

Expanding Cognitive Screening & Assessment

A Practical Guide for PCPs

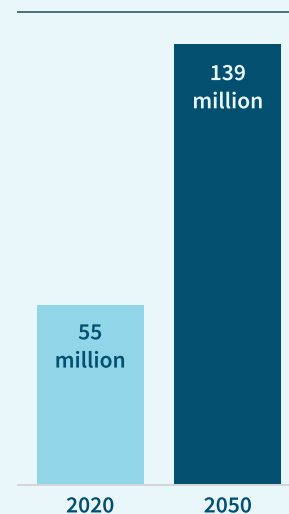


The essential role of PCPs in changing the outlook for brain health

Dementia cases will more than double in the next two decades if current projections hold, making it more critical than ever to adopt new approaches for early detection and intervention.¹ However, while the majority of primary care providers believe it's important to assess older patients for cognitive impairment, less than half say they routinely do this today.² Why the divide? Numerous factors have impeded screening becoming widespread for brain health like it is already for cancer, heart disease, and so many other conditions. But there are also a number of developments that hold new promise for facilitating this shift — new technology, assessment tools, and options for patients. What's more, a growing body of evidence points to the role of modifiable risk factors in dementia — new research links up to 40% of cases to them — and early action is key to maximizing their potential impact for patients.³

As the shortage of neurologists and other specialists worsens, primary care providers will play an even more crucial role caring for a growing population of patients with cognitive issues. They are the key to identifying issues early and empowering patients and their families to take action — whether that's in the form of adopting lifestyle-based interventions, joining clinical trials, or simply planning with new priorities. Already strapped for time though, expanding cognitive assessments in primary care requires making them more practical and actionable for providers and staff. To that end, this guide provides key steps for evaluating and implementing new approaches, while streamlining workflows.

PEOPLE GLOBALLY
AGE 65+ WITH DEMENTIA¹



Overcome common barriers to more widespread cognitive screening

Historically cognitive assessments have occurred largely in response to patient concerns, after symptoms have already arisen — when a provider has few options other than to refer the patient to a specialist. The barriers below have hindered earlier detection of cognitive issues, but associated developments are opening up new possibilities for more proactive screening and intervention.



Practical constraints

Standard paper and pencil cognitive assessments provide limited insight and often require an unrealistic amount of a provider's time to administer, score, and record results manually, with many requiring up to 20 minutes just for the patient's portion.



Emerging technologies enable faster screenings and deliver richer clinical insights

Newer assessments save time through automation and AI-enabled analysis, yielding faster, more accurate, and more insightful results. Additionally, digital tools offer a variety of other benefits, such as the ability for other clinical team members to handle administration and access to clinical decision support for help navigating next steps.



Reimbursement limitations

In the past, billing and reimbursement for cognitive assessment in primary care has been undersupported, compromising the sustainability of their regular use.



New diagnosis codes provide additional support for cognitive assessment in primary care

In 2019, Medicare released several new CPT codes to expand billing for cognitive assessments in primary care. These reimbursement opportunities reflect the time primary care practices invest in both the administration of assessments, as well as the interpretation of results.



Lack of clarity on prevention and treatment options

47% of PCPs are reluctant to diagnose cognitive impairments due perceived lack of treatment options.⁴



Growing scientific evidence supports the potential of personalized lifestyle and health-based interventions to delay or mitigate symptoms

Emerging research points to a deeper understanding of the role modifiable risk factors can play in the progression of cognitive issues. Even for patients with existing cognitive decline, tailored interventions (e.g. increasing physical activity, treating co-occurring depression) can help reduce severity of disability.⁵ Of course, early detection also expands the window of opportunity to connect patients with clinical trials.

RESEARCH-BACKED INTERVENTIONS

A 2020 Lancet Commission report found that addressing modifiable risk factors, such as nutrition, physical activity, sleep patterns, alcohol consumption, and connection to community, may decrease dementia risk by up to 40%.³



Concern about patient reactions

41% of PCPs report concern over the possible stigma a patient might experience with a cognitive diagnosis and wonder if the psychological impact to patients might outweigh the benefits.⁴



The majority of patients say they would want to know about cognitive issues early on

In a recent study, 85% of older adults in the US reported they would want to know if they had signs of a cognitive disease early on.⁴ Among the top reasons cited (all around 70%) were: time to plan for the future, ability to treat symptoms earlier, and the opportunity to take steps to preserve existing function. Over 40% of respondents also cited the chance to join clinical trials.

