Section 4.17 Implement

Health Risk Assessments

This tool describes and provides examples of various health risk assessments that may be used by a care coordinator (CC) in a community-based care coordination (CCC) program to support patients in meeting their health care needs and goals. A reproducible template for each assessment instrument is included in this Toolkit.

Time required: 2 hours

Time required to complete a typical assessment for a specific patient: 15-30 minutes

Suggested other tools: Patient Action Plan (and template); CCC Patient Plan (and template); Approaches to Patient Communications; various risk assessment templates

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How to Use

1. **Review** the comparison of health risk assessments to medical and nursing assessments.

2. **Review** and understand each type of risk assessment and consider how and when it might be used with patients in the CCC program.

3. **Use** the appropriate risk assessment for a particular patient as needed to identify risks to the patient in meeting her/his health care goals.

4. **A template** is provided in this Toolkit for each type of assessment instrument (for example, see *Environmental Risk Assessment Template*) that can be used as-is or branded with a clinic, hospital, or CCC program's name or logo.

Health Risk Assessments in Comparison to Medical and Nursing Assessments

Health risk assessments used in care coordination may be distinguished from medical and nursing assessments performed during a routine medical check-up for a patient in several ways.

Both types of assessments:

- Attempt to gain an understanding about patient attributes or environment upon which further action can be taken by the person conducting the assessment, such as a referral to a specialty provider or community resource

- Are most effective when a baseline measurement can be taken when a patient is well then compared to periodic or subsequent measures, although such a baseline is not always available in both cases.

Medical and nursing assessments:

- Are expected and acceptable actions by physicians and nurses in the routine care of a patient, either as a regular health checkup or to diagnose and treat a patient's illness or injury.

- Are comprehensive, covering a wide range of physical, mental, and behavioral areas, and may or may not include a formal health risk assessment instrument. The comprehensive medical and nursing assessments may be somewhat modified to the circumstances surrounding how and when a patient seeks medical and nursing services.

- Lead to the identification of further diagnostic studies that may be needed, and, ultimately, to the formulation of a specific treatment regimen which is carried out by trained professionals.

Health risk assessments:

- Are short, focused tools used to understand particular attributes about a patient as related to a patient's capacity to perform certain activities and to independently navigate the health care system.

- Are often triggered by a suspicion of need rather than as a routine part of a medical or nursing practice.

- Carry a sensitivity about them such that conducting a formal assessment needs to be carefully weighed against potential harm. As such, a health risk assessment should be triggered through a heightened sense of awareness and adjustment in communications rather than as part of a formal care coordination process.

Common Health Risk Assessments for Care Coordination

- Medication Reconciliation
- Health Literacy Assessment
- Functional Risk Assessment
- Fall Risk Assessment
- Environmental Risk Assessment

- Digital Literacy Assessment
- Depression Risk Assessment
- Substance Use Assessment
- Social and Financial Risk Assessment

Medication Reconciliation

Medication reconciliation is the process of comparing a patient's medication orders to all of the medications that the patient has been taking. This reconciliation is done to avoid medication errors such as omissions, duplications, dosing errors, or drug interactions. It should be done at every transition of care in which new medications are ordered or existing orders are rewritten. Transitions in care include changes in setting, service, practitioner, or level of care.

Medication reconciliation may be considered a health risk assessment within the context of care coordination because:

- There may be different providers prescribing medications with no one ensuring appropriate medication therapy management.

- There may be no qualified nurse for a patient at home to monitor administration of medication and its reactions.

Medication reconciliation within the CCC program may be conducted using the following assessment tool, which was adapted from the Agency for Health care Research and Quality (AHRQ)'s "Improving Medication Safety in High Risk Medicare Beneficiaries Toolkit" at: http://effectivehealth care.ahrq.gov/index.cfm/search-for-guides-reviews-and-reports/?pageaction=displayproduct&productid=1186

Uses of Medication

In addition to medication reconciliation, many clinicians who work with older persons apply the Beers Criteria to assess potential inappropriate use of medications, often as a result of the person having multiple providers. The American Geriatrics Society updated their Beers Criteria in 2012. The following link provides the most recent criteria: http://www.americangeriatrics.org/files/documents/beers/BeersCriteriaPublicTranslation.pdf

The Beers Criteria, as well as other guidance tools for geriatric patients, are also available on mobile phone apps, at: http://www.americangeriatrics.org/publications/shop_publications/smartphone_products#iGeriatrics

Medication Reconciliation
1. Obtain medication lists from all of the patient's health records and compile these onto a single list on the **CCC Patient Plan**. It may be necessary to review discharge summaries and visit notes to determine if recent referrals have been made and to contact those providers to obtain medication lists.
2. During development of the **Patient Action Plan** with the patient, ask the patient to display containers for all prescription medications, OTC products and herbal and nutritional products being taken. If not available, ask the patient to supply medication lists that providers have given to the patient. If not available, ask the patient to recall the medications. In all cases, the patient should be prompted about patches, creams, eye drops, inhalers, sample medications, shots, optics, herbals, vitamins, minerals, and food supplements such as high-protein foods and energy drinks being taken. Ask the patient to document all medications being taken, their description, dose, route, and directions for taking (sig).

