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Authors

Nicosia, Francesca M
Spar, Malena J
Steinman, Michael A
[et al.](#)

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Making function part of the conversation: Clinician perspectives on measuring functional status in primary care

Francesca M. Nicosia, PhD^{1,2}, Malena J. Spar, BA^{1,2}, Michael A. Steinman, MD^{1,2}, Sei J. Lee, MD^{1,2}, and Rebecca T. Brown, MD, MPH^{1,2,3}

¹San Francisco VA Medical Center

²Division of Geriatrics, University of California, San Francisco

³Division of Geriatric Medicine, Perelman School of Medicine of the University of Pennsylvania

Abstract

Objectives: While there is increasing interest in using functional status to guide clinical decision-making, function is seldom routinely assessed in primary care. We explored clinician perspectives on barriers and facilitators to routine measurement of older adults' functional status in primary care settings.

Design: Qualitative study using semi-structured interviews.

Setting: Primary care and geriatrics clinics at 6 VA Medical Centers.

Participants: Twenty-four primary care providers including 17 from primary care clinics and 7 from geriatrics clinics.

Measurements: We conducted interviews to elicit clinician perspectives about functional status measurement, including barriers and facilitators to routine assessment. We analyzed transcripts iteratively using a hybrid inductive and deductive thematic approach.

Results: Interviews revealed three distinct aspects to measuring function: screening and assessment, documentation, and use of data to inform care. Barriers and facilitators to screening and assessment included time availability, clinic processes, and degree of interdisciplinary environment. Barriers and facilitators to documentation included the usability and integration of electronic instruments into workflows and the availability of a standardized location to document function in the electronic medical record. Barriers and facilitators to use of data included the availability of a standardized location to retrieve data on function, the availability of appropriate referrals and services, and provider knowledge of available resources to address functional impairments. To address these barriers, providers emphasized the critical importance of connecting measurement of function directly to improved patient care.

Corresponding author: Francesca M. Nicosia, 4150 Clement Street, R-151, San Francisco, CA 94121, 415-221-4810 x.23446, francesca.nicosia@ucsf.edu, Twitter: @fran_nicosia, @MJ_Spar18, @sejlee, @MikeSteinman, @rtbrownMD.

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Conclusion: While clinicians emphasized the importance of measuring function, they also cautioned against additional workload burdens, cumbersome electronic documentation, and measuring function without ensuring that these data are used to improve care. Approaches to functional status measurement must address these barriers in order to improve care and outcomes for older adults.

Keywords

functional status; primary care; qualitative research

IMPACT STATEMENT

1. We certify that this work is novel clinical research.
2. The potential impact of this research on clinical care or health policy includes the following:
 - Understanding the barriers and facilitators to measuring functional status among older adults in primary care settings will inform efforts to improve measurement of function and use of these data to improve care and outcomes for older adults.
 - Addressing barriers to measuring functional status in primary care has the potential to improve population-level health by allowing the VA and other integrated health systems to track the functional status of older populations over time and forecast the need for long-term services and supports.

INTRODUCTION

The ability to perform activities of daily living such as bathing and dressing, often called functional status, is central to older adults' quality of life and independence. Losing the ability to independently perform these activities is strongly associated with higher rates of acute care use, nursing home admission,^{1,2} and death.¹⁻³ For clinicians, understanding patients' functional status is essential to providing optimal care to older adults. Identifying functional impairment allows clinicians to deliver practical interventions that can help delay or prevent nursing home admission, such as physical and occupational therapy.⁴⁻⁸ Understanding function is also essential to deliver patient-centered care, including evaluating how patients will tolerate interventions,⁹⁻¹³ individualizing cancer screening,¹⁴ and helping patients and families determine the need for long-term services and supports. For these reasons, routine assessment of functional status is a cornerstone of geriatrics practice. However, the vast majority of older adults are cared for in non-geriatrics primary care settings where functional status is often not routinely measured.¹⁵⁻¹⁸

Leaders in geriatrics and health care policy have long recognized this gap and the obstacle it poses to improving care and outcomes for older adults, and have called for improved measurement of functional status.^{16,19,20} Yet most health systems have been slow to incorporate routine measurement of function into patient care. The Veterans Health

Administration (VHA), the nation's largest integrated health care system, offers unique opportunities to improve functional status measurement for older adults on a large scale. In 2009, the VHA implemented annual functional status measurement among older veterans in primary care clinics. In these implementation efforts, measurement of function was encouraged but not required, and barriers and facilitators to implementation were not formally assessed. An evaluation later showed that uptake of measurement was low and its quality varied, with some medical centers measuring older patients' functional status consistently and others not at all.²¹ In addition, there were few concrete ways that these functional status data were being used to improve care for older veterans.