Unlock the power of digital advancements for brain health

Limitations inherent to long-standing paper and pencil assessments have contributed to a trend towards later-stage diagnosis of cognitive and brain disorders. Though accessible and historically important to the diagnostic pathway, they lack the sensitivity needed to detect cognitive impairment in its earliest stages and their manual format — across scoring, interpretation, and tracking — poses challenges to operational efficiency.

Going beyond simply digitizing traditional tests, emerging advanced digital assessments employ new technologies, such as machine learning and AI, to enhance sensitivity further. Digitally-enabled solutions can offer providers a variety of new benefits, including:



Streamlined administration and workflows

Many digital solutions offer equivalent — if not expanded — assessment capabilities in a fraction of the time. Plus, they enhance efficiency at each step of the process and can integrate with other key systems (e.g, EHRs).



Richer, more actionable clinical insights

AI-enabled solutions can detect previously imperceptible, subtle signs of cognitive impairment, even before symptoms begin and deliver more specific insights for next steps.



Automated workflows

In addition to reducing provider burden, automated assessments offer new levels of objectivity and repeatability, equipping care teams to better track trends and changes in cognition over time.

By harnessing the power of digital innovation, these new solutions can help make early detection more feasible, not only opening a new window of opportunity for intervention, care planning, and connection to clinical trials, but also laying the critical foundation for connecting patients to new treatments as they become available.

Select the right new solution for your organization

The landscape of cognitive assessment solutions is expanding. The initial considerations below can help practice leaders determine the right fit for their organizations and patients.

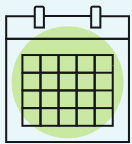
Assessment Technology & Design	
Accuracy	<ul style="list-style-type: none"> ▶ How sensitive and specific is the assessment? ▶ How well-established is the assessment? Has it been validated? ▶ Has the science behind the test been published in peer-reviewed journals?
Scope	<ul style="list-style-type: none"> ▶ What is the breadth of the assessment — does the assessment capture insights from the patient's process (e.g. drawing) as well as the final output? ▶ How robust is the quantitative analysis — what domains does it cover? ▶ Does the solution identify key modifiable risk factors needed for intervention?
Workflow	
Administration	<ul style="list-style-type: none"> ▶ How long does the assessment take to administer and score? ▶ How quickly are results available for providers to view? ▶ Does the solution integrate with other key systems in the practice?
Scoring	<ul style="list-style-type: none"> ▶ How objective or subjective is the scoring of the assessment? ▶ Are assessments repeatable and designed to foster high interrater reliability?
Provider & Patient Insights	
Provider Experience	<ul style="list-style-type: none"> ▶ Are results easy to access and presented in an intuitive format? ▶ Does the solution include automated interpretation? ▶ Does the solution offer clinical decision support alongside results? ▶ Who is the medical team behind the recommendations?
Patient Experience	<ul style="list-style-type: none"> ▶ Does the assessment include off-the-shelf materials to help patients understand findings, practical actions they can take, and other next steps as needed? ▶ Are patient resources written in plain language at accessible literacy levels?
Training & Ongoing Support	
Overall Usability	<ul style="list-style-type: none"> ▶ Is the solution easy for staff and patients to learn and use across both the hardware and software components?
Training Requirements	<ul style="list-style-type: none"> ▶ What training is required to be eligible to administer the test? ▶ Does the assessment require a provider or can other staff (e.g. MAs) administer it? ▶ What time investment is needed to train staff on how to administer the test?
Customer Support	<ul style="list-style-type: none"> ▶ Does the vendor offer support with dedicated staff for a successful rollout? ▶ What's the level of support for initial kick-off and training? ▶ Beyond implementation, how does the vendor support customer success? ▶ What practices does the vendor follow in terms of scalability and security?
ROI & Reimbursement	
ROI	<ul style="list-style-type: none"> ▶ Does the solution's pricing provide a clear path to ROI for the practice?
Reimbursement	<ul style="list-style-type: none"> ▶ Does the vendor offer guidance and support to assist with reimbursement?

