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ODDS OREGON NEEDS ASSESSMENT (ONA) PILOT TESTING ANALYSIS RESULTS

DRAFT

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1. INTRODUCTION

The Office of Developmental Disability Services (ODDS) within the Oregon Department of Human Services is required to conduct a functional needs assessment to inform the individual support plan (ISP) for any individual receiving Medicaid funded supports through an ODDS program. The 2013 Oregon Legislature (under SB 5529) directed ODDS to implement a single, uniform needs assessment tool, requiring it to “be evidence-based and consider broad stakeholder input.” As a single tool, the assessment is intended to be the basis for an Individual Support Plan (ISP), identifying strengths, needs, preferences and risks to be addressed. It also needs to establish whether individuals meet the Intermediate Care Facility for Individuals with Intellectual Disabilities (ICF-IID) level of care (LOC) criteria, mandated for participation in a waiver or Community First Choice (K plan).

To meet these requirements, ODDS contracted with Mission Analytics Group, Inc. (Mission Analytics), in partnership with HCBS Strategies and George Washington University (GWU), to review, revise, test and validate a uniform assessment tool. Mission Analytics’ work was coordinated through the ReBAR (Restructuring Budgets, Assessments and Rates) staff at ODDS. Early in 2016, ReBAR and the Mission Analytics team developed a revised needs assessment called the Oregon Needs Assessment or ONA.

<u>ONA Development Timeline</u>	
January 2016 – March 2016:	Tool development
April 2016 – May 2016:	Training and tool revision/clarification
June 2016 – September 2016:	Electronic system development and testing; support material development/revision
October 2016 – April 2017:	Field testing assessments
April 2017 – May 2017:	Data analysis

The ONA builds on a draft “One Tool” assessment developed by ODDS staff. The One Tool integrated items previously split across existing tools, including the Adult Needs Assessment (ANA), the Child Needs Assessment (CNA), the Risk Identification tool, and the LOC criteria. An initial review of the One Tool indicated that some sections had weaknesses that could affect the validity and reliability of the tool.¹ There were items that addressed multiple underlying concepts, including items that combined possible barriers in physical ability, cognitive ability and behavior. Support needs were commonly blended with assessments of impairments, preferences or strengths. In addition, response options were sometimes difficult to interpret.

In developing the ONA, the team sought to maintain all of the key domains incorporated into the One Tool and its original source tools. For some domains, One Tool items were left essentially

¹ See *ODDS Tool Validation Design Report* submitted to ODDS by Mission Analytics Group, Inc., December 29, 2015.

unchanged. In other domains, items were replaced with validated items from other tools, especially the Functional Assessment Standardized Items (FASI) from the Testing Experience and Functional Tools (TEFT). The Centers for Medicare and Medicaid Services (CMS) funded TEFT as an effort to improve the standardization of assessment data and payment across post-acute care settings. The FASI represents a catalogue of items with established reliability available in the public domain. If the FASI did not include items for the domain/concept, we drew on items developed by HCBS Strategies in Minnesota (MnCHOICES) and Colorado for assessments of individuals with intellectual or developmental disabilities. As needed, we also created new items that blended aspects from different tools.

This draft report provides findings from pilot testing of the ONA tool with approximately 520 individuals. The findings are structured around the major sections within the ONA, with a particular focus on the Activities of Daily Living (ADLs), Instrumental Activities of Daily Living (IADLs), Behaviors, and Medical assessment sections. For each section of the tool, we provide:

- Non-missing response frequency by item for adults and children
- Inter-rater reliability by item
- Issues about the items as captured in the Frequently Asked Questions (FAQ) during the pilot testing or through a survey conducted at the end of the testing
- Discussion of the share of missing answers and the degree to which response categories are populated
- Discussion on any section restructuring or skip patterns that could be incorporated to shorten the tool.

The rest of the report is split into three major sections. Section 2 reviews the pilot testing and the characteristics of individuals included in the assessment findings. Sections 3 through 6 provides the findings for the core sections (ADLs, IADLs, Behaviors, Medical). Section 7 briefly highlights some issues identified for items in other sections of the ONA. Frequencies by item split by adults and children and by setting, are included as separate attachments.

2. ONA PILOT TESTING

The ONA pilot testing was conducted between October 2016 and April 2017 by ReBAR assessors. In this section, we briefly review the training and testing process and then provide descriptive statistics for the samples of individuals whose assessments are included in this pilot.

Training

Dr. Steve Lutzky (HCBS Strategies), Dr. Barbara Gage (GWU) Mr. Andrew Cieslinski (HCBS Strategies) and Linda Darr (ODDS Assessment Unit Trainer) developed training materials for the ONA pilot. These included a two-day in-person training (in March 2016), a Training Manual, a blog for Frequently Asked Questions (FAQ) and supporting materials, such as the ONA Coding Decision Tree (see next page). In addition, the assessor team met bi-weekly with the Mission Analytics team during the testing period to review questions as they arose. Midway through the testing period, the assessment team participated in a quiz to better identify areas where there might be inconsistencies between assessors.

Pilot Testing Process

A. Pilot Group Selection and Scheduling

ONA assessments were conducted with a randomly selected subsample of individuals who would normally receive an annual assessment during the pilot period. Program managers from Community Developmental Disabilities Programs (CDDP) and brokerage agencies in ten counties selected individuals whose ISPs were due to be conducted within the 60 days after the pilot testing period, so between December 2016 and June 2017. Adults and children of all ages in all service elements were selected to participate.

Scheduling was handled through service coordinators, to select a date and location convenient for the individual and invite the people the individual wanted to have included at the assessment meeting. Because the assessment was part of the ISP planning process, service coordinators were required to participate in the meeting. Individuals who could not represent themselves were allowed to be represented by their guardian or other representative, but the assessors had to meet the individuals as well.

Prior to the interview, ReBAR assessors reviewed the files of the individuals to be assessed. The file review allowed the assessors to determine information such as the presence of a Behavior Support Plan or diagnosed medical condition. Some ONA items could be completed based on the file review and confirmed at the interview as appropriate. In some cases, the assessor did additional file review or other follow up after the interview.

B. Reliability Analysis

An important factor in selecting data elements is that they be valid and reliable. Validity tells you that you are measuring what you intend to measure. Validity can be measured in several ways, including face validity (subjective agreement that an element is measuring the intended concept) or more empirically, by looking at the correlations between similar elements.

Reliability means that a data element is clear enough or strong enough in its psychometric properties, that 95 out of 100 tests will produce the same results. One type of reliability testing that is critical to elements used in public policy is inter-rater reliability – will 2 people evaluating the same client at the same time reach the same conclusion in rating them, 95 out of 100 times? To meet this standard, an element needs to be clearly defined and not be open to varying interpretations.

For cases selected for inter-rater reliability (IRR), a lead and a second assessor participated together. Both assessors reviewed the files. One interviewer conducted the interview and the other took notes and scored. The lead and second assessor alternated who led the interviews. In the IRR cases, both assessors scored the ONA independently.

Methods

In Sections 3 through 6, we present the frequencies of responses, separately for adults and children, on central sections of the ONA, focusing on items that are key to the functional assessment but that require potentially subjective responses. (Frequencies for all items are provided as an attachment.) These frequencies provide an indication of the share of individuals who are independent, who need different levels of support or who are dependent for specific activities. However, the frequencies also indicate how well the items work in terms of the usefulness of the different response categories and how often items were missed, refused, not applicable or not attempted. Along with these results, we provide information from the FAQ and other sources where assessors and other reviewers had questions of interpretation or recommendations on how to improve the items.

A central goal of the pilot testing was to establish the inter-rater reliability of the tool. This is a measure of the extent to which two assessors assign the same rating on the item, which is an indicator that the data collected is an accurate representation of the concept being measured. Inter-rater reliability was tested using paired data results for items with scaled response options in the ODDS tool. Data were collected on 53 clients by paired assessors. To test the reliability, Intra-class correlation coefficients (ICC) were used to measure the agreement between the pairs of assessors. Two types of agreement were examined – individual consistency (are the scores of both assessors in the same direction) and absolute agreement (do both assessors give the same scores). Both pieces of information are important to understanding the extent of reliability given the absence of a gold standard response. A two-way random effects model was used which assumes that the individuals were rated by the same group of assessors. This method was selected since all clients were assessed by a small, trained group of assessors. The individual ICC are reported because they show the expected results when individual assessments will be done in the field. The upper and lower bound confidence intervals (CI) are also reported. The ICC should

be between the upper and lower bounds of the CI to be significant at the 95 percent CI. ICC scores can be interpreted as follows:²

- Less than 0.5 indicates poor reliability
- Between 0.5 and 0.75 indicates moderate reliability
- Between 0.75 and 0.9 indicate good reliability
- Greater than 0.9 indicates excellent reliability.

IRR results are provided for ADLs, IADLs and Behaviors, at the end of Sections 3-5.

Characteristics of Completed Assessments

In the pilot testing, ONAs were completed with 521 individuals. We treat these assessments as falling into two samples: 468 individuals with one assessment completed and 53 individuals with two assessments completed (the IRR sample).

As shown in Table 1, the IRR sample is nearly identical to the overall sample in gender, with both split about 61% male and 39% female. Both samples capture a range of ages, although the IRR sample is somewhat older, with only 25% under age 25 compared to 37% in the rest of the sample.

Table 1: Gender and Age of Pilot Sample

Characteristic	One Assessment	Two Assessments (IRR)
Total Count (N)	468	53
Gender		
Male	61%	62%
Female	39%	38%
Age Category		
Under 12 years old	12%	8%
12 to 17 years old	11%	9%
18 to 24 years old	14%	8%
25 to 34 years old	21%	19%
35 to 54 years old	24%	32%
55 or older	19%	25%

² For finding and interpreting ICC scores, see Koo, Terry K, and Mae Y. Li. 2016. "A Guideline of Selecting and Reporting Intraclass Correlation Coefficients for Reliability Research." *Journal of Chiropractic Medicine* 15 (2): 155-163.

By service setting (Table 2), the largest share of the pilot assessments were completed for adults in 24 hour residential settings (SE50). Among the main sample, adult in-home service settings (SE149 and SE49) together represented a similar share to the 24 hour residential setting, although foster care for adults accounted for a larger share of the IRR sample. Most children in both samples received in-home services. Finally, as shown in Table 3, pilot assessments were conducted with residents of 22 counties. Not surprisingly, the largest share were completed for Multnomah County residents, especially among the IRR sample.

Table 2: Service Settings of Pilot Sample

Setting	One Assessment	Two Assessments (IRR)
Total Count (N)	468	53
Adults		
24hr Residential (SE50)	29%	34%
Brokerage In-Home (SE149)	18%	13%
Comp In-Home (SE49)	12%	6%
Foster Care (SE58)	15%	25%
Supported Living (SE51)	4%	6%
Children		
Children's In-Home Services (SE151)	17%	11%
Children's Intensive In-Home (SE145)	1%	0%
Children's Residential System (SE142)	2%	0%
Comp In-Home (SE49)	0%	0%
Foster Care (SE58)	2%	6%
Other	>1%	0%
SACU (SE141)	>1%	0%

Finally, as shown in Table 3, pilot assessments were conducted with residents of 22 counties. Not surprisingly, the largest share were completed for Multnomah County residents, especially among the IRR sample.

Table 3: County of Residence of Pilot Sample

County	One Assessment	Two Assessments (IRR)
Total Count (N)	468	53
Baker	1%	0%
Benton	1%	0%
Clackamas	1%	2%
Clatsop	>1%	6%
Columbia	2%	0%
Coos*	4%	4%
Crook	>1%	0%
Curry*	1%	0%
Deschutes	>1%	0%
Douglas	1%	0%
Jackson*	11%	6%
Josephine	1%	6%
Klamath*	9%	0%
Lane*	4%	8%
Lincoln*	1%	0%
Linn*	12%	9%
Marion*	8%	2%
Multnomah*	26%	38%
Polk	1%	0%
Umatilla*	3%	4%
Washington*	12%	15%
Yamhill	>1%	0%
<Unknown>	1%	2%

*Indicates counties whose CDDP or brokerage agencies participated.