As part of a larger study to improve measurement of functional status among older veterans in primary care clinics, we conducted a qualitative study to: 1) assess primary care providers' perspectives on barriers and facilitators to routine measurement of functional status among older adults; and 2) apply these findings to develop a conceptual model for measuring function in primary care.

METHODS

Design

In this qualitative study, clinicians participated in semi-structured interviews focused on their opinions about and experiences with measuring functional status in older veterans. The institutional review boards of San Francisco Veterans Affairs (VA) Medical Center and University of California, San Francisco approved the study.

Setting and participants

We recruited participants from six VA medical centers. To sample centers with varying characteristics, we used criterion sampling.²² First, we selected geographically diverse centers, with at least one from each of VA's five regions. Second, we selected centers based on their strategies for collecting functional status data. We identified these strategies by analyzing national VA data related to functional status, and classifying strategies in three categories.²³ These included: 1) routine use of a structured screening tool to assess function, including basic and instrumental activities of daily living (ADLs and IADLs); 2) routine use of a structured screening tool to collect partial information on function (e.g., ADLs or IADLs); and 3) no standardized approach for measuring function. We selected two centers from each category.

To recruit clinicians from these six medical centers, we obtained lists of all primary care providers (MD, DO, NP) from clinic leadership at each center. We sent recruitment e-mails to providers and scheduled a one-time, 30-minute telephone interview with interested individuals. In several cases, we used a snowball sampling approach to increase enrollment by asking participants to recommend interested colleagues.²⁴

Data Collection

The study team consisted of a medical anthropologist (FMN), a clinical research assistant trained in qualitative methods (MJS), and three geriatrician-researchers (MAS, SJL, and

RTB). Between March 2016 and October 2016, FMN or MJS conducted a single telephone interview with each participant lasting approximately 30 minutes. Participants provided verbal consent before each interview. Interviews were audio recorded and professionally transcribed.

We used a semi-structured interview guide to assess barriers and facilitators to routine measurement of function in primary care clinics (Supplemental Table 1). To systematically assess barriers and facilitators, we included questions related to constructs from the Consolidated Framework for Implementation Research (CFIR).²⁵ CFIR is an implementation science framework that facilitates translation of research findings into clinical practice by accounting for contextual factors that affect implementation, uptake, and sustainment of interventions. The interview guide included open-ended questions about the following domains: clinic structure; processes for measuring function; roles and responsibilities of clinic staff; acceptability and feasibility of standardized, routine functional status measurement; and relevant and desired outcomes for measuring function in primary care. We pilot tested the interview guide with the first five participants and revised it to reflect emergent constructs and themes and to ensure that prompts elicited a broad range of responses.

Data Analysis

We used qualitative thematic analysis to analyze interview transcripts, including a hybrid approach of deductive and inductive coding.²⁶ Two investigators (FMN and RTB) independently reviewed and coded three transcripts and then met to refine codes and draft the initial coding scheme. We first developed and applied deductive codes using a priori constructs from the study aims, CFIR, and interview guide domains. Second, through serial review of transcripts, we developed and applied inductive codes and identified emergent constructs and themes. During this iterative process, three team members (FMN, RTB, MJS) met to discuss findings after each set of three independently-coded transcripts. We continued to conduct interviews and review transcripts until no new themes emerged, at which point we determined that we had reached thematic saturation. We resolved disagreements about the presence, scope, or definition of codes through discussion and consensus. Other study co-investigators (SJL, MAS) reviewed our findings at regular intervals. We analyzed data used Atlas.ti qualitative data analysis software (Version 8, Berlin, Scientific Software Development).

During the analytic process, we developed and refined a conceptual model of functional status measurement for primary care settings. To do so, we first used Donabedian's conceptual model of health care quality as a framework for describing the structures, processes, and outcomes relevant to measurement of functional status. To identify contextual factors that may impact implementation of functional status measurement, we adapted relevant factors from CFIR that participants identified as important to implementation.