Operationalize a new standard

Given the many opportunities to utilize cognitive assessments in clinical practice, successful expansion often requires a phased approach, identifying and prioritizing patient groups and rolling out workflows over time. The steps below provide a framework of key questions and decision points from Linus Health's medical team.

Identify target populations

There are a variety of clinical scenarios in which cognitive assessments can provide valuable information. The following are examples of patient groups to begin or expand with.



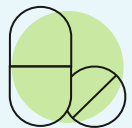
Patients due for routine screening: Many clinical recommendations advise routine screening for asymptomatic patients 55-65+ annually. This can occur at a new patient visit, during a Medicare Annual Wellness visit or annual physical, or any visit over a year after a previous routine assessment.



Patients with a reported (or family-reported) cognitive or memory concern: Reports of increased forgetfulness, difficulty following conversations, or getting lost in familiar environments can be symptoms of early cognitive impairment.



Patients 65+ with other signs/symptoms that may be indicative of a cognitive concern: Gradual changes in behavior, new or worsening anxiety or depression, a recent fall, and disrupted sleep patterns are just some of the common concerns that may be signals of cognitive impairment.



Patients preparing for a medical intervention that may put them at a higher risk for delirium: Given that various medications (e.g., diabetes, hypertension, or epilepsy), and medical interventions (surgery, chemotherapy) can affect cognition, establishing a baseline and tracking changes can help gauge their impact and provide valuable data points to inform care planning.



Patients with certain new diagnoses: Establishing a baseline for conditions that may impact cognition (e.g. diabetes or hypercholesterolemia) can help providers track cognition over time.

Map out an optimal setup and efficient workflows

After identifying target populations, it's important to work through the nuts and bolts of workflows. Following key questions can help guide this process:

Patient identification	Test administration	Results review
<ul style="list-style-type: none"> ▶ Who will identify individual patients for cognitive assessment? ▶ When will they do this? ▶ How will they indicate patients identified for assessment? 	<ul style="list-style-type: none"> ▶ Who will administer assessments? ▶ When will they administer the assessments — before or after the visit? ▶ Where will they administer the assessment? 	<ul style="list-style-type: none"> ▶ When will providers review results? ▶ When/how will normal results be shared with the patient? ▶ When/how will abnormal results be shared with the patient?

Position the practice for success with billing & reimbursement

Ensuring effective billing and reimbursement is critical to the sustainability of regular cognitive assessment practices overall. Key factors to plan for in this area include:



Medical necessity: Generally, health plans don't reimburse for cognitive assessments for purely screening purposes (e.g. while part of the Medicare Annual Wellness Visit, there is no incremental reimbursement for this component). However, most plans *do* cover assessments for patients with concerns or symptoms, or when a provider suspects an underlying disorder. To secure reimbursement effectively, providers must sufficiently document medical necessity.



Documentation: It's also common for health plans to require basic descriptions of the process and tools used for assessment, as well as test outcomes and clinical next steps. Practices often set up templates and quick-texts to reduce keystrokes and streamline processes around this.



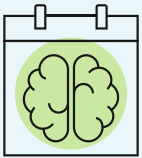
Resources for patients and families: Following testing, health plans often require proof that clinical teams shared relevant educational resources with patients and their circle of care. To complete this step, it's important to have tailored, evidence-based resources ready to share.

Engage patients and their circle of care effectively

Fear, shame, and stigma have made open conversation around brain health, dementia, and other cognitive disorders challenging. Here are some practical ideas on how to approach such discussions:



Approach routine screening as a new standard, or a “brain health checkup” to avoid alarming patients (e.g., with words like “decline” or “impairment”). Similar to blood pressure readings, cholesterol checks, and cancer screenings, cognitive assessments are another way providers monitor patients’ health and ensure they can spot issues early for the best care options.



Consider timing patient outreach with key public health campaigns. These have helped reduce stigma and normalize discussion around critical topics like mental health, breast exams, and cervical cancer screening in the past. Outreach during Alzheimer’s awareness month, for example, can bring cognitive health to the forefront and help engage patients.



