consumer will have an iBudget. Consumers with similar characteristics will have similar iBudgets and differently situated consumers will have different iBudgets. That is, funding will be responsive to individual's different characteristics and situations. Unlike the current

system, this provides a fair, transparent, reliable, and scientific method for assigning funding. The proposed system is prospective in the sense that agency spending will be more predictable and it allows for determining expenses to cover current consumers and may project new funding needed to serve individuals on the wait list. Furthermore, by establishing funding first, the choice of how the individual budget should be spent is given to the consumer, thereby increasing the role of consumer choice.

After considering the current system against the proposed iBudget, it is clear that a complex system will be replaced by one that is more equitable, less complicated, and increases self-direction and sustainability. The key to implementing the new iBudget system is to develop the best model for accurately capturing consumers' monetary needs for support.

Required by the Florida Legislature in the 2009 General Appropriations Act, APD needs to submit a plan to develop the "formulas necessary to predict resources needs and establish individual budgets" for individuals on the waiver and projecting expenditures for persons on the wait list. The main purpose of this report is developing statistical models for predicting resource needs and establishing individual budgets for persons with disabilities in Florida. Specifically, this study will perform the following tasks specified by APD:

- Determine and refine dependent and independent variables used in the statistical models.
- Develop statistical models that achieve APD goals and objectives.
- Propose techniques for identifying outliers and evaluating case influences.
- Test the accuracy and reliability of the models proposed and provide recommendations for improving accuracy and reliability.
- Assess and provide recommendations for improving data integrity.
- Review, evaluate, and provide recommendations for model selection that achieves FAPD goals and objectives.

- Provide text for, review, and comment upon the draft of the statistical portion of the report to the Legislature, and perform other statistical tasks as may be required.

Several statistical models will be developed for the purpose of predicting resource needs and establishing individual budgets for persons with disabilities in Florida. The best model, or models, will be identified and recommended to APD to meet its goals and objectives.

II. Statistical Methods

1. Multiple Linear Regression Models with Transformations

Consider a classical multiple linear regression model with the form:

$$y_i = \beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \cdots + \beta_p x_{pi} + \varepsilon_i, \qquad i=1, 2, \ldots, n, \tag{1}$$

where y_i is the dependent variable, $\{ x_{1i}, x_{2i,} \cdots, x_{pi} \}$ are independent variables or predictors, β_0 is the intercept, and $\{\beta_0, \beta_1, \cdots, \beta_p\}$ are unknown coefficients. The random error terms $\{\varepsilon_1, \varepsilon_2, \cdots, \varepsilon_n\}$ should satisfy the following assumptions:

1) Each term ε_i has a normal distribution
2) $\{\varepsilon_1, \varepsilon_2, \cdots, \varepsilon_n\}$ are independent of one another
3) Each term ε_i has the same variance σ^2.

When the assumptions on $\{\varepsilon_1, \varepsilon_2, \cdots, \varepsilon_n\}$ are satisfied, the responses $\{y_1, y_2, \cdots, y_n\}$ are
also independent and have normal distributions with constant variance, σ^2. However, in practice it may be the case that one or more of these assumptions are not valid and transformations on the responses are needed to ensure the assumptions are approximately satisfied.

Consider random variables $\{y_1, y_2, \cdots, y_n\}$ with variances $\{Var(y_i) = \sigma_i^2$, *i=1, 2, …, n*$\}$.
That is, the variances of $\{y_1, y_2, \cdots, y_n\}$ are not constant. We want to find a transformation
$z_i = f(y_i)$ such that the distribution of z_i is approximately normal and with constant variance $Var(z_i) = \sigma^2$. The popular **Box-Cox Power Transformation Family** will be used for this purpose. Similarly, independent variables can also be transformed to make the relationship between response and predictors linear (Weisberg, 2005; Chapter 7).

First we suppose that the observations $\{y_1, y_2, \cdots, y_n\}$ are all positive. Otherwise, we may add a positive number to each of the observations, making all observations positive. (**This operation changes the mean values of the observations, a level shift, but will not change the variance and covariance structure of the data.**)

The Box-Cox Power Transformation Family is

$$z_i^{(\lambda)} = \frac{y_i^{\lambda} - 1}{\lambda}, \quad \text{if } \lambda \neq 0; \qquad z_i^{(\lambda)} = \log(y_i), \quad \text{if } \lambda = 0. \tag{2}$$

The Box-Cox Power transformation family given in (2) is continuous about real numbers λ since we have $\lim_{\lambda \to 0} \frac{y_i^{\lambda} - 1}{\lambda} = \log(y_i)$.

When we know that a transformation is needed for the responses $\{y_1, y_2, \cdots, y_n\}$, one natural question will be how to choose a transformation in the Box-Cox Power Transformation Family. For a given λ, define

$$z_i^{(\lambda)} = \frac{y_i^{\lambda} - 1}{\lambda [GM(y)]^{\lambda - 1}}, \quad \text{if } \lambda \neq 0; \qquad z_i^{(\lambda)} = \log(y_i)[GM(y)], \quad \text{if } \lambda = 0,$$

(3)

where *GM*(y) is the **geometric mean** of the observations $\{y_1, y_2, \cdots, y_n\}$, calculated

$GM(y) = \left[\prod_{i=1}^{n} y_i\right]^{1/n}$ with *n* being the sample size. The scale adjustment by *GM*(y) in (3) guarantees that the units of $\{ z_i^{(\lambda)}, i=1, 2, \ldots, n\}$ are similar to each other for all values of λ so that different transformations can be compared. For each given λ , fit the linear model

$$z_i^{(\lambda)} = \beta_0^{(\lambda)} + \beta_1^{(\lambda)} x_{1i} + \cdots + \beta_p^{(\lambda)} x_{pi} + \varepsilon_i^{(\lambda)}, \qquad i=1, 2, \ldots, n, \tag{4}$$

obtain the residuals $\left\{\hat{\varepsilon}_1^{(\lambda)}, \hat{\varepsilon}_2^{(\lambda)}, \cdots, \hat{\varepsilon}_n^{(\lambda)}\right\}$, and calculate the Residual Sum of Squares, $RSS(\lambda) = \sum_{i=1}^{n}\left(\hat{\varepsilon}_i^{(\lambda)}\right)^2$. Then the best transformation for the responses $\{y_1, y_2, \cdots, y_n\}$ will
choose λ such that $RSS(\lambda)$ reaches its minimum (Weisberg, 2005; Chapter 7).

The Box-Cox power transformation method chooses λ such that residuals from the linear model are as close to normally distributed with constant variance as possible. Therefore, after the transformation when the normality and constant variance assumptions are valid, the
residual sum of squares from the model should be smaller than that based on untransformed data.

In practice, $RSS(\lambda) = \sum_{i=1}^{n}\left(\hat{\varepsilon}_i^{(\lambda)}\right)^2$ is calculated only for some special cases, such as $\lambda \in \{ -3, -2.5, -2, -1.5, -1, -0.5, 0, 0.5, 1, 1.5, 2, 2.5, 3\}$.

2. Model Selection

Consider the linear regression model specified in (1) with y_i as the dependent variable and $\{ x_{1i}, x_{2i,} \cdots, x_{pi}\}$ as the independent variables (or predictors). In practice, one or more predictors in model (1) may not be statistically significant and lack prediction power for the response, y_i. Keeping non-significant or borderline predictors in

a model will bring additional sources of noise and reduce the accuracy of predictions. When different models are fit to the observations $\{y_1, y_2, \cdots, y_n\}$, model selection techniques should be used to decide which model fits the data best. Statistical inferences such as estimation and prediction will then be based on the best model selected.

The Bayesian Information Criterion (SBC) suggested by Schwartz (1978) is one popular criterion for model comparison. For a fitted model (linear or nonlinear) with p parameters, SBC is defined as SBC(p) = -2 log(maximum likelihood function) + p $\times$ log(n). The likelihood function is based on the distribution assumption of the model such as normal, log-normal, or other distribution families. n is the sample size. When the random errors have a normal distribution, the SBC(p) has the simplified form

$$\text{SBC(p)} = n \times \log\left(\sum_{i=1}^{n} (y_i - \hat{y}_i)^2 / (n - p - 1)\right) + p \times \log(\text{n}), \qquad (5)$$

where $\hat{Y}_i$ is the fitted value based on one of the candidate models and $\sum_{i=1}^{n} (Y_i - \hat{Y}_i)^2$ is the

Residual Sum of Squares (RSS) based on the fitted candidate model.

Intuitively, there are two parts in (5), the first part is

$$n \times \log\left(\sum_{i=1}^{n} (y_i - \hat{y}_i)^2 / (n - p - 1)\right) = n \times \log \hat{\sigma}^2,$$

which is a measure of the goodness-of-fit of the candidate model. In general, increasing the number of parameters in a model will improve the goodness-of-fit of the model to the data regardless how many parameters are in the **true model** that generated the data. When a model with too many predicators (significant or not significant ones) is fit to a data set, we may get a perfect fit but the model will be useless for inference such as prediction. In statistics, fitting a model with too many unnecessary parameters is called *over-fitting*. The second part in SBC,
$p \times \log(\text{n})$, places a penalty term on the complexity of a candidate model, which will increase when the number of parameters in a candidate model increases. Thus the

criterion SBC requires a candidate model fitting the data well and penalizing the complexity of the model.

Often in practice, the penalty term in the SBC rule, $p \times \log(n)$, is not heavy enough and results in selecting an over-fitted model. In order to solve this problem, Rao and Wu (1989) suggested the Generalized Information Criterion (GIC), which is a generalization of Akaike's information criterion (AIC) and the Bayesian information criterion(SBC). Pu and Niu (2006) extended the GIC to select linear mixed-effects models that are widely applied in analyzing longitudinal data. For the linear model given in (1), the GIC is defined as

$$\text{GIC(p)} = n \times \log \hat{\sigma}^2 + p \times \lambda_n . \quad (6)$$

Pu and Niu (2006) carried out a simulation study to empirically evaluate the performance of the extended GIC procedure. The results from their simulation show that if the signal-to-noise ratio is moderate or high (measured by the absolute student-t value of the estimated coefficient), the percentages of choosing the correct model by the GIC procedure with $\lambda_n = \sqrt{n}$ are close to one for finite samples. In this study, the GIC with the following form

$$\text{GIC(p)} = n \times \log \hat{\sigma}^2 + p \times \sqrt{n} \quad (7)$$

will be used for model selection. **For a group of candidate models, the GIC(p) value will be calculated for each of the models and the best model is the one with the lowest GIC value.**

3. Detecting potential outliers.

Suppose that after an appropriate transformation $z_i = f(y_i)$, the transformed response variable z_i follows the linear regression model of the form

$$z_i = \beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \cdots + \beta_p x_{pi} + \varepsilon_i, \qquad i=1, 2, \ldots, n, \tag{8}$$

where $\{\varepsilon_1, \varepsilon_2, \cdots, \varepsilon_n\}$ satisfy the three assumptions given in the last section. Define

$$\mathbf{z} = (z_1, z_2, \cdots, z_n)', \quad \mathbf{x_j} = (x_{j1}, x_{j2}, \cdots, x_{jn})', \quad \boldsymbol{\varepsilon} = (\varepsilon_1, \varepsilon_2, \cdots, \varepsilon_n), \quad \boldsymbol{\beta} = (\beta_0, \beta_1, \cdots, \beta_p)'$$

and

$$\mathbf{X} = (\mathbf{1}, \mathbf{x_1}, \mathbf{x}_2, \cdots, \mathbf{x}_p), \qquad \text{where } \mathbf{1} = (1, 1, \cdots, 1)'.$$

Then model (5) can be expressed in the vector-matrix form:

$$\mathbf{z} = \boldsymbol{\beta}\mathbf{X} + \boldsymbol{\varepsilon} \tag{9}$$

and the least-squares estimate of $\boldsymbol{\beta}$ is given by $\hat{\boldsymbol{\beta}} = \mathbf{(X'X)^{-1}X'z}$. The fitted values based on the model are $\hat{\mathbf{z}} = \mathbf{Xz} = \mathbf{X(X'X)^{-1}X'z}$ where matrix $\mathbf{H} = \mathbf{X(X'X)^{-1}X'}$ is called the projection matrix or the **hat** matrix. Moreover, the residuals can be expressed as $\hat{\boldsymbol{\varepsilon}} = \mathbf{(I - H)z}$ (Weisberg, 2005; Chapter 8).

Let h_{ii} denote the i^{th} diagonal element of the matrix $\mathbf{H}$. The variance of residual $\hat{\varepsilon}_i$ is actually $(1 - h_{ii})\sigma^2$. The studentized residuals are defined as (Weisberg, 2005; Chapter 9)

$$r_i = \frac{\hat{\varepsilon}_i}{(1-h_{ii})\hat{\sigma}}, \qquad i=1, 2, \ldots, n, \tag{10}$$

When the sample size *n* is large, the studentized residual r_i has an approximately normal distribution with mean zero and variance one. In other words, r_i has a standard normal distribution.

One important assumption in linear model analysis is that the model in (8) is appropriate for all cases $\{(z_i, x_{1i}, \cdots, x_{pi}), i=1, 2,\ldots, n\}$ in the given data set. Cases that follow a

different model than the rest of the data are called outliers. In our analysis, outliers are corresponding to APD consumers whose waiver expenditures were extremely high or extremely low.

In this study, outliers are defined as these cases with $|r_i| \geq 1.645$, corresponding to extreme values outside a 90% interval of the population, each tail with 5% of the theoretical normal population with mean zero and variance one.

III. Dependent and Independent Variables Analysis.

1. Dependent Variable Analysis.

A) The main dependent variable used in this study is the APD consumers' FY 2007-2008 expenditures with the following adjustments:

1) Removed expenditures for individuals who had fewer than 12 months' of claims in FY 07-08;
2) Took out Personal Care Assistance (PCA) claims for individuals under 21, since these are paid for by the Medicaid state plan administered by the Agency for Health Care Administration;
3) Took out waiver support coordination claims for everyone, pending policy decisions (funds will be added back in to consumers' budgets at the appropriate level);
4) Took out all services that have since been eliminated, such as massage therapy, chore, homemaker, non-residential supports and services, and medication administration;

5) Took out expenditures for dental services, environmental adaptations, and durable medical equipment, since funding will be set aside for such expenditures;
6) Adjusted residential habilitation rates for Monroe, Broward, Dade and Palm Beach County by taking out their geographic differentials; and
7) Removed consumers in the list of audit exceptions triggered by a mismatch between the consumer's paid claims for a certain service type and the person's living setting (1370 consumers in this list, provided by APD staff on Dec. 22, 2009).

B) The APD consumers' FY 2008-2009 expenditures:

APD implemented a four-tier waiver system in October of 2008, in which over 13,000 consumers were notified that their approved costs exceed the tier cap to which they were assigned. Over 5,000 affected consumers requested a hearing. The FY 2008-2009 consumer expenditure is expected to be highly correlated with tier assignment. Since some stakeholders have concerns about the fairness of distributing fund resources based on the tier system, we suggest not using the FY 2008-2009 expenditures as a dependent variable for establishing the iBudget Florida algorithm.

C) The APD consumers' FY 06-07 expenditures.

During FY 2006-2007 to FY 2007-2008, several provider rate changes occurred. For example, provider rates for residential habilitation services in an APD-licensed facility changed on December 1, 2007, and again on January 1, 2008. Some services available in FY 06-07 were eliminated in FY 07-08. It is believed that the FY 07-08 consumer expenditures reflect more accurately the current APD services and rates than the FY 2006-2007 expenditures. In addition, the QSI assessments, which provide consumers' individual characteristics and important predictors for the main statistical algorithm, were administrated in years 2008 and 2009. The relationship between the FY 07-08 expenditures and the QSI assessments is clearly more reliable than that between the FY 06-07 expenditures and the QSI predictors.

In summary, the APD consumers' FY 2007-2008 expenditures after adjustments will be used as the dependent variable for establishing the statistical models. The FY 2006-2007 expenditures will be used as a test data set to see whether the algorithm is applicable to different data sets. However, the FY 2008-2009 expenditures will not be used as a dependent variable due to the potential concerns about the tiered waiver system.

2. Independent Variable Analysis.

The main purposes of developing a statistical algorithm for calculating APD consumers' individual budgets are: 1) increasing fairness of resource distribution based on consumers' individual characteristics and assessment results; 2) predicting resource needs before services are decided upon and managing funds scientifically; and 3) enhancing transparency of the fund distribution process and sustainability of APD's programs and services.

APD developed the Florida Questionnaire for Situational Information (QSI) for assessing its consumers' individual characteristics and support needs. The QSI (Version 4) consists of three main parts:

- Part 1: Functional Status, with 11 elements (Q14-Q24) focusing on person's needs for assistance during the normal course of a routine day;
- Part 2: Behavioral Status, with 6 elements (Q25-Q30) focusing on major behavioral issues requiring support, assistance or intervention;
- Part 3: Physical Status, with 19 elements (Q32-Q50) focusing on health and physical I concerns.

Elements in the three parts are listed in Table 1.

Table 1. Elements in the three parts of QSI (Version 4)

Part 1. Functional Support Status		Part 2. Behavioral Support Status		Part 3. Physical Support Status	
Item Number	**Item Description**	**Item Number**	**Item Description**	**Item Number**	**Item Description**
Q14	Vision	Q25	Hurtful to Self/Self Injurious Behavior	Q32	Injury to the Person caused by Self-Injurious Behavior
Q15	Hearing	Q26	Aggressive/Hurtful to Others	Q33	Injury to the Person Caused by Aggression toward Others or Property
Q16	Eating	Q27	Destructive to Property	Q34	Use of Mechanical Restraints or Protective Equipment for maladaptive Behavior
Q17	Ambulation	Q28	Inappropriate Sexual Behavior	Q35	Use of Emergency Chemical Restraint
Q18	Transfers	Q29	Running Away	Q36	Use of Psychotropic Medications
Q19	Toileting	Q30	Other Behaviors that May Result In Separation from Others	Q37	Gastrointestinal Conditions (includes vomiting, reflux, heartburn, or ulcer)
Q20	Hygiene			Q38	Seizures
Q21	Dressing			Q39	Anti-Epileptic Medication use
Q22	Communications			Q40	Skin Breakdown
Q23	Self-Protection			Q41	Bowel Function
Q24	Ability to Evacuate (place of residence)			Q42	Nutrition
				Q43	Treatment (physician prescribed)
				Q44	Assistance in meeting Chronic Healthcare Needs
				Q45	Individual's Injuries
				Q46	Falls
				Q47	Physician Visits/Nursing Services
				Q48	Emergency Room Visits
				Q49	Hospital Admission
				Q50	Days missed- illness

Each element listed in Table 1 has five levels (level 0 to level 4), from basic to intensive (detailed description of the levels can be found in the QSI document). A summary score for each QSI part, called the "Total Weighted Rating Score", was calculated.

Besides the levels for each of the three parts, an overall level for each consumer, ranging from level-1 to level-5, was also calculated. Detailed descriptions of the five levels for the overall score can be found in the "Report to the Legislature on the Agency's Implementation of the Questionnaire for Situational Information (QSI) Assessment" submitted by Florida APD on October 1, 2009.

Currently, 53 independent variables are tried in the model building and analysis. They are:

1) **Independent Variables 1-36 (Q14-Q30, Q25-Q30, Q32-Q50):** The 36 elements in the QSI survey, including 11 elements (Q14-Q24) for the functional status support part, 6 elements (Q25-Q30) for the behavioral status support part, and 19 elements (Q32-Q50) for the physical status support part. Each score has 5 levels ranging from 0 to 4.

2) **Independent Variables 37-39 (Func, Behav, Phys.) (Note: APD decided in January 2010 to use the subsection raw scores rather than three variables due to the method for testing reliability and validity of the QSI):** Three summary scores, or the "Total Weighted Rating Scores", for the three parts, named functional status score (Func), behavioral status score (Behav), and physical status score (Phys). Each summary score has 6 levels, from 1 to 6.

3) **Independent Variable 41 (Live):** Living setting with 4 levels (Provided by Susan Chen on Dec 08):

- Level-1: Family Home (ABC Program Component code 02; 22 if consumer is a child under 18 not receiving Residential Habilitation services)
- Level-2: Supported Living & Independent Living (ABC Program Component codes are 01 and 11)
- Level-3: Group Home (ABC Program Component codes are 21; 22 if consumer is a child under 18 receiving Residential Habilitation services; 23, 31, 32, 33, 35, 41, 42, 43, 44 and 45)
- Level-4: Residential Habilitation Centers (ABC Program Component codes are 51, 52, 53 and 55)

4) **Independent Variable 42 (Age):** Age of each consumer (up to 07/01/2008), ranging from 5 to 90;

5) **Independent Variable 43 (AgeI):** A two-level dummy variable for Age with **AgeI=0** for consumers 20 year old or younger; **AgeI=1** for consumers between 21 and 90.

6) **Independent Variable 44 (Rel2):** Categorical independent variable for family/guardian relationship, using ABC fields for contact person and relationship (APD decided not to use this variable due to concerns about its reliability):

- Rel2 = 0 for no contact person listed
- Rel2 = 1 for "C = non-relative contact person" and "N = non-relative court appointed"
- Rel2 = 2 for other relative and family contact person.

7) **Independent Variable 45 (CBC):** Dummy variable indicating whether the individual is a child involved in the Community Based Care system, 1 if Yes, 0 if No.

8) **Independent Variable 46 (Safety):** Community Safety indicator. The default value is zero. Value is set to 1 if there is a record of the consumer ever having been in any one of the following program components (i.e., residential living settings).

- 71 = Adult Mentally Retarded Defendant Program
- 72 = Juvenile Mentally Retarded Defendant Program
- 95 = Jail pre-sentencing (all jail and prison situations prior to May 2007)
- 98 = Jail post-sentencing
- 99 = Prison

9) **Independent Variable 47 (Jail):** Dummy variable for jail/prison indicator, set to 1 if there is a record of the consumer ever having been in program component 95, 98, or 99.

10) **Independent Variable 48 (MenH)** (**Note: APD decided in December of 2009 not to use this variable in the analysis since it is not reliable):** Dummy variable indicating participation in Florida Medicaid Pre-Paid Mental Health Plan, 1 if Yes, 0 if No.

11) **Independent Variable 49 (DMYN):** Dummy variable indicating participation in Florida Medicaid Chronic Disease Management Program, 1 if Yes, 0 if No.

12) **Independent Variables 49-51 (BS1, FS1, PS1):** Sums of raw scores for the three sections, named functional status raw score (FS1), behavioral

status raw score (BS1), and physical status raw score (PS1). Specifically, the functional status raw score (FS1) is the sum of scores of the 11 elements (Q14-Q24) for the functional status support part, ranging from 0 to 44; behavioral status raw score (BS1) is the sum of scores of the 6 elements (Q25-Q30) for the behavioral status support part, ranging from 0 to 24; and physical status raw score (PS1) is the sum of scores of the 19 elements (Q32-Q50) for the physical status support part, ranging from 0 to 76.

13) **Independent Variable 52 (Q8asum):** Sum of the dummy variables for the first eight elements of Question 8a:

- Death or loss of a long-term primary caregiver seen daily;
- Death or loss of a significant other seen daily;
- Child(ren) taken away or held in foster care by child protective authorities for maltreatment;
- Death or loss of a close family member (non-custodial) having frequent contact with the person;
- Survivor of a major physical assault, rape, auto accident, natural disaster or near-death experience;
- Detention in jail or an institution fro more that three days;
- Major illness, injury, or surgery requiring hospitalization for more than three days;
- Pregnancy or child birth.

14) **Independent Variable 53 (Q8bsum):** Sum of the dummy variables for the 14 elements of Questions 8b, Signs and Symptoms of Emotional or Behavioral Distress (Not listed here, see Florida QSI).

3. Graphical Descriptions of the Variables.

Below are presentations of box plots and pie charts using the dependent variable, FY 2007-2008 claims data, against each of the independent variables.

Figure 1 displays living setting and FY 07-08 claims, with a sample size of n=24,226. From the plot, we see that 57% of the consumers live with family, 17% in supported and independent living, 25% in group homes, and only 1% in a residential habilitation center. The box plot shows that the medians of FY 07-08 claims increased with the level of living setting. The remaining figures can be described similarly.

Figure 1. Living Setting with FY 07-08 Claims (n=24226)

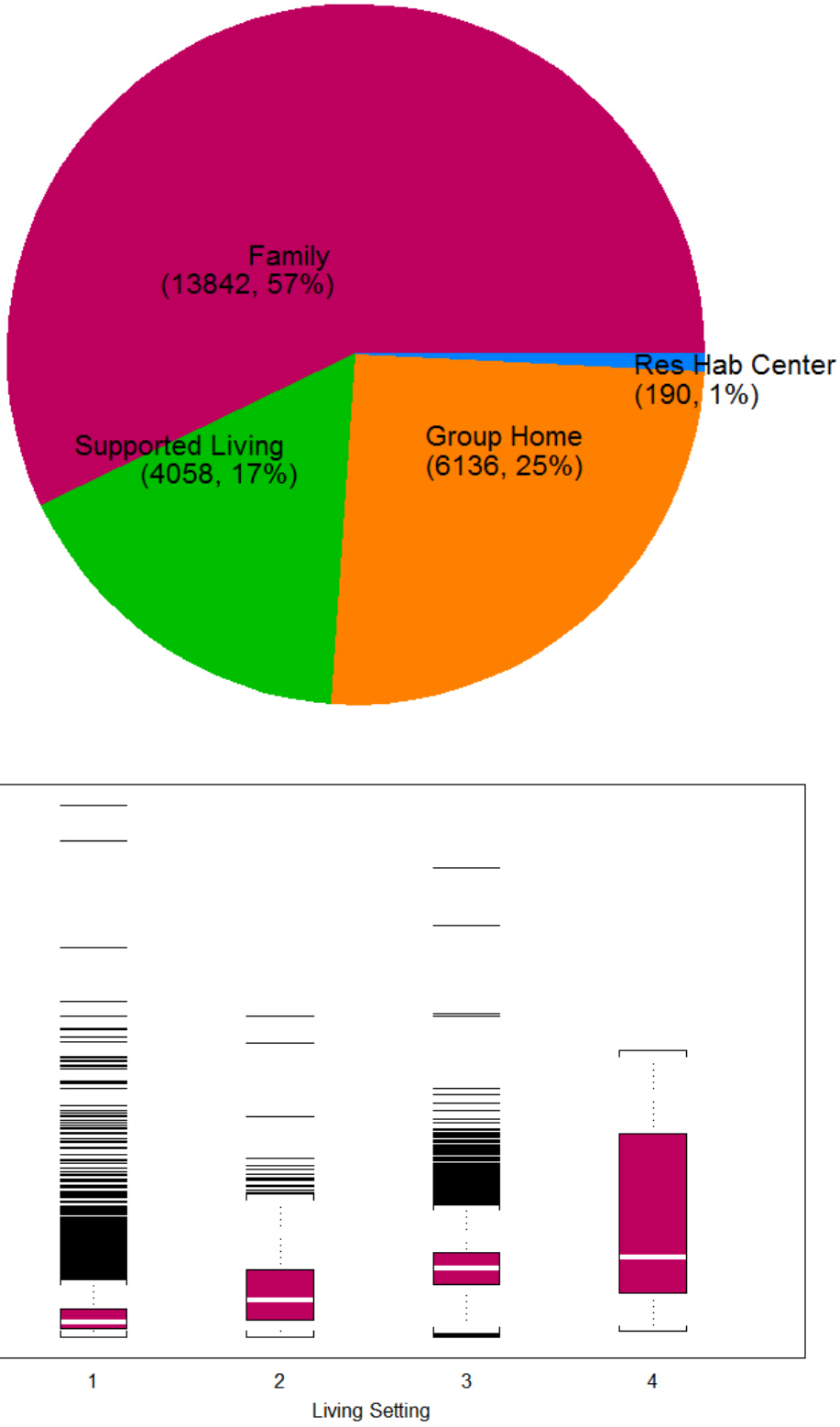
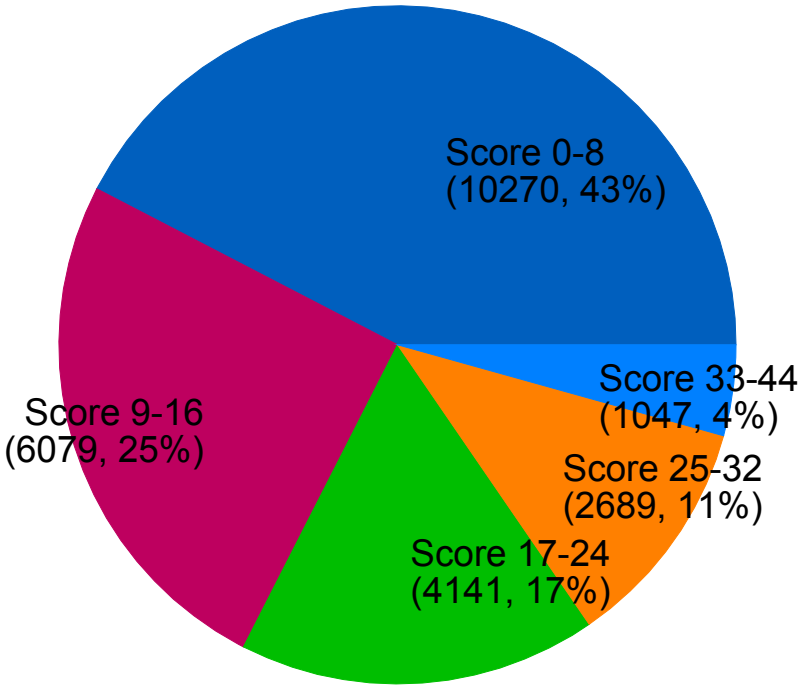


Figure 2. Functional Status Raw Scores with FY 07-08 Claims (n=24226)
Level-1: Score 0-8; Level-2: Score 9-16; Level-3: Score 17-24;
Level-4: Score 25-32; Level-5: Score 33-44.



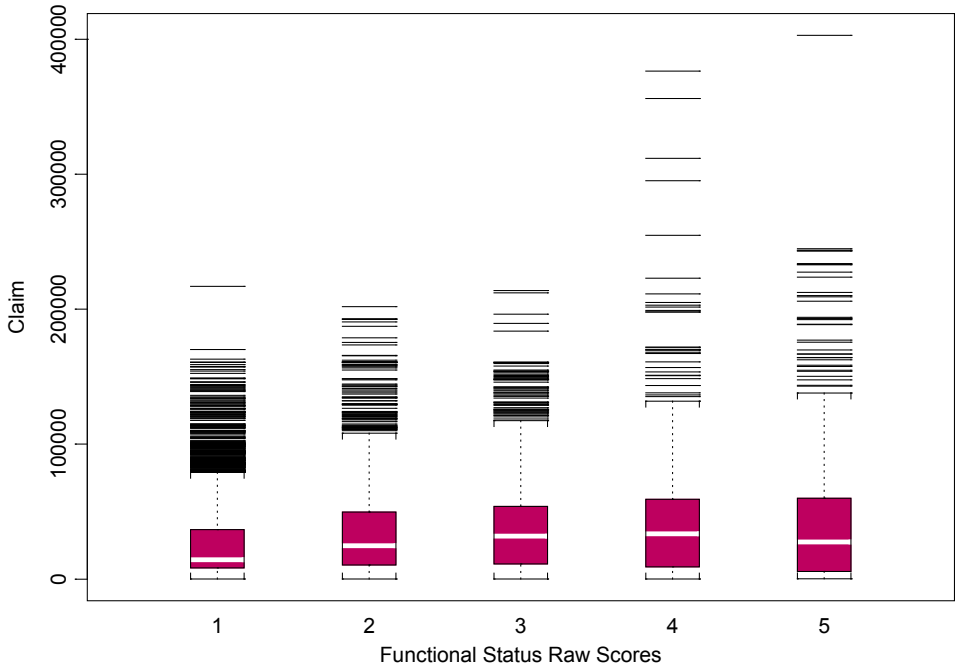
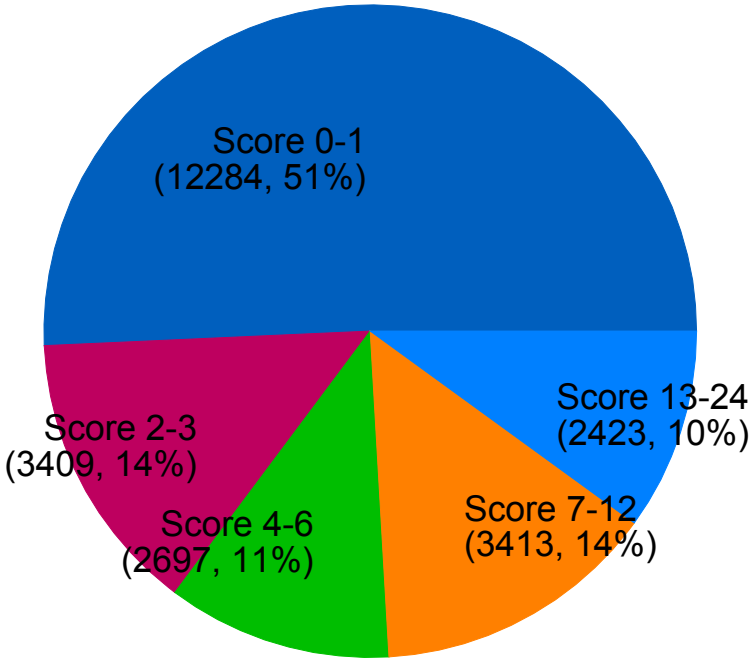


Figure 3. Behavioral Intervention and Support Status Raw Score with FY 07-08 Claims (n=24226)
Level-1: Score 0-1; Level-2: Score 2-3; Level-3: Score 4-6; Level-4: Score 7-12; Level-5: Score 13-24.



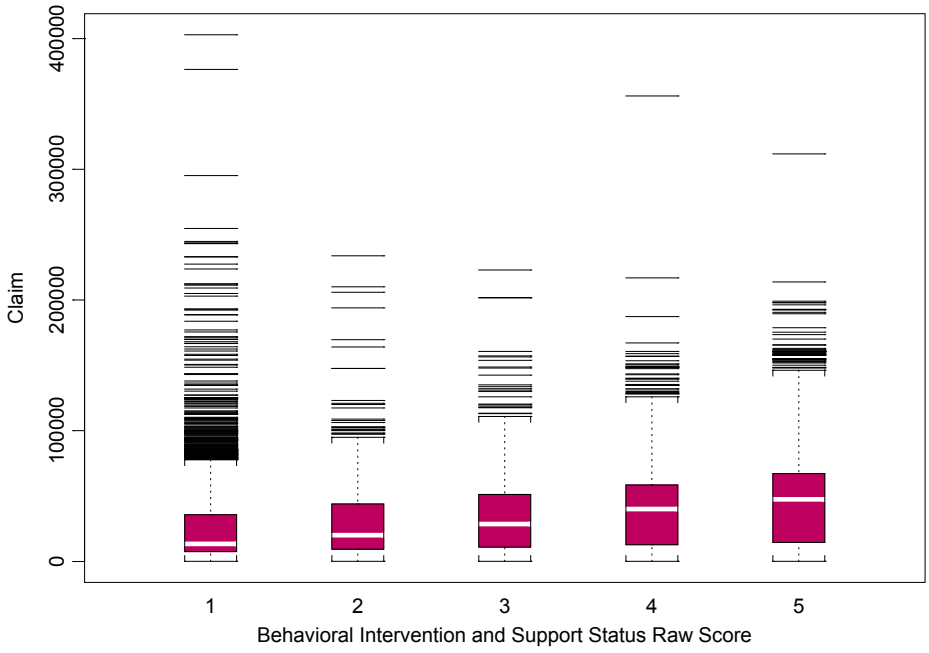
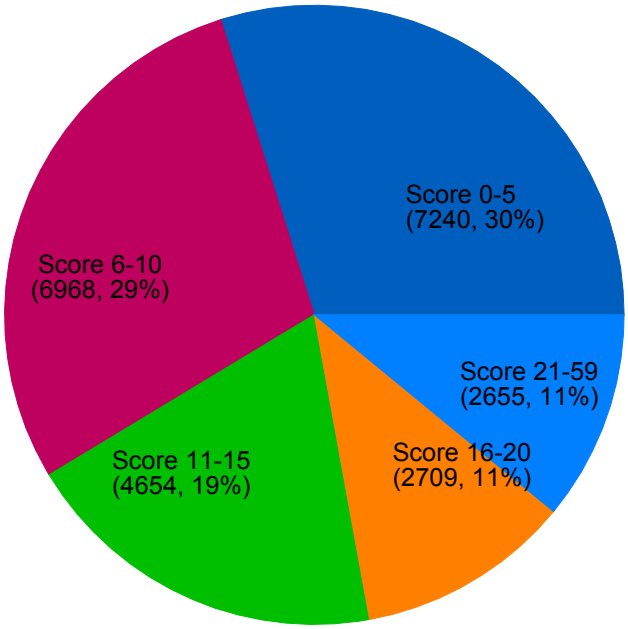


Figure 4. Physical Support Status Raw Score with FY 07-08 Claims (n=24226)
Level-1: Score 0-5; Level-2: Score 6-10; Level-3: Score 11-15;
Level-4: Score 16-20; Level-5: Score 21-59.



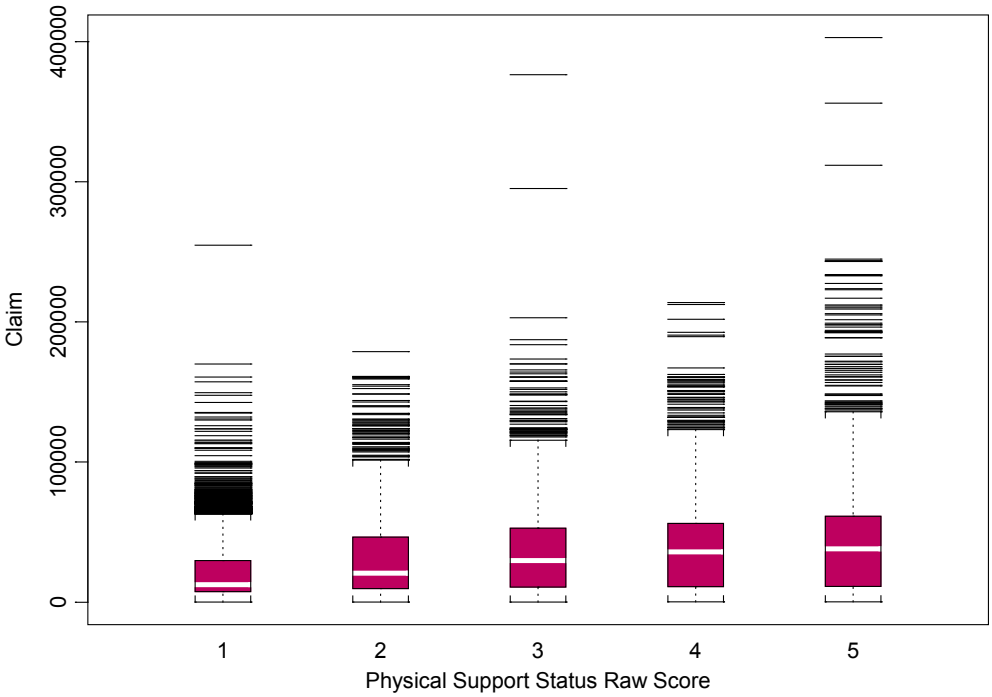
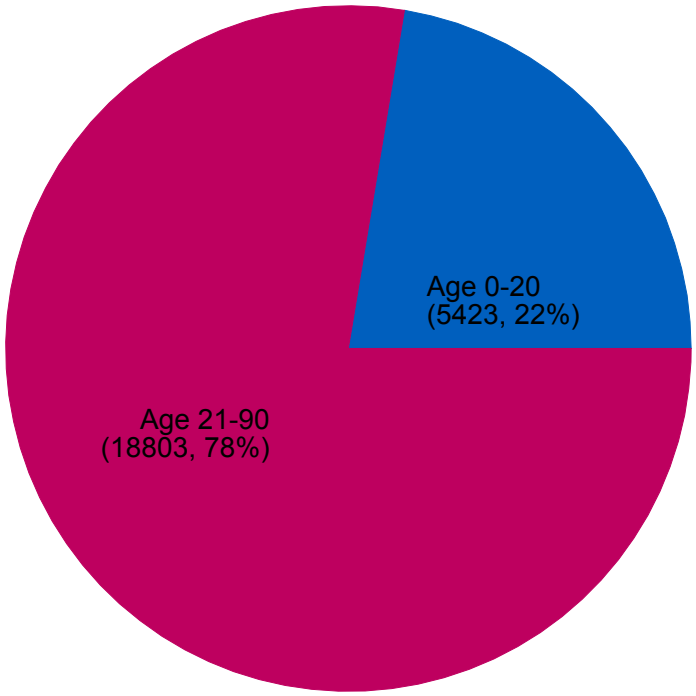


Figure 5. Age Groups with FY 07-08 Claims (n=24226)



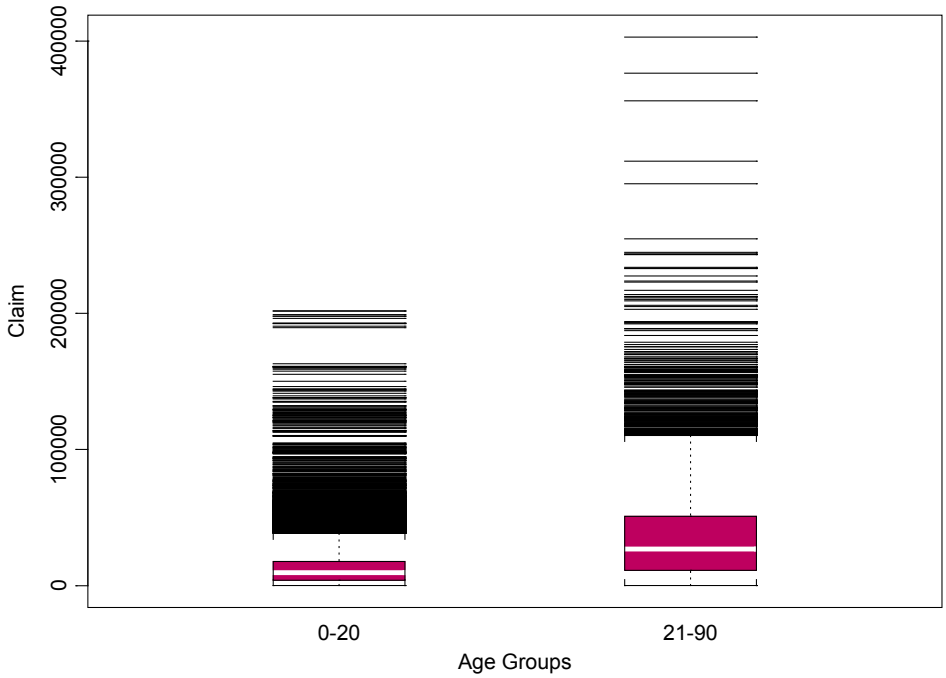
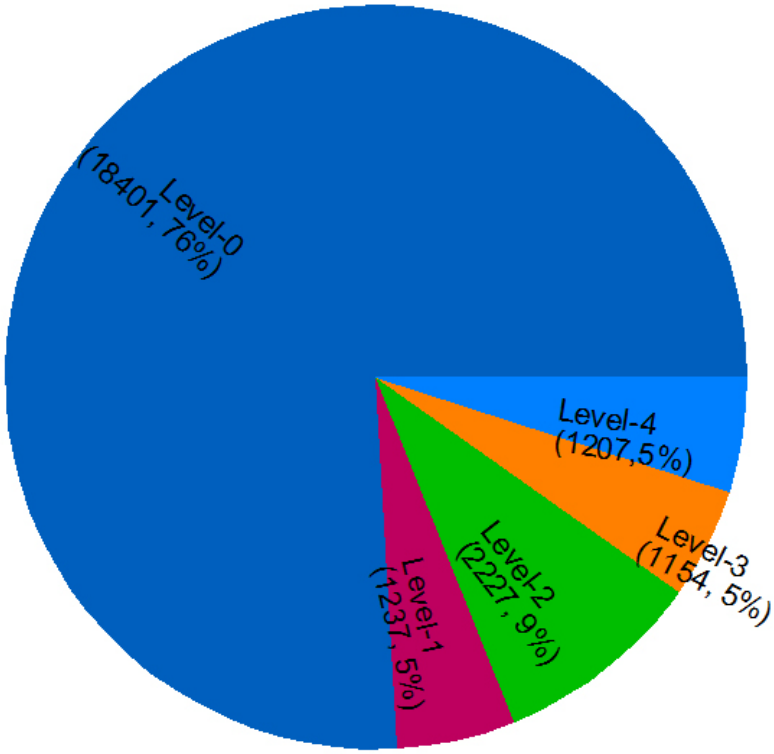


Figure 6. Transfers Status (Q18) Levels with FY 07-08 Claims (n=24226)



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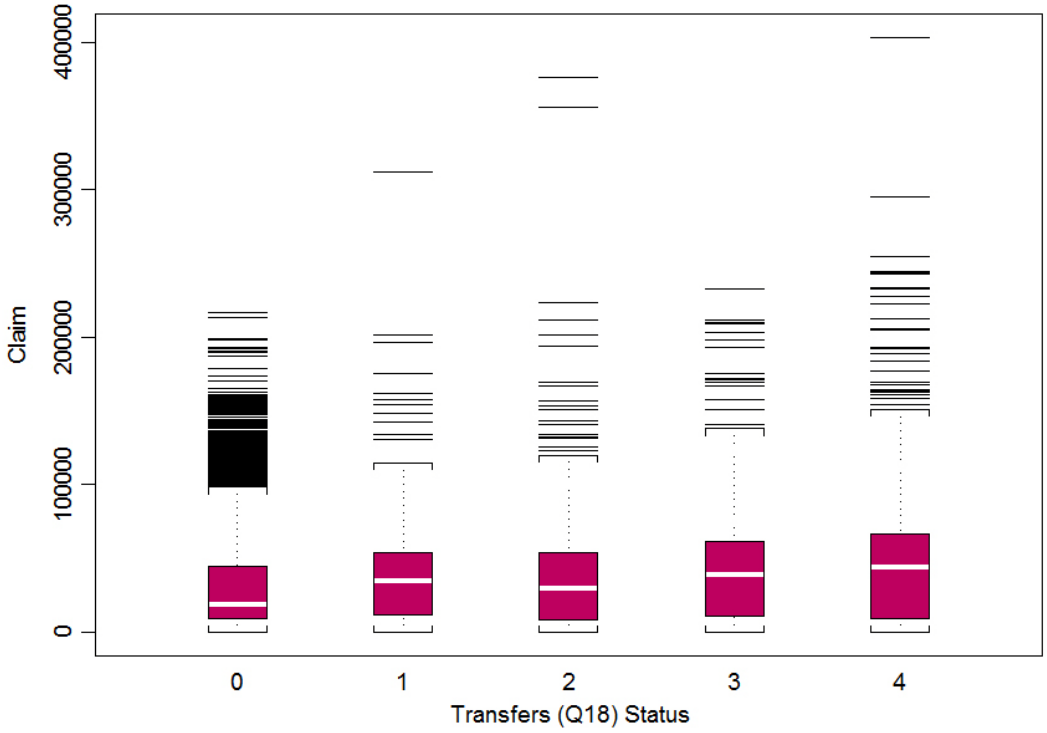


Figure 7. Hygiene Status (Q20) Levels with FY 07-08 Claims (n=24226)

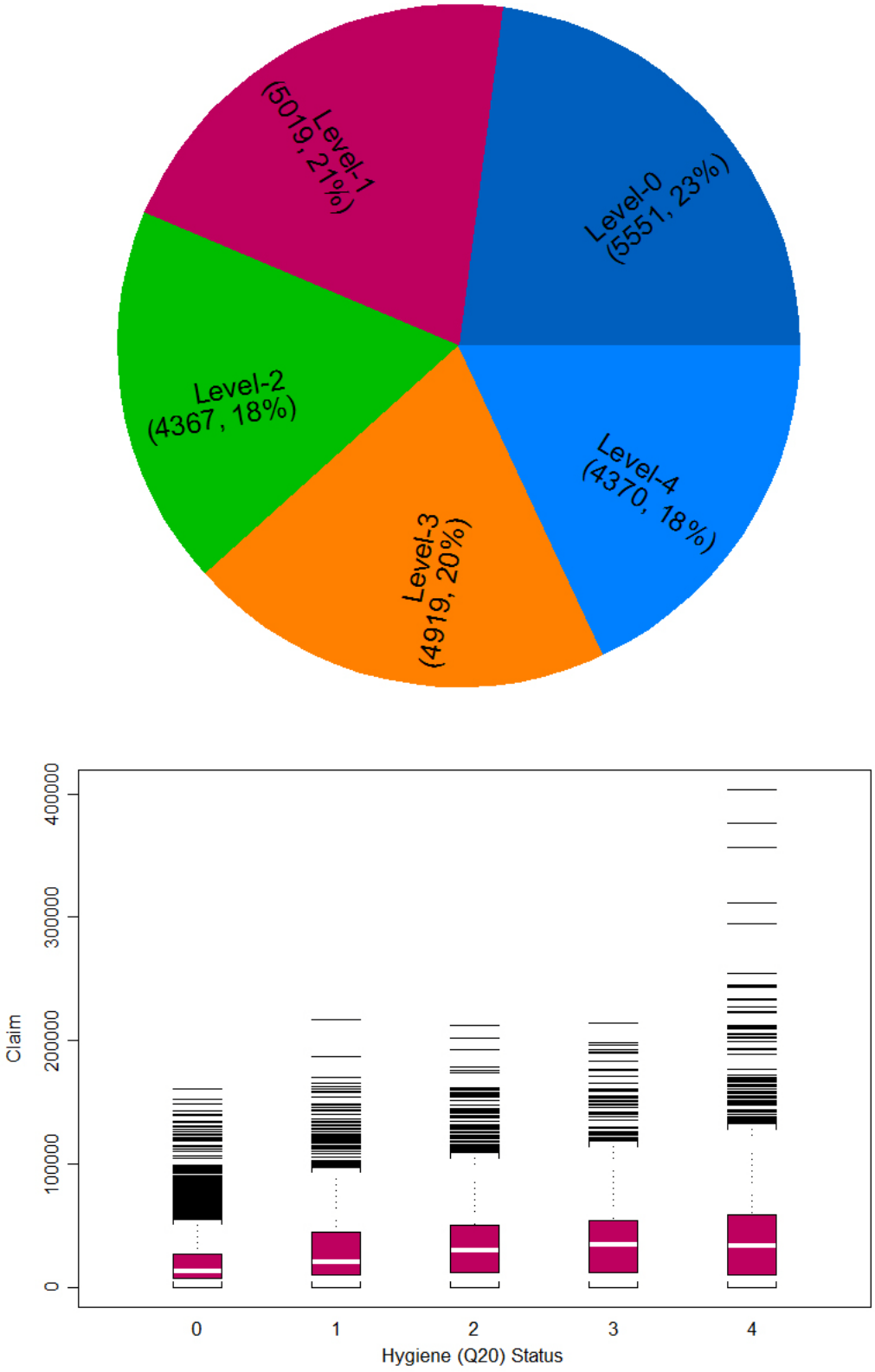
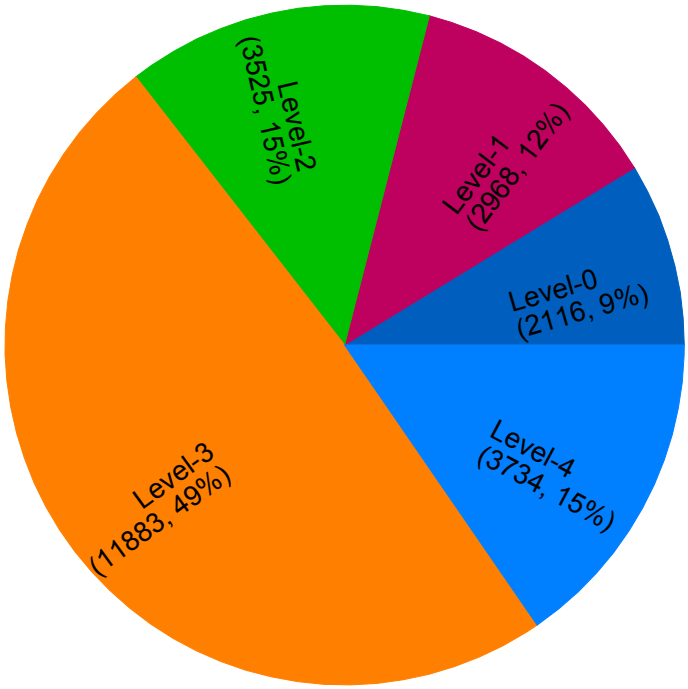
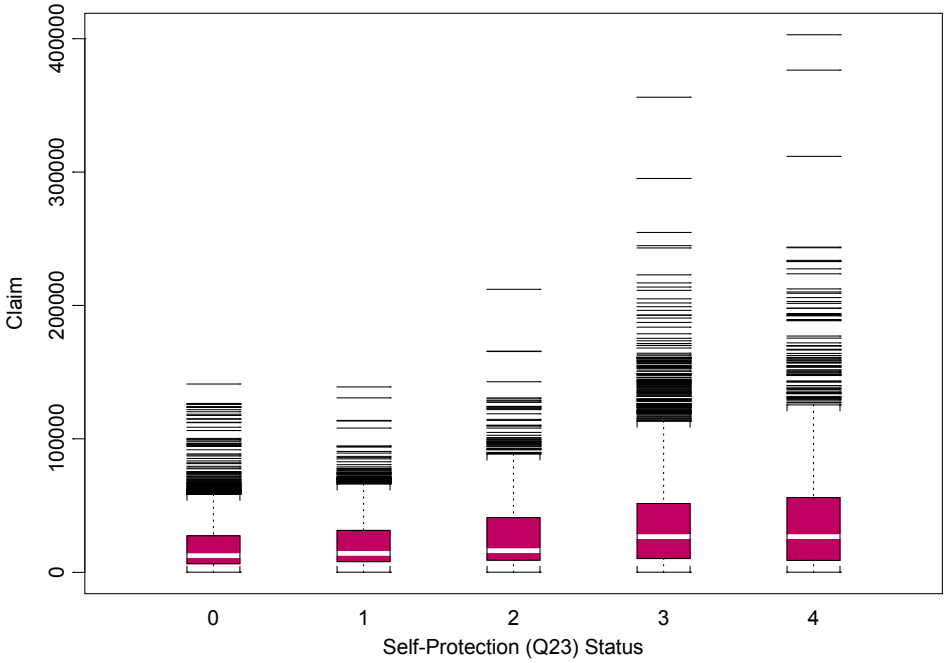


Figure 8. Self-Protection (Q23) Levels with FY 07-08 Claims (n=24266)





IV. Results for the FY 07-08 Claims.

1. Why is the two-level dummy variable AgeI used in the Regression Models instead of the Age variable?

As discussed in Section 3, the APD consumers' FY 2007-2008 expenditures after adjustments is used as the dependent variable in this study. The first step of the analysis is to examine the relationship between the dependent variable and age. Regression models linking age with the square-root of the FY 07-08 consumers' claim are fit. Transformation of the dependent variable will be explained in the next section.

Regression Model 1: Square-Root of FY 07-08 Claims as the dependent variable, and Living Setting and age as the independent variables:

```
Coefficients:
               Value Std. Error  t value Pr(>|t|)
(Intercept)  57.7615   1.0688    54.0413   0.0000
       Live  52.1405   0.4730   110.2240   0.0000
        Age   0.2566   0.0278     9.2414   0.0000

Residual standard error: 60.38 on 24223 degrees of freedom
Multiple R-Squared: 0.3779      Adjusted R-squared: 0.3779
F-statistic: 7358 on 2 and 24223 degrees of freedom, the p-
   value is 0
```

GIC=199,148

Regression Model 2: Square-Root of 07-08 Claim as the dependent variable; Living Setting and categorical variable AgeI as the independent variables:

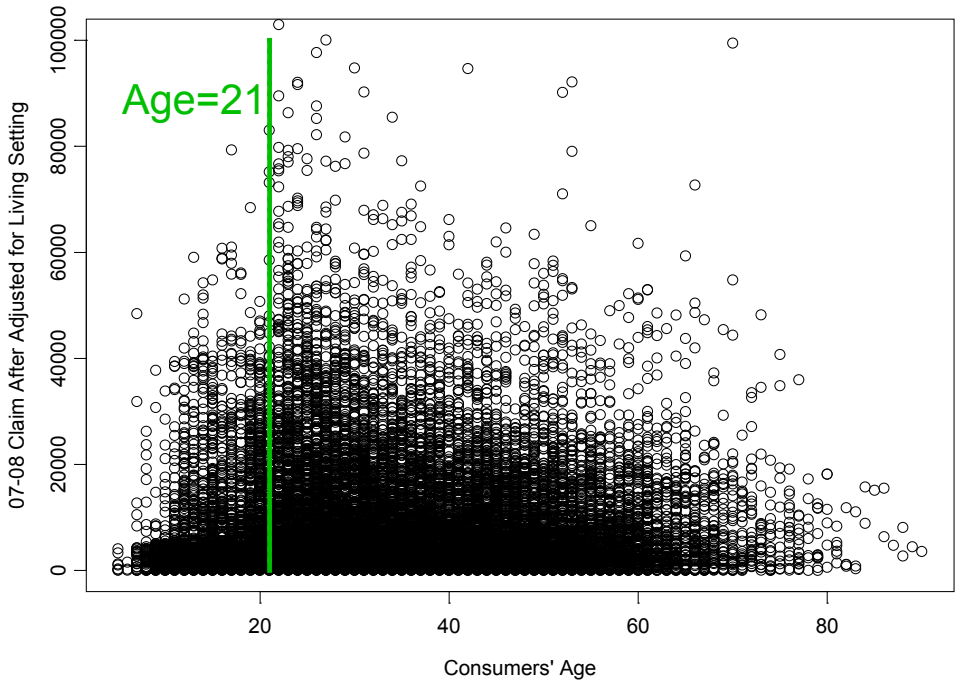
```
Coefficients:
              Value Std. Error  t value Pr(>|t|)
(Intercept)  48.3654   0.9996    48.3846   0.0000
        NL2  50.6097   0.4506   112.3098   0.0000
       AgeI  26.5346   0.9453    28.0697   0.0000

Residual standard error: 59.52 on 24223 degrees of freedom
Multiple R-Squared: 0.3954      Adjusted R-squared: 0.3953
F-statistic: 7921 on 2 and 24223 degrees of freedom, the p-
   value is 0
```

GIC=198,458

Conclusions on the relationship between FY 07-08 claim and Age:

1) Comparing Model 2 with Model 1, we can see R^2 increases from 37.8% to 39.5%.
2) The GIC value of Model 2 is 198,458, smaller than the value of 199, 148 for Model 1, indicating Model 2 is a better fit to the data than Model 1.
3) From Model 2, after adjusting for living setting, the weights (estimated coefficients) for the two age groups (0-20, 21-90) are 0, and 26.53, respectively, indicating that the FY 07-08 consumers' expenditure increases when age increases from 0-20 to 21 and older. In fact, when a consumer reaches 21 (from child to adult), consumers may lose supports and services from other sources like the Medicaid State Plan that are available only for children. At age 21, depending on the individual's tier assignment, the consumer may be able to access additional waiver services to replace some of these services.
4) Based on Model 2, the FY 07-08 consumers' claims after adjustment for Living Setting is calculated (Sqrt(Claim) – 50.6097 × Live). The adjusted FY 07-08 claim is plotted against Age in Figure 9.

