

GUIDE

Clinical Guidelines: The Importance of Assessing and Addressing Health Management

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Defining Health Management

Health management is an essential task for maintaining a person’s overall health and well-being, particularly for people experiencing homelessness who have increased prevalence and higher onset of chronic health conditions.¹ **Health management is defined as “activities related to developing, managing, and maintaining health and wellness routines, including self-management, with the goal of improving or maintaining health to support participation in other occupations (daily life activities).”²**

One way to think of health management is as encompassing all of the decisions and activities that occur outside of interactions with medical providers — beyond office visits, the hospital, clinical care in medical respite settings, and outreach and home care visits. As the definition notes, health management is made up of several different activities and skills and is a complex process, especially for those managing multiple and/or chronic health conditions.

Health management activities may include: social and emotional health promotion and maintenance, symptom and condition management, communicating with the health care system, medication management, physical activity, nutrition management, and personal care device management². Each of these specific activities has multiple components. Effectively managing health requires both individual skills and engagement with the health care system. People who are unhoused experience multiple challenges to effectively managing their health due to both individual and contextual factors. Managing multiple health conditions while also working to meet basic needs, experiencing and processing trauma, or actively using substances, among other situations, and doing so with limited resources impacts a person’s ability to effectively engage with health care systems and use health management skills.

Further, the environment of being unhoused, combined with decreased access to health care services and the stigma and bias within these systems, can make health management even more challenging. **This document provides guidance on assessing health management skills in people experiencing homelessness, which can be used in settings including health centers, medical respite programs, mobile clinics, permanent supportive housing, and street medicine.**

Importance of Health Management Skills


As health management can be understood to encompass a majority of the health-related activities people engage in outside of direct care, these skills greatly influence people’s health outcomes and experiences. Factors that can have a significant impact on one’s health, health outcomes, and one’s experiences of health include: how someone understands information provided to them about their health, ability to apply that information to health activities and behaviors, ability to effectively communicate with providers about health beliefs, interest and ability to carry out instructions, and the impact of health interventions.


Success in these areas can significantly impact a person’s self-perception of wellness and experience of agency over health decisions and bodily autonomy, in turn influencing effective communication with providers and self-advocacy. For example, if a client has an experience of confusion around diabetic management and the use of insulin and, as a result, has difficulty managing their medications, this will not only impact their diabetes but also potentially influence future decisions by the provider, influencing the client’s confidence in communicating their challenges and taking on new instructions.


By contrast, a positive experience with learning about and managing diabetic medications can have a significant impact both on one’s physical health and on their self-perception of their ability to take on other health-related challenges and goals.


Impact of Homelessness on the Ability to Carry Out Health Management Activities


Experiences of homelessness can significantly impact people's ability to engage in health management activities. A lack of safe and stable housing requires individuals to focus on their safety and basic needs, and often does not allow for attention to and management of complex health-related tasks. Additionally, the realities of homelessness and related stigmas present complex barriers to carrying out health management activities, even in the setting of an individual spending significant time and energy on their health. Consider the potential impact of experiences of homelessness in the following areas:


 **Focus on basic needs over health management:** As mentioned above, when people are focused on where they will sleep, obtain their next meal, or on direct threats to their safety related to weather, hunger, or violence, it is very difficult to focus on health-related tasks like organizing medications, eating a healthy diet, or scheduling and attending medical appointments.

 **Self-assessment and decision making:** Experiences of trauma, exposure to the elements, chronic pain, and other hardships related to experiences of homelessness can make it very difficult for people to assess their own health status and know when something has become an emergency. These experiences can impact decision making itself, with basic needs often outcompeting non-emergency health needs.

 **Appointment management:** People experiencing homelessness may have difficulty keeping track of the date and time or maintaining a calendar. They may not have a cellphone or means to charge it. They may need to organize their day around transportation availability, substance use treatment (like methadone), cooling or warming centers, or meal programs. These factors, along with financial and transportation barriers, can make it very difficult to schedule and attend appointments. When people do get to a scheduled appointment, they can be turned away for being more than 10 or 15 minutes late, often requiring a reschedule and long wait to be seen again.

 **Medication management:** It can be challenging to properly and safely store and keep track of medications while experiencing homelessness. This is a result of several factors: the need to carry all belongings at all times, the risk of theft of personal belongings, difficulty in maintaining a medication schedule when belongings are stored in a shelter but the shelter space is closed during the day, lack of access to refrigeration or a private space to administer medications, and challenges with insurance and paying for medications.

 **Stigma and health care provider bias:** People experiencing homelessness can face significant stigma within the health care system, a situation that can be compounded by overt or perceived stigmatization based on other marginalized identities such as race, using drugs, or being transgender. Provider bias can also impact both communication and health outcomes, with the potential for providers to misattribute symptoms to the impact of homelessness or substance use, or to make assumptions about a client's motivations. Both stigma and biases significantly undermine people's ability to communicate their concerns and goals and to advocate for themselves.

 **Use of durable medical equipment (DME):** The use of DME can be impacted by the following factors: ability to wash hands and have a clean space for things like checking blood sugar or cleaning a nebulizer or CPAP tubing, ability to plug in or charge a device, potential theft of assistive devices such as rollator walkers or canes, lack of space to safely store devices, loss of devices during encampment sweeps or emergency events, and atypical wear and tear on things like wheelchairs from the heavy outdoor use needed to meet basic needs while unsheltered.

Assessment

The definition of health management includes several activities that require specific skills in order to effectively manage one's health. Due to this, there is not one overarching recommended approach or assessment to evaluate a person's health management skills. Instead, providers will need to identify what components of health management they would like to or need to assess with their clients.

Providers will likely need to prioritize skills to assess, or specific tools based on the clinical picture.³ Providers will need to follow their scope of practice and use clinical reasoning to determine which tools should be used to assess health management skills. All assessment practices should be client-centered and integrate the client's health care priorities.

