

Case Examples of Evaluation and Intervention within the Cognitive Disabilities Model

Background: Evaluation and intervention within the Cognitive Disabilities Model (CDM)^{1,2} incorporate the CDM theoretical and practice framework as well as aspects of the OTFP-4.³ This approach emphasizes the importance of assessing functional cognitive capacity in the context of a comprehensive evaluation that considers all the person's assets and limitations that may affect safe and effective performance of activities the person needs and wants to do. These considerations include: physical capacities (e.g., mobility, muscle strength, fine and gross motor skills, energy level); domain-specific cognitive functions (e.g., perception, memory, language); the person's goals, values, interests, motivation; and contextual supports and barriers (e.g., access, financial resources, and necessary education/training). The three case examples that follow illustrate this process with persons with medical conditions associated with stable, improving, and declining functional cognitive abilities who are receiving interventions related to their cognitive disabilities/limitations in home and hospital settings.

Sources:

Case 1 Chris. [Teaching Case]. In C. A. Earhart (2011, October). Using the Cognitive Disabilities Model to Guide Interventions. Presented at the 35th Annual Occupational Therapy Association of California Conference. Sacramento, CA. Adapted and revised (2023) from Earhart, C. A. & McCraith, D. B (2020). Cognitive Disabilities Model: Allen Cognitive Level Screen-5 and Allen Diagnostic Module (2nd Edition) Assessments. In B. Hemphill & C. Urish (Eds.), *Assessments in occupational therapy mental health: An integrative approach* (4th ed., pp. 203-206). Slack, Inc.

Case 2 Flora. [Teaching Case]. Developed by C. A. Earhart (2010) for educational use. Adapted and revised (2023) from McCraith, D. B, Austin, S. L., & Earhart, C.A. (2011). The Cognitive Disabilities Model in 2011. In N. Katz (Ed.), *Cognition, occupation, and participation across the life span: Neuroscience, neurorehabilitation, and models of intervention in occupational therapy* (3rd ed., pp. 400-401). AOTA Press.

Case 3 Bob. Contributed by Tina Blue, OTR/L (2022). Veteran's Administration Bay Pines Health Center, St. Petersburg, FL. Used with permission.

References:

¹McCraith, D. B & Earhart, C.A. (2018). Cognitive Disabilities Model: Creating fit between functional cognitive abilities and cognitive activity demands. In N. Katz and J. Toglia (Eds.), *Cognition, occupation, and participation across the lifespan: Neuroscience, neurorehabilitation, and models of intervention in occupational therapy* (4th ed., pp. 469-497). AOTA Press.

²Allen, C., Earhart, C., & Blue, T. (1992). Occupational therapy treatment goals for the physically and cognitively disabled. Bethesda, MD: AOTA Press.

³American Occupational Therapy Association (AOTA; 2020). Occupational therapy practice framework: Domain and process (4th ed.). *American Journal of Occupational Therapy*, 74 (Supplement_2). <https://doi.org/10.5014/ajot.2020.74S2001>

Case 1: Chris, a Young Man with a Developmental Disability in a Community Setting: Modifying valued activities to support safe and successful performance in context

Case Summary: This case illustrates a CDM evaluation/intervention process for **creating a fit** with Chris, a young man with Autism Spectrum Disorder with intellectual and developmental disabilities in a community setting. This process included establishing a new performance routine in consultation with caregivers by modifying a valued activity to be a better *fit* with Chris’ stable functional cognitive capacity and associated functional performance abilities. The OT practitioner consulted with Chris and his family to select interventions that supported Chris in establishing a new daily routine using familiar skills while ensuring his safety in the community. The OT practitioner educated the family in instructional methods and activity modifications that *fit* Chris’ available functional cognitive capacity. Chris achieved his goal to travel to work independently and safely every day by learning a new performance routine that fit his functional cognitive capacity.