3. FINDINGS ON ADLS ITEMS (SECTION V)

The ONA is designed to replace a number of different instruments, including the LOC, the ANA/CNA and the risk assessment. As a tool for service planning, many of the early sections of the ONA are included to provide background information and guidance to the assessor. This includes Assessment and Demographic Information, Communication and Memory and Cognition (Sections I through III). A fourth section, Community and Social, was initially included to promote person-centered planning. However, in the course of the pilot testing, the ReBAR assessors concluded these items were appropriate for the ISP development but were not as helpful for a functional assessment managed through the ReBAR team.

Section V, ADLs and IADLs, therefore represents the first section that provides critical information for the functional assessment and level of care. This section, along with Section VI Behaviors and Section VIII, are the central focus for our analysis of the reliability and validity of the ONA items.

Given the number of items, we focus first on the ADLs by topic. Frequencies are not included for preferences and guidance for individuals providing support on any item area. Before continuing to findings on IADLs, we present a reliability analysis on the ADL items.

ADLs: 8. Dressing

The questions in this section are drawn from the FASI, with the exception of the last question (“Is skill training needed to support independence?”), which was included from the Colorado tool to support person-centered planning. Table 4 provides the response frequency for these items in the main sample, split by adults and children. The frequencies show the percent for each response, excluding any missing cases. Out of the 468 assessments in the main sample, three had only text responses and are not included in the frequencies. That leaves a maximum of 360 responses for adults and 105 for children. Because of missing values, the actual number of responses varies from item to item. Questions on preferences (8e) and guidance for individuals providing support (8f) are excluded from the table.

Table 4: Dressing Items: Response Frequencies, Core Sample, Adults and Children

a) Upper Body Dressing - The ability to put on and remove shirt or pajama top. Includes buttoning, if applicable.	Frequencies (Adults)	Frequencies (Children)
	N = 357	N = 100
Independent	28.6	11.0
Setup or clean-up assistance	24.6	18.0
Supervision or touching assistance	11.2	18.0
Partial/moderate assistance	16.0	30.0
Substantial/maximal assistance	7.8	14.0
Dependent	11.8	9.0
Person refused	0.0	0.0
Not applicable	0.0	0.0
Not attempted	0.0	0.0

b) Lower Body Dressing – The ability to dress and undress below the waist, including fasteners. Does not include footwear.	N = 356	N = 100
Independent	30.9	13.0
Setup or clean-up assistance	21.9	15.0
Supervision or touching assistance	12.4	18.0
Partial/moderate assistance	12.1	29.0
Substantial/maximal assistance	8.4	14.0
Dependent	14.3	11.0
Person refused	0.0	0.0
Not applicable	0.0	0.0
Not attempted	0.0	0.0
c) Putting on/taking off footwear – The ability to put on and take off socks and shoes or other footwear that are appropriate for safe mobility	N = 356	N = 100
Independent	42.7	16.0
Setup or clean-up assistance	12.4	4.0
Supervision or touching assistance	7.3	15.0
Partial/moderate assistance	13.2	36.0
Substantial/maximal assistance	7.3	16.0
Dependent	16.8	13.0
Person refused	0.0	0.0
Not applicable	0.3	0.0
Not attempted	0.0	0.0
d) How often does the individual require assistance with dressing more than five times per day?	N = 342	N = 98
Never	88.6	82.7
Less than once per month	0.6	3.1
Less than once per week	0.3	1.0
About once per week	2.6	4.1
More than once per week	2.6	1.0
Daily	5.3	8.2
g) Is skill training needed to increase independence?	N = 316	N = 92
Yes	6.3	34.8
No	93.7	65.2

A. Are all response categories needed/populated?

For the dressing items, we rarely observe the non-scored responses Person refused, Not Applicable, and Not Attempted. Not Applicable was used once, for footwear.

On item 8d, the lower frequency support levels (less than once a month, less than once per week) are rarely used, especially for adults.

B. Can the clarity of these items be improved?

These items are referenced in the FAQs in the context of what is considered appropriate clothing. The FAQs state that reminders to wear *appropriate* clothing are considered a setup or clean-up activity, as opposed to the ability to dress. This item was once again referenced in regard to confusion on undressing/dressing as relates to toileting. Toileting is covered in another part of the assessment, and the FAQs state that changing clothes for toileting should not be captured here. However, the need to change clothing due to soiled garments is captured in this section (item 8d).

There is a higher frequency of partial/moderate assistance responses and a lower frequency of independent responses for children compared to adults. These differences may suggest difficulty in disentangling age-associated developmental status from functional limitations for children. These questions are skipped for children under the age of 4 (which removed three children from the frequencies).

C. Can the section be shortened by eliminating questions or reordering for skip patterns?

No one question in this section can preclude the possibility that a consumer may have the need for another support captured by another item in this section. These questions measure different, but related concepts, as evidenced by the varying frequencies for each item.

The skill training question is missing the most responses out of this section, with approximately 12% of adults and 10% of children with missing responses. This section is blanked out for children under 4.

ADLs: 9. Transferring and Positioning

As with the Dressing section, most of the Transferring and Positioning items are drawn from the FASI, with the exception of the last question (“Is skill training needed to support independence?”), which was included from the Colorado tool to support person-centered planning. Table 5 provides the response frequency for these items in the main sample, split by adults (out of 360) and children (out of 105). The frequencies show the percent for each response, excluding any missing cases and exclusions. For this section, the items are skipped for children under 3 (one assessment). Because of missing values, the number of responses varies from item to item. Questions on preferences (9f) and guidance for individuals providing support (9g) are excluded from the table.

Table 5: Transferring and Positioning Items: Response Frequencies, Core Sample, Adults and Children

a) Roll left and right – The ability to roll from lying on back to left and right side, and return to lying on back.	Frequencies (Adults)	Frequencies (Children)
	N = 352	N = 102
Independent	88.6	94.1
Setup or clean-up assistance	0.0	0.0
Supervision or touching assistance	0.3	0.0
Partial/moderate assistance	2.8	2.9
Substantial/maximal assistance	1.1	0.0
Dependent	6.5	2.9
Person refused	0.0	0.0
Not applicable	0.3	0.0
Not attempted due to medical condition or safety concerns	0.3	0.0
b) Sit to lying – The ability to move from sitting on side of bed to lying flat on bed.	N = 349	N = 102
Independent	85.7	94.1
Setup or clean-up assistance	0.6	0.0
Supervision or touching assistance	1.4	1.0
Partial/moderate assistance	2.3	0.0
Substantial/maximal assistance	2.0	0.0
Dependent	7.5	4.9
Person refused	0.0	0.0
Not applicable	0.3	0.0
Not attempted due to medical condition or safety concerns	0.3	0.0
c) Lying to sitting on side of bed – The ability to safely move from lying on the back to sitting on the side of the bed with feet flat on the floor, and with no back support.	N = 342	N = 102
Independent	81.0	92.2
Setup or clean-up assistance	0.9	0.0
Supervision or touching assistance	2.1	0.0
Partial/moderate assistance	3.8	2.0
Substantial/maximal assistance	2.3	1.0
Dependent	9.1	4.9
Person refused	0.0	0.0
Not applicable	0.3	0.0
Not attempted due to medical condition or safety concerns	0.6	0.0
d) Sit to stand – The ability to safely come to a standing position from sitting in a chair or on the side of the bed.	N = 348	N = 101
Independent	71.6	88.1
Setup or clean-up assistance	1.4	0.0
Supervision or touching assistance	4.9	0.0
Partial/moderate assistance	8.6	3.0
Substantial/maximal assistance	3.7	3.0

Dependent	6.0	5.0
Person refused	0.0	0.0
Not applicable	1.4	1.0
Not attempted due to medical condition or safety concerns	2.3	0.0
e) Chair/bed to chair transfer: The ability to safely transfer to and from a bed to a chair (or wheelchair).	N = 350	N = 101
Independent	43.1	52.5
Setup or clean-up assistance	1.1	0.0
Supervision or touching assistance	4.6	2.0
Partial/moderate assistance	3.4	0.0
Substantial/maximal assistance	4.0	2.0
Dependent	8.0	5.9
Person refused	0.0	0.0
Not applicable	35.7	39.6
Not attempted due to medical condition or safety concerns	0.0	0.0
h) Is skill training needed to increase independence?	N = 320	N = 96
Yes	0.0	1.0
No	100.0	99.0

A. Can the clarity of these items be improved?

Unlike the Dressing section, responses for adults and children were consistent. Note that this section is skipped for children under the age of 3.

No questions were posed regarding the transfer questions by assessors. In the post-pilot survey, a respondent questioned the reasoning behind marking answers for every question if an individual is independent for the entire section.

On item 9e, chair/bed transfer, there appears to be some confusion for individuals who do not use a wheelchair based on the mix of “Independent” and “Not Applicable” responses.

B. Are all response categories needed/populated?

Although most of the items had 71% or higher Independent and 6 to 8% Dependent, there was a range of responses between the two extremes. Among the non-response categories, Refused was never used, and Not Applicable was rarely used. A few cases were reported as Not Attempted due to a medical condition or safety concern. These responses may need to be distinguished from other non-responses. Yes to skill training was only answered once.

C. Can the section be shortened by eliminating questions or reordering for skip patterns?

Except for chair/bed transfer (9e) where there may have been some confusion, there were high frequencies of Independent for these items. There may be a strategy to identify Independent on all items. The variation in responses suggests a consumer may have different needs for support across the items in this section.

As in the last section, the skill training item is missing the most responses.

ADLs: 10. Mobility

As with the previous two sections, most of the Mobility items are drawn from the FASI (items 10 a-l). Along with the skill training question, the section includes two additional questions from the Colorado instrument (pink headings, items 10m and n) that assess risk of falls. For this section, the items are skipped for children under 3 (one assessment). For individuals who walk, items a-h are asked, along with m, n and q. (Questions on preferences and guidance for individuals providing support, items 10o and 10p are excluded from frequencies.)