Appendix A is a clinical reasoning guide to help providers initiate the conversation around health management and determine what skills to assess and how to assess them.

Appendix B provides an overview of published or standardized tools for different health management skills. The skills assessed, purpose of the tool, access, and previous use with unhoused populations are discussed.

The Clinical Reasoning Guide (**Appendix A**) and the standardized tools in **Appendix B** include assessments of the following skills, as defined below:

Health literacy: An individual's ability to find, understand, and use health-related information and services in making health-related decisions and putting the information into practice.⁴

Medication self-management: Encompasses the organization of and adherence to a prescribed medication regimen. Also includes the ability to understand the purpose and intended impact of medications, how to recognize and report side effects, decision making around medication (for example, a missed dose), and communicating with health care professionals about one's experience with medications.⁵

Physical skills for health management: Includes any health-related tasks that require fine or gross motor skills to complete, including moving oneself and/or objects, and the ability to integrate cognitive skills to complete the task properly.² Examples include self-administering insulin, filling a weekly medication box, plugging in or lifting a medical device, or transferring safely in and out of a wheelchair.

Time Management: How a person organizes, schedules, and prioritizes certain activities (e.g., taking medications with meals).² Within time management, appointment management can be understood as the ability to schedule, track, and attend health-related appointments, including arriving on time and with any documentation needed (insurance card, referral, medical records) to complete the visit.

Self-advocacy and communication: Health self-advocacy is one's ability to represent their own experiences, opinion, and interests in health-related communications and decision making.⁶

Self-assessment and decision making: Ability to identify one's own capacity to complete a specific activity or action based on existing knowledge and physical skills. This includes self-efficacy, which is an individual's belief in their capability to produce given outcomes. Self-efficacy is a basis for an individual deciding what course of action to take, and the degree of effort to exert, when faced with an obstacle or challenge in life.⁷ Decision making is the cognitive, reasoning-based process resulting in the selection of a belief or a course of action among several possible alternative options, based on assumptions of values, preferences, and beliefs of the decision-maker.⁸

Creating a Holistic Clinical Picture

The assessment process should be sure to include the client's perspectives, objective observations, feedback from other involved providers or support systems, and an understanding of the person's environment. Once these components of the assessment process have been completed, providers should review the findings and create a clinical summary. Providers can use **Appendix C** to help summarize findings from the assessment process.

This summary should include identified strengths and barriers (internal and external) to health management. Providers can utilize strengths to determine effective strategies and treatment plans. Identified barriers will inform the treatment plan in numerous ways, including:

- Medications prescribed and selected dosing schedules. For example, taking into account the risk profile of medications (e.g., fast-acting versus long-acting insulin) or dosing needed (e.g., four times daily versus twice daily dosing for antibiotics, or once-daily long-acting antihypertensives).
- Additional referrals or resources needed to address health needs. For example, specialty care, or outpatient versus home care physical therapy or wound care support.
- Determining additional DME the person may use or, if not prescribed, a summary of why it was not indicated.
- Ability to physically take prescribed medications due to sensory impairments, such as low vision or decreased physical sensation.
- Needed teaching for self-management. For example, use of an inhaler and potential need for a spacer, learning the steps to appropriately self-administer injectable medications, or learning how to manage a chronic wound or ostomy.
- Frequency of follow-up visits with primary care and other providers. For example, when choosing a wound care regimen or medication that requires frequent lab work.

Providers should be sure to document the information gained throughout the assessments, along with overall findings. This will be helpful for future reference and for additional providers the person may meet with to help pre-emptively identify barriers and devise strategies to address these barriers. This will also help to communicate with the team regarding any decisions made (e.g., prescribing an alternative medication based on dosing schedule).

There may be additional referrals that can support the client in addressing or compensating for barriers and challenges. These can include referring to community health workers (CHWs), nurse education and support, occupational therapy practitioners (OTPs), and behavioral health (BH) providers. The appropriate referrals will be based on barriers identified and support needed. For example:

Someone who has low health literacy and complicated chronic conditions may benefit from CHW support to navigate health systems and coordinate care.

Someone newly diagnosed with a chronic condition may benefit from peer and BH support to grapple with the diagnosis and to feel comfortable making health-related decisions.

OTPs can evaluate and address several factors, including overall health management skills and underlying factors such as cognition and dexterity that affect health management.

Routine nursing visits can provide continued health education and teach clients necessary skills, such as administering insulin based on a sliding scale.

Monitoring Outcomes and Reassessing Skills

Providers do not necessarily need to reassess health management skills at regular intervals. The impact of treatment plans and use of strategies to compensate for skills can be viewed and measured through changes in the person's health status or health-related behaviors (e.g., improvement in HgbA1c; reduced frequency of emergency room visits; or the client refilling medications on schedule and not running out early).

Reassessing health management could occur if the person has a change in function or cognition, a decline in health management skills, or a new significant health condition that requires different or new skills than those previously used. It is also important to note that, depending on the client's cognitive status, they may not be able to generalize skills and may require the same strategies and repeated opportunities for learning with each new health condition or intervention.

It is also important to remember that environment and transitions can also impact someone's skills. Clients may experience decreased health management ability while transitioning into new housing; they may benefit from instruction once established in their housing to adapt new skills or use compensatory strategies. Loss of belongings, such as during encampment sweeps, may disrupt progress in health management when supplies are lost or thrown away. Formal reassessment may not be beneficial, but the provider may find it useful to engage with the client to identify new barriers, supports, or concerns that would affect the treatment plan.

