

# Promoting Patient *Phronesis*: Communication Patterns in an Online Lifestyle Program Coordinated With Primary Care

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## Abstract

*Phronesis*, or practical wisdom developed through experience, is an Aristotelian concept that can shed light on the capacities of patients to make health-related decisions and engage in healthy behaviors. In this article, the authors develop a conceptual framework for understanding the role of *phronesis* in lifestyle change as well as its relationship to patient activation, which is considered to be a critical component of the Chronic Care Model and patient education in general. The authors develop the concept of *phronesis* by analyzing qualitatively the comments made by 35 participants working to manage chronic health issues in a weight-loss study. The authors iteratively coded transcribed passages of exit interviews for *phronesis* and patient activation. These passages provide experientially grounded content for evaluating the use of *phronesis* and its development among individuals engaging in lifestyle change. *Phronesis* is expressed in 31% of participant responses to questions regarding the relationship between the online lifestyle intervention, participant health, and participant readiness to engage in productive clinical encounters with health care practitioners. Of those responses, 73% express some level of patient activation. The authors conclude that *phronesis* may be an important new tool for understanding successful self-management support, with potential usefulness in the creation of tailored lifestyle interventions, the development of patient activation, and the ability of participants to enact health-related behaviors.

## Keywords

chronic disease management, empowerment, health promotion, obesity, patient education, qualitative methods, web-based health education

Practical wisdom—or *phronesis*—is a construct that may be a useful addition to theoretical models that include patient “self-management” (e.g., Wagner et al., 2001, p. 68-69). Derived from Aristotle’s *Nicomachean Ethics*, *phronesis* is knowledge oriented to everyday practices and decision making (Aristotle, trans. 1934, VI.v.1-8, VI.vii.6-7). *Phronesis* can be understood as distinct from scientific understanding or *episteme* and less systematic and procedural than the habitual performance of professional practices or *techné* (Aristotle, trans. 1934, VI.iii.1-VI.v.8; see also, e.g., Dowie, 2000; Frank, 2004; James, Andershed, Gustavsson, & Ternstedt, 2010; Montgomery, 2009; Waring, 2000). *Phronesis* has commonly been associated with ethical decision making (Aristotle, trans. 1934; Waring, 2000); however, we believe it can further elucidate the decision-making skills of patients. As such, *phronesis* involves experiential knowledge gained through practice and tied to activities and reasoning skills that allow individuals to craft good and healthy lives

(Nussbaum, 2001). Accordingly, *phronesis* involves not only deliberative skills, including self-reflection, communication with others, and situated performance (Aristotle, trans. 1934; Hariman, 1991; Nussbaum, 2001; Schwarze, 1999; Self, 1979), but also the “embodiment” and enactment of habits (see, e.g., Chan, 2005, p. 21) that support the creation of a healthy life.

*Phronesis* has received a great deal of attention across a wide spectrum of disciplinary and practical domains. It is most familiar to clinicians in the context of “clinical judgment” or knowledge gained through the experience of practicing medicine (Beresford, 1991; Centor, 2009; Macnaughton,

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1998; Montgomery, 2006, 2009). It has undergone substantial development in philosophical and communication theory, where it plays a central role in elucidating the development of practical reasoning and decision-making skills (Dunne, 1993; Hariman, 2003; Jenicek & Hitchcock, 2005; Nussbaum, 2001; Zickmund, 2007). Furthermore, in bioethics, *phronesis* is often used to describe the application of general principles to specific clinical cases (Beresford, 1991, 1996; Davis, 1997; Jonsen & Toulmin, 1989; Macnaughton, 1998; Pellegrino & Thomasma, 1993; Tyreman, 2000; Widdershoven-Heerding, 1987). In addition, *phronesis* has become a central concept in ongoing debates about the content of medical education (Bishop & Rees, 2007; Dowie, 2000; Hilton & Slotnick, 2005; Kinghorn, 2010; Rees, 2005) and the practices used by providers to engage in patient care (Connor, 2004; James et al., 2010). Despite widespread work on patient self-care, “partnership” (Bodenheimer, Lorig, Holman, & Grumbach, 2002, p. 2469), and “collaboration” with providers in the context of chronic disease (Holman & Lorig, 2000; Lorig et al., 1999; Lorig, Sobel, Ritter, Laurent, & Hobbs, 2001; Von Korff, Gruman, Schaefer, Curry, & Wagner, 1997), *phronesis* has yet to receive much attention as a conceptual tool in patient self-management. Additionally, although some scholars have recognized patient *phronesis* as a kind of “health literacy” as well as experiential knowledge and “self-examination” (Rubinelli, Schulz, & Nakamoto, 2009, p. 309), we expand on these elements, suggesting that in the context of lifestyle change, *phronesis* is best understood as a developmental process of learning by doing.