Table 6: Mobility Items: Response Frequencies, Core Sample, Adults and Children

a) Does the person walk?	Frequencies (Adults)	Frequencies (Children)
	N = 352	N = 101
No, and walking goal is not indicated	7.1	1.0
No, and walking is indicated in future	1.7	3.0
Yes	91.2	96.0
b) Walks 10 feet: Once standing, the ability to walk at least 10 feet in a room, corridor, or similar space.	N = 318	N = 98
Independent	75.8	89.8
Setup or clean-up assistance	0.3	0.0
Supervision or touching assistance	16.4	3.1
Partial/moderate assistance	4.4	6.1
Substantial/maximal assistance	2.2	1.0
Dependent	0.6	0.0
Person refused	0.0	0.0
Not applicable	0.3	0.0
Not attempted due to medical condition or safety concerns	0.0	0.0
Skipped because answered alternative item	0.0	0.0
c) Walks 50 feet with two turns: Once standing, the ability to walk at least 50 feet and make two turns.	N = 317	N = 96
Independent	69.1	87.5
Setup or clean-up assistance	0.6	0.0
Supervision or touching assistance	19.6	3.1
Partial/moderate assistance	4.7	8.3
Substantial/maximal assistance	1.9	0.0
Dependent	0.6	1.0
Person refused	0.3	0.0
Not applicable	1.3	0.0
Not attempted due to medical condition or safety concerns	1.9	0.0
Skipped because answered alternative item	0.0	0.0

d) Walks 150 feet: Once standing, the ability to walk at least 150 feet in a corridor or similar space.	N = 316	N = 96
Independent	64.6	84.3
Setup or clean-up assistance	1.3	0.0
Supervision or touching assistance	18.4	4.2
Partial/moderate assistance	6.0	6.3
Substantial/maximal assistance	1.9	2.1
Dependent	1.6	1.0
Person refused	0.6	0.0
Not applicable	1.6	0.0
Not attempted due to medical condition or safety concerns	4.1	2.1
Skipped because answered alternative item	0.0	0.0
e) Step onto/off a curb: The ability to step on/off a curb or up and down one step.	N = 316	N = 95
Independent	55.1	72.6
Setup or clean-up assistance	1.3	1.1
Supervision or touching assistance	21.2	13.7
Partial/moderate assistance	15.2	10.5
Substantial/maximal assistance	2.5	0.0
Dependent	1.0	2.1
Person refused	0.0	0.0
Not applicable	1.3	0.0
Not attempted due to medical condition or safety concerns	2.5	0.0
Skipped because answered alternative item	0.0	0.0
f) 4 steps: The ability to go up and down four steps with or without a rail.	N = 315	N = 95
Independent	54.6	67.4
Setup or clean-up assistance	1.0	2.1
Supervision or touching assistance	18.7	19.0
Partial/moderate assistance	11.4	6.3
Substantial/maximal assistance	2.2	2.1
Dependent	2.2	2.1
Person refused	0.0	0.0
Not applicable	1.9	1.1
Not attempted due to medical condition or safety concerns	7.9	0.0
Skipped because answered alternative item	0.0	0.0
g) 12 steps: The ability to go up and down 12 steps with or without a rail.	N = 317	N = 97
Independent	51.4	65.0
Setup or clean-up assistance	1.6	2.1
Supervision or touching assistance	15.8	18.6
Partial/moderate assistance	7.9	8.3
Substantial/maximal assistance	1.0	1.0
Dependent	1.3	3.1
Person refused	0.6	0.0
Not applicable	3.2	1.0

Not attempted due to medical condition or safety concerns	17.4	0.0
Skipped because answered alternative item	0.0	0.0
h) Walks indoors: From room to room, around furniture and other obstacles.	N = 314	N = 94
Independent	72.3	77.7
Setup or clean-up assistance	2.2	2.1
Supervision or touching assistance	17.2	13.8
Partial/moderate assistance	3.8	5.3
Substantial/maximal assistance	3.2	1.1
Dependent	0.6	0.0
Person refused	0.0	0.0
Not applicable	0.3	0.0
Not attempted due to medical condition or safety concerns	0.3	0.0
Skipped because answered alternative item	0.0	0.0
i) Does the person use a wheelchair or scooter?	N = 345	N = 100
Yes, currently uses	20.6	10.0
No, does not use	79.1	90.0
No, unmet need	0.3	0.0
k) Wheels 50 feet with two turns: Once seated in wheelchair/scooter, the ability to wheel at least 50 feet and make two turns.	N = 72	N = 10
Independent	6.9	0.0
Setup or clean-up assistance	0.0	0.0
Supervision or touching assistance	5.5	0.0
Partial/moderate assistance	2.7	0.0
Substantial/maximal assistance	15.1	0.0
Dependent	64.3	100.0
Person refused	0.0	0.0
Not applicable	1.4	0.0
Not attempted due to medical condition or safety concerns	4.1	0.0
Skipped because answered alternative item	0.0	0.0
l) Wheels 150 feet: Once seated in wheelchair/scooter, the ability to wheel at least 150 feet in a corridor or similar space.	N = 72	N = 11
Independent	4.2	0.0
Setup or clean-up assistance	0.0	0.0
Supervision or touching assistance	6.9	0.0
Partial/moderate assistance	2.8	0.0
Substantial/maximal assistance	11.1	0.0
Dependent	70.8	90.9
Person refused	0.0	0.0
Not applicable	0.0	9.1
Not attempted due to medical condition or safety concerns	4.2	0.0
Skipped because answered alternative item	0.0	0.0

m) Has the individual had two or more falls in the past year? RISK ITEM	N = 344	N = 102
No	66.9	69.6
Yes	31.4	28.4
Unknown	1.7	2.0
n) Has the individual ever had fall(s) that resulted in major injury? RISK ITEM	N = 345	N = 101
No	65.5	78.2
Yes	31.3	18.8
Unknown	3.2	3.0
q) Is skill training needed to increase independence?	N = 316	N = 91
Yes	1.9	9.9
No	98.1	90.1

A. Can the clarity of these items be improved?

Responses for adults and children were largely consistent, with children generally showing higher frequency of Independent. Note that this section is skipped for children under the age of 3.

There was some discussion regarding the walking sections in reference to how one would score for a blind individual. For an individual who is legally blind and needs a support person to walk with them arm in arm, though they may bear weight just fine, it is recommended for assessors to score as supervision/cueing. A respondent on the post-pilot survey indicated that an individual may be independent on all of these items, and should thus be precluded from answering questions in the section.

B. Are all response categories needed/populated?

Compared to previous sections, there is much greater variability in the responses on these items, with most response options populated. There are also a high number of cases where items are not scored due to medical or safety concerns.

The skip patterns appear effective, as no assessor populated the Skipped because answered alternative item answer category. However, Not applicable was used in a few cases on items a-h, even though these questions should only have been answered for individuals who walk.

Note also that the wheelchair mobility questions (items k and l) are answered for everyone using a wheelchair, whether or not they also walk. Out of the 72 individuals who use or need a wheelchair, 40 also walk.

Finally, the skill training item (applicable to all individuals) is again missing the most responses. However, for the first time here, we do see more use of the Yes response, especially for children.

C. Can the section be shortened by eliminating questions or reordering for skip patterns?

There is a high frequency of Independent responses on even the harder items, and this frequency is higher for the easier tasks. Therefore, a skip pattern could be introduced to use the hardest

mobility question to identify independent individuals on other items– one such question could be 10d – Walks 150 feet. All individuals independent on 10d were found to be independent on 10b, and nearly all were independent on 10c. The questions on steps (10e-10g) could also be reordered. A similar skip pattern could be put in place for individuals in wheelchairs (e.g. for item l), though very few individuals (<10) are independent in wheeling 150 feet.

ADLs: 11. Eating and Tube Feeding

The initial Eating and Tube Feeding items are again drawn from the FASI, except for item 11f on skill training (from the Colorado tool). The section also includes a set of risk items, indicated with pink headings, largely drawn from previous Oregon tools. The frequencies exclude the check box items for parenteral/IV feeding, feeding tubes and mechanically altered foods. Item 11b is skipped for children under 4.

Table 7: Eating and Tube Feeding Items: Response Frequencies, Core Sample, Adults and Children

b) Eating – The ability to use suitable utensils to bring food to the mouth and swallow food once the meal is presented on a table/tray. Includes modified food consistency.	Frequencies (Adults)	Frequencies (Children)
	N = 355	N = 99
Independent	41.7	28.3
Setup or clean-up assistance	5.9	2.0
Supervision or touching assistance	36.3	47.5
Partial/moderate assistance	5.4	12.1
Substantial/maximal assistance	2.5	4.0
Dependent	5.6	2.0
Person refused	0.0	0.0
Not applicable	0.6	3.0
Not attempted due to medical condition or safety concerns	2.0	0.0
c) Tube Feeding – The ability to manage all equipment/supplies related to obtaining nutrition.	N = 344	N = 101
Independent	0.6	2.0
Setup or clean-up assistance	0.0	0.0
Supervision or touching assistance	0.3	0.0
Partial/moderate assistance	0.0	0.0
Substantial/maximal assistance	0.0	0.0
Dependent	4.9	6.9
Person refused	0.0	0.0
Not applicable	94.2	91.1
Not attempted due to medical condition or safety concerns	0.0	0.0
f) Is skill training needed to increase independence?	N = 309	N = 97
Yes	3.2	20.6
No	96.8	79.4

h) Does the individual refuse food or liquids because of food preferences or sensory issues, such as texture or taste? RISK ITEM	N = 345	N = 102
Yes	30.4	61.8
No	69.6	38.2
i) Does the individual drool excessively? RISK ITEM	N = 349	N = 100
Yes	6.9	12.0
No	93.1	88.0
j) Does the individual complain of chest pain, heartburn, or have small, frequent vomiting (especially after meals) or unusual burping (happens frequently or sounds wet)? RISK ITEM	N = 352	N = 101
Yes	33.2	23.8
No	66.8	76.2
k) Has the individual required intravenous (IV) fluids due to dehydration in the past year? RISK ITEM	N = 351	N = 101
Yes	5.4	3.0
No	94.6	97.0

A. Can the clarity of these items be improved?

Assessors indicated confusion on whether or not to score cutting food into small bites as a mechanical alteration (item 11a, not shown). Food that has to be pureed, blended or mashed should be scored as mechanically altered, but no foods that must be cut should be scored as such. For g, a multiple answer question about signs or symptoms of a possible swallowing disorder (not shown), assessors asked about whether this question includes just foods the individual eats (pureed etc.), or foods they want to eat. Tool designers urged assessors to consider the reason for food modification (i.e. to score as if it is any type of food – assessing risk for aspiration, choking, or swallowing disorders).

Responses on the survey indicated the suggestion for a possible skip pattern triggered by deeming the individual independent of supports.

As with the dressing items, the share Independent on Eating was much lower for children than for adults, even though the question was not asked for children under 4 (excludes three cases). These differences, combined with the high level of skill training for children, may suggest difficulty in disentangling age-associated developmental status from functional limitations for children.

B. Are all response categories needed/populated?

Person refused was not observed for these items, although Not applicable and Not attempted due to medical condition were populated.

Tube Feeding (11c) was scored as Not applicable in most cases, indicating the absence of a skip to only use this question if feeding tube is used. Among those with feeding tubes, most individuals were scored as Dependent or Independent, with few intermediate categories.

The skill training item (applicable to all individuals) is again missing the most responses. However, the share that scored Yes rose to 21% for children.

C. Can the section be shortened by eliminating questions or reordering for skip patterns?

The tube feeding question should be skipped for individuals without feeding tubes.

ADLs: 12. Elimination

The Elimination section is largely a mix of questions from the FASI and risk assessment items. For selected FASI items (12c and 12f), additional response items were included to reflect the role of the current support program (highlighted in green). Toileting questions are skipped for children under 4.

Table 8: Elimination Items: Response Frequencies, Core Sample, Adults and Children

	Frequencies (Adults)	Frequencies (Children)
a) Toileting – The ability to maintain perineal hygiene, adjust clothes before and after using the toilet, commode, bedpan, or urinal. If managing an ostomy, include wiping the opening but not managing equipment.	N = 354	N = 100
Independent	42.7	23.0
Setup or clean-up assistance	11.0	11.0
Supervision or touching assistance	7.6	10.0
Partial/moderate assistance	13.0	25.0
Substantial/maximal assistance	9.0	12.0
Dependent	11.3	11.0
Person refused	0.3	1.0
Not applicable	3.4	6.0
Not attempted	1.7	1.0
b) Toilet transfer – The ability to safely get on and off a toilet or commode.	N = 350	N = 99
Independent	74.9	80.8
Setup or clean-up assistance	1.1	2.0
Supervision or touching assistance	3.4	3.0
Partial/moderate assistance	3.4	5.1
Substantial/maximal assistance	3.1	2.0
Dependent	4.9	1.0
Person refused	0.3	1.0
Not applicable	6.0	5.1
Not attempted	2.9	0.0
c) Indicate the frequency of bladder incontinence:	N = 350	N = 99
Continent (no documented incontinence)	51.7	45.5
Continent due to existing support/program	1.1	2.0
Stress incontinence only – bladder (e.g. when coughing or jumping)	0.6	0.0
Incontinent less than daily	16.0	20.2
Incontinent daily (at least once a day)	16.3	17.2