Conclusion

Assessing for health management skills can assist providers in identifying strengths and barriers experienced by each of their clients. Information gained from health management assessments can be used to inform treatment and education plans and ensure client-centered care, as providers can individualize their care and treatment plans based on individual skills and needs. Many barriers exist for unhoused populations to manage their health effectively, and assessing health management skills can create opportunities for learning and skill development to work toward improving a person's health and well-being.

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Case Example 1 — Medical Respite Program

Background: Bernie (he/him/his) was a client admitted to a medical respite program after hospitalization for uncontrolled blood pressures over a three-week period. Bernie is managing hypertension and congestive heart failure, along with depression, and is prescribed medications for all of these conditions. Bernie has a long history of not taking medications as prescribed, and often seeks out providers only when experiencing acute symptoms (such as chest pain or suicidal thoughts). Previously, Bernie exclusively used the emergency department (ED) for health needs, but over the past year has presented to the health center during walk-in hours. He was referred to medical respite for further stabilization of his blood pressure and to increase his ability to consistently take medications.

Assessment: Bernie has engaged well with the medical respite program staff. He was agreeable to using a pillbox to organize his medications, which are taken in the morning and at nighttime. Despite being given a pillbox pre-filled by the registered nurse (RN), Bernie doesn't consistently take medication. He is able to verbalize when he is supposed to take it but identifies having trouble remembering to take it. To assess potential health management barriers, the medical team did the following:

1. Interviewed Bernie regarding his perceptions of medication management
2. Used the [Medi-Cog assessment](#) to assess cognitive and medication skills
3. Observed Bernie using his pillbox

The interview revealed that Bernie felt concerned about his hospitalization and chest pain, as he witnessed several family members have heart attacks or die related to heart conditions. He does identify that he previously hasn't addressed his heart issues "until my body tells me it's a problem." He is interested in being more proactive and likes the care he receives at the health center.

The Medi-Cog assessment identified that Bernie has decreased memory and recall. He also showed decreased health literacy skills, as he was unable to read medication information and instructions for the written pillbox portion.

The providers made two observations with Bernie. First, they observed Bernie read his medication label and fill his pillbox. He required substantial assistance, as he was unable to read most written information on the pill bottle labels, although he could read and understand "morning" and "evening." He also had trouble remembering verbal instructions. On a later date, the nurse asked Bernie to show her how he took medications out of his pillbox. Bernie opened the first slot that had pills in it, which did not correspond with the current date. The nurse engaged further with Bernie, learning that Bernie was unaware of what day it was and could not identify the correct date on a calendar. Bernie also noted that if he couldn't remember what day it was or whether he had taken his medicine already, he would just take the next dose (the nurse was concerned he may have been doubling up on doses).

Intervention: As a result, the RN decided to continue using the pillbox with Bernie, but with his permission, kept it in the program's medication storage to administer twice daily. Bernie worked with the RN daily to learn to take his medication. He was able to look at his phone to identify the day of the week and match that day to the day on the pillbox. He was educated on only taking medication that matched the current day to avoid taking extra medication. After several days of increased instruction, Bernie kept his pillbox, but was only filled for three days at a time. On the third day, the RN would refill the medication for three additional days and provided continued education to Bernie.

Outcomes: Over time, he was able to independently use the pillbox and take medications with the correct date. He was able to continue with weekly supports to fill his pillbox by the RN team at the health center, which also allowed him to have more consistent monitoring of his cardiac status.

Case Example 2 — Informal Assessment in HCH Health Center

Background: Ana (she/her/hers) is a client at a Health Care for the Homeless health center and has been seen there for about nine months. She is currently staying in shelter. She has a history of hypertension, asthma, and diabetes that was controlled through oral medications. Ana was recently found to have increased blood glucose (HgbA1c of 10.2) and was started on insulin. The prescribing provider and the clinic nurse both spoke with her about when to take her long-acting insulin, about using an insulin pen, and about the signs and symptoms of hypoglycemia. Ana picked up her insulin pens and pen needles at her local pharmacy. After three months of treatment, she was found to have an HgbA1c of 10.4, unchanged from when she last had labs. Ana was very frustrated by this because she had been taking her insulin most nights, just as she was instructed to do. She estimated that, most weeks, she takes her insulin five out of seven days.

Assessment: Ana met with the nurse on the same day she had met with her provider to review her lab results. The nurse asked the following open-ended questions about how she is managing her diabetes:

1. Tell me about what you usually eat in a normal day? Where do you eat your meals (e.g. lunch program, shelter, panhandling, etc.?)
2. Tell me about how you organize and remember to take your medications? What do you do if you forget your medications?
3. Tell me about testing your blood sugar — tell me about the steps you take to test your sugar, when you usually test your sugar (e.g., before breakfast, after lunch, etc.), what you do or change based on the readings?
4. Tell me about how and when you take your insulin. Where do you store your pen and supplies and the pens you aren't using?

There was nothing in Ana's reporting that stood out as a potential contributor to her unchanged HgbA1c. The nurse arranged with Ana to schedule a follow-up nursing appointment and asked Ana to bring her insulin pen, pen needles, and glucose monitor. Ana scheduled an appointment to return the next week.

At her follow-up appointment, Ana showed the nurse how she took her blood glucose and they reviewed the meter's readings together. Ana was able to test her own sugar and demonstrated that she knew what was considered a high reading, and when to call the clinic. Ana then demonstrated to the nurse how she took her insulin. Through the demonstration, the nurse was able to realize that while Ana was removing the outer needle cap on the pen needle, she was not removing the inner, smaller cap before self-administering the insulin. As a result, Ana had not been receiving any of the insulin she was administering. Because Ana knew the needle was small and often not easily felt when injecting into the abdomen, she did not realize she was not successfully injecting the insulin.