Accordingly, there is a need to develop the concept of *phronesis* in the context of patient self-management (Rubinelli et al., 2009). We posit that *phronesis* is consistent with the Chronic Care Model’s (CCM’s) approach to promoting active patient involvement in their health care, with providers centering attention on patients’ development of knowledge and skills in the promotion of their health (McKinlay, McBain, & Gray, 2009; McKinney, 2010; Wagner, 1998; Wagner, Austin, & Von Korff, 1996; Wagner et al., 2001; Wagner et al., 2005). It is in this way that the CCM promotes “productive interactions between practice team and patients” (Wagner et al., 2001, p. 68). Combining these elements, *phronesis* addresses the gap articulated by Wagner et al. between knowledge achieved through “traditional patient education” and the “confidence and skills” required for the transformation of health behaviors and activities that contribute to chronic disease (Wagner et al., 2001, pp. 69-70; see also Norris, Engelau, & Narayan, 2001). In this way, *phronesis* may contribute to a more robust understanding of the ongoing development of the patient role in diverse implementations of the CCM (Blakeley & Dziadosz, 2008; Coleman, Austin, Brach, & Wagner, 2009; Hennessey, Suter, & Harrison, 2010; Jackson & Weinberger, 2009; Kreindler, 2009; Martin & Sturmberg, 2009).

Of course, *phronesis* and the CCM conception of the “informed, activated patient” (Wagner, 1998, p. 3) are conceptually distinct but practically related. Where *phronesis*

indicates experiential knowledge gained through practice, activation is not in itself a form of knowledge so much as the vigorous involvement of patients in their own care. This conception of activation is drawn from theoretical and clinical work that has emphasized the importance of communication and the enhancement of skills drawing on critical tools developed in patient education literature (Roter, Stashefsky-Margalit, & Rudd, 2001). In this context, activation implies preparedness and action on the part of the patient to achieve autonomously defined goals rather than reliance on health care practitioners to produce health outcomes.

Throughout the rest of this article, we develop the concept of *phronesis* and the related notion of patient activation in the context of a year-long, online lifestyle intervention. This program featured automated interactive lessons and lifestyle coaching integrated with patients’ routine primary care, making it a promising site to explore the ways that patients articulate how they build self-management skills and bolster the confidence necessary to assert active roles in their health care. *Phronesis* has not been adequately developed as a tool for understanding patient reasoning, decision making, and communication skills. For this reason, further effort in this area is warranted, given *phronesis*’ potential to elaborate key dimensions of the CCM and support the tailoring of interventions that account for the complexity of lifestyle change. This study aims to develop a richer understanding of whether, how, and why *phronesis* and patient activation are cultivated.

## Method

### Study Design

This is a qualitative study using exit interviews provided by participants in a year-long weight loss program. The University of Pittsburgh’s Institutional Review Board approved this project.

### Sample

We analyzed cross-sectional data from 50 primary care patients from a single large academic general internal medicine practice who participated in a year-long Internet-based lifestyle intervention, integrated with primary care delivery (McTigue et al., 2009). For enrollment, patients needed to have a body mass index (BMI)  $\geq 25$  kg/m<sup>2</sup>, at least one weight-related cardiovascular risk factor (diabetes, hypertension, dyslipidemia, or impaired fasting glucose), and Internet access. Referring physicians needed to feel that the program’s lifestyle goals were safe and medically appropriate. The program was adapted from the Diabetes Prevention Program’s lifestyle curriculum (Knowler et al., 2002) and included 16 weekly and 8 monthly lessons as well as behavioral tools such as email prompts for online self-monitoring of diet, physical activity and weight, and automated progress reports. The program included individualized counseling and support via electronic messaging by trained lifestyle

**Table 1.** Questions Used for This Analysis (1 of 13 Main Questions)

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What was your experience with [the lifestyle intervention] and your routine medical care?

1. Can you share with me how often you saw your physician during [the lifestyle intervention]?
2. Did the program help you to follow your doctor's advice?
3. Did you get feedback from your physician about your progress with weight change or in developing a healthier lifestyle?
4. Did [the lifestyle intervention] change the way you communicate with your physician?
  - a. If yes, and insufficient detail:
    - i. Did it change how often you discuss lifestyle?
    - ii. Did it change the quality of your lifestyle discussions?
5. Did the [lifestyle intervention] program referral and follow-up from your doctor add value to your medical care?

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coaches. Over the 1-year study period, the program successfully promoted weight loss, with program completers ( $n = 45$ ) losing 4.8 ( $SD$  8.6) kilograms (McTigue et al., 2009, p. 855). On program completion, all participants were eligible to participate in an open-ended half-hour telephone interview regarding their satisfaction with the program. E-mail invitations were sent to participants, with one reminder e-mail and two follow-up telephone calls to those who had not responded.

