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Shared decision making with frail older patients: Proposed teaching framework and practice recommendations

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ABSTRACT


This study has two aims: The first aim is to identify core competencies for shared decision making (SDM) with frail older persons, and the second is to determine key elements of a teaching framework, based on the authors' recently developed model for SDM with older patients who are frail. To this end the authors conducted a qualitative inquiry among health professionals ($n = 53$) and older patients who are frail ($n = 16$). Participants formulated core competencies and educational needs for SDM with older patients who are frail, which were further explored in the literature. This resulted in practice recommendations and a teaching framework with the following key elements: create a knowledge base for all health professionals, offer practical training, facilitate communication, identify discussion partners, engage patients, and collaborate. The authors' teaching framework for SDM with older patients who are frail may be useful for clinicians, educators, and researchers who aim to promote SDM with older patients who are frail.

KEYWORDS

Shared decision making;
geriatrics education;
teaching framework

Introduction

Shared decision making (SDM) is an approach in which clinicians and patients communicate together using the best available evidence when faced with the task of making decisions. It is increasingly advocated as the preferred way to support patients in making health care choices (Charles, Gafni, & Whelan, 1997; Elwyn, Edwards, & Kinnersley, 1999; Elwyn et al., 2012; Stiggelbout, 2012). Despite its importance, research shows that the application of SDM in routine clinical practice remains limited (Couet et al., 2015). Because of the aging population, in nearly all clinical practices the number of patients with multimorbidity and impairments will increase, which complicates patient management and decision making (Ayyar, Varman, de Bhaldraithe, & Singh, 2010; Illsley & Clegg, 2016; Lacas & Rockwood, 2012). In this patient category however, existing models for SDM—that are developed for medical treatment decision making about a single condition—are difficult to apply (Gionfriddo et al., 2014; Holm, Berland, & Severinsson, 2016; Montori, Gafni, & Charles, 2006). Therefore, we recently developed—through an international Delphi consensus procedure—a model for SDM with

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older patients who are frail (van de Pol et al., 2016). Although almost all health professionals will need awareness and a basic set of competencies regarding SDM with older persons who are frail, professional education does not take this specific group into account (Frenk et al., 2010). Most peer-reviewed educational programs directed at increasing the application of SDM are implemented in clinical settings (Bieber et al., 2009; Legare et al., 2014), only a few programs exist for undergraduate students (Ledford, Seehusen, Chessman, & Shokar, 2015; Morrow, Reed, Eliassen, & Imset, 2011). These educational programs vary greatly, moreover there is little evidence about which educational programs are most effective, and which core competencies are needed to deliver SDM adequately (Legare et al., 2012, Legare et al., 2014). The application of SDM is even more complex in the care for older patients who are frail, because multimorbidities, cognitive decline, and complex care situations challenge the process (Gionfriddo et al., 2014; Holm et al., 2016; Montori et al., 2006). Moreover the most frequently used model for guiding the SDM process focuses on treatment decisions in the medical curative setting (Elwyn et al., 2012). However, in the complex care situation for older patients with multiple chronic conditions, the preferred goals for SDM are individually different and often more directed toward improving well-being than toward cure or increased survival (Fried, Tinetti, & Iannone, 2011; Morris, Sanders, Kennedy, & Rogers, 2011; Reuben, 2009; Robben, Perry, Olde Rikkert, Heinen, & Melis, 2011).

There already are many educational materials available on the topic of SDM with older patients, for example, on the portal of online geriatrics education (POGOe.org). Other websites like vitaltalk.org and jhartfound.org offer education and communication programs.

However, these programs are largely focused at disease-specific treatment decisions and end-of-life goals whereas older patients who are frail struggling with multiple chronic diseases need a broader perspective toward goals and SDM as our developed SDM model shows as well (Legare et al., 2012; Stiggelbout, Pieterse, & De Haes, 2015; van de Pol et al., 2016; Waterworth & Gott, 2010). This broader view on SDM connects with the chronic care model that is frequently used for shaping care for older patients who are frail with multiple chronic diseases (Bodenheimer, Wagner, & Grumbach, 2002; Wagner, Austin, & Von Korff, 1996).