Intervention: The nurse spoke with Ana about what she had observed and the need to remove the inner needle cap. The nurse was able to show Ana how to remove both the outer and inner cap and observed Ana doing the same process. Ana was relieved to know that she didn't need an increased dose of insulin. The nurse spoke with the provider, who kept Ana on the same insulin dose and scheduled her to come back in three months.

Outcomes: When Ana returned, her HgbA1c was down to 8.5, and she was able to again demonstrate proper use of her glucometer and her insulin pen.

Appendix A — Clinical Reasoning and Assessing Health Management Skills

Before determining the approach to health management, the provider should consider information already learned about the person, and the purpose of assessing health management, such as:

- What has the client identified as barriers to managing their health?
- What have the provider or their care team identified as barriers to explore?
- Are there health domains in which the person is struggling that could be attributed in part to health management deficits? For example, blood sugar control or visits to the emergency room for asthma exacerbations.
- How are the environment or available supports contributing to or creating barriers for health management?
- What are the gaps in their health history that need to be further assessed?
- Are there priority or emergent needs that should be addressed first? (E.g., an acute wound infection versus a planned review of recent lab results.)

A comprehensive look at health management will include:



The process for each is discussed further in detail, and [Appendix C](#) is a blank form that can be used to summarize results.

Determining What Assessments to Use

Ideally, a provider will engage in discussion with all clients to learn more about their health experiences, preferences, and barriers — either through a conversation or formal assessment. This may be done formally in the first appointment or interaction with a client. Or it may occur over time as the provider and client get to know each other and trust is built.

The provider may decide there is a need for observation of skills when:

- The client’s health status is not improving despite reports of following health recommendations.
- The client identifies they have not followed the recommended health plan, and it is unclear why.
- The client discusses or presents with cognitive concerns (e.g. memory, organization).
- The client presents with low self-efficacy for their self-management.
- Their health or functional status has changed.
- The provider wants a more comprehensive clinical picture.

An environmental assessment should be completed as part of discussions with the client to help investigate external barriers to health management. The environmental assessment can be informed by other providers on the care team, such as CHWs, who may investigate these barriers more thoroughly.

It is recommended that providers create their own question guides or decision trees for use in their workflow after reading this section.

Discussion with the Client

This discussion involves talking with, interviewing, and/or providing a questionnaire to the client to learn more about their perspectives, experiences, and priorities.

Informal

This is a process of gaining information about the client's health and health management based on a semi-structured conversation with the client. It does not include using a standardized screening tool or questionnaire:

1. Use [motivational interviewing strategies](#) to learn more about the client's experience with health management, medications, concerns, challenges, and strengths.
2. Ideally, the provider will ask questions and listen to answers while avoiding providing health information or instruction throughout the interview. Questions and education can be given once the provider has completed the question/assessment process.
3. Questions could include:
 - How do you feel about your health?
 - What are the things you currently do to manage your health?
 - What about your health do you find easy to manage?
 - What do you find challenging related to managing your health?
 - What are your priorities or goals for your health?
 - What are your biggest worries or concerns?
 - Do you find it easy to talk to doctors or providers about your health?
 - Do you feel comfortable asking questions during visits? Why or why not?
 - Do you know who you can ask for help with your health or medicine? How do you get in touch with them?

Note: The following questions use the word "medication," but the word could be substituted for other health management tasks, such as checking blood sugar or blood pressure, cleaning and caring for wounds, etc.

- How do you feel about medication?
- How do you feel about taking medication?
- What experiences have you had with medication before?
 - What helped?
 - What didn't work? Would you be comfortable with sharing why it didn't work?
- Tell me how you organize and take your medications.
 - How do you remember to take your medications?
 - What do you do if you miss a dose?
 - On a scale of 1 to 10, how well do you feel you take all of your medications as prescribed?
- Do you know why you are prescribed the medications you have?
 - Do you know what your medications are supposed to treat?
 - Do you know about the possible side effects of your medications?

- Are you comfortable with starting medication?
 - What concerns do you have?
 - What are you willing to start with?
- What would be supportive or helpful for you to take medication?
- A lot of my patients miss taking their medicines from time to time. In the last week, how many days did you miss taking a dose of one of your medicines?⁹

Benefits of Using This Method	Drawbacks of Using This Method
<p>Providers can use questions that are relevant to the person and exclude those that are not relevant.</p> <p>The client may be more comfortable engaging in conversation than in a formalized assessment.</p>	<p>The person may not be comfortable disclosing all information to you or may feel uncomfortable with a verbal conversation.</p> <p>It may take a long time to complete.</p> <p>The person may ask questions or seek additional information from the provider during the interview.</p>

Standardized Tool

This is if you will be using a published or standardized questionnaire (see [Appendix B](#) for options).

- Identify a tool that seeks to assess information relevant to the intended focus.
- Identify whether you will be asking the client questions or if they will be reading and answering them independently:
 - Ensure they are able to easily read the questionnaire.
 - If you or another provider (e.g., CNA) are asking the questions, be sure to encourage the client to be as honest as possible. Telling a provider directly may influence the person’s answers.
- Score or summarize the information gained through the tool/questionnaire according to the directions of the tool.
- Supplement the tool with any additional questions needed.

Benefits of Using This Method	Drawbacks of Using This Method
<p>The questions have usually been tested and will capture a range of the person’s feelings toward health or medication management.</p> <p>It may offer a standardized scoring or summary to identify areas to address.</p>	<p>The person may need to be able to read/write to answer the questionnaire.</p> <p>It may not generate additional rapport-building or conversation that can enhance the therapeutic relationship; it may not gather some information about the person’s experience.</p>

Observation of Skills

Observing a person's skills gives the provider an opportunity to see how the person goes about health management tasks. Although the clinic is not the exact environment where the person does these tasks, it can be helpful to see the steps the person takes, the skills the person has, and the areas where they might struggle. Mobile clinics or street medicine providers may have the best opportunity to observe the person in the environment where they usually are, which can be beneficial.