### Semistructured Interview

We developed and used a semistructured interview script, which was administered over the phone by a trained interviewer who was intentionally not associated with the original lifestyle intervention study. All interviews were audio taped and transcribed. The interview included 13 overarching questions about the program and program components, with predefined follow-up questions designed to encourage open-ended discussions from the participants. For this analysis, we used the final portion of the interview that was focused on the participants' experience with the lifestyle intervention and their routine primary care detailed in Table 1 (McTigue et al., 2011).

### Qualitative Coding and Data Management

The frequency of *phronesis* was determined by using an editing qualitative methodology (Miller & Crabtree, 1992). Two trained coders, including the project coordinator who had extensive knowledge of the study, developed a code for *phronesis* based on an iterative reading of the transcripts and a theoretical development of the concept. More explicitly, the code for *phronesis* was originally developed after an initial examination of the transcripts by the principal investigator (JJR) and was further refined through examining the text and discussing the concept with the other coder (TDB) and the qualitative expert (SLZ). The remaining codes

defined and discussed below were based on an open-ended reading of the text with the concepts emerging through an iterative codebook development process. In other words, although the concepts of *phronesis* and patient activation were part of the conceptual repertoire of the principal investigator (PI) prior to the study, their application and usefulness in the context of analyzing these interviews emerged through a careful reading of the transcripts. After this process, the coders independently applied the codes to all interview transcripts. The coders met regularly to discuss the definitions and decision rules for each code and then adjudicated all discrepant findings. In particular, the coders worked to create a conceptually robust code (and related subcode of patient activation) that could be applied in a consistent way. In fact, although the concept of *phronesis* entered into the discussion relatively early, the coders eventually found that patient activation might, as we note in the introduction, better express a potential secondary and critical element in achieving lifestyle change. In other words, the coders agreed that the *phronesis* code did not fully vitiate the need for the CCM concept of patient activation that sutures experiential knowledge and its expression in action to concrete steps to realize coordinated action with primary care providers (PCPs). Separate coding files completed prior to adjudication were used to calculate intercoder reliability Kappa scores.

The primary code reflects an Aristotelian conception of *phronesis* and comprised two essential elements: (a) the participant demonstrated insight into the interaction between behavior (lifestyle choices) and health and (b) that experience was facilitated by participation in the lifestyle management program. Note here that we are not so much looking to see whether the lifestyle intervention produced an outcome that is then coded as *phronesis*. Instead, we attach our concept of *phronesis* to insights that participants express in the context of the lifestyle intervention in order to explore the concept of *phronesis* as directly tied to lifestyle change. We believe this is important in that our goal is to use the lifestyle intervention and not the wider experiential resources of the participants as a conceptual laboratory for exploring and further elucidating a conception of patient *phronesis*.

When *phronesis* was present, the coders also assessed for a subcode focusing on evidence of an "activated patient" (Wagner, 1998, p. 3). Recall from our introduction that patient activation is the realization of *phronesis* in the context of the mutual interaction between patients and their primary care providers. The subcode was applied when at least one of these two elements was found: (a) the participant was better equipped for clinical/health care encounters or (b) he/she reported that some aspect of their clinical health encounters improved. Thus, the primary coding criteria allow us to investigate the movement from lack of self-knowledge and awareness to *phronesis* directly attached to the participants' experience with the lifestyle intervention. We used Atlas.ti 5.2 (Scientific Software, Berlin, Germany) for these qualitative analyses.

After we coded for *phronesis* and patient activation, we found examples of other related subthemes that provide a way to chart discrete elements of the larger codes. These subthemes are drawn from the definitional and theoretical work in our introduction as well as from the experiences expressed by the participants. The subthemes that we iteratively developed in our analysis of the coded responses displaying *phronesis* are as follows: experience, enactment, connecting health status to health behavior (connection), confidence, the development of new skills (new skills), and authority. *Authority*, the only term not used in our introduction and the original code definitions, is meant to imply control over and capacity to manage health behaviors. Our inclusion of this term as a way to capture a discrete element in the participant responses indicates the extent to which our codes and especially our thematic analysis developed out of a careful reading of the responses themselves rather than the mere imposition of theoretical constructs onto the words and ideas of the respondents. In addition, the terms that we iteratively developed in our analysis of the coded responses displaying emergent patient activation are as follows: improved communicative encounters (communication), action, preparedness, and partnership.

## Results

Fifty participants were enrolled in the lifestyle management pilot study, with three discontinuing prior to completion. Of these, 35 completed the structured interview (70% of the original sample), which lasted 20 minutes on average. The Kappa statistic for coder agreement concerning reports of improved participant *phronesis* and patient activation was 94%. Both codes were applied to the same interview questions.