The Royal College of Physicians and Surgeons of Canada developed a frequently used framework (Royal College of Physicians and Surgeons Canada, 2016) that identifies and describes the abilities physicians require to effectively meet the health care needs of the people they serve. In the CanMEDS-competencies SDM is considered important for all health professionals (Royal College of Physicians and Surgeons Canada, 2016), however the topic of SDM with older patients who are frail receives little attention in geriatrics undergraduate curricula (Leipzig et al., 2009; Tersmette, van Bodegom, van Heemst, Stott, & Westendorp, 2013). Assisting patients and families in making care decisions is considered important; paradoxically systematic skills training regarding SDM is lacking in geriatrics specialty training (Legare et al., 2014; Leipzig et al., 2014).

For health professionals to be able to perform SDM with this patient group adequately, it is necessary to establish a list of core competencies that are required and subsequently to develop appropriate education and training. The objectives of this study were therefore to identify the core enabling competencies for SDM with older persons who are frail, and secondly, to determine key elements of a teaching framework for SDM in this patient group.

Method

We conducted a qualitative inquiry to define core competencies and educational needs for performing SDM with older patients who are frail.

Between May 2014 and January 2015, we conducted a three-round Delphi study in which we reached consensus on a model for shared decision making in older patients who are frail (Boulkedid, Abdoul, Loustau, Sibony, & Alberti, 2011; Kleynen et al., 2013; van de Pol et al., 2016). Participants of this Delphi study were asked to reflect on the competencies needed in daily practice to perform SDM with older patients who are frail.

In Round 1 all participants were asked to formulate their general thoughts about the key issues and generic competencies needed to perform SDM adequately with older patients who are frail. In Round 2 participants were asked to formulate core competencies needed per stage of the developed SDM model. In Round 3 participants were asked to refine the core-enabling competencies they defined. Furthermore they were asked for their educational needs for these competencies and suggestions for specific teaching programs. The results were compared with existing literature on these topics.

Participants

In total 16 patients (Round 1) and 59 professionals (Rounds 1, 2, and 3) participated in the qualitative inquiry. The patient group consisted of ten persons who were elderly and home dwelling (five male, five female, age 72 ± 6) and six persons who were elderly care home dwelling (one male, five female, age 89 ± 4 years), without cognitive impairments. Professionals were health care professionals active in the field of geriatrics and care for older persons, SDM research, medical education, or a combination of these. Their characteristics are listed in Table 1.

According to Dutch legislation, no ethics committee approval is necessary for a qualitative inquiry. Participation was voluntary, participants could withdraw from the study at any time, without reason.

Table 1. Professionals' characteristics.

Professionals ($N = 53$)	
Mean age in years (SD)	47 (10)
Gender (n)	
Male	24
Female	29
Background	
Physician	45
Nurse	3
Academic	5
Present professional activity ^a	
Elderly care/geriatrics	43
Education and communication	40
Education and communication research	20
Shared decision making research	21
Geographical region in which currently active	
The Netherlands	41
Europe	8
North-America/Canada	4

a. More than one activity is possible.

Document analysis of qualitative reflections on core competencies for SDM

The results of the participants qualitative reflections were analyzed using constant comparative analysis (Glaser & Strauss, 1967). Two researchers (MvdP and YS) began by familiarizing themselves with the data. They then applied open coding in a process of breaking down, examining, and comparing the data, hereby conceptualizing and categorizing data (explorative phase). During the subsequent axial coding, data were put back together in new ways after open coding by making connections between categories. This was done with a view to defining the important elements of the information (specification phase). Subsequently, selective coding was used at the highest level of abstraction, in which the core variable guided further relevant coding, and the data were scrutinized for invalid areas (reduction phase).

The two researchers who analyzed the data discussed the initial coding and consulted a third researcher (ALJ) wherever disagreements or doubts arose about identified key issues. Finally, the supervising team discussed interpretations of the identified key issues.

