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## Primary Care Practitioners' Views on Incorporating Long-term Prognosis in the Care of Older Adults

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### Abstract

**IMPORTANCE**—Clinical practice recommendations increasingly advocate that older patients' life expectancy be considered to inform a number of clinical decisions. It is not clear how primary care practitioners approach these recommendations in their clinical practice.

**OBJECTIVE**—To explore the range of perspectives from primary care practitioners on long-term prognosis, defined as prognosis regarding life expectancy in the range of years, in their care of older adults.

**DESIGN, SETTING, AND PARTICIPANTS**—A qualitative, semistructured interview study was conducted in a large group practice with multiple sites in rural, urban, and suburban settings. Twenty-eight primary care practitioners were interviewed; 20 of these participants (71%) reported that at least 25% of their patient panel was older adults. The audiorecorded discussions were transcribed and analyzed, using qualitative content analysis to identify major themes and subthemes. The study was conducted between January 30 and May 13, 2015. Data analysis was performed between June 10 and September 1, 2015.

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*Study concept and design:* Schoenborn, Cayea, Pollack, Feeser, Boyd.

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**MAIN OUTCOMES AND MEASURES**—The constant comparative approach was used to qualitatively analyze the content of the transcripts.

**RESULTS**—Of the 28 participants, 16 were women and 21 were white; the mean (SD) age was 46.2 (10.3) years. Twenty-six were physicians and 2 were nurse practitioners. Their time since completing clinical training was 16.0 (11.4) years. These primary care practitioners reported considering life expectancy, often in the range of 5 to 10 years, in several clinical scenarios in the care of older adults, but balanced the prognosis consideration against various other factors in decision making. In particular, patient age was found to modulate how prognosis affects the primary care practitioners' decision making, with significant reluctance among them to cease preventive care that has a long lag time to achieve benefit in younger patients despite limited life expectancy. The participants assessed life expectancy based on clinical experience rather than using validated tools and varied widely in their prognostication time frame, from 2 years to 30 years. Participants often considered prognosis without explicitly discussing it with patients and disagreed on whether and when long-term prognosis needs to be specifically discussed. The participants identified numerous barriers to incorporating prognosis in the care of older adults including uncertainty in predicting prognosis, difficulty in discussing prognosis, and concern about patient reactions.

**CONCLUSIONS AND RELEVANCE**—Despite clinical recommendations to increasingly incorporate patients' long-term prognosis in clinical decisions, primary care practitioners encounter several barriers and ambiguities in the implementation of these recommendations.

Research and clinical practice recommendations increasingly recognize that older adults of similar age can have widely varying life expectancies and suggest that several clinical decisions regarding older patients—including cancer screening and glycemic goal in diabetes mellitus treatment—should incorporate patients' life expectancy over a time frame of up to 10 years.<sup>1–11</sup> The potential benefit from these clinical interventions may not be achieved for many years, but the potential harms may occur in the short term.<sup>3,4,7,12</sup> Thus, without considering *long-term prognosis*, defined as prognosis regarding life expectancy in the range of years, patients with limited life expectancy may be inappropriately exposed to harm from continued clinical interventions with little chance of benefit, whereas stopping these interventions in healthy older adults with long life expectancy may exclude them from potentially beneficial interventions.

There is evidence<sup>13–18</sup> that current practices of incorporating prognosis in clinical care may be suboptimal. For example, older patients with poor long-term prognosis frequently receive routine cancer screening, with a screening rate as high as 55% in one study.<sup>13</sup> However, adequate screening is not performed in healthy older adults with a relatively long life expectancy who may benefit from cancer screening, possibly as a result of age-based guidelines.<sup>14,15,17,19,20</sup>

Primary care practitioners play an important role in these clinical decisions, and research<sup>21–23</sup> highlights the challenges they face in incorporating prognosis in the decisions and discussing this information with older patients. A study<sup>23</sup> of mostly geriatric medicine–trained practitioners who cared for frail older patients found that the participants were reluctant to discuss long-term prognosis because it was thought to be too uncertain to be

useful. It is not clear how general primary care practitioners think about prognosis in the care of older adults across the spectrum of health status, especially in light of recent clinical recommendations.<sup>1,4,8-11</sup> Because little is known about this area, we used qualitative methods in this study to explore the range of perspectives from primary care practitioners to generate hypotheses. We aimed to examine how these individuals think about, incorporate, and communicate prognosis in the care of older adults, with a focus on long-term prognosis over a time frame of years.