Figure 9. FY 07-08 Claims (after adjustment for Living Setting) against Consumers' Age.



2. Transformation of the dependent variable.

Next we examine whether a transformation in the Box-Cox power transformation family is needed for the dependent variable. The method discussed in Section 2 is used to choose the transformation power, λ. A regression model with main independent variables AgeI, Living Setting (treated as a categorical variable too), Functional Status raw score, Behavioral Status raw score, and Physical Status raw score is fit.

Regression Model 3: FY 07-08 claim as the dependent variable with main independent variables.

```
Coefficients:
                  Value  Std. Error     t value    Pr(>|t|)
   (Intercept) -8660.1771   406.4922   -21.3047      0.0000
        Live-2 17545.1021   387.2061    45.3120      0.0000
        Live-3 29524.4026   336.1886    87.8210      0.0000
        Live-4 66867.1411  1475.6449    45.3138      0.0000
          AgeI 15028.0175   345.0726    43.5503      0.0000
           FS1   813.1346    15.8806    51.2030      0.0000
           BS1   929.5635    26.3412    35.2893      0.0000
           PS1   160.7636    19.9634     8.0529      0.0000

Residual standard error: 20100 on 24218 degrees of freedom
Multiple R-Squared: 0.4697      Adjusted R-squared: 0.4695
F-statistic: 3064 on 7 and 24218 degrees of freedom, the p-
   value is 0
```

Figure 10. Box-Cox Power Transformation for the dependent variable, 07-08 Consumers' Claim.

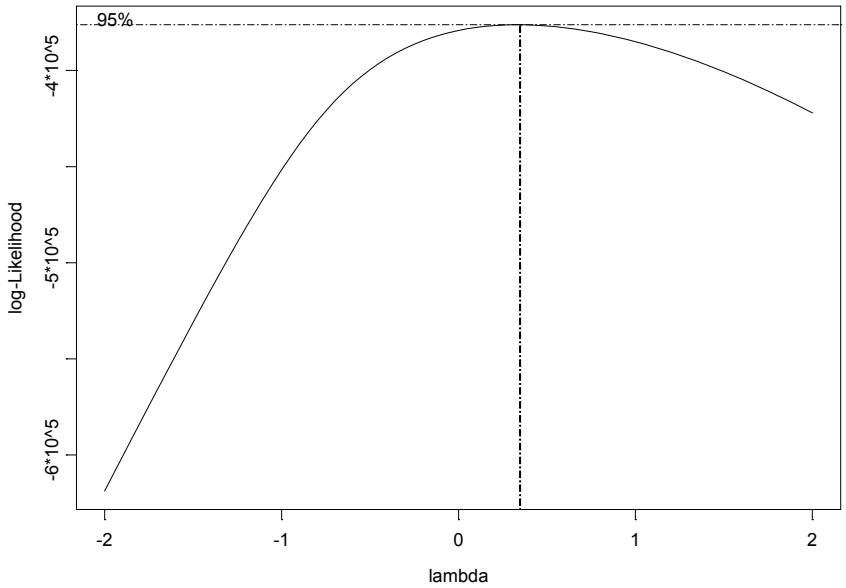


Figure 10 shows the transformation selected from the Box-Cox power transformation family. The log-likelihood of the transformation actually reaches its maximum at $\lambda = 0.30$. In this study, the transformation $\lambda = 0.5$, or the square-root transformation

will be used. After performing the square-root transformation for the FY 2007-2008 consumers' claim, the regression model with independent variables from model 3 is refitted.

Regression Model 4: Square-Root of FY 07-08 Claim as the dependent variable with main independent variables

```
Coefficients:
                Value Std. Error  t value Pr(>|t|)
   (Intercept)  39.8417   1.0793    36.9138   0.0000
        Live-2  55.4128   1.0281    53.8976   0.0000
        Live-3  88.0684   0.8926    98.6596   0.0000
        Live-4 145.5601   3.9181    37.1503   0.0000
          AgeI  50.6836   0.9162    55.3171   0.0000
           FS1   2.3138   0.0422    54.8740   0.0000
           BS1   2.6270   0.0699    37.5605   0.0000
           PS1   0.2465   0.0530     4.6502   0.0000

Residual standard error: 53.38 on 24218 degrees of freedom
Multiple R-Squared: 0.5138      Adjusted R-squared: 0.5137
F-statistic: 3657 on 7 and 24218 degrees of freedom, the p-
   value is 0
```

Conclusion on transformation of the dependent variable:

Comparing Model 4 with Model 3, we can see that the R^2 increases from 47.0% to 51.4%. The increase in R^2 is significant. Therefore the square-root transformation of the dependent variables is adopted in this analysis.

3. Model Selection.

Based on the procedure discussed in Section 2, the best regression model between FY 07-08 claims and the independent variables will be selected according to the GIC rule. The model selection procedure is illustrated step by step in this section.

Regression Model 5a: Square-Root of FY 07-08 claims as the dependent variable with 48 independent variables (GIC= 199,407).

Coefficients:

	Value	Std. Error	t value	Pr(>|t|)
(Intercept)	30.3788	1.4170	21.4381	0.0000
AgeI	52.9381	0.9539	55.4985	0.0000
Live-2	57.8999	1.0801	53.6040	0.0000
Live-3	83.7582	0.9426	88.8540	0.0000
Live-4	135.0640	3.9251	34.4102	0.0000
FS1	-1.2615	0.3997	-3.1562	0.0016
BS1	-0.1867	0.4124	-0.4527	0.6507
PS1	2.5341	0.5782	4.3825	0.0000
Rel21	9.0796	1.9472	4.6629	0.0000
Rel22	4.0312	0.7752	5.2006	0.0000
CBC	17.8079	4.5596	3.9056	0.0001
Safety	25.0372	5.6262	4.4501	0.0000
Jail	0.2017	7.1797	0.0281	0.9776
Q15	0.9985	0.7176	1.3914	0.1641
Q16	3.0159	0.6318	4.7735	0.0000
Q17	0.9095	0.7141	1.2736	0.2028
Q18	9.6282	0.7222	13.3317	0.0000
Q19	1.2632	0.5700	2.2161	0.0267
Q20	4.8946	0.6409	7.6366	0.0000
Q21	4.5462	0.6501	6.9933	0.0000
Q22	0.5396	0.5396	0.9999	0.3174
Q23	8.0584	0.5871	13.7258	0.0000
Q24	2.9987	0.5647	5.3101	0.0000
Q26	3.1883	0.6022	5.2947	0.0000
Q27	1.6127	0.6042	2.6691	0.0076
Q28	3.9005	0.6048	6.4496	0.0000
Q29	2.8813	0.6063	4.7522	0.0000
Q30	1.0854	0.5525	1.9646	0.0495
Q33	1.4669	0.9520	1.5408	0.1234
Q34	3.3998	1.0345	3.2863	0.0010
Q35	-3.8652	0.8854	-4.3655	0.0000
Q36	0.9888	0.6793	1.4556	0.1455
Q37	-3.1162	0.6864	-4.5401	0.0000
Q38	-1.8064	0.7992	-2.2602	0.0238
Q39	-2.9508	0.8100	-3.6431	0.0003
Q40	-2.2211	0.8583	-2.5879	0.0097
Q41	-2.0005	0.6990	-2.8620	0.0042
Q42	-3.2732	0.6724	-4.8680	0.0000
Q43	0.5491	0.6930	0.7924	0.4282
Q44	-2.1990	0.6236	-3.5262	0.0004
Q45	-1.7539	0.9717	-1.8050	0.0711
Q46	-3.3904	0.7269	-4.6642	0.0000

```
          Q47   -3.2343    0.7137    -4.5319    0.0000
          Q48   -1.6967    0.6943    -2.4438    0.0145
          Q49   -3.6463    0.7898    -4.6166    0.0000
          Q50   -3.7468    0.6880    -5.4457    0.0000
         DMYN    5.1084    1.5242     3.3515    0.0008
       Q8asum   -2.1328    0.7416    -2.8759    0.0040
       Q8bsum    0.0715    0.2324     0.3077    0.7583

Residual standard error: 52.36 on 24177 degrees of freedom
Multiple R-Squared: 0.533      Adjusted R-squared: 0.5321
F-statistic: 574.9 on 48 and 24177 degrees of freedom, the
   p-value is 0
```

Comments on Model 5a:

1) Among the 53 independent variables listed in Section III, the three raw scores (**Independent Variables 49-51:** Sums of raw scores for the three sections), FS1, BS1, and PS1 are included in the model. However, Q14, Q25, and Q32, the first question in the three sections, are not included to make the model identifiable (or coefficient estimable). For example, the raw score for the functional status section, FS1, is the simple sum of scores of the 11 elements (Q14-Q24) in the section. Thus FS1 is linearly dependent on the 11 variables and one of the 12 variables (Q14-Q24, FS1) has to be removed from model fitting to make the coefficients estimable.
2) The mental health status variable is not used in this analysis since it is not reliable.
3) The living setting variable Live (independent variable 41) is a categorical variable with four levels. This variable occupies three degrees of freedom, i.e., with three estimated coefficients.
4) The guardian relation variables Rel2 (independent variable 44) is a categorical variable with three levels. This variable occupies two degrees of freedom, i.e., with two estimated coefficients.
5) The 48 independent variables in this model are highly correlated. Many estimated coefficients in the model are negative, which makes no sense. For example, the estimated coefficient for FS1 (Functional status raw score) is -1.2615, implying that consumers' claims decrease as FS1 increases.

The stepwise (both forward selection and backward elimination) model selection procedure using the SBC rule defined in (5) is employed to screen the independent variables. The model chosen based on the SBC rule is labeled as Model 5b.

Regression Model 5b: Model chosen based on SBC by the stepwise procedure. Square-Root of FY 07-08 claims as the dependent variable with the 49 independent variables in Model 5a. (GIC= 194,745).

Coefficients:

	Value	Std. Error	t value	Pr(>|t|)
(Intercept)	29.4929	1.3675	21.5676	0.0000
Live-2	57.4123	1.0687	53.7211	0.0000
Live-3	84.4578	0.9228	91.5246	0.0000
Live-4	137.3540	3.9173	35.0635	0.0000
FS1	0.0673	0.1246	0.5400	0.5892
AgeI	52.1032	0.9267	56.2231	0.0000
BS1	1.9561	0.0896	21.8202	0.0000
Q18	8.5203	0.5161	16.5085	0.0000
Q23	7.0386	0.4426	15.9014	0.0000
Q36	3.0632	0.3587	8.5397	0.0000
Q20	3.9067	0.5334	7.3238	0.0000
Q33	4.6890	0.6179	7.5880	0.0000
Safety	26.6823	3.5665	7.4814	0.0000
Q34	5.7074	0.8033	7.1046	0.0000
Q43	2.7498	0.3707	7.4175	0.0000
Q21	3.8389	0.5430	7.0701	0.0000
Rel21	11.2587	1.9173	5.8722	0.0000
Rel22	4.0597	0.7746	5.2412	0.0000

Residual standard error: 52.54 on 24208 degrees of freedom
Multiple R-Squared: 0.5293 Adjusted R-squared: 0.5289
F-statistic: 1601 on 17 and 24208 degrees of freedom, the p-value is 0

Seventeen independent variables are selected by the SBC rule. It is still an over-fitted model. Further model selection is needed.

The stepwise (both forward selection and backward elimination) model selection procedure using the GIC rule is employed to select the best model between FY 07-08 claims and the independent variables. **During the selection process, the three QSI section raw scores (Functional status raw score FS1, Behavioral status raw score**

BS1, Physical status raw score BS1) are purposely kept in the model, reflecting best practice in algorithm development for resource allocation. Susan M. Havercamp, Ph.D., Florida Center for Inclusive Communities, UCEDD, University of South Florida , performed a series of studies in FY 2008-2009 on these three raw scores, including item analyses, inter-interviewer reliability, test-retest reliability, content validity, and concurrent validity

Regression Model 6: Square-Root of FY 07-08 claim as the dependent variable with the selected independent variables (GIC= 194,039).

```
Coefficients:
                Value Std. Error  t value Pr(>|t|)
 (Intercept)  32.6298   1.2750    25.5927   0.0000
        AgeI  50.4641   0.9094    55.4936   0.0000
      Live-2  57.4173   1.0562    54.3597   0.0000
      Live-3  86.6512   0.8901    97.3505   0.0000
      Live-4 143.8178   3.8890    36.9810   0.0000
         BS1   2.6648   0.0738    36.1241   0.0000
         FS1   0.5490   0.1073     5.1186   0.0000
         PS1   0.2042   0.0529     3.8626   0.0001
         Q18   8.1893   0.5152    15.8959   0.0000
         Q20   4.8003   0.5142     9.3349   0.0000
         Q23   6.6141   0.4378    15.1073   0.0000

Residual standard error: 52.95 on 24215 degrees of freedom
Multiple R-Squared: 0.5216      Adjusted R-squared: 0.5214
F-statistic: 2640 on 10 and 24215 degrees of freedom, the
   p-value is 0
```

Recall that Q18 assesses supports needed for transfer, Q20 assesses supports needed to maintain hygiene, and Q23 assesses supports needed for self-protection.

Comments on Model 6:

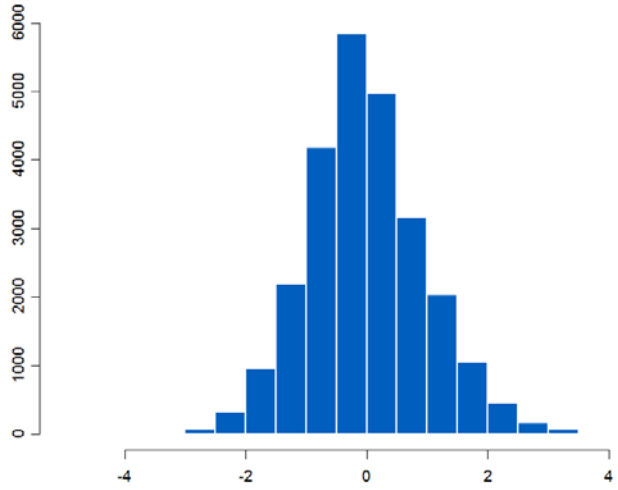
Model 6 is selected as the final model before removing outliers.

4. Outlier Detection and Final Model Recommendation.

Based on Model 6, the studentized residuals are calculated using the formula in (10). A histogram of the studentized residuals is presented in Figure 11, which is quite

symmetric a nd a pproximately n ormally d istributed. O utliers a re th e c laims w ith studentized r esiduals f alling i n t he t ail a reas of F igure 11, w hich a re i dentified a nd removed. Then the regression model 7a is fit.

Figure 11. Histogram of Studentized Residuals from Model 6a



Regression Model 7a (Removing about 9.37% outliers) : Square-Root of 07-08 claims as the dependent variable with the selected independent variables. (GIC=163,192)

In this model, 9.37% of the consumers (2270 cases) are identified as outliers and removed from the population. Outliers (persons with extremely high or low supports) are defined as claims with absolute Studentized residuals of at least 1.645, corresponding to extreme values outside a 90% interval of the population. Each tail has 5.0% of the theoretical Standard Normal population.

```
Coefficients:
               Value Std. Error  t value Pr(>|t|)
 (Intercept)  26.6376   1.0045    26.5188   0.0000
       AgeI  53.1068   0.7286    72.8854   0.0000
     Live-2  62.4932   0.8246    75.7882   0.0000
     Live-3  92.0871   0.7029   131.0168   0.0000
     Live-4 121.5147   4.8279    25.1691   0.0000
        BS1   2.5374   0.0589    43.0615   0.0000
        FS1   0.4071   0.0849     4.7933   0.0000
        Q18   7.1537   0.4136    17.2957   0.0000
        Q20   5.8793   0.4040    14.5537   0.0000
        Q23   7.6818   0.3440    22.3281   0.0000
        PS1   0.0184   0.0424     0.4333   0.6648

Residual standard error: 39.62 on 21945 degrees of freedom
Multiple R-Squared: 0.6757      Adjusted R-squared: 0.6755
F-statistic: 4572 on 10 and 21945 degrees of freedom, the
   p-value is 0
```

Conclusions on Model 7a:

In model 7a, the variable Physical Status Raw Score (PS1) is not significant.

Regression Model 7b (Removing about 9.37% outliers): The variable Physical Status Raw Score (PS1) is removed from Model 7a with Square-Root of 07-08 claim as the dependent variable. (GIC=163,043)

```
Coefficients:
```

```
               Value Std. Error  t value Pr(>|t|)
(Intercept)  26.7080   0.9912    26.9442   0.0000
       AgeI  53.1104   0.7286    72.8964   0.0000
     Live-2  62.5319   0.8197    76.2847   0.0000
     Live-3  92.1163   0.6996   131.6714   0.0000
     Live-4 121.5095   4.8278    25.1685   0.0000
        BS1   2.5457   0.0558    45.6613   0.0000
        FS1   0.4124   0.0840     4.9089   0.0000
        Q18   7.1686   0.4122    17.3922   0.0000
        Q20   5.8770   0.4039    14.5495   0.0000
        Q23   7.6807   0.3440    22.3260   0.0000

Residual standard error: 39.61 on 21946 degrees of freedom
Multiple R-Squared: 0.6757      Adjusted R-squared: 0.6756
F-statistic: 5081 on 9 and 21946 degrees of freedom, the p-
   value is 0
```

Comments on Model 7b:

1) Models 7a and 7b have the same R-square 0.6757. Model 7b does not include the physical status raw score (PS1) as one of the predictors.

2) Model 7b is recommended as the final model for predicting consumers' supports, in which 9.37% of the consumers (2270 cases) are identified as outliers and removed from the whole population before fitting the model.

Regression Model 8 (Removing about 5% outliers): Square-Root of FY 07-08 claims as the dependent variable with the selected independent variables.

In this model, 5.09% of the consumers (1232 cases) are identified as outliers and removed from the population. Outliers (persons with extremely high or low supports) are defined as claims with absolute Studentized residuals of at least 1.96, corresponding to extreme values outside a 95% interval of the population. Each tail has 2.5% of the theoretical Standard Normal population.

```
Coefficients:
               Value Std. Error  t value Pr(>|t|)
 (Intercept)  27.8217   1.0714    25.9681   0.0000
       AgeI  53.1064   0.7820    67.9131   0.0000
     Live-2  61.3557   0.8843    69.3869   0.0000
     Live-3  90.3239   0.7567   119.3691   0.0000
     Live-4 125.0909   4.1625    30.0520   0.0000
        BS1   2.6349   0.0598    44.0587   0.0000
        FS1   0.4189   0.0905     4.6287   0.0000
        Q18   7.3469   0.4408    16.6654   0.0000
        Q20   6.0781   0.4355    13.9563   0.0000
        Q23   7.2967   0.3714    19.6487   0.0000

Residual standard error: 43.71 on 22984 degrees of freedom
Multiple R-Squared: 0.6252      Adjusted R-squared: 0.625
F-statistic: 4259 on 9 and 22984 degrees of freedom, the p-
   value is 0
```

Conclusions on Model 8:

1) Model 8 is a good alternative for model 7b if about 5.0% of consumers are classified as outliers.

2) If few outliers are desired in a plan, model 8 can be considered as an alternative for model 7b.

5. Weights for the Final Algorithm and Examples.

When model 7b is used as the final model, the weights for calculating consumers' individual budget are listed in Table 2. Additionally, an example iBudget is calculated using the given weights. The next page contains example budgets for 50 randomly chosen consumers. Note that due to the square-root transformation on the response, predicted values in the model must be squared to attain the iBudget amount as seen below. Predicted support would then be adjusted further based on appropriations and set-asides for extraordinary needs, changed needs, and one-time needs.

Table 2. Weights used to Calculate Consumers' Needs (Square-Root Scale)

Variable Name	*Weights*	*Example Level*	*Example Value*
Intercept	26.7080	1	26.7080
Age 21 or Older	53.1104	1	53.1104
Live-2	62.5319	1	62.5319
Live-3	92.1163	0	
Live-4	121.5095	0	
Behavioral Status Raw Score	2.5457	5	12.7284
Functional Status Raw Score	0.4124	10	4.1245
Q18	7.1686	2	14.3371
Q20	5.8770	1	5.8770
Q23	7.6807	2	15.3614
Total in the square root scale Predicted Support			**194.7787** **$37,938.75**

Table 3. Fifty Randomly Selected Individual Budgets Calculated Based on the Chosen Model 7b.

Predicted Value	Living Setting	Age-3	Behavioral Raw Score	Functional Raw Score	Q18 Score	Q20 Score	Q23 Score
9784	1	0	7	19	0	4	3
10061	1	0	7	18	0	3	4
8901	1	0	8	16	0	3	3
9803	1	0	9	18	1	2	3
8106	1	0	9	18	0	3	2
6833	1	0	9	10	0	1	3
10485	1	0	11	17	0	3	3
10569	1	0	11	18	0	3	3
16224	1	0	15	20	0	4	4
14588	1	0	18	14	0	2	4
21547	1	1	0	29	2	3	3
7728	1	1	0	1	0	0	1
11183	1	1	0	7	0	0	3
7874	1	1	0	3	0	0	1
20752	1	1	0	18	2	2	4
12426	1	1	0	11	0	2	2
18444	1	1	0	21	2	3	2
6437	1	1	0	1	0	0	0
7728	1	1	0	1	0	0	1
14693	1	1	0	16	0	2	3
32637	1	1	5	30	3	4	4
14646	1	1	6	7	0	0	3
20503	1	1	6	18	0	3	3
13436	1	1	11	1	0	0	1
26765	1	1	11	18	0	3	4
39678	2	1	4	17	2	3	1
30773	2	1	4	4	0	1	2
28717	2	1	5	2	0	1	1
54536	2	1	7	29	1	4	4
28313	2	1	7	1	0	0	1
39801	2	1	7	11	0	2	3
54570	2	1	8	23	1	4	4
34449	2	1	8	4	0	1	2
35664	2	1	13	4	0	2	0
39993	2	1	13	8	0	1	2
51147	2	1	15	12	0	3	3
43335	3	0	0	33	3	4	4

41403	3	0	5	28	3	4	2
34836	3	0	12	6	0	2	3
38977	3	0	15	18	0	3	2
46014	3	0	16	16	0	3	4
53992	3	1	3	12	1	3	3
61576	3	1	14	14	0	2	3
52941	3	1	16	5	0	0	2
63296	3	1	16	10	0	2	3
60171	3	1	16	9	0	1	3
62675	3	1	16	7	0	2	3
69586	3	1	18	13	0	3	3
54304	3	1	24	0	0	0	0
54351	4	1	0	7	0	1	3

6. Fractions of Variation in the Response explained by Predictors

In this section, regression models with different groups of predictors are fit and fractions of total variation in the response variable, square-root of the FY 2007-2008 claims, are calculated**.**

Regression Model 10a: Square-Root of FY 07-08 claims as the dependent variable and Living Setting as the predictor.

```
Coefficients:
                Value Std. Error  t value Pr(>|t|)
 (Intercept) 111.6458   0.4333   257.6700   0.0000
      Live-2  58.4004   0.9088    64.2639   0.0000
      Live-3 115.7410   0.7823   147.9490   0.0000
      Live-4 151.4963   5.9147    25.6137   0.0000

Residual standard error: 48.64 on 21952 degrees of freedom
Multiple R-Squared: 0.5109      Adjusted R-squared: 0.5108
F-statistic: 7644 on 3 and 21952 degrees of freedom, the p-
   value is 0
```

Regression Model 10b: Square-Root of FY 07-08 claims as the dependent variable and AgeI as the predictors.

```
Coefficients:
               Value Std. Error  t value Pr(>|t|)
(Intercept) 104.1694   0.9343   111.4971   0.0000
       AgeI  60.4966   1.0576    57.1998   0.0000

Residual standard error: 64.88 on 21954 degrees of freedom
Multiple R-Squared: 0.1297      Adjusted R-squared: 0.1297
F-statistic: 3272 on 1 and 21954 degrees of freedom, the p-
   value is 0
```

Regression Model 10c: Square-Root of FY 07-08 claims as the dependent variable and (BS1, FS1) as the predictors.

```
Coefficients:
               Value Std. Error  t value Pr(>|t|)
(Intercept) 121.5950   0.7594   160.1178   0.0000
        BS1   4.0327   0.0807    49.9979   0.0000
        FS1   1.1157   0.0456    24.4518   0.0000

Residual standard error: 64.73 on 21953 degrees of freedom
Multiple R-Squared: 0.1339      Adjusted R-squared: 0.1338
F-statistic: 1697 on 2 and 21953 degrees of freedom, the p-
   value is 0
```

Regression Model 10d: Square-Root of FY 07-08 claims as the dependent variable and (BS1, FS1, PS1) as the predictors.

```
Coefficients:
               Value Std. Error  t value Pr(>|t|)
(Intercept) 116.8665   0.8156   143.2899   0.0000
        BS1   3.5821   0.0854    41.9374   0.0000
        FS1   0.7842   0.0502    15.6057   0.0000
        PS2   1.0410   0.0677    15.3727   0.0000

Residual standard error: 64.39 on 21952 degrees of freedom
Multiple R-Squared: 0.1431      Adjusted R-squared: 0.143
F-statistic: 1222 on 3 and 21952 degrees of freedom, the p-
   value is 0
```

Regression Model 10e: Square-Root of FY 07-08 claims as the dependent variable and (Q18, Q20, Q23) as the predictors.

```
Coefficients:
               Value Std. Error  t value Pr(>|t|)
(Intercept) 120.1943   1.0871   110.5639   0.0000
        Q18   0.1092   0.4938     0.2212   0.8249
        Q20   8.8935   0.4473    19.8813   0.0000
        Q23   5.9081   0.4822    12.2517   0.0000

Residual standard error: 67.34 on 21952 degrees of freedom
Multiple R-Squared: 0.06261      Adjusted R-squared:
  0.06248
F-statistic: 488.7 on 3 and 21952 degrees of freedom, the
  p-value is 0
```

Comments on the Coefficient of Determination:

1) Comparing model 10c and with model 10d, Behavioral Status raw score (BS1) and Functional Status raw score (FS1) together explained 13.4% of the total variation in the response variable (square-root of the 07-08 claim), while adding the Physical Status raw score (PS1) in the model (model 10d) only increases the fraction explained from 13.4% to 14.3% since the Physical Status raw score is highly correlated with other two raw scores.

2) The fractions of total variation in the response variable explained by different predictor groups are listed in Table 4, where we can see that about 83.8% of the total variation in the dependent variable is explained by the four groups of predictors (actually, 67.6% by the predictors together due to mutual correlations, see Model 7b). The remaining 17.2% of total variation in the response variable is due to other unknown factors and random errors.

Table 4: Fractions of Total Variation in the Dependent Variable Explained by Different Groups of Predictors.

Predictor Group	Fraction of Total Variation Explained
Living Setting	51.1%
Age Dummy	13.0%
BS1 and FS1	13.4%
Q18, Q20, and Q23	6.3%
Total	**83.8%**

7. Other independent variables tested in this analysis.

During this analysis, many other types of independent variables are tested and regression models are fit for the purpose of searching the best models. The main models we tested can be listed in the following three parts.

(i) Different forms of the age independent variable.

a) Age used as a continuous variable.

When age is used as a continuous variable, both age and squared-age (Age2) were used as independent variables. After removing the 2270 outliers (same as model 7a), the fitted regression model is model 11a.

Regression Model 11a: Square-Root of FY 07-08 claims as the dependent variable with the selected independent variables. (GIC=164,594)

```
Coefficients:
                Value Std. Error   t value  Pr(>|t|)
 (Intercept)  -16.8709    1.7278    -9.7643    0.0000
         Age    4.5633    0.0849    53.7349    0.0000
        Age2   -0.0498    0.0011   -45.1492    0.0000
      Live-2   63.1060    0.8658    72.8867    0.0000
      Live-3   93.2983    0.7536   123.7984    0.0000
      Live-4  125.4321    4.9865    25.1544    0.0000
         BS1    2.4840    0.0583    42.5830    0.0000
         FS1    0.3335    0.0868     3.8432    0.0001
         Q18    7.3167    0.4257    17.1868    0.0000
         Q20    5.9012    0.4171    14.1494    0.0000
         Q23    7.4916    0.3555    21.0749    0.0000

Residual standard error: 40.9 on 21945 degrees of freedom
Multiple R-Squared: 0.6543      Adjusted R-squared: 0.6542
F-statistic: 4154 on 10 and 21945 degrees of freedom, the
   p-value is 0
```

Comments on Model 11a:

1) In model 11a, Age and Age2 are used as independent variables instead of the dummy variable AgeI in model 7b. The R-square value for model 11a is 0.6543, lower than the R-square of 0.6757 for model 7b.

2) The GIC value of model 11a is 164,594, higher than the GIC value of 163,043 of model 7b. Thus model 7b is a better model than model 11a.

b) Age used as a three-level categorical variable.

In the model selection process, a three-level categorical variable for age was also tested. The three-level variable, Age3, is defined as Age3=1 for consumers younger than 21, Age3=1 for consumers' age between 21 and 50, and Age3=2 for consumers older than 50. After removing the 2270 outliers (same as model 7a), the fitted regression model is model 11b.