Results of qualitative reflections on core competencies

Generic competencies for SDM with older patients who are frail

Patients and professionals formulated their general thoughts about the key issues and competencies needed by patients as well as physicians to support the process of SDM. Health professionals need to have adequate medical knowledge, establish a professional relationship with the use of good communication skills, show empathy and person centeredness, and apply time management skills. Patients require adequate cognitive functions and the ability to process information. Furthermore, the participating patients stressed that patients need to be actively involved and be honest about their values and wishes.

Core-enabling competencies for SDM with older patients who are frail

All professionals were asked to formulate core enabling competencies that are needed for adequate training and education on the different stages of SDM with older patients who are frail. The results are summarized in Table 2. Selected quotes on the generic and enabling competencies are presented in Table 3.

Formulated educational needs

The whole process of adequate SDM with older patients who are frail was considered difficult. The participants considered the “goal talk” stage of the SDM process as the most challenging part and specifically articulated educational needs for “engaging patient in dialogue,” “identifying discussion partner,” and “identifying patient values and goals of care.”

Engaging patient in dialogue. Participants stressed the importance of time to build a relationship with the patient and asked for practical training on how to engage and empower patients. In addition to their own educational needs, the participating professionals asked for education of patients who need to play an active role in making healthcare choices.

Identifying discussion partner. Participants asked for validated instruments and communication training on how to assess decision capacity. Participants also requested

Table 2. Core competencies for shared decision making (SDM) with older persons who are frail.

Phase	Element	Preconditions	Enabling competencies
Preparation	History	Adequate (electronic) patient record "knowing" the patient well	To keep record (of discussed advance directives)
	Problem analysis	Time (and money) Availability of relevant information	To perform and interpret geriatric assessment (comprehensive geriatric assessment (CGA) or other problem analysis method)
Goal talk	Engage patient in dialogue	Adequate (electronic) patient record Public reorientation /empowerment campaign	To collaborate interprofessional To empower and engage patients
	Identify discussion partner	"knowing" the patient well	To build a professional relationship To assess decision capacity To assess health literacy
	Identify patient values and goals of care	Mutual trust, enough time, and compassion	To elicit values and goals of care: Advanced communication and questioning skills; prepare the patient for these questions Ability to broaden (medical) scope to include well being Ability to show cultural awareness Ability to show empathy
Choice talk		Analytic skills, ability to prioritize	To summarize To engage patient
Option talk		Decision aids would be helpful	To interpret outcome measures with benefits and trade-offs To perform risk communication
Decision talk Evaluation talk		Negotiation skills Analytic skills	To reinforce engagement (avoid pressure) To discuss decision making process To make a treatment plan

practical training on how to involve family members or proxy decision makers in the process. Some participants suggested that structured discussion sessions with colleagues could help in developing dedicated communication skills for capacity assessment.

Identifying patient values and goals of care. Participants expressed the need for specific training in asking open-ended questions. They also asked for help in learning how to address well-being as a way to clarify goals of care. Several participants suggested that interdisciplinary education (i.e., nursing and medical students and staff) could be appropriate for this.

Recommendations for teaching SDM with older patients who are frail

The core-enabling competencies and the formulated educational needs demonstrate that performing SDM with older patients who are frail is a complex process that requires complex competencies; Health professionals need to have adequate medical knowledge, establish a professional relationship with the use of good communication skills, show empathy and person centeredness, and apply time management skills. We synthesized the findings from the qualitative inquiry and developed practice recommendations for SDM (Figure 1). The practice recommendations can be seen as a toolbox that can be used to practice SDM skills, and they connect to the generic and core-enabling competencies (Table 2). Furthermore we combined the results of our qualitative inquiry with existing literature on the formulated competencies and educational needs and therewith defined key elements of a teaching framework (Figure 2): create a knowledge base, train, facilitate communication, identify discussion

Table 3. Quotes on competencies for shared decision making (SDM) with older persons who are frail.