RESULTS

Participant characteristics

Of the 24 primary care providers, eight worked in a clinic with routine, standardized measurement of function; seven in a clinic with routine but partial measurement of function; and nine in a clinic with non-standardized, ad hoc measurement (Table 1). About two-thirds (63%) of providers were women, 75% were attending physicians, 8% were nurse practitioners, and 17% were current fellows in geriatrics or primary care. Nearly three-quarters (71%) worked in non-geriatrics primary care clinics. One-third (33%) had formal training in geriatric medicine. Nearly half (46%) had worked at the VA for more than five years.

Barriers and facilitators to routine functional status measurement

Interviews revealed three distinct yet closely-related aspects of functional status measurement in primary care: (1) screening and assessment; (2) documentation; and (3) use of data to inform care. Screening and assessment encompassed processes that elicit functional status information from patients, including use of electronic reminders to administer screening questionnaires by clinic staff and further assessment by providers. Documentation included any documentation within the electronic medical record, including clinical reminders and unstructured notes. Use of data included any use of functional status data to inform care, including treatment decisions, referrals, and uses beyond primary care such as research and program planning. Because of the interrelated nature of these measurement processes, several barrier and facilitator domains crossed over multiple aspects of measurement (Tables 2–4).

Screening and Assessment

Barriers and facilitators to routine screening and assessment of functional status included: (1) time availability; (2) clinic processes; and (3) patient and provider characteristics.

Time availability—Time pressures were the most frequently mentioned barrier to assessing functional status. As one physician noted: “If it’s up to [primary care] providers to do it on their own voluntarily, they won’t. They’re just too busy.” Another explained that, “When clinic’s really busy, I don’t [assess functional status].” Many providers described how lack of time was compounded by competing clinical priorities in primary care. In one provider’s words,

“You’re only going to be able to tackle so much ... sometimes these patients are pretty complex and you have to really focus on the medical management and so some of those questions about function will not be asked all the time.”

Providers also relayed how inadequate clinic staffing contributed to time pressures, limiting their ability to routinely assess function. As one provider said: “I just don’t have the staff to do that right now.”

Clinic processes—Another frequently-cited barrier was the lack of a standardized process for screening and assessment. Some providers described their clinic’s approach to

measuring function as “haphazard,” without an “exact process,” and lacking “anything formal.” In the absence of a standardized process, providers focused on more pressing priorities such as acute complaints or medication management. A related barrier was the lack of clarity about roles and responsibilities among interdisciplinary team members. As one provider explained, “[I don’t] know who exactly should have all these responsibilities.”

Providers noted that an interdisciplinary approach to measurement, with clearly defined roles and responsibilities, could help address these barriers and facilitate routine screening and assessment. Providers noted that nursing staff could potentially screen for functional impairment during patient triage, using electronic clinical reminders. As one provider said, “[A template for screening] definitely saves time. There are a lot of templates that the RNs or LPNs use and it does save time and is helpful when I look at it.”

Providers from clinics that had adopted routine screening and assessment described how pre-visit screens by clinic staff served as a “conversation starter” to facilitate further assessment, priming patients to discuss functional difficulties with their provider. In addition, providers described how pre-visit screening by staff could focus their attention on a patient’s difficulty with particular ADLs or IADLs, helping to address time-related barriers to assessment. Some providers felt that a self-administered questionnaire could also prepare patients to talk with providers about function. However, they identified potential barriers to self-assessment, including difficulties faced by patients with cognitive impairment, sensory impairment, limited dexterity, or low digital literacy, as well as a lack of time before appointments. In addition, they noted the need for providers to “validate” patient self-reports, and workflow issues due to data not being entered in the medical record at the point of care.

Patient and provider characteristics—Providers noted that patient characteristics could hinder accurate screening and assessment. For example, patients might under-report functional impairment due to pride, and self-reported function might be inaccurate among patients with cognitive impairment. Providers also noted that the quality of the patient-provider relationship facilitated obtaining accurate information about patients’ function, specifically a trusting relationship and provider continuity.

Providers’ individual training and beliefs about the importance of function influenced their approach to assessment. Providers for whom functional assessment was less important were more likely to rely on ad-hoc approaches to gathering information such as chief complaint, caregiver report, observed red flags, or relying on falls as a proxy for function. Thus, if a patient did not explicitly mention concerns with function, providers would not elicit this information. One provider explained: “It kind of depends on what other medical problems we have. I may not always address their ADLs at each visit, unless there’s a primary concern, or that’s the chief complaint, or it’s brought up by a family member.”