Always incontinent	13.1	15.2
No urine output (e.g. renal failure)	0.0	0.0
Not applicable (e.g. indwelling catheter)	1.1	0.0
d) Does the individual require assistance with managing equipment related to bladder incontinence (e.g. urinal, bedpan, indwelling catheter, intermittent catheterization, incontinence pads/undergarments)	N = 169	N = 54
Yes	63.3	74.1
No	36.7	25.9
e) Is a toileting program (e.g. scheduled toileting or prompted voiding) currently being used to manage the individual's urinary continence?	N = 169	N = 54
Yes	34.9	48.2
No	65.1	51.9
f) Indicate the frequency of bowel incontinence	N = 347	N = 99
Continent (no documented incontinence)	62.8	58.6
Continent due to existing support/program	1.1	5.1
Incontinent less than daily	18.4	12.1
Incontinent daily (at least once a day)	8.7	10.1
Always incontinent	8.9	14.1
No bowel output	0.0	0.0
Not applicable (e.g. indwelling catheter)	0.0	0.0
g) Does the individual require assistance with managing equipment related to bowel incontinence (e.g. ostomy, incontinence pads/undergarments)?	N = 130	N = 40
Yes	73.9	80.0
No	26.2	20.0
h) Is a bowel program currently being used to manage the individual's bowel continence?	N = 127	N = 41
Yes	31.5	56.1
No	68.5	43.9
k) Is skill training needed to increase independence?	N = 323	N = 93
No	4.0	31.2
Yes	96.0	68.8
l) Does the individual take routine bowel medications for constipation or take "as needed" (PRN) medications for constipation more than two times a month within the past year (do not include fiber)? RISK ITEM	N = 354	N = 99
Yes	36.7	24.2
No	63.3	75.8
m) Does the individual have a diagnosis of chronic constipation or have ongoing issues with constipation? RISK ITEM	N = 350	N = 99
Yes	44.6	43.4
No	55.4	56.6
n) Has the individual required a suppository or enema for constipation within the past year? RISK ITEM	N = 159	N = 43

Yes	24.5	20.9
No	75.5	79.1
o) Does the individual require digital impaction removal by the caregiver five or more days a week? RISK ITEM	N = 158	N = 41
Yes	0.6	2.4
No	99.4	97.6
p) Has the individual had more than one episode in the past year of complaining of pain when having a bowel movement? RISK ITEM	N = 160	N = 43
Yes	45.0	67.4
No	43.8	27.9
Unknown	11.3	4.7
q) Has the individual had more than one known episode of hard stool in the past year? RISK ITEM	N = 161	N = 43
Yes	57.1	81.4
No	37.3	14.0
Unknown	5.6	4.7
r) Does the individual take a medication that causes constipation and would not recognize or communicate if he/she constipated? RISK ITEM	N = 161	N = 43
Yes	59.6	32.6
No	40.4	67.4

A. Can the clarity of these items be improved?

Assessors indicated confusion regarding whether or not a consumer should be scored in this section if the individual is totally incontinent – i.e., if a consumer is incontinent, but already has a toileting program, should they be scored as if there is an absence of the program.

Except for the main toileting question, where it is difficult to disentangle age-associated developmental status from functional limitations for children, scoring is fairly similar for children and adults.

B. Are all response categories needed/populated?

Virtually all responses are populated on these items as appropriate given the skip patterns. The skills training question primarily applies to children.

C. Can the section be shortened by eliminating questions or reordering for skip patterns?

Skip patterns are already applied to this section.

ADLs: 13. Showering and Bathing

These items are drawn from the FASI, except for the skill training question. Frequencies are not included for preferences and guidance for individuals providing support, as for previous ADL and following ADL items. These questions are skipped for children under 5 (excludes six cases).

Table 9: Showering/Bathing Items: Response Frequencies, Core Sample, Adults and Children

a) Shower/bathe self: The ability to bathe self in shower or tub, including washing, rinsing, and drying self. Include transferring in/out of tub/shower.	Frequencies (Adults)	Frequencies (Children)
	N = 355	N = 97
Independent	21.1	2.1
Setup or clean-up assistance	18.6	12.4
Supervision or touching assistance	14.1	12.4
Partial/moderate assistance	8.5	21.7
Substantial/maximal assistance	13.5	19.6
Dependent	22.8	30.9
Person refused	0.3	0.0
Not applicable	0.0	1.0
Not attempted due to medical condition or safety concerns	1.1	0.0
b) Wash upper body: The ability to wash, rinse, and dry the face, hands, chest, and arms while sitting in a chair or bed.	N = 352	N = 97
Independent	12.2	2.1
Setup or clean-up assistance	1.4	1.0
Supervision or touching assistance	5.7	3.1
Partial/moderate assistance	1.7	2.1
Substantial/maximal assistance	2.8	1.0
Dependent	13.4	5.2
Person refused	0.3	0.0
Not applicable	62.5	85.6
Not attempted due to medical condition or safety concerns	0.0	0.0
e) Is skill training needed to increase independence?	N = 322	N = 91
Yes	4.7	33.0
No	95.3	67.0

A. Can the clarity of these items be improved?

No comments were included in the ReBAR assessor comments nor in the post-pilot survey of assessors and other stakeholders regarding these items.

B. Are all response categories needed/populated?

Compared to other items, the share scored as Independent on the main question (13a) is much lower (21% for adults). All levels of assistance are populated with a more even distribution than observed for other items.

Consistent with other items, children are more likely to be scored as Dependent and in need of skill training.

Item 13b is meant to be skipped for those scored as Independent on 13a, but this skip does not appear to have been in place. Despite high levels of need recorded on 13a, 13b is usually coded as Not applicable.

C. Can the section be shortened by eliminating questions or reordering for skip patterns?

The skip for Independent on 13a needs to be enforced. However, it may also be appropriate to determine more specific criteria for needing to score 13b.

ADLs: 14. Oral Hygiene and 15. General Hygiene

These items are drawn from the FASI, except for the skill training question. Frequencies are not included for preferences and guidance for individuals providing support. The oral hygiene and menses questions are skipped for children under 5 (excludes six cases).

Table 10: Oral and General Hygiene: Response Frequencies, Core Sample, Adults and Children

14. a) Oral Hygiene: The ability to use suitable items to clean teeth. [Dentures (if applicable): The ability to remove and replace dentures from and to the mouth, and manage equipment for soaking and rinsing them.]	Frequencies (Adults)	Frequencies (Children)
	N = 353	N = 98
Independent	14.2	3.1
Setup or clean-up assistance	23.5	17.4
Supervision or touching assistance	21.8	21.4
Partial/moderate assistance	6.2	11.2
Substantial/maximal assistance	6.5	14.3
Dependent	24.4	30.6
Person refused	1.4	2.0
Not applicable	2.0	0.0
Not attempted due to medical condition or safety concerns	0.0	0.0
14. e) Is skill training needed to increase independence?	N = 326	N = 91
Yes	8.9	27.5
No	91.1	72.5

15. a) Menses Care – Able to use tampons or sanitary napkins; wash hands after changing pads or tampons; change pad or tampon as required keep the blood from soaking through clothes; and properly dispose of pad or tampon.	Frequencies (Adults)	Frequencies (Children)
	N = 349	N = 98
Independent	6.3	2.0
Setup or clean-up assistance	2.9	3.1
Supervision or touching assistance	3.7	3.1
Partial/moderate assistance	1.2	1.0
Substantial/maximal assistance	0.9	0.0
Dependent	6.0	6.1
Person refused	0.3	0.0
Not applicable	78.8	84.7
Not attempted due to medical condition or safety concerns	0.0	0.0
15. b) Other General Hygiene – The ability to perform other hygiene maintenance tasks, such as hair brushing, shaving, nail care, and applying deodorant. Note: Excludes toilet, menses care, and oral hygiene.	N = 349	N = 97
Independent	14.9	3.1
Setup or clean-up assistance	10.3	12.4
Supervision or touching assistance	7.5	8.3
Partial/moderate assistance	24.6	21.7
Substantial/maximal assistance	16.9	27.8
Dependent	25.2	25.8
Person refused	0.6	0.0
Not applicable	0.0	1.0
Not attempted due to medical condition or safety concerns	0.0	0.0
e) Is skill training needed to increase independence?	N = 317	N = 91
Yes	7.3	28.6
No	92.7	71.4

A. Can the clarity of these items be improved?

Assessors expressed confusion regarding whether an individual refusing to comply with the act of brushing their teeth should be coded as Person refused. Depending on the setting, this may be supervision/cueing. For an in-home individual who refuses to comply and to allow a PSW into their home, this may have to be scored as Person refused, as no supports would be written into the plan.

B. Are all response categories needed/populated?

Not attempted due to medical condition was not observed for these questions. Otherwise, there was a wide distribution of responses for oral hygiene, general hygiene and menses care in the small share of individuals for whom this was applicable.

Consistent with other items, children are more likely to be scored as Dependent and in need of skill training (28-29%).

Skill training needs are relatively high (7-9%) for adults on these questions.

C. Can the section be shortened by eliminating questions or reordering for skip patterns?

Not applicable serves as a de facto skip for the menses care question.

ADLs: Reliability Analysis

Table 11 below shows the Intra-class correlation coefficients (ICC) results for the ADLs. Many of the questions in this section use response scales to measure a person’s level of independence (see tables above). Items with very small numbers have been excluded as the statistics are not appropriate. The number of clients assessed on each item is provided in the second column.

Table 11: Intra-class Correlation Coefficients (ICC) for ADLs (IRR cases only)

	N	Individual Consistency		Absolute Agreement	
		Score	Confidence Interval	Score	Confidence Interval
8. Dressing					
a. Upper Body Dressing	52	0.93	(0.88 - 0.98)	0.92	(0.85 - 0.98)
b. Lower Body	51	0.92	(0.87 - 0.98)	0.92	(0.86 - 0.98)
c. Putting on/taking off	51	0.92	(0.87 - 0.98)	0.92	(0.87 - 0.98)
9. Transferring and Positioning					
a) Roll left and right	47	0.79	(0.65 - 0.93)	0.78	(0.64 - 0.93)
b) Sit to lying	45	1.00	-	1.00	-
c) Lying to sitting on side of bed	46	0.95	(0.91 - 0.98)	0.95	(0.91 - 0.98)
d) Sit to stand	43	0.97	(0.95 - 0.99)	0.97	(0.95 - 0.99)
e) Chair/bed to chair transfer	17	0.98	(0.94 - 1.00)	0.98	(0.94 - 1.00)
10. Mobility					
a) Does the person walk?	50	0.90	(0.83 - 0.97)	0.90	(0.83 - 0.97)
b) Walks 10 feet	41	0.17	(-0.14 - 0.62)	0.17	(-0.14 - 0.62)
c) Walks 50 feet with two turns	41	0.58	(0.33 - 0.86)	0.57	(0.33 - 0.86)
d) Walks 150 feet	40	0.82	(0.69 - 0.95)	0.80	(0.65 - 0.94)
e) Step onto/off a curb	40	0.88	(0.78 - 0.97)	0.88	(0.78 - 0.96)

	N	Individual Consistency		Absolute Agreement	
		Score	Confidence Interval	Score	Confidence Interval
f) 4 steps	36	0.85	(0.72 - 0.96)	0.85	(0.73 - 0.96)
g) 12 steps	34	0.79	(0.61 - 0.94)	0.79	(0.62 - 0.94)
h) Walks indoors	42	0.65	(0.43 - 0.88)	0.65	(0.43 - 0.89)
k) Wheels 50 feet with two turns	10	0.92	(0.72 - 0.99)	0.92	(0.73 - 0.99)
l) Wheels 150 feet	10	0.92	(0.72 - 0.99)	0.92	(0.73 - 0.99)
11. a) Eating	48	0.83	(0.72 - 0.95)	0.83	(0.71 - 0.95)
12. Elimination					
a) Toileting	44	0.93	(0.88 - 0.98)	0.93	(0.88 - 0.98)
b) Toilet transfer	43	0.77	(0.62 - 0.93)	0.76	(0.6 - 0.93)
13. Showering and Bathing					
a) Shower/bathe self	49	0.95	(0.92 - 0.99)	0.95	(0.92 - 0.99)
b) Wash upper body	6	1.00	-	1.00	-
14. a) Oral Hygiene	50	0.95	(0.91 - 0.98)	0.95	(0.91 - 0.98)
15. General Hygiene					
a) Menses Care	6	0.94	(0.63 - 1.00)	0.94	(0.68 - 1.00)
b) Other General Hygiene	50	0.88	(0.80 - 0.96)	0.88	(0.80 - 0.96)

The results show excellent reliability with most of the ADL and Mobility items (.9 or above). A few items have slightly lower levels of reliability (between 0.7 and 0.9), such as the rolling left and right item (9a), and toilet transfer (12b) although the ICC estimates are still within the upper and lower bound confidence intervals.