Phase	Quotes
	"The doctor must have good medical knowledge, be able to listen well and take time. The important thing is the person opposite him and the environment of this person." M, age 76, home dwelling
	"As a patient I need to be well informed so that I can communicate better with the doctor." F, age 82, elderly care home
	"The patient must have some understanding of the illness and understand the information given and the consequences. He must be able to express wishes and include all this in the decision." F, age 41, elderly care physician
Preparation	"The doctor must know the patient's history ... even better if the doctor remembers previous consultations." F, age 30, elderly care physician
Goal talk	"... identifying patient values and goals requires patients to have done some 'homework' and a culture change whereby patients expect doctors and other health professionals to take their goals and values into account!" F, age 39, geriatrician
	"... Not every 95 year old wants to die because life has lasted too long, not every 40 year old wants to fight at all costs ... that is your own frame of reference. If you can't let this go, I'm afraid this model has no effect." F, age 44, geriatrician
	"I never learnt this step (identifying goals of care) in my education, nor in a case history, it never looked further than religion. I made it my own by obtaining information from spiritual counsellors." F, age 40, elderly care physician
	"Doctors don't speak much about life vision, spirituality and culture in our context. This requires practice and feedback." M, age 54, MD educator
	"... doctors need additional training, need to learn how to 'diagnose' decisional capacity." M, age 62, geriatrician
Choice talk	"It can be challenging to associate general goals (prolongation of life, functional autonomy, visit my grandchildren, comfort, etc.) with concrete medical decisions." F, age 49, geriatrician
	"Need to educate health professionals on the variability of patient preferences and that they can't be making good decisions if they don't take patient preferences into account." F, age 55, geriatrician
Option talk	"The doctor must possess a certain degree of empathy to understand what the patient's reaction means. To involve the patient the doctor must know how to stimulate the patient. It's useful here too if the doctor already knows the patient." F, age 49, elderly care nurse
	"Getting the facts and giving them is the most critical. But it is really hard to do. Our evidence base probably informs us of about 1% of what we need to tell people. The other 99% is experience and value judgment." F, age 32, geriatrician
Decision talk	"The notion of 'participatory consent' might be valuable here, which helps to see decision making as a process rather than an event, wherever possible." F, age 32, geriatrician
	"Just to say that I am perpetually surprised by the decisions people make when given time to think with the doctor out of the room: we give them the information, but give them time to decide. I prefer to make my purchasing decisions without the shop assistant hovering around!" F, age 32, geriatrician
Evaluation talk	"Let the patient tell the result of the consultation in his own words, then there is a greater, but still small, chance that it will be retained by the patient /family." F, age 53, geriatric nurse

partner, engage patient, and collaborate interprofessional. The key elements of this teaching framework are further explained in [Table 4](#).

Discussion

Currently there is still a great need to improve access to and quality of SDM with older patients who are frail, because it receives too little attention in clinical practice and in medical education. In this study we developed recommendations for communication and a teaching framework for SDM with older patients who are frail. SDM with older patients who are frail can be seen as a dynamic and complex process. Teaching SDM core enabling competencies to trainees is a complex process. Our proposed teaching framework and practice recommendations provide a basis for developing education and propose a broader view on learning as a continuing change and transition in the learner and his or her environment; this connects with recent education evidence (van der Vleuten & Driessen, 2014).

Our care systems are increasingly being absorbed by the care of older patients who are frail, which stresses the importance of SDM and the complexity of the competencies required to



Figure 1. Practice recommendations for SDM with frail older patients.