In general, providers who perceived function as clinically important were more supportive of routine assessment and accepting of associated time burdens or changes to workflow. Providers with formal training in geriatrics were also more likely to emphasize the importance of understanding function for the care of older adults. Additional facilitators to routine assessment were a strong interdisciplinary environment and the quality and

motivation of team members. One provider explained, “It’s a team effort to catch when [patients are] falling behind and they’re needing more help.” Another emphasized the benefits of effective interdisciplinary communication and observant team members: “If I have a good team, it’s awesome, the amount of information that I can get. Where, ‘Oh, this person had a balance issue trying to get out of the chair when we took the blood pressure. Or, ‘They’re not using their walker.’”

Documentation

Barriers and facilitators to routine documentation included the (1) usability of electronic reminders and templates; (2) availability of a standardized place to document function in the medical record; and (3) degree of integration into personal workflows.

Usability of electronic reminders and templates—Study participants explained how some existing electronic reminders for function were not user-friendly. For example, one provider explained: “I think a lot of the clicking and the templates that we have are very difficult to use.” Poorly designed and cumbersome reminders impeded timely documentation, contributing to provider frustration.

Standardized data location—The presence or lack of a standardized location for functional status data was an important factor in documentation practices. Providers in clinics with a standardized note template explained how these helped facilitate documentation, particularly for less experienced providers and trainees. One physician explained: “The template...help[ed] the trainees do more uniform documentation.” Conversely, providers whose clinics lacked electronic reminders or templates noted that without a standardized location to enter this information, they were less likely to routinely document function.

Integration into personal workflows—Providers also pointed to the importance of documentation fitting into personal workflows. One provider commented, “I don’t really mind documenting it because it is part of what we’re discussing anyways.” Many also discussed how improving the reminder’s length, functionality, user-friendliness, and integration within the electronic medical record would further facilitate documentation.

Use of functional status data to improve care

Barriers and facilitators to using functional status data to improve care included the (1) connection between measurement and use of data to improve patient care; (2) availability and accessibility of functional status data; and (3) availability of referrals and services, as well as provider knowledge of these resources.

Connection between measurement and use of data—An overarching theme that emerged from provider interviews was the importance of “meaningful metrics,” meaning the need to connect assessment and documentation of function to use of that information to improve care. As one provider put it: “Does something get done with the data? Does it actually make a difference in the outcomes of the patients or is it just another something that we’re documenting and nothing’s happening with it?” Providers noted that use of data could

be influenced by aspects of documentation. One physician contrasted the utility of a functional status score versus other types of screening instruments, stating, “Unlike drinking and depression, a low score in functional status is kind of nonspecific.” Another said, “You probably want to elaborate a little bit more in detail what patients can and cannot do. Usually it’s never a simply yes and no.” Providers noted that to be clinically useful, functional status screening instruments must “move beyond a [numeric] score” and include individualized patient information regarding specific ADL impairments.

Availability and accessibility of data—The lack of a standardized location to access functional status data prevented providers from effectively using these data in clinical decision-making. One provider explained, “Most of the time you really can’t [get functional status information from the medical record] because those things [ADLs and IADLs] just aren’t routinely documented.” Providers also noted the inability to track change in function over time within the medical record. One provider commented, “In an outpatient [setting], there’s no way to go into the chart and [see] what’s happening with ADLs over the last year.” Some providers noted that creating a functional status dashboard for outpatient settings could address this barrier, allowing tracking of individual and population trends in function over time.

Availability and provider knowledge of referrals and services—Providers cited limited services and supports for patients with functional impairment as a barrier to using functional status data. Providers also indicated that their own lack of knowledge about existing resources, particularly community resources outside the VA, was a barrier to using functional status data to inform care. One provider explained, “I don’t always know when someone would qualify for [services].” However, a strong interdisciplinary team, including knowledgeable social workers, could facilitate use of data to connect patients with appropriate services and supports. A provider explained how electronic reminders could also be designed to facilitate referrals: “If you had a functional impairment order set that had a set of [referral options] pre-done you could go, ‘Oh, I’m going to do this one, this one and this one.’ You could just make it easy.”

Conceptual model

Based on our findings of these barriers and facilitators, we developed a conceptual model for measuring function in primary care settings, informed by Donabedian’s model of health care quality evaluation^{27,28} and the Consolidated Framework for Implementation Research (Figure 1).²⁵ The model shows the relationship between aspects of measurement (screening and assessment, documentation, use of data) and structural factors within the organizational and external context. Organizational context includes factors within the clinic and medical center that influence routine measurement of function, including organizational culture, degree of patient-centeredness, staffing levels, and information technology infrastructure. The external context includes factors outside of the immediate clinic or medical center, such as federal policies, quality-reporting requirements, and patient and community-based resources. These structures and processes in turn influence downstream outcomes, including patient access to services and supports, health care utilization, and function and quality of life.