Table 1: *Chris, a Young Man with a Developmental Disability in a Community Setting*

| Steps | | Implementation | Interpretation/Recommendations |
|-------|--|---|---|
| 1 | Collect occupational profile data (client & caregiver report) | <ul style="list-style-type: none"> Chris is 21 years old, single Caucasian male, Dx: Autism Rx: Risperdal Lives alone with daily support from parents Takes bus to work daily where he wraps silverware in café Chris’ goal: “Get to the bus station from home by myself.” | <ul style="list-style-type: none"> <i>Can Do:</i> TBD <i>Will Do:</i> Wants to get to the bus independently <i>May Do:</i> Parents support Chris living independently & working with supervision |
| | | <ul style="list-style-type: none"> Independent in grooming, dressing, eating | 4.4 + abilities are inferred |
| | | <ul style="list-style-type: none"> Follows trained routines for preparing packaged food, using dishwasher, doing laundry, making simple purchases, traveling familiar bus routes, using cell phone to access help | 4.4 abilities are inferred |
| | | <ul style="list-style-type: none"> Takes Rx meds with daily checks for compliance by parents | 4.4 abilities are inferred |
| | | <ul style="list-style-type: none"> Budgets money & plans new activities with parents’ assistance | 4.4 abilities are inferred |
| 2 | Assess & verify functional cognitive abilities | <ul style="list-style-type: none"> ACLS-5: Learns WS; unable to learn SCS after 2 demos | 4.4 score. Need to verify score. |
| | | <ul style="list-style-type: none"> ADM Key Fob (4.0 – 5.2 cognitive activity demands): Chris selects activity & states: “It is hard, but I like it” | 4.4 score. Verified score. |
| 3 | Interpret data | <ul style="list-style-type: none"> Pattern of ADL & IADL performance with daily assistance matches mode 4.4. Two standardized tests: scores of 4.4 | Chris displays current stable functional cognitive abilities at mode 4.4. |

Table 1: Chris, a Young Man with a Developmental Disability in a Community Setting (cont.)

| Steps | | Implementation | Interpretation/Recommendations |
|-------|--|---|--|
| 4 | Analyze activity demand elements for “Fit” | <ul style="list-style-type: none"> Walking to bus: <i>Fit</i>: Chris can walk 1 mile & learn new route (4.4) <i>Misfit</i>: Chris needs assistance to plan a new safe route (6.0) | <ul style="list-style-type: none"> Walking to bus is realistic with training to follow a safe route planned by others |
| | | <ul style="list-style-type: none"> Riding bike to bus: <i>Fit</i>: Chris can ride a bike 1 mile (4.4) <i>Misfit</i>: Chris does not scan environment while riding bike (4.6) to ensure safety & needs assistance to plan new safe route | <ul style="list-style-type: none"> Biking to bus is realistic with training to ride bike <i>on sidewalk</i> along a safe route planned by others |
| 5 | Plan intervention | <ul style="list-style-type: none"> Chris selects biking to bus method to meet his goal. Dad agrees to provide recommended targeted assistance. Goal: Client will ride his bike 1 mile to bus station on the sidewalk on new route determined by Dad. | <ul style="list-style-type: none"> <i>Can Do</i>: Chris’ familiar skills include riding a bike (4.4); targeted assistance to modify 4.6 and 6.0 elements in activity is required for safety in traveling via a new route to bus station. <i>Will Do</i>: Chris wants to ride his bike to achieve his goal <i>May Do</i>: Bike, helmet available for safety; Dad agrees to plan new route via sidewalk & train Chris by demonstration & direct supervision until new route is learned. |
| 6 | Intervene (develop new skill) | <ul style="list-style-type: none"> Caregiver: Dad checks bike for safety; secures helmet; determines new route on sidewalk; trains Chris to navigate using large visible landmarks along route & accompanies him several times until Chris learns new route. Client: Chris wears helmet, carries cell phone with preset number & demonstrates correct use of preset emergency number on cell phone. | <ul style="list-style-type: none"> Training methods: On site training & multiple trials optimizes learning new performance skills at mode 4.4. Identifying specific striking visible cues one at a time (landmarks along new route, motor actions with cell phone) optimizes learning at mode 4.4. |
| 7 | Evaluate results, modify intervention | <ul style="list-style-type: none"> On first unaccompanied ride, Chris uses wrong crosswalk; cannot cross street due to heavy traffic; cannot solve this new problem. Chris calls Dad on cell: “I can’t cross the street.” Dad tells Chris to backtrack & use correct crosswalk. Chris follows directions & bikes to bus station successfully on following days. | <ul style="list-style-type: none"> Chris expresses satisfaction with new independence in getting to work site. Recommend that parents continue to support Chris’ independence by helping to plan new activities, anticipating safety needs, & solving new problems. |