Stage of SDM model	Specific actions	Examples
Before you start	Prepare	Have lots of conversations with older people "Know" background of your patient Think about your own goals and values Read about spirituality and the art of living
Preparation: History and problem analysis	Adequate recordkeeping To perform and interpret relevant geriatric assessment	
Goal talk: engage patient	To empower and engage patients: <i>Talk with not about the patient.</i> <i>Talk about living more and less about disease</i> <i>Provide specific instructions for patients</i>	"Every person feels different about what is important when facing a health problem, would you share with me what is important to you at the moment..." "Could you tell me something about what is important to you?" (can give examples: physical function, longevity, retaining cognitive function, freedom from symptoms, independence, etc.) "Could you tell me what you know about your current problem?" "Is your current problem stopping you from doing the things you like?" "Can you help me to take good care of you by sharing your health history?"
Goal talk: identify discussion partner	To assess decision capacity (eliciting patient values and goals of care may be helpful)	Present a "vignette" (Vellinga, Smit et al. 2004) to a patient to test his/her decision capacity "I am going to ask you some questions to discuss if you feel comfortable in having a conversation about decisions." "Would you like someone else (proxy) to support you?"
Goal talk: identify patient values and goals of care	To elicit patient values and goals of care To bridge between values and goals (advanced interpersonal and communication skills): Use concrete examples of how other patients formulated goals.	"Tell me what you liked to do before you came to the hospital" "Is religion important to you?" "What is important to you? (can give examples: physical function, longevity, retaining cognitive function, freedom from symptoms, independence, etc.)" "What are you hoping for?" "What are you afraid of?" "Let us discuss how we can help you meet your goals" "Do you ever think about the end of life? Can you say something about that?" "Let me summarize what we have discussed so far..."
Choice talk	To summarize and pause	"I can see this is difficult for you..." "What is your understanding of your problem and what would you like to achieve?"
Option talk	To describe the options with benefits and trade offs	"based on our discussion, these are the possible options..." "In your situation, here's what we expect this could look like..."
Decision talk	To reinforce engagement	"Are you ready to decide?" "Do you want more time?" "Do you have any questions?"
Evaluation talk	To discuss the decision making process (summarize and pause)	"Can you tell me in your own words what we have discussed and decided?" "Are you satisfied with the decision?"

Source: Vellinga et al. (2004).

Figure 2. Key elements of a teaching framework for educating SDM with frail older patients.

<p>Create a knowledge base Specific geriatric knowledge on and training in geriatric syndromes, comprehensive geriatric assessment and geriatric clinical problem solving</p> <p>Train Practical training sessions to acquire core competencies (Table 2) Experience-based learning and interactive case-based sessions are effective</p> <p>Facilitate communication Practice specific actions and use example questions (Box 1)</p>	<p>Identify discussion partner Specific attention is necessary to assess decision capacity Practice with assessment tools Develop clinical judgment under supervision of experienced clinician</p> <p>Engage patient Invest in relationship, create a dialogue Focus on patient, not disease Provide specific instructions</p> <p>Collaborate inter-professional Practice together with other students/professionals Improve through inter-professional training</p>
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perform SDM with older patients who are frail necessitate comprehensive education and training. Existing literature on competencies and educational needs endorsed the need for education and training, however, did not state what the best timing is (Bayliss et al., 2007; Doukas & Hardwig, 2003; Falk, Wahn, & Lidell, 2007). From research on the training of other complex competencies, such as for example communication, it is known that these can be taught in small steps in increasing complexity, however transfer of complex competencies to clinical practice remains a difficult process (van den Eertwegh, van Dulmen, van Dalen, Scherpbier, & van der Vleuten, 2013; van Weel-Baumgarten, Bolhuis, Rosenbaum, & Silverman, 2013). A possible challenge in this process of teaching complex competencies is over-reliance on a model or guideline (Hawkins et al., 2015). The complex competency of SDM with older patients who are frail requires a continuous counselling dialogue, not merely following the steps of a model. Our proposed teaching framework therefore stimulates case-based education and emphasizes the importance of building a relationship with the patient and focusing on well-being. Moreover our teaching framework addresses the importance of inter-professional learning (Curran et al., 2015).

The fact that almost all health professionals at some point will serve the health care needs of (frail) older patients, further supports our plea to start teaching the necessary competencies for SDM with older patients who are frail early on in education. This is in line with the CanMEDS recommendations to teach competencies in an increasing degree of difficulty to provide physicians with a basic competency level and to support continuing competency building during specialization and subsequent clinical practice (Royal College of Physicians and Surgeons Canada, 2016). Teaching these complex competencies calls for dedicated clinical educators and dedicated competency-based courses (McGaghie, 2015; Srinivasan et al., 2011). From the few general SDM courses available in undergraduate education it is known that young students are capable of achieving complex competencies (Ledford et al., 2015; Morrow et al., 2011). We therefore argue that teaching necessary SDM competencies should start during undergraduate education and that education and practical training should continue in subsequent clinical practice.

Table 4. Explanatory remarