

STEADI Coordinated Care Plan: TELE-MED ADAPTATION



Tele-Med Adaptation of the Coordinated Care Plan to Prevent Older Adult Falls

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INTRODUCTION:

Why Focus On Falls?

In the United States falls among older adults (ages 65 and older) remain a substantial public health problem as a leading cause of fatal and non-fatal injuries. Each year, older adult falls result in approximately three million emergency department visits and one million hospitalizations. Disparities in fall rates exist by demographic and geographic characteristics such as race/ethnicity, sex, or rural settings. In collaboration with Emory Healthcare and NORC at the University of Chicago, and in response to the COVID-19 pandemic, the Centers for Disease Control and Prevention developed the “STEADI Coordinated Care Plan Tele-Med Adaptation” to help guide healthcare providers in conducting clinical fall prevention via telemedicine.

STEADI (Stopping Elderly Accidents, Deaths, and Injuries)

The STEADI initiative helps health care providers incorporate older adult (aged 65 and older) fall prevention into their clinical practice. The core components of STEADI are to:

- 1 **Screen** older adults for fall risk,
- 2 **Assess** those at risk for modifiable risk factors
- 3 **Intervene** using clinical and community evidence-based programs to address identified risk factors.

The [STEADI Algorithm for Fall Risk Screening, Assessment, and Intervention](#) provides an overview of each of these three core components.



Screen

Identify patients at risk for a fall



Assess

Identify modifiable risk factors



Intervene

Use effective clinical and community strategies



The [STEADI Coordinated Care Plan to Prevent Older Adult Falls](#) offers primary care providers, practices, and healthcare systems a framework for managing their older patients' fall risk in an in-person outpatient or ambulatory clinical setting. The Coordinated Care Plan was developed by fall prevention experts that implemented STEADI into clinical practice and healthcare systems to provide tangible tips and strategies for healthcare teams implementing STEADI-based fall prevention programs. STEADI-based programs have been adapted and implemented in a variety of other clinical settings, including [community pharmacy](#) and [inpatient clinical settings](#).



Opportunities to Extend Reach and Care through Telemedicine Adaptation

After the onset of the COVID-19 pandemic, there was a substantial acceleration in the use of telemedicine with the aim to provide continuation of care while limiting exposure and spread of COVID-19. Telemedicine continues to be an important part of healthcare delivery. Based on the [2022 US census household pulse survey](#) more than 20% of older adult patients received a telemedicine visit. Healthcare delivery in a telemedicine environment ([telehealth](#)) can be beneficial in many ways beyond reducing the risk of infections. Telemedicine provides access to healthcare for individuals who may not have easy access to medical facilities, for instance individuals who live in rural or underserved areas. Access can also be enhanced to healthcare provider specialists who may not otherwise be accessible for in-person meetings, such as geriatricians. Additionally, telemedicine can allow for more frequent and timely follow up appointments, promoting better continuity of care and improved health outcomes. [The U.S Department of Health and Human Services](#) provides additional resources for health care providers on implementing telehealth services.



Purpose of this Adaptation:

The *STEADI Coordinated Care Plan: Tele-Med Adaptation* provides information on how health care teams can adapt the *STEADI Coordinated Care Plan* specifically for a telemedicine environment.

This adaptation complements the detailed and comprehensive implementation framework in the *STEADI Coordinated Care Plan* by offering a succinct overview of falls screening and assessment workflows, integrated into telemedicine appointments. This adaptation also provides tips to bypass potential barriers and pitfalls.

The adaptation largely focuses on adaptations to falls screening and assessment (core components 1 and 2 of the 3-step *STEADI* process). The third *STEADI* step is focused on interventions and actions. Discussions with a healthcare provider can inform which interventions can occur via telemedicine versus ones that might require other actions, such as in-person physical activities.

The adaptation is organized as follows:

- **Adapting Screening for Telemedicine:** *Screening* for fall risk within a telemedicine environment
- **Adding Pre-assessment for Telemedicine:** *Pre-assessment*—to ensure readiness for a comprehensive assessment of modifiable fall risk factors within a telemedicine environment.
- **Adapting Assessing for Telemedicine:** *Assessment* of modifiable risk factors for a telemedicine environment.
- **Adapting Intervening for Telemedicine:** *Intervention* to create a plan of action to reduce a patient's fall risk.
- **STEADI Tele-Med in Action:** *Case Study*—bringing it all together in a case study to walk through the complete process and highlight considerations to optimize program impact.



Step 1: Screening

Purpose: To screen for fall risk annually or anytime the patient presents with an acute fall.

During this step, determine whether the patient is at risk for a fall by using either the [Stay Independent brochure](#) or ask the patient the [Three Key Questions](#). Record results and information in the patient's electronic health record (EHR).

- The Three Key Questions are:
 - Have you fallen in the past year?
 - Do you feel unsteady when standing or walking?
 - Do you worry about falling?

Suggestions for virtual screening methods include:

- Send an online version of the Stay Independent Screener by text or email. The online version should capture their responses in a format useable by the healthcare system. The [Falls Free Checkup screener](#) is available to be used in this way. However, the patient would need to email their results back to the healthcare provider for their EHR.
- Call the patient to screen them for fall risk by using either the Stay Independent brochure or ask the patient the Three Key Questions and record results in the EHR.

In preparation for the pre-assessment and assessment steps, ensure that the screened patients have access to:

- A computer/tablet/smartphone with a web camera and stable internet connection.
- A suitable space for within home testing, including 10 feet of unobstructed pathway and a clear corner.
- An able-bodied helper to assist during the assessment or who could call for help if needed.
- A chair (preferably without arms), a tape measure or yardstick, and decluttered area of the house.
- Masking tape to mark distances for testing.
- A blood pressure monitor (optional for orthostatic hypotension assessment).

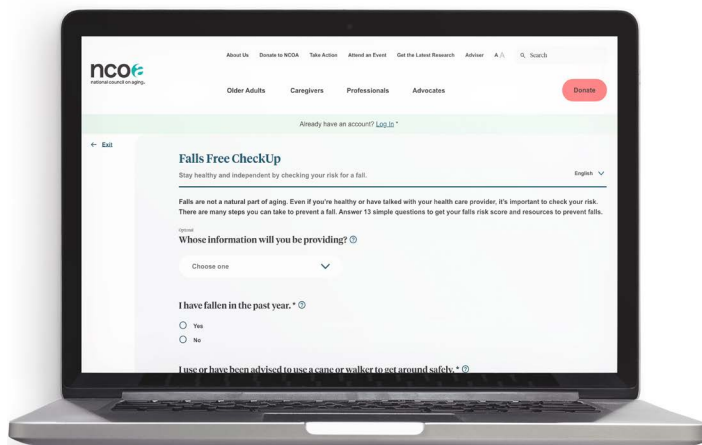
Check Your Risk for Falling

Circle "Yes" or "No" for each statement below			Why it matters
Yes (2)	No (0)	I have fallen in the past year.	People who have fallen once are likely to fall again.
Yes (2)	No (0)	I use or have been advised to use a cane or walker to get around safely.	People who have been advised to use a cane or walker may already be more likely to fall.
Yes (1)	No (0)	Sometimes I feel unsteady when I am walking.	Unsteadiness or needing support while walking are signs of poor balance.
Yes (1)	No (0)	I steady myself by holding onto furniture when walking at home.	This is also a sign of poor balance.
Yes (1)	No (0)	I am worried about falling.	People who are worried about falling are more likely to fall.
Yes (1)	No (0)	I need to push with my hands to stand up from a chair.	This is a sign of weak leg muscles, a major reason for falling.
Yes (1)	No (0)	I have some trouble stepping up onto a curb.	This is also a sign of weak leg muscles.
Yes (1)	No (0)	I often have to rush to the toilet.	Rushing to the bathroom, especially at night, increases your chance of falling.
Yes (1)	No (0)	I have lost some feeling in my feet.	Numbness in your feet can cause stumbles and lead to falls.
Yes (1)	No (0)	I take medicine that sometimes makes me feel light-headed or more tired than usual.	Side effects from medicines can sometimes increase your chance of falling.
Yes (1)	No (0)	I take medicine to help me sleep or improve my mood.	These medicines can sometimes increase your chance of falling.
Yes (1)	No (0)	I often feel sad or depressed.	Symptoms of depression, such as not feeling well or feeling slowed down, are linked to falls.
Total			Add up the number of points for each "yes" answer. If you scored 4 points or more, you may be at risk for falling. Discuss this brochure with your doctor.

To check your risk online, visit: www.fall.gov/50489W6

This checklist was developed by the Greater Los Angeles VA Geriatric Research Education Clinical Center and affiliates and is a validated fall risk self-assessment tool (Rubenstein et al. J Safety Res. 2001; 42(6):483-489). Adapted with permission of the authors.

Stay Independent Brochure



Falls Free Checkup screener





Step 1.5: Pre-assessment call

PURPOSE: Ensure the patient has everything they need to successfully assess modifiable fall risk factors via a virtual, telemedicine appointment.

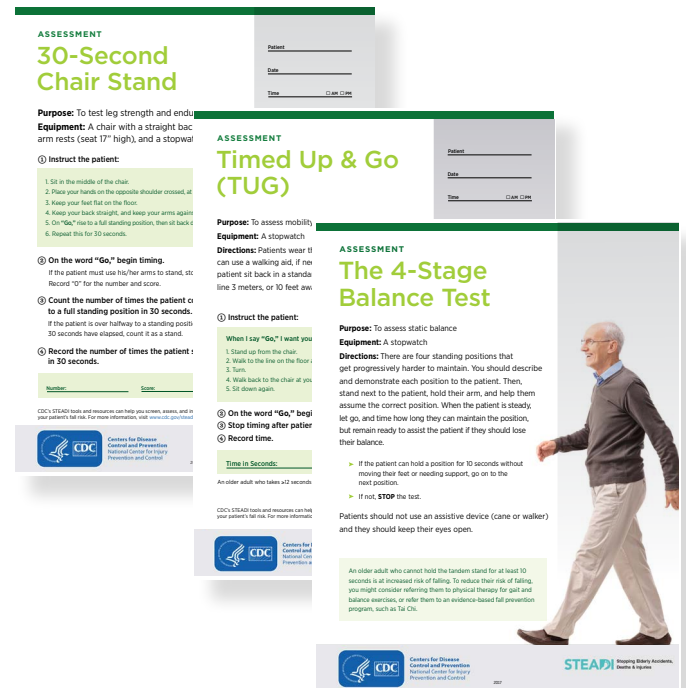
1. A non-medical staff member or registered nurse (RN) should call the patient to complete the following tasks before the actual telemedicine assessment:

- a. Conduct a trial run of software for the video call.
- b. Educate your patient on how to be safe during the remote assessment:
 - i. Wear appropriate footwear and clothing for walking tasks (pants, leggings, or shorts preferred).
 - ii. Remove clutter that may be a tripping hazard.
- c. Present recorded video demonstrations of all gait and mobility assessments
 - i. [30-Second Chair Stand test video](#)
 - ii. [Timed Up & Go test video](#)
 - iii. [4-Stage Balance test video](#)
- d. Identify a sturdy chair, preferably without arms, that can be placed with the back of the chair against a wall for the [30-Second Chair Stand test](#) and the [Timed Up & Go test](#).
- e. Ask the patient to measure and mark 10 feet of unobstructed space from the chair for the [Timed Up & Go test](#). We recommend placing a piece of tape on the floor at the 10 foot mark.
- f. To interpret this test, the examiner needs to be able to see the entire body, including the feet walking during the test. Work with the patient to identify a proper camera angle to allow the needed view.
- g. Ask the patient to show a clutter free corner for the [4-Stage Balance test](#).
- h. Ask the patient to measure and mark 5 feet away from the video screen for the [visual acuity screening](#).
- i. Assess if it is safe to test the patient for gait, balance, and strength in the home based on patient's fall history, visible frailty, pain, and physical abilities of the patient and their helper.