Non-Standardized

Use the person's own supplies and resources (e.g., medications, inhalers, calling their pharmacy on their phone).

The provider can take two approaches:

1. Observe the person, without interfering, to see what they are doing on their own.

- Write down/note any issues.
- After the person is finished, provide specific teaching to correct any mistakes made.
- Ensure that the person redoes the skill while you observe, ensuring they learned and can apply your teaching.

Benefits of Using This Method	Drawbacks of Using This Method
The provider is able to see what and how the person is doing without support and is likely doing on their own in the community.	The person may complete steps inaccurately that may have potential consequences. The provider will need to use clinical judgement about whether to intervene (e.g., administering the incorrect dose of medication versus putting a blood pressure cuff on incorrectly).

2. Observe and teach: Watch the person do their medication routine, but interrupt and provide teaching/correction as needed while they are doing it.

- After the assessment, have the person show you the skills without support to ensure they have learned the skills you taught or corrected.
- Repeat instructions or teaching as much as needed for learning. This may need to occur over multiple visits.
- Document teaching and the person's response, including any areas that may need reinforcement, so that other providers can provide targeted support at subsequent visits.

Benefits of Using This Method	Drawbacks of Using This Method
<p>The provider is able to provide correction or education at the exact steps where someone may not have skills.</p> <p>The provider may use this method to prevent dangerous errors (e.g., taking the wrong dose of medicine) and then provide opportunity for repeated instructions and learning.</p>	<p>The person may get distracted or fatigued by demonstrating their skills and receiving instruction at the same time.</p> <p>They may not remember all the information given, especially if it is given in several steps.</p>

Standardized Assessment

This is if you will be using a published or standardized assessment tool (see [Appendix B](#) for options).

- Follow the instructions for administration of the assessment.
 - This will often require the person to use equipment or supplies that are part of the assessment, and not their own supplies.
- Using the assessment instructions and scoring, identify where the person made errors.
- Write down the errors made and types of errors. Use the scoring guide and clinical reasoning to identify how these errors are affecting health management skills.

If the provider thinks the potential errors are a result of standardized testing, or to determine whether these deficits exist only within new health management tasks:

- Observe the person doing the task with their own supplies to see if these errors exist within their existing health management tasks (see the non-standardized assessment above).
 - Note: The person may not exhibit the same errors if they have learned or practiced the skills with their own resources. This indicates challenges with new learning but shows capacity to learn.

Benefits of Using This Method	Drawbacks of Using This Method
<p>Provides a structured way for providers to evaluate specific health management skills.</p> <p>For those that can be used as pre- and post-assessment, they can be used to measure changes over time or after a specific intervention.</p> <p>They also provide a standardized score that can be compared to determine the extent of the limitations or provide context for the person’s skills.</p>	<p>Clients may have difficulty using testing equipment instead of their own supplies, and they may show more errors.</p> <p>Standardized assessments can feel like “testing” and increase anxiety of the client.</p> <p>Standardized assessments also limit the flexibility of the provider to adapt or intervene during the assessment, as they are most valid when instructions are followed exactly.</p>

Environmental Assessment

The environmental assessment is used to gain a picture of the external supports or barriers to health management experienced by the person. If the provider is able to see where the person is staying, they may be able to observe some of the supports and barriers firsthand. Otherwise, the assessment will require the provider to gain this information from interviewing the person and/or their supports.

Evaluating the Environment

This can be gained by speaking with the person or other staff and team members involved in their care, reviewing available case or medical notes, and speaking with any supports the person has who participate in their care. This can also be gained by the provider observing the person's environment.

- **What is the person's current housing status?**
 - Where do they keep their belongings?
 - Where do they complete health management activities?
 - Do they have an address where supplies can be mailed, delivered, or dropped off?
- **Available resources to access medication and supplies:**
 - How accessible is the clinic or medical team to the client?
 - What is their insurance status?
 - Does their insurance cover the cost of supplies or medicine?
 - What are the person's available funds for health needs?
 - Is the person able to physically get to a pharmacy to pick up medication?
 - Is there a location the person can access to pick up additional supplies needed?
- **Ability to carry and store medications and supplies:**
 - Where does the person store their medication?
 - Does the storage meet the temperature requirements of the medication?
 - Ability to keep supplies to facilitate health activities (e.g., can the person have scissors or a pocket knife within shelter space?)
 - Does the person have adequate storage for all medicine and supplies (e.g., may be only able to manage one mobility device, may not have space to keep more than one week's worth of test strips or wound care supplies)?
 - Does the person have access to their medication and supplies when they need them (e.g., can they access the medication storage at the shelter for midday dosing?)
- **What are the safety needs?**
 - Does the person need to keep pills in their bottles with labels instead of using a pillbox?
 - Is the person prescribed medicine that is more likely to be stolen or taken?
 - Is their medication storage secured or stored in a place where it can be stolen?
 - Does the person have privacy to complete health management activities?
 - Are mobility devices adequate support for the places the person navigates in the community? Are there additional safety or fall risks?
 - Are there any complications or side effects that would impact the person's safety in their living environment?

Note: If there is a location that is frequented by your clients, it may be beneficial to do a site visit to that location to understand supports and setup for health management. This might include the local shelters or day/meal centers.

Appendix B — Table of Health Management Assessment Tools

This table can be used to identify standardized or researched tools to assess different areas of health management. This table provides a brief description of the tool, what it assesses, and the recommended providers or staff to implement the tool. Some tools are freely available; others have a purchasing fee or require access to the research article. When possible, we have included links to free versions or appended the tools in this document.

This document is not inclusive of all possible tools but of ones that are easily accessible and could likely be integrated into the HCH or medical respite setting.