Medication Reconciliation

3. Compare what the patient states is being taken against the lists gleaned from the review of the patient's health record(s). Identify any medication discrepancies and ask the patient about them. Mark these on the **CCC Patient Plan** for further review of health record(s) and discussions with the patient's health care team.

4. Continue to conduct the medication reconciliation risk assessment by asking the patient the following questions and documenting responses on the **CCC Patient Plan** or in formal notes.

   ❑ Do you have any allergies? If so, to what drug/food and what was the reaction?

   ❑ Does anyone normally help with medication administration? [*If yes*, allow that person to assist with answering questions; if not, the patient must answer all questions without assistance.]

   For *each* medication the patient has listed on the **Patient Action Plan**, ask:

   ❑ When did you start taking this drug, or how long have you been taking this medication?

   ❑ How many times in the past 2 weeks have you forgotten a dose of this medication, or think you may have taken the medication more times than prescribed?

   ❑ Does your doctor require you to periodically have lab tests, check your blood pressure, or do anything else to monitor your condition?

   ❑ Have you had or do you now have any side effects from taking this drug? If so, what happened? Did you stop taking the drug? Reduce the amount of the drug you are taking? Contact your doctor?

   For each medication the patient has NOT listed on the **Patient Action Plan** but which appear on current medication lists from the patient's health record(s), ask:

   ❑ Are you taking this medication now? [*If taking*, ask the same questions as above.]

   ❑ Did you ever take this medication? If yes, why did you stop? If not, why not? [*if patient is not taking the medication on the list*.]

   ❑ Are you taking any other medication or substance that has not been prescribed for you but you find helpful to take? *If yes*, ask:

      ❑ How do you feel when you decide to take this product?

      ❑ How frequently do you take this product? How much do you take at a time?

      ❑ How do you feel after taking this product?

      ❑ Have you discussed taking this medication with your provider?

   ❑ Do you have any conditions for which you are NOT taking any prescription or non-prescription medications or other types of curative products, but which you believe medication may be helpful? [Note these conditions on the **CCC Patient Plan**.]

   ❑ Other than the side effect(s) you mentioned [*if applicable*], do you periodically experience any other changes in how you feel? Do you think these are related to any of the medications you are taking or when you don't take them, or to anything you eat, drink, or do? [Prompt for dizziness, nausea, pain, mood, shakiness, memory loss, numbness, etc. that may suggest a reaction to any of the medications being taken or not being taken, or other substance use. Note these symptoms on the **CCC Patient Plan**.]

   ❑ Do you have any questions or concerns about your medications?

5. For any discrepancies, reactions, or unusual symptoms, follow up by checking the patient's last lab work and vital signs, and discuss with the patient's primary care provider, other prescriber, and/or pharmacist.

(See *Medication Reconciliation Template* for a reproducible form.)

Health Literacy Assessment

The American Medical Association report, Health Literacy and Patient Safety: Help Patients Understand,[1] reports that "poor health literacy is a stronger predictor of a person's health than age, income, employment status, education level, and race." In Healthy People 2010,[2] the U.S. Department of Health and Human Services (HHS) adopted a definition of health literacy as "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions."

There are numerous health literacy resources available; a useful compilation is available from the Veterans Health Affairs, VA Library Network.[3] The following key points about conducting a health literacy risk assessment have been adapted from Cornett (2009) in the Online Journal of Issues in Nursing.[4]

Key considerations in conducting a Health Literacy Risk Assessment include:

- Communicating effectively with patients who have low literacy in general and low health literacy in particular depends on recognizing the problem and creating a shame-free environment in which to increase health literacy and evaluate learning that has occurred.

- Remember that even people with good literacy skills can find it challenging to understand health care information. Stress and anxiety over one's health condition may further limit the ability to listen, learn, and remember. However, patients can also feel insulted if some of the standard literacy tests are applied to them, which impacts patient satisfaction.

- Also note that patients suspected to have low literacy should be screened for other forms of cognitive impairments, such as:
  a. Delirium (acute onset of waxing and waning attention or disorganized thinking that is often a side effect of medications; review patient's *Medication Reconciliation Assessment* and refer to patient's primary care provider)
  b. Depression (see *Depression Risk Assessment*)
  c. Dementia (use a rapid screening test such as the Mini-Cog assessment.[5] This test can be administered by telling the patient to listen carefully to and remember three unrelated words.

- Many people with low literacy skills in general are masters at concealing their deficit and are often quite articulate in speaking. As a result, it may be difficult to realize a problem exists.

- There is fair evidence to suggest that harm outweighs benefits of literacy testing (see citation in article referenced above). People with low or impaired literacy skills in general, who already feel stigmatized and fear exposure of their inability to read, may go elsewhere for their health care or not seek health care/care coordination as appropriate if a formal literacy test is part of the process.

- Close observation, asking the "right" questions, and looking for clues that provide "red flags" that there is a problem usually is more effective than administering a formal test.

- In addition to referring patients to their primary care provider for specific medical and/or behavioral health conditions, strategies for oral and written communications can help those with low literacy become better recipients of health care communications. (See *Approaches to Patient Communications.*)

The following Health Literacy Assessment assumes that the patient has English language competency and there is no need for an interpreter. If there is need for an interpreter, appropriate arrangements need to be made for such.