DISCUSSION

In this qualitative study, VA primary care providers identified multiple barriers and facilitators to measuring and using functional status data in primary care settings. Interviews revealed three distinct aspects to measuring function, including screening and assessment, documentation, and use of data to inform care. Overall, participants emphasized the importance of measuring function to improve care for older patients. However, they also cautioned against additional workload burdens, cumbersome electronic documentation, and measuring function without clearly connecting it to patient care processes and outcomes. These findings suggest that routine, standardized measurement of function in VA primary care settings is valued by clinicians, but that measurement approaches must navigate these barriers.

Previous studies show that although clinicians feel that measuring function is important for delivering optimal care to older adults,^{29,30} function is seldom measured in primary care settings.^{15–18} However, little is known about the reasons for this disconnect, including the barriers and facilitators providers experience to routine measurement. In this study, primary care providers identified multiple barriers and facilitators to measuring function, including those related to screening and assessment, documentation, and use of data. Lack of time was the most frequently-cited barrier to screening and assessment, a finding consistent with previous qualitative research examining barriers to preventative screenings and assessments.^{29,31,32} When faced with competing priorities, primary care providers often utilized ad-hoc assessment approaches as a time management strategy, such as reliance on chief complaint. However, clinicians often underestimate patients' disabilities,^{15,17} and thus ad-hoc approaches are likely to miss functional impairments.

The lack of a standardized process for measuring function was commonly cited as a barrier to routine measurement. As a solution, providers suggested implementing standardized processes for measuring function among all older patients, including clear interdisciplinary roles and responsibilities and standardized electronic documentation. However, providers in our study cautioned against overreliance on instruments with a numerical score, calling for ways to individualize patient information to maximize clinical usefulness. Thus, instruments to standardize functional status measurement within the electronic medical record must be able to accommodate both structured data that can easily be stored and retrieved and unstructured data in the form of free-text comments that can enhance the applicability of a functional status "score" to individualized patient care.³³ Unstructured data on function have the potential to be captured using natural language processing, providing nuance and context about patients' function.

Even as clinicians noted the potential benefits of implementing standardized processes for measuring and documenting function, they raised concerns over the specter of standardization and cautioned against poorly-designed electronic data collection instruments that were cumbersome or not clinically useful. This finding supports previous research showing clinicians' frustration with electronic documentation and clinical reminders.^{34,35} Their responses also echo a growing concern that clinicians are overburdened by electronic documentation and that documentation has become a tool for performance measurement

rather than contributing to improvements in care.^{36,37} To address this issue, clinicians emphasized the importance of connecting the work of measuring function with concrete, clinically useful actions to address functional impairments, such as linking patients to needed services and supports.

Our findings have implications for improving measurement of function in primary care. Provider-identified barriers to measurement suggest the need for an approach that streamlines and integrates the distinct but interrelated steps of functional status measurement. To address provider concerns about the disconnect between measurement and outcomes, approaches to measurement must connect documentation of functional status to concrete steps providers can take to improve care. Education for providers on the value and uses of functional status for informing patient care may also help bridge this disconnect. Additionally, interdisciplinary measurement strategies – such as screening by triage nurses and further assessment by clinicians – may help address time limitations in primary care settings. Addressing these common barriers to measuring function has the potential to improve care not just for individual patients, but for populations. Access to standardized data on functional status could allow health systems to track functional status among older populations over time and forecast the need for long-term services and supports. Furthermore, with growing efforts to expand common data models (e.g., Observational Medical Outcomes Partnership), there is potential for standardized functional status metrics to be leveraged for population health on a national scale.^{38,39} As clinicians and health systems consider how to measure function within their specific organizational context, our conceptual model may help guide efforts to identify the relevant contextual factors that impact implementation of functional status measurement.

Our study has several limitations. Primary care providers may have been more likely to enroll if they believed assessing function was important, contributing to selection bias. We took several measures to counter this potential bias, including sampling VA medical centers with varying approaches to measuring function and inviting all eligible providers to participate. Our study included providers from VA medical centers, with each center academically-affiliated and located in an urban area. Thus, our results might not be generalizable to other settings. The VA differs from other settings in several ways, including generally longer appointment times for patients, a predominantly male patient population,⁴⁰ and extensive implementation of interdisciplinary primary care teams.⁴¹ However, we identified a wide range of barriers and facilitators consistent with research in other primary care settings, including those related to time limitations, competing priorities,^{31,32,42} and the adoption of electronic medical records.^{34,43}

CONCLUSION

In this qualitative study, VA primary care providers identified barriers and facilitators to several aspects of functional status measurement, including screening and assessment, documentation, and use of data to improve care. Overall, participants emphasized the importance of routine, standardized measurement of function to improve care for older patients. At the same time, they emphasized barriers to doing so, including time limitations, lack of standardized processes or location of functional status data, poor usability of

electronic instruments, and lack of a clear connection between measurement and patient care. To be successfully implemented in busy, real-world primary care settings, approaches to measuring function must address these barriers, by navigating time constraints, competing priorities, and the challenges of harnessing electronic data to enhance clinical decision-making and improve patient care and outcomes.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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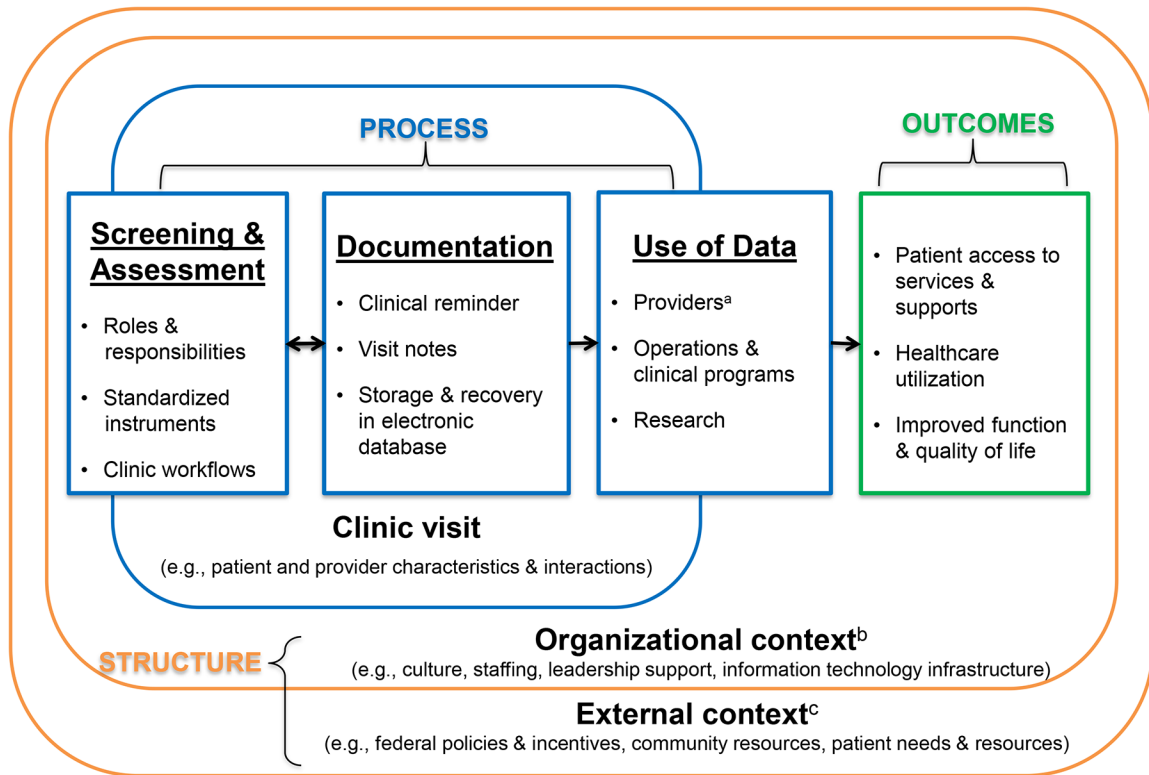
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^aPrimary care and specialty providers.

^bIndividual VA medical centers or individual health care facilities.

^cPolicies, incentives, and resources outside of organizational context or medical center level.