CAUTION

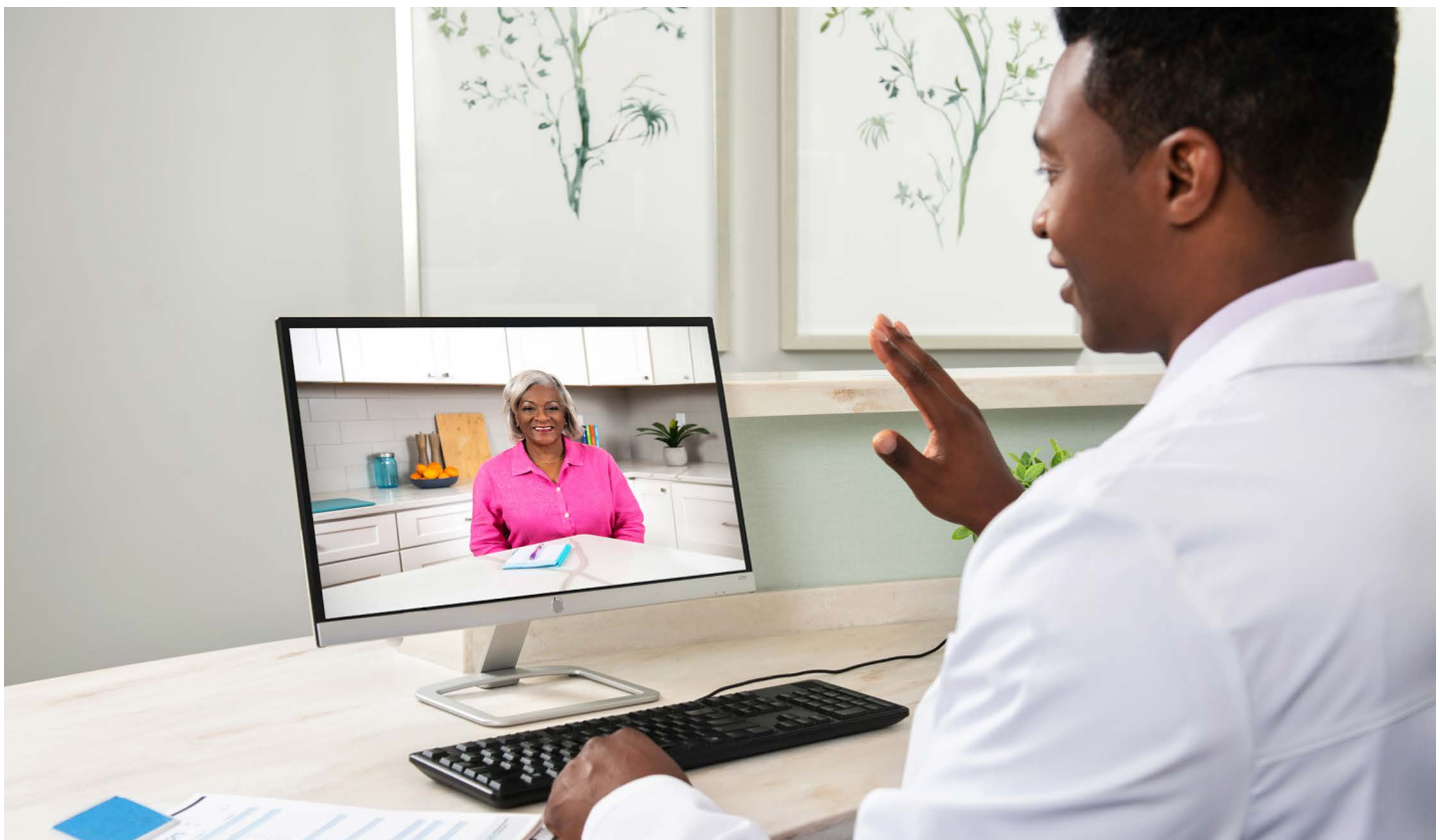
Consider the patient at **increased risk** for future falls if they report recurrent falls or their falls required medical attention in an emergency department or hospital. An immediate in-person assessment and intervention are recommended.





Step 2: Assessment

PURPOSE: To identify modifiable fall risk factors that can be addressed (in Step 3) to ultimately reduce fall risk.

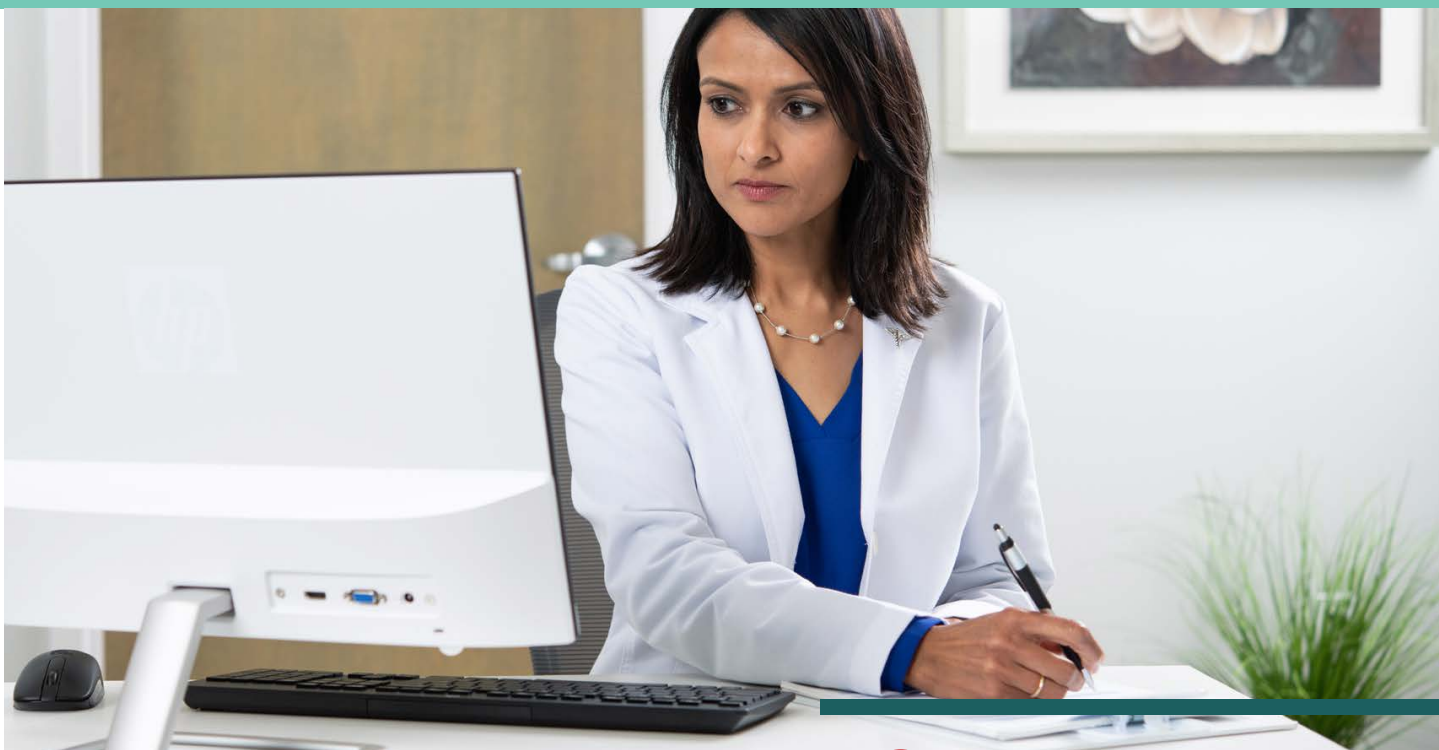


1. Confirm the presence of a helper who can assist the patient

- Confirm that the second, able-bodied person is present for the assessment to aid or to call for help if needed.
- Ask the second person to confirm that the patient's chair is sturdy and placed against a wall so it will not slide backwards during testing. This will be used for the *30-Second Chair Stand* test and *Timed Up & Go* test.

2. Assess Falls History

- Assess patients' falls history by asking these three questions:
 - How many times have you fallen in the last year?
 - Ask where, when, and the circumstances of the previous falls. This may include details such as at home vs. outside, location within home, day vs. night, or activity at the time of fall.
 - Did you seek medical attention because of these falls?
 - Have you experienced any blackouts, loss of consciousness, or a broken/fractured bone resulting from a fall?



3. Review and Assess Comorbidities

- Review the patient's EHR for comorbidities and flag conditions associated with increased fall risk. Health conditions to consider include but are not limited to:
 - Cognitive problems
 - Parkinson's disease
 - Cardiac arrhythmia
 - Orthostatic hypotension
 - Depression
 - Incontinence

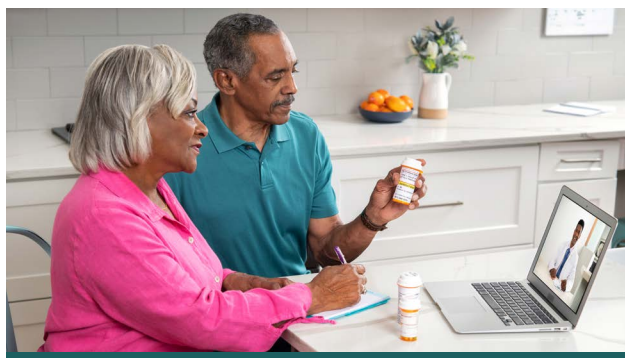


TIP

If the patient has a health condition associated with increased fall risk, ask the patient what they are currently doing to manage that condition.

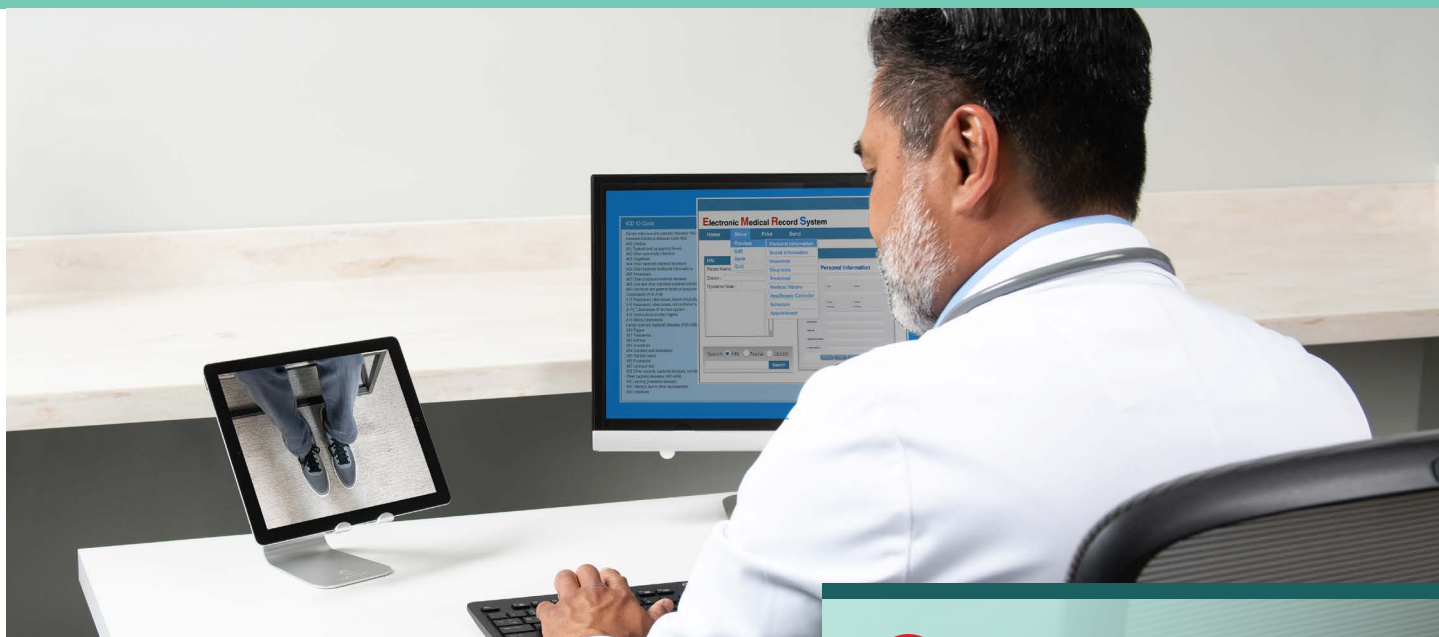
4. Review Medications

- Confirm active prescriptions with the patient. If helpful, ask the patient to display their medication bottles on the video call.
- Review the patient's prescribed medications using CDC's [SAFE Medication Review Framework](#) and identify medications that increase fall risk.
- Assess if the patient is taking five or more medications, also known as polypharmacy.
- Flag medications that increase fall risk and polypharmacy for discussion with their primary care provider or prescribing care provider and report any inappropriate medications.
- Provide educational materials on medication management to the patient.



TIP

Evaluate medications associated with increased fall risk and determine if adjustments should be made during their next primary care visit. Flagged medications should be reviewed by the patient's primary care provider to determine if medications can be tapered or adjusted based on prescribing guidance.



5. Assess Feet/Footwear, Podiatry Needs, and Diabetes Status

- Share and review the *STEADI Feet and Footwear* handout over video with the patient. Email this handout to the patient after the assessment.
- Assess the patient's footwear and podiatry needs by asking:
 - When indoors, do you walk barefoot, in socks, in slippers, in shoes or house shoes?
 - What type of shoes are you wearing?
 - Determine if their shoes are risky or non-risky, using the handout as a guide. (*Note: patient may show their shoes over video if possible*)
 - Do you have foot pain right now?
 - Have you lost any feeling in your feet?
 - What is your current diabetes status?

6. Examine Visual Acuity

If the patient is using a smaller screen, such as a phone, ask them if they have any vision problems instead of performing the vision assessment.

- Ask the patient whether they wear contact lenses or eyeglasses and if so, are they bifocals or progressives.
 - Ask about use of bifocals/progressive lenses when walking outdoors.
- Display the [Banner eye chart](#) over video and ask the patient to stand five feet away from the screen for the test.
- Record the patient's visual acuity in both eyes and in each eye individually while allowing them to wear lenses they usually wear; record whether they wear contacts or glasses (and if they use bifocals or progressives).



TIP

Consider a referral to podiatry or assess the patient in person at the next visit if patient reports experiencing foot pain, having a loss of sensation in their feet, or having a diagnosis of diabetes.



TIP

Refer the patient to ophthalmology or optometry if patient has visual impairment (20/40 or worse). Advise patients against the use of bifocals or progressive lenses outdoors as they cause distortion in depth perception and increased risk of falling.



TIP

If the patient scores below the age-specific cut-offs then the patient has “failed,” and no further physical assessments should be conducted.

7. Assess Gait, Balance, and Strength

The RN, patient, or helper can stop testing at any time for safety reasons, if anyone believes that the tests would pose real fall risk to the patient. It is not necessary to complete all the tests after one of the tests is positive, indicating a risk for falls. It is not necessary to complete the tests if the testing environment appears cluttered or unsafe. Document notes on the tests conducted and tests skipped in the EHR. Inform the patient’s primary care provider if the patient exhibits signs of unstable gait.

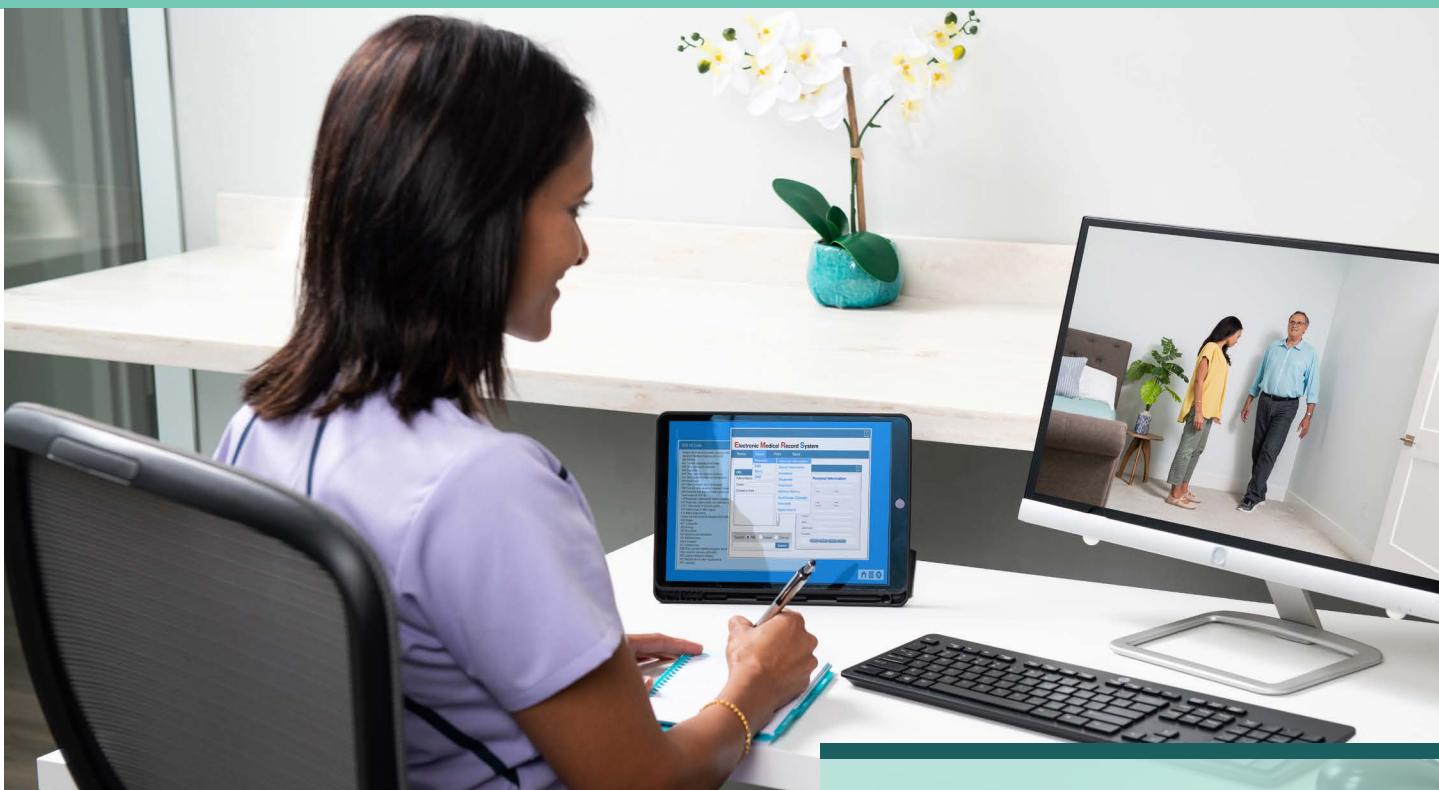
Before you begin:

- Advise caution to the patient and helper during the assessment. Remind the patient and helper that they may stop the test at any time if they feel that they are unable to perform/supervise the task safely.
- Instruct the helper to assist with camera placement if needed and if it is safe for them to do so. Advise the helper to use and adjust a stationary camera only and to not conduct the test using a handheld device.
- Ensure that the patient’s helper attends to the patient during the assessment.

Conduct gait, balance, and strength testing in this order. The patient may not need to complete all tests for the clinician to decide that a physical therapy referral will be required.

I. 30-second Chair Stand test

Conduct as described in the [30-Second Chair Stand handout](#) with the chair placed against a wall for safety. (Count the number of times the patient stands-up from sitting in a chair without using their hands in 30-seconds.)



II. **Timed Up & Go test**

Conduct as described in the [Timed Up & Go handout](#), with the chair placed against a wall for safety. Note if the patient exhibits signs of unstable gait, such as loss of balance, short strides, little or no arm swing, or shuffled turning during the assessment; you may end the test for safety if any of these signs are visible. Patients may use their regular assistive device as needed.

(Time how many seconds it takes for the patient to stand-up from their chair, walk 10 feet, turn around, walk back to their chair, and sit down.)

III. **Four Stage Balance test**

Conduct the first three stages of the four-stage balance test as described in the [4-Stage Balance Test handout](#), with a modification to perform the balance test in the corner of a room for additional safety since this is a telemedicine appointment. You may end the test for safety if the patient cannot stand in each position for 10 or more seconds or cannot stand stable in tandem stance. Test the standing positions in this order:

- Feet side-by-side
- Big toe of one foot at instep of other foot
- One foot in front of the other, heel touching toe (pictured above)

For a virtual assessment it is recommended to skip the last stage of the *4-Stage Balance test* (stand on one foot) for safety.

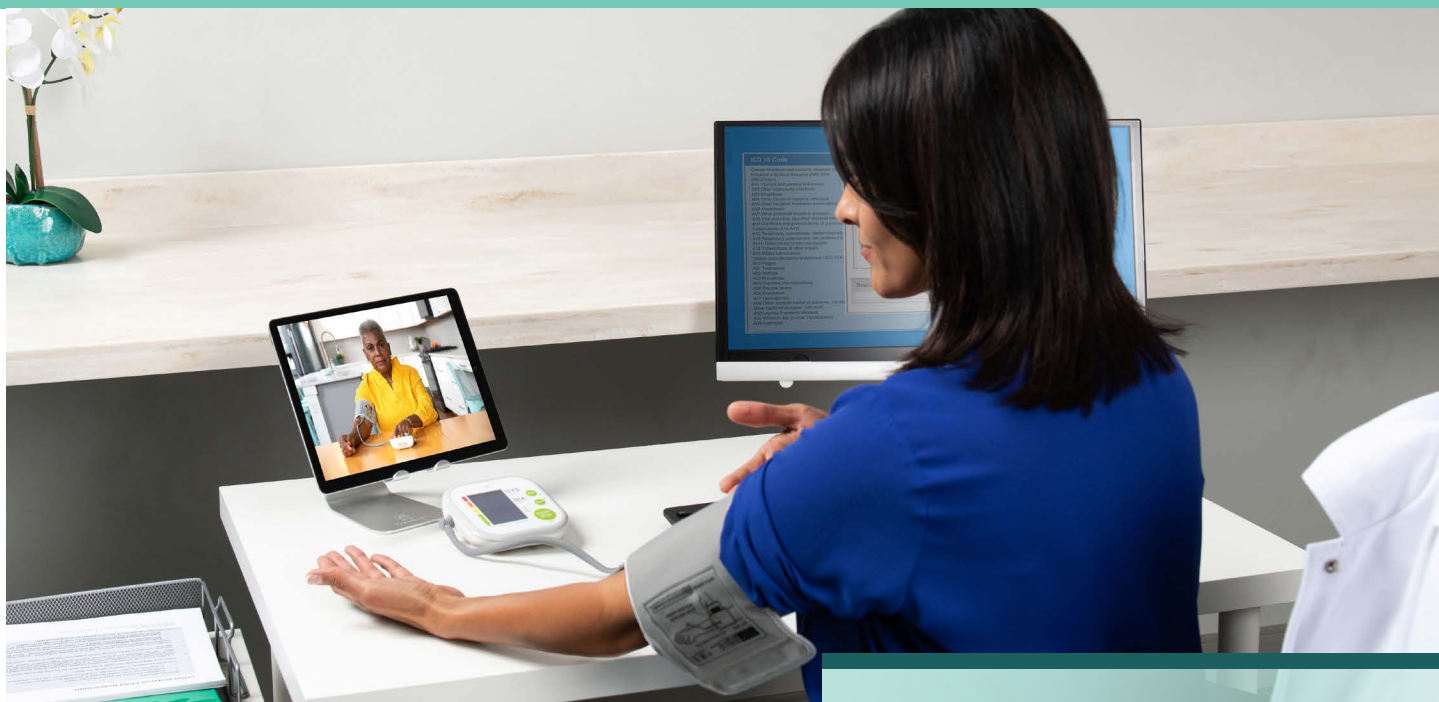
TIPS

Recommend a referral to physical therapy if the patient fails any of the tests, or tests are discontinued for safety.

Physical therapy referrals may be recommended without performing gait, balance, and strength assessments for patients who:

- Report frequent falls,
- Report and/or clearly demonstrate habitual use of assistive devices,
- Are visibly frail.

Recommend a community exercise program for fall prevention to help improve or maintain their balance if the patient passes all three tests. Possible programs may [include](#) Tai Chi, Better Balance, or the Otago Exercise Program.



8. Test for Orthostatic Hypotension

You can skip this assessment if the patient does not have a blood-pressure cuff. Make a note in the EHR to have the patient tested for orthostatic hypotension during their next clinic visit.

The sit-to-stand orthostatic hypotension test is used for Tele-Med assessments. You perform this test by measuring the patient's blood pressure after sitting for 2 minutes and then after standing for 2 minutes. Make sure the patient's helper is nearby and discontinue the test if the patient reports feeling faint or dizzy.



TIP

If the patient experiences either a systolic blood pressure drop of 15 mmHg or more or a diastolic blood pressure drop of 7 mmHg or more, or reports feeling faint or dizzy, flag the patient to be followed up with an in-person assessment by their provider and provide the patient with the [STEADI brochure on managing orthostatic hypotension](#).

9. Review Key Home Safety Considerations

Review [CDC's Check for Safety: A Home Fall Prevention Checklist for Older Adults](#) brochure with the patient.



TIP

Communicate common home safety risks and discuss risks identified during the telemedicine appointment. A referral to occupational therapy for a home modification assessment may be recommended.

Use this checklist to find and fix hazards in your home.

STAIRS & STEPS (INDOORS & OUTDOORS)	FLOORS	BEDROOMS
<p>Are there papers, shoes, books, or other objects on the stairs?</p> <p><input type="checkbox"/> Always keep objects off the stairs.</p> <p>Are some steps broken or uneven?</p> <p><input type="checkbox"/> Fix loose or uneven steps.</p> <p>Is there a light and light switch at the top and bottom of the stairs?</p> <p><input type="checkbox"/> Have an electrician put in an overhead light and light switch at the top and bottom of the stairs. You can get light switches that glow.</p> <p>Has a stairway light bulb burned out?</p> <p><input type="checkbox"/> Have a friend or family member change the light bulb.</p> <p>Is the carpet on the steps loose or torn?</p> <p><input type="checkbox"/> Make sure the carpet is firmly attached to every step, or remove the carpet and attach non-slip rubber treads to the stairs.</p> <p>Are the handrails loose or broken? Is there a handrail on only one side of the stairs?</p> <p><input type="checkbox"/> Fix loose handrails, or put in new ones. Make sure handrails are on both sides of the stairs, and are as long as the stairs.</p>	<p>When you walk through a room, do you have to walk around furniture?</p> <p><input type="checkbox"/> Ask someone to move the furniture so your path is clear.</p> <p>Do you have throw rugs on the floor?</p> <p><input type="checkbox"/> Remove the rugs, or use double-sided tape or a non-slip backing so the rugs won't slip.</p> <p>Are there papers, shoes, books, or other objects on the floor?</p> <p><input type="checkbox"/> Pick up things that are on the floor. Always keep objects off the floor.</p> <p>Do you have to walk over or around wires or cords (like lamp, telephone, or extension cords)?</p> <p><input type="checkbox"/> Coil or tape cords and wires next to the wall so you can't trip over them. If needed, have an electrician put in another outlet.</p>	<p>Is the light near the bed hard to reach?</p> <p><input type="checkbox"/> Place a lamp close to the bed where it's easy to reach.</p> <p>Is the path from your bed to the bathroom dark?</p> <p><input type="checkbox"/> Put in a nightlight so you can see where you're walking. Some nightlights go on by themselves after dark.</p>
	KITCHEN	BATHROOMS
	<p>Are the things you use often on high shelves?</p> <p><input type="checkbox"/> Keep things you use often on the lower shelves (about waist high).</p> <p>Is your step stool sturdy?</p> <p><input type="checkbox"/> If you must use a step stool, get one with a bar to hold on to. Never use a chair as a step stool.</p>	<p>Is the tub or shower floor slippery?</p> <p><input type="checkbox"/> Put a non-slip rubber mat or self-stick strips on the floor of the tub or shower.</p> <p>Do you need some support when you get in and out of the tub, or up from the toilet?</p> <p><input type="checkbox"/> Have grab bars put in next to and inside the tub, and next to the toilet.</p>

10. Screen for Vitamin D Deficiencies

Screen the older adult for malnutrition and vitamin deficiencies if exhibiting symptoms. Patients who may need further evaluation include those with osteoporosis, kidney stones, advanced renal disease, certain malignancies, or sarcoidosis that can result in hypercalcemia.

Ask if the patient has adequate vitamin D intake (e.g., drinks 3 glasses of milk daily or takes a vitamin D supplement).



Recommend Vitamin D supplement for bone health (minimum 800 IU daily cholecalciferol) if the patient is at risk for Vitamin D deficiency.



Step 3: Intervene

PURPOSE: Develop a plan of action to address modifiable fall risk factors and reduce fall risk.

Record risk assessment results in the patient's EHR and communicate recommended referrals to their primary care provider. The provider can then decide which prevention strategies are needed for the patient.

Refer to the [CDC's Coordinated Care Plan to Prevent Older Adult Falls](#) for a detailed list of potential referrals, recommendations, and interventions.



CASE STUDY: STEADI Tele-Med In Action

When STEADI-based fall prevention was being introduced into Emory Primary Care clinics, Emory implemented STEADI via telemedicine (STEADI Tele-Med) at three sites. STEADI Tele-Med is an adapted version of the STEADI initiative. STEADI Tele-Med uses a multidisciplinary team (see more in Table 1) to screen and assess patients for fall risks from patients' homes and communicate the results to their providers via electronic health records and email.

The purpose of this case study is to provide a summary of the steps taken to implement STEADI Tele-Med (see more in Table 2), to better understand the holistic process, and to highlight future considerations and recommendations to potentially optimize program impact.

First establish the roles for staff members who will be participating in STEADI Tele-Med. It is critical to understand and establish key tasks and staff member roles for successful implementation. The table below highlights specific tasks that a Registered Nurse (RN), Primary Care Provider (PCP), and non-clinical staff member can lead to ensure successful implementation.

Table 1. Summary of STEADI Tele-Med Tasks by Role

Tasks	Description	Performed By
Screening for Fall Risk	Send the online Falls Free Checkup screener to the patient via email or text to screen the patient for fall risk remotely.	Non-Medical Staff
Fall Risk Screening Phone Call	If the patient does not fill out the online screener, staff member will call the patient and use the Stay Independent brochure's Three Key Questions to screen for fall risk.	Non-Medical Staff
Introductory Phone Call	<p>Call the patient to introduce them to STEADI Tele-Med and ensure teleconferencing technology is available and set up properly.</p> <ul style="list-style-type: none"> • Ensure patient has stable internet connection and either a home laptop, cellphone, tablet, or another internet connected device. • Ensure an extra person will be available during the assessment to assist the patient if needed. <p>This step can also be done during the screening call if the staff member had called the patient to screen for fall risk.</p> <p>Note: Not all assessments can be conducted via voice call. It is recommended to use teleconferencing technology with video capabilities.</p>	Non-Medical Staff
Pre-Assessment Call	Conduct pre-assessment phone call to prepare patient for the fall risk assessment.	Non-Medical Staff or Registered Nurse
Assessment Call	Over video or voice call, conduct assessment of fall risk factors on the older adult patients who screened at risk for a fall.	Registered Nurse

Tasks	Description	Performed By
Communicate Recommendations	Message the patient's primary care provider with findings and recommendations from the fall risk assessment.	Registered Nurse
Primary Care Visit	Recommend evidence-based fall prevention strategies to the patient based on the findings and recommendations from the telemedicine visit.	Primary Care Provider

Building from the overview of key tasks and roles above, the following table walks through, in more detail, the specific steps of STEADI Tele-Med implementation in a primary care clinic with modifications to allow for telemedicine delivery. These adapted steps, potential challenges, and tips to overcome pitfalls are based on lessons learned from the Emory University STEADI Tele-Med adaptation and implementation.