Name of Tool	What It Assesses	Who Can Administer?*	Description and Notes
Newest Vital Sign	<ul style="list-style-type: none"> Health literacy Self-assessment and decision making 	RN MD/PA/NP OT PT Pharmacist Medical assistant	A screening tool that identifies patients at risk for low health literacy. <ul style="list-style-type: none"> Available in English and Spanish Looks at reading and calculation skills by reading a nutrition label Takes five minutes or less to administer
	Where to find it: https://www.pfizer.com/products/medicine-safety/health-literacy/nvs-toolkit		
	Citation: https://cdn.pfizer.com/pfizercom/health/nvs_flipbook_english_final.pdf		
Short Assessment of Health Literacy (SAHL-S)	<ul style="list-style-type: none"> Health literacy Self-advocacy and communication 	RN MD/PA/NP OT PT Pharmacist Medical assistant Case managers CHW Peers	Assesses health literacy and measures comprehension and pronunciation of health-related terms. <ul style="list-style-type: none"> Available in English and Spanish Requires prep to put together card set Long and short versions; most take 10 minutes or less to administer
	Where to find it: https://www.ahrq.gov/health-literacy/research/tools/index.html#short		
	Citation: Lee, S. Y. D., Stucky, B. D., Lee, J. Y., Rozier, R. G., & Bender, D. E. (2010). Short Assessment of Health Literacy—Spanish and English: A comparable test of health literacy for Spanish and English speakers. <i>Health Services Research</i> , 45(4), 1105–1120. https://doi.org/10.1111/j.1475-6773.2010.01119.x		

Name of Tool	What It Assesses	Who Can Administer?*	Description and Notes
Rapid Estimate of Adult Literacy in Medicine (REALM)	<ul style="list-style-type: none"> Health literacy Self-advocacy and communication 	RN MD/PA/NP OT PT	The Rapid Estimate of Adult Literacy in Medicine — Short Form (REALM-SF) is a seven-item word-recognition test to provide clinicians with a validated quick assessment of patient health literacy. <ul style="list-style-type: none"> Takes 10 minutes or less to administer
	Where to find it: https://www.ahrq.gov/health-literacy/research/tools/index.html#rapid		
	Citation: Arozullah, A. M., Yarnold, P. R., Bennett, C. L., Soltysik, R. C., Wolf, M. S., Ferreira, R. M., Lee, S. Y., Costello, S., Shakir, A., Denwood, C., Bryant, F. B., & Davis, T. (2007). Development and validation of a short-form, rapid estimate of adult literacy in medicine. <i>Medical Care</i> , 45(11), 1026–1033. https://doi.org/10.1097/MLR.0b013e3180616c1b		
Ask-12	<ul style="list-style-type: none"> Health literacy Medication management Self-assessment and decision making 	All providers Medical assistant Case managers CHW Peers	Quick screening tool to identify the most prevalent factors influencing medication adherence. <ul style="list-style-type: none"> Looks at perception and self-report of medication adherence Can be administered by all types of providers, but needs follow-up by clinical provider to address barriers
	Where to find it: https://al nursing.org/wp-content/uploads/2020/03/ASK-12-Survey-Overview.pdf		
	Citation: Matza, L. S., Park, J., Coyne, K. S., Skinner, E. P., Malley, K. G., & Wolever, R. Q. (2009). Derivation and validation of the ASK-12 Adherence Barrier Survey. <i>Annals of Pharmacotherapy</i> , 43(10), 1621–1630. https://doi.org/10.1345/aph.1M174		
Medi-Cog	<ul style="list-style-type: none"> Medication management Cognition 	RN MD/PA/NP OT	A brief assessment of cognition, literacy, and pillbox skills to identify cognitive impairment, identify literacy barriers, and identify patients who would benefit from pillbox education. <ul style="list-style-type: none"> The Mini-Cog portion is validated. Not an observation of a person’s skills, but would identify need for further education or assessment.
	Where to find it: https://www.pharmacy.umaryland.edu/media/SOP/medmanagementumarylandedu/MediCogBlank.pdf and https://www.pharmacy.umaryland.edu/media/SOP/medmanagementumarylandedu/MediCogPresentation.pdf		
	Citation: <i>Tools to assess Self-Administration of Medication</i> . (n.d.). https://www.pharmacy.umaryland.edu/centers/lamy/clinical-initiatives/medmanagement/assisted_living/Tools-to-Assess-Self-Administration-of-Medication/		

Name of Tool	What It Assesses	Who Can Administer?*	Description and Notes
<p>MedMaIDE</p>	<ul style="list-style-type: none"> Medication management Physical tasks — opening medications Self-assessment and decision making 	<p>All providers Medical assistant Case managers CHW Peers</p>	<p>Assesses the ability to self-administer medications within the aging population.</p> <ul style="list-style-type: none"> Developed for older adults (average age of study sample was 78). Can be administered by non-clinical staff who are comfortable with reviewing medications. Gives a deficiency score but no cut-off — requires clinical reasoning to determine impact of medication knowledge.
	<p>Where to find it: https://www.pharmacy.umaryland.edu/media/SOP/medmanagementumarylandedu/MedMaIDE.pdf and https://www.pharmacy.umaryland.edu/centers/lamy/clinical-initiatives/medmanagement/assisted_living/Tools-to-Assess-Self-Administration-of-Medication/</p>		
	<p>Citation: Orwig, D., Brandt, N., & Gruber-Baldini, A. L. (2006). Medication Management Assessment for Older Adults in the Community. <i>The Gerontologist</i>, 46(5), 661-668. https://doi.org/10.1093/geront/46.5.661</p>		
<p>ManageMed</p>	<ul style="list-style-type: none"> Medication management Physical tasks: manipulating medications and pillbox Self-assessment and decision making 	<p>OT RN</p>	<p>An observation/performance-based screening to determine if someone can manage a moderately difficult medication routine (i.e., three different medications and three different schedules and doses).</p> <ul style="list-style-type: none"> Primarily for OT, although RN also can administer. Free, but requires person to buy and put together materials. Aligns with MoCA and assesses functional cognition along with medication management skills. Take 20-35 minutes to administer.
	<p>Where to find it: Contact CSynovec@nhchc.org for assessment tool</p>		
	<p>Citation: Bolduc, J. J., & Robnett, R. H. (2015). Usefulness of the ManageMed Screen (MMS) and the Screening for Self-Medication Safety Post Stroke (S5) for assessing medication management capacity for clients post-stroke. <i>The Internet Journal of Allied Health Sciences and Practice</i>. https://doi.org/10.46743/1540-580x/2015.1521</p>		