Figure 1. Conceptual model of functional status measurement in primary care

Based on findings from qualitative interviews with primary care providers, this model illustrates the structure, processes, and outcomes related to implementation of routine measurement of functional status in primary care. The model shows the relationship between aspects of the measurement process (i.e., screening and assessment, documentation, use of data) and structural factors within the organizational and external context. Organizational context refers to factors within the clinic and medical center that influence the routine measurement of function, including organizational culture and the degree of patient-centeredness, staffing levels, and information technology infrastructure. The external context includes factors outside of the immediate clinic or medical center context, such as federal policies, regulations, and quality-reporting requirements, as well as patient and community-based resources. These structures and processes in turn influence downstream outcomes, including patient access to services and supports, health care utilization, and function and quality of life.

Table 1.

Participant Characteristics

CHARACTERISTIC	N=24 (%)
Provider's clinic location	
Site 1	5 (21)
Site 2	3 (13)
Site 3	4 (17)
Site 4	3 (13)
Site 5	3 (13)
Site 6	6 (25)
Clinic approach to measuring function	
Routine, complete, standardized data collection	8 (33)
Routine, partial standardized data collection	7 (29)
Non-standardized, ad-hoc	9 (38)
Female	15 (63)
Provider type	
Attending physician	18 (75)
Nurse practitioner	2 (8)
Physician fellow	4 (17)
Provider's clinic type	
Primary Care	13 (54)
Geriatrics	7 (29)
Women's Health	4 (17)
Geriatrics fellowship training	8 (33)
Years at VA	
5	13 (54)
6–10	5 (21)
>10	6 (25)

Total percentages may sum to more than 100% due to rounding.

Table 2.

Barriers and Facilitators to Screening and Assessment of Functional Status

Screening and Assessment		
Barrier and facilitator domain	Sub-domain	Illustrative quotations
Time availability	Barrier: Busyness of clinic prevents assessment	“If it’s up to (primary care) providers to do it on their own voluntarily, they won’t. They’re just too busy.” “It really depends on how busy clinic is. When clinic’s really busy, I don’t [assess function].”
	Barrier: Lack of time during intake; screening disrupts workflow	“There’s only so much we can ask people to do [during the] check in process without it completely being a bottleneck and disrupting the whole clinical flow.”
	Barrier: Competing priorities; medical management prioritized over function	“You’re only going to be able to tackle so much . . . sometimes these patients are pretty complex and you have to really focus on the medical management so some of those questions [about function] will not be asked all the time.”
Clinic processes	Barrier: Lack of time exacerbated by inadequate staffing	“I just don’t have the staff to do that [screening and assessment] right now.” “Please don’t just give us more stuff to do. Give us more staff to do it.”
	Barrier: Lack of standardized process	“I think it’s individual, a lot of what we do about functional status. I think people do it quite differently.”
	Barrier: Lack of clarity around roles and responsibilities	I don’t really know [who should be responsible for assessing function]. I think that a lot of it has to be on the primary care provider . . . I guess I don’t really know who exactly should have all these responsibilities.”
	Facilitator: Standardized electronic reminders and note template	“[A template] definitely saves time. There are a lot of templates that the RNs or LPNs use and it does save time and is helpful when I look at it.”
Screening tool	Facilitator: Screening is a conversation starter and raises red flags about function	“A pre-visit screen makes it easier to initiate the conversation.” “I think the LPNs and the RNs could really help providers by assessing that, just sort of as a pre-screening tool. That would then allow me to know where to focus.”
	Barrier: Completing reminders from clinical care and contributes to alert fatigue	“The volume of alerts I get in a given day is large and the number of them that actually are meaningful are small.”
Patient and provider characteristics	Barrier: Individual provider approaches to assessing function; reliance on patient complaint or family report	“It kind of depends on what other medical problems we have. I may not always address their ADLs at each visit, unless there’s a primary concern, or that’s the chief complaint, or it’s brought up by a family member.” “It’s more or less dependent on what the patient wants to talk about.”
	Barrier: Individual provider approaches to assessing function; dependence on observation of red flags or cognitive impairment	“If I have a patient who comes in and they’re doing fine . . . then I typically won’t do a full functional assessment. On the other hand, if I have a patient that comes in and they have a gait disturbance, or I’m concerned about a memory issue, then I might actually pull up a Katz assessment and template it into my notes.” “Once people have dementia or show some signs of functional impairment I think it gets done but maybe not so well before.”
	Barrier: Patient underreporting of functional limitations	“A lot of patients probably under-report these struggles due to pride or not . . . being unaware of how we can help them at home. So, we’re really relying on them.”
	Barrier: Patient impairments prevent accurate assessment	“So most of the time we can get the information [quickly], but in some patients who have a problem with hearing and memory issue.”
	Facilitator: Strong interdisciplinary environment and quality of staff facilitates screening and assessment	“It’s a team effort to catch when [patients are] falling behind and they’re needing more help.” “If I have a good team, it’s awesome, the amount of information that I can get. Where, oh, this person had a balance issue trying to get out of the chair when we took the blood pressure. Or they’re not using their walker. Things that maybe I didn’t pick up on.”
	Facilitator: Provider perception of function as clinically important	“What I’m finding is that it doesn’t matter what kind of medical treatment you prescribe to a patient, if they don’t have the support or the functional status to be able to carry out that medical treatment plan, it doesn’t matter how much time I spend in clinics, my patients are never going to be able to do this.”