### Sample Description

Respondents were primarily white, female, and well educated, although nearly a quarter reported at least some difficulty paying for basics (Table 2). Weight-related comorbidities were common. On average, respondents lost approximately 5 kg during the 1-year intervention. When we compared interview respondents ( $n = 35$ ) with interview nonrespondents ( $n = 15$ , including three who did not complete the program), there was no significant difference in terms of age, sex, race, education, the ability to pay for basics, baseline BMI, weight-related cardiovascular morbidities, or 12-month weight loss. Smoking was rare in both groups with no respondents and only two nonrespondents reporting smoking.

### Phronesis, Patient Activation, and the CCM

Here, we provide some exemplars from participant responses that allow us to investigate (a) the concept of patient *phronesis* and (b) its relationship to patient activation. Throughout, we show how the context of this lifestyle intervention created an excellent opportunity for augmenting our understanding of

**Table 2.** Description of Respondents ( $n = 35$ )<sup>a</sup>

|                                 | N (%) or Mean (SD) Among Respondents |
|---------------------------------|--------------------------------------|
| Age                             | 52.66 (10.93)                        |
| Sex                             |                                      |
| Female                          | 28 (80.0%)                           |
| Male                            | 7 (20.0%)                            |
| Race                            |                                      |
| White                           | 32 (91.4%)                           |
| Black                           | 2 (5.7%)                             |
| Other                           | 1 (2.9%)                             |
| Education                       |                                      |
| Less than college               | 10 (28.6%)                           |
| College                         | 8 (22.9%)                            |
| Graduate degree                 | 17 (48.6%)                           |
| Ability to pay for basics       |                                      |
| Not at all hard                 | 27 (77.1%)                           |
| Somewhat hard                   | 7 (20.0%)                            |
| Very hard                       | 1 (2.9%)                             |
| Baseline health                 |                                      |
| BMI                             | 36.38 (7.09)                         |
| Current smoker                  | 0 (0.0%)                             |
| Diabetes                        | 8 (22.86%)                           |
| Hypertension                    | 23 (65.7%)                           |
| Dyslipidemia                    | 23 (65.7%)                           |
| Weight change at 12 months (kg) | -5.45 (9.65)                         |

Note. BMI = body mass index. Results are reported in terms of mean (standard deviation) for continuous data and frequency (percentage) for categorical variables.

*phronesis* and the role it can play in realizing the goals of the CCM, the promotion of activation, and the cultivation of patient-provider partnership. To aid the reader, we have provided a table (Table 3) that summarizes our codes, subthemes, and several of our exemplars in order to make our analytic work more transparent and easier to follow.

**Primary code of *phronesis*.** Of the 35 participant interviews, 11 (31%) of them were coded as providing content that we use here to develop a grounded, experientially based, and clinically connected conception of *phronesis*. Throughout our analysis of these responses, we highlight examples of applied knowledge regarding the development of new skills, the relationship between weight and health in the context of participant experiences with the lifestyle intervention, and authority to take charge of health-related decision making.

In terms of new skills development, when discussing the impact of the lifestyle intervention on the ability to follow through on lifestyle changes, one man notes,

For the time that I was actively involved in the program, it was perfect for me. I was losing weight on a steady basis. . . . My lifestyle was changing. . . . I was putting into effect everything that I had learned in the program.

**Table 3.** Selected Textual Exemplars of the Phronesis and Patient Activation Codes With the Associated Subthemes and Counterexamples Illustrating Comments That Are Lacking Phronesis and Patient Activation