Health Literacy Assessment
1. When providing oral communications:
a. Speak slowly and distinctly, using plain language. • **Watch for signs** that indicate the patient cannot hear you. *For example*, the patient does not respond to a question you ask, appears to be straining to hear, or moves closer to you. • **Watch for signs** that the patient has "tuned out," perhaps because you are speaking too fast or using medical jargon. *For example*, referring to "abdomen" may be the correct term to use, but "stomach" will be better undersood by the patient. • **Use animation** to emphasize key words or actions when possible. *For example*, point to your abdomen when saying stomach. • **Watch for signs** that the patient has become overwhelmed because you are supplying too much information at one time or are not provding enough opportunity for the patient to ask questions. *For example*, if the patient is no longer looking at you, nods his or her head when there is nothing to agree to, does not seem ready to ask a question, or simply seems dazed, pause and ask a brief question to draw the patient back to the conversation. Even just a pause may draw the patient back to concentrating on what is being said.
b. Organize the message logically and in short components. ❑ **First, explain to the patient what you are going to tell him or her.** If there are several components to the message, state how many things you are going to relate. *For example*, if there are four steps to doing X, tell the patient, "I am going to tell you how to do X. There are four steps." ❑ **Tell the patient each step in order.** Pause after each step to allow time for questions. However, avoid repetitive asking if the patient has any questions, as this can be both annoying and distracting. The patient may simply need time to process what has been heard. If there appears to be any uncertainty after an appropriate time for the patient to think about the statement, restate the step and use an example. If possible, find an example that includes some animation. If restatement is necessary, try to shorten the statement. The natural inclination is often to lengthen it and provide more information. This only becomes more overwhelming. ❑ **Then repeat to the patient what you have told them.** Summarize that you have told them how to do X, there are four steps, including 1..., 2..., 3…, and 4…. ❑ **Finally, use teach-back to confirm understanding for something especially important**. However, avoid asking the patient to repeat what they have just been told, as that can be intimidating and insulting. Instead, turn it around so you are comfortable that you have done your job. *For example*, if you have just explained the need to take a medication within five to ten minutes of starting a meal, you could say, "It is very important that this medication be taken in the correct way. To reassure me that I've been clear, can you please tell me in your own words, how and when you are going to take the first pill." Respond by thanking the patient.
2. When providing written communications:
a. If the written communication is the same as what the patient has been told, **tell the patient you are giving him or her a copy of what you just said** in case the patient wants to refer back to the information later or there is a family member/caregiver who may want to know more.

Health Literacy Assessment

b. If the patient is being asked to use a document, such as in developing the **Patient Action Plan,** track health status on a diary, check warning signs for subsequent action, or to join an online support group, two key steps should be taken:

   - Ensure that the patient can read well enough to complete the documentation.
   - Provide easy to read materials.

c. If there is any indication during oral communications that the patient may not be able to read, one way to check on this is to have the patient look at the My Action Plan section on the **Patient Action Plan** tool.

   Observe how the patient responds:

   ❑ *Does the patient accept the document and appear to read it?* If the patient offers an excuse to not read the form, such as "I don't have my glasses," "I'm too tired, I'll read it later," etc., that is an indication that the patient may not be able to read.

   ❑ *State that the action steps are designed to be like a stoplight*, with green meaning he/she is well, yellow suggests a problem, and red is an emergency. Ask, "Is it clear when you might be starting to not feel well?" If the patient responds without reading or at least paraphrasing the content of the document, it is possible that the patient cannot read.

   ❑ When develop the **Patient Action Plan** with the patient, put the document in a place where both you and the patient can see the document and will be easy for either of you to write on it.
   State you would like the patient to fill in the form as you discuss it. If the patient does not reach to do so, read the first item. State, "Shall I record this for you?" As you proceed, ask the patient if he/she would prefer to record the information him/herself. You might ask if the print is too small to see, although this is more a "way out" for the patient than a true indicator of literacy. If the patient prefers you to continue documenting, make sure you ask what the patient wants you to record. If the patient can read and write, it is likely the patient will eventually start documenting.

   ❑ *If the patient cannot read and write, you will need to find strategies to communicate* any information that would normally be written, such as electronic transmission of vital signs from a "smart" monitoring device, more frequent check-in calls, tape-recording information, or using documents with photographs (called photonovela).

d. If the patient can read, but there is an indication that higher level skills that may impact lifestyle choices are an issue, a test of health literacy called "The Newest Vital Sign" can be used. It is suggested that you introduce the test by indicating that food choices are very important in maintaining health and that they can sometimes be tricky to understand.
   State: *"I would like to go over a label with you and have us do some exercises so you can be sure you are making the right food choices."* Then conduct the test, which takes about 5-6 minutes to administer. It consists of asking the patient to read the label that would be on an ice cream container then answer some questions. The test can be downloaded for free from the Pfizer Clear Health Communication Initiative website:
   http://www.pfizerhealthliteracy.com/asset/pdf/NVS_Eng/files/nvs_flipbook_english_final.pdf

e. If it is found that higher level skills are inadquate for what you would like the patient to do, again it will be necessary to make appropriate adjustments, such as communicating more frequently, using documents with more pictures, and giving more directives. *For example*, if you wish the patient to make low-sodium food choices but fails the ice cream label test, you may need to specify things like "Buy Campbells soup that has a green sign with yellow letters."