Name of Tool	What It Assesses	Who Can Administer?*	Description and Notes
Self-Efficacy for Appropriate Medication Use Scale (SEAMS)	<ul style="list-style-type: none"> Medication management Self-assessment and decision making 	All providers Medical assistant Case managers CHW Peers	Measures self-efficacy of the client to adhere to their medication regimen. <ul style="list-style-type: none"> 21-item questionnaire requires clients to rate their confidence on circumstances that could affect medication adherence. Higher scores indicate higher levels of self-efficacy
	Where to find it: http://miwisewoman.org/pdfs/forms/english/SelfEfficacyApprMedScale201401.pdf		
	Citation: Risser, J. Jacobson, T. A., M.D., & Kripalani, S. (2007). Development and psychometric evaluation of the Self-Efficacy for Appropriate Medication Use Scale (SEAMS) in low-literacy patients with chronic disease. <i>Journal of Nursing Measurement, 15</i> (3), 203-219. https://doi.org/10.1891/106137407783095757		
Patient Self Advocacy Scale (PSAS)	<ul style="list-style-type: none"> Self-assessment and decision making Self-advocacy and communication 	All providers Medical assistant Case managers CHW Peers	PSAS is intended for use as a unidimensional scale to assess personal self-advocacy. Initially developed for people with HIV/AIDS. It is an instrument designed to measure a person’s propensity to engage in self-activism during health care encounters. <ul style="list-style-type: none"> The PSAS is composed of 12 items, answered in a five-point Likert format, ranging from 1 (strongly agree) to 5 (strongly disagree). This questionnaire identifies that a person who does not follow physician advice/treatment is using self-advocacy skills, as they have evaluated their own beliefs and how a prescribed treatment aligns with these.
	Where to find it: Appendix D of this document. Questions are also in the original publication.		
	Citation: Brashers, D. E., Haas, S. M., & Neidig, J. L. (1999). The Patient Self-Advocacy Scale: Measuring patient involvement in health care Decision-Making interactions. <i>Health Communication, 11</i> (2), 97–121. https://doi.org/10.1207/s15327027hc1102_1		

Name of Tool	What It Assesses	Who Can Administer?*	Description and Notes
Self-Advocacy Scale (SAS)	<ul style="list-style-type: none"> Self-assessment and decision making Self-advocacy and communication 	All providers Medical assistant Case managers CHW Peers	Developed for people with acquired brain injury, this tool measures self-efficacy related to personal advocacy following acquired brain injury. <ul style="list-style-type: none"> Developed at a seventh-grade reading level and with a cognitive understanding of someone who has had an acquired brain injury Includes eight questions where the person rates their confidence in self-advocacy actions
	Where to find it: https://doi.org/10.1037/rep0000093 (Article must be purchased or accessed via academic library.)		
	Citation: Hawley, L., Gerber, D., Pretz, C., Morey, C., & Whiteneck, G. (2016). Initial validation of personal self-advocacy measures for individuals with acquired brain injury. <i>Rehabilitation Psychology, 61</i> (3), 308-316. https://doi.org/10.1037/rep0000093		
Personal Advocacy Activity Scale (PAAS)	<ul style="list-style-type: none"> Self-assessment and decision making Self-advocacy and communication 	All providers Medical assistant Case managers CHW Peers	Measures self-reported personal advocacy activities after acquired brain injury. <ul style="list-style-type: none"> Developed at a seventh-grade reading level and with a cognitive understanding of someone who has had an acquired brain injury. 12-item questionnaire where the person reports how many times they have done a self-advocacy activity within the last three months.
	Where to find it: https://doi.org/10.1037/rep0000093 (Article must be purchased or accessed via academic library.)		
	Citation: Hawley, L., Gerber, D., Pretz, C., Morey, C., & Whiteneck, G. (2016). Initial validation of personal self-advocacy measures for individuals with acquired brain injury. <i>Rehabilitation Psychology, 61</i> (3), 308-316. https://doi.org/10.1037/rep0000093		

Name of Tool	What It Assesses	Who Can Administer?*	Description and Notes
Weekly Calendar Planning Activity	<ul style="list-style-type: none"> Appointment management Cognition 	OT	Occupational therapy-specific assessment that evaluates functional cognition and the ability to plan for and manage a weeklong calendar of activities and appointments. <ul style="list-style-type: none"> Takes 20-30 minutes to administer. Requires the person to complete a weekly calendar requiring decision making and executive functioning skills.
	Where to find it: https://myaota.aota.org/shop_aota/product/900369U (available for purchase)		
	Citation: Arora, C., Frantz, C., & Togli, J. (2021). Awareness of performance on a functional cognitive performance-based assessment across the adult life span. <i>Frontiers in Psychology, 12</i> , 753015. https://doi.org/10.3389/fpsyg.2021.753016		
Mobility Assistive Device Algorithm/ Decision Guide	<ul style="list-style-type: none"> Mobility device use 	RN MD/PA/NP OT PT	Provides initial guidance and education that providers can give to clients regarding mobility devices. <ul style="list-style-type: none"> Providers may need to adapt guidelines to address the use and support needs of someone who is unhoused and may use devices at a higher frequency. Pending client needs and capabilities, referral to PT and/or OT may also be beneficial and could be required for insurance-covered wheelchairs and power wheelchairs.
	Where to find it: https://www.aafp.org/pubs/afp/issues/2021/0615/p737.pdf Embedded in the article, along with considerations and instructions for each mobility device. Accompanying patient handout: https://www.aafp.org/pubs/afp/issues/2021/0615/p737-s1.pdf		
	Citation: Sehgal, M., Jacobs, J., & Biggs, W. (2021). Mobility device use in older adults. <i>American Family Physician, 103</i> (12), 737-744.		