| Main Codes   | Subthemes  | Illustrative Examples (see additional examples in the text)   |
|--|--|---|
| Phronesis <sup>a</sup>                                 | Confidence, Enactment, Experience, New skills              | For the time that I was actively involved in the program, it was perfect for me. I was losing weight on a steady basis. . . . My lifestyle was changing. . . . I was putting into effect everything that I had learned in the program.  |
|  | Enactment, New skills                                      | One of the things that we talked about was increasing aerobic exercise. My weight did not—I think at the most at the height maybe [I] lost about eight pounds, but because of an increase in muscular [sic], my body fat went down. And my blood pressure had gotten better.  |
|  | Connection, Enactment, Experience                          | My blood sugar levels increased during that time. Could be from stress. Could be I was still eating badly. And it could be just the progression of the disease, but I might not have been so conscientious about monitoring my health if I [sic, recte wasn't] trying so hard on [the lifestyle intervention].  |
|  | Authority, Confidence, Enactment                           | I had a little more authority because I knew what I was doing and I was kind of proud of myself for the exercising part and asking her isn't that good for my age.  |
| Patient Activation <sup>b</sup>                        | Action, Communication, Confidence, Experience, Partnership | And then I did tell my doctor if it weren't for [the online lifestyle program], I wouldn't have been complaining about anything. . . . I wouldn't have been baffled. There would have been nothing to be baffled about.   |
|  | Experience, Preparedness                                   | Because I went more often and checked in, you know, knowing my regular appointments. And I did not feel like I was [sic, recte making] no effort to try to improve my situation. So I knew something had to be wrong.   |
|  | Action, Partnership, Preparedness                          | I started putting a list [sic, recte together] of everything that I wanted to discuss when I saw my physician.  |
|  | Action, Confidence, New skills, Partnership                | One respondent reports that the lifestyle intervention placed him "In a community of people whose conversation focused on the specific goals that I had initially set out to achieve, as well as gave me the kind of feedback and put me in a much more disciplined way of looking at what I was doing in terms of diet, exercise and those kinds of things."                               |
| Quotes lacking <i>phronesis</i> and patient activation | N/A  | Um, actually it was interesting because my—although I'm not sure how in depth my doctor looked at the stuff that was going on, I know that she mentioned it a couple of times that she had seen it and that she kind of looked in periodically to see what was going on with me as far as my weight and the nutritional stuff that I was putting in there and that I actually was using it. |
|  | N/A  | She was great. She was great. I mean when I went to her after I had started losing the weight, I mean she was just so encouraging and—she was great. She just is great anyhow.  |
|  | N/A  | She talked about the number of steps, walking more, and different exercises I could do based on the limitations I have, things like that. She was very pleased with the [lifestyle intervention] program.   |
|  | N/A  | Yes, because really right before I started the program, her advice had been to lose weight. And, that's where I got the information about [the lifestyle intervention].   |

Note. All exemplars are drawn from responses to queries about participants' experience with the online lifestyle intervention and their routine medical care.

a. A kind of knowledge developed through experience and applied to specific circumstances through action and communication.

b. A state and kind of action within the clinical setting that indicates the direct involvement of the individual patient in their own health care.

This respondent indicates that his involvement with the online intervention program helped him to enact (as opposed to simply learn about) healthy behavior. The key element here is enactment. As we noted in our introduction, there is a gap between adequate information delivery and the transformation needed for the promotion of health. This respondent notes a connection between experiential learning and the enactment of new skills, a critical element of our developing conception of *phronesis*.

Other participants report similar experiences all pointing to the importance of *phronesis* as a concept that captures the relationship between increased knowledge and the confidence to enact new skills and habits. For example, one respondent remarks,

One of the things that we talked about was increasing aerobic exercise. My weight did not—I think at the most at the height maybe [I] lost about eight pounds, but because of an increase in muscular [sic], my body fat went down. And my blood pressure had gotten better.

In this response, we find a sense of the connection between health behaviors and health status and, as a result, a more robust understanding of the overall management of health. When describing the implications of the lifestyle intervention in terms of following her physician's advice, another respondent suggests,

The program—I would say yes because I could follow my doctor's advice but I was just too lazy to do it.

In both comments, we find the recognition that information is insufficient. Instead, gaining knowledge about how certain kinds of exercise (e.g., "aerobic") might affect health (e.g., "blood pressure") and the extent to which following physician advice depends on additional prompts for action that allow patients to overcome inertia are expressed as primary concerns.

Other responses indicate and expand on the extent to which education about the interaction between health behaviors and other medical conditions contributed to the respondents' health-related knowledge and capacity to succeed in their efforts to enact changes. For example, one respondent comments,

My blood sugar levels increased during that time. Could be from stress. Could be I was still eating badly. And it could be just the progression of the disease, but I might not have been so conscientious about monitoring my health if I [sic, recte wasn't] trying so hard on [the lifestyle intervention].

In addition, another respondent indicates the importance of connecting health behaviors with health status, thereby

moving beyond information into the domain of actively connecting what might otherwise be disparate experiential elements:

I've become his [PCP] poster child for the hypothesis that if you lose enough weight, you no longer have to take medication for hypertension.

Another respondent reports a realization that "cholesterol" is directly connected "with the eating habits." For all of these respondents, the recognition and understanding of the relationship between lifestyle and health conditions (diabetes, hypertension, high cholesterol) is made possible by the respondent's development of a capacity to monitor their health and embody the kinds of mental and physical changes recommended by their PCPs. This capacity, as all of them point out, is directly tied to their ongoing experiences with enacting changes in their lifestyles as part of the intervention.

In addition, some respondents indicate that they developed a sense of "authority" regarding their own health by integrating information, healthy behaviors, and an experientially informed capacity to have ownership of their behavior. One respondent suggests the following:

I had a little more authority because I knew what I was doing and I was kind of proud of myself for the exercising part and asking her isn't that good for my age.