(See *Health Literacy Assessment Template* for a reproducible form.)

Functional Risk Assessment

Functional impairment is defined as "difficulty performing, or requiring the assistance of another person to perform, one or more of activities of daily living." Assessing a patient's functional status is very important because prevalence is high among older persons, and Activities of Daily Living (ADL) impairment is a strong predictor of lenthening hospital stays, functional decline, institutionalization, and death. Studies reported by the University of Michigan Medical School suggest that 25% to 35% of older patients admitted to a hospital for treatment of an acute illness lose independence in one or more ADL. Approximately 75% of persons over the age of 75 limit their Instrumental Activities of Daily Living (IADL) due to functional impairment each year, and almost 50% of people 85 years of age and older require assistance in one or more ADL.[6]

In general, there are two levels of activities to address:

1. **Activities of Daily Living (ADL)** are those basic elements of self-care that indicate a need for supportive services, such as home health care. The Katz Index of Independent in Activities of Daily Living is an effective assessment for ADL:[7]

Functional Risk Assessment—Part 1		
Activities of Daily Living	**Independence:** (1 point each) *No supervision, direction, or personal assistance needed*	**Dependence:** (0 point each) *Supervision, direction, personal assistance, or total care needed*
Bathing Score: _____	Bathes self completely or needs help in bathing a single body part	Needs help with bathing more than one part of body, getting in or out of tub or shower, or total bathing
Dressing Score: _____	Gets clothes from closets and drawers and puts on clothes and outer garments complete with fasteners; may have help tying shoes	Needs help with dressing self or needs to be completely dressed
Toileting Score: _____	Goes to toilet, gets on and off, re-positions clothes, cleans without help	Needs help transferring to toilet, cleaning, or uses bedpan or commode
Transferring Score: _____	Moves in and out of chair unassisted; mechnical transferring aides are acceptable	Needs help in moving from bed to chair or requires a complete transfer
Continence Score: _____	Exercises complete self control	Is partially or totally incontinent
Feeding Score: _____	Gets food from plate into mouth without help; preparation of food may be done by another person	Needs partial or total help with feeding or requires parenteral feeding
Total Score: _____	Interpretation: **6** = patient independent, **0** = patient very dependent	

2. **Instrumental Activities of Daily Living (IADL)** are those associated with independent living in the community and for which there may need to be community resources required for maintaining the person's independence.

The Lawton Instrumental Activities of Daily Living Scale is one of the more common assessments. There are several forms of this assessment online. The American Academy of Family Physicians describes a three point version[8] where each topic is assessed on whether **(3)** no help is needed, **(2)** some help is needed, or **(1)** person is completely unable to perform a function. This scale is often used for self-administration. Lawton and Brody also published a modification that is frequently used by providers.[9]

These scales cover the following topics (listed in order of importance). Whichever scoring is performed, it is most important to recognize declining scores for an individual over time. Some questions may be related to gender norms and may be modified by the interviewer. Document findings and record a score. Monitor over time. Any IADL that patients indicate they need help with should be addressed by the CC seeking appropriate community services.

Scoring
3 points = no help is needed
2 points = some help is needed
1 point = person is completely unable to perform a function

Functional Risk Assessment—Part 2			
Instrumental Activities of Daily Living	**Date:**	**Date:**	**Date:**
Administering own medication	Score: _____	Score: _____	Score: _____
Grocery shopping	Score: _____	Score: _____	Score: _____
Preparing meals	Score: _____	Score: _____	Score: _____
Using the telephone	Score: _____	Score: _____	Score: _____
Driving and transportation	Score: _____	Score: _____	Score: _____
Handling own finances	Score: _____	Score: _____	Score: _____
Housekeeping	Score: _____	Score: _____	Score: _____
Laundry	Score: _____	Score: _____	Score: _____

(See *Functional Risk Assessment Template* for a reproducible form.)

Fall Risk Assessment

Risks factors for falls by older persons living in the community are often different than those in hospitals or nursing homes, and their interventions are potentially more expansive if around-the-clock supervision is not available. The University of Michigan Medical School study (previously cited) notes that between 30% and 40% of older persons who live in the community fall each year. For those who fall, the incidence of additional falls increases. Complications resulting from falls are among the leading causes of death in older persons, with 10% to 15% of falls resulting in fracture or other serious injury.

The American Geriatrics Society offers a Clinical Practice Guideline on Prevention of Falls in Older Persons, available at: http://www.americangeriatrics.org/health_care_professionals/clinical_practice/clinical_guideline s_recommendations/prevention_of_falls_summary_of_recommendations/

The following is an initial screening and risk assessment tool used to evaluate risk of falls in older persons as described by the American Geriatrics Society Clinical Practice Guideline on Prevention of Falls in Older Persons. It is recommended that this minimum assessment be conducted at least once a year.

Fall Risk Assessment—Part 1		
Fall Risks	**Findings**	**Recommended Actions**
1. a. Ask patient if he or she has fallen in the past year. **1. b.** If the patient has not fallen in the past year, ask if he or she fears falling or has difficulty walking or has balance issues.	Describe patient reliability in reporting and nature of fears/balance issues:	o If the patient has not fallen in the past year and reports no fear or balance issues and is otherwise a good historian, no further assessment may need to be performed. o If the patient does fear falling or reports difficulty with walking or balance, continue to screen for fall risk.
2. If the patient has fallen in the past year (or is fearful of falling or reports difficulty with walking and balance), ask how frequently the patient has had difficulty or has fallen, and under what circumstances these events occurred.	Describe frequency and circumstances:	o If the patient fears falling due to difficulty walking or has balance issues, but has not fallen or has only had a single fall, patient should have an assessment of gait and balance (see below). o If the patient has had recurrent falls in the past year, he or she should have a multifactorial fall risk assessment performed by a clinician with appropriate skills and training
3. If the patient cannot perform or performs poorly on the standardized gait and balance test, or demonstrates unsteadiness during the test, he or she should have a multifactorial fall risk assessment performed.	Describe results of test:	o If the patient has had only a single fall, fears falling, or reports difficulty with walking and balance but has no difficulty or unsteadiness during the gait and balance assessment, he or she may not need a multifactorial fall risk assessment. The CC should apply professional judgment in making this determination.

Fall Risk Assessment—Part 2

Screening for gait instability performed using the "Timed Get Up and Go" test

1. Prior to conducting the test:

   ❑ Place a marker ten feet from a standard armchair.

   ❑ Encourage the patient to wear regular footware, use any customary walking aid, and walk normally.

   ❑ No physical assistance should be given.

   ❑ Have the patient walk through the test once before being timed to become familiar with the test.

   ❑ Explain to the patient that he or she will be asked to perform the test three times and will be timed (from the point the patient rises out of the chair to the time the patient sits down).

2. To test the patient, give the following instructions:

   1. Rise from the chair
   2. Walk to the mark on the floor (10 feet away)
   3. Turn
   4. Return to the chair
   5. Sit down

3. Record time for each test:

   Test 1: _____ seconds

   Test 2: _____ seconds

   Test 3: _____ seconds

4. Record patient's mobility based on the following scale:

   ❑ <10 seconds = ***Freely mobile***

   ❑ 10-20 seconds = ***Mostly independent***, consider further evaluation

   ❑ >20 seconds = ***Variable or impaired mobility***, a multifactorial fall risk assessment should be peformed

5. For patients who are not referred for a multifactorial fall risk assessment, the following strategies are further useful for reducing the risk of falls:

   ❑ Conduct an *Environmental Risk Assessment* and recommend adaptations or modifications accordingly.

   ❑ Conduct a *Medication Reconciliation Assessment* and determine if there are psychoactive or other medications that the patient's primary care provider may want to consider withdrawing or recommend minimal use. Fall risk may not have been assessed during an outpatient visit or may have changed since the last visit.

   ❑ Determine if there is need for *postural hypotension management*. Discuss with patient's primary care provider.

   ❑ Determine if there are *foot problems* that need management. Discuss with patient's primary care provider if a referral to a podiatrist may be helpful.

   ❑ Recommend *balance, strength, and gait training exercise*. Discuss with patient's primary care provider if there is need for any specialized therapy.

(See *Fall Risk Assessment Template* for a reproducible and fillable form.)

Environmental Risk Assessment

To help overcome risk of falls and other injuries, an environmental risk assessment can help identify areas in which hazards can be mitigated. Many of these can be as simple as clearing clutter or taping down throw rugs. Some may require modest expense, such as having grab bars installed in the bathroom or extra lighting in stairways. A study conducted in Australia found that 80% of older persons' homes had at least one hazard, with the bathroom identified as the most hazardous. Even when the homeowners were able to conduct their own self-assessments, 30% of those rating their homes as very safe had more than 5 hazards.[10]

In addition to the assessment, the following checklist offers excellent tips that can be used as suggestions to patients to reduce their risks:

❑ Exercise regularly
❑ Have their doctor or pharmacist review their medications for drugs that may make them sleepy or dizzy
❑ Have their vision checked annually
❑ Get up slowly after sitting or lying down
❑ Wear shoes both inside and outside the house; avoid going barefoot or wearing slippers
❑ Improve the lighting in the home; use CFL bulbs that are brighter and less costly to use
❑ Attempt to reduce glare, and have uniform lighting to avoid blind spots and shadows
❑ Paint a contrasting color on the top edge of all steps
❑ Keep emergency numbers in large print near each phone
❑ Put a phone near the floor
❑ Consider wearing an alarm device that will summon help in case of a fall

A comprehensive assessment and detailed intervention suggestions are available from the AgriLife Extension at Texas A&M University, entitled "Improving Independence in the Home Environment: Assessment and Intervention" available at:
http://fcs.tamu.edu/families/aging/fall_prevention/pdf/assessement-intervention.pdf

The following Environmental Risk Assessment is an initial screening for the potentially most hazardous areas in a home, listed in order by vulnerability.

- Examples of problems that might be found are included. Replace these with actual findings from the assessment that are specific to the patient's home.

- Examples of recommended interventions are also included. Replace these examples with those specific to the patient's needs.

- Examples are offered in the references provided. Once the assessment is completed, give a copy to the patient so he/she can address as many problems as possible.

Environmental Risk Assessment			
Area / Activity	**Problems** *(examples)*	**Ways to Reduce Risk** *(examples)*	**Completed**
Bathroom	❑ Medications disorganized ❑ Slippery floors ❑ Transfer in/out of tub ❑ Transfer on/off toilet Other problems ❑	• Automated pill dispensers • Non-skid rugs or mats • Grab bars • Contrasting color toilet seat	
Kitchen	❑ Open flames on stove ❑ Sticky floor from dropping food ❑ Cluttered floor from dropping utensils Other problems ❑	• Microwave, hot plates • Housekeeping services • Walker basket or tray	
Stairs	❑ Difficult to see ❑ Slippery Other problems: ❑	• Improve lighting • Mark edge with bright tape • Non-skid stair treads	
Home and safety mgmt.	❑ Mailbox full ❑ Difficulty seeing who is at door ❑ Glare in living room ❑ Lounge chair springs worn ❑ Extension cords Other problems: ❑ ❑ ❑	• Ask carrier to bring to door • One-way glass; video intercom • Light-colored sheer curtains • Cushion with board underneath • Anchor to baseboards	

(See *Environmental Risk Assessment Template* for a reproducible and fillable form.)

Digital Literacy Assessment

Many people believe that the elderly are not interested in using computers, that computers are too complicated for seniors or have little value for older persons, and that social networking is only for young people. All of these are actually myths, with the recognition that computer use by the elderly could actually be beneficial. The following two anecdotes are from a 1995 post:[11]

- A visionary article entitled "Computers and Technology: Aiding Tomorrow's Aged" was published in 1973, when computers were really not accessible in anyone's home. But the article discussed the potential for computers to be "intellectually stimulating" and could help avoid "costs of institutionalization [that] are already exorbitant and this will not change."

- In 1983, after the first personal computer was made available to the general public, an article entitled "Microcomputers and the Elderly: New Directions for Self-Sufficiency and Life-Long Learning" observed, "Never before in our history has so much potential for individualized lifelong learning been available to senior citizens."

More recently (2009), a Phoenix Center study[12] found that Internet use by the elderly reduced depression by 20%. In the same year, a UCLA study showed that as seniors are performing simple web searches, blood flow increased in areas of the brain that are vital for memory and thinking.[13] An article (2014) describing video games being used as a physical therapy tool reported a study from the University of Illinois where seniors were found to be more motivated to play strategy videogames than other brain exercise programs.[14] Pew Research has studied generations of computer users and find that, while still low, Internet use is rapidly growing. For example, in 2005, only 26% of those 70-75 years old used the Internet. By 2009, that percentage had grown to 45%.[15]

With accessibility to computers and broadband connections improving and computers themselves much easier to use by seniors, it is important for CCs to recognize the value of computer use by the elderly. Just going through an assessment can pique patients' interest in computer use. Not only can computer use be an enjoyable experience for the elderly, there are benefits from the socialization and contributions to remaining independent that access to the Internet provides, such the use of online shopping, banking, and health research (the most commonly cited uses by the elderly), Skype, and access to myMedicare.gov.

To gauge patients' digitial literacy, the following Digital Literacy Assessment may help determine and improve interest in using a computer, and to identify potential issues to be overcome. It is recommended that the assessment be performed in the following manner:

- **Assess whether the patient has access to a computer**, and if not, why not. Make note of potential interventions to recommend to the patient once interest is established.

- **Assess interest in using a computer** if the patient is not already a user; help the patient find additional uses if only as an occasional user.

- **If there remains a lack of interest** or the patient may not be able to gain access to a computer, put the assessment aside. Over time, find ways to introduce "low-tech" forms of automation, such as an automated pill box, that may bridge the gap. Slowly return to other aspects of the assessment to make further recommendations.

- **If there is interest and access is feasible**, assess the patient's skills for use of the computer and offer interventions that may help.

- **Consider training options.** Computer training for the elderly is a growing business. Computer stores, senior centers, libraries, online aids, and other resources – including the primary care provider's office staff encouraging patients to use a portal to access their health information – are increasingly providing assistance. Microsoft offers accessibility guides on customizing computers for those with age-related impairments (see http://www.microsoft.com/enable/aging/default.aspx).

Digital Literacy Assessment		
General Access Assessment	**Findings**	**Interventions**
Access to computer and broadband connectivity	❑ None ❑ Home ❑ Other	Determine reason for lack of access: ❑ Interest: continue to Interest Assessment ❑ Cost: determine if feasible to use computer elsewhere ❑ Broadband availability: check availability in the community
Frequency of use today (*if patient has access to computer*)	❑ Not at all ❑ Occasional ❑ Regular user	❑ Continue to Interest Assessment ❑ Determine how computer is used, if assistance is needed, what would improve use ❑ Determine types of use, note any gaps and make recommendations; determine if any additional assistance is needed
Interest Assessment	**Findings and Suggestions for Generating Interest**	
Do you find it challenging to make calls for services needed, such as finding a handyman to install a light bulb or maid service to clean?	Using the Internet gives you instant access to services in your area and reviews you can use to decide which is best for you.	
Do you find you go out less and sometimes do not have the food or supplies you need?	Using the Internet, you can do shopping, obtain carryout, and order supplies that can be delivered to your door. You can also pay bills online and check your bank account.	
Do you talk on the telephone with your family or friends as much as you used to?	Using the Internet, you can make free telephone calls and/or chat with family and friends via social media.	
In the past, did you play cards, board games, or other activities that you would continue if you had a partner to play with?	Digital games are widely available and often help keep you sharp and focused.	
Would you be interested in learning more about your health or keep track of how you are doing on managing your health?	There are a number of websites that give you access to useful information about your health that are very easy-to-understand, including pictures and tools that you can use; for example, keeping a health diary.	
Do you think there may be value in having access to your Medicare information online?	Medicare has a portal that allows you to access your health information and to manage billing.	

Skills Assessment	Findings and Interventions	Interventions
Physical skills	❑ Vision sufficient to see large font on monitor ❑ Recognition of common icons ❑ Hand/eye coordination issues ❑ Fine motor skills	❑ Need for speech dictation ❑ Need for screen reader ❑ Need for keyboard modifications ❑ Need for different navigational devices (e.g., mouse, joystick) ❑ Use of tablet
Research skills	❑ Ability to formulate search query ❑ Ability to make connections between one search and additional areas of interest	❑ Demonstration ❑ Practice
Information skills	❑ Recognize need to evaluate the information ❑ Ability to critically evaluate information	❑ Demonstration ❑ List of reliable sites
Socio-emotional skills	❑ Ability to perform effectively in virtual communication environments	❑ Consider whether *Depression Risk Assessment* and closer monitoring is needed ❑ Recommend use of audiovisual devices and services
Real-time thinking skills	❑ Ability to perform several operations simultaneously under time pressure, such as in computer games	❑ Find games that are less action-oriented

(See *Digital Literacy Assessment Template* for a reproducible and fillable form.)

Depression Risk Assessment

Depression is common in older persons in general, and especially in those with chronic illness. It is a significant risk factor for re-admissions. Late-life suicide is also a consideration, especially in elderly males who live alone and have comorbid physical illness and alcoholism.

However, depression is also managable with prompt recognition and appropriate treatment. Identifying depression in the elderly is also not quite the same as for younger persons. New York University College of Nursing has found that the Geriatric Depression Scale (GDS) has been found to be the most predictive.[16]

The short form of the scale and its interpretation are reproduced below (the scale is in the public domain). Additional information and other forms of the scale, including translations for other languages, are available from http://www.stanford.edu/~yesavage/GDS.html.

The approach to using this assessment follows:

1. Determine if use of this scale is within your scope of practice for the credentials/licensure you hold.

2. Ask the patient to respond to each of the 15 questions with "yes" or "no" based on how the patient has felt over the past week.

3. Circle the answers given. Add the number of points (each **bold** answer is 1 point.). These answers suggest depression.

4. Assess the score and recommend follow up as applicable:

   >5 points is suggestive of depression

   ≥10 points is almost always indicative of depression

5. Refer any person with a score of >5 points for a follow-up comprehensive assessment.

Note: If this is not in the care coordinator's scope of practice, he/she should refer the patient to their primary care provide, a social worker, or other credentialed individual to administer the screening

Other psycho-social and behavioral conditions may be common in the elderly, especially Alzheimer's Disease and Dementia. "Tools for Early Identification, Assessment, and Treatment for People with Alzheimer's Disease and Dementia" is a publication available from the Alzheimer's Association and National Chronic Care Consortium, available at: http://www.alz.org/national/documents/brochure_toolsforidassesstreat.pdf

Depression Risk Assessment

Geriatric Depression Scale: Short Form

1. Are you basically satisfied with your life?   YES / **NO**

2. Have you dropped many of your activities and interests?   **YES** / NO

3. Do you feel that your life is empty?   **YES** / NO

4. Do you often get bored?   **YES** / NO

5. Are you in good spirits most of the time?   YES / **NO**

6. Are you afraid that something bad is going to happen to you?   **YES** / NO

7. Do you feel happy most of the time?   YES / **NO**

8. Do you often feel helpless?   **YES** / NO

9. Do you prefer to stay at home, rather than going out and doing new things?   **YES** / NO

10. Do you feel you have more problems with memory than most?   **YES** / NO

11. Do you think it is wonderful to be alive now?   YES / **NO**

12. Do you feel pretty worthless the way you are now?   **YES** / NO

13. Do you feel full of energy?   YES / **NO**

14. Do you feel that your situation is hopeless?   **YES** / NO

15. Do you think that most people are better off than you are?   **YES** / NO

Source: http://www.stanford.edu/~yesavage/GDS.html

1. **Ask the patient to respond** to each of the 15 questions with "yes" or "no" based on how he/she has felt over the past week.

2. **Circle the answers given**. Each **bold** answer is 1 point. Add the number of points. These answers suggest depression.   # Points: _____

3. **Assess the score and recommend follow up** as appropriate:
   a.   >5 points is suggestive of depression
   b.   ≥10 points is almost always indicative of depression

4. Refer any person with a score of >5 points for a follow-up comprehensive assessment. Medical disorders in the elderly can mimic depression, including apathetic hyperthyroidism and apathy accompanying malignancy, Parkinson's disease, and dementia.