The majority of items tested in this section. have shown to be significantly reliable. These results are based on a small number of cases and those with fewer cases in the test tend to have near perfect agreement which may be a function of the very small number (15a for example) as it means every respondent agreed on the client rating. However, estimates for those items with over 30 responses should be duplicative in the larger sample.

4. FINDINGS ON IADLS ITEMS (SECTION V)

In this section, we continue with findings from Section V of the ONA, focusing here on the Instrumental Activities of Daily Living (IADL) items.

All of the IADL questions are drawn from the FASI, except for skill training questions from the Colorado instrument. Frequencies are not included for preferences and guidance for individuals providing support.

IADLs: 18. Housework, 19. Meal Preparation, 20. Laundry

These questions are skipped for children under 12 (excludes 55 cases).

Table 12 Housework, Meal Preparation and Laundry: Response Frequencies, Core Sample, Adults and Children

18. a) Housework – The ability to safely and effectively maintain cleanliness of the living environment by washing cooking and eating utensils, cleaning the stove, sinks, toilets, tubs/showers, and counter; sweeping, vacuuming, and washing floors; and taking out garbage.	Frequencies (Adults)	Frequencies (Children)
	N = 353	N = 49
Independent	1.7	0.0
Setup or clean-up assistance	2.8	0.0
Supervision or touching assistance	10.5	16.3
Partial/moderate assistance	20.4	30.6
Substantial/maximal assistance	36.8	38.8
Dependent	26.9	14.3
Person refused	0.0	0.0
Not applicable	0.0	0.0
Not attempted	0.9	0.0
18. d) Is skill training needed to increase independence?	N = 318	N = 43
Yes	12.3	34.9
No	87.7	65.1
19. a) Make a light meal – The ability to plan and prepare all aspects of a light meal such as a bowl of cereal or a sandwich and cold drink, or reheat a prepared meal.	Frequencies (Adults)	Frequencies (Children)
	N = 352	N = 49
Independent	13.9	6.1
Setup or clean-up assistance	2.6	0.0
Supervision or touching assistance	11.9	14.3
Partial/moderate assistance	17.9	28.6
Substantial/maximal assistance	17.1	20.4
Dependent	35.2	30.6
Person refused	0.6	0.0
Not applicable	0.0	0.0
Not attempted	0.9	0.0

19. d) Is skill training needed to increase independence?	N = 314	N = 46
Yes	16.6	30.4
No	83.4	69.6

20. a) Laundry: Includes all aspects of completing a load of laundry using a washer and dryer. Includes sorting, loading and unloading, adding laundry detergent, and folding laundry.	Frequencies (Adults)	Frequencies (Children)
	N = 350	N = 49
Independent	8.3	0.0
Setup or clean-up assistance	8.9	4.1
Supervision or touching assistance	14.9	20.4
Partial/moderate assistance	14.0	18.4
Substantial/maximal assistance	26.6	24.5
Dependent	26.9	32.7
Person refused	0.3	0.0
Not applicable	0.0	0.0
Not attempted due to medical condition or safety concerns	0.3	0.0
20. d) Is skill training needed to increase independence?	N = 305	N = 44
Yes	11.2	36.4
No	88.9	63.6

A. Can the clarity of these items be improved?

There are age-related constraints on these question – only children 12 and older are included in this assessment section. The scoring mechanism for children and adults can vary; assessors expressed confusion regarding how to score a young adult versus an older individual. The score should be based on support needs that fit to an individual of that age.

Given the age restriction, the scoring for adults and children was not that different, although adults were more likely to be scored as Independent.

B. Are all response categories needed/populated?

Non-response scores (Not applicable, Not attempted, Person refused) were rare on these questions. Otherwise, there was a wide distribution of responses in terms of assistance needs.

Skill training needs are relatively high (11-17%) for adults on these questions. This is true for children as well, though not surprisingly so.

C. Can the section be shortened by eliminating questions or reordering for skip patterns?

Although the distribution of scores is similar for laundry and housework, suggesting that they may not be capturing significantly different concepts, the correlation between these items is relatively low. As noted below, the Light Meal Preparation had poorer scores on reliability.

IADLs: 21. Transportation

The car transfer question is skipped for children under 3 (one assessment), but missing for a larger share of children.

Table 13: Transportation: Response Frequencies, Core Sample, Adults and Children

a) Use public transportation: The ability to plan and use public transportation. Includes boarding, riding, and disembarking from transportation.	Frequencies (Adults)	Frequencies (Children)
	N = 353	N = 52
Independent	7.9	5.8
Setup or clean-up assistance	5.7	1.9
Supervision or touching assistance	7.4	11.5
Partial/moderate assistance	7.4	7.7
Substantial/maximal assistance	4.3	7.7
Dependent	25.2	19.2
Person refused	1.1	0.0
Not applicable	29.2	0.0
Not attempted due to medical condition or safety concerns	11.9	3.9
b) Car transfer: The ability to transfer in and out of a car or van on the passenger side. Does not include the ability to open/close door or fasten seat belt.	N = 345	N = 87
Independent	55.9	72.4
Setup or clean-up assistance	1.7	0.0
Supervision or touching assistance	11.0	5.8
Partial/moderate assistance	13.6	8.0
Substantial/maximal assistance	4.4	3.5
Dependent	9.9	9.2
Person refused	0.0	0.0
Not applicable	2.0	1.2
Not attempted due to medical condition or safety concerns	1.5	0.0
e) Is skill training needed to increase independence?	N = 314	N = 87
Yes	8.9	20.5
No	91.1	79.5

A. Can the clarity of these items be improved?

A question came up regarding an individual with a bus pass/subscription, for whom set-up of the transportation plan occurs less than monthly. This individual, as they would be independent in all other respects, should be scored as independent.

The public transportation question was treated as a skip for children where not applicable (missing) but scored as Not applicable for almost one third of adults. This suggests that the question was considered inapplicable in areas without public transportation. We assume that this does not affect the responses for the remaining individuals.

B. Are all response categories needed/populated?

There was a wide distribution of responses in terms of assistance needs for these questions.

The skill training rates reflect previous sections where this is more commonly answered yes for children than adults.

C. Can the section be shortened by eliminating questions or reordering for skip patterns?

It would be helpful to clarify when the public transportation question should be asked for rural populations.

IADLs: 22 and 23. Money Management and Light Shopping

These questions are skipped for children under 12 (55 assessments).

Table 14: Transportation: Response Frequencies, Core Sample, Adults and Children

22. a) Money Management – The ability to manage finances for basic necessities (food, clothing, shelter), including counting money and making change, paying bills/writing checks, making budgeting and other financial decisions, and balancing checkbook.	Frequencies (Adults)	Frequencies (Children)
	N = 352	N = 48
Independent	1.1	0.0
Setup or clean-up assistance	0.6	0.0
Supervision or touching assistance	0.9	2.1
Partial/moderate assistance	8.8	10.4
Substantial/maximal assistance	26.1	25.0
Dependent	62.2	62.5
Person refused	0.0	0.0
Not applicable	0.3	0.0
Not attempted	0.0	0.0
22. c) Is skill training needed to increase independence?	N = 312	N = 44
Yes	11.2	45.5
No	88.9	54.6
23. a) Light shopping: Once at a store, can locate and select up to five groceries and personal care items, take to check out, and complete purchasing transaction.	Frequencies (Adults)	Frequencies (Children)
	N = 351	N = 47
Independent	8.0	2.1
Setup or clean-up assistance	4.3	2.1
Supervision or touching assistance	16.2	19.2
Partial/moderate assistance	19.7	21.3
Substantial/maximal assistance	25.1	36.2
Dependent	25.1	19.2
Person refused	0.9	0.0
Not applicable	0.0	0.0
Not attempted	0.9	0.0

23. b) Walks for 15 minutes: Without stopping or resting (e.g. department store, supermarket)	N = 341	N = 43
Independent	62.2	83.7
Setup or clean-up assistance	0.6	0.0
Supervision or touching assistance	12.6	7.0
Partial/moderate assistance	4.1	2.3
Substantial/maximal assistance	1.8	0.0
Dependent	2.4	2.3
Person refused	0.6	0.0
Not applicable	8.5	4.7
Not attempted	7.3	0.0
23. c) Wheels for 15 minutes: Without stopping or resting (e.g. department store, supermarket)	N = 334	N = 43
Independent	8.4	2.3
Setup or clean-up assistance	0.3	0.0
Supervision or touching assistance	1.8	0.0
Partial/moderate assistance	0.0	0.0
Substantial/maximal assistance	2.4	0.0
Dependent	13.2	7.0
Person refused	0.3	0.0
Not applicable	71.9	90.7
Not attempted	1.8	0.0
23. f) Is skill training needed to increase independence?	N = 318	N = 43
Yes	8.2	50.0
No	91.8	50.0

A. Can the clarity of these items be improved?

On money management, assessors raised the question of whether or not to score an individual on these items based on their age – for example, a 12 year old has very different needs than a 21 year old in regard to money management. Supports should be scored based on what is the norm for that age group.

Shopping was a confusing area for many assessors – many expressed confusion regarding whether or not to score based on behavioral concerns. An individual who runs away while at the supermarket may be scored as needing supervision due to an underlying behavioral issue. In the event a behavioral concern impacts the individual’s ability to complete the action, support needed for the particular action should be taken into consideration. Participation in shopping may be considered anything from picking out coffee at a convenience store to picking produce.

B. Are all response categories needed/populated?

Almost no one was scored as Independent or nearly Independent on money management. Non-response scores were also rare.

Scores were far more distributed for shopping, with children and adults scoring fairly similarly.

Almost half of children were scored as needing more skill training on these areas. Adult rates reflect previous sections.

C. Can the section be shortened by eliminating questions or reordering for skip patterns?

Given the high rates of Independent or Not applicable (wheelchair) on items 23b and 23c, it is not clear that these are adding much information. We did a consistency comparison for this section in relation to the mobility section. For individuals with the ability to walk in the supermarket for 15 minutes without stopping or resting (independent only), nearly all were independent in walking 10 feet in the mobility section (item 10b). However, there were a few individuals who needed supervision or touching assistance and/or partial/moderate assistance for that mobility item. Some even had missing responses on the mobility item. Responses were more predictable for individuals who can independently wheel for 15 minutes in the supermarket or department store. All of these individuals recorded either independent or were missing responses on item 10l, “wheels 150 feet.” These questions may be capturing a mix of mobility and behavior, both captured elsewhere.

IADLs: Reliability Analysis

The table below shows results from reliability testing for IADLs. As in the ADL portion, these sections primary use response scales to measure a person’s level of independence. Items with very small numbers have been excluded. The number of clients assessed on each item is provided in the column titled “N.”