***Acronym Guide**

RN = Nursing

NP = Nurse Practitioner

CHW = Community Health Worker

MD = Doctor of Medicine

OT = Occupational Therapist

All Providers refers to: RN, MD, PA, NP, OT, & PT

PA = Physician’s Assistant

PT = Physical Therapist

Appendix C: Creating a Clinical Summary

Client Interview		Date Completed:
Identified Strengths:	Identified Barriers:	
Initial or Recommended Strategies:		
Observation of Skills		Date Completed:
Identified Strengths:	Identified Barriers:	
Initial or Recommended Strategies:		
Environmental Assessment		Date Completed:
Identified Strengths:	Identified Barriers:	
Initial or Recommended Strategies:		

Overall Summary of Findings (Includes All Assessments Completed):
Impact on Plan of Care and Health Management:
Initial Strategies to Be Used to Support Health Management: <input type="checkbox"/> Communicated With Care Team <input type="checkbox"/> Discussed with Client
Additional Assessments Needed:
Referrals:

Appendix D: Patient Self-Advocacy Scale

Patient Self-Advocacy Scale (PSAS): General Version

Source: Brashers, D. E., Haas, S. M., & Neidig, J. L. (1999). The Patient Self-Advocacy Scale (PSAS): Measuring patient involvement in health care decision-making interactions. *Health Communication, 11*, 97-121. https://doi.org/10.1207/s15327027hc1102_1

The 12-item PSAS scale can be used as a five-point or seven-point Likert scale. The three subscales can be analyzed independently or as one overall scale.

Directions: The following items ask about your involvement in your health and interactions with your healthcare provider. Please rate your response on the scale below each item:

1. I believe it is important for people to learn as much as they can about their health.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

2. When I am sick, I actively seek out information on my illness.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

3. I am more educated about my health than most US citizens.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

4. I have full knowledge of the health problems of people like me.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

5. I get what I need from my physician* because I am assertive.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

6. I am more assertive about my health care needs than most US citizens.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

7. I frequently make suggestions to my physician about my health care needs.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

8. If my physician prescribes me something I do not understand or agree with, I question it.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

* This tool uses the term “physician” — providers may wish to modify language to “health care team” to better reflect their setting. Of note is that “physician” was the term used when the tool was validated.

9. Sometimes there are good reasons not to follow the advice of a physician.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

10. Sometimes I think I have a better grasp of my needs medically than my doctor does.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

11. If I'm given a treatment by my physician that I do not agree with, I am likely not to take it.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

12. I do not always do what my physician or health care worker has asked me to do.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

References

- ¹ Gutman, S. A., Amarantos, K., Van Den Berg, J. W., Aponte, M., Gordillo, D., Rice, C., Smith, J., Perry, A., Wills, T. B., Chen, E., Peters, R. G., & Schluger, Z. (2018b). Home safety fall and accident risk among prematurely aging, formerly homeless adults. *American Journal of Occupational Therapy*, 72(4), 7204195030p1-7204195030p9. <https://doi.org/10.5014/ajot.2018.028050>
- ² American Occupational Therapy Association. (2020). Occupational therapy practice framework: Domain and process. *The American Journal of Occupational Therapy*, 74(Supplement_2), 7412410010, p1-7412410010p87. <https://doi.org/10.5014/ajot.2020.74s2001>
- ³ Basu, S., Garg, S., Sharma, N., & Singh, M. M. (2019). Improving the assessment of medication adherence: Challenges and considerations with a focus on low-resource settings. *Tzu Chi Medical Journal*, 31(2), 73-80. https://doi.org/10.4103/tcmj.tcmj_177_18
- ⁴ *What is health literacy? Take action. Find out.* (2023, July 11). Centers for Disease Control and Prevention. <https://www.cdc.gov/healthliteracy/learn/index.html>
- ⁵ Cadel, L., Cimino, S. R., Rolf von den Baumen, T., James, K. A., McCarthy, L., & Guilcher, S. J. T. (2021). *Patient Preference and Adherence*, 15, 1311-1329. <https://doi.org/10.2147/PPA.S308223>
- ⁶ Ruggiano, N., Whiteman, K., & Shtompel, N. (2016). "If I Don't Like the Way I Feel With a Certain Drug, I'll Tell Them.": Older adults' experiences with self-determination and health self-advocacy. *Journal of Applied Gerontology*, 35(4), 401-420. <https://doi.org/10.1177/0733464814527513>
- ⁷ Brashers, D. E., Haas, S. M., & Neidig, J. L. (1999). The Patient Self-Advocacy Scale: Measuring patient involvement in health care decision-making interactions. *Health Communication*, 11(2), 97-121. https://doi.org/10.1207/s15327027hc1102_1
- ⁸ Fischhoff, B., & Broomell, S. B. (2020). Judgment and decision making. *Annual Review of Psychology*, 71(1), 331-355. <https://doi.org/10.1146/annurev-psych-010419-050747>
- ⁹ (S. Kripalani, personal communication, May 5th, 2022)