## Methods

### Design and Study Setting

This was a qualitative study in which semistructured, in-depth interviews lasting 40 to 60 minutes were conducted with primary care practitioners. Participants were affiliated with Johns Hopkins Community Physicians, the largest outpatient group practice in Maryland, with 37 outpatient sites in rural, urban, and suburban settings. Most Johns Hopkins Community Physicians are full-time practitioners without academic appointments. This project was approved by a Johns Hopkins School of Medicine institutional review board and adhered to the Declaration of Helsinki.<sup>24</sup> The participants provided written informed consent and received financial compensation.

### Participants

We sought practitioners, including physicians, certified registered nurse practitioners, and physician assistants, who provided primary care to older adults. We identified eligible participants through a central list of Johns Hopkins Community Physicians and recruited potential participants electronically using a combination of maximum variation (targeting a wide range of diverse subjects) and snowball sampling.<sup>25,26</sup>

### Interview Guide

The interview guide was piloted with 3 general internal medicine faculty at our institution to ensure clarity and appropriateness (eAppendix in the Supplement). At the beginning of the interview, we stated that we were specifically interested in prognosis regarding life expectancy. The interviews then explored participants' perspectives about life expectancy; the word *prognosis* was frequently used interchangeably with *life expectancy* by both the interviewer and the participants during the interviews. The interviews explored the following: participants' attitudes toward incorporating life expectancy in the care of older adults (defined as ≥ 65 years), the type of clinical scenarios in which they considered the patients' life expectancy, how they assessed life expectancy, how they applied life expectancy to inform clinical decisions, how they discussed life expectancy with the patients, and the facilitators and barriers to incorporating life expectancy in primary care of older adults. We did not specify a number of years for what constituted long-term prognosis; the interview included a question that asked about assessing life expectancy in the range of years and a question regarding the clinical decision of cancer screening, which has a lag time to benefit of approximately 10 years.<sup>12</sup> The participants were also shown a brief demonstration of prognostic tools (eAppendix in the Supplement) and asked if such tools

would be helpful in their clinical practice.<sup>27</sup> The interviews were semistructured and allowed for new topics to emerge.

### **Data Collection and Analysis**

One investigator (N.L.S.) conducted the interviews in person between January 30 and May 13, 2015. Interviews occurred privately in conference rooms or offices and were audiorecorded. Participant characteristics were collected using a brief questionnaire. The audiorecordings were then transcribed verbatim and analyzed using Atlas.ti, version 7, textual data analysis software (ATLAS.ti Scientific Software Development). The transcripts were continuously reviewed and assessed for the emergence of new ideas or themes; data collection continued until no new ideas were emerging and theme saturation was reached.<sup>25</sup> The constant comparative approach was used to qualitatively analyze the content of the transcripts.<sup>25,28</sup> A preliminary coding scheme based on the interview guide was iteratively refined and applied to analyze the data.<sup>25,29</sup> 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 (N.L.S. and T.L.B.) independently coded all transcripts. Differences were reconciled by consensus until 100% agreement was reached. Content analysis generated major themes and subthemes. Data analysis was performed between June 10 and September 1, 2015.