Regression Model 11b: Square-Root of FY 07-08 claims as the dependent variable with the selected independent variables. (GIC=163,178)

```
Coefficients:
                Value Std. Error  t value Pr(>|t|)
  (Intercept)  26.6233   0.9912    26.8602   0.0000
    Age 21-50  53.4766   0.7347    72.7917   0.0000
    Age 50+    50.4592   1.0069    50.1138   0.0000
       Live-2  62.9957   0.8284    76.0413   0.0000
       Live-3  92.6951   0.7157   129.5245   0.0000
       Live-4 121.9710   4.8279    25.2640   0.0000
          BS1   2.5217   0.0561    44.9604   0.0000
          FS1   0.4159   0.0840     4.9511   0.0000
          Q18   7.1263   0.4122    17.2887   0.0000
          Q20   5.8848   0.4038    14.5730   0.0000
          Q23   7.7141   0.3440    22.4227   0.0000

Residual standard error: 39.6 on 21945 degrees of freedom
Multiple R-Squared: 0.6759      Adjusted R-squared: 0.6758
F-statistic: 4577 on 10 and 21945 degrees of freedom, the
   p-value is 0
```

Comments on Model 11b:

1) In model 11b, the three-level categorical variable Age3 is used as an independent variable instead of the dummy variable AgeI in model 7b. The R-square value for model 11b is 0.6759, slightly higher than the R-square of 0.6757 for model 7b.

2) The GIC value of model 11b is 163,178, higher than the GIC value of 163,043 of model 7b. Thus model 7b is a better model than model 11b.

(ii) The transportation cost issue.

During the iBudget Florida Stakeholders' meetings in November and December of 2009, several stakeholders expressed that consumers' transportation costs should be considered in the iBudget algorithm..

a) Transportation Price Index for each consumer's county in 2007 used as an independent variable.

We used the transportation price index (Transp) for each consumer's county in 2007 as one of the independent variables. After removing the 2270 outliers (same as model 7a), the fitted regression model is model 11c.

Regression Model 11c: Square-Root of FY 07-08 claims as the dependent variable with the selected independent variables. (GIC=163,173)

```
Coefficients:
                Value Std. Error   t value  Pr(>|t|)
 (Intercept)   87.2039   13.9005     6.2734    0.0000
       AgeI    53.0924    0.7283    72.9004    0.0000
     Live-2    62.4310    0.8197    76.1624    0.0000
     Live-3    92.2337    0.6998   131.7958    0.0000
     Live-4   121.1132    4.8267    25.0923    0.0000
        BS1     2.5469    0.0557    45.7010    0.0000
        FS1     0.4104    0.0840     4.8866    0.0000
        Q18     7.1590    0.4120    17.3759    0.0000
        Q20     5.8922    0.4038    14.5925    0.0000
        Q23     7.6772    0.3439    22.3249    0.0000
     Transp    -0.6136    0.1406    -4.3632    0.0000

Residual standard error: 39.6 on 21945 degrees of freedom
Multiple R-Squared: 0.676      Adjusted R-squared: 0.6758
F-statistic: 4578 on 10 and 21945 degrees of freedom, the
   p-value is 0
```

Comments on Model 11c:

1) In model 11c, the transportation price index (Transp) is added to model 7b as an independent variable. The R-square value for model 11c is 0.676, slightly higher (0.03%) than the R-square of 0.6757 for model 7b.

2) The GIC value of model 11c is 163,173, higher than the GIC value of 163,043 of model 7b. Thus model 7b is a better model than model 11c.

3) Furthermore, the estimated coefficient of Transp in model 11c is negative, which implies that consumers' expenditures decrease when the transportation price index is higher, clearly not making sense.

b) Relationship between the FY 07-08 transportation costs (Tcost) variable and other independent variables in model 7b.

This r egression m odel will a nswer t he f ollowing que stion: i s t he t ransportation c ost partially explained by other independent variables in model 7b?

Regression Model 11d: Square-Root of FY 07-08 transportation cost (Tcost) is used as the dependent variable with the selected independent variables in Model 7b. The estimated coefficients of BS1, FS1, Q18, and Q20 are negative thus these four independent variables were not used in this model.

```
Coefficients:
               Value Std. Error  t value Pr(>|t|)
 (Intercept)  -0.3865   0.0208   -18.5521   0.0000
        AgeI   1.0092   0.0150    67.2324   0.0000
      Live-2  -0.0628   0.0175    -3.5876   0.0003
      Live-3   0.4213   0.0142    29.5804   0.0000
      Live-4  -0.5490   0.1035    -5.3020   0.0000
         Q23   0.1141   0.0056    20.3340   0.0000

Residual standard error: 0.8504 on 21950 degrees of freedom
Multiple R-Squared: 0.2449      Adjusted R-squared: 0.2448
F-statistic: 1424 on 5 and 21950 degrees of freedom, the p-value is 0
```

Comments on Model 11d:

1) In model 11d, the three independent variables, Age, Living Setting, and Self-protection (Q23), explain about 24.5% of the total variation in the response variable, the square-root of the FY 07-08 transportation cost.

2) Relative to consumers with age 20 or younger, consumers with age 21 or older have higher transportation costs in FY 07-08.

3) Relative to consumers living in family home, consumers living in group home have higher transportation costs, while consumers in supported living and in residential habilitation centers have lower transportation costs in FY 07-08.

4) Consumers' FY 07-08 transportation costs increased when the self-protection variable moves to a higher level.

(iii) The FSL program issue.

a) NONFSL service dummy variable used as an independent variable.

During FY 2007-08, some consumers were enrolled in the Family and Supported Living waiver (FSL) program; fewer services were available to these consumers and their average expenditures were lower than those enrolled on the Developmental Disabilities Home and Community-Based Services waiver. The impact of FSL enrollment on expenditures was tested by adding the NONFSL dummy variable (NONFSL=1 if not enrolled in the FSL, NONFSL=0 if enrolled in the FSL) to model 7b as an independent variable.

Regression Model 11e: Square-Root of FY 07-08 claims as the dependent variable with the selected independent variables. (GIC=162,428)

```
Coefficients:
               Value Std. Error  t value Pr(>|t|)
 (Intercept)  16.5398   1.0402    15.9004   0.0000
       AgeI  47.2761   0.7460    63.3742   0.0000
     Live-2  58.5125   0.8184    71.4964   0.0000
     Live-3  87.6460   0.7060   124.1453   0.0000
     Live-4 117.3316   4.7470    24.7168   0.0000
        BS1   2.4502   0.0549    44.6319   0.0000
        FS1   0.3947   0.0826     4.7799   0.0000
        Q18   6.6218   0.4055    16.3282   0.0000
        Q20   5.6244   0.3971    14.1645   0.0000
        Q23   7.7044   0.3381    22.7872   0.0000
     NONFSL  21.5947   0.7747    27.8764   0.0000

Residual standard error: 38.93 on 21945 degrees of freedom
Multiple R-Squared: 0.6868      Adjusted R-squared: 0.6866
F-statistic: 4812 on 10 and 21945 degrees of freedom, the
   p-value is 0
```

Comments on Model 11e:

1) In model 11e, the NONFSL dummy variable is added to model 7b as an independent variable. The R-square value for model 11e is 0.6868, higher (about 1.1%) than the R-square of 0.6757 for model 7b.

2) The GIC value of model 11e is 162,428, lower than the GIC value of 163,043 of model 7b. Thus model 11e is a better model statistically than model 7b.

3) Model 11e will give consumers who were not in the FSL program higher budgets than model 7b. APD tentatively decided not to use this model.

8. Summary of Results for the FY 07-08 Claims.

In this section, regression models of the FY 07-08 Claim versus independent variables were fit, and the best model was selected based on the GIC rule. The conclusions of this analysis are the follows:

1) The best transformation of the dependent variable is square-root of the FY 07-08 Claim, chosen by the Box-Cox procedure;

2) The best model before removing outliers is model 6 on Page 33, chosen based on the GIC rule;

3) Outliers are identified based on the studentized residuals from the best regression model 6;

4) After removing 2270 outliers (about 9.37% of the total number of consumers), the best fitted model is model 7b which explains about 67.6% of the total variation in the response variable. Model 7b is recommended as the final algorithm for predicting consumers' supports in the next year;

5) Weights of the algorithm for calculating consumers' needs were listed in Table 2 (Page 37). Fifty random samples of predicted consumers' needs based on the algorithm (model 7b) were listed in Table 3 (Page 38);

6) Other potential independent variables and models, such as different forms of the age variable, transportation cost related variables, FSL program variable, were also tested. Results were listed in Pages 41 to 46.

7) The FY 07-08 transportation costs were partially explained by other independent variables in Model 7b (about 25.5%).

V. Best selected model for the FY 06-07 Claims.

In order to test the robustness of the model selection procedure, we use the FY 06-07 claim as the dependent variable and repeat the model fitting and comparison process in Section IV. The models are listed and discussed in this section.

Regression Mode l2a: Square-Root of FY 06-07 claims as the dependent variable with the selected independent variables. The three summary raw scores (BS1, FS1, PS1) are kept in the model during the selection process. (GIC= 193,648).

```
Coefficients:
               Value Std. Error  t value Pr(>|t|)
 (Intercept)  51.4898   1.2556    41.0083   0.0000
       AgeI  39.5699   0.8876    44.5784   0.0000
     Live-2  54.0380   1.0616    50.9004   0.0000
     Live-3  82.8177   0.8935    92.6942   0.0000
     Live-4 115.9698   3.9196    29.5871   0.0000
        BS1   2.4913   0.0742    33.5887   0.0000
        FS1   0.7110   0.1077     6.5994   0.0000
        PS1   0.1523   0.0531     2.8679   0.0041
        Q18   8.2758   0.5175    15.9925   0.0000
        Q20   4.7289   0.5164     9.1579   0.0000
        Q23   5.4509   0.4395    12.4021   0.0000

Residual standard error: 53.1 on 24149 degrees of freedom
Multiple R-Squared: 0.4843      Adjusted R-squared: 0.4841
F-statistic: 2268 on 10 and 24149 degrees of freedom, the
   p-value is 0
```

Recall that Q18 represents transfers, Q20 is hygiene, and Q23 is self-protection.

Regression Model 12b (Removing 9.5% outliers): Square-Root of FY 06-07 claims as the dependent variable with the selected independent variables. (GIC=162,902)

In this model, 9.50% of the consumers (2295 cases) are identified as outliers and removed from the whole population. Outliers (persons with extra-high or extra-low supports) are defined as claims with absolute Studentized residuals of at least 1.645, corresponding to extreme values outside a 90% interval of the population. Each tail has 5.0% of the theoretical Standard Normal population.

```
Coefficients:
                Value Std. Error   t value  Pr(>|t|)
 (Intercept)   47.3438    0.9952    47.5708    0.0000
       AgeI    40.0818    0.7154    56.0251    0.0000
     Live-2    57.3299    0.8380    68.4168    0.0000
     Live-3    90.1482    0.7137   126.3078    0.0000
     Live-4    81.4948    4.2838    19.0239    0.0000
        BS1     2.4875    0.0599    41.5449    0.0000
        FS1     0.6602    0.0863     7.6474    0.0000
        Q18     8.1268    0.4176    19.4591    0.0000
        Q20     5.5696    0.4094    13.6032    0.0000
        Q23     5.9742    0.3480    17.1650    0.0000
        PS1    -0.0078    0.0429    -0.1809    0.8564

Residual standard error: 39.96 on 21854 degrees of freedom
Multiple R-Squared: 0.6457      Adjusted R-squared: 0.6455
F-statistic: 3983 on 10 and 21854 degrees of freedom, the
   p-value is 0
```

Comments on model 12b:

In model 12b, the variable Physical Status raw score (PS1) is not significant.

Regression Model 12c (Removing 9.5% outliers) : the variable Physical Status Score (Phys) is removed from Model 11b with Square-Root of FY 06-07 claim as the dependent variable. (GIC=162,753)

```
Coefficients:
                Value Std. Error  t value Pr(>|t|)
 (Intercept)  47.3146   0.9820    48.1813   0.0000
       AgeI   40.0798   0.7153    56.0302   0.0000
     Live-2   57.3139   0.8332    68.7842   0.0000
     Live-3   90.1357   0.7103   126.8899   0.0000
     Live-4   81.5029   4.2835    19.0272   0.0000
        BS1    2.4840   0.0567    43.7969   0.0000
        FS1    0.6579   0.0854     7.7031   0.0000
        Q18    8.1202   0.4160    19.5191   0.0000
        Q20    5.5708   0.4094    13.6085   0.0000
        Q23    5.9745   0.3480    17.1663   0.0000

Residual standard error: 39.96 on 21855 degrees of freedom
Multiple R-Squared: 0.6457      Adjusted R-squared: 0.6456
F-statistic: 4426 on 9 and 21855 degrees of freedom, the p-
   value is 0
```

Final Model for the FY 06-07 Claim:

1) Models 12b and 12c have the same R-square 0.6457. Model 11c does not include the physical status raw score (PS1) as one of the predictors and has a lower GIC value.

2) Comparing model 12c (final model for FY 06-07 claim) with model 7b (final model for FY 07-08 claim), the R-square of FY 06-07 final model, 0.6457, is about 3% lower than that of FY 07-08 model (R^2=0.6757). The two models use the same independent variables, which shows that the relationship between consumers' expenditures and the independent variables is very stable and the model selection procedure is quite robust.

3) The R-square value of 0.6457 for the FY 06-07 final model is quite higher, which shows a strong relationship (even though slightly weaker than the FY 07-08 claim) between the FY 06-07 claim and the selected independent variables. This fact indicated that consumers' expenditures in FY 07-08 and FY 06-07 are highly correlated to consumers age, living setting, and other functional and behavioral characteristics.

Regression Model 13 (Removing about 5% outliers): Square-Root of FY 06-07 claims as the dependent variable with the selected independent variables.

In this model, 5.09% of the consumers (1230 cases) are identified as outliers and removed from the population. Outliers (persons with extremely high or low supports) are defined as claims with absolute Studentized residuals of at least 1.96, corresponding to extreme values outside a 95% interval of the population. Each tail has 2.5% of the theoretical Standard Normal population.

Coefficients:

	Value	Std. Error	t value	Pr(>|t|)
(Intercept)	48.3718	1.0625	45.5272	0.0000

```
        AgeI  40.2130   0.7684    52.3352   0.0000
      Live-2  56.5974   0.8959    63.1758   0.0000
      Live-3  88.7923   0.7661   115.9058   0.0000
      Live-4  88.7526   4.1957    21.1535   0.0000
         BS1   2.5182   0.0607    41.5139   0.0000
         FS1   0.6729   0.0914     7.3663   0.0000
         Q18   7.8871   0.4434    17.7887   0.0000
         Q20   5.5711   0.4401    12.6574   0.0000
         Q23   5.7177   0.3754    15.2317   0.0000

Residual standard error: 44.1 on 22920 degrees of freedom
Multiple R-Squared: 0.5919      Adjusted R-squared: 0.5917
F-statistic: 3693 on 9 and 22920 degrees of freedom, the p-
   value is 0
```

Conclusions on Model 13:

Model 13 is a good alternative for model 12c if about 5.0% of consumers are classified as outliers.

References:

Efron, B. 1979. "Bootstrap Methods: Another Look at the Jackknife." *Annals of Statistics* 7:1-26.

Efron, B. and R. J. Tibshirani. 1993. *An Introduction to the Bootstrap*. New York: Chapman and Hall.

Pu, W. and Niu, X-F. 2006. "Selecting Mixed-Effects Models Based on a Generalized Information Criterion," *Journal of Multivariate Analysis*, **No.** 97, 733-758.

Schwartz, G. 1978. "Estimating the Dimension of a Model." *The Annals of Statistics*, 6: 461-464

Weisberg, S. 2005. *Applied Linear Regression.* John Wiley & Sons Inc. New York.

Appendix III: Table of State Algorithm Elements

This table compares the elements of selected states' algorithms for determining individual budgets.

	WYOMING	OREGON	MINNESOTA	INDIANA	COLORADO	GEORGIA
PRIMARY ASSESSMENT INSTRUMENT USED	ICAP	SIS STATE	INSTRUMENT	ICAP	SIS	SIS
ASSESSMENT GENERAL SCORES	ICAP BROAD INDEPENDENT	SUPPORT NEEDS INDEX SCORE	LEVELS OF SUPPORT	ICAP BROAD INDEPENDENT		
	ICAP GENERAL MALADAPTIVE			ICAP GENERAL MALADAPTIVE		
			LEVEL OF MEDICAL NEEDS	BEHAVIORAL AND HEALTH INTENSITY & FREQUENCY	SIS EXCEPTIONAL MEDICAL NEEDS SECTION SCORE	SIS EXCEPTIONAL MEDICAL NEEDS SECTION SCORE
		SIS EXCEPTIONAL BEHAVIORAL NEEDS SECTION SCORE			SIS EXCEPTIONAL BEHAVIORAL NEEDS SECTION SCORE	SIS EXCEPTIONAL BEHAVIORAL NEEDS SECTION SCORE
BEHAVIORAL		COMMUNITY SAFETY RISK	BREAKS LAW		PUBLIC SAFETY RISK	
			AGGRESSIVE , VERBAL/GESTURAL			
			AGGRESSIVE, PHYSICAL			
			PROPERTY DESTRUCTION			
			INAPPROPRIATE SEXUAL BEHAVIOR			
			INJURIOUS TO SELF		EXTREME SAFETY RISK TO SELF	
			RUNS AWAY			
PERSONAL CHARACTER-ISTICS	AGE		AGE	AGE		
	DIAGNOSIS (AUTISM, LEVEL OF RETARDATION, CHEMICAL DEPENDENCY, DEAFNESS, BRAIN/NEUROLOGICAL DAMAGE)		CEREBRAL PALSY, LEVEL OF RETARDATION, CHILDHOOD PSYCHOSIS	DIAGNOSES (VISUAL IMPAIRMENT)		
	PSYCHOTROPIC MEDICATIONS TAKEN					
			MOBILITY			
			EPILEPSY			
			SEIZURES			
			RELATED CONDITIONS (ICD-9 CODE)			
			ABILITY TO SELF PRESERVE			
LIVING SETTING		FACILITY SIZE OR TYPE		LIVING WITH FAMILY		LIVING SETTING (INCLUDING LIVING WITH FAMILY AND RESIDENTIAL SIZE OR TYPE)
	LIVING SETTING (LIVES WITH FAMILY, INDEPENDENTLY, INDEPENDENT WITH MONITORING)			NUMBER OF ROOMMATES		
			RISK OF REQUIRING ICF/DD PLACEMENT			
SUPPORT NEEDS				FAMILY SUPPORT NEEDS		
					SIS HEALTH AND SAFETY ACTIVITIES SECTION	
			VOCATIONAL SUPPORT NEEDS			
					SIS HOME LIVING SECTION SCORE (SELF CARE)	
		SUM OF SUBSECTIONS HOME LIVING, COMMUNITY LIVING, AND HEALTH AND SAFETY	LEISURE & RECREATION SUPPORT NEEDS		SIS COMMUNITY LIVING SECTION SCORE	
SERVICE USAGE	TYPE OF DAY ACTIVITY (SHELTERED WORKSHOP, SUPPORTED EMPLOYMENT, COMPETITIVE EMPLOYMENT)					
	RESIDENTIAL SERVICES RECEIVED (Y/N)					
	DAY HABILITATION RECEIVED (Y/N)					
	NURSING SERVICES RECEIVED (Y/N)					
	PERSONAL CARE RECEIVED (Y/N)		MENTAL HEALTH SERVICE USAGE			
	PSYCHOLOGICAL SERVICES RECEIVED (Y/N)					
	SECOND ASSESSMENT (Y/N)		OCCUPATIONAL THERAPY NEEDS			
	IN-HOME SERVICES RECEIVED (Y/N)		DAILY LIVING SKILL LEVEL, COMMUNITY LIVING SKILL LEVEL			
						Georgia does not make full details publicly available. This list is therefore may not be comprehensive.

Appendix IV: Questionnaire for Situational Information

Florida
Questionnaire Situational Information

Version 4.0

◆

REVISED 2-15-08
To be used by Certified Administrators Only

Produced for the

agency for persons with disabilities
State of Florida

Person's Name	Area	Date

Purpose and Use of this Questionnaire

The **Questionnaire for Situational Information** is a questionnaire designed to gather key information about a person that will describe his or her life situation for the purpose of planning supports over a 12-month period. These descriptions reflect a person's needs for assistance in key life roles and areas of daily activity. The first portions of the questionnaire are entitled **Life Changes** and **Community Inclusion.** These areas of inquiry focus on a person's need for assistance in order to adjust to life changes while living, working, fulfilling valued roles, and participating in his/her community. The next portion of the questionnaire is titled **Functional Status** and focuses on a person's need for assistance during the normal course of a routine day, including sight, hearing, communication, and ambulation. Another portion is titled **Behavioral Status** and focuses on any major behavioral issues that might require assistance and intervention. The final portion is titled **Physical Status** and focuses on health and physical concerns, including medical conditions that an individual experiences and medications taken on a routine or emergency basis. Together these life areas are explored and rated to generate information about types and levels of support the person may require now and in the near-term future.

The **Questionnaire for Situational Information** is a component of a holistic approach to the development of a support plan that meets the needs of the individual. As support plans are developed for each person, the preferences of the individual as well as information from the **Personal Outcome Measures** and other information sources blend together to achieve a unified and collaborative approach for each person served by the Agency for Persons with Disabilities (APD). Personal information gathered by this questionnaire is confidential and is to be respected and kept private. Non-identifying data gathered by the questionnaire may be used in generating legislative budget requests and estimating a range of costs associated with a reasonable approach to amelioration of a developmental disability.

The development of the **Questionnaire for Situational Information** has included the review and perspective of national experts in services and supports to people with developmental disabilities. It is built on other existing screenings and assessments from other states that identify major barriers to good health, safety, and quality of life.
This questionnaire will be administered in the language understood by the interviewee. In addition, the administration of this questionnaire will be performed by persons who are properly qualified, have received training, and authorized to do so. In every instance, the gathering of personal information will include an observation of and a face-to-face interview with the individual with a developmental disability, the individual's guardian, and the individual's family. In addition, the following should occur:

- Interviews with the individual's caregivers and/or health care personnel, as appropriate
- Review of the individual's records including recent assessments and progress notes from medical records, school records, previous support plans, and relevant information from other collateral sources, as appropriate.

The **Questionnaire for Situational Information** will be administered at the time of eligibility determination for the Agency for Persons with Disabilities and/or reviewed for possible

changes at least annually at the time of the annual support plan development. The **Questionnaire for Situational Information** will be re-administered to identify any possible changes in levels of support in the event that an individual experiences major life changes (such as moving from one residential setting to another, major changes in caregivers, or a health change that requires new medications or monitoring, or if the person has experienced major improvements and accomplishments in his/her cognitive or physical condition.) In some cases, the level of support will not change and, in other cases, the level of support will be greater or less, depending on the circumstances.

Any concerns or questions regarding this questionnaire or its use should be directed to the Area APD Program Administrator or to the Agency for Persons with Disabilities in Tallahassee, Florida.

Agency for Persons with Disabilities
4030 Esplanade Way, Room 380; Tallahassee, FL 32399
Phone: 850/488-4877 • FAX: 850/922-6456

Human Systems and Outcomes, Inc.
2107 Delta Way; Tallahassee, FL 32303-4224
Phone: 850/422-8900 • FAX: 850/422-8487

FQSI ADMINISTRATOR INFORMATION

1. **FQSI Administrator:** Print your full name (i.e., the name of the person administering this questionnaire).
   Print last name first.

   _____
   Last Name First Name

2. **Initiation Date (MM/DD/YYYY):** Record the date on which the FSIQ is initiated using a month/day/year format.

   _____ Example: 09/07/2006

3. **Administration Date (MM/DD/YYYY):** Record the date on which the FSIQ is completed using a month/day/year format.

   _____ Example: 09/07/2006

4. **FQSI Administrator's ID #:** Clearly write the five-digit FSIQ administrator number of the person completing this form.

   __ __ __ __ __

GENERAL INFORMATION

1a. Name:

_____
First Name M. I. Last Name Area/Region

1b. Social Security Number ___ ___ ___ - ___ ___ - ___ ___ ___ ___

1c. Medicaid Number ___ ___ ___ ___ ___ ___ ___ ___ ___ ____

1d. Date of Birth: ___ ___/ ___ ___/ ___ ___ ___ ___ Example 09/12/1962

2a. Mailing Address: Complete if the person's home address is different from his or her mailing address:

_____
Person's Complete Mailing Address, Including Apartment #

_____ _____
City or Town State Zip Code

_____ _____
County of Residence Home Telephone Number

2b. Guardian's Name, Address and Home Telephone Number

_____
Guardian's Complete Mailing Address, Including Apartment #

_____ _____ _____
City or Town State Zip Code

_____ _____
County of Residence Guardian Day Telephone Phone

_____
Guardian Evening Phone

3. Person's Gender: Indicate below the person's gender. (Check only one)

☐ Male ☐ Female

4. Person's Life Stage: Indicate below the person's present life stage. (Check only one)

☐ Under age 18
☐ 18 - 22 years ☐ 23 - 45 years ☐ 46 - 65 years ☐ 66 + years

5. Person's Race/Ethnicity: Indicate below the person's race/ethnicity.

□ White □ Black □ Latino/Hispanic □ Asian □ Native American
□ Other: _____

6. Person's Current Residence. Indicate below the person's current residence: (Check only one)

□Personal home alone or with non-relatives
□Personal home with relatives
□Family home with relatives
□Foster or adult companion home
□Supported living arrangement
□Group home
□Private ICF/DD facility
□Residential habilitation center
□Secure facility
□Nursing home
□Mental health facility
□APD institution
□Hospital

7a. Person's Primary Diagnosis. Indicate below the person's primary diagnosis: (Check only one)

□ Mild retardation (IQ 52-69)
□ Moderate retardation (IQ 36-51)
□ Severe retardation (IQ 20-35)
□ Profound retardation (under 20)
□ Spina bifida
□ Cerebral palsy
□ Prader-Willi syndrome
□ Autism
□ Other:
□ High Risk for Children

7b. Person's Secondary Diagnosis. Indicate below the person's secondary diagnosis: (Check only one)

□ Mild retardation (IQ 52-69)
□ Moderate retardation (IQ 36-51)
□ Severe retardation (IQ 20-35)
□ Profound retardation (IQ under 20)
□ Other:
□Cerebral palsy
□Prader-Willi syndrome
□Autism
□Spina bifida

LIFE CHANGE AND ADJUSTMENT INFORMATION

8a. Indicate Any of the Following Life Changes this Person Has Experienced over the Past 12 Months. (Check all that apply.)

- ☐ No life change experienced over the past 12 months
- ☐ Death or loss of a long-term primary caregiver seen daily, such as a custodial parent [100 points].
- ☐ Death or loss of a significant other seen daily, such as a spouse, domestic partner, best friend [73 points]
- ☐ Child(ren) taken away or held in foster care by child protective authorities for maltreatment [73 points]
- ☐ Death or loss of a close family member (non-custodial) having frequent contact with the person [63 points]
- ☐ Survivor of a major physical assault, rape, auto accident, natural disaster or near-death experience [63 points]
- ☐ Detention in jail or an institution for more than three days [63 points]
- ☐ Major illness, injury, or surgery requiring hospitalization for more than three days [53 points]
- ☐ Pregnancy or child birth [40 points]
- ☐ Gaining a new family member in the person's home or a new room mate [39 points per change in the past 12 months]
- ☐ Major change in living conditions or lifestyle [25 points]
- ☐ Change in place of residence [20 points for each change in past 12 months]
- ☐ Major change in the type and/or amount is recreational activities [19 points]
- ☐ Major change in the type and/or amount of social activities and positive interactions [18 points]
- ☐ Major change in work or major daytime activities [18 points]
- ☐ Major change in sleeping habits [16 points]
- ☐ Major change in eating habits [15 points]

☐ This person has a relative low amount of life change stress. Caregivers should be made aware of stress indicators and observe the person for any health or behavioral changes.

☐ This person has a moderate amount of life change stress that could lead to health or behavioral changes. Caregivers should be made aware of stress indicators and observe the person for any changes in health or behavioral conditions. Referral for health or behavioral specialty support may be required if problems arise.

☐ This person has a significant amount of life change stress that could lead to health or behavioral changes. Caregivers should be made aware of stress indicators and report any changes in health or behavioral conditions promptly so that the person can be evaluated for the need for intervention. Referral for health or behavioral specialty support will probably be required if problems arise.

8b. Mark Any of the Following Signs and Symptoms of Emotional or Behavioral Distress Presented by this Person that had On-Set or Significant Intensification during the Past 12 Months? (Check all that apply.)

- ☐ None apply
- ☐ Sadness or crying spells
- ☐ Avoidance of favorite activities or friends
- ☐ Feeling overwhelmed, disoriented, or lost
- ☐ Major weight gain or loss (including binging)
- ☐ Accidents and injuries of unknown origin
- ☐ Suicidal thoughts, plans, or suicide attempts
- ☐ Property destruction (major, repeated)
- ☐ Nervousness, anxiety, worry, desperation
- ☐ Decline in work attendance or performance
- ☐ Agitation, irritability, restlessness
- ☐ Self-injurious behaviors (pica, head-banging, etc.)
- ☐ Return or increase in rate or severity of seizures
- ☐ Aggressive behaviors to others
- ☐ Use of alcohol or illegal drugs

8c. If any of the Signs or Symptoms in 8b above were Marked, Was this Person Screened by a Qualified Professional for any of the Following Conditions? (Check all that apply)

- ☐ None apply
- ☐ Adjustment disorder
- ☐ Anxiety disorder
- ☐ Post-traumatic stress disorder
- ☐ Depression
- ☐ Suicide or homicide risk
- ☐ Risk of victimization or re-victimization

8d Indicate Any of the Following Life Changes that this Person is Likely (probability > 50%) **to Experience over the Next 12 Months**. (Check all that apply.)