Prepare a messaging framework. Sharing results that indicate a likely cognitive impairment can be daunting, especially when time is short. Reviewing communication guidelines and best practices can help build confidence for delicate conversations.⁶

COMMUNICATION TIPS

Here are some best practices from experts in the field and the Linus Health medical team.⁶

- ▶ Consider setting up a **follow-up visit** to discuss abnormal results and next steps.
- ▶ If the patient is open to it, **have a family member or friend present** at the visit to offer support and insights on the patient’s symptoms and their impact on daily life.
- ▶ When appropriate, **share the patient’s specific quantitative and/or qualitative results** to provide clarity on specific domains where a patient may struggle in daily life.
- ▶ **Set expectations** on the diagnostic plan and possible outcomes to ensure patients and families are prepared for important conversations and decisions ahead.
- ▶ Whenever possible, **frame the conversation in a constructive, action-oriented way**, emphasizing that, in many cases, there are modifiable risk factors (e.g., vision, hearing, physical activity) patients can address to better their cognitive health outlook.
- ▶ **Provide clear written information** on any diagnoses, related treatment options, recommended lifestyle modifications, and additional resources/referrals.

Equipping primary care providers to expand cognitive care

While celebrating the advancements in medicine and public health that have enabled people to live longer lives, it's important to plan proactively for a future with a commensurate rise in cognitive care needs. Primary care providers have a critical role to play in both enabling early identification of cognitive issues and building the trusted relationships necessary to empower patients to take action to effectively manage and mitigate them. While this puts added pressure on primary care providers, digital technology is advancing rapidly, offering novel solutions to help make cognitive assessments both more practical and more actionable in primary care settings — supporting a fundamental shift that's more urgent than ever.

TAKE THE NEXT STEP

Interested in making practical, proactive cognitive screening a reality in your practice?

Contact the Linus Health team at info@linushealth.com or visit linushealth.com to learn more.

REFERENCES

1. Alzheimer's Disease International. (2020). ADI - Dementia statistics. <https://www.alzint.org/about/dementia-facts-figures/dementia-statistics/>
2. Alzheimer's Association. (2020). Alzheimer's Disease Facts and Figures (pp. 19, 65–72) https://www.alz.org/media/Documents/alzheimers-facts-and-figures_1.pdf
3. Livingston, G., Huntley, J., Sommerlad, A., Ames, D., Ballard, C., Banerjee, S., Brayne, C., Burns, A., Cohen-Mansfield, J., Cooper, C., Costafreda, S. G., Dias, A., Fox, N., Gitlin, L. N., Howard, R., Kales, H. C., Kivimäki, M., Larson, E. B., Ogunniyi, A., & Orgeta, V. (2020). Dementia prevention, intervention, and care: 2020 report of the Lancet Commission. *The Lancet*, 396(10248), 413–446. [https://doi.org/10.1016/S0140-6736\(20\)30367-6](https://doi.org/10.1016/S0140-6736(20)30367-6)
4. (2022). More Than Normal Aging: Understanding Mild Cognitive Impairment Alzheimer's Association. <https://www.alz.org/media/Documents/alzheimers-facts-and-figures-special-report.pdf>
5. Diniz, B., Butters, M., Albert, S., Dew, M., & Reynolds, C. (2013). Late-life depression and risk of vascular dementia and Alzheimer's disease: Systematic review and meta-analysis of community-based cohort studies. *British Journal of Psychiatry*, 202(5), 329-335. <https://doi.org/10.1192/bjp.bp.112.118307>
6. Grill, J. D., Apostolova, L. G., Bullain, S., Burns, J. M., Cox, C. G., Dick, M., Hartley, D., Kawas, C., Kremen, S., Lingler, J., Lopez, O. L., Mapstone, M., Pierce, A., Rabinovici, G., Roberts, J. S., Sajjadi, S. A., Teng, E., & Karlawish, J. (2017). Communicating mild cognitive impairment diagnoses with and without amyloid imaging. *Alzheimer's Research & Therapy*, 9(1), 35. <https://doi.org/10.1186/s13195-017-0261-y>