### **Results**

Twenty-eight primary care practitioners from 14 different clinic sites participated in the study. Table 1 summarizes participant characteristics. The participants' mean (SD) age was 46.2 (10.3) years. Of the 28 participants, 16 were women and 21 were white. The time since completing clinical training was 16.0 (11.4) years. Participants practiced in urban, suburban, and rural settings and conducted 7.1 (2.1) clinic sessions (defined as one 4-hour session) per week. Twenty-six were physicians and 2 were nurse practitioners. Twenty of the participants reported that at least 25% of their patient panel was older adults. Content analysis revealed 5 major themes with subthemes; these are presented below and illustrated using representative quotes.

#### **Theme 1: Long-term Prognosis Considered in Several Clinical Scenarios**

In addition to the scenario of cancer screening that was mentioned in the interview question, participants spontaneously mentioned numerous other clinical scenarios in which they considered the patients' life expectancy, often in the range of 5 to 10 years (Table 2). Common examples included several preventive care decisions, the presence of life-limiting conditions, or the presence of multiple serious, chronic conditions.

#### **Theme 2: Prognosis Considerations Balanced Against Other Factors**

Participants used patients' life expectancy to inform clinical decisions. However, the prognosis consideration often was balanced against other factors and, at times, was outweighed by other considerations.

**Patient Preference**—Patient preference or request was the most common consideration that outweighed prognosis considerations; participants often acquiesced to patients' requests even though an intervention was unlikely to provide benefit based on the patients' life expectancy. For example, one participant said:

“Do I give in sometimes and do tests that I don't think are medically necessary? Yes... if [the patients] insist, I say, ‘ok, as long as you understand.’”

**Age and Nature of Prognosis**—The effect of prognosis on the clinical decisions varied depending on patients' age and whether the prognosis was good or poor. In patients with long life expectancy, participants often continued preventive care despite patients' age. One participant observed:

“I have folks [in whom] we're doing certain tests and things well beyond what generally is recommended but I think for good reason....I have a couple patients in their late 80s and 90s where I tell them: ‘you're likely to live another decade or two... so we might need to be a little more aggressive with staying with some of these [preventive] things.’”

When primary care practitioners described patients with poor long-term prognosis and advanced age, often referring to those in their 80s or 90s, the participants tended to be less aggressive with preventive care and more aggressive in addressing advanced directives and goals of care. One participant commented:

“I'm taking people off sulfonylureas all the time and then their [hemoglobin] A<sub>1c</sub> runs higher... with the ideas that it doesn't make sense to try to prevent something that's going to happen in 20 years in an 80- or 90-year-old patient.”

In patients who were younger and had poor long-term prognosis, the participant was likely to continue aggressive preventive care unless the patients' prognosis over a shorter time frame (ie, weeks to months) was also poor. This decision stemmed in part from pressure to follow age-specific guidelines and from fear of mistakenly estimating prognosis, especially if that estimate led to deviation from age-specific guidelines. The interplay between age and prognosis is illustrated in the following example:

“I would feel very uncomfortable for 50-year-old patients... saying we'll never screen again [for colorectal cancer] even though I would be shocked if they lived longer than 5 years from now.”

Another participant commented on fear of making a wrong estimate:

“[There is] fear of making the wrong decision based on this nebulous thing that is prognosis...you know, what if I think that somebody only has 5 years but in fact they have 10 years and I miss a colon cancer that will shorten their life.”

### Theme 3: Prognosis Assessed Based on Clinical Experience

**Unfamiliar With Prognostic Tools**—The primary care practitioners generally did not use validated prognostic tools to assess life expectancy in older adults; instead, they often used a “gestalt” sense based on their clinical experience. When the interviewer demonstrated

some of the existing prognostic tools (eAppendix in the Supplement),<sup>27</sup> many of the participants found the tools to be helpful, but others did not and raised questions on how to interpret the results or how to make the results relevant to clinical decisions. One participant commented:

“No, [the tool is] not helpful....On an individual basis none of that means a thing.”

**Assessment Approaches Varied**—Some participants’ prognosis assessments relied predominantly on patients’ age, some relied heavily on patients’ functional status, and others focused on specific life-limiting diagnoses. Participants also varied widely in the time frame of their prognostication, ranging from 2 years to 20 to 30 years (Table 3).

#### Theme 4: Discussion of Long-term Prognosis

**Prognosis Consideration Without Discussion**—The primary care practitioners often considered prognosis without explicitly discussing it with the patients, even if the prognosis informed the practitioners’ approaches to clinical decisions. This is illustrated in the following comment:

“I have to say [prognosis] is something I go through in my head...it’s not something that I say to the patient...I would say that it’s very infrequent that it’s a verbalized discussion.”

**Attitudes Toward Prognosis Discussions**—Although most participants stated that prognosis is an important factor to consider, they disagreed on whether and when prognosis needs to be explicitly discussed, especially long-term prognosis when patients are not at the end of their lives. The participants’ perspectives on whether and when prognosis should be discussed are summarized in Table 4. Reasons to discuss prognosis included questions from patients or families about prognosis or to prompt change in factors such as smoking cessation or weight loss to improve health.

**Discussion Strategies**—Some of the primary care practitioners were more comfortable than others with discussing long-term prognosis and had prognosis discussions more frequently. We explored the strategies of these individuals. One participant asked patients to estimate their life expectancy first and used those estimates as the starting point for discussion:

“You can say, ‘how long do you think that you’re going to stick around?’ And then they’ll tell you. You say, ‘ok, if that’s what is going to happen, then probably you wouldn’t need...the statin because the...benefits aren’t large enough to outweigh the risk at this point in your life....”

Another participant framed the patients’ life expectancy in the context of how it would be affected by an intervention or diagnosis:

“This new diagnosis has significantly altered what we think your life expectancy to be and we need to...use it as a touch point not only for this disease but other things going on as well.”

An incremental range of timelines to guide patients to think about their life expectancy was also used:

“‘It’s unwise for you to...not consider that you’re not going to be here 20 years from now.’ Most people, if you pick a far enough time, [for example, if] they’re 80 and you say: ‘look I’m not worried about how you’re going to do 25 years from now [when you are] 105.’ And they think, ‘Hahaha.’ So then you can start to bring it back: ‘but what about [when you are] 100, what about 95, what about 90?’ And then they start realizing that there is a point where I need to think about these things.”

### Theme 5: Barriers to Incorporating Prognosis

Barriers to incorporating prognosis included uncertainty in predicting prognosis, difficulty in discussing prognosis, time constraints in clinic visits, lack of emphasis or value placed on prognosis in societal or health care culture, inappropriate incentives in the practice environment, concern for litigation, inadequate training on how to incorporate prognosis, and concern about patient reactions (Table 5). In particular, participants were concerned that patients may perceive the practitioners as judgmental or as abandoning patients if prognosis is considered in clinical decisions. One participant commented:

“I’m afraid that the patients will think I’m giving up on them like I’m not doing everything I can...I feel like I’m playing God.”

Facilitators to incorporating prognosis included knowing the patient well over time or knowing that the patient had previously considered or discussed prognosis.

## Discussion

Building on the previous literature<sup>30–34</sup> on prognosis that focuses on short-term prognosis in oncology or palliative care patients, we characterized primary care practitioners’ perspectives on incorporating long-term prognosis in the care of older patients. We found that the participants’ consideration of long-term prognosis in decision making was modulated by several factors, particularly patient age, and that the approaches used to assess and discuss long-term prognosis varied widely.

We were encouraged to find that primary care practitioners often considered patients’ long-term prognosis over many years in preventive care decisions, such as cancer screening and diabetes mellitus care, which was congruent with clinical practice recommendations.<sup>1,4,8–11</sup> Previous studies<sup>35–39</sup> showed conflicting results on whether practitioners incorporated life expectancy in cancer screening decisions. Our results add to the literature by highlighting that patient age modulated the effect that prognosis had on clinical decisions for patients with a poor long-term prognosis. In such patients, the participants were more comfortable to be less aggressive in preventive care if the patients were of relatively advanced age, frequently in their 80s or older. Poor prognosis had much less effect on the practitioners’ decision making when the patients were younger. This finding highlights the need to reconcile clinical practice recommendations that are age-based<sup>19,20</sup> and those that emphasize consideration of prognosis<sup>9–11</sup> to more clearly guide practitioners on how to approach

patients who have poor long-term life expectancy across the age spectrum. There is also need for additional research to evaluate whether approaches should differ toward, for example, a 60-year-old vs an 80-year-old patient with a similar estimated long-term prognosis.

Although various validated prognostic tools to predict long-term prognosis in older adults have been developed,<sup>6</sup> our finding that none of the participants used these prognostic tools suggests that there is a gap in the uptake and implementation of these tools in primary care. To our knowledge, no study has directly compared the predictive accuracy of validated prognostic tools with that of clinical intuition, but some studies<sup>21,40–42</sup> suggest that practitioners' intuition may be inaccurate and that these tools may be helpful in clinical practice. In the present study, when prognostic tools were demonstrated (eAppendix in the Supplement),<sup>27</sup> many participants believed that these tools would be helpful in clinical practice. However, other participants raised questions regarding how to interpret the results or how to make the results relevant to clinical decisions, suggesting that education surrounding how to use the tools and how to apply prognostic information in clinical decisions is likely necessary. We find it interesting that the participants had a wide range of time frames they considered in prognostication, which, to our knowledge, is a novel finding and suggests the need to more clearly define the appropriate prognostic time frames for specific clinical decisions.

We found that the primary care practitioners at times did not verbalize their consideration of prognosis to patients and had divergent perspectives on whether prognosis should be discussed and, if so, when such discussion should occur in the health trajectory of a patient. Specifically, some participants raised the question that if prognosis was used to appropriately inform clinical decisions, whether it was necessary to discuss long-term prognosis with patients. This uncertainty is a critical area that requires additional research. Although recommendations<sup>1,4,8–11</sup> mention that practitioners should frame clinical decisions in the context of prognosis, the ideal frequency and clinical scenarios in which prognosis should be explicitly discussed is not clear. There is also no established best practice to discuss long-term prognosis. Most of the literature<sup>30–34</sup> on prognosis communication focuses on patients at the end of their lives or those with cancer. Discussing long-term prognosis in primary care settings may be different from previously studied contexts in important ways. Patients who are not at the end of life may have different expectations about when or how long-term prognosis is communicated. The current paradigm on prognosis communication, developed in patients with cancer and those at the end of their lives, involves lengthy discussions that may not be feasible in primary care visits.<sup>31–33</sup> In the absence of empirical evidence from patients to guide primary care practitioners on how to discuss long-term prognosis, we detailed some example approaches from those who were more comfortable with such discussions; these examples could be evaluated in future studies to develop best practices on how to discuss long-term prognosis.

Participants in the present study identified numerous barriers to incorporating prognosis in the primary care of older adults, several of which (eg, uncertainty in estimating prognosis and discomfort with broaching the topic of prognosis) are consistent with other studies.<sup>22,23</sup> To address these barriers and effect change, future work needs to better understand patient



perspectives and preferences in this area, improve training in this area for primary care practitioners, and reform the practice environment to provide appropriate resources and incentives for the practitioners to better incorporate long-term prognosis in clinical care.

This study has several limitations. It was conducted with participants affiliated with 1 large group practice and may not represent the experiences of primary care practitioners elsewhere. Although the participants did not have academic appointments and the Johns Hopkins Community Physicians group operates separately from the academic institution of The Johns Hopkins University, the participants' experiences may differ from those who practice in settings without any academic affiliation. We purposefully oversampled among primary care practitioners who provided care in rural settings; however, they still represented a minority among the participants. In addition, a high proportion of the participants were white. This study was not designed to be representative of all primary care practitioners, but rather to gain in-depth perspectives about a topic where little was previously known. The study design relied on self-report and the results are prone to recall and social desirability biases. We were not able to triangulate the results with independent observations or medical records reviews, but we will consider this in future studies.

## Conclusions

Older adults have significantly heterogeneous health status and health trajectories<sup>43</sup>; incorporating long-term prognosis in the care of these individuals helps to differentiate patients who have limited prognosis and inform decision making for the whole population. Despite clinical recommendations to increasingly incorporate patients' long-term prognosis in clinical decisions, primary care practitioners encounter several barriers and ambiguities in the implementation of these recommendations. Patient age is found to modulate how prognosis affects practitioners' decision making, with significant reluctance to cease aggressive preventive care in younger patients despite poor prognosis. Future studies need to more clearly define a detailed approach on how to incorporate long-term prognosis to inform care and explore patients' perspectives on when and how they would like to discuss long-term prognosis in primary care settings.

## Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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### Key Points

**Question**

How do primary care practitioners think about, incorporate, and communicate long-term prognosis in the care of older adults?

**Findings**

In this qualitative interview study, 28 primary care practitioners described several barriers and ambiguities in incorporating long-term prognosis in the care of older adults. They also varied widely in their approaches to assess and discuss prognosis.

**Meaning**

More clear guidance is needed for primary care practitioners on how to incorporate long-term prognosis to inform care and how to approach the related discussions.

**Table 1**

## Participant Characteristics

Characteristic	Value
Age, mean (SD), y	46.2 (10.3)
Female sex, No. (%)	16 (57)
Race, No. (%)	
White	21 (75)
African American	1 (4)
Asian	5 (18)
Other	1 (4)
Academic degree, No. (%)	
MD	22 (79)
DO	4 (14)
CRNP	2 (7)
Time since completing clinical training, mean (SD), y	16.0 (11.4)
Residency training, No. (%)	
Internal medicine	19 (68)
Family medicine	8 (29)
Medicine/pediatrics <sup>a</sup>	1 (4)
Clinic site, No. (%)	
Urban	10 (36)
Suburban	15 (54)
Rural/suburban <sup>b</sup>	3 (11)
No. of clinic sessions/wk, mean (SD) <sup>c</sup>	7.1 (2.1)
Proportion of older patients in patient panel, No. (%)	
<25 y	8 (29)
25–49 y	13 (46)
50–74 y	7 (25)

<sup>a</sup>Combined training program.

<sup>b</sup>The clinic served a mixture of rural and suburban populations.

<sup>c</sup>One 4-hour session per week.

**Table 2**

## Clinical Scenarios in Which Older Patients' Prognosis Is Considered

Clinical Scenario	Example
Preventive care	
Cancer screening	"I think about [prognosis] when I stop preventive measures....do I still need to do mammograms and pap smears and colonoscopies, etc."
Preventive medication	"Things like taking a statin, for example, to lower cholesterol...I'll definitely not recommend cholesterol medicine...if I feel like someone's prognosis is not as good."
Hypertension control	"I think we're thinking about what's the likelihood of this patient living for another 20 y, 30 y because better hypertension control of 30 y probably does a better thing."
Glycemic control in diabetes mellitus	"[Regarding] diabetes, [I] may not be as aggressive if someone's prognosis changes."
Osteoporosis treatment	"Someone who still may be expected to live 5 y and they have osteoporosis...the benefit if you are treated could be within a year, you might see some benefit."
Surgery	"[I] say: 'the likelihood is you're going to live for another 10 y...therefore, you should really strongly consider this [surgery] for your lifestyle.'"
Diagnostic workup of new symptom	"This woman in her 80s had a breast mass...she [had] poor life expectancy, she was already on home oxygen, heart failure, all those comorbid conditions, we could see her lungs failing, and I don't think we need to do anything about [the breast mass]."
Presence of life-limiting conditions	"[With] my dialysis patients, [I don't often say]: 'Do you know you're about to do dialysis? Do you want to go in with the fact that your likelihood of surviving 5 y on dialysis is really very, very low when you're about to start this whole arduous process?' I don't talk about it enough for my patients."
Presence of multiple comorbidities	"It's usually the patient that's had more than 2 heart attacks that still smokes and has the diabetes hemoglobin A <sub>1c</sub> I can't get below 7.0, and I think this patient might not be alive in 10 y or 5 y."
Decline in a patient's health or functional status	"If their health is deteriorating then we would be thinking about...their prognosis and how long we expect them to live."

**Table 3**

## Approaches to Assess Older Patients' Long-term Prognosis

Assessment Approach	Example
Age	"Age plays the most significant role in my idea of prognosis."
Functional status	"It's not so much their medical list but their general physical condition, that person who is unable to move around very easily, has falls, kind of frail...I'm more concerned about them than I am about the person based on what their medical history says or what their age is."
Specific diagnosis	"Cancer is the only thing, incurable cancer's the only time you have real confidence [in prognostication]."
Timeframe, y	
2	"We kind of recognize when somebody is not doing well and their chances of living for another 2 y [is not good]."
5	"[For me], 5 y is a good dividing point, if they've got a good chance of getting to 5 y then let's do [screening]."
10	"I sort of go through my mind, does this person have another 10 y?"
20	"I don't like the idea that they use the 10-year thing routinely; I think that people are looking more into the idea of 20 and 30 y."

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**Table 4**

## Attitudes Toward Discussing Older Patients' Long-term Prognosis

Attitude	Example
Whether to discuss prognosis	
Prognosis discussion is important	"I think there are probably cases where we may do a patient a disservice by waiting too long to bring [prognosis] up, because I think patients can make a more educated decision if they've been able to think through it and make a decision."
Prognosis discussion is not important	"There's also a part which is taking away their hope, so I would have to be pushed very hard, like in a situation where they were clearly going to make a wrong decision based on their feeling of prognosis, that would be the only situation where I'd be, like, we need to sit down and face facts, because until that if they feel like they're going to live for 10 y, you know, let them, let them think...I don't know that it's such a bad idea for people to feel like they're going to live."
When to discuss prognosis	
Earlier	"I think there's a huge benefit to doing it earlier; the sicker you get the less clear things are, you know, having those conversations and revisiting them often...the sooner the better."
Later	"Once they go into the hospital on a ventilator getting IVs it's easier to have that [prognosis] discussion because you can see it, if a patient just walks into my room they can't see it that they are that sick."

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**Table 5**

## Barriers to Incorporating Prognosis in the Care of Older Adults

<b>Barrier</b>	<b>Example</b>
Uncertainty in predicting long-term prognosis	"[There is] the uncertainty that no one really knows what someone's life expectancy is going to be."
Difficulty in discussing prognosis	"I think we should be talking about [prognosis] more, definitely...I think it's just really difficult to talk about."
Inadequate training	"We've not been given great training about prognosis."
Concern about patient reactions	"I'm afraid that the patients will think I'm giving up on them, like, I'm not doing everything I can."
Time constraints	"We often think [prognosis] is something we ought to talk about but if I open this conversation I'm going to get behind and I've got many more other people to see today, so I'm not going to bring it up."
Lack of value placed on prognosis in societal or health care culture	"It is kind of a stigma—we are supposed to be helping people to live a healthy life and probably not so much talking about life span."
Competing practice incentives	"There are so many things pulling primary care doctors in different ways...I need to have my 85-year-olds' A1cs below 7 to get my bonus this year...when that really doesn't help my patients long term."
Concern for litigation	"If the patient sued you or some legal thing happened we often worry about that...You could write in your note: 'I discussed with patient, reviewed prognosis indicator...it said less than this number,' but I don't know if that would protect you if something bad happened."

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