Table 15: Intra-class Correlation Coefficients (ICC) for IADLs (IRR cases only)

	N	Individual Consistency		Absolute Agreement	
		Score	Confidence Interval	Score	Confidence Interval
18. a) Housework	44	0.88	(0.79 - 0.96)	0.88	(0.79 - 0.96)
19. a) Make a light meal	46	0.59	(0.37 - 0.86)	0.59	(0.37 - 0.86)
20. a) Laundry	45	0.89	(0.80- 0.97)	0.89	(0.80- 0.97)
21. Transportation					
a) Use public transportation	20	0.79	(0.54 - 0.95)	0.78	(0.53 - 0.95)
b) Car transfer	49	0.94	(0.90- 0.98)	0.95	(0.91 - 0.98)
22. a) Money Management	46	0.76	(0.61 - 0.92)	0.75	(0.59 - 0.92)
23. Light Shopping					
a) Light shopping	45	0.82	(0.69 - 0.94)	0.82	(0.69 - 0.94)
b) Walks for 15 minutes	33	0.73	(0.53 - 0.92)	0.74	(0.53 - 0.93)
c) Wheels for 15 minutes	7	0.98	(0.90- 1.00)	0.98	(0.91 - 1.00)

Among the IADL items (18a-23c), the reliability varies more across the set of items. While housework (18a) has high reliability (0.87), meal preparation has only moderate reliability (0.59) with a wide ranging confidence intervals suggesting greater variation in the responses than in other data elements. The remaining IADLs have stronger reliability estimates and tighter confidence intervals, suggesting they are more reliable.

The few items in the 0.5 to 0.6 range will not be consistently reliable if incorporated into the ODDs tool. The other items have strong reliability ratings, and could be expected to be reliable when used by individual assessors.

5. FINDINGS ON BEHAVIOR ITEMS (SECTION VI)

For behaviors, we focus here on the questions on the behavior issue, without drilling down into the presenting behaviors, or the text responses describing the behaviors. We divide the discussion into three parts: the Specific Behavior Items (items 25-41), Intervention Frequency (items 43 and 44) and the Behavior Support Plan.

These items are drawn primarily from the Colorado assessment tool, with a few items from the FASI or the earlier Oregon risk assessment.

Behaviors: 25-41 Behavior Issues

These items are drawn primarily from the Colorado assessment tool, with a few items from the FASI (35 and 36) or the earlier Oregon risk assessment (37). Item 27 was added to the set, and additional wording from previous Oregon assessments was included in the Pica question (item 34). Text boxes and presenting behaviors add to the length of this section in the report, but are not included in the frequencies.

Table 16: Behavior Issues: Response Frequencies, Core Sample, Adults and Children

	Frequencies (Adults)	Frequencies (Children)
25. Injurious to Self – Individual displays intentional disruptive or dangerous behavioral symptoms not directed toward others, including self-injurious behaviors (e.g. hitting or scratching self, attempts to pull out IVs).	N = 350	N = 102
No history, no concern about this behavior	60.6	40.2
Has history, has not displayed symptoms in past year, no concern about reoccurrence	2.3	5.9
Has history, has not displayed symptoms in past year, assessor has concerns about reoccurrence	2.6	1.0
No history, but assessor has concerns may become an issue.	0.3	0.0
Yes, present in past year	34.3	52.9
26. Aggressive or combative – Individual displays physical behavior symptoms directed toward others (e.g., hits, kicks, pushes, or punches others, throws objects, spitting).	N = 349	N = 101
No history, no concern about this behavior	56.5	28.7
Has history, has not displayed symptoms in past year, no concern about reoccurrence	4.6	2.0
Has history, has not displayed symptoms in past year, assessor has concerns about reoccurrence	5.4	4.0
No history, but assessor has concerns may become an issue.	0.3	0.0
Yes, present in past year	33.2	65.4
27. Injurious to animals – Individual displays, or would without intervention, behaviors that would result in the injury of an animal.	N = 347	N = 102
No history, no concern about this behavior	90.5	66.7
Has history, has not displayed symptoms in past year, no concern about reoccurrence	1.2	1.0

Has history, has not displayed symptoms in past year, assessor has concerns about reoccurrence	3.8	3.9
No history, but assessor has concerns may become an issue.	0.0	2.0
Yes, present in past year	4.6	26.5
28. Aggressive towards others, verbal – Individual displays verbal behavioral symptoms directed towards others (e.g., yelling, screaming, threatening, cursing, excessive profanity, sexual references).	N = 348	N = 103
No history, no concern about this behavior	50.3	49.5
Has history, has not displayed symptoms in past year, no concern about reoccurrence	0.9	1.0
Has history, has not displayed symptoms in past year, assessor has concerns about reoccurrence	1.4	1.0
No history, but assessor has concerns may become an issue.	0.3	0.0
Yes, present in past year	47.1	48.5
29. Socially unacceptable behavior – Individual expresses him/herself, or would without an intervention, in an inappropriate or unacceptable manner (e.g., inappropriate sexual comments or other behaviors, smearing/throwing food or feces)	N = 343	N = 101
No history, no concern about this behavior	47.8	31.7
Has history, has not displayed symptoms in past year, no concern about reoccurrence	1.8	0.0
Has history, has not displayed symptoms in past year, assessor has concerns about reoccurrence	2.0	0.0
No history, but assessor has concerns may become an issue.	0.0	0.0
Yes, present in past year	48.4	68.3
30. Sexual aggression/assault – Individual displays, or would without intervention, behaviors that are sexually aggressive (e.g., grabbing, thrusting) or assaultive (e.g., pushing up against wall and groping) towards others.	N = 346	N = 100
No history, no concern about this behavior	90.5	93.0
Has history, has not displayed symptoms in past year, no concern about reoccurrence	1.2	1.0
Has history, has not displayed symptoms in past year, assessor has concerns about reoccurrence	2.6	2.0
No history, but assessor has concerns may become an issue.	0.9	2.0
Yes, present in past year	4.9	2.0
31. Property destruction: Major – Individual engages in behavior, or would without an intervention, with intent to destroy public or private property or possessions. To be characterized as major, there must be intent to destroy and destruction is either aggressive (e.g., punching walls and breaking windows) or causes damage that is likely to cost in excess of \$500 to repair or replace (e.g., breaking a television or video game system) in a single incident. It is not necessary to obtain actual cost estimates.	N = 343	N = 102

No history, no concern about this behavior	83.4	68.6
Has history, has not displayed symptoms in past year, no concern about reoccurrence	2.9	1.0
Has history, has not displayed symptoms in past year, assessor has concerns about reoccurrence	3.5	7.8
No history, but assessor has concerns may become an issue.	0.3	4.9
Yes, present in past year	9.9	17.7
32. Property destruction: Minor –Individual engages in behavior, or would without an intervention, that disassembles or damage public or private property or possessions. The individual is intentionally engaging in an act that leads to damage, though may not have the intent to cause damage. Minor refers to incidents that do not meet the major criteria: not aggressive and not likely to cost more than \$500 to repair or replace.	N = 347	N = 102
No history, no concern about this behavior	71.5	49.0
Has history, has not displayed symptoms in past year, no concern about reoccurrence	2.6	4.9
Has history, has not displayed symptoms in past year, assessor has concerns about reoccurrence	2.9	1.0
No history, but assessor has concerns may become an issue.	0.0	2.0
Yes, present in past year	23.1	43.1
33. Leaving Supervised Area –Individual purposefully, or would without an intervention, leaves an area or group without telling others or departs from the supervising staff unexpectedly resulting in increased vulnerability.	N = 348	N = 102
No history, no concern about this behavior	65.5	33.3
Has history, has not displayed symptoms in past year, no concern about reoccurrence	4.0	3.9
Has history, has not displayed symptoms in past year, assessor has concerns about reoccurrence	3.7	5.9
No history, but assessor has concerns may become an issue.	1.2	0.0
Yes, present in past year	25.6	56.9
34. Pica (Ingestion of non-nutritive substances) and/or placing non-edible objects in mouth –Does not require diagnosis of Pica, only presenting behaviors. Individual ingests, or will without an intervention, non-food items (e.g., liquid detergent, coins, paper clips, cigarettes) or the individual places non-edible objects in his/her mouth that may cause poisoning, aspiration, choking and/or severe injury.	N = 344	N = 102
No history, no concern about this behavior	89.8	67.7
Has history, has not displayed symptoms in past year, no concern about reoccurrence	0.6	2.9
Has history, has not displayed symptoms in past year, assessor has concerns about reoccurrence	1.2	0.0
No history, but assessor has concerns may become an issue.	0.3	0.0
Yes, present in past year	8.1	29.4
35. Difficulties regulating emotions – Individual has instances, or	N = 347	N = 102

would without an intervention, of emotional behavior that are atypical of others in similar situations.		
No history, no concern about this behavior	28.2	12.8
Has history, has not displayed symptoms in past year, no concern about reoccurrence	1.4	0.0
Has history, has not displayed symptoms in past year, assessor has concerns about reoccurrence	1.2	0.0
No history, but assessor has concerns may become an issue.	0.3	0.0
Yes, present in past year	68.9	87.3
36. Refusing ADL/IADL and/or medical care –Individual resists required assistance (e.g., resists ADL assistance or medications)	N = 346	N = 100
No history, no concern about this behavior	53.2	40.0
Has history, has not displayed symptoms in past year, no concern about reoccurrence	1.5	0.0
Has history, has not displayed symptoms in past year, assessor has concerns about reoccurrence	1.7	0.0
No history, but assessor has concerns may become an issue.	0.0	1.0
Yes, present in past year	43.6	59.0
37. Rapid ingestion of food or liquids that presents a health or safety risk to the individual. RISK ITEM	N = 343	N = 102
No history, no concern about this behavior	73.2	64.7
Has history, has not displayed symptoms in past year, no concern about reoccurrence	0.6	2.0
Has history, has not displayed symptoms in past year, assessor has concerns about reoccurrence	0.6	0.0
No history, but assessor has concerns may become an issue.	0.3	0.0
Yes, present in past year	25.4	33.3
38. Withdrawal –Participant has a tendency, or would without an intervention, to avoid, isolate or retreat from conversation, interaction or activity.	N = 347	N = 102
No history, no concern about this behavior	69.5	72.6
Has history, has not displayed symptoms in past year, no concern about reoccurrence	0.6	1.0
Has history, has not displayed symptoms in past year, assessor has concerns about reoccurrence	1.2	0.0
No history, but assessor has concerns may become an issue.	0.0	0.0
Yes, present in past year	28.8	25.5
39. Intrusiveness –Participant has a tendency, or would without an intervention, for entering personal or private space without regard or permission.	N = 343	N = 101
No history, no concern about this behavior	56.6	47.5
Has history, has not displayed symptoms in past year, no concern about reoccurrence	0.6	0.0
Has history, has not displayed symptoms in past year, assessor has concerns about reoccurrence	0.6	0.0
No history, but assessor has concerns may become an issue.	0.0	0.0
Yes, present in past year	42.3	52.5

40. Susceptibility to Victimization –Participant engages in, or would without an intervention, behaviors that increase or could potentially increase the participant's level of risk or harm or exploitation by others such as befriending strangers.	N = 341	N = 102
No history, no concern about this behavior	52.2	59.8
Has history, has not displayed symptoms in past year, no concern about reoccurrence	3.2	2.9
Has history, has not displayed symptoms in past year, assessor has concerns about reoccurrence	5.9	4.9
No history, but assessor has concerns may become an issue.	2.9	2.0
Yes, present in past year	35.8	30.4
41. Legal Involvement –Individual has been engaged with or is at risk of being engaged with law enforcement or Psychiatric Security Review Board (PSRB), arrested, and/or convicted of breaking a law or laws and has been determined to have had knowledge of breaking laws.	N = 342	N = 103
No history, no concern about this behavior	81.3	88.4
Has history, has not displayed symptoms in past year, no concern about reoccurrence	4.7	2.9
Has history, has not displayed symptoms in past year, assessor has concerns about reoccurrence	4.4	1.0
No history, but assessor has concerns may become an issue.	1.2	1.0
Yes, present in past year	8.5	6.8

A. Can the clarity of these items be improved?

The behaviors section was particularly challenging for assessors. Among the questions asked were:

1. Does the behavior have to result in injury for it to be coded as injurious?
2. If an individual is presenting a behavior, but the presented behavior is not due to that specific behavior, how should it be coded?
3. Should cultural practices be factored into coding?
4. If an assessor learns that discussing behaviors may trigger behavior, should they only bring up issues when the individual is not present?