Case 2: Flora, an Older Woman with Serious Mental Illness in an In-patient Mental Health Setting: Monitoring changing abilities and making recommendations for continued recovery after discharge from an acute care setting

Case Summary: This case illustrates a CDM evaluation/intervention process for **creating a fit** with Flora, an older woman diagnosed with Major Depression with psychotic features in an acute in-patient mental health setting. The OT practitioner hypothesized that engaging Flora in safe and satisfying activities that fit her available functional cognitive and physical capacities would maintain her current capacity and provide a supportive context over time for observing expected improvements due to medication and other interventions. The OT practitioner 1) modified the cognitive complexity of activity demands of valued, familiar activities selected in consultation with Flora and caregivers, and 2) continued to modify those activities to fit Flora’s functional cognitive capacity and functional performance abilities as these improved. At the time of discharge, outcomes included 1) safe and successful participation in familiar activities valued by Flora who expressed satisfaction with her intervention program, 2) identification of qualitative improvements in Flora’s functional cognitive capacity and functional performance abilities which were communicated to the interdisciplinary treatment team as confirmation that medications and other in-patient interventions were effective, and 3) recommendations to support Flora’s continued recovery at home which were provided to Flora’s sister and physician.

Table 2: Flora, an Older Woman with Serious Mental Illness in an In-patient Mental Health Setting

| Steps | | Implementation | Interpretation/Recommendations |
|-------|--|--|--|
| 1 | Collect Occupational Profile Data | <p>Medical record review: Flora, 76 years old, single, Hispanic woman who primarily speaks Spanish was admitted to hospital on legal hold as a danger to herself after not eating or sleeping for 12 days & withdrawing from all activities. She hears & feels the “Devil pressing down” on her & expresses suicidal ideation.</p> <p>Caregiver (sister) report: Flora lives with her younger sister who manages their budget & social plans. Routine: Flora is independent in ADLs, cooks familiar meals, cleans the house, & travels to familiar MD appointments alone on the bus. Interests: likes to sew (machine), read, cook, & socialize with friends. Recently Flora has been studying to take the written portion of the US citizenship test which the sister reports has been “very stressful for Flora”.</p> | <p>Recent decline in performance of ADL/IADL routines is likely due to this Major Depression episode.</p> <p>Previous functional cognitive capacity & functional performance abilities are estimated at Level/mode 4.8 based on sister’s report, including: independence in ADLs & serial stepped routine IADLs (e.g., learning bus routes, cooking with recipes); and needing assistance from sister in complex IADLs with 6.0 activity demands (e.g., budgeting, planning new social activities, & taking US citizenship test)</p> |

Table 2: Flora, an Older Woman with Serious Mental Illness in an In-patient Mental Health Setting (cont.)

| | Steps | Implementation | Interpretation/Recommendations |
|---|--|--|--|
| 2 | Screen for Functional Cognitive Capacity & Verify Results | <p>Nursing Report: Flora eats & sleeps poorly & is withdrawn on unit. Staff initiates & supervises all ADLs. Flora can sequence familiar actions correctly when given supplies to complete ADLs. She appears more alert in afternoons & has learned unit routine.</p> <p>Client Interview: Flora displays a sad affect, low energy, & needs prompts to continue slow motor actions. Has mild hand tremors. Verbal responses are short & effortful. She states, “The devil presses down on me, and says she wants to die. When asked by OT, she cannot describe her previous routines nor identify a goal for herself.</p> <p>Standardized OT Assessments: LACLS-5: Flora scores 4.2. Slow pace. ADM-2 Ribbon Card: Flora scores 4.2. Flora attempts all assessment tasks. Pace is very slow & sustained energy appears limited.</p> | <p>Based on reported performance of ADLs on unit & learning daily unit routine, OT <i>estimates</i> Flora’s current functional cognitive capacity to be within 4.0 – 4.4 range.</p> <p>Reported and observed symptoms are consistent with diagnosis of depression. Safety concern: Provide only safe, familiar objects with direct supervision in activities.</p> <p>Due to tremors, the LACLS-5 was selected to screen for functional cognitive capacity. Needles were removed to ensure safety. ADM-2 Ribbon Card is selected to verify screen score, based on: cognitive activity demands of 4.0-5.2 are likely to <i>fit</i> Flora’s current abilities, assessment is completed in 20 to 30 minutes to fit Flora’s low energy, materials are safe.</p> |
| 3 | Interpret Data to Identify Current ACL | <p>Direct and reported observations of Flora’s behavior suggest a pattern of fluctuating performance between levels/modes 4.2 in morning & 4.4 in the afternoon. Two scores on standardized ADM assessments of 4.2.</p> | <p>A pattern of performance behaviors in the ACL 4.2 to 4.4 range depending on time of day is identified. Variability during day may be related to varying levels of fatigue.</p> |
| 4 | Analyze Valued Activities for Fit | <p>Flora’s previous valued activities with cognitive activity demands at 4.8 (taking bus to MD appointments, cooking with recipes, sewing with machine) <i>exceed</i> current functional cognitive capacity & are unlikely to be performed safely & successfully at this time.</p> | <p>Flora’s current limitations in functional cognitive capacity are likely to improve in next three weeks. Changing abilities may be monitored daily by observing Flora’s performance in activities with demands that both <i>fit</i> & <i>exceed</i> her current capacity.</p> |

Table 2: Flora, an Older Woman with Serious Mental Illness in an In-patient Mental Health Facility (cont.)

| Steps | | Implementation | Interpretation/Recommendations |
|-------|---|--|--|
| 5 | Plan Intervention | <p><i>Monitor Flora’s performance for expected improvements in functional cognitive capacity in activities selected to fit available abilities, for 30 – 60 minutes daily, in OT clinic.</i></p> <p><i>Make recommendations for assistance to treatment team at discharge to support continued recovery at home.</i></p> <p><i>Goal: Flora will demonstrate improved functional cognitive capacity & functional performance abilities by anticipated discharge in approximately 3 weeks.</i></p> | <p><i>Can do assets:</i> Offer Flora safe, familiar activities with cognitive activity demands that <i>fit</i> current ACL 4.2-4.4 capacity & that contain more complex activity elements.</p> <p><i>Will do assets:</i> Offer Flora a choice between two ADM-2 activity assessments that use familiar sewing tools & processes, or another similar simple crafts option.</p> <p><i>May do assets:</i> Escort Flora to daily OT sessions off unit, set up safe materials, provide instruction that <i>fits</i> current cognitive capacity (demonstrated new steps, exact sample of outcome) with continuous supervision.</p> |
| 6 | Evaluate Results Modify Intervention | <p><i>Week 1:</i> Five ADM-2 activities are selected by Flora. Scores: 4.2 – 4.4. Other observations: Flora needs prompts to engage; works at a very slow pace; no adverse medication effects are observed or reported by Flora. These observations are reported daily to treatment team.</p> <p><i>Week 2:</i> Five different ADM-2 activities selected by Flora. Scores: 4.6. Other observations: Flora no longer needs prompting to engage; work pace increases; she states: “The Devil doesn’t bother me anymore,” & she denies suicidal ideation. No adverse medication effects are observed or reported by Flora. These observation are reported daily to treatment team.</p> <p><i>Week 3:</i> ADM-2 Needlepoint Key Fob suggested by OT: Scores of 4.8. Other observations: Flora states: “I like this activity. May I do more?” No adverse medication effects are observed or reported by Flora.</p> | <p>OT offers activities with increasingly complex cognitive activity demands to <i>fit</i> observed improvements in functional cognitive capacity & functional performance abilities.</p> <p>Flora’s pattern of task performance in 11 different standardized ADM-2 activity assessments over a 3-week period suggests improvement in functional cognitive capacity from 4.2 to 4.8 as well as decreased symptoms of depression, likely a positive response to medication & supportive milieu.</p> <p>Week 3 performance suggests Flora has returned to presumed previous hypothesized functional cognitive capacity of ACL 4.8.</p> |

Table 2: Flora, an Older Woman with Serious Mental Illness in an In-patient Mental Health Facility (cont.)

| Steps | Implementation | Interpretation/Recommendations |
|---|---|--|
| <p>7</p> <p>Recommendations to Support Safe Participation after Discharge</p> | <p>At end of Week 3, MD discharges Flora to her home to continue to recover. She is given two new ADL/IADL activities: 1) two new medication prescriptions to fill & 2) new monthly follow up appointments at a local mental health clinic accessible by bus from her home. Sister requests suggestions for supporting Flora at home.</p> | <p>Flora is likely able to resume familiar routines at home with targeted assistance in new activities provided by sister.</p> |
| | <p>OT practitioner completes task analysis of new ADL/IADL activities & US citizenship test based on analysis of cognitive activity demands & Flora’s current functional cognitive capacity of ACL 4.8 so that she can provide Flora’s sister with recommendations for helping Flora learn/incorporate her new ADL/IADL activities into her routine.</p> | <p>OT recommendations: <i>create a fit</i> between identified activity demands of new ADL/ IADL activities & her 4.8 functional cognitive capacity.</p> |
| | <p><i>ADL task analysis:</i> New prescription has serial stepped instructions (4.8 complexity) which <i>fit</i> Flora’s current functional cognitive capacity of ACL 4.8 (<i>Can do assets</i>).</p> | <p>ADL: OT recommends that sister supervise Flora to ensure safety compliance & remind her to renew new prescription as needed until Flora demonstrates consistent mastery of this new activity.</p> |
| | <p><i>IADL task analysis:</i> Identifying bus route to new destination (follow-up clinic) requires planning, ACL 6.0 activity demands that <i>do not fit</i> Flora’s current functional cognitive capacity of ACL 4.8.</p> | <p>IADL: OT recommends that sister identify new bus route for Flora & accompany her to ensure she has learned the new route (training strategy <i>fits</i> ACL 4.8).</p> |
| | <p><i>Task analysis of written US Citizenship test:</i> Test requires learning conceptual material to correctly answer questions, 6.0 activity demands. The cognitive activity demands <i>do not fit</i> Flora’s current functional cognitive capacity of ACL 4.8.</p> | <p>OT hypothesizes that the stress of trying to study for this test may have contributed to onset of depression for Flora.</p> |
| | <p>OT also learns that while test content may not be modified for a better <i>fit</i>, Flora may be excused from test for valid medical reason provided by MD (<i>May do asset</i>).</p> | <p>OT recommends that MD provide documentation to excuse Flora from taking the written test, citing “cognitive decline from medical condition.”</p> <p>OUTCOME: Flora was excused from taking the written test.</p> |

Note: OT = Occupational Therapist

Case 3: Bob, an Older Man with Physical and Cognitive Disabilities in an Outpatient Rehabilitation Clinic Setting: Evaluating functional cognitive and physical capacities and functional performance abilities to recommend assistance to support health and safety in the home environment.

Case Summary: This case illustrates the role of an OT practitioner as a consultant regarding the need for a medical necessity report based on an evaluation with intervention recommendations for **creating a fit** in the context of the CDM. Bob, an older man in an outpatient rehabilitation clinic with apparently stable functional cognitive capacity and physical disabilities, experienced a new physical condition (left below knee amputation) that required changing his health routines and adjusting to new safety risks in his home environment. Based on an evaluation of Bob's current cognitive and physical capacity, the OT practitioner recommended interventions for safety by modifying Bob's home environment and the activity demands of his health and safety routines to *fit* his identified functional cognitive and physical capacities. The occupational therapist (OT) focused on prevention by (a) identifying potential risks to Bob's health and safety related to his available functional cognitive capacity for adjusting to his new medical condition and (b) making recommendations based on medical necessity to care providers for increased assistance in Bob's home environment to maintain his current abilities, prevent potential health complications, and minimize safety hazards. This evaluation and medical necessity report with recommendations resulted in increased frequency of previously scheduled home assistance for Bob and a new home-based physical therapy (PT) program for exercise and care of his amputation site.