- ☐ None apply
- ☐ Loss/change of a significant long-term primary caregiver — Month of Anticipated Change _____ .
- ☐ Loss/changeof a significant other (spouse, partner) — Month of Anticipated Change _____
- ☐ Major surgery requiring hospitalization — Month of Anticipated Change _____
- ☐ Birth or loss of a child (e.g., termination of rights) — Month of Anticipated Change _____
- ☐ Detention in jail or an institution — Month of Anticipated Change _____
- ☐ Gaining a new family member or new room mate — Month of Anticipated Change _____
- ☐ Major change in living conditions or lifestyle — Month of Anticipated Change _____
- ☐ Change in place of residence — Month of Anticipated Change _____
- ☐ Major change in recreational activities — Month of Anticipated Change _____
- ☐ Major change in social activities — Month of Anticipated Change _____
- ☐ Major change in work or daytime activities — Month of Anticipated Change _____
- ☐ Other major change: _____ — Month of Anticipated Change _____

9. Does the Person Plan To Move In The Next 12 Months?
(Check only one and indicate the month of anticipated move.)

- ☐ The person chooses to remain in his/her current home
- ☐ The person chooses to remain in his/her current home, but cannot do so without some additional help
- ☐ The person must move for reasons of health or safety
- ☐ The person chooses to move from his or her current home for reasons not related to safety
- ☐ The person is unsure about moving to a different home at this time

Month of anticipated move: _____

10. Person's Legal Status? (Check all that apply.)

- ☐ Person is an adult with no pre-need directives or any form of guardianships.
- ☐ Person is an adult with one or more pre-need directive (durable power of attorney, trust, health care surrogate, etc.)

- ☐ Person has a partial (limited) or full (plenary) guardian.

- ☐ Person has a partial or full guardian advocate.

- ☐ Person has exercised his or her right to designate a client advocate.

- ☐ Person is an adult and has a guardian ad litem.

- ☐ Person is an adult and has been involuntarily admitted to receive residential services from the Developmental Disabilities Program.

- ☐ Person is a minor child

- ☐ Person is a minor child – guardian appointed

- ☐ Other: _____

11. Language Spoken or Understood by the Person. Indicate below the primary language spoken or understood by the person. (Check only one)

☐ English ☐ Spanish ☐ Sign language ☐ Other: _____

COMMUNITY INCLUSION & FULFILLMENT OF VALUED ADULT ROLES

For Persons 18 years and older

Using the following scales, please circle the levels that best describes how much personal support the person requires **(both now and in the future)** in order to participate actively in his or her local community and, where appropriate, to fulfill valued adult roles (e.g., parenting minor children in the home) as a part of community living and adult life.

1 = Level 1: You do not need any personal support
2 = Level 2: You need personal support and it is limited to occasional reminders or verbal prompts and/or physical assistance.
3 = Level 3: You need personal support and require daily reminders, verbal and/or physical prompts.
4 = Level 4: You need personal support from someone and require supervision to complete.
5 = Level 5: You need personal support from someone and require supervision to complete.
0: Don't know
9 Not applicable

	Community Inclusion Activities	Level of Support person requires over the next 12 months	
12a	The person can find a place to live and manage leases or rent arrangements	1 2 3 4 5	0 9
12b	The person can find a job and manage a career	1 2 3 4 5	0 9
12c	The person can pay rent and utilities on time	1 2 3 4 5	0 9
12d	The person can shop for food, clothes, and other personal items	1 2 3 4 5	0 9
12e	The person can arrange and attend social outings and community gatherings on a regular basis	1 2 3 4 5	0 9
12f	The person can use the community transportation system (if available)	1 2 3 4 5	0 9
12g	The person can attend and participate in community clubs, organizations and activities	1 2 3 4 5	0 9
12h	The person can keep him/her self safe in the neighborhood and can avoid being exploited, taken advantage of, and avoid dangerous situations and people	1 2 3 4 5	0 9
12i	The person can routinely work or participate in activities on a daily basis	1 2 3 4 5	0 9
12j	The person can do his/her own housekeeping	1 2 3 4 5	0 9
12k	The person can do his/her own home repairs	1 2 3 4 5	0 9

	Fulfillment of Valued Adult Roles in the Community	Level of Support person requires over the next 12 months	
12l	The person can parent his/her minor children effectively in the home without involvement of child protective services	1 2 3 4 5	0 9
12m	The person can function as a spouse or domestic partner in a stable, intimate, ongoing relationship.	1 2 3 4 5	0 9
12n	The person can fulfill the role of a valued and trusted employee in a productive, sustained work assignment	1 2 3 4 5	0 9
12o	The person can vote, follow community rules, and fulfill other responsibilities as a citizen of the community	1 2 3 4 5	0 9

EMPLOYMENT INFORMATION

IF Currently Employed	
13a. Does the person currently have a job? (If no, skip to # 13c.)	Yes _____ No_____
13b. Does the person need help with a job currently held?	Yes _____ No_____

IF Currently <u>Not</u> Employed	
13c. If not currently employed, is the person interested in getting a job?	Yes _____ No _____

Certification of Sources of Information Used in Preparing this Questionaire: As the administrator of this questionnaire, I hereby certify that I relied on the sources of information indicated below in preparing this questionnaire.

Information Source	Information Name/Type of Record	Date of Collection

- ☐ Interview with the individual
- ☐ Interview with the family/guardian
- ☐ Interview with paid support
- ☐ Interview with other informant
- ☐ Review of the individual's records (indicate type/source)

FUNCTIONAL STATUS

Person's Sensory Functioning: Using information provided by one or more key informants along with information contained in the person's record, check the rating scale value that best describes the extent to which the person's sensory status affects his/her capacities in performing daily activities in items #14-15.

14. Vision:

☐ **0** = NO functional impairments related to vision. The person's vision is adequate for daily functioning (with or without glasses).

☐ **1** = The person has a visual impairment that MINIMALLY impacts functioning and that can be ameliorated through the use of inexpensive low technology aids (e.g., large button devices, magnifying lenses, or a cane) and generally does not require the assistance of another person.

☐ **2** = The person has a visual impairment that impacts functional activities (i.e., related to daily living, moving about in the environment, and/or activities related to work). The functional limitations can be ameliorated through the use of assistive devices (e.g., talking or sound alert devices) and/or the OCCASIONAL assistance of another person.

☐ **3** = The person has a visual impairment that impacts functional activities that can be ameliorated through the use of high technology assistive devices (e.g., computerized reading devices, voice activated devices, or software) and /or FREQUENT assistance of another person.

☐ **4** = The person has a visual impairment that requires CONSTANT assistance of another person for performance of functional activities and the person is unable to use assistive devices.

15. Hearing:

☐ **0** = NO functional impairments related to hearing. The person's hearing is adequate for daily functioning (with or without a hearing aid).

☐ **1** = The person has a hearing impairment that MINIMALLY impacts functioning and that can be ameliorated through the use of inexpensive low technology aids (e.g., volume-adjustable phone, extra loud alarm clock) and generally does not require the assistance of another person.

☐ **2** = The person has a hearing impairment that impacts functional activities (i.e., related to daily living, moving about in the environment, and/or activities related to work). The functional limitations can be

ameliorated through the use of assistive devices (e.g., vibrating or flashing alerting devices) and/or the OCCASIONAL assistance of another person.

- **3** = The person has a hearing impairment that impacts functional activities that can be ameliorated through the use of high technology assistive devices (e.g., TDD, closed caption TV, or amplification devices) and /or FREQUENT assistance of another person.

- **4** = The person has a hearing impairment that requires CONSTANT assistance of another person for performance of functional activities and the person is unable to use assistive devices.

Essential Living Skills: Using information provided by one or more key informants along with information contained in the person's record, check the rating scale value that best describes the extent to which the person is independent in performing the activities listed in items #16-24.

16. Eating:

☐ **0** = Eats INDEPENDENTLY, may use adaptive equipment. An individual with this rating may require some type of simple adaptive equipment, such as a hand splint, special utensil, cup, etc. The person is generally able to feed self without the assistance of others, with the exception of meal preparation, such as cutting up meat.

☐ **1** = Requires INTERMITTENT physical assistance and/or verbal prompts to eat. The individual with this rating generally has difficulty attending to tasks and/or needs direct physical help due to motor limitations. With intermittent physical assistance of another person, the individual is able to complete a meal in a safe manner.

☐ **2** = Requires CONSTANT verbal and physical help to complete a meal. An individual with this rating generally has difficulty in attending to tasks and/or needs without direct physical help due to motor limitations. With constant verbal and physical help of another person, the individual is able to complete a meal in a safe manner.

☐ **3** = Requires CONSTANT physical assistance and mealtime intervention to EAT SAFELY. This person is unable to obtain adequate calories and fluids without the assistance of another. An individual with this rating may have difficulty with breathing/swallowing while eating or conditions that impair ability to eat safely. Mealtime interventions are required for this person, such as specific positioning support, eating devices, presentation techniques, and modifications in food/fluid consistency. This person may have a feeding tube for fluid or to supplement nutrition, but maintains some level of oral eating.

☐ **4** = Receives ALL nutrition through a gastrostomy or jejunostomy tube. The individual is unable to swallow safely, experiences malabsorption, has GI problems, and requires all nutrition to be given through the tube. Requires specialist follow-up and specially trained people to assist in eating.

17. Ambulation:

□ **0** = Ambulates INDEPENDENTLY, may use walker or other means of ambulatory support without problems of safety. Self-explanatory.

□ **1** = Walks with MINIMAL supervision. An individual with this rating requires some type of support, such as a walker, with the support of another person in close proximity, but the issue is primarily safety during ambulation.

□ **2** = INDEPENDENTLY uses a manual wheelchair for PRIMARY means of mobility. An individual with this rating may not have the ability to use his/her lower body. He/she has the ability to use upper body strength to propel the wheelchair and to reposition self, is generally able to maintain trunk alignment. This individual may not recognize the need to reposition or provide pressure relief on a consistent basis.

□ **3** = INDEPENDENTLY uses a powered wheelchair as a means of mobility or requires ASSISTANCE to propel a manual wheelchair for extended distances.

-OR-

Requires ASSISTANCE to change positions or shift weight in a wheelchair. An individual with this rating has limited use of his/her limbs and requires assistance to reposition self in wheelchair or to provide pressure relief.

□ **4** = Disability prevents sitting in an upright position. An individual with this rating possesses many of the same characteristics as the individual in rating 3, but due to the degree of musculoskeletal deficits or deformity, has limited positioning options.

18. Transfers:

□ **0** = Transfers INDEPENDENTLY (may require verbal prompts but no physical assistance.) Self-explanatory.

□ **1** = Needs someone to SUPERVISE the transfer for safety. Self-explanatory.

□ **2** = Needs PHYSICAL ASSISTANCE of ONE person to transfer or to change position. Self-explanatory.

□ **3** = Needs PHYSICAL ASSISTANCE of TWO people to transfer or to change position. Individuals at this level require the assistance of two people to transfer and position safely.

□ **4** = Needs LIFTING EQUIPMENT/PROCEDURES to safely transfer person. Individuals at this level may require specialized equipment to provide safe transfers due to severe spasticity, history of bone fragility, potential for injury due to size, or the degree of physical deformity. Individuals may also need a range of specially designed positions.

19. Toileting:

□ **0** = INDEPENDENTLY uses toilet. No physical assistance required or appreciated, adaptive equipment (such as safety bars) may be needed.

□ **1** = MINIMAL supervision or adaptation is required. An individual with this rating may require reminders or some verbal and physical assistance to maintain hygienic practice or manage clothing adjustments. Beyond this, the individual is generally able to manage toileting skills with minimal or no assistance from others.

□ **2** = CONTINENT of bladder or bowel, CONSTANT ATTENTION is needed. An individual with this rating requires physical assistance to complete hygiene tasks such as wiping, hand washing, and clothing repositioning. May have occasional accidents.

□ **3** = INCONTINENT of bowel or bladder. An individual with this rating generally is not able to recognize when he/she has eliminated due to loss of sensation, physical inability to manage toileting needs, difficulty communicating, or recognizing toileting needs. May require scheduled toileting or use of incontinent briefs.

□ **4** = INDWELLING CATHETER OR COLOSTOMY. An individual with this rating has either a severely disabling medical condition or has experienced a medical crisis making elimination through the rectum or urinary tract either difficult or not possible. This may be a temporary or permanent condition. The caregivers will need training related to the underlying condition that created the need for a catheter or colostomy and skills required to manage the catheter, colostomy, ileostomy, urostomy, etc.

20. Hygiene:

□ **0** = INDEPENDENTLY takes care of all personal hygiene. An individual with this rating is able to bathe; wash, dry, and style hair; brush teeth; trim fingernails and toenails; and all other aspects of personal hygiene. For women, this applies to all aspects of monthly feminine hygiene needs. Minor adaptations to accommodate physical limitations may be needed.

□ **1** = MINIMAL SUPERVISION OR ASSISTANCE IS REQUIRED. An individual with this rating may require occasional reminders or minimal physical assistance to maintain hygienic practice or manage clothing adjustments. Beyond this, the individual is generally able to manage hygiene skills with minimal or no assistance from others.

□ **2** = Generally aware of hygiene needs and activities, but routine prompting and/or MODERATE physical assistance are needed. An individual with this rating requires prompting or physical assistance to complete hygiene tasks, such as combing, brushing, hand washing, and clothing repositioning.

□ **3** = Requires SUBSTANTIAL prompting and/or physical assistance to meet personal hygiene needs. An individual with this rating generally is not able to recognize or remember when personal hygiene activities are to be performed or is physically unable to manage hygiene needs. May require scheduled hygiene activities or substantial physical assistance. Generally cooperative when assisted.

□ **4** = TOTALLY DEPENDENT upon staff for personal hygiene. An individual with this rating requires maximum assistance with all aspects of personal hygiene due to his/her level of mental and/or physical functioning. An individual with this rating may have special care requirements or may not be cooperative when others provide him/her physical assistance in hygiene activities.

21. Dressing:

- **0** = INDEPENDENTLY dresses. An individual with this rating is able to choose clothing and dress him/herself, including socks and shoes. Adaptive equipment to accommodate physical limitations may be needed.

- **1** = MINIMAL SUPERVISION OR ASSISTANCE IS REQUIRED. An individual with this rating is able to choose clothing and dress him/herself, including socks and shoes, with minimal supervision or assistance.

- **2** = Generally aware of clothing selection and dressing activities, but OCCASIONAL prompting and/or minimal physical assistance are needed. An individual with this rating requires prompting or physical assistance to complete dressing tasks at least some of the time.

- **3** = Requires SUBSTANTIAL prompting and/or physical assistance to dress. An individual with this rating generally is not able to recognize or remember when clothing selection and dressing activities are to be performed or is physically unable to manage dressing tasks. May require scheduled dressing activities or substantial physical assistance. Generally cooperative when assisted.

- **4** = TOTALLY DEPENDENT on staff for dressing and selection of clothes. An individual with this rating requires maximum assistance with all aspects of dressing due to his/her level of mental and/or physical functioning. An individual with this rating may have special physical needs that have to be accommodated in clothing design or may not be cooperative when others provide him/her physical assistance in dressing.

22. Communications: Based on informant reports, observation, and the person's record: (consider age-appropriateness for children)

- **0** = The person INDEPENDENTLY communicates in an efficient and timely manner (with or without communication devices). The person can communicate effectively with familiar and unfamiliar persons in his/her daily settings and in the larger community.

- **1** = The person RELIES ON THE VISUAL PRESENTATION of objects or pictures or on the presentation of yes/no questions to communicate needs, decisions, and choices. The person communicates adequately with familiar persons in his/her daily settings.

- **2** = The person has LIMITED COMMUNICATION ABILITIES and does not have sufficient vocabulary or efficiency to communicate needs, decisions, and choices in a timely manner. Greater time is required of familiar persons to gain an understanding of his/her needs, decisions, and choices.

- **3** = The person depends UPON SUPPORT FOR THE USE OF SIGN LANGUAGE interpreters or communication devices, or requires training to use communication devices to communicate needs, decisions, and choices. The person's method of communication may require more time of others and may require that others have special skills or knowledge in order to communicate with the person.

- **4** = The person has NO CURRENTLY INDENTIFIED METHOD TO COMMUNICATE decisions and choices to others.

23. Self-protection:

Due to the potential risk of harm to him/herself, this person may require supervision, training, or assistance to protect him/herself from harm, including that arising from physical injury and sexual exploitation. Rate the special precautions and/or supervision currently in place, if any, to ensure that the person is safe from physical or sexual exploitation. Score this item based on supports needed without regard to age.

- **0** = None required. No concerns with regard to exploitation.
- **1** = Frequent reminders or instructions are provided regarding dangers related to exploitation, but the person moves about his/her home, school, work site, neighborhood, and community without supervision or restriction.
- **2** = The person's movement beyond the boundaries of his/her home, school, or work site requires adult supervision or accompaniment of a more capable peer.

-OR-

The person is not allowed to go to certain places due to the potential of exploitation.

- **3** = The person's movement beyond the boundaries of his/her home, school, or work site requires supervision or accompaniment of a competent adult no matter where the person goes.
- **4** = Special precautions (e.g., selection of the other persons with whom the person lives, alarms on bedroom doors, exceptional care in the selection of caregivers) are in place and the person requires close supervision at all times and in all settings because the person has no ready means of alerting others should exploitation occur.

24. Ability to Evacuate (place of residence):

- **0** = Independently evacuates place of residence. An individual with this rating is able to discern the circumstances under which to evacuate his/her residence and is able to exit the building safely and promptly when circumstances warrant. An individual must have the ability to transfer and propel wheelchair independently (if wheelchair dependent).
- **1** = Minimal supervision or adaptation is required. An individual with this rating is able to discern the circumstances under which to evacuate his/her residence but requires minimal supervision during the exiting process or special adaptations to the environment (e.g., hand rails) be in place to exit safely and promptly.
- **2** = Responds to an alarm, but supervision and/or moderate physical assistance are needed. An individual with this rating requires a moderate degree of supervision or physical assistance (transfers, etc.) to exit a building in a safe and timely manner.
- **3** = Requires personal direction and/or substantial physical assistance to evacuate. An individual with this rating generally is not able to recognize or respond to an alarm in a safe and timely manner. He/she requires continuous direction or substantial physical assistance. Generally cooperative when assisted.
- **4** = Totally dependent on assistance from others for emergency evacuation of a building. An individual with this rating requires maximum assistance with all aspects of evacuation due to his/her level of mental and/or physical functioning. He/she may have special physical needs that have to be accommodated in rapid building evacuation and/or may not be cooperative when others provide him/her direction or physical assistance in exiting.

Review Notes Concerning Functional Status

Behavioral Status Section Follows

BEHAVIORAL INTERVENTION AND SUPPORT STATUS

In this section the reviewer rates the current interventions, no matter how minimal or of what type, that are actually in place to address the following six categories of problems with behavior:

- Self-injury
- Harm to others
- Property damage
- Inappropriate sexual activity
- Elopement/running away
- Any other behaviors that might lead to or have led to social or physical isolation or segregation

The reviewer should first become familiar with the types of problems with behavior identified in this section, particularly the "other" category, before starting to complete the questionnaire. It will be true in most cases that there will be no need to ask specific questions about each of these types of problems with behavior. Rather, by gathering information from the sources listed below and asking general questions, the reviewer should be able to identify what, if any, concerns there are that relate to this section. More in-depth inquiries would then be made.

RULE
If no intervention is taken in response to these types of problems with behavior, then a rating of "0" should be entered for each item in this section.

The types of interventions that the reviewer should be alert to include, but are not limited to, the following:

- Occasional verbal prompts or redirection
- Environmental modifications
- Supervision by paid staff, friends, or family members
- Social skills training
- Restrictions on movement or activities
- Behavior analysis, psychology, or mental health services
- Planned or emergency use of medication, manual or mechanical restraint, or protective equipment
- Call to and use of law enforcement to intervene in a situation
- A specialized residential arrangement such as a crisis stabilization unit, APD institution, intermediate care facility, or secure facility (e.g., the Mentally Retarded Defendant Program or other state-operated, secure facility).

When rating the interventions, the reviewer should use the following sources of information:

- Current written documentation: including progress notes, assessments, service plans, and data/reports related to services.
- Interviews/conversations with the individual and persons who know the individual best, including service providers.
- Observations of the individual in context.

If the interventions used have varied over the past 12 months, then the reviewer should use the highest level of intervention when rating an item in this section. Otherwise, the reviewer should rate the items based on the interventions in place at the time that the questionnaire is completed.

Behavioral Intervention and Support Section

Items for rating the interventions used to address problems with behavior follow. Interventions are rated, NOT the acuity (frequency, duration, or intensity) of the behavior of concern. Rate an intervention for each category of problem with behavior for which the intervention is used. For example, if psychotropic medications are prescribed to address self-injury AND property damage, then rate the interventions in both items. If, on the other hand, medications are prescribed only to address self-injury, then rate the intervention only for the self-injury item.

25. **Hurtful to Self/Self-injurious Behaviors:** In the past 12 months, has the person engaged in behavior that resulted in injury to him/ herself? Examples of this type of behavior are listed below.

a) Eye-poking
b) Bangs head
c) Bites self, mouth, hands; or cuts self
d) Rectal digging
e) Pulls own hair
f) Rumination, vomiting self-induced
g) Pica (ingestion of inedible objects)
h) Suicide threats/attempts
i) Abuse of alcohol or drugs

What, if any, supports, services, interventions, or restrictions are in place to address this behavior?

- ☐ **0** = None required. No behavior of concern in this area.
- ☐ **1** = Occasional verbal prompts, instructions, or redirection by the caregiver. No environmental modification or assistance from others is required.
- ☐ **2** = Frequent prompts, instructions, or redirection by caregiver, environmental modifications, and/or restrictions on movement may be necessary. No additional assistance from others is necessary.
- ☐ **3** = Frequent, possibly informal, but planned interventions by caregivers.

-OR-

Assistance from other people is necessary. Restrictions of the person's movements are frequently necessary.

-OR-

The person takes one psychotropic medication for control of behavior or psychiatric symptom.

-OR-

The person has been admitted to a crisis stabilization unit within the past 12 months for psychiatric reasons.

- ☐ **4** = Use of physical, mechanical, and/or chemical restraint or protective equipment.

-OR-

Use of one medication with multiple changes or use of two or more psychotropic medications and/or intensive behavioral services.

-OR-

The person is residing in a secure facility, an intensive residential treatment program, or a psychiatric hospital.

26. **Aggressive/Hurtful to Others:** In the past 12 months, has the person engaged in behavior that resulted in injury to others? Examples of aggressive/hurtful behavior toward others are listed below. Examples of target behaviors include:

a) Hits or kicks others
b) Bites others
c) Scratches, cuts, or stabs others
d) Threatens to kill/seriously harm others

What, if any, supports, services, interventions, or restrictions are in place to address this behavior?

☐ **0** = None required. No behavior of concern in this area.

☐ **1** = Occasional verbal prompts, instructions, or redirection by the caregiver. No environmental modification or assistance from others is required.

☐ **2** = Frequent prompts, instructions, or redirection by caregiver, environmental modifications, and/or restrictions on movement may be necessary. No additional assistance from others is necessary.

☐ **3** = Frequent, possibly informal, but planned interventions by caregivers.

-OR-

Assistance from other people is necessary. Restrictions of the person's movements are frequently necessary.

-OR-

The person takes one psychotropic medication for control of behavior or psychiatric symptoms.

-OR-

The person has been admitted to a crisis stabilization unit within the past 12 months for psychiatric reasons.

☐ **4** = Use of physical, mechanical, and/or chemical restraint or protective equipment.

-OR-

Use of one medication with multiple changes or use of two or more psychotropic medications and/or intensive behavioral services.

-OR-

The person is residing in a secure facility, an intensive residential treatment program, or a psychiatric hospital.

27. Destructive to Property: In the past 12 months, has the person engaged in behavior that resulted in frequent or substantial property damage? Examples of behaviors include:

a) Breaks windows
b) Destroys furniture
c) Destroys wall decorations
d) Destroys clothing
e) Destroys own or others' property
f) Steals others' property
g) Sets fires

What, if any, supports, services, interventions, or restrictions are in place to address this behavior?

☐ **0** = None required. No behavior of concern in this area.

☐ **1** = Occasional verbal prompts, instructions, or redirection by the caregiver. No environmental modification or assistance from others is required.

☐ **2** = Frequent prompts, instructions, or redirection by caregiver, environmental modifications, and/or restrictions on movement may be necessary. No additional assistance from others is necessary.

☐ **3** = Frequent, possibly informal, but planned interventions by caregivers.

-OR-

Assistance from other people is necessary. Restrictions of the person's movements are frequently necessary.

-OR-

The person takes one psychotropic medication for control of behavior or psychiatric symptoms.

-OR-

The person has been admitted to a crisis stabilization unit within the past 12 months for psychiatric reasons.

☐ **4** = Use of physical, mechanical, and/or chemical restraint or protective equipment.

-OR-

Use of one medication with multiple changes or use of two or more psychotropic medications and/or intensive behavioral services.

-OR-

The person is residing in a secure facility, an intensive residential treatment program, or a psychiatric hospital.

28. **Inappropriate Sexual Behavior:** In the past 12 months, has the person engaged in or perpetrated sexual behaviors that were or are considered to be inappropriate by others or to exceed proper social or cultural boundaries? Examples of behaviors include:

a) Unwanted touching or peeping
b) Public exposure, urination, masturbation
c) Non-consensual intercourse
d) Molestation

What, if any, supports, services, interventions, or restrictions are in place to address this behavior?

☐ **0** = None required. No behavior of concern in this area.

☐ **1** = Occasional verbal prompts, instructions, or redirection by the caregiver. No environmental modification or assistance from others is required.

☐ **2** = Frequent prompts, instructions, or redirection by caregiver, environmental modifications, and/or restrictions on movement may be necessary. No additional assistance from others is necessary.

☐ **3** = Frequent, possibly informal, but planned interventions by caregivers.

-OR-

Assistance from other people is necessary. Restrictions of the person's movements are frequently necessary.

-OR-

The person takes one psychotropic medication for control of behavior or psychiatric symptoms.

-OR-

The person has been admitted to a crisis stabilization unit within the past 12 months for psychiatric reasons.

☐ **4** = Use of physical, mechanical, and/or chemical restraint or protective equipment.

-OR-

Use of one medication with multiple changes or use of two or more psychotropic medications and/or intensive behavioral services.

-OR-

The person is residing in a secure facility, an intensive residential treatment program, or a psychiatric hospital.

29. **Running Away:** In the past 12 months, has the person has run away? This applies to persons who intentionally leave or seek opportunities to leave the home, work area, or recreation setting, even in the presence of supervision. Examples of target behaviors include:

a) Intentionally leaving without notice b) Running away/eloping

What, if any, supports, services, interventions, or restrictions are in place to address this behavior?

☐ **0** = None required. No behavior of concern in this area.

☐ **1** = Occasional verbal prompts, instructions, or redirection by the caregiver. No environmental modification or assistance from others is required.

☐ **2** = Frequent prompts, instructions, or redirection by caregiver, environmental modifications, and/or restrictions on movement may be necessary. No additional assistance from others is necessary.

☐ **3** = Frequent, possibly informal, but planned interventions by caregivers.

-OR-

Assistance from other people is necessary. Restrictions of the person's movements are frequently necessary.

-OR-

The person takes one psychotropic medication for control of behavior or psychiatric symptoms.

-OR-

The person has been admitted to a crisis stabilization unit within the past 12 months for psychiatric reasons.

☐ **4** = Use of physical, mechanical, and/or chemical restraint or protective equipment.

-OR-

Use of one medication with multiple changes or use of two or more psychotropic medications and/or intensive behavioral services.

-OR-

The person is residing in a secure facility, an intensive residential treatment program, or a psychiatric hospital.

30. Other Behaviors that May Result in Separation from Others: In the past 12 months, has the person presented another behavior not covered in items #25-29 that puts the person at risk of injury or social or physical segregation? Examples of target behaviors include:

a) Repetitive vocalizations (e.g., screaming, crying, yelling)
b) Sleep disturbances that disrupt others' sleep
c) Stereotypical rocking, twirling, hand-flicking
d) Talking or acting in ways that are socially disruptive to others

What, if any, supports, services, interventions, or restrictions are in place to address this behavior?

☐ **0 =** None required. No behavior of concern in this area.

☐ **1 =** Occasional verbal prompts, instructions, or redirection by the caregiver. No environmental modification or assistance from others is required.

☐ **2 =** Frequent prompts, instructions, or redirection by caregiver, environmental modifications, and/or restrictions on movement may be necessary. No additional assistance from others is necessary.

☐ **3 =** Frequent, possibly informal, but planned interventions by caregivers.

-OR-

Assistance from other people is necessary. Restrictions of the person's movements are frequently necessary.

-OR-

The person takes one psychotropic medication for control of behavior or psychiatric symptoms.

-OR-

The person has been admitted to a crisis stabilization unit within the past 12 months.

-OR-

Receives behavioral services from the school system (includes a person who is currently attending a Severely Emotionally Disturbed (SED) school program.

☐ **4 =** Use of physical, mechanical, and/or chemical restraint or protective equipment.

-OR-

The person is residing in a secure facility or intensive residential treatment program.

Behavioral Intervention and Support Status Follow Up Consultation

If the Behavioral Intervention and Support Status of the person is rated as level 3 or higher, then a follow up consultation should be considered using the following guidelines:

- Are the current interventions effectively addressing the identified problem with behavior?
- Is the person and/or his or her caregivers satisfied with the current state of affairs?
- Does the person and/or his or her caregivers state that no additional supports and/or services are needed?
- Are the current interventions consistent with the laws of Florida (particularly section 393.13, FS) and the rules of the agency (particularly rules 65G-4.029 -.031, FAC)?
- Are the current professional services, if any, consistent with the professional standards for the type of professional (behavior analyst, psychiatrist, psychologist, counselor) providing these services?

31a. Follow Up Consultation: Based on the answers to the questions above or other information, is a follow up consultation indicated for this person?

- **NO**: No consultation is indicated

- **YES**: A follow up consultation is indicated

If YES, identify below the type of professional indicated. For example, if psychotropic medications are involved you might recommend that a psychiatrist complete the follow up consult. If behavior analysis services are in place or are indicated, then a follow up consult by a Certified Behavior Analyst or Associate Behavior Analyst or other qualified behavior analysis professional should be considered.

31b.. Recommended type of professional:

- Psychiatrist
- Certified Associate Behavior Analyst
- Counselor
- Certified Behavior Analyst
- Psychologist
- Other - Please specify: _____

Review Notes Concerning Behavioral Status

Physical Status Section Follows

Items for rating the person's physical status follow. The first two items rate self-injury caused by self-injurious behavior and/or by aggressive behavior that results in injury to the person. Because these items address the level of injury rather than the behavior itself, these items appear and are rated in the physical status section that follows.

PHYSICAL STATUS

Ratings in the Physical Status area are concerned with life situations and physical conditions that may pose a need for medical interventions or health care for the person. The reviewer should examine health care records and interview persons who would know about the person's health status.

32. **Injury to the Person Caused by Self-injurious Behavior:** Movement of some part of the person's body that ends with contact to other parts of the person's body (might include the use of an object, such as a knife) or with solid objects. The focus of this examination is on possible injuries to this person that would require medical intervention or treatment.

☐ **0** = No episodes of self-injury.

☐ **1** = Self-injury may result in temporary redness of skin, without resulting in bruising or any other tissue damage.

☐ **2** = Self-injury results in mild bruising, scratches, swelling, or other minor temporary tissue damage (usually lasting less than 48 hours) that, if treatment is required, can be treated adequately using simple first aid.

☐ **3** = Self-injury results in broken skin requiring stitches, butterfly closure, or surgical gluing; major bruising, prolonged swelling; or other significant tissue damage that requires physician/nursing attention (cannot be treated adequately using simple first aid), and is not life threatening or likely to result in significant permanent physical damage.

-OR-

Has threatened to commit suicide within the past 12 months.

-OR-

Has health problems that are not immediately life threatening in nature due to self-induced vomiting, rumination, pica (ingestion of inedible objects/substance); or has a sleep disorder; or alcohol or drug abuse.

☐ **4** = Self-injury results in tissue breakdown, significant scarring, multiple contusions, or damage to bones or organs that requires physician attention. May be life threatening and is likely to result in permanent tissue damage.

-OR-

Has attempted suicide in the past 12 months.

-OR-

Life is threatened by self-induced vomiting, rumination, pica (ingestion in inedible objects/substances); sleep disorder; or alcohol or drug abuse.

33. Injury to the Person Caused by Aggression toward Others or Property: The focus here is on possible injuries sustained by the person during episodes of aggression directed toward others or toward property occurring within the past 12 months.

☐ **0** = No aggression toward others or property.

☐ **1** = Aggression toward others or property may result in temporary redness of skin, without resulting in any tissue damage (including bruising or swelling) or pain. Actions do not interfere significantly with social interactions or result in others avoiding the person.

☐ **2** = Aggression toward others or property results in mild bruising, scratches, swelling, or other minor temporary tissue damage (usually lasting less than 48 hours). If treatment is required, can be treated adequately using simple first aid.

-OR-

Maladaptive behavior results in the person being knocked down or hit back by the other person.

☐ **3** = Aggression toward others or property results in broken skin; major bruising, prolonged swelling; or other significant tissue damage to self that requires physician/nursing attention (cannot be treated adequately using simple first aid), and is not life threatening or likely to result in significant permanent physical damage.

-OR-

Has been injured by another person defending him/herself from the person.

-OR-

Has engaged in sexual misconduct (involving unprotected sex) with another person in the past 12 months.

☐ **4** = Aggression toward others or property results in tissue breakdown, significant scarring, multiple contusions, or damage to bones or organs of self that requires physician attention. May be life threatening and is likely to result in permanent tissue damage.

-OR-

Has engaged in sexual predatory behavior (including unprotected sex) in the past 12 months.

34. **Use of Mechanical Restraints or Protective Equipment for Maladaptive Behavior:** Mechanical restraints are devices used for the purpose of restricting a person's movement. Use of mechanical restraints is highly controlled and in many cases PROHIBITED. Positioning devices such as trays or shoulder straps are NOT considered mechanical restraints. Protective equipment for medical conditions, such as a helmet for an individual with uncontrolled seizures or an unsteady gait leading to falls, is not protective equipment for maladaptive behavior.

□ **0** = Has never been restrained or not within the past 12 months.

□ **1** = Has been restrained LESS THAN once per month in the past 12 months.

□ **2** = Has been restrained ONE OR MORE times per month in the past 12 months. Individuals with this rating may have had mechanical restraints used for the purpose of facilitating some type of urgent medical procedure or care that without the use of the restraint the procedure would not have been possible. Example: An individual is hospitalized and/or has a physician order requiring oxygen therapy, IV therapy, respiratory treatments, surgical recovery, etc. Due to the individual's behavior, the procedure would be compromised or not possible. This would be a rare occurrence and would not be implemented without the physician's justification and orders.

□ **3** = Use of mechanical restraint MORE THAN FIVE TIMES per month or WEARS some sort of PROTECTIVE EQUIPMENT (like fencing mask for pica or helmet to control self-abuse) on a regular basis (at least once per day, but less than 12 hours per day). An individual with this rating generally has behavioral issues such as hitting, throwing objects, biting, head banging, etc., that cause injury to self and others. An individual may wear protective devices, e.g., a helmet to reduce injury to the head, elbow splints, or tubes to reduce tissue damaging injury from blows of the bony part of the elbow.

□ **4** = Use of some sort of PROTECTIVE EQUIPMENT AT LEAST 12 HOURS PER DAY (fencing mask for pica or helmet to control self-abuse). An individual with this rating generally has significant tissue damage, requiring physical or mechanical restraint. An example is a person with Lesch-Nyhan syndrome.

35. **Use of Emergency Chemical Restraints:** Chemical restraint is the use of any drug to restrict or reduce function, behavior, or movement in an emergency situation. For example, a person who is agitated to the point of threatening to harm others may be administered a drug to calm him/her down.

□ **0** = Has not received drugs given in an emergency to control behavior in the past 12 months. An individual with this rating may have behavior issues; however, caregivers or the individual's coping skills are sufficient to calm down without the necessity of drug/medication administration.

□ **1** = Received medication (i.e., chemical restraint) before ANY medical or dental procedure in the past 12 months. An individual with this rating generally meets the same criteria as rating 0. However, the individual's anxiety, or pain threshold, has resulted in the use of chemical restraint prior to a medical or dental procedure.

□ **2** = Has received emergency drugs to control behavior ONE time in the past 12 months.

□ **3** = Has received emergency drugs to control behavior TWO OR THREE times in the past 12 months.

□ **4** = Has received emergency drugs to control behavior FOUR OR MORE times in the past 12 months.

36. **Use of Psychotropic Medications:** Psychotropic medications are ones taken to control psychiatric symptoms (e.g., anxiety, mood disturbances, or schizophrenia) or certain types of problem behaviors. The prescribing physician should indicate the diagnosis and specific symptoms or behavior that the medication is to control or reduce. Risks of adverse side effects are associated with many psychotropic medications. The person should be checked periodically for signs and symptoms of possible side effects. If side effects are present, the swift and appropriate protective actions should be taken. Psychotropic medications should be continued only when desired treatment effects are present and side effects are absent or minimal. An individual may or may not be taking a psychotropic drug but is taking a medication such as Benadryl, Inderal, Tegretol, or Depakote for the identified behavior or psychiatric disorder. Check with the nurse, the side effect screening records, and the Medical Administration Record [MAR] in the person's medical record.

☐ **0** = Receives NO MEDICATION to control behavior or psychiatric disorder.

☐ **1** = Receives ONE MEDICATION to control behavior or psychiatric disorder.

☐ **2** = Receives two or more medications to control behavior or a psychiatric disorder, UNCHANGED IN THE PAST YEAR.

☐ **3** = Receives two or more medications to control behavior or a psychiatric disorder, and/or the medications have been CHANGED IN THE PAST YEAR. An individual with this rating is on two or more medications to control behaviors.

☐ **4** = Receives drug therapy but is not stable on the medications or is experiencing significant side effects of the medications. May have had a series of different drug trials with dosage increases, reductions, or discontinuations within the past six months. The person may be experiencing one or more side effects of medications (e.g., involuntary muscle movements) requiring special management.

-OR-

Anyone on Reglan/Metoclopramide, regardless of the reason, has this rating.

37. Gastrointestinal Conditions (includes vomiting, reflux, heartburn, or ulcer): Suggested Sources of Information: Nurse/Patient records (N/PR), also annual health summary in the support plan and quarterly or annual nursing summaries.

☐ **0** = None. Individual has no history or diagnosis of stomach ulcer, vomiting, reflux, or any gastrointestinal concerns.

☐ **1** = OCCASIONAL episodes of gastrointestinal symptoms in absence of acute illness. Individual's health is very stabilized, only has an occasional episode of GI symptoms (two or less per month). This individual's GI distress has no current medical diagnosis.

☐ **2** = THREE OR MORE EPISODES of gastrointestinal symptoms per month. Same as rating 1, but symptoms occur three or more times a month. A documented pattern of incidents may be developing. These episodes are more likely associated with a disorder of the stomach or gastrointestinal tract instead of following an acute illness like the flu.

☐ **3** = More than SIX episodes of gastrointestinal symptoms per month.

-OR-

Individual has coughing spells unrelated to pulmonary/respiratory infections during or within 1-3 hours after a meal or during the night.

-OR-

Individual who has any history of gastrointestinal bleeding or a current diagnosis of esophageal reflux.

-OR-

The person attempts to stick his/her hand down own throat as if he/she is trying to grasp or scratch deep into the throat. This may happen at night and/or after mealtimes.

☐ **4** = Gastrointestinal condition requiring hospital admission in the past 12 months. A gastrointestinal condition could include GI bleeding, vomiting, persistent dehydration, reflux causing aspiration, intestinal infections, parasites, impaction, and/or obstruction.

38. **Seizures:** Suggested Sources of Information: N/PR (also the person's annual health summary in the support plan and quarterly or annual nursing summaries)

☐ **0** = No seizure in his/her lifetime or by history only. Self-explanatory.

☐ **1** = No seizure in the last TWO YEARS. This score indicates the individual has had a history of seizure activity but has been seizure-free for the past two years. This individual may or may not be on antiepileptic medication.

☐ **2** = Seizure activity that DOES NOT interfere with functional activity, such as work, school, and recreation.

☐ **3** = Major seizure activity that DOES interfere with functional activities, such as work, school, or recreation.

☐ **4** = Has required hospital admission or more than one emergency room visit for uncontrolled seizures or toxicity/adverse reaction to antiepileptic medication in the past 12 months.

39. **Antiepileptic Medication Use:** (NOTE: When an antiepileptic drug is prescribed specifically for behavioral concerns, rate under item #36.) Suggested Sources of Information: N or Medication Administration Record (MAR).

☐ **0** = None. Individual is not on an antiepileptic drug but may have a history of seizures.

☐ **1** = Use of a single antiepileptic drug, which has not changed in the past year. Individual has a history of or presently experiences seizure activity (no matter what classification) taking one antiepileptic drug and that medication has not changed in the past year.

☐ **2** = Use of two antiepileptic agents without any changes in the dose or drug within the past year. Same as rating 1, except two antiepileptic medications are used.

☐ **3** = Antiepileptics CHANGED in the past 12 months. Same as ratings 1 and 2, except antiepileptic medication change has occurred in the past year.

-OR-

The individual is receiving DEPAKOTE (VALPROIC ACID) in combination with any other antiepileptic medication.

☐ **4** = Has been taken to the emergency room or hospitalized for antiepileptic medication toxicity in the past 12 months. Self-explanatory.

40. **Skin Breakdown:** Suggested Sources of Information: Family or Direct Care staff (D/C) -- also MAR in medical records and quarterly or annual nursing summaries)

☐ **0** = No areas of reddened skin (particularly on buttocks, elbows, heels, hips). Skin breakdown is not a problem.

☐ **1** = Red or dusky color of skin (particularly on buttocks, elbows, heels, hips). Individual shows signs of dusky skin color that is reddened from pressure or signs of poor circulation that disappear upon change in position, especially in the areas of the buttocks, elbows, heels, and/or hips.

☐ **2** = Either currently has or has had broken skin due to unrelieved pressure (particularly on buttocks, elbows, heels, hips) in the past six months. Individual has a history or currently has areas of broken skin. Areas of susceptible skin breakdown include the ears, buttocks, elbows, heels, hips, or possible pressure areas identified by bony protrusions, especially if the individual has musculoskeletal deformities.

☐ **3** = The person actually developed a pressure ulcer that required medical attention (particularly on buttocks, elbows, heels, hips) even though his/her position was changed regularly. Same as rating 2, but the individual has required medical attention in the past six months.

☐ **4** = The skin condition required recurrent medical or surgical treatment (such as debridement, skin graft, outpatient treatment by a wound care center, etc.) or hospitalization for other related complications in the past six months. Same as ratings 1 and 2, but the individual has required hospitalization in the past six months.

NOTE: If skin breakdown is due to self-injurious behavior, then score also in the behavior area.

41. **Bowel Function:** Suggested Sources of Information: DC, N/PR (also MAR in medical records and quarterly or annual nursing summaries)

☐ **0** = No bowel elimination problems. Individual has no problems with intestinal tract. No history or present condition of constipation or diarrhea.

☐ **1** = Bowel elimination is easy to manage with diet. Individual may receive a diet modification or fiber supplement.

☐ **2** = Bowel elimination requires routine medication. Individual has slight problems with constipation, requiring intermittent or routine stool softener or other medications for improvement of elimination.

☐ **3** = Daily management of bowel elimination requires ongoing observation and preventative measures, including enemas and/or manual impaction assessment. Individual has recurrent problem with constipation, requiring between three and six suppositories per month and/or enema. Also, if the person experiences episodes of intermittent diarrhea, this score should be identified.

-OR-

Requires more than one medication to prevent constipation and/or more than three enemas per month. May require manual assessment for impaction.

☐ **4** = Any hospitalization in the past 12 months required to treat an impaction or bowel obstruction.

42. **Nutrition:** Defined as caloric or other necessary nutrient intake by mouth or by tube (other necessary nutrients include water, minerals, etc.). Maintenance of good nutrition is essential for both comprehensive management and prevention of disease. For a person with additional issues, it is critical that a medical professional who knows the person well (e.g., a nurse) be asked to clarify and define the issues. Suggested Sources of Information: Family, N/PR, Dietician Notes (D/N), (also weight record and quarterly or annual nursing summaries)

☐ **0** = Within acceptable body weight range and is able to maintain weight (e.g., weight maintenance). Requires no diet modifications, prescribed nutritional supplements, or nutritional intervention to maintain health status.

☐ **1** = Is above or below acceptable body weight range but there are no associated medical concerns such as high blood pressure, high cholesterol, chronic anemia, high triglycerides, diabetes, or kidney disease.

☐ **2** = Is well managed on a special diet recommended by a physician or nutritionist, e.g., low sodium, low purine, low fat/cholesterol, low protein, calorie controlled. The individual has a special diet prescription for health maintenance or health concerns and has been under good control within the past 12 months.

☐ **3** = Is not well managed on a special diet recommended by a physician or nutritionist and has a nutritional risk that required nutrition status monitoring within the past 12 months, or does not follow the prescribed diet. The individual has displayed unstable nutritional status episodes or trends in the past 12 months. A list of nutritional risk factors for which to monitor includes the following:

- Inability to maintain desired body weight
- Unplanned changes/trends in body weight
- A chronic medical condition that affects nutritional status (i.e., genetic/endocrine/metabolic disorder such as propionic acidemia or PKU, diabetes mellitus, anemia, renal or liver disease, gastrointestinal disorders, recurring fecal impaction, decubitus ulcer)
- Fluid intake levels specific to nutrition
- Difficulty consuming adequate intake, poor appetite, or frequent meal refusals
- Food allergies or intolerance that limit intake of major food groups
- Hyperlipidemia/hypercholesterolemia

☐ **4** = The individual is at high nutritional risk and requires intensive nutritional intervention to address any of the following conditions:

- Unplanned weight loss >10% of usual weight in past six months.

-OR-

Current body weight significantly below desired or ideal body weight (IBW), e.g., a 12-year-old weighing 39 pounds; adult weighing <90% IBW
- Morbid obesity—body weight 100 pounds greater than or twice the desired weight range
- Hospitalization and/or treatment in the past 12 months for recurrent aspiration pneumonia, choking episodes, GI bleeding, unresolved diarrhea, vomiting, or unresolved decubitus ulcer
- Inability to consume an adequate diet due to chewing or swallowing disorder
- Diagnosis of metabolic disorder with instability, e.g., on a special diet and requires ongoing monitoring with laboratory values out of range
- Low serum protein including low serum albumin
- Gastrostomy or jejunostomy tube with complications or placement in the past six months

43. **Treatments:** Automatic score of "4" if physician-prescribed procedures are required. (NOTE: Information used in determining item #43 ratings must be corroborated with physician's orders.) See: MAR in medical records and quarterly or annual nursing summaries.

☐ **0** = Does not have a condition that requires physician-prescribed procedures.

☐ **4** = Has a condition that requires physician-prescribed procedures carried out by a licensed nurse that cannot be taught and delegated to a non-licensed person. These conditions may include people in acute and/or end stages of liver, lung, heart, or kidney disease; individuals with a terminal illness such as cancer; or persons with progressive neurological disorders, such as Sanfilippo syndrome, multiple sclerosis, or Huntington's chorea, when problems with multiple systems begin occurring. Examples of interventions requiring a licensed nurse include:

- Medication therapy requiring intramuscular, intravenous injections; hemaport/irrigations
- Catheterization requiring sterile technique
- Physician-ordered treatments that cannot be delegated to a non-licensed person
- Sterile dressing/wound treatments routinely performed only in clinical settings or by licensed practitioners
- Tracheostomy that requires suction
- Ventilator dependent
- Nebulizer treatments requiring medication calculations. Person receives medicines, such as Ventolin or Theophylline, by oxygen mist nebulizer, requiring licensed nurse to calculate dosage
- Deep suction, which means entering a suction catheter 6 inches or more into or below the voice box either via tracheotomy, orally, or nasal route
- Individuals in acute or end stages of liver, lung, or kidney diseases
- Terminal illness (cancer) or persons with progressive neurological disorders (Sanfilippo syndrome, multiple sclerosis, or Huntington's chorea) when multiple systems problems begin occurring that require regular intervention by licensed personnel.

44. **Assistance in Meeting Chronic Health Care Needs:** Some persons require supervision and/or varying levels of assistance to maintain their overall health. A person may have chronic health conditions/diagnoses that are currently stable because of the supports and services he/she currently receives. Consider the individual's overall health in the following areas before answering the question below. The examples of chronic conditions listed below are those that are not captured elsewhere in this survey. Bubble-in all conditions that have been present in the last 12 months and are documented in the central record or medical records.

Cardiovascular System (heart, blood vessels)

a) ☐ High cholesterol or high triglycerides
b) ☐ Coronary artery disease
c) ☐ Congestive heart failure
d) ☐ Peripheral vascular disease w/ swelling, blueness, or redness and/or pain or stasis ulcers
e) ☐ Congenital heart disease, uncorrected
f) ☐ Heart attack
g) ☐ Recurrent angina
h) ☐ Cardiac arrhythmia
i) ☐ Poorly controlled high blood pressure
j) ☐ Thrombophlebitis
k) ☐ Cardiomyopathy
l) ☐ Uncorrected heart valve stenosis
m) ☐ Pulmonary hypertension
n) ☐ Aortic or cerebral aneurysm

Digestive System (mouth, teeth, stomach, liver, gall bladder, bowel)

o) ☐ Cirrhosis of the liver
p) ☐ Chronic hepatitis
q) ☐ Pancreatitis
r) ☐ Gallstones
s) ☐ Ulcerative colitis
t) ☐ Crohn's disease
u) ☐ Cholecystitis

Endocrine System (thyroid, pancreas, parathyroid, adrenals, pituitary, hypothalamus, thymus, ovaries, testes)

v) ☐ Diabetes mellitus
w) ☐ Diabetes insipidus
x) ☐ Conn's syndrome
y) ☐ Thyroid disease, hypothyroidism, hyperthyroidism, Grave's disease, thyrotoxicosis
z) ☐ Addison's disease

Genitourinary System (reproductive/sexual organs, kidney, bladder)

aa) ☐ Benign prostatic hypertrophy
bb) ☐ Protatitis
cc) ☐ Nephritis
dd) ☐ History of hydronephrosis
ee) ☐ Renal (kidney) failure
ff) ☐ Fibroid tumors
gg) ☐ Endometriosis
hh) ☐ Kidney stones
ii) ☐ Cystitis (urinary tract infections)
jj) ☐ Polycystic kidney disease
kk) ☐ Fibrocystic breast disease

Hematology/Immune System (blood, spleen lymph glands, bone marrow)

ll) ☐ Anemia, unresolved
mm) ☐ Aplastic anemia
nn) ☐ Pernicious anemia
oo) ☐ Thallasemia
pp) ☐ Leukemia
qq) ☐ Polycythemia vera
rr) ☐ Thrombocytopenia

ss) ☐ Sickle cell anemia
tt) ☐ Hemophilia
uu) ☐ Hodgkin's disease
vv) ☐ Lymphoma
ww) ☐ Splenectomy
xx) ☐ History of a severe allergy requiring immediate medical intervention (latex, penicillin, bee sting)

Integumentary System (skin, connective tissue, mucus membranes)
yy) ☐ Collagen diseases
zz) ☐ Systemic lupus erythematosus

Musculoskeletal System (connective tissue, muscles, bones)
aaa) ☐ Rheumatoid arthritis
bbb) ☐ Osteopenia
ccc) ☐ Paget's disease
ddd) ☐ Muscular dystrophy

Neurological System (brain, spinal cord)
eee) ☐ Huntington's disease
fff) ☐ Neuropathy
ggg) ☐ Alzheimer's disease
hhh) ☐ Tuberous sclerosis
iii) ☐ Rett syndrome
jjj) ☐ Multiple sclerosis
kkk) ☐ Myasthenia gravis
lll) ☐ Amyotropic lateral sclerosis
mmm) ☐ Polydipsia/water intoxication
nnn) ☐ Parkinson's

Respiratory System (nose, trachea, lungs)
ooo) ☐ Recurrent cyanosis
ppp) ☐ Apnea or sleep apnea
qqq) ☐ Asthma
rrr) ☐ Emphysema
sss) ☐ Pulmonary fibrosis
ttt) ☐ Chronic bronchitis
uuu) ☐ Cystic fibrosis

Other
vvv) ☐ Glaucoma

Which statement below best describes the level of assistance the person requires in meeting his/her health care needs on a daily basis?

☐ **0 =** The person meets health needs independently with or without medications and health devices.
-OR-
Has no chronic health problems.

☐ **1 =** The person meets health needs with occasional assistance or reminders to complete tasks.

☐ **2 =** The person requires daily reminders and verbal prompts to maintain health.
-OR-
Is taking 2-5 prescribed medications for any of the above conditions.

☐ **3 =** The person requires daily monitoring of health condition, daily supervision, and frequent hands-on assistance to stay healthy.
-OR-
Is taking six or more prescribed medications for any of the above conditions.

☐ **4 =** The person is totally dependent on others to stay healthy.

45. **Individual's Injuries:** Suggested Sources of Information: Quarterly or annual nursing summaries

□ **0** = No injury or minor injuries not requiring medical or nursing attention. Self-explanatory.

□ **1** = Injuries needing nursing/medical attention occurring THREE OR LESS TIMES per year. Person has sustained injuries such as bruising or cuts, requiring nursing or medical attention, but any injuries must occur three or less times in the past 12 months.

□ **2** = Injuries needing nursing/medical attention occurring FOUR TO 12 TIMES in a year. These can be due to safety problems, self-abuse, etc.

□ **3** = Injuries requiring nursing or medical attention on a monthly basis.

□ **4** = Any injury or accident, other than a fall, (e.g., airway obstruction resulting from food crammed into throat) REQUIRING HOSPITAL ADMISSION.

46. **Falls:** May be due to dizziness from medication side effects, or due to any reason. Suggested Sources of Information: Annual review, medical record, incident reports

□ **0** = No falls.

□ **1** = ONE TO THREE falls per year.

□ **2** = FOUR TO SIX falls per year.

-OR-

Wears a protective helmet to protect from injuries due to falls.

□ **3** = MORE THAN SIX falls per year.

□ **4** = Any falls that resulted in FRACTURES or HOSPITAL ADMISSION.

47. **Physician Visits/Nursing Services:** Suggested Sources of Information: Quarterly or annual nursing summaries and physician's orders.

□ **0** = No visits other than annual and quarterly medical assessments.

□ **1** = Required TWO VISITS per QUARTER on average over a one-year period.

□ **2** = Required ONE TO TWO visits PER MONTH on average to a physician or specialist.

-OR-

Required daily nursing services for reasons other than medication administration greater than 14 days continuously in the past six months.

□ **3** = Required THREE visits PER MONTH on average to a physician or specialist.

□ **4** = Required FOUR OR MORE visits PER MONTH, including emergency appointments.

48. Emergency Room Visits: Suggested Sources of Information: Quarterly or annual nursing summaries and physician's orders.

- **0** = No emergency room visits.
- **1** = Emergency room visit(s) due to physician absence or non-emergency situation.
- **2** = ONE emergency room visit in the last year for acute illness or injury.
- **3** = TWO OR MORE emergency room visits in the last year for acute illness or injury.
- **4** = ANY emergency room visits in the last year for acute illness or injury that RESULTED IN HOSPITAL ADMISSION.

49. Hospital Admissions: Suggested Sources of Information: Quarterly or annual nursing summaries and physician's orders

- **0** = No hospital admissions.
- **1** = Hospital admission for SCHEDULED SURGERY or PROCEDURE.
- **2** = Hospital admission for ACUTE ILLNESS or EMERGENCY SURGERY.
- **3** = TWO OR MORE admissions in the last six months for acute illnesses, emergency surgery, or admission through emergency department.
- **4** = Hospital ADMISSION TO ICU.

50. Days Missed at Job, School, Recreation, or Other Day Activities Due to Illness (past 12 months):

- **0** = None, or person does not attend due to guardian objections. No clinical restrictions. No days missed or the person does not attend for reasons not having to do with clinical status, such as guardian objections.
- **1** = LESS THAN TWO DAYS in a month due to clinical issues. An individual with this rating generally is able to actively participate in a job, school, recreation, or other day activities; however, due to an existing chronic, but generally stable, condition or behavioral issues, this person may be ill or have physician appointments to monitor a physical condition, receive treatment, monitor medications, etc.
- **2** = TWO TO FOUR DAYS in a month due to clinical issues. An individual with this rating generally is able to actively participate in a job, school, recreation, or other day activities; however, due to an existing chronic, but generally stable, condition or behavioral issues, this person may be ill or have physician appointments to monitor a physical condition, receive treatment, monitor medications, etc.
- **3** = FIVE TO TEN DAYS a month due to clinical issues. An individual with this rating generally has similar conditions as in 1 and 2 above; however, his/her condition is unstable or becoming progressively worse.
- **4** = MORE THAN TEN DAYS in a month due to clinical issues or does not attend due to intensity of clinical issues. An individual with this rating generally has similar conditions as in 1 and 2 above; however, his/her condition is unstable or becoming progressively worse.

Physical Status Follow Up Consultation

A follow-up consultation by a Registered Nurse is indicated when either of the following two conditions are met for the person. A follow-up consultation is indicated when:

- The Physical Status Rating for the person is determined to be a 3, 4, 5, or 6.
  [See the rating section on pages 43 - 44]

- The Physical Status Rating for the person is determined to be 1 or 2; AND, the person has indications of instability, physical decline, or medical complexities not reflected in the rating value alone.

51a. **Follow Up Consultation**: Based the criteria stated above, is a follow up consultation by a Registered Nurse indicated for this person?

☐ **NO**: No consultation is indicated

☐ **YES**: A follow up consultation is indicated

Review Notes Concerning Physical Status

APPENDIX V

Excerpted from Report to the Legislature on the Agency's Implementation of the Questionnaire for Situational Information (QSI) Assessment, submitted October 1, 2009
Full studies are available at http://apd.myflorida.com/qsi-wsc-training/

Validity and Reliability of the QSI

Section 393.0661(1) (a), F.S., requires the Agency to use an assessment instrument that is reliable and valid.

APD has had five (5) studies conducted on the QSI to determine its reliability and validity in meeting the needs of APD customers. The Agency contracted with the Florida Center for Inclusive Communities (FCIC) at the University of South Florida to coordinate and conduct these studies of the QSI. Dr. Susan Havercamp served as the principal investigator. The FCIC subcontracted with the American Association on Intellectual and Developmental Disabilities (AAIDD) and the Human Services Research Institute (HSRI) for their assistance and support in this research. AAIDD is a professional membership organization, and HSRI is a consulting firm.

Final reports have revealed that overall the QSI has met reliability and validity standards; that is, the QSI generally measures what it is intended to measure and does so consistently across time and across the assessors administering the assessment. These standards measure test-retest reliability, inter-interviewer reliability, and concurrent validity. Additionally, the findings support that the three (3) subscales within the QSI which measure a customer's functional, physical, and behavioral status possess ample face and content validity; that is, they measure the types of things that are useful in planning supports. Further, the QSI uses many of the same criteria to assess its customers that are used by other similar validated instruments, such as the Supports Intensity Scale (SIS) and the Inventory for Client and Agency Planning (ICAP).

After initially establishing an instrument's validity and reliability, developers then begin a continuing process of alternatively designing enhancements to an instrument to improve validity and reliability and then testing the extent to which the enhancements do in fact improve validity and reliability. The Agency is committed to ongoing improvement of the QSI so it meets the needs of both the Agency and its customers. Accordingly, the Agency has conducted two (2) follow-up studies with the goal of enhancing the QSI.

The results are discussed below.

Validity Studies

Validity determines whether an assessment instrument measures what it was intended to measure. For a needs assessment instrument, a validity study is conducted to determine if the instrument accurately determines the needs of the individual in the areas that it measures. For the QSI, this would be functional, behavioral, physical (health) status and the overall level of need. For example, one question to be answered might be "do the QSI's questions regarding an individual's medical circumstances accurately reflect his or her health needs"?

The QSI incorporates material from an assessment instrument previously developed by the Agency called the "Florida Status Tracking Survey" (FSTS), as well as new questions to make the assessment more comprehensive and updated. The Agency had conducted studies to assess the validity of the FSTS. These studies established acceptable construct validity (the FSTS measured the concepts it intended to measure) and concurrent validity (the FSTS accurately predicted the similar value contained in another instrument) for the FSTS.

Recent studies assessed content, face, construct, and concurrent validity of the QSI. A description of the studies and the results obtained thus far follows.

a. Content, Face and Construct Validity

Content validity is the systematic examination of the needs assessed so that items or questions selected for inclusion in an instrument represent what is intended to be measured. In the case of the QSI, the items should measure functional status, behavioral status, and physical status.

Face validity, as part of construct validity, concerns whether the assessment seems to contain the questions that pertain to the needs of people with disabilities. Construct validity is the extent to which the test or instrument measures a desired theoretical construct or trait. For the QSI, this construct would be the need for assistance or support.

The University of South Florida subcontracted with HSRI for a group of ten (10) content experts to analyze content, face, and construct validity. This group included both self-advocates and professionals in the field of developmental disabilities. The content experts were provided with a packet containing the QSI, the training manual, a brief description of the instrument's history along with a letter describing the purpose of the study, and instructions to complete the review.

Regarding content validity, the investigators concluded that "the items in each scale are representative of the topic areas. Reviewers, however, sometimes observed that the scales could be expanded to cover additional ground within a topic area [functional, behavioral, or physical status]. On balance, however, the reviewers indicate that the items within each scale amply cover essential aspects within each targeted area."

Regarding face validity, the investigators stated that the QSI's three (3) scales (functional, behavioral, and physical status) appear to measure what is intended: the items in each scale do refer to the topic area targeted.

The investigators stated that the study offers some support for the construct validity of the three (3) scales. First, the scales have both face and content validity, a requisite for having construct validity. Second, reviewers stated that the QSI's scales compared favorably with those of similar widely-used needs assessment instruments like the Supports Intensity Scale (SIS) and the Inventory for Client and Agency Planning (ICAP).[9] The investigators indicated that "construct validity for any measure is developed over time as a preponderance of evidence builds to illustrate that the measure is aligned with a targeted hypothetical construct, such as 'the need for assistance or support.'" They recommend that additional studies be done, for instance, to assess how well the QSI's scales compare to other tools like the SIS and ICAP that measure similar constructs. (Note that the concurrent validity study performed by the principal investigator found correlations between the scales of the SIS and the QSI "within the moderate range of correlation indicating a substantial relationship." Section b., below, discusses this study.)

Among reviewers' recommendations were that the QSI assessment's language be more "people first" oriented, that the scaling and weighting of questions in determining scores be reviewed, and that the QSI include more questions regarding habilitative needs, given the QSI's strong emphasis on adaptive daily living skills.

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[9] The ICAP measures both adaptive and maladaptive behaviors and gathers additional information to determine the type and amount of special assistance that people with disabilities may need. The ICAP features two sections, one each measuring adaptive behavior and maladaptive behavior.

The SIS is a tool designed to measure the relative intensity of support that an individual with a developmental disability needs to participate fully in the community. The SIS consists of three (3) sections:

- A support needs scale,
- A section related to protection and advocacy, and
- A section assessing exceptional medical and behavioral support needs.

The scaling and weighting of questions in determining scores have been reviewed through a factor analysis and repeat item analysis by the principal investigator and are discussed below. Other recommendations are currently under review by the Agency. For instance, the Agency could revise the questions in the Community Inclusion section to address habilitative needs better. These questions are not currently considered in determining a customer's level score but are useful in planning supports.

b. Concurrent Validity

Concurrent validity is a type of predictive validity and is often used to determine if two (2) similar needs assessments provide similar results in assessing needs. Concurrent validity is used to demonstrate where a test correlates well with a measure that has previously been validated. The two (2) measures may be for the same construct, or for different, but presumably related constructs. Our study examined the correlation of the QSI with the previously validated Supports Intensity Scale (SIS).

The SIS is a tool designed to measure the relative intensity of support that an individual with a developmental disability needs to participate fully in the community. The SIS consists of three (3) sections:

- A support needs scale,
- A section related to protection and advocacy, and
- A section assessing exceptional medical and behavioral support needs.

The SIS has been used as a needs assessment tool in several other states and provides a good comparison tool for validity. If the QSI correlates well with the SIS, this indicates that the instruments measure similar constructs or characteristics and would have similar applications in planning supports for people with developmental disabilities.

This concurrent validity study was conducted through an examination of the analysis of variance (ANOVA) between the QSI and the SIS for a sample of 100 individuals. The University of South Florida contracted with the American Association on Intellectual and Developmental Disabilities, who completed 100 valid SIS interviews by October 2008.

The principal investigator examined the Pearson product moment correlations[10] for the QSI functional scale, the QSI behavioral scale, the QSI physical scale, and the QSI total score with the corresponding scales and score of the SIS. This analysis compares how the change in one variable relates to the change in a corresponding variable, with a correlation of 1.0 indicating that given a change in

[10] See Glossary for definition.

one variable, the other variable changes by the same amount in the same direction. The investigator found that these correlations ranged from .59 to .66. Under widely accepted statistical standards, a correlation above .35 is desired. Since these correlations were all above the .35 threshold, they demonstrated concurrent validity and were within the moderate range of correlation indicating a substantial relationship.

Table 1. Pearson product moment correlations between the SIS and QSI

	SIS Home	SIS Com-munity	SIS Learn-ing	SIS Employ-ment	SIS Health Safety	SIS Social	SIS Section 1 Total	SIS Medical	SIS Behavior
QSI Functional	0.74	0.48	0.50	0.54	0.65	0.52	**0.66**	0.60	0.02
QSI Behavior	0.13	0.25	0.07	0.14	0.16	0.32	0.21	0.08	**0.63**
QSI Physical	0.52	0.26	0.28	0.36	0.53	0.37	0.46	**0.59**	0.15
QSI Total	0.61	0.45	0.38	0.46	0.59	0.55	**0.59**	0.54	0.39

Expected strong correlations appear in bold typeface and are shaded. Other correlations were not predicted to be strong and thus are not considered in determining concurrent validity.

Reliability Studies

For an assessment to be ***reliable*** it must first be found to be consistent in its measurement across time and across interviewers. Regarding the time element, the question to be answered is "are QSI assessment results the same when the QSI is administered to an individual at one point in time and then re-administered to the same individual at a later point in time, provided there has been no change in that individual's situation"? In regard to the interviewer element, the question to be answered is "does the assessment obtain sufficiently similar results when administered to the same individual by different interviewers"?

Three (3) reliability studies have been completed regarding the QSI: test-retest reliability, inter-interviewer reliability, and item analysis.

a. Test-Retest Reliability

Test-retest reliability is a process used to assess the consistency of a measure from one time to another. In this test, QSI assessments were administered twice by the same QSI administrator for the same individual within a 2-3 week time period. The resulting scores of the two (2) QSI assessments were compared and

analyzed. A high agreement between the scores from the two (2) assessments indicates strong test-retest reliability.

The Agency conducted 136 assessments statewide specifically for this study. Eleven (11) assessments were eliminated from the study as they had missing or unusable data. Initial data was sent to the principal investigator on August 22, 2008, and requested updated data and descriptive data was forwarded to the principal investigator on September 22, 2008.

The principal investigator examined test-retest reliability for two (2) groups: the total group of 125 valid assessments and a subsample of those who had not had major life changes during the interim between the two (2) administrations of the assessments, comprised by 111 persons. This subsample was examined since having a major life change could lead to legitimately different results in a second QSI administration.

The principal investigator reported that the test-retest reliability coefficients for both groups met or exceeded required thresholds (research standards) and were comparable to those reported for similar needs assessment instruments, including the Supports Intensity Scale (SIS), the Service Need Assessment Profile (SNAP), and the North Carolina Support Needs Assessment Profile (NC-SNAP). [11]

As shown in Table 2, scores were highly stable over the interval of several weeks for both the total group and the "no life changes" subsample. Pearson product moment correlation coefficients ranged from .86 to .94 for the entire sample and from .88 to .94 for the no life change subsample. Suggested reliability should generally be .80 or above for psychometric instruments (Anastasi and Urbina in Havercamp, 2009). As expected, test-retest correlations were greater for the subsample of individuals who did not experience a major life change during the interim between the two (2) administrations of the assessment.

[11] The SNAP is an Australian instrument designed to measure the support hours needed by individuals with disabilities living in the community. The NC-SNAP is intended to assess an individual's intensity of need for services.

Table 2. Pearson product moment correlations between QSI time 1 and time 2

	Total Sample N=125	No Life Changes N=111
Functional	.94	.94
Behavioral	.87	.90
Physical	.90	.90
Level Estimate (Overall)	.86	.88

b. Inter-Interviewer Reliability

Inter-interviewer reliability is used to assess the degree to which different raters (the QSI administrators, in the case of the QSI) give consistent ratings of the same individual using the QSI assessment.

QSI administrators completed a sample of fifty (50) assessments for use in inter-interviewer reliability studies by July 25, 2008, and the Agency provided data to the principal investigator for analysis by October 1, 2008. Results are shown in Table 3. The accepted industry standard for coefficients for inter-interviewer reliability developed by Cicchetti and Sparrow (1981) are 0-.39, Poor; .4-.59, Fair; .60-.74, Good; and .75-1.00, Excellent. The total score inter-interviewer reliability correlation was .74 (sum of scores), and the scales showed correlations at .87 for functional status, .48 for behavioral status, and .78 for physical status. The reliability correlation for the estimated level (overall score) was .45. To improve the behavioral and estimated level reliability correlations, the principal investigator suggested that APD conduct a factor analysis and repeat item analysis to further analyze how the QSI is scaled and weighted to determine the overall estimated level and specific level scores. Therefore, APD has contracted for these studies, the results of which are discussed below.

Table 3: Pearson product moment correlations (Pearson's r) between QSI time 1 and time 2 (n=50)

Scale	Pearson's r
Functional	.87
Behavioral	.48
Physical	.78
Total (Sum of scores)	.74
Estimated Level (Overall score)	.45

c. Item Analysis

Item analysis is used to show how items relate to each other and the scores to which they contribute. Internal consistency considers the contribution of a particular question or item to the overall score. In other words, how does an instrument's validity improve given the addition of a particular question? Item agreement measures the extent to which various questions or items on an assessment agree; basically, whether some questions measure the same characteristics of an individual. Item discrimination determines whether a particular question contributes to the discrimination or determination of the overall score.

In September 2008, the principal investigator began a statistical analysis of the internal consistency, item analysis, and item discrimination of the QSI. For use in this process, Agency staff provided scores from a random sample of 500 assessments to the principal investigator on September 2, 2008.

The principal investigator examined the internal consistency of the QSI's three (3) scales. Internal consistency is a measure of the similarity of elements of the items on the scale. The report revealed that the QSI functional status scale had an acceptable internal consistency coefficient. However, the other two (2) scales (behavioral and physical) had internal consistency coefficients below the accepted standard. The thirty-six (36) items of the QSI which contribute to the estimated level had an internal consistency coefficient that approached the minimum level (.84, compared to a desired threshold of .85).

The principal investigator discussed two possible reasons for these findings. One is that the physical and behavioral subscales may combine two different types of items: items which measure support needs and items describing individual

characteristics. By measuring a concept in different ways, more variation is introduced into the measurement. Another possible reason for these findings is that items in a single scale might be measuring not a single concept but more than one concept.[12] For example, the calculation of the score for the physical subscale includes some behavior-related items; possibly one or more of these items might not be related closely enough to physical health to merit inclusion in calculating the physical score.

The principal investigator suggested two strategies for improving internal consistency. One is to conduct an exploratory factor analysis. This type of study examines interrelationships among the items or questions in the QSI instrument. The results would highlight the concepts the QSI is measuring. For instance, the Agency may find that the QSI's measurement of physical or behavioral status is too broad and could be more narrowly defined. By measuring these concepts in more specific ways, the internal consistency would be improved. As will be discussed below, APD contracted for an exploratory factor analysis and found that more specific measurement of the constructs is possible and does improve internal consistency. A second strategy is to rewrite some questions to be more similar in their approach to measurement. This strategy would require more extensive readministration of the QSI and so is being considered for longer-term implementation.

Ongoing Research to Improve the Instrument

Assessment instruments generally undergo a continual process of refinement. There are a variety of ways to improve an instrument, from changes in the way that assessors are trained or administer an instrument to revisions in the scoring formula to rewording of questions or additions or deletions of questions in calculating scores.

From its base of overall good validity and reliability, to seek to enhance aspects of the QSI's inter-interviewer reliability and internal consistency, the Agency contracted for an exploratory factor analysis and a repeat item analysis as recommended by the principal investigator. These studies were completed June 30, 2009. The purpose was to summarize the interrelationships among scale items in a concise but accurate manner to better understand and measure the underlying construct (e.g., support needs). Through this analysis, the principal investigator posited that the QSI is comprised of not three (3) but nine (9) factors which she titled "Community Participation," "Self-care," "Behaviors," "Valued Social Roles," "Employment," "Physical Health," "Emergency Health Needs," "Seizure Needs," and

[12] In fact, results of a subsequent study (a factor analysis) suggest that the questions comprising the physical subscale may be measuring as many as five factors, or narrower individual concepts, supporting this theory.

"Sensory Problems." (Note that the principal investigator included as part of this analysis some of the QSI questions that were not included in the three (3) scored subscales: questions in the "Community Inclusion," "Fulfillment of Valued Adult Roles," and "Employment Information" sections.) By classifying questions into the nine (9) factors in this proposed factor solution, every question seemed to contribute to the internal consistency of the QSI scale.

The internal consistency coefficient for the QSI under this proposed factor solution is .92, above the desired threshold. The internal consistency coefficient for the individual factors ranged from .18-.92.[13]

Additionally, under this proposed factor solution, the patterns of factor intercorrelations are generally consistent with current trends in services and supports for people with intellectual and developmental disabilities. For example, according to the principal investigator, "We see strong relationships between community participation, employment, and attaining valued social roles. We also see relationships between self-care, employment, physical health, seizure needs, and sensory problems." However, she suggested that the Agency further examine a small number of the questions which did not appreciably contribute to the proposed subscales to which they had been assigned in the proposed factor solution.

Given these encouraging findings, the Agency intends to refine the QSI by contracting for further work on rescoring and rescaling the QSI. Among the questions this work would address is whether to distribute the QSI's questions differently among the three subscales, create a different set of subscales with the QSI's questions, exclude questions that do not appreciably contribute to a subscale from calculating subscale scores, or change the scoring system from its 1 to 5 range. APD expects that upon the completion of work developing a new scoring and scaling system, the existing assessments would be able to be used and would simply be rescored using the newly-developed system. The Agency would then contract for additional studies to evaluate the validity and reliability of the revised QSI instrument.

[13] As noted, the principal investigator included some items from the nonscored sections of the QSI. The .18 result was in regard what she termed the Employment factor which incorporates some of these items. There appear to be some data anomalies with one of the three items comprising this factor; when that question was deleted from the factor, the internal consistency coefficient rose to .85, at the desired threshold.

Appendix VI: Options Provided to Stakeholders for Consideration

Consumer and Family Control Framework				
No.	OPTION	A	B	C
1	Limits on spending to ensure funds last through the year (system will not pay more than this amount for services billed during this period)	Monthly (1/12 of total budget available each month)	Monthly hybrid (90% of budget allocated at beginning of each month over 12 months); 10% allocated up front)	Quarterly hybrid (80% of budget allocated at beginning of each quarter over 4 quarters); 20% allocated up front)
2	How overspending is discouraged	Periodic allocation of funds; consumer/family review of statements; WSC issues service authorizations; use of point-of-sale "swipe" cards	Periodic allocation of funds; consumer/family review of statements; WSC issues service authorizations; use of point-of-sale "swipe" cards	Periodic allocation of funds; consumer/family review of statements; use of point-of-sale "swipe" cards
3	How overspending is addressed	Work with consumer to adjust budget; require additional reviews for future changes (limit flexibility to make changes); allocate additional funds temporarily to meet critical health & safety needs; find a representative to assist in decision-making; for individuals who repeatedly overspend, require the use of a mentor paid from the individual's budget	Work with consumer to adjust budget; require additional reviews for future changes (limit flexibility to make changes); allocate additional funds temporarily to meet critical health & safety needs; find a representative to assist in decision-making; for individuals who repeatedly overspend, require the use of a mentor paid from the individual's budget	Work with consumer to adjust budget; require additional reviews for future changes (limit flexibility to make changes); allocate additional funds temporarily to meet critical health & safety needs; find a representative to assist in decision-making; for individuals who repeatedly overspend, require the use of a mentor paid from the individual's budget
4	Consumer flexibility framework (see Providers/Services/Waiver Support Coordinator/Administrative Workgroup materials for details)	Individual services maintained, though some are broadened in scope to provide greater flexibility to consumers to meet day-to-day needs (like the proposed Flexible Benefit Service will be a broader service than respite, ADT, in-home supports, etc., each is currently)	Individual services are broadened and are grouped into several service families. Once approved for one service within a family, under certain conditions (described in options below), consumers can use a service within the family without further review or approval.	Identical to Option B, except that more services are broadened and the service families are also broader.
5	Capped service amounts (hours or dollars)	Similar to current limits	Only on a limited number of services (most would not have caps)	No
6	Health & safety ("core") services prioritization required (cannot spend funds outside service families or for non-approved services within service families)	Residential habilitation, nursing, therapies	Residential habilitation only	No
7	Who issues service authorizations to begin/end services	WSC, along with area staff for certain services (for example, behavior analyst services)	WSC	Consumer/family for changes not requiring review, such as within service families under most circumstances (would require IT capabilities) & WSC, as determined by consumer/family/WSC
8	Audits conducted to detect service arrangements of concern (100% respite, no meaningful day activities for adults, unusual WSC-provider usage patterns, unusual provider billing, lack of use of therapies, etc)	Yes Yes		Yes
9	Tools for managing budgets	Online budget development tool. Combined with swipe cards or requirements for providers to submit records on amount of services provided within a certain short timeframe.	Online budget development tool. Combined with swipe cards or requirements for providers to submit records on amount of services provided within a certain short timeframe.	Online budget development tool. Combined with swipe cards or requirements for providers to submit records on amount of services provided within a certain short timeframe.
10	Training for consumers and families	Provided via website, FCC, WSC's, and as additional service	Provided via website, FCC, WSC's, and as additional service	Provided via website, FCC, WSC's, and as additional service
11	Ability to carryover funds, if Legislature and federal government permitted	None carried over	50% could be carried over for up to one year	100% could be carried over
12	Negotiation of rates	No	Yes, up to maximum in rate rule	Yes

SERVICE REVIEW/APPROVAL PROCESS				
No.	**OPTION**	**A**	**B**	**C**
	Situations requiring a review to ensure federal requirements are met and an individual's iBudget maximum is not overspent:			
1	Initial cost plan (newly enrolled on a waiver)	Yes	Yes	Yes
7	If overspent budget within last 12 months	Yes	Yes	Yes
8	Move to licensed residential facility	Yes	Yes	Yes
10	Temporary significant change in circumstances requiring increased services that could not be accommodated within current budget	Yes	Yes	Yes
11	Permanent significant change in circumstances requiring increased services that could not be accommodated within current budget	Yes	Yes	Yes
13	Extraordinary need request	Yes	Yes	Yes
2	First iBudget FL plan (for those already enrolled)	Yes	Yes	Only if using different services than were approved under current system
3	Review every 3 years	Yes	No	No
4	If adding new service family	Yes	Yes	No
5	If increasing amount of certain services	Yes--Intensive behavioral services, nursing services, therapies	Yes--Intensive behavioral services, nursing services, therapies	No
6	If decreasing amount of certain services	Yes--Intensive behavioral services, nursing services, therapies	No	No
9	Move to different living setting not requiring increased budget (though may involve budget recalculation)	Yes	Yes	No
12	Meets certain criteria	Forensic involvement, complex medical needs, complex behavioral needs, community based care child, only paid supports in person's life	Forensic involvement, community based care child	No
14	Application for one-time services (home modification, durable medical equipment, and extraordinary dental needs) if iBudget or carryover, if allowed, not sufficient to meet health & safety needs	Yes	Yes	Yes
15	Process for requesting and performing reviews	Computer-based as much as possible	Computer-based as much as possible	Computer-based as much as possible
16	Who would conduct reviews	Contracted provider, central office, and area	Central office and area	Area

QUALITY ASSURANCE PROCESS - Basic Quality and Health & Safety (1 of 2)				
Role →	Basic Quality Activities		Health & Safety	
Entity ↓	Current/Planned	Options	Current/Planned	Options
Consumers & Families			Identify health/safety concerns and notify WSC or area office (planned: online submission of comments)	Limits on flexibility in changing certain services, such as residential habilitation, nursing, or therapies
			Planned: review online central record, service logs, case notes, etc., and notify WSC or area office of any inconsistencies or concerns	
Waiver Support Coordinator	Develop support plan outlining consumer goals, medical/behavioral issues, etc.		Identify health/safety issues and address in support plan, such as through review of QSI results	
	Monitor services through contacts with consumer/family and work to adjust services as necessary		Review and act on incident reports	
	Receive training on role and responsibilities			Requirement for use of full or enhanced waiver support coordination by certain individuals (e.g., those with forensic involvement)
Quality Assurance Contractor			Monitors for health and safety issues--surfaces critical ones immediately to area; less critical issues provided in report to area	
Central Office	Monitors data to assess system performance and identify trends and develop policies and procedures to address (planned: greater effectiveness through online central records, reporting, etc.)		Reviews critical incident reports	Utilization review to identify potential health and safety issues
	Develops and makes available training for providers			Competency-based training for staff
Area Office			Reviews incident reports and corrective action plans	Competency-based training for staff
			Investigates and decertifies providers not meeting standards or in compliance with law/rule/waiver agreement	

QUALITY ASSURANCE PROCESS - Basic Quality and Health & Safety (2 of 2)				
Role →	Basic Quality Activities		Health & Safety	
Entity ↓	Current/Planned	Options	Current/Planned	Options
Certified Behavior Analyst			Consult with consumers, families, waiver support coordinators, providers, and area staff to address issues	
			Reviews progress reports and data graphs on behavior services	
Nurse			Consult with consumers, families, waiver support coordinators, providers, and area staff to address issues	Review based on QSI scores or other criteria
			May assist with group home licensure reviews from nursing perspective	
Licensure			Identifies issues through annual relicensure review	
Licensed home monitoring			Identifies issues through monthly review, including review of at least one record	
Provider enrollment	Provides basic training, background screening, review of references and qualifications, etc.			Competency-based training a requirement
Supported living coordinator			Reviews and approves supported living plans for health and safety, as well as other issues	
Questionnaire for Situational Information Assessor			Notifies area staff of significant concerns highlighted during assessment	
Providers	Train staff on proper policies/procedures		Ensures staff receives background screening	
	Establishes policies & procedures to ensure safety and monitors their implementation		Develops corrective action plans to address incidents	
Family Care Council Florida/Family Care Councils	Educate consumers and families about provider quality issues			
			Notify central/area offices about issues	
Other state agencies (Department of Children & Families, Agency for Health Care Administration)			AHCA: Coordinates waiver submission, amendment, and renewal process, which includes description of QA activities; DCF: provides verified reports of abuse/neglect	
Statewide Advocacy Councils/Local Advocacy Councils			Monitor licensed homes and other providers, notifying area offices of issues	
Advocates (Florida Developmental Disabilities Council, Advocacy Center, provider associations, etc.)			Identify individual and systemic issues and work with APD to find solutions	
Other				

QUALITY ASSURANCE PROCESS - Budget and Outcomes (1 of 2)				
Role →	Budget		Outcomes	
Entity ↓	Current/Planned	Options	Current/Planned	Options
Consumers & Families		Use budget development online tool to create budgets, ensuring that they remain within budget amount	Monitor services to determine if they're meeting outcomes (planned: a sample can indicate level of satisfaction with services and providers via National Core Indicators survey)	Training on outcomes under a more self-directed system
			Review annual reports from providers to determine if outcomes are being met.	
Waiver Support Coordinator		Use budget development online tool to create budgets, ensuring that they remain within budget amount	Work with consumer/family to identify desired outcomes	Training on outcomes under a more self-directed system
		Create corrective action plan with consumer if overspending occurs	Encourage consumer to consider other possible positive outcomes	Training for support coordinators on handling issues of poor choice-making
		Provide training to consumers/families on system processes and their opportunities and responsibilities	Review attainment of outcomes during support planning process	Procedures for waiver support coordinators to access area office support and direction in addressing problematic consumer choice-making
Quality Assurance Contractor			Monitors a portion of consumers (about 5%) for outcomes	
Central Office		Receive notice of excessive overspending		Review of support plans to assess consumer goals
		Analyze data to identify issues influencing overspending, on individual and systemic basis, and develop policies and tools to address		
Area Office		Receive notice of overspending		
		Review and approve corrective action plans to address overspending		

QUALITY ASSURANCE PROCESS - Budget and Outcomes (2 of 2)				
Role →	Budget		Outcomes	
Entity ↓	Current/Planned	Options	Current/Planned	Options
Certified Behavior Analyst			Assess whether behavior plans are achieving stated outcomes	
Nurse			Assess whether nursing services are achieving stated outcomes	
Licensure				
Licensed home monitoring				
Provider enrollment				
Supported living coordinator			Reviews implementation plans and annual reports	
Questionnaire for Situational Information Assessor				
Providers				
Family Care Council Florida/Family Care Councils				
Other state agencies (Department of Children & Families, Agency for Health Care Administration)				
Statewide Advocacy Councils/Local Advocacy Councils				
Advocates (Florida Developmental Disabilities Council, Advocacy Center, provider associations, etc.)				
Other	Primarily through gatekeeper function, overseen by AHCA			

QUALITY ASSURANCE PROCESS - Compliance (1 of 2)		
Role →	**Compliance**	
Entity ↓	**Current/Planned**	**Options**
Consumers & Families	Monitor service delivery to determine if it's complying with service plans and state/federal requirements	Training for consumers/families on provider responsibilities
Waiver Support Coordinator	Notify area office if have concerns about provider compliance with service plans, state/federal requirements, etc.	
Quality Assurance Contractor	Monitors for compliance with the handbook	Publicly share information about non-compliant providers
Central Office		Utilization review to identify provider non-compliance
		Publicly share information about non-compliant providers
Area Office		Publicly share information about non-compliant providers