Table 2. STEADI Tele-Med Implementation Actions, Potential Challenges, and Tips to Overcome Potential Challenges

Traditional STEADI Actions	Modified Actions for STEADI Tele-Med	Challenges Identified During Implementation	Modified/Suggested Actions
SCREEN FOR FALL RISK (Core Component 1)			
<p>Patient is screened for fall risk during their medical visit.</p> <p>Recommended tools for screening include:</p> <ul style="list-style-type: none"> • CDC Stay Independent Screener (SIS) • Three Key Questions 	<p>Patient is screened for fall risk prior to medical visit.</p> <p>Recommended tools:</p> <ul style="list-style-type: none"> • Online, email, or text version of the SIS sent to the patient to complete at home. • The Three Key Questions or the 12-item questionnaire in the SIS asked during phone call. 	<ul style="list-style-type: none"> • Patient skepticism of screening for health status via phone call. • Difficulty navigating online version of SIS. • Patient requiring additional clarification on SIS questions. • Estimated time for screening was 30 minutes. 	<ul style="list-style-type: none"> • Engage patients in a conversational style to gain trust and increase participation. • Conduct SIS screener via phone instead of electronic version. • Provide clarifications for questions in SIS as needed.

Traditional STEADI Actions	Modified Actions for STEADI Tele-Med	Challenges Identified During Implementation	Modified/Suggested Actions
PRE-ASSESSMENT CALL SET UP (Component 1.5)			
Not applicable	<p>For patients screened at risk, determine if they are able to participate in a virtual STEADI assessment.</p> <p>Check for:</p> <ul style="list-style-type: none"> • Availability of computer, smartphone, or tablet with a camera • A stable internet connection • Space in the home to safely conduct gait, strength, and balance tests. • Helper or able adult nearby during assessment 	<ul style="list-style-type: none"> • Patient discomfort, difficulty, or inability to use zoom platform. • About 85% of participants had difficulty navigating Zoom • Patient weariness of being on video at their home 	<ul style="list-style-type: none"> • Respond to patient concerns and provide sufficient explanation of the steps/ actions planned.
ASSESS FOR MODIFIABLE RISK FACTORS (Core Component 2)			
<p>A multifactorial fall risk assessment is performed during medical visits. Risk factors assessed include:</p> <ul style="list-style-type: none"> • History of falling • Gait, strength, or balance impairment • Medications that increase fall risk • Orthostatic hypotension • Comorbidities that increase fall risk • Vitamin D deficiency • Visual impairment • Feet and footwear issues • Home hazards 	<p>A multifactorial fall risk assessment is performed during virtual (video-conferencing preferred) call with patient.</p> <p>Actions included:</p> <ul style="list-style-type: none"> • Obtaining fall history • Conducting adapted gait, strength, and balance tests on videoconference • Reviewing medication list on electronic health record or during patient interview • Conducting sit-to-stand orthostatic hypotension test. • Reviewing comorbidities with patient • Screening for vitamin D deficiency • Conducting visual acuity test using Banner Eye Chart displayed on screen. • Reviewing Feet and Footwear handout with patient • Reviewing Check for Safety handout with patient 	<ul style="list-style-type: none"> • Concerns about patient safety during functional tests. • Difficulty using video conferencing software. 	<ul style="list-style-type: none"> • May end gait, strength, and balance tests for safety reasons and refer to physical therapy. • If video conferencing is not possible, consider phone-based assessments if possible and email handouts as needed such as <i>Feet and Footwear</i> and <i>Check for Safety</i> handouts. • Encourage patient's helper to assist with technology difficulties to encourage participation. <p>TIP: Providing sufficient training to clinical staff conducting the assessments will aid in adjusting tests during telemedicine visits to accommodate for technical or physical limitations.</p>

Traditional STEADI Actions	Modified Actions for STEADI Tele-Med	Challenges Identified During Implementation	Modified/Suggested Actions
COORDINATE CARE WITH PRIMARY CARE PROVIDER (Component 2.5)			
Not applicable	<p>Document findings from STEADI Tele-Med assessments and communicate results and recommendations with primary care provider.</p> <p>TIP: <i>Recommendations to provider may include suggested referral to podiatry, occupational therapy, pharmacy for medication adjustments, ophthalmology, physical therapy, or community-based evidence-based programs.</i></p>	<ul style="list-style-type: none"> It was a time-consuming process to complete the assessments and all required paperwork, estimated average 56-60 min. 	<ul style="list-style-type: none"> Consider using the EHR system to document and provide recommendations to providers. Use a standard form to document all STEADI Tele-Med findings and recommendations including summary of screening and assessment results.
INTERVENE USING EFFECTIVE CLINICAL STRATEGIES (Core Component 3)			
During medical visit, the provider recommends prevention strategies to address modifiable fall risk factors identified in assessment and promote safe mobility.	<p>During telemedicine visit:</p> <ul style="list-style-type: none"> Refer to additional services as needed. Educate the patient on modifiable risk factors and interventions to address them. Provide patient with relevant educational materials. 	<ul style="list-style-type: none"> Provider time constraints were a barrier to reviewing STEADI Tele-Med recommendations and providing referrals. The estimated time to review findings and recommendations was 5-10 minutes. Patient limited receptiveness to discussing fall prevention strategies. 	<ul style="list-style-type: none"> Prioritizing fall prevention during patient assessment is an important factor for managing comorbidities. Use motivational interviewing techniques with patients to encourage change. Review the factsheet "Helping my older patients reduce their risk of falling" to reinforce benefits of fall prevention recommendations. <p>TIP: <i>Supply primary care providers with a list of clinical and community resources available in the area and ways to refer patients to them to aid in successful referral to effective clinical and community strategies and programs.</i></p>



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