Caregiver request for cognitive assessment: MD requested cognitive assessment after Bob's 18-month follow up appointment with PT who noted poor compliance with amputated limb protocols resulting in chronic pain and patellar irritation in the limb.

Client request: Bob reported his "failing memory" was probably affecting his ability to care for himself. He stated he would prefer to live in an assisted living facility but could not afford it.

Bob's Evaluation/Intervention Process within the CDM

1. Collect Occupational Profile Data

- **Medical record review:** Bob is 80 years old, single, and a veteran and retired carpenter. Pertinent medical diagnoses include: Left Below Knee Amputation (18 months, post); Chronic Obstructive Pulmonary Disease, Hypertension, and Tobacco Dependence. Bob's healthcare provider currently provides a Home Health Aide 3 to 4 times a week to assist Bob with self-care, shopping, chores, and cleaning.

Consultation with Physical Therapist (PT): The OT consulted with the PT who initiated the referral for cognitive assessment after seeing Bob for his 18-month follow up appointment. The PT reported that Bob required increased time and verbal cueing to doff and re-don his prosthesis which suggested that he had not learned this new procedure after 18 months. Bob admitted he did not clean his gel liner daily or bathe his amputated limb daily as required. The PT thought that this likely contributed to his developing patellar irritation, a scab over the kneecap, and chronic pain in the limb.

- **Interview with client:** Bob arrived in the OT outpatient clinic in his wheelchair with the left leg rest swing-away mechanism broken. He appeared disheveled, with poor grooming and hygiene, and coughed frequently with a notable "rattling" sound in his lungs. OT noted he had a pack of cigarettes in his shirt pocket. Bob reported that he lives alone in a mobile home with a ramp to access the front entrance.

Bob reported that he bathes three times a week in a walk-in shower with grab bars and shower chair with assistance of the Home Health Aide. He cooked "TV dinners" for himself in the microwave and used a propane tank stove that he struggled to keep filled due to limited financial resources. He enjoyed going to a local church for support and socialization but said that he had been victimized by some housekeepers arranged by a "friend from the church," who stole most of his furniture and valuables when he was in the hospital after amputation of his left lower leg eighteen months ago. His solution to redress this problem was to "go to a local television news station and make a complaint."

Bob reported he tries to use his front door entrance ramp with his rolling walker to go outside to get his mail, but that he is "scared to death" he might fall every time he attempts it. He relies on paid transportation for medical appointments that costs him \$10 per trip. He reported independence with keeping track of medical appointments by writing them on a calendar and of phone numbers to contact his doctors by having them pre-set in his basic cell phone.

Bob attributed his chronic left knee pain to a problem with his prosthesis. When the OT tried to point out the possible connection between his knee pain and his problem following through with his PT home health limb care program, Bob did not seem to understand other than to say that he does not wear his prosthesis "as much as I should." He stated that instead of wearing his prosthesis, he would rather use his wheelchair or walk short distances using his rolling walker until his right knee starts to hurt. He did not appear to grasp the possible effect of not following hygiene and other protocols for care of his amputated limb.

2. Screen for Functional Cognitive Capacity and Verify Results

- **Functional Cognitive Screening: Allen Cognitive Level Screen-5**

Bob was cooperative with the ACLS-5 Screen assessment and was assigned a score of 4.2. He was goal directed, able to follow demonstrated familiar actions one step at a time using a few striking visual cues but was unable to correct twist errors when they were pointed out in the two-step whipstitch task. He continued to repeat the same error.