Another respondent discusses ownership in a similar way:

From the standpoint that my being able to monitor what I ate as far as the fat content. I was looking to lower my cholesterol, which I did.

Note that both respondents use "I" multiple times in their descriptions of their activities and one of them uses the term *authority*. They both express a degree of ownership over their experiences and their activities. Such authority is part of developing *phronesis* as it indicates that knowledge is being put into action and developed by the individual participant in their daily activities.

These participant responses indicate the extent to which our conception of *phronesis* can be fleshed out by iteratively encountering the reported impressions of patients engaged in lifestyle change. As a site for conceptual development, the interviews elucidate how knowledge can empower patients not only to learn about but also engage in the use of new skills, to draw lines between health behaviors and health status, and to exercise more authority over their health-related choices. Finally, all the responses indicate the extent to which these elements of *phronesis* can be fruitfully developed and described in the context of a lifestyle intervention integrated with routine primary care.

*Phronesis and patient activation.* Among the 11 participants whose comments elucidate elements of *phronesis*, 8 (73%) were coded as providing content that we use here to develop a conception of patient activation. Recall that activation takes the participant one step further along the chain of activities ranging from their own health behaviors to their partnership with their PCP. In addition, it helps amplify a key communicative element of *phronesis*: activation implies communication with and shared action through productive patient–PCP encounters. As such, the subthemes identified for *phronesis* as well as those developed for activation find purchase and analytical clarity in these responses.

Several respondents comment on their increased capacity to wield health-related information as a tool to improve their interactions with their PCPs. For example, one respondent notes,

Because of my focus on myself . . . I became aware of that medication I was taking that made you gain weight. And I was the one who said to my doctor is this true, you know, and she said yes. I don't think in the past I would have ever even known . . . it was sort of a kick in the stomach. And then I did tell my doctor if it weren't for [the online lifestyle program], I wouldn't have been complaining about anything. . . . I wouldn't have been baffled. There would have been nothing to be baffled about.

This respondent reports a positive synergy between her experiential development within the lifestyle intervention and her capacity to identify important areas of concern for her PCP, thereby improving the quality of their communicative encounter. The action she takes to understand the situation with her medication thereby enhances her role in the partnership with her PCP. Her newly honed knowledge based in experience (*phronesis*) contributes to her feeling activated in her health and ends with her ably preparing to enter the communicative domain of the clinic (on the importance of this process to patient *phronesis*, see (Rubinelli et al., 2009).

In addition, activation in terms of patient preparedness for and engagement with the topics to be covered during PCP appointments is another recurrent element. One respondent notes that due to the intervention, she is more likely to seek out and keep PCP appointments:

Because I went more often and checked in, you know, knowing my regular appointments. And I did not feel like I was [sic, recte making] no effort to try to improve my situation. So I knew something had to be wrong.

Some respondents report a higher degree of preparedness to enter the clinical setting and engage in communication with their PCP. One respondent states,

I started putting a list [sic, recte together] of everything that I wanted to discuss when I saw my physician.

Furthermore, several respondents also mention the role played by their interactions with lifestyle coaches. One respondent related the following experience:

It was good because I would say something to the coach like “is this normal?” and she would say “maybe you should check with your doctor” . . . I think . . . they were on target in saying well you know, what you're doing is healthy and if you were having other kinds of problems, you should check with your physician and tell them what you're doing. It was sort of like isolating what might be a problem with [the lifestyle intervention] versus what might be a general health problem and directing me in the right way.

Here, the lifestyle intervention provides an inventional space for posing problems and formulating questions in anticipation of future meetings with a physician. In this way, this respondent reports that being prepared to take on an active role in communicating and making decisions with her physician allows her to differentiate between her daily activities in the lifestyle intervention and “general health problem[s].”

Several respondents also note the importance of the context of the lifestyle intervention in terms of providing support to cultivate and maintain healthy lifestyles and partnership with providers. For example, one respondent reports that the lifestyle intervention placed him

in a community of people whose conversation focused on the specific goals that I had initially set out to achieve, as well as gave me the kind of feedback and put me in a much more disciplined way of looking at what I was doing in terms of diet, exercise and those kinds of things.

This response is suggestive of the relationship between *phronesis* and the patient activation subcode that we expected to see. Experiential learning (*phronesis*) provides a context for activation that moves toward more productive communicative interactions informed by newly developed skills and increasing confidence to apply such skills to daily activities.

The exemplars quoted here provide initial grist for our effort to develop the interrelated concepts of *phronesis* and patient activation. In part, each response indicates that experiential knowledge (*phronesis*) and enactment allow for a kind of activation that goes beyond the traditional model of patient decision making based primarily on the professional expertise of the physician (Rubinelli et al., 2009). Instead, the activation expressed here is what CCM, patient education, and partnership researchers and practitioners are seeking but that has not yet been fully articulated: a process of cultivating developmental experiences.

*Counter examples in our iterative reading: Participants lacking phronesis and activation.* Although many of the participants expressed elements of the above codes and subthemes, several did not. This enabled us to examine the ways in which nonphronetic discourse functioned textually. Thus, we offer several exemplars here to more fully demarcate our conceptions of *phronesis* and activation from their absence. Throughout the interviews, several respondents report on their experiences in the lifestyle intervention in ways that indicate dependence on their provider and very little development of skills, understanding of the relationship of health status and behavior, or authority over health-related decisions. For example, one respondent suggests the following:

Um, actually it was interesting because my—although I'm not sure how in depth my doctor looked at the stuff that was going on, I know that she mentioned it a couple of times that she had seen it and that she kind of looked in periodically to see what was going on with me as far as my weight and the nutritional stuff that I was putting in there and that I actually was using it.

This response primarily reports on the activities of the respondent's PCP. The respondent notes that their physician (and not the respondent) made sure the elements of the intervention were being actively used. There is no indication here of the respondent taking measures to gain authority or enact change outside the observation and monitoring of a physician. This participant might have been activated and engaged, but there is no way for us to infer these elements given that the entire comment is locked into an analysis of the activities of a physician as opposed to the participant. As such, this quotation is something of a limit case that indicates the degree to which we held the participant responses to a strict interpretation of our codes.

Likewise, and in contradistinction to the quotations that emphasize "I" in our discussion of authority, one respondent, when discussing her PCP, notes,

She was great. She was great. I mean when I went to her after I had started losing the weight, I mean she was just so encouraging and—she was great. She just is great anyhow.

The repeated reference back to a physician and lack of discussion of individually enacted lifestyle changes is suggestive of a textual lack of *phronesis*. In addition, another respondent, when asked whether the lifestyle intervention made it easier to follow PCP advice, notes,

Yes, because really right before I started the program, her advice had been to lose weight. And, that's where I got the information about [the lifestyle intervention].

Here, the physician's advice "to lose weight" is not attached to any respondent-enacted changes. Therefore, this respondent offers no specific context through which to develop or more fully understand these concepts.

In addition, several respondents report experiences that rely on a traditional, information-based notion of patient education. For example, when discussing feedback from a PCP about progress within the program, one respondent reports,

She talked about the number of steps, walking more, and different exercises I could do based on the limitations I have, things like that. She was very pleased with the [lifestyle intervention] program.

Here again, there is very little indication of the respondent doing anything active. Rather, information is being delivered and this information is being repeated to the interviewer. In all, these three examples point to the major differences between the exemplars we have highlighted in the previous sections and those not included in the *phronesis* or activation code.

## Discussion

Among primary care patients in an online lifestyle intervention to promote healthy eating, physical activity, and weight loss, 31% made connections between their experiences with the intervention and the development of a kind of experiential knowledge consistent with *phronesis*. In addition, 73% of the participants who display elements of our *phronesis* code also fit under our patient activation subcode, which includes elements of enhanced patient-provider communication and a sense that such communication could contribute to improvements in health. As such, these interviews indicate the value added by translating a concept drawn from communication theory into clinically relevant domains (Leach, 2009; Lyne, 2001; Mitchell & McTigue, 2007; Segal, 2005).

The subthemes and concepts that emerge within participant statements and our iterative development of the *phronesis* code lend insight into the implications of *phronesis* for self-management of chronic diseases. For example, the qualitative analysis of participant responses suggests that *phronesis* enhances skills necessary to make an active transition to healthier lifestyles (something seen in similar interventions; see, e.g., Allen, Iezzoni, Huang, Huang, & Leveille, 2008). Such movement to action is a critical step toward sustained health behavior change as described in the transtheoretical model (Prochaska & DiClemente, 2005). However, *phronesis* is not merely a new term for the same concept. *Phronesis* does not account for the various stages of behavior change or the kinds of individuals more likely to succeed in, for instance, losing weight. It is a construct that helps elucidate a form of knowledge held by patients that has as yet not been adequately theorized in the context of behavioral health promotion, a kind of knowledge that emerges from



experience and that fills the black box that exists between more traditional models of patient education and the enactment of change (Rubinelli et al., 2009). Likewise, *phronesis* extends beyond other related concepts such as “self-efficacy,” which focus primarily on “the exercise of human agency through people’s beliefs in their capabilities to produce desired effects by their actions” (Bandura, 1997, p. vii). *Phronesis* does not engage one’s motivational resources for action but rather the cultivation of experiential knowledge that creates synergy between health-related skills and decision making. In fact, *phronesis* adds a needed component to the design of lifestyle interventions (based on the impressions of actual patients): experience as a form of knowledge. Despite an emerging emphasis on patient-centered care, medicine has not yet found a way to fully value patient knowledge in the construction of health-related behaviors and decision making (Rubinelli et al., 2009). Thus, turning to Aristotle’s concept of *phronesis* offers hope for energizing providers who would like a new way to think about and more fully realize the pedagogical elements of the patient-provider relationship.

Accordingly, *phronesis* can contribute to clinical practice and patient self-care in a variety of ways. For example, an intervention promoting *phronesis* may improve the quality of the discussion between patients and their health care providers (Rubinelli et al., 2009). This insight is consistent with patient-provider communication research that suggests that patients must have certain reasoning and communication skills to productively interact with their caregivers (Clayman et al., 2010; Comite, Gallagher, Villagra, & Koop, 1998; T. Edgar, Noar, & Freimuth, 2008; Frantsve, & Kerns, 2007; Roter & Hall, 2006). In addition, the communicative elements of *phronesis* may be valuable because, as Wagner et al. (2001) argue, effective communication is integral to successful implementation of the CCM because chronic illnesses benefit from regularized and sustained patient-provider dialogue (see also Wagner, 1998). Furthermore, the concept of *phronesis* and its close connection to patient activation indicates that providers should not make the assumption that patients can move directly from information delivery to the enactment of lifestyle change (Bodenheimer et al., 2002). More broadly, the concept of *phronesis* contributes important insights in the effort to augment the role of patients in informed consent and health-related decision making by giving them access to knowledge and applied reasoning skills they previously lacked (Paterick, Carson, Allen, & Paterick, 2008; Whitney, McGuire, & McCullough, 2003), thus helping them on the path to becoming the “ultimate manager[s]” of their condition (Wagner, 1998, p. 3). Such skills are likely to be valuable in promoting the self-management of obesity. They involve the patient in a process that allows them to take a more empowered role in their health care (Badcott, 2005; A. Edgar, 2005; Gibson et al., 2002; Norris et al., 2001; (Rubinelli et al., 2009); Wagner et al., 2001). In addition, the ongoing development of the CCM, especially the use of technology and highly integrated practice teams (Coleman et al., 2009), will both yield and benefit from patients with enhanced self-management skills. Finally,

practitioners may benefit from the realization that their patients are able to articulate connections between their experiences and their behaviors and between their behaviors and their overall health. Although such knowledge cannot replace *episteme* (scientific knowledge) or *techne* (professional knowledge), it can augment and mutually support them in the context of the patient-provider relationship (James et al., 2010; Rubinelli et al., 2009).

### Strengths and Limitations

We do not take up the question directly in this article as to whether *phronesis* or patient activation are clear effects of the lifestyle intervention nor have we posited a connection between *phronesis* and patient activation on the one hand and actual weight loss on the other. Such a research agenda requires further study involving a larger sample size. Furthermore, the limitations of this study include a relatively small sample size, particularly for comparing subsets in the sample, as well as incomplete participation in interviews by 30% of the online program participants. However, in the emerging field of Internet-based preventive interventions, data are lacking, and our sample provides unique insight into patients’ perspectives concerning the contribution of Internet-based interventions to comprehensive medical care (McTigue et al., 2011). Additionally, although our qualitative approach introduces a subjective element into the interpretation of participants’ responses, the high Kappa score for intercoder reliability indicates that the coding procedures are highly reproducible (Landis & Koch, 1977). As such, the opportunity to learn from the participants’ own words more than balances out any tendency toward subjective interpretation of their meaning.

Moreover, the intervention was not randomized, making it difficult to attribute the observed *phronesis* to the online intervention. For this reason, our coding focuses the analysis on specific ties between the online lifestyle intervention and the conceptual development of participant *phronesis*. Although this approach provides a conservative estimate of the prevalence of patient *phronesis* in the interviews as well as the various facets of *phronesis* that iteratively emerged from the participants words, all the comments used as exemplars of our codes are specifically linked with both the intervention and with a change in participant lifestyle rather than just generalized knowledge or beliefs. Additional studies with larger cohorts may provide the right context for determining how specific elements of the online lifestyle intervention promoted patient *phronesis*.

### Conclusions

In sum, after participating in an effective lifestyle intervention, nearly a third of participants used language that displayed and made connections with our theoretical construct of *phronesis* in relation to their lifestyle choices. The classical concept of *phronesis*, drawn from ethics and communi-

cation theory, suggests that through practice and enactment, patients can make changes in their lives. Interventions that are able to support this process may offer particular salience in the prevention and treatment of behaviorally related chronic illness.

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