From the survey (assessors and other stakeholders): One respondent stated that the verbal aggression section can be combined with aggressive behaviors. Others had conflicting remarks; some said the section was too complex and too long, while others appreciated the options and went so far as to suggest adding more factors.

B. Are all response categories needed/populated?

Except for susceptibility to victimization (item 40), No history, but assessor has concerns may become an issue was rarely used as an answer option for more than 1% of assessments. Most

responses fall into the categories No history, no concern, and Yes, present in past year. The severity of the behavior may be more important to capture than all three intermediate categories between these responses.

C. Can the section be shortened by eliminating questions or reordering for skip patterns?

There are 7% to 68% of individuals scored as having current, specific behavior issues depending on the behavior. While the behaviors may not all be equally concerning, they do capture different issues. Simplifying the response categories may be more valuable than eliminating an item.

Note that the text boxes and presenting behaviors, not shown with these frequencies, do add substantially to the length of the section.

Behaviors: 43-44 Intervention Frequency and Other Behavior Items

These items are primarily drawn from the Colorado assessment, with the addition of specific risk items (44c and d).

Table 17: Intervention Frequency and Other Behavior Items: Response Frequencies, Core Sample, Adults and Children

43. Intervention frequency: How often does the individual require intervention and/or environment management due to any behavior issue (not specifically to each presenting behavior)	Frequencies (Adults)	Frequencies (Children)
a) Cueing –	N = 347	N = 102
None	11.2	2.9
<Once per month	3.5	0.0
Once per month	1.2	0.0
>Once per month	4.6	1.0
1-3 times per week	10.7	2.9
4 or more times per week, less than daily	9.2	6.9
<5 times per day	17.3	16.7
5 or more times per day	42.4	69.6
b) Physical Prompts –	N = 334	N = 101
None	60.5	30.7
<Once per month	5.1	3.0
Once per month	2.1	0.0
>Once per month	1.2	2.0
1-3 times per week	4.5	6.9
4 or more times per week, less than daily	3.0	2.0
<5 times per day	6.9	18.8
5 or more times per day	17.8	36.6

c) PPIs –	N = 322	N = 99
None	87.9	52.5
<Once per month	6.5	4.0
Once per month	0.3	5.1
>Once per month	0.9	8.1
1-3 times per week	1.6	8.1
4 or more times per week, less than daily	0.6	5.1
<5 times per day	1.2	10.1
5 or more times per day	0.9	7.1
44. Other behavior items		
a) How likely is it that disruptive or dangerous behaviors would occur and/or escalate if services were withdrawn?	N = 348	N = 101
Highly unlikely	8.1	4.0
Unlikely	9.2	2.0
Likely	10.6	7.9
Very Likely	15.2	10.9
Behavior would almost certainly reoccur	46.8	74.3
Not sure	4.0	0.0
Not currently receiving services	6.0	1.0
b) Is a court mandated restriction currently in place against the individual?	N = 338	N = 99
Yes	2.7	1.0
No	97.3	99.0
c) Does the individual have a current court mandated restriction in place against anyone? RISK ITEM	N = 333	N = 100
Yes	2.4	5.0
No	97.6	95.0
d) Is there a concern about abuse of substances, including illegal drugs, marijuana, prescription medication, or alcohol? RISK ITEM	N = 337	N = 99
Yes	7.1	0.0
No	92.6	100.0
Chose not to answer	0.3	0.0

A. Can the clarity of these items be improved?

As with the earlier behavior questions, there were a number of FAQs around these questions. Among the questions asked were:

1. Should supports be coded for behaviors outside of the home and community settings, e.g. at schools?
2. Should one consider monitoring in the cueing item?
3. Could you include examples for what is considered cueing?

4. What services are referred to when we discuss “likelihood of behavior occurring if service is withdrawn?”

5. How does one score for situations outside of the individual’s control?

B. Are all response categories needed/populated?

Within the intervention frequencies, almost all categories are populated. However, some of the categories have only small shares. Because these questions could be closely tied to support needs, eliminating categories would lose detail on variation within the support needs.

For recurrence of behaviors, it is difficult to know how to distinguish between some of the lesser categories (e.g. Highly unlikely versus Unlikely, Likely and Very likely).

C. Can the section be shortened by eliminating questions or reordering for skip patterns?

Given the central role of these questions, simplifying the response categories may be more valuable than eliminating items.

Behaviors: 45. Behavior Support Plan

Items on the Behavior Support Plan (BSP) are drawn from previous Oregon assessment tools.

Table 18: Intervention Frequency and Other Behavior Items: Response Frequencies, Core Sample, Adults and Children

a) Has a Behavior Support Plan (BSP) been created for the individual?	Frequencies (Adults)	Frequencies (Children)
	N = 346	N = 103
Yes	25.4	35.9
No	74.6	64.1
b) Does the BSP include Protective Physical Interventions (PPIs)?	N = 89	N = 37
Yes	42.7	54.1
No	57.3	46.0
c) Is the BSP currently being implemented by caregivers?	N = 89	N = 37
Yes	92.1	75.7
No	7.8	24.3
d) Does the BSP implementation include documentation of the incidence of behavior?	N = 89	N = 37
Yes	82.0	48.7
No	18.0	51.4
e) Has the individual's Behavior Support Plan been revised 2 or more times in the last 12 months to address new behaviors, or to address significant changes in either the behavior or the effectiveness of the behavior support strategies?	N = 89	N = 37
Yes	19.1	18.9
No	80.9	81.1
f) Does the individual's BSP include complex behavior support tools that must be developed or significantly altered by a caregiver one or more times per month? (Such as social stories or visual structure systems.)	N = 87	N = 37
Yes	13.8	5.4
No	86.2	94.6
g) Has the individual required PPIs, other than deflection and evasion, 3 or more times in the last 6 months?	N = 336	N = 101
Yes	7.1	40.6
No	92.9	59.4
h) Has the individual required PPIs, other than deflection and evasion, 5 or more times in the last 12 months?	N = 338	N = 100
Yes	6.5	36.0
No	93.5	64.0

i) Has the individual required PPIs including deflection and evasion maneuvers, at least twice every month for the last 6 months?	N = 336	N = 101
Yes	10.1	31.7
No	89.9	68.3
j) Has the individual required emergency services, crisis intervention services or protective services to address a dangerous behavior 2 or more times in the past 12 months?	N = 340	N = 101
Yes	3.8	5.9
No	96.2	94.1

A. Can the clarity of these items be improved?

As with the earlier behavior questions, there were a number of FAQs around these questions. Among these were:

1. What is considered a Protective Physical Intervention (PPI)?
2. What is considered a BSP, and how often should it be updated?

B. Are all response categories needed/populated?

This question is drawn from former Oregon assessment tools and has been used for oversight of BSPs. We do not recommend removal of response categories due to the usage of these items.

C. Can the section be shortened by eliminating questions or reordering for skip patterns?

There may be duplication of questions on PPIs between these items and the intervention frequencies in the previous section.

Behaviors: Reliability Analysis

Intra-class correlation coefficients (ICC) for Behaviors are below. These sections use response scales to measure a person’s degree of history in the Behavior items. Again, items with very small numbers have been excluded. The number of clients assessed on each item is provided in the column titled “N.”

The results in the Behavior section (25a-44a) suggests these items are also quite reliable with results ranging between 0.8 and 1.0. The few items that have lower results are still in the 0.7 to 0.8 range with the exception of injurious to animals (0.54), a new addition to the tool. Scores in the 0.5 to 0.6 range will not be consistently reliable if they continue to be used in the new tool. The items in this section have over 30 responses; these results should be duplicative in the larger sample.

Table 19: Intra-class Correlation Coefficients (ICC) for Behaviors (IRR cases only)

	N	Individual Consistency		Absolute Agreement	
		Score	Confidence Interval	Score	Confidence Interval
25. Injurious to Self	47	0.89	(0.81 - 0.97)	0.89	(0.82 - 0.97)
26. Aggressive or combative	48	0.99	(0.99 - 1.00)	0.99	(0.99 - 1.00)
27. Injurious to animals	47	0.54	(0.31 - 0.83)	0.55	(0.31 - 0.84)
28. Aggressive towards others, verbal	48	1.00	(1.00 - 1.00)	1.00	(1.00 - 1.00)
29. Socially unacceptable behavior	48	0.94	(0.89 - 0.98)	0.94	(0.89 - 0.98)
30. Sexual aggression/assault	47	0.84	(0.73 - 0.95)	0.84	(0.73 - 0.95)
31. Property destruction: Major	47	0.70	(0.52 - 0.90)	0.71	(0.53 - 0.90)
32. Property destruction: Minor	48	0.89	(0.81 - 0.97)	0.89	(0.81 - 0.97)
33. Leaving Supervised Area	48	0.97	(0.94 - 0.99)	0.97	(0.94 - 0.99)
34. Pica (Ingestion of non-nutritive substances) and/or placing non-edible objects in mouth	46	0.83	(0.71 - 0.95)	0.83	(0.71 - 0.95)
35. Difficulties regulating emotions	47	0.74	(0.57 - 0.92)	0.74	(0.58 - 0.92)
36. Refusing ADL/IADL and/or medical care	44	0.80	(0.67 - 0.94)	0.79	(0.63 - 0.94)
37. Rapid ingestion of food or liquids that presents a health or safety risk to the individual.	45	0.80	(0.67 - 0.94)	0.81	(0.68 - 0.94)
38. Withdrawal	48	0.85	(0.75 - 0.96)	0.85	(0.75 - 0.96)
39. Intrusiveness	44	0.91	(0.84 - 0.97)	0.91	(0.83 - 0.97)
40. Susceptibility to victimization	43	0.75	(0.59 - 0.92)	0.76	(0.59 - 0.93)
41. Legal Involvement	43	0.83	(0.71 - 0.95)	0.84	(0.72 - 0.95)
42. Other Behavioral Issues	43	0.78	(0.63 - 0.93)	0.78	(0.64 - 0.93)
43. Intervention frequency					
a) Cueing	48	0.98	(0.96 - 0.99)	0.98	(0.96 - 0.99)
b) Physical Prompts	41	0.90	(0.82 - 0.97)	0.90	(0.82 - 0.97)
c) PPIs	39	0.75	(0.57 - 0.93)	0.75	(0.58 - 0.93)
44. Other: a) How likely is it that disruptive or dangerous behaviors would occur and/or escalate if services were withdrawn?	46	0.12	(-0.17 - 0.57)	0.12	(-0.17 - 0.57)

6. FINDINGS ON MEDICAL ITEMS (SECTION VIII)

The final section we treat as “core” for detailed results is the section on Medical support needs. There are a large number of questions in this section that are “check all that apply” responses for health conditions and specific diagnoses (item 52), as well as detailed lists of therapies and treatments; these are not included below. As objective diagnoses and treatments determined by clinicians rather than assessor judgment, we do not consider these to be subject to validity and reliability problems. Therefore, in this section, we focus on the subset of the questions that may be more subjective.

Medical: 51. General Medical Supports

The General Medical Supports items are largely drawn from the previous Oregon assessment tools and include items that indicate risk as a major consideration, items that meet the LOC criteria, and items connected to Enhanced or Exceptional (E&E) criteria. Items 17a and 17f are skipped for children under age 18.