(See *Depression Risk Assessment Template* for a reproducible form.)

Substance Use Assessment

Substance use is not uncommon in the elderly, and alcohol use is the largest category of substance use in older adults, with as many as 14% of those between 50 and 64 years old characterized as heavy drinkers. Dual diagnosis is also very common, with up to 85% of patients in drug and alcohol treatment having a coexisting mental health problem.[17]

There are several alcohol use screening tools, including the Short Michigan Alcoholism Screening Instrument – Geriatric Version (SMAST-G), the Alcohol Use Disorders Identification Test (AUDIT), and the CAGE Questionnaire. Most recommend that the questions be used in the clinical setting using informal phrasing, ideally without asking questions about how much or how frequently the patient drinks. Some suggestions for introducing and using the questions are provided in the Substance Use Interview tools below.

Before considering using the Substance Use Risk Assessment interview tool, it should be noted that the Substance Abuse and Mental Health Services Administration (SAMHSA) Guidelines recommend that these screening tests be used as a first step in a process of Screening, Brief Intervention, and Referral to Treatment (SBIRT).[18] The *Nursing Times* article cited above also warns that persons administering any such screening test should not just carry out the assessment and move on. It is critical to engage the patient in a conversation about cutting down on the amount of alcohol consumed or on the impact substance use may have on the individual and his/her health.

(See *Substance Use Risk Assessment Template* for a reproducible form.)

Substance Use Risk Assessment

Interview Tool

1. Initiate a discussion

Consider initiating a discussion about alcohol and substance use if there are suspicious clinical signs, social issues (e.g., depression, domestic violence), concerns expressed by family members or caregivers, or as part of a routine introductory assessment.

2. Introduce the topic

Find an appropriate way to introduce the topic of drinking and substance use. Some of these might include combining it with other screening questions, such as "*Are you allergic to anything, smoke, or drink?*" If a patient complains about symptoms associated with alcohol or substance use, consider suggesting *"We should look into that more. When do you experience those symptoms? Do you have such a feeling after you have had a drink?"*

3. Determine patient's willingness to talk

If the patient is unwilling to talk about drinking or substance use, it may be best to drop the subject and attempt to find other ways at another time to explore further. The patient must be willing to talk about the issue for the discussion to be successful.

4. Ask screening questions

The following questions are common to many of the screening tools and can be modified for other substance use issues. As with the depression screening tools, before use of these tools determine if such interviewing is within the scope of practice for the credentials/licensure you hold. If not, or if you have any doubts, recommend that the patient's primary care provider, a social worker, or other credentialed professional administer the screening.

- ❑ When talking with others, do you ever underestimate how much you drink?
- ❑ After a few drinks, have you sometimes not eaten or skipped a meal because you didn't feel hungry?
- ❑ Does having a few drinks help decrease your shakiness or tremors?
- ❑ Does alcohol sometimes make it difficult for you to remember parts of the day or night?
- ❑ Do you usually take a drink to relax or calm your nerves?
- ❑ Do you drink to take your mind off your problems?
- ❑ Have you ever increased your drinking after experiencing a loss in your life?
- ❑ Has a doctor or nurse ever said they were worried or concerned about your drinking?
- ❑ Have you ever made rules to manage your drinking?
- ❑ When you feel lonely, does having a drink help?

5. Consider interventions

Not all questions on a given screening tool need to be asked if it becomes clear that there is a problem. It is better to proceed to the interventions stage. Interventions might include:

a. Motivational interviewing

b. Decision balancing, which includes asking the patient to describe advantages and disadvantages of using alcohol or other substances. This process removes bias, helps build rapport, often leads to personal recognition of potential harms, and can help lead to further interventional discussions.

c. Brief interventions, which include quickly stating advice, being empathetic, and providing feedback about risky behavior. These can be very effective when performed by primary care professionals and may open the door to more specific forms of help.

d. Encouraging the patient to participate in Alcoholics Anonymous or other support groups if the patient is ready.

All patients with alcohol or substance abuse issues should be referred to a behavioral health specialist.

Social and Financial Risk Assessment

Elderly people fare best when care is provided in their own homes, and the existence of a strong social support network can frequently be the determining factor as to whether the patient can remain at home.

The Social and Financial Risk Assessment is a screening tool for a social support network.

Social and Financial Risk Assessment
1. Determine who is available to help the patient with IADL, ADL, if he or she becomes ill. This should be performed before the patient returns home from any care delivery setting. The person providing help may not be present in the home at all times but should be in regular contact with the patient, often daily, and should be able to intervene in any emergency situation.   **Findings**:
2. Screen family members and caregivers periodically for symptoms of depression or caregiver burnout and, if present, refer for counseling or support groups. Elder mistreatment (abuse or neglect) should also be considered, particularly if the patient presents with contusions, burns, bite marks, genital or rectal trauma, pressure ulcers, or malnutrition with no clinical explanation, or there is evidence of misuse of money, financial exploitation, or inability to account for money or property. An Elder Assessment Instrument is available at: http://consultgerirn.org/uploads/File/trythis/try_this_15.pdf   **Findings**:

(See *Social and Financial Risk Assessment Template* for a reproducible and fillable form.)

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