Published in final edited form as:

J Am Geriatr Soc. 2015 August ; 63(8): 1645–1651. doi:10.1111/jgs.13526.

Current Practices and Opportunities in a Resident Clinic Regarding the Care of Older Adults with Multimorbidity

Nancy L. Schoenborn, MD, Cynthia M. Boyd, MD, MPH, Matthew McNabney, MD, Anushree Ray, MSPH, and Danelle Cayea, MD, MS

Division of Geriatric Medicine and Gerontology, Department of Medicine, School of Medicine, Johns Hopkins University, Baltimore, Maryland

Abstract

OBJECTIVES—Multimorbidity (2 chronic conditions) affects more than half of all older adults. The American Geriatrics Society developed and published guiding principles for the care of older adults with multimorbidity in 2012. Improved clinician training in caring for older adults with multimorbidity is needed, but it is not clear what opportunities arise within clinical encounters to apply the guiding principles or how clinicians at all stages of training currently practice in this area. This project aimed to characterize current practice and opportunities for improvement in an internal medicine residency clinic regarding the care of older adults with multimorbidity.

DESIGN—Qualitative content analysis of audio-recorded clinic visits.

SETTING AND PARTICIPANTS—Thirty clinic visits between 21 internal medicine residents and 30 of their primary care patients aged 65 and older with two or more chronic conditions were audio-recorded. Patients' mean age was 73.6, and they had on average 3.7 chronic conditions and took 12.6 medications.

MEASUREMENTS—Transcripts of the audio-recorded visit discussions were analyzed using standard techniques of qualitative content analysis to describe the content and frequency of discussions in the clinic visits related to the five guiding principles: patient preferences, interpreting the evidence, prognosis, clinical feasibility, and optimizing therapies.

RESULTS AND CONCLUSIONS—All visits except one included discussions that were thematically related to at least one guiding principle, suggesting regular opportunities to apply the

---

Address correspondence to Nancy L. Schoenborn, Division of Geriatric Medicine and Gerontology, Johns Hopkins University School of Medicine, 5200 Eastern Avenue, Mason F. Lord Building, Center Tower, Suite 2200, Baltimore, MD 21224. nancyli@jhmi.edu.

Conflict of Interest: The editor in chief has reviewed the conflict of interest checklist provided by the authors and has determined that the authors have no financial or any other kind of personal conflicts with this paper. Dr. Cynthia Boyd received a small payment from UpToDate for having coauthored a chapter on multimorbidity, but we do not believe this has resulted in any conflict with the design, methodology, or results presented in this manuscript.

Author Contributions: Dr. Schoenborn had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

Study design and conduct: Schoenborn, Boyd, McNabney, Ray, Cayea. Data collection and management: Schoenborn, Ray. Data analysis and interpretation: Schoenborn, Boyd, Ray, Cayea. Preparation of manuscript: Schoenborn, Boyd, McNabney, Cayea. Review and revision of manuscript: Schoenborn, Boyd, McNabney, Ray, Cayea.

Sponsor's Role: The funding sources had no role in the design, methods, subject recruitment, data collections, analysis, or preparation of paper.

guiding principles in primary care encounters with internal medicine residents. Discussions related to some guiding principles occurred much more frequently than others. Patients presented a number of opportunities to incorporate the guiding principles that the residents missed, suggesting target areas for future educational interventions.

Keywords

multimorbidity; older adults; resident training; communication; qualitative research

Multimorbidity (≥ 2 chronic conditions) is common and is associated with morbidity and mortality.^{1–3} Clinical practice guidelines mostly focus on single diseases; simply combining guidelines often leads to contradicting recommendations and greater likelihood of adverse effects.⁴ The Guiding Principles for the Care of Older Adults with Multimorbidity were developed in 2012 as an alternative approach to better care for these individuals.¹ The document outlines five domains:

- *Patient Preferences:* Elicit and incorporate patient preferences into medical decision-making for older adults with multimorbidity;
- *Interpreting the Evidence:* Recognizing the limitations of the evidence base, interpret and apply the medical literature specifically to older adults with multimorbidity;
- *Prognosis:* Frame clinical management decisions within the context of risks, burdens, benefits, and prognosis (e.g., remaining life expectancy, functional status, quality of life) for older adults with multimorbidity;
- *Clinical Feasibility:* Consider treatment complexity and feasibility when making clinical management decisions for older adults with multimorbidity;
- *Optimizing Therapies and Care Plan:* Use strategies for choosing therapies that optimize benefit, minimize harm, and enhance quality of life for older adults with multimorbidity.

Better clinician training specific to caring for older adults with multimorbidity is needed.^{1,5–7} It is not clear what opportunities arise to apply the guiding principles in clinical encounters to inform decision-making, how clinicians at all levels of training currently practice in this area, or how best to direct interventions to improve practice. Internal medicine residents are critical learners because residency is a formative time, and many older adults receive care from clinicians trained in internal medicine.⁸ This study aimed to characterize specific educational targets by exploring the current practices and opportunities for improvement in an internal medicine residency clinic of the care of older adults with multimorbidity.

METHODS

This qualitative study involved audio-recording clinic visits between internal medicine residents and patients in the Johns Hopkins Bayview General Internal Medicine clinic. Residents with clinic sessions from November 2013 to January 2014 and faculty preceptors were recruited. The residents' patients aged 65 and older with two or more of the 30

conditions in the Elixhauser comorbidity index were consecutively recruited.⁹ Patients were excluded if they were non-English speaking, were not seeing their primary care provider, or were not able to provide informed consent. Companions to participating patients were also asked for consent. Information on patient characteristics was collected from medical record and a questionnaire. The Johns Hopkins School of Medicine institutional review board approved this project.

The audio-recordings were transcribed verbatim and analyzed using textual data analysis software (ATLAS.ti Scientific Software Development, Berlin, Germany). Two investigators (NS, AR) continuously reviewed the transcripts and independently assessed for the emergence of new ideas or themes. Data collection continued until no new ideas were emerging and theme saturation was reached.¹⁰ Standard techniques of qualitative content analysis were used to code and describe the content and frequency of discussions related to the guiding principles.^{10,11} A preliminary coding scheme based on the guiding principles was iteratively refined and applied to analyze the data using the constant comparative approach.^{10,12} Open coding procedures allowed inductive identification of new themes in addition to deductive coding within the established scheme. Revisions to the coding scheme were applied to all previously coded transcripts. Two investigators (NS, AR) independently coded all transcripts. Differences were reconciled by consensus, with input from a third investigator (DC) when needed, until 100% agreement was reached.

There were six major coding categories: the five guiding principles and a category on clinical decision-making (Table 1). A clinical decision was defined to include changing medication; ordering a diagnostic test, referral, or vaccine; setting a treatment goal; or planning for a behavior change. Within each guiding principle coding category, several subcategories were coded, including whether comments related to the guiding principle were present; whether the resident or patient initiated the comments; when the patient initiated the comments, how the resident responded; and whether the comments led to a clinical decision. Additional subcoding categories specific to each guiding principle are presented in the Results section. Within the clinical decision-making coding category, whether a clinical decision was made and whether guiding principle-related comments occurred in the context of making that decision were coded. The unit of analysis was a “discussion unit,” defined to start when any participant made a comment thematically related to a guiding principle or a clinical decision and to end when the comments shifted to a different topic. A discussion unit could include comments related to one or more guiding principles that led to clinical decisions, comments related to one or more guiding principles without a clinical decision, or a clinical decision without any guiding principle-related comments (Figure 1A).

One hundred eighty-eight discussion units were coded. Because this study focused on residents, nine discussion units with faculty preceptors’ comments but not residents’ were excluded. The remaining 179 discussion units were included in the analysis; they included 12 discussions with comments from residents and faculty and 167 without faculty comments.

Comments from patient companions occurred in 22 discussions and were often intermingled with patients’ comments. Patients’ and companions’ comments were pooled because studies

have showed that visit companions are important in facilitating communication with older adults.¹³ There was no suggestion of different preferences between patients and companions.

RESULTS

Twenty-three residents and 42 patients were approached; 21 residents (6-first-year residents, 7 second-year residents, 8-third-year residents) and 30 patients participated in 30 recorded visits. The residents were in “categorical” training track (9/21), with focus on subspecialty experiences, or “primary care” track (12/21), with more primary care training. Each resident had one to four recorded visits. Table 2 summarizes patient characteristics. Patients’ average age was 73.6. Most of the patients were female, and most were white. They had on average 12.6 medications and 3.7 chronic conditions.⁹ A significant portion of patients reported problems with mobility and usual activities and screened positive for low health literacy.^{14,15}

Of the 179 discussion units included in the analysis, 134 included comments related to at least one guiding principle; 102 of these involved clinical decisions (Figure 1A). Forty-five discussions involved clinical decisions without any guiding principle–related comments; these occurred in 22 clinic visits and involved laboratory tests (10), vaccines (5), ordering imaging (5), medication changes (13), ordering referral (6), treatment goals (2), and behavior changes (4).

Discussions with guiding principle–related comments occurred in 29 clinic visits. Discussions related to some guiding principles occurred more frequently than others (Figure 1B–D). Findings related to each guiding principle are discussed below with illustrative quotations.

Patient Preferences

Eighty-eight discussions involved patient preferences; residents initiated the comments in 36 discussions and patients in 52. There were two subcoding categories. First, whether patient preference was incorporated into care was coded, and it was found that it was incorporated into care in most of the discussions (79/88), unless there were clinical reasons to pursue a different plan or the preference was not feasible. Next, whether the patient expressed a preference in reaction to a clinical decision in which preference had not been elicited was coded; this was found to be the case in approximately one-third of the discussions (17/52). This is illustrated regarding influenza vaccination:

Resident: “We’re also gonna give you the flu vaccine today.” Patient: “Oh no, I don’t want that, last time I got that, I was sick in bed for two weeks. . .never again.”

Interpreting the Evidence

Thirteen discussions included comments referring to research literature, clinical practice guidelines, or recommendations; residents made all comments. There were no comments about the applicability of the evidence specifically to older adults with multimorbidity. A resident refers to the hepatitis screening recommendation:

Resident: “It’s recommended that anyone in your age group [be] screened for a disease called hepatitis C.”

Prognosis

Nine discussions included comments on overall life expectancy or condition-specific prognosis or risk. Residents initiated the comments in six discussions and mostly (5/6) commented on condition-specific risk (stroke risk if hypertension is not controlled). All patient-initiated prognosis comments were about life expectancy, to which the residents did not respond or discouraged discussion about mortality. Below, a patient with family history of dementia talks about her future:

Patient: I’m 72, and . . . by 75, she [my mother] was almost a basket case. . . so I figure I got 3 more good years, and then we’re gonna have to start watching.

Resident: Well, let’s plan on at least 13 more good years. . .

Patient: She was dead when she was 88.

Resident: Well, gotta keep looking forward to the future, OK? You can’t think about death.

Clinical Feasibility

Forty-two discussions included comments related to treatment complexity, feasibility, or adherence. Two subcoding categories coded for what treatment modalities were involved and whether the resident took action to address the patient’s concerns. Twenty-three of the discussions involved comments about medications, and the rest involved feasibility of behavior change, specialist visits, or diagnostic tests. Residents initiated the comments in 16 discussions and, in 14 of these, took action, if needed, to reduce treatment complexity or improve feasibility or adherence. Here, the resident makes a suggestion to improve medication adherence:

Resident: Do you ever feel like you forgot [your medications]?

Patient: Yeah, if I forgot I didn’t take it, I wait until the next day. . .

Resident: Have you ever thought about using one of those pill boxes that has the days of the week in it?

Patients initiated comments related to clinical feasibility in 26 discussions; in 12 of these, the resident did not address the patient’s concern and sometimes did not respond at all. Below, a patient’s comment about the number of medications is ignored:

Patient: It’s a lot of medicines to take. When I was young, I didn’t think I’d be on all this, my old days taking pills, pills, pills.

Resident: All right, so we are gonna do the flu shot, then you’re gonna get some urine test. . .

Optimizing Therapies

Twenty-seven discussions included comments related to stopping or not starting a treatment with little to no benefit or significant harms or comments comparing the relative benefit of two or more treatment options. Two subcoding categories coded for whether the patient had already made changes on his or her own to the treatment before the visit and whether interaction among multiple conditions was considered. Patients initiated the comments in 10 discussions, and in nine of these talked about having already canceled a diagnostic test or stopped medications with side effects or no perceived benefit. Patients in two discussions and residents in six discussions considered interaction between multiple conditions or the treatments for multiple conditions. A resident commented on how treating one condition might worsen another:

Resident: The swelling around your abdomen because of your liver problem—there's a medication that we give that decreases the blood flow to the gut, it's called Nadolol. . .but sometimes in patients with asthma, it's not a good medication. I know you've had this asthma attack. . . Maybe it'd be better to hold off on that medicine.

DISCUSSION

This article characterizes current practices in an internal medicine residency clinic regarding the application of guiding principles in the care of older adults with multimorbidity and identifies several opportunities for improvement. This study adds to the literature because the authors did not find other work describing the real-life applications of these guiding principles or of other approaches to patient-centered care for older adults with multimorbidity.

Discussions related to some guiding principles occurred much more frequently than others. This may be partially because the residents had more training in some guiding principles than others; for example, the residency program had curricula on eliciting patient preferences and considering treatment feasibility but not on prognosis. Without strictly defined criteria regarding the application of the guiding principles, it is not possible to distinguish how often a guiding principle should have been applied, which is therefore not assessed.

Residents in this study missed multiple opportunities to apply the guiding principles. Patients in the study often expressed preferences in reaction to proposed clinical decisions when their preferences had not been elicited, suggesting missed opportunities to elicit patient preferences. This finding is consistent with studies in shared decision-making that identified similar gaps in eliciting and understanding patient preferences.^{16,17} The paucity of prognosis considerations and the failure to respond to patients' prognosis comments suggest significant gaps. This is consistent with descriptions that clinicians rarely discuss prognosis with older patients and find prognostication difficult.^{18–20} Residents also missed opportunities to address patient concerns about treatment complexity and adherence. This finding is consistent with studies on contextualizing care, in which clinicians missed many “red flags” in the patient's context.²¹ The current study did not find faculty input or

feedback to the residents regarding the missed opportunities. A novel and encouraging finding is that some patients and residents considered the interaction between multiple conditions or the treatments for the multiple conditions.

The results of this study have several important implications. Guiding principle–related discussions occurred in almost all visits, suggesting regular opportunities to apply these guiding principles in primary care encounters with internal medicine residents. The various missed opportunities to incorporate these guiding principles, even when prompted by patients, indicate opportunities for improvement. Residency is an important forum to improve clinician training. The guiding principles emphasize many important competencies for internal medicine residents.^{22,23} The results indicate specific educational gaps, such as in the areas of prognosis and treatment complexity, which may inform targeted interventions. Last, the wide variance in the frequency of discussions related to different guiding principles and the absence of guiding principle–related comments in almost one-third of clinical decisions raise the question of how often the guiding principles should be applied and in what clinical scenarios, highlighting the need to better define how to apply the guiding principles optimally and to develop assessment tools.

This study has several limitations. Conducted with a small group of participants at one institution, it may not represent patients and residents elsewhere, although it was intended to generate qualitative data through in-depth analysis; the sample size is typical in qualitative research.^{10,24,25} As mentioned above, the findings of missed opportunities to elicit patient preferences and incorporate prognosis are consistent with existing literature.^{16–20} Second, audio-recording may not capture the application of guiding principles if there is no discussion with the patient or if the topic has been discussed previously; it also may not capture faculty input or feedback that occur outside the clinic room. Third, the Elixhauser index may not perfectly characterize the patients' chronic conditions.⁹ There is no consensus in the literature on the optimal screening tool for multimorbidity. The patients in the study had significant polypharmacy and self-reported functional limitations, suggesting that the guiding principles were applicable. Last, although there are no validated criteria to assess the application of the guiding principles, missed opportunities when patients initiated comments related to the guiding principles but residents did not respond were examined, but it was not possible to capture other missed opportunities when the clinical scenarios might have suggested that the guiding principles should have been applied.

Based on these findings, a curriculum has been developed and implemented and is being evaluated at the Johns Hopkins Bayview Medical Center teaching the internal medicine residents to better incorporate prognosis into the care of older adults with multimorbidity. Additional educational efforts are needed to target the other identified gaps. Future work may also assess the potential opportunities for improvement among practicing clinicians in their application of the guiding principles and adapt educational interventions for clinicians at all levels of training. The guiding principles for the care of older adults with multimorbidity provide important guidance in clinical practice; educational efforts to disseminate them are critical to bring about practice changes to improve care.

Acknowledgments

An earlier version of the manuscript was presented as a poster at the Society of General Internal Medicine national meeting, San Diego, California, 2014, and as an oral presentation at the American Geriatrics Society national meeting, Orlando, Florida, 2014.

This project was made possible with a grant from the Arnold P. Gold Foundation (The Picker Institute/Gold Foundation Graduate Medical Education Challenge Grant) and was supported by the John A. Hartford Foundation Geriatric Center of Excellence. Dr. Schoenborn was supported by the Donald W. Reynolds Consortium Faculty Development to Advance Geriatric Education Program: Next Steps. Dr. Boyd was supported by Paul Beeson Career Development Award NIA K23 AG032910, the John A. Hartford Foundation, Atlantic Philanthropies, and the Starr Foundation. Dr. McNabney was supported by the Fellowship Training Program in Geriatric Medicine and Gerontology at Johns Hopkins, and Dr. Cayea was supported by the Daniel and Jeannette Hendin Schapiro Geriatric Medical Education Center.

References

1. American Geriatrics Society Expert Panel on the Care of Older Adults with Multimorbidity. Guiding principles for the care of older adults with multimorbidity: An approach for clinicians. *J Am Geriatr Soc.* 2012; 60:E1–E25. [PubMed: 22994865]
2. Fortin M, Hudon C, Haggerty J, et al. Prevalence estimates of multimorbidity: A comparative study of two sources. *BMC Health Serv Res.* 2010; 10:111. [PubMed: 20459621]
3. Boyd CM, Fortin M. Future of multimorbidity research: How should understanding of multimorbidity inform health system design. *Public Health Rev.* 2010; 32:451–474.
4. Boyd CM, Darer J, Boulton C, et al. Clinical practice guidelines and quality of care for older patients with multiple comorbid diseases: Implications for pay for performance. *JAMA.* 2005; 294:716–724. [PubMed: 16091574]
5. Fortin M, Soubhi H, Hudon C, et al. Multimorbidity's many challenges. *BMJ.* 2007; 334:1016–1017. [PubMed: 17510108]
6. Arenson CA, Rattner S, Borden C, et al. Cross-sectional assessment of medical and nursing students' attitudes toward chronic illness at matriculation and graduation. *Acad Med.* 2008; 83:S93–S96. [PubMed: 18820512]
7. Turner J, Pugh J, Budiani D. "It's always continuing": First-year medical students' perspectives on chronic illness and the care of chronically ill patients. *Acad Med.* 2005; 80:183–188. [PubMed: 15671326]
8. Reuben DB, Zwanziger J, Bradley TB, et al. How many physicians will be needed to provide medical care for older persons? Physician manpower needs for the twenty-first century. *J Am Geriatr Soc.* 1993; 41:444–453. [PubMed: 8463534]
9. Elixhauser A, Steiner C, Harris DR, et al. Comorbidity measures for use with administrative data. *Med Care.* 1998; 36:8–27. [PubMed: 9431328]
10. Crabtree, B.; Miller, W. *Doing Qualitative Research.* 2. Thousand Oaks, CA: Sage Publications; 1999.
11. Hsieh HF, Shannon SE. Three approaches to qualitative content analysis. *Qual Health Res.* 2005; 15:1277–1288. [PubMed: 16204405]
12. Boeije H. A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Qual Quant.* 2002; 36:391–409.
13. Wolff JL, Roter DL. Hidden in plain sight: Medical visit companions as a resource for vulnerable older adults. *Arch Intern Med.* 2008; 168:1409–1415. [PubMed: 18625921]
14. EuroQol Group. EuroQol—a new facility for the measurement of health-related quality of life. *Health Policy.* 1990; 16:199–208. [PubMed: 10109801]
15. Chew LD, Bradley KA, Boyko EJ. Brief questions to identify patients with inadequate health literacy. *Fam Med.* 2004; 36:588–594. [PubMed: 15343421]
16. Covinsky KE, Fuller JD, Yaffe K, et al. Communication and decision-making in seriously ill patients: Findings of the SUPPORT project. The Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatments. *J Am Geriatr Soc.* 2000; 48:S187–S193. [PubMed: 10809474]

17. Ekdahl AW, Andersson L, Wirehn AB, et al. Are elderly people with co-morbidities involved adequately in medical decision making when hospitalised? A cross-sectional survey. *BMC Geriatr*. 2011; 11:46. [PubMed: 21851611]
18. Thai JN, Walter LC, Eng C, et al. Every patient is an individual: Clinicians balance individual factors when discussing prognosis with diverse frail elderly adults. *J Am Geriatr Soc*. 2013; 61:264–269. [PubMed: 23320808]
19. Fried TR, Bradley EH, O’Leary J. Prognosis communication in serious illness: Perceptions of older patients, caregivers, and clinicians. *J Am Geriatr Soc*. 2003; 51:1398–1403. [PubMed: 14511159]
20. Christakis NA, Iwashyna TJ. Attitude and self-reported practice regarding prognostication in a national sample of internists. *Arch Intern Med*. 1998; 158:2389–2395. [PubMed: 9827791]
21. Weiner SJ, Schwartz A, Sharma G, et al. Patient-centered decision making and health care outcomes: An observational study. *Ann Intern Med*. 2013; 158:573–579. [PubMed: 23588745]
22. Green ML, Aagaard EM, Caverzagie KJ, et al. Charting the road to competence: Developmental milestones for internal medicine residency training. *J Grad Med Educ*. 2009; 1:5–20. [PubMed: 21975701]
23. Williams BC, Warshaw G, Fabiny AR, et al. Medicine in the 21st century: Recommended essential geriatrics competencies for internal medicine and family medicine residents. *J Grad Med Educ*. 2010; 2:373–383. [PubMed: 21976086]
24. Morse JM. The significance of saturation. *Qual Health Res*. 1995; 5:147–149.
25. Morse JM. Determining sample size. *Qual Health Res*. 2000; 10:3–5.

Figure 1.

Frequency of discussion units related to each guiding principle and clinical decisions. (A) Discussion units characterized with respect to guiding principles and clinical decisions (B–D) Frequency of discussion units related to each guiding principle are presented in three different ways to illustrate the relative frequencies of discussions among domains. For example, patient preferences were discussed (B) in 88 of 179 discussion units, (C) in the context of 77 of 147 clinical decisions, and (D) in 28 of 30 clinic visits.

Table 1

Overview of Coding Framework

Major Coding Categories ^a	Definition	Example
Patient preference	Any inquiry or comment about patient preference regarding any aspect of their medical care	R: "What about. . .we'll check a lab in a week's time. Would that work for you? . . .You want to do that?"
Interpreting the evidence	Any mention of "research," "study or studies," "guidelines," "literature," "paper," or "recommendation"	R: "The national recommendations are that we check for HIV once in a lifetime."
Prognosis	Any reference to life expectancy, mortality risk, or condition- specific risk	P: "I want to be around as long as God will let me. . .I want to see [my granddaughter] grow up, and I'm 73 already."
Clinical feasibility	Any inquiry or comment on treatment complexity; logistical, financial, clinical, or other aspects of treatment feasibility; or challenges with adherence to treatment	P: "It's kind of hard. . .because [international normalized ratio] goes up and down all the time. . .gotta readjust the medicine. . .I live by myself. . .sometimes I forget."
Optimizing therapies	Any comment about stopping or not starting a treatment with little to no benefit or significant harms, or comments comparing the benefit of at least two treatments	R: "I think that [not adding an antihypertensive medication] sounds good because different medications can increase your risk of falling, too much blood pressure medicine's one of them. So I don't want to overload you when you're already feeling off balance."
Clinical decision- making	Any change in a medication, ordering a diagnostic test (laboratory, imaging, procedure), ordering a referral, ordering a vaccine, setting a treatment goal, or plan for a routine change in behavior such as smoking cessation	R: "I would want to test and see if there's a blood clot [in your leg] . . . so I want you to get an ultrasound . . . to see if the blood flow is OK to your foot, all right? So I'll put in an order for that."

R = resident; P = patient.

^a Subcoding categories are presented in Results section.

Table 2

Patient Characteristics (N = 30)

Characteristic	Value
Age, mean $\pm$ SD	73.6 $\pm$ 7.3
Female, n (%)	22 (73)
Race, n (%)	
White	20 (67)
African American	8 (27)
Other	2 (6)
Self-reported educational level, n (%)	
<High school	14 (47)
High school	11 (37)
<4-year college	5 (17)
Self-assessed socioeconomic status, n (%)	
Comfortable	6 (20)
Enough to make ends meet	14 (47)
Not enough	10 (33)
Number of chronic conditions, mean $\pm$ SD	3.7 $\pm$ 1.4
Number of medications, mean $\pm$ SD	12.6 $\pm$ 4.6
Low health literacy, ¹⁶ n (%)	13 (43)
Self-report of some problems in, ¹⁵ n (%)	
Mobility	19 (63)
Self-care	6 (20)
Usual activities	12 (40)
Pain	19 (63)
Anxiety	14 (47)
Accompanied by companion, n (%)	11 (37)

SD = standard deviation.