Screening and Assessment		
Barrier and facilitator domain	Sub-domain	Illustrative quotations
	Facilitator: Positive patient-provider relationship promotes assessment	“It’s definitely [helps] to get real responses from [a patient] when you have a relationship with them and you’re actually sitting down and trying to understand what’s going on with them.”

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Table 3.

Barriers and Facilitators to Documentation of Functional Status

Documentation		
Barrier and facilitator domain	Sub-domain	Illustrative quotations
Usability of electronic reminders and templates	Barrier: Complicated, long, and cumbersome reminders and templates	"I think a lot of the clicking and the templates that we have are very difficult to use." "Some reminders, there's a very forced algorithm, so you can't close it out unless you click a bunch of different places, and that drives people crazy."
Availability of a standardized data location	Facilitator: Standardized reminder and note templates promote uniform documentation	"The template... was geared towards trying to help the trainees do more uniform documentation, [as well as] the attendings... The intent was to get uniformity in documentation and make it easier to document."
Integration into personal workflows	Facilitator: Documentation fits into workflow	"I don't think [documenting function] is particularly burdensome, mainly because we discuss those issues anyway and it's oftentimes in conjunction with discussing overall goals and plans and how are these functional challenges affecting your quality of life... I don't really mind documenting it because it is part of what we're discussing anyways."
Connection of documentation to clinical use	Barrier: Limited utility of a functional status score	"Unlike drinking and depression, a low score in functional status is kind of nonspecific." "You probably want to elaborate a little bit more in detail what patients can and cannot do. Usually it's never a simply yes and no."

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Table 4.

Barriers and Facilitators to Use of Functional Status Data to improve care

Use of functional status data to improve care		
Barrier and facilitator domain	Sub-domain	Illustrative quotations
Connection between measurement and patient outcomes	Barrier: Lack of meaningful metrics prevents use of functional status data	"Does something get done with the data? Does it actually make a difference in the outcomes of the patients or is it just another something that we're documenting and nothing's happening with it?"
	Barrier: Functional status is too broad to associate with specific actions	"Poor score on functional status, what do I do with that? Does that mean I need to send the social worker? If I get a low score, does that mean that there's too many meds? Does that mean there's not enough meds? Am I missing a disease that's hidden under there that's messing this up? I don't know, it doesn't trigger an action in and of itself."
Availability and accessibility of data	Barrier: Lack of standardized data location prevents use	"Most of the time you really can't [get functional status information from the medical record] because those things [ADLs and IADLs] just aren't routinely documented."
	Barrier: Lack of standardized data location prevents ability to track function over time	"In an outpatient basis, there's no way to go into the chart and say, okay, what's happening with his ADLs over the last year."
	Facilitator: Tracking individual and population changes in function over time could be facilitated by electronic medical record	"If you had something like that where you could look at his score for functional status then you could track it over time and it was easy to pull up so that you could look at the trend."
	Facilitator: Integrated referral options and order set for functional impairments in electronic medical record could facilitate use of data	"If you had a functional impairment order set that had a set of [referral options] pre-done that you could then go, "Oh, I'm going to do this one, this one and this one," you could just make it easy."
Availability and provider knowledge of referrals and services	Barrier: Access to services and supports limited by funding, patient eligibility, timeliness of delivery	"Funding is being cut for those programs. We were able to get them pretty easily for patients [but] it's becoming much more difficult." "Some of the resources can take a while to get help to the patient. Like getting them a stair glide installed in their house is not something that happens instantaneously."
	Barrier: Provider lack of knowledge about services prevents use of data	"I honestly don't always know what's available, what available services are out there... Things are always changing about what services [VA is] going to provide and fund."