Table 20: General Medical Support Items: Response Frequencies, Core Sample, Adults and Children

	Frequencies (Adults)	Frequencies (Children)
a) In the past 6 months, how many times has another person recommended that the individual seek medical attention for an issue that the individual was unaware of or unwilling to seek attention for? LOC CRITERIA	N = 351	N/A
None	48.7	N/A
One	18.8	N/A
Two or three	12.8	N/A
More than three	19.7	N/A
c) Does the individual currently experience a lack of access to medical care, including mental health care, because of transportation, geographical, financial, cultural, or other non-behavioral reasons? RISK ITEM	N = 345	N = 99
Yes	8.1	6.1
No	91.9	93.9
d) Does the individual require documented daily monitoring of temperature, respiration, heart rate, and blood pressure according to a documented physician’s order? E&E CRITERIA	N = 343	N = 100
Yes	1.5	0.0
No	98.5	100.0
e) The individual does not report or is unable to describe pain and/or signs of illness and where it is located. RISK ITEM	N = 351	N = 100
Yes	39.9	31.0
No	60.1	69.0

f) Does the individual need assistance to make and/or keep medical appointments?	N = 350	N/A
Yes	26.5	N/A
No	73.5	N/A

A. Can the clarity of these items be improved?

The FAQs do not indicate issues with these items.

Survey responses suggested that the Medical section overall might be condensed. To some assessors, the health conditions and treatment sections (not shown) seemed more targeted toward medical facility residents.

B. Are all response categories needed/populated?

Except for question a, these items are yes/no. Question a has responses spread across the four categories.

C. Can the section be shortened by eliminating questions or reordering for skip patterns?

These questions are capturing very different concepts and therefore cannot be reduced by eliminating items. However, there may be a case for moving one or more of these questions to different sections of the assessment. For example, an individual may need assistance making or keeping medical appointments for behavioral or cognitive reasons.

Medical: 53. Seizure and Diabetes Screen

Item 53, drawn primarily from earlier Oregon assessment tools, combines objective questions about seizure/epilepsy and diabetes diagnoses with more subjective questions on support needs.

Table 21: Seizure and Diabetes Screen: Response Frequencies, Core Sample, Adults and Children

a) Does the individual have a diagnosis of seizures or epilepsy or has the individual had a seizure within the past five (5) years?	Frequencies (Adults)	Frequencies (Children)
	N = 351	N = 101
Yes	26.5	22.8
No	73.5	77.2
c) Does the individual require support to prevent injury during or prior to a seizure episode?	N = 87	N = 21
Yes	63.2	61.9
Less than monthly	62.1	46.7
Less than weekly	12.1	13.3
Less than daily	6.9	66.7
Daily	19.0	33.3
No	36.8	38.1

d) Does the individual have a diagnosis of diabetes or pre-diabetes?	N = 346	N = 101
Yes, diabetes	11.0	0.0
Yes, pre-diabetes	4.6	1.0
No	84.4	99.0
e) Does the individual use a diabetic insulin pump?	N = 52	
Yes	0.0	N/A
No	100.0	N/A
f) Does the individual's diabetes management include administration of sliding scale insulin?	N = 54	
Yes, administered by the individual without in-person assistance	5.6	N/A
Yes, administered by the individual with in-person assistance	7.4	N/A
Yes, administered by support person	7.4	N/A
No	79.6	N/A

A. Can the clarity of these items be improved?

The FAQs included one question on these items:

1. What if an individual had a suspected seizure in the last 5 years? Tool designers answered with, if suspected, this should be coded as no, and comments included.

B. Are all response categories needed/populated?

No individuals used a diabetic pump, and no children used insulin among those in the pilot test population.

C. Can the section be shortened by eliminating questions or reordering for skip patterns?

These questions are capturing very different concepts and therefore cannot be reduced by eliminating items. It is not clear, however, whether insulin administration should be treated differently from other treatments/monitoring. The section explicitly detailing treatments and monitoring (not shown in frequencies) includes check boxes for support persons and the level of support.

Medical: 54-55. Treatments/Therapies and Medication

The Medical section includes an introductory question on whether individuals are receiving special treatments or therapies, drawn from earlier Oregon assessment tools. There is also a set of Medication questions that include new questions on the use of medication (55a,b,d), risks

items associated with medication, and medication management questions from the FASI. The FASI medication management questions (items 55f-i) were skipped for children under age 18.

Table 22: Treatments/Therapies and Medication: Response Frequencies, Core Sample, Adults and Children

54. a) Is the individual currently receiving or in need of any special treatments or therapies, such as pacemaker, ostomy care, oxygen/respiratory therapy, feeding tube, or dialysis?	Frequencies (Adults)	Frequencies (Children)
	N = 337	N = 97
No	58.2	100.0
Yes	41.8	0.0
Unsure	0.0	0.0
Chose not to answer	0.0	0.0
55. a) Individual currently takes prescription medications.	Frequencies (Adults)	Frequencies (Children)
	N = 350	N = 102
No	8.6	15.7
Yes	91.4	84.3
55. b) Is a list of medications kept somewhere else for the individual?	N = 295	N = 83
	Yes	86.4
No	13.6	48.2
55. d) Regularly takes over the counter medications, vitamins or supplements.	N = 297	N = 78
	No	24.6
Yes	75.4	43.6
55. e) Does the individual take medication known to cause dehydration? RISK ITEM	N = 314	N = 80
	None the participant, proxy, or assessor is aware of	79.6
Yes	20.4	6.3
55. f) Medication management – oral medication: The ability to prepare and take all prescribed oral medications reliably and safely, including administration of the correct dosage at the appropriate times/intervals.	N = 316	N/A
	Independent	6.3
Setup or clean-up assistance	7.0	N/A
Supervision or touching assistance	6.3	N/A
Partial/moderate assistance	6.3	N/A
Substantial/maximal assistance	23.4	N/A
Dependent	46.2	N/A
Person refused	0.0	N/A
Not applicable	2.2	N/A
Not attempted	2.2	N/A

55. g) Medication management – inhalant/mist medications: The ability to prepare and take all prescribed inhalant/mist medications reliably and safely, including administration of the correct dosage at the appropriate times/intervals.	N = 313	N/A
Independent	4.5	N/A
Setup or clean-up assistance	3.2	N/A
Supervision or touching assistance	2.6	N/A
Partial/moderate assistance	0.3	N/A
Substantial/maximal assistance	1.9	N/A
Dependent	7.4	N/A
Person refused	0.0	N/A
Not applicable	80.2	N/A
Not attempted	0.0	N/A
55. h) Medication management – injectable medications: The ability to prepare and take all prescribed injectable medications reliably and safely, including administration of the correct dosage at the appropriate times/intervals.	N = 311	N/A
Independent	2.6	N/A
Setup or clean-up assistance	0.0	N/A
Supervision or touching assistance	0.6	N/A
Partial/moderate assistance	1.3	N/A
Substantial/maximal assistance	0.6	N/A
Dependent	6.8	N/A
Person refused	0.0	N/A
Not applicable	88.1	N/A
Not attempted	0.0	N/A
55. i) Medication management – topical medications: The ability to prepare and apply all prescribed topical medications reliably and safely, including administration of the correct dosage at the appropriate times/intervals.	N = 313	N/A
Independent	4.2	N/A
Setup or clean-up assistance	2.6	N/A
Supervision or touching assistance	2.6	N/A
Partial/moderate assistance	3.2	N/A
Substantial/maximal assistance	4.5	N/A
Dependent	36.1	N/A
Person refused	0.3	N/A
Not applicable	46.7	N/A
Not attempted	0.0	N/A

A. Can the clarity of these items be improved?

Although the treatment/therapies themselves are objective (see Appendix for item 54b), assessors remarked that it is unclear whether or not the frequency of usage items should be coded based on frequency of support interventions or frequency of therapy sessions.

In the FAQ, a question on item 54a arose: Group homes require prescriptions for every medication, no matter whether the medication is traditionally over the counter or not. This contributes to a potential difference in scoring for in-home and out-of-home individuals. Should these continue to be scored in this way?

B. Are all response categories needed/populated?

No responses to item 54a were scored as Unsure or Chose not to answer.

Inhalant and injectable medications were generally answered as Not Applicable, making it difficult to see distinctions in the other categories. However, most response categories were used, except for Person refused and Not attempted, which were rarely selected.

C. Can the section be shortened by eliminating questions or reordering for skip patterns?

Item 55b and the list of medications (item 55c not shown) are skipped for individuals not taking prescription medication. Additional skips could be used for questions on inhalants and injectable and topical medications.

Medical: 56. Medical Risk

The final set of questions in the Medical section are used for determination of medical risk, drawing from existing Oregon assessment items.

Table 23: Medical Risk: Response Frequencies, Core Sample, Adults and Children

a) Aspiration	Frequencies (Adults)	Frequencies (Children)
	N = 326	N = 93
Not needed	65.6	77.4
Evaluation needed	7.7	8.6
Evaluation complete	26.7	14.0
At medical risk	N = 310	N = 97
Yes	36.8	24.8
No	58.4	73.2
Unknown	4.8	2.1
b) Dehydration	N = 322	N = 94
Not needed	74.5	89.4
Evaluation needed	6.8	5.3
Evaluation complete	18.6	5.3
At medical risk	N = 307	N = 97
Yes	33.6	30.9
No	62.9	68.0
Unknown	3.6	1.0
c) Choking	N = 322	N = 93
Not needed	66.8	74.2
Evaluation needed	9.3	14.0
Evaluation complete	23.9	11.8

At medical risk	N = 308	N = 96
Yes	40.9	34.4
No	53.6	61.5
Unknown	5.5	4.2
d) Constipation	N = 321	N = 93
Not needed	66.0	77.4
Evaluation needed	7.8	9.7
Evaluation complete	26.2	12.9
At medical risk	N = 307	N = 97
Yes	43.7	37.1
No	53.1	60.8
Unknown	3.3	2.1

A. Can the clarity of these items be improved?

No issues identified with these questions.

B. Are all response categories needed/populated?

All response categories are populated.

C. Can the section be shortened by eliminating questions or reordering for skip patterns?

As risk items, all questions are needed.

7. OTHER ISSUES

In this final section, we highlight issues identified in other sections of the tool. Complete frequencies for the items are provided as a separate attachment to this report.

Other Items Prompting FAQs or Survey Comments

- II. Communication: 1 Communication Devices and Preferences –
 - FAQs: Confusion regarding whether to indicate all modes of communication, or just primary ways.
 - Survey: One respondent indicated it would make sense to remove question d, a text response question: “Identify any other communication preferences or needs. Include issues with communication with reference to setting.
- II. Communication: 2 Language Expression and Comprehension – The survey contained conflicting responses on this section. Some said this section is too long and convoluted. One respondent wrote “no need for b, c, d, and e. In short, too many questions group them together and be concise.” Another stated this section is more detailed than in the ANA, which is much better for people with higher needs. But yet another respondent stated this could be more detailed, as 90% of IDD individuals need support with communication activities.
- III. Memory and Cognition: 4. Potential Cognitive Difficulties (skipped for children under age 12) – Two survey responses addressed this section: 1 - That this is blanked out for children under 12 is concerning. 2 - Including memory as a factor here is not appropriate for the population.
- VII. Safety: 47 Safety Awareness and Support – Survey respondents disagreed around whether this can be more concise, or if this contains too little detail.
- VII. Safety: 48 Environmental Safety –
 - FAQs: If interventions already in place to prevent a safety issue, should this be coded as having a safety issue? How should we consider risk if chemicals are not locked up?
 - Survey: Differing opinions on length and complexity
- VII. Safety: 49 Assessor’s Judgment about Potential for Abuse, Neglect and Exploitation
 - FAQs: Should we mark yes for increased risk if individuals have had past incidents? Quite common for individuals in certain living settings to have at least one neglect on file; answers to FAQ state to assess whether that incident text puts the individual at increased risk.
 - Survey: Shouldn’t assessor judgment depend on living setting rather than age, i.e. in the case of self-neglect?
- IX. Supervision and Support Summary: 60 Assessor Judgment of Potential Level of Supervision Needed by Setting: Supports - Assessors had questions regarding concurrent supervision supports, i.e. how to code if an individual is remotely monitored as well as

requires a 1:1 during awake hours, “typical” supports versus supports on specific days, and how to record hours for sleep supervision (sleeping versus lying down/resting). Assessors also had questions regarding how to score support needs for children at after-school programs that may be paid for by the parent.