- **Verifying the ACLS-5 Score with Skilled Observation in Other Assessments**

To verify the ACLS-5 score of 4.2, the OT observed Bob in several self-report and observational performance-based assessments with cognitive activity demands within level 4. OT observed abilities to state a goal, describe his familiar routines, engage in reciprocal conversation, and follow simple two-step demonstrated directions during testing. Bob was able to complete all the following assessments when requested, with the following results:

- **Functional Independence Measure (FIM)** (1 = total assist, 7 = complete independence based on *client report*): Eating (7), Grooming (6), Bathing (4-5), Upper Body Dressing (6), Lower Body Dressing (6), Toileting (6)
- **Functional Range of Motion:** Within normal limits on all tests of the upper extremities
- **Upper Extremity Strength:** Manual Muscle Test (MMT) results: 4/5 (right), 4+/5 (left)
- **Grip:** Within functional limits for age for right (dominant) hand and left (nondominant) hand
- **Upper Extremity Coordination:** Gross and fine motor within functional limits for both extremities
- **Pain Assessment:** client reported 7-8/10 chronic pain in left knee, 10/10 toward end of 60-minute OT session when Bob asked OT: "Do you have some Tylenol?"

3. Synthesizing and Interpreting Evaluation Data Bob's report of his self-care and daily routines, observations of behaviors during interview and various assessments, and data from PT interview appeared to support a pattern of task performance behavior matching ACL 4.2 on the Allen Cognitive Scale. A relatively stable, moderate functional cognitive disability was inferred. Evidence for this interpretation included:

- demonstrated ability to engage in a *familiar* daily routine, but neglect of *new* personal hygiene requirements (e.g., care of gel liner, prosthesis, and wheelchair);
- failure to learn a new sequence of steps to don and doff prosthesis after 18 months of intermittent training;
- poor understanding of the effect of neglected daily hygiene routine on his amputated limb, which has resulted in skin breakdown and limb pain and caused him to avoid using his prosthesis;
- failure to identify and implement solutions to new problems requiring consideration of possibilities and multiple related variables (e.g., using existing social systems to retrieve stolen furniture and valuables or to retrieve his mail.)

Bob's assets included his ability to recognize his need for assistance and his good verbal and social skills which might be used to make connections with potential sources of assistance in his community if he chooses to do so.

4. Evaluation Summary and Medical Necessity Report

(Based on the OT practitioner's analysis of the cognitive activity demands of Bob's new daily health routine for hygiene and exercise, and his reported performance of valued activities affected by his amputated limb, in order to make specific recommendations that *fit* his current cognitive and physical capacity.) With functional cognitive capacity and associated functional performance abilities **moderately impaired at ACL 4.2**, Bob is at risk for experiencing continued health problems and safety risks, e.g., skin breakdown and falls related to his failure to follow a daily hygiene routine for care of his amputated limb and prosthesis. Persons functioning within ACL 4.2 typically may be trained by caregivers to follow new procedures one step at a time, over several weeks, in the situation-specific (home) setting for better follow-through. However, daily supervision would be required to check results and to monitor this person's follow-through to prevent potential problems in the future that a person with an ACL at 4.2 typically cannot anticipate. Because Bob cannot afford to relocate to an assisted living facility that would provide this level of assistance, he would benefit from: (1) a referral to a home health PT and (2) increased Home Health Aide visits and assistance from 3-4 to 7 days a week.

5. Intervention Recommendations

(Based on OT practitioner's evaluation and interpretation of Bob's functional cognitive and physical capacity described above)

- *Home Health PT:* Recommend that PT use training methods (one step at a time over several weeks in home environment) to train Bob in a home program including: care of his amputated limb and prosthesis, simple exercises to optimize fitness, and a daily routine for following through on limb care and exercise. PT will ensure that Bob's wheelchair is repaired or replaced.
- *Home Health Aide:* Recommend that Home Health Aide visit daily to monitor Bob's follow through on PT home limb care and exercise program and adequacy of nutritional intake and personal hygiene; and maintain sanitary home conditions by removing trash, repairing or replacing faulty or broken essential household equipment (e.g., fire, gas, leaking faucets) to mitigate potential safety hazards for Bob's overall safety.

6. Outcome of OT Practitioner's Evaluation and Medical Necessity Report The recommended increase in Home Health PT and Home Health Aide services were authorized based on medical necessity and recommendations by OT were implemented by the PT and Home Health Aide providers.