QUALITY ASSURANCE PROCESS - Compliance (2 of 2)		
Role →	**Compliance**	
Entity ↓	**Current/Planned**	**Options**
Certified Behavior Analyst	Solo and agency providers' compliance with rules on behavior services	
	Monitors behavior focus and intensive behavior homes' compliance with rules	
Nurse		
Licensure	Monitors licensed home for compliance with law/rule	
Licensed home monitoring	Monitors licensed home for compliance with law/rule	
Provider enrollment	Determines compliance with law/rule prior to enrollment	
Supported living coordinator		
Questionnaire for Situational Information Assessor		
Providers		
Family Care Council Florida/Family Care Councils		
Other state agencies (Department of Children & Families, Agency for Health Care Administration)		Revise relevant assurances and the handbook to clarify expectations and responsibilities under self-directed system
Statewide Advocacy Councils/Local Advocacy Councils		
Advocates (Florida Developmental Disabilities Council, Advocacy Center, provider associations, etc.)		
Other		

iBudget Florida System Option #1 - Modified Status Quo					
Group	**Service No. (See Appendix)**	**Services Encompassed in New Service Title**	**New Service Title**	**Who Can Provide?**	**Count**
A	3	Behavior Analysis Services	Behavior Analysis	Board Certified Behavior Analyst, (Level 1, Level 2, or Level 3) AND Behavior Analyst Assistants.	1
	4	Behavior Assistant Services	Behavior Analysis	Independent Vendors (Individuals OR Employees of Agencies)	
B	6	Consumable Medical Supplies	Consumable Medical Supplies/PERS	Licensed Home Health or Hospice Agencies, Pharmacies, Medical Supply Companies, Durable Medical Equipment Suppliers and Vendors (e.g. Discount Stores, Department Stores) OR Independent Vendors	1
	14	Personal Emergency Response Systems	Consumable Medical Supplies/PERS	Licensed Electrical Contractors, Alarm System Contractors, Contract Agencies for Community Care for the Elderly (CCE), Community Care for Disabled Adults (CCDA) Programs, or Hospitals	
C	2	Adult Dental Services	Adult Dental Services	Licensed Dentists	1
D	7	Dietician Services	Dietician Services	Licensed Dieticians	1
E	9	Environmental Accessibility Adaptations	Environmental Accessibility Adaptations	Licensed General Contractors, Independent Licensed Contractors, Electricians, Plumbers, Carpenters, Architects, and Engineers	1
F	13	Personal Care Assistance	Personal Care Assistance	Licensed Home Health Agencies OR Hospice Agencies, Independent Vendors (Individuals OR Employees of Agencies)	1
G	10	In-Home Support Services	In Home Support	Independent Vendors (Individuals OR Employees of Agencies)	1
	27	Supported Living Coaching	In Home Support	Independent Vendors (Individuals OR Employees of Agencies)	
H	1	Adult Day Training	Meaningful Day	Adult Day Training Centers	1
	5	Companion Services	Meaningful Day	Licensed Home Health Agencies OR Hospice Agencies, Independent Vendors (Individuals OR Employees of Agencies)	
	26	Supported Employment	Meaningful Day	Independent Vendors, Solo Providers, OR Agency Vendors	
I	18	Residential Nursing Services	Nursing	Nurses Licensed or Registered in accordance with F.S. 464	1
	21	Skilled Nursing	Nursing	Nurses Licensed or Registered in accordance with F.S. 464	
	16	Private Duty Nursing	Nursing	Registered Nurses	
J	12	Occupational Therapy	Occupational Therapy	Licensed Occupational Therapists, Occupational Therapy Aides, OR Occupational Therapy Assistants	1
K	8	Durable Medical Equipment and Supplies	Durable Medical Equipment and Supplies	Licensed Home Health or Hospice Agencies, Pharmacies, Medical Supply Companies, Durable Medical Equipment Suppliers and Vendors (e.g. Discount Stores, Department Stores)	1
L	23	Specialized Mental Health Services	Specialized Mental Health Services	Psychiatrists, Psychologists, Clinical Social Workers, Marriage and Family Therapists, or Mental Health Counselors	1
M	15	Physical Therapy	Physical Therapy	Licensed Physical Therapists OR Physical Therapist Assistants	1
N	17	Residential Habilitation Services	Residential Habilitation Services	Transitional Living Facilities OR Residential Facilities	1
	22	Special Medical Home Care	Special Medical Home Care	Group Homes that Employ Registered Nurses, Licensed Practical Nurses, and Certified Nurse Assistants	
	20	Respite Care	Respite Care	Licensed Residential Facilities, Licensed Home Health or Hospice Agencies, Licensed Nurse Registries, Agencies that Specialize in Services for Recipients with Developmental Disabilities	
O	19	Respiratory Therapy	Respiratory Therapy	Licensed Respiratory Therapists Independent Vendors (Individuals OR Employees of Agencies)	1

iBudget Florida System Option #1 - Modified Status Quo					
Group	**Service No. (See Appendix)**	**Services Encompassed in New Service Title**	**New Service Title**	**Who Can Provide?**	**Count**
P	24	Speech Therapy	Speech Therapy	Licensed Speech Language Pathologists OR Speech Language Pathologist Assistants	1
Q	25	Support Coordination	Support Coordination	Solo OR Agency Support Coordinators	1
R	28	Transportation	Transportation	Community Transportation Coordinators for the Transportation Disadvantaged, Limited Transportation Providers, Public Transit Authorities, Group Homes, Residnetial Facilities, Adult Day Training Programs, Public / Private For Profit / Private NFP Transport	1
				SERVICE GROUP COUNT:	**18**

iBudget Florida System Option #2 - Modified Mercer Service Grouping		
Group	**Service Family**	**Service**
1	Life Skills Development	Adult Day Training
		Residential Habilitation (1/4 Hour)
		Supported Employment
		Behavior Analysis Services
		Behavior Assistant Services
		Community Training and Supports
		Mentoring
2	Environmental and Adaptive Equipment	Durable Medical Equipment and Supplies
		Environmental Accessibility Adaptations
		Personal Emergency Response Systems (Unit and Services)
3	Personal Supports	Companion Services
		In-Home Support Services
		Personal Care Assistance
		Respite Care
4	Residential Services	Residential Habilitation (Standard)
		Residential Habilitation (Behavior Focused)
		Residential Habilitation (Intensive Behavior)
		Specialized Medical Home Care
		Supported Living Coaching
		Residential Nursing
5	Support Coordination	Support Coordination
		Person Centered Planning
		Family & Guardian Training
6	Therapeutic Supports	Occupational Therapy
		Physical Therapy
		Respiratory Therapy
		Specialized Mental Health Counseling
		Speech Therapy
7	Transportation	Transportation
8	Wellness Management	Consumable Medical Supplies
		Dietician Services
		Adult Dental Services
		Private Duty Nursing
		Skilled Nursing

Current services are grouped into service families, with increased flexibility for consumers to add services within the same service family without needing APD approval (some exceptions would apply for certain medically/behaviorally-oriented services).

iBudget Florida System Option #3 - Minimalist Service Grouping			
Group	**Service Family**	**New Service Title**	**Services Encompassed in New Service Title**
1	Places to Live	Basic Residential	Residential Habilitation (Standard)
		Enhanced Residential	Residential Habilitation (Behavior Focused)
			Residential Habilitation (Intensive Behavior)
			Specialized Medical Home Care
			Residential Nursing
2	Personal Supports	Flex Benefit	Adult Day Training
			Companion Services
			In-Home Support Services
			Personal Care Assistance
			Respite Care
		Basic Supports	Support Coordination (Limited)
			Transportation
		Enhanced Supports	Behavior Analysis Services
			Behavior Assistant Services
			Community Training and Supports
			Family & Guardian Training
			Mentoring
			Person Centered Planning
			Support Coordination (Transitional)
			Support Coordination (Full)
			Supported Employment
			Supported Living Coaching
3	Wellness	Basic Wellness	Adult Dental Services
		Enhanced Wellness	Dietician Services
			Occupational Therapy
			Physical Therapy
			Private Duty Nursing
			Respiratory Therapy
			Skilled Nursing
			Specialized Mental Health Services
			Speech Therapy
4	Equipment	Equipment	Durable Medical Equipment and Supplies
			Environmental Accessibility Adaptations
			Personal Emergency Response Systems (Unit and Services)
			Consumable Medical Equipment

Most current services are broadened to provide more flexibility to consumers in meeting day-to-day needs, then grouped into service families, with increased flexibility for consumers to add services within the same service family without needing APD approval (some exceptions would apply for certain medically/behaviorally-oriented services). Service families would be broader than in the Modified Mercer option.

Appendix VII: Estimated Algorithm Impacts

ASSUMPTIONS USED FOR ESTIMATING PROPOSED ALGORITHM IMPACTS AND ALTERNATIVE ASSUMPTIONS

Appropriation for Waiver Services[1] **$ 831,943,225**

		ASSUMPTIONS USED IN APD IMPACT ANALYSES							
Funding Reserved for Temporary/Permanent Changed Needs[2]	Percentage of Total Appropriation	3%	4%	5%	6%	7%	8%	9%	10%
	Dollar Amount	$ 24,958,297	$ 33,277,729	$ 41,597,161	$ 49,916,594	$ 58,236,026	$ 66,555,458	$ 74,874,890	$ 83,194,323
Remaining Funds After Reserving for Changed Needs		$ 806,984,928	$ 798,665,496	$ 790,346,064	$ 782,026,632	$ 773,707,199	$ 765,387,767	$ 757,068,335	$ 748,748,903
Funding for Waiver Support Coordination Services[3]		$ 30,000,000	$ 30,000,000	$ 30,000,000	$ 30,000,000	$ 30,000,000	$ 30,000,000	$ 30,000,000	$ 30,000,000
One-time Expenditures[4]									
Dental Services		$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000
Durable Medical Equipment		$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000
Environmental Accessibility		$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000
Total Reserved for One-Time Expenditures		$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000
Remaining Funds after Reserving for One-time Expenditures and Waiver Support Coordination Services		$ 766,984,928	$ 758,665,496	$ 750,346,064	$ 742,026,632	$ 733,707,199	$ 725,387,767	$ 717,068,335	$ 708,748,903
Funding for Extraordinary Needs[5]		$ 230,000,000	$ 230,000,000	$ 230,000,000	$ 230,000,000	$ 230,000,000	$ 230,000,000	$ 230,000,000	$ 230,000,000
Remaining Funding for iBudgets		$ 536,984,928	$ 528,665,496	$ 520,346,064	$ 512,026,632	$ 503,707,199	$ 495,387,767	$ 487,068,335	$ 478,748,903

(1) This worksheet estimates APD appropriations for waiver services based on FY 2009-2010 funding and projected federal match percenta
(2) This analysis depicts the assumptions APD used in estimating algorithm impacts as well as some alternative assumptions. APD assumed that only 3% would set aside for changed needs based on expenditure history. APD will obtain an actuarial analysis of the amount of funding to be reserved for temporary/permanent changed needs, one-time expenditures, and extraordinary needs.

(3) To allow exploration of options for waiver support coordination services and because waiver support coordination is a required service, APD removed waiver support coordination funding from the model and will add back the required amounts to waiver support coordination services to each consumer's budget.
(4) These are estimated based on historical expenditures.
(5) These are estimated based on historical expenditures for consumers whose expenditures were in the highest or lowest 4.7% in Fiscal Year 2007-08, who were receiving intensive behavioral services, and whose expenditures for core services may lead them to require extraordinary need funding.

Estimated Impact of the Algorithm--iBudget Mean v. FY08-09 Adjusted Expenditure Mean by Age and Living Setting					
Age Group	**Living Setting**	**Consumers**	**iBudget Mean (Average)**	**FY08-09 Adjusted Expenditure Mean (Average)**	**Difference**
Adults	Family Home	7,194	$14,751	$13,938	$813
	Independent & Supported Living	2,725	$28,589	$23,338	$5,251
	APD-Licensed Foster/Group Home; non-APD-licensed congregate home	3,899	$54,770	$47,991	$6,779
	Residential Habilitation Center	42	$65,174	$47,560	$17,614
	Total	**13,860**	**$28,882**	**$25,468**	**$3,415**
Children	Family Home	4,452	$9,759	$8,903	$856
	Independent & Supported Living	82	$22,229	$24,933	($2,704)
	APD-Licensed Foster/Group Home; non-APD-licensed congregate home	602	$41,271	$51,178	($9,907)
	Residential Habilitation Center	4	$70,336	$97,197	($26,860)
	Total	**5,140**	**$13,696**	**$14,178**	**($483)**
Total	Family Home	11,646	$12,843	$12,013	$830
	Independent & Supported Living	2,807	$28,403	$23,385	$5,018
	APD-Licensed Foster/Group Home; non-APD-licensed congregate home	4,501	$52,964	$48,417	$4,547
	Residential Habilitation Center	46	$65,623	$51,876	$13,746
TOTAL		**19,000**	**$24,774**	**$22,414**	**$236**

NOTES:

(1) These are ESTIMATED impacts based on assumptions APD has made regarding funding appropriated by the Legislature for waiver services and the funding required for one-time expenditures, individuals with changed needs, and individuals with extraordinary needs. APD will obtain an actuarial review of the allocation of funding for individuals with extraordinary needs, changed needs, and one-time needs, which may lead to different results than depicted here.

(2) This analysis assumes full implementation. However, APD is proposing a phase-in approach where some, if not all, individuals are transitioned gradually to their iBudgets. Thus any reductions or increases would be gradual.

(3) These are averages of the estimated impacts. Impacts by individual will vary.

(4) Consumers excluded from these analyses are those whose expenditures were not considered in building the algorithm because they had fewer than 12 months' worth of services, triggered data accuracy audits, or had expenditures among the very lowest and highest roughly 4.7%. There are also consumers who have extraordinary needs so unusual that models cannot and are not intended to predict their needs. APD intends to have a systematic review process to determine whether extraordinary need funding is appropriate. Thus some consumers who might be considered to have extraordinary needs were excluded from this analysis (those receiving intensive behavioral services or whose iBudgets were lower than their FY08-09 funding for certain core health and safety services, such as Residential Habilitation or nursing services; since each consumer's situation will be reviewed individually, these consumers may or may not receive extraordinary need funding). However, other consumers included in this analysis may also have extraordinary needs and eventually receive additional funding for that purpose. For example, children who do not live in a family home received disproportionately more decreases than increases compared to other groups; each child in this situation would be evaluated carefully to see whether he or she qualified for additional funding. Note that all requests for additional funds would receive thorough review.

(5) FY08-09 expenditures were adjusted to make them comparable by removing one-time expenditures and eliminated services. Neither FY08-09 expenditures or the model prediction include waiver support coordination funding or residential habilitation geographic differentials, which will be added back in at current rates. FY08-09 expenditures were also adjusted to account for the deficit spending from that year.

Estimated Impact of the Algorithm		
Change Range	**Number of Clients**	**Percent**
Increase less than 5%	853	4.5%
Increase 5%-10%	664	3.5%
Increase 10%-25%	1,868	9.8%
Increase 25%-50%	2,230	11.7%
Increase 50%-75%	1,395	7.3%
Increase 75%-100%	913	4.8%
Increase more than 100%	4,166	21.9%
Decrease less than 5%	767	4.0%
Decrease 5%-10%	2,339	12.3%
Decrease 10%-25%	305	1.6%
Decrease 25%-50%	2,270	11.9%
Decrease 50%-75%	1,070	5.6%
Decrease 75%-100%	160	0.8%
TOTAL	**19,000**	**100.0%**

NOTES:

(1) These are ESTIMATED impacts based on assumptions APD has made regarding funding appropriated by the Legislature for waiver services and the funding required for one-time expenditures, individuals with changed needs, and individuals with extraordinary needs. APD will obtain an actuarial review of the allocation of funding for individuals with extraordinary needs, changed needs, and one-time needs, which may lead to different results than depicted here.

(2) This analysis assumes full implementation. However, APD is proposing a phase-in approach where some, if not all, individuals are transitioned gradually to their iBudgets. Thus any reductions or increases would be gradual.

(3) Consumers excluded from this analysis are those whose expenditures were not considered in building the algorithm because they had fewer than 12 months' worth of services, triggered data accuracy audits, or had expenditures among the very lowest and highest roughly 4.7%. There are also consumers who have extraordinary needs so unusual that models cannot and are not intended to predict their needs. APD intends to have a systematic review process to determine whether extraordinary need funding is appropriate. Thus some consumers who might be considered to have extraordinary needs were excluded from this analysis (those receiving intensive behavioral services or whose iBudgets were lower than their FY08-09 funding for certain core health and safety services, such as Residential Habilitation or nursing services; since each consumer's situation will be reviewed individually, these consumers may or may not receive extraordinary need funding). However, other consumers included in this analysis may also have extraordinary needs and eventually receive additional funding for that purpose. Note that all requests for additional funds would receive thorough review.

(4) Increases and decreases are determined by comparing the algorithm prediction under certain assumptions to adjusted FY08-09 expenditures. FY08-09 expenditures were adjusted to make them comparable by removing one-time expenditures and eliminated services. Neither FY08-09 expenditures nor the model prediction include waiver support coordination funding or residential habilitation geographic differentials, which will be added back in at current rates. FY08-09 expenditures were also adjusted to account for the deficit spending from that year.

Estimated Impact of the Algorithm - Change vs. Adjusted FY2008-08 Expenditures by Age and Living Setting										
Age Group	**Living Setting**	**Change**	**Consumers**	**Percent of Total Consumers in Sample**	**Change**	**Consumers**	**Percent of Total Consumers in Sample**	**Change**	**Consumers**	**Percent of Total Consumers in Sample**
Adults	Family Home	Increase	4,458	23.5%	Decrease	2,736	14.4%	Total	7,194	37.9%
	Independent Living/ Supported Living	Increase	1,943	10.2%	Decrease	782	4.1%	Total	2,725	14.3%
	APD-Licensed Foster/Group Home; non-APD-licensed congregate home	Increase	2,807	14.8%	Decrease	1,092	5.7%	Total	3,899	20.5%
	Residential Habilitation Center	Increase	39	0.2%	Decrease	3	0.0%	Total	42	0.2%
	Total	Increase	**9,247**	**48.7%**	Decrease	**4,613**	**24.3%**	Total	**13,860**	72.9%
Children	Family Home	Increase	2,656	14.0%	Decrease	1,796	9.5%	Total	4,452	23.4%
	Independent Living/ Supported Living	Increase	39	0.2%	Decrease	43	0.2%	Total	82	0.4%
	APD-Licensed Foster/Group Home; non-APD-licensed congregate home	Increase	145	0.8%	Decrease	457	2.4%	Total	602	3.2%
	Residential Habilitation Center	Increase	2	0.0%	Decrease	2	0.0%	Total	4	0.0%
	Total	Increase	**2,842**	**15.0%**	Decrease	**2,298**	**12.1%**	Total	**5,140**	27.1%
All	Family Home	Increase	7,114	37.4%	Decrease	4,532	23.9%	Total	11,646	61.3%
	Independent Living/ Supported Living	Increase	1,982	10.4%	Decrease	825	4.3%	Total	2,807	14.8%
	APD-Licensed Foster/Group Home; non-APD-licensed congregate home	Increase	2,952	15.5%	Decrease	1,549	8.2%	Total	4,501	23.7%
	Residential Habilitation Center	Increase	41	0.2%	Decrease	5	0.0%	Total	46	0.2%
TOTAL		Increase	**12,089**	**63.6%**	Decrease	**6,911**	**36.4%**	**Total**	**19,000**	**100.0%**

NOTES:

(1) These are ESTIMATED impacts based on assumptions APD has made regarding funding appropriated by the Legislature for waiver services and the funding required for one-time expenditures, individuals with changed needs, and individuals with extraordinary needs. APD will obtain an actuarial review of the allocation of funding for individuals with extraordinary needs, changed needs, and one-time needs, which may lead to different results than depicted here.

(2) This analysis assumes full implementation. However, APD is proposing a phase-in approach where some, if not all, individuals are transitioned gradually to their iBudgets. Thus any reductions or increases would be gradual.

(3) Consumers excluded from these analyses are those whose expenditures were not considered in building the algorithm because they had fewer than 12 months' worth of services, triggered data accuracy audits, or had expenditures among the very lowest and highest roughly 4.7%. There are also consumers who have extraordinary needs so unusual that models cannot and are not intended to predict their needs. APD intends to have a systematic review process to determine whether extraordinary need funding is appropriate. Thus some consumers who might be considered to have extraordinary needs were excluded from this analysis (those receiving intensive behavioral services or whose iBudgets were lower than their FY08-09 funding for certain core health and safety services, such as Residential Habilitation or nursing services; since each consumer's situation will be reviewed individually, these consumers may or may not receive extraordinary need funding). However, other consumers included in this analysis may also have extraordinary needs and eventually receive additional funding for that purpose. For example, children who do not live in a family home received disproportionately more decreases

than increases compared to other groups; each child in this situation would be evaluated carefully to see whether he or she qualified for additional funding. Note that all requests for additional funds would receive thorough review.

(4) Increases and decreases are determined by comparing the algorithm prediction under certain assumptions to adjusted FY08-09 expenditures. FY08-09 expenditures were adjusted to make them comparable by removing one-time expenditures and eliminated services. Neither FY08-09 expenditures or the model prediction include waiver support coordination funding, which will be added back in at current rates. FY08-09 expenditures were also adjusted to account for the deficit spending from that year.

Two-Year Phase In Schedule: Annual Budget Amounts						
Adjusted FY0809 Expenditures	*50% iBudget/50% Prior FY Expenditures*	*100% iBudget**	*20% iBudget/80% Prior FY Expenditures*	*40% iBudget/60% Prior FY Expenditures*	*60% iBudget/40% Prior FY Expenditures*	*100% iBudget**
$762	$4,040	$7,317	$2,073	$3,384	$4,695	$7,317
$861	$4,755	$8,650	$2,419	$3,976	$5,534	$8,650
$937	$6,561	$12,185	$3,187	$5,436	$7,686	$12,185
$1,022	$5,332	$9,642	$2,746	$4,470	$6,194	$9,642
$1,893	$3,938	$5,983	$2,711	$3,529	$4,347	$5,983
$2,062	$8,212	$14,363	$4,522	$6,982	$9,443	$14,363
$2,173	$7,014	$11,856	$4,109	$6,046	$7,983	$11,856
$2,237	$2,461	$2,685	$2,326	$2,416	$2,506	$2,685
$3,487	$9,432	$15,377	$5,865	$8,243	$10,621	$15,377
$3,872	$6,021	$8,169	$4,732	$5,591	$6,450	$8,169
$3,924	$6,438	$8,952	$4,930	$5,935	$6,941	$8,952
$4,377	$5,374	$6,371	$4,776	$5,175	$5,573	$6,371
$5,566	$7,469	$9,372	$6,327	$7,088	$7,850	$9,372
$6,138	$14,448	$22,758	$9,462	$12,786	$16,110	$22,758
$6,946	$9,657	$12,368	$8,030	$9,115	$10,199	$12,368
$7,444	$10,202	$12,960	$8,547	$9,650	$10,754	$12,960
$7,865	$6,037	$4,208	$7,134	$6,402	$5,671	$4,208
$9,474	$16,054	$22,633	$12,106	$14,738	$17,370	$22,633
$10,185	$16,125	$22,065	$12,561	$14,937	$17,313	$22,065
$11,379	$10,338	$9,296	$10,963	$10,546	$10,129	$9,296
$11,467	$13,159	$14,851	$12,144	$12,821	$13,497	$14,851
$11,679	$7,242	$2,805	$9,904	$8,129	$6,355	$2,805
$11,868	$13,755	$15,642	$12,623	$13,378	$14,132	$15,642
$11,999	$17,316	$22,633	$14,126	$16,252	$18,379	$22,633
$13,375	$18,356	$23,338	$15,367	$17,360	$19,353	$23,338
$16,330	$18,414	$20,499	$17,164	$17,998	$18,831	$20,499
$19,641	$13,684	$7,728	$17,258	$14,876	$12,493	$7,728
$19,765	$32,374	$44,983	$24,809	$29,852	$34,896	$44,983
$21,163	$34,169	$47,175	$26,366	$31,568	$36,770	$47,175
$22,706	$29,430	$36,155	$25,396	$28,086	$30,775	$36,155
$23,102	$17,424	$11,745	$20,831	$18,559	$16,288	$11,745
$26,999	$19,109	$11,219	$23,843	$20,687	$17,531	$11,219
$27,290	$26,564	$25,839	$27,000	$26,710	$26,419	$25,839
$29,050	$35,302	$41,555	$31,551	$34,052	$36,553	$41,555
$29,879	$32,427	$34,975	$30,898	$31,917	$32,937	$34,975
$30,306	$26,200	$22,094	$28,663	$27,021	$25,379	$22,094
$33,316	$47,419	$61,521	$38,957	$44,598	$50,239	$61,521
$33,745	$52,238	$70,731	$41,142	$48,539	$55,936	$70,731
$34,711	$48,123	$61,535	$40,076	$45,441	$50,806	$61,535
$39,311	$37,016	$34,722	$38,393	$37,475	$36,557	$34,722
$43,646	$34,745	$25,844	$40,086	$36,525	$32,965	$25,844
$45,437	$47,226	$49,015	$46,153	$46,868	$47,584	$49,015
$45,900	$34,267	$22,633	$41,247	$36,593	$31,940	$22,633
$48,637	$52,055	$55,473	$50,005	$51,372	$52,739	$55,473
$51,323	$45,562	$39,801	$49,019	$46,714	$44,410	$39,801
$52,462	$56,411	$60,360	$54,041	$55,621	$57,201	$60,360
$54,575	$51,991	$49,406	$53,541	$52,508	$51,474	$49,406
$73,107	$68,991	$64,876	$71,460	$69,814	$68,168	$64,876
$74,480	$70,337	$66,194	$72,823	$71,166	$69,508	$66,194
$79,675	$75,697	$71,719	$78,084	$76,493	$74,901	$71,719

(1) These are ESTIMATED impacts based on assumptions APD has made regarding funding appropriated by the Legislature for waiver services and the funding required for one-time expenditures, individuals with changed needs, and individuals with extraordinary needs. APD will obtain an actuarial review of these assumptions, which may lead to different results than depicted here.

(2) Some consumers receiving reductions under this analysis may have extraordinary needs and receive additional funding for that purpose. Note that all requests for additional funds would receive thorough review.

(3) This analysis presents just two phase-in schedules. Other phase-in schedules and approaches are possible.

(4) FY08-09 expenditures were adjusted to make them comparable by removing one-time expenditures and eliminated services. Neither FY08-09 expenditures or the model prediction include waiver support coordination funding or residential habilitation geographic differentials, which will be added back in at current rates. FY08-09 expenditures were also adjusted to account for the deficit spending from that year.

Appendix VIII: Services Currently Available Under Tier Waivers

Waiver Services Summary		
Service Name	**Tiers 1, 2, and 3**	**Tier 4 Waiver**
Adult Day Training	Yes	Yes
Adult Dental Services	Yes	-
Behavior Analysis Services	Yes	Yes
Behavior Assistant Services	Yes	Yes
Companion Services	Yes	Yes
Consumable Medical Supplies	Yes	Yes
Dietician Services	Yes	-
Durable Medical Equipment and Supplies	Yes	-
Environmental Accessibility Adaptations	Yes	Yes
In-Home Support Services	Yes	Yes
Occupational Therapy	Yes	-
Personal Care Assistance	Yes	-
Personal Emergency Response Systems	Yes	Yes
Physical Therapy	Yes	-
Private Duty Nursing	Yes	-
Residential Habilitation Services	Yes	-
Residential Nursing Services	Yes	-
Respiratory Therapy	Yes	-
Respite Care	Yes	Yes
Skilled Nursing	Yes	-
Special Medical Home Care	Yes	-
Specialized Mental Health Services	Yes	-
Speech Therapy	Yes	-
Support Coordination	Yes	Yes
Supported Employment	Yes	Yes
Supported Living Coaching	Yes	Yes
Transportation	Yes	Yes

Appendix IX: Suggested Statutory Changes to Implement Individual Budgets

393.xxxx Individual Budgeting.— The Legislature finds that improved financial management of the existing Home and Community Based Services (HCBS) waiver service delivery system is necessary in order to avoid deficits that delay or prevent the provision of services to individuals on the waiting list for enrollment into the HCBS waiver. The Legislature finds that clients and their families should have greater flexibility in choosing which services best allow them to live in their community within the limits of an established budget. Therefore, the Legislature intends that the Agency for Persons with Disabilities, in consultation with the Agency for Health Care Administration, develop and implement a comprehensive redesign of the service delivery system using individual budgets, or iBudgets, as the basis for allocating funds appropriated for the HCBS waiver among eligible enrolled clients.

(1) The agency shall establish an individual budget, referred to as an iBudget, for each individual served by the Home and Community-Based Services waiver prior to the development of the individual's support plan. The iBudget process allocates the agency's appropriated funds among eligible, enrolled clients. The iBudget process shall include provisions necessary to achieve the following: enhanced client choice within a specified service package, appropriate assessment strategies, an efficient consumer budgeting and billing process that contains reconciliation and monitoring components, a redefined role for support coordinators that avoids potential conflicts of interest, a flexible and streamlined service review process, and a methodology and process that ensures that available funds are allocated to each client in an equitable manner based on the client's level of need, as determined by the variables in the allocation algorithm.

(a) In developing each client's iBudget, the agency shall use an allocation algorithm and methodology approved by the Legislative Budget Commission. This algorithm and methodology may consider information from a formal assessment instrument which has been determined by the agency to be valid and reliable, and other assessment processes in addition to other individual characteristics determined by the agency to have a statistically-validated relationship to the individual's level of need for services provided through the HCBS waiver. The agency may identify individuals who have exceptional circumstances such that the application of a uniform algorithm is inappropriate and utilize an alternate process to develop an iBudget for these individuals. In any case, a client's expenditures for waiver services may not exceed the limits of his or her total iBudget. Rates for any or all services established through Agency for Health Care Administration rules may be designated as maximum rather than fixed amounts for individuals who receive an iBudget.

(b) Prior to allocating funds appropriated for the Home and Community Based Services waiver services pursuant to the algorithm required in paragraph (a), the agency shall reserve funds for the following eligible, enrolled clients:

1. Clients whose exceptional circumstances will place their health and safety or that of their caregivers or the public in immediate, serious jeopardy without an increase to their iBudget as determined by the algorithm. Their budget amounts shall be determined utilizing an alternate methodology as provided in paragraph (a).

2. Clients who have significant, unanticipated increases in service needs that seriously jeopardize their health and safety, or that of their caregivers, or the public due to substantial changes in circumstances including, but not limited to, permanent or long-term loss or incapacity of a caregiver or a significant change in medical or functional status, which requires greater services on a permanent or long-term basis that cannot be accommodated within the individual's iBudget. For purposes of this subparagraph, the term "long-term" shall apply to a period of twelve or more continuous months.

3. Clients who have a significant need for supports or services of a temporary or one-time nature that cannot be accommodated within the client's iBudget. This might include, but not be limited to, environmental modifications, durable medical equipment, services to address the temporary loss of support from a caregiver, or special services or treatment for a condition where the service or treatment is expected to ameliorate the underlying condition.

The agency shall determine the amount to be reserved pursuant to this paragraph based on recommendations of an independent actuary.

(2) The Agency for Health Care Administration, in consultation with the agency, shall seek federal approval, including amending current waivers and requesting a new waiver, and amend contracts as necessary to implement the iBudget system to serve eligible, enrolled clients through the Home and Community-Based Services waiver and the Consumer-Directed Care Plus program.

(3) (a) The agency may phase-in the iBudget system. The agency shall design the phase-in process to ensure that no client experiences more than one half of any expected overall increase or decrease to their existing cost plan during the first year they are provided an iBudget.

(b) While the agency is transitioning to full implementation of the iBudget system, the agency may continue to serve some untransitioned eligible, enrolled clients under the four-tiered waiver system while they await transitioning into the iBudget system.

(4) Clients must utilize all available State Plan Medicaid services, school-based services, private insurance and other benefits, and any other resources that may be available to the client before using funds from their iBudget to pay for supports and services.

(5) The agency shall ensure that clients and caregivers have access to training and education to inform them about the iBudget system and enhance their ability for self-direction. Such training shall be offered in a variety of formats and at a minimum address the policies and processes of the iBudget system; the roles and responsibilities of consumers, caregivers, waiver support coordinators, providers, and the agency; information available to help in decision-making; and examples of supports and resources available in the community.

(6) The agency shall collect data to evaluate the implementation and outcomes of the iBudget system.

(7) The agency and the Agency for Health Care Administration may adopt rules specifying criteria and processes for clients to access reserved funds for extraordinary needs, temporarily or permanently changed needs, and one-time needs and processes and requirements for selection and review of services, development of support and cost plans, and management of iBudgets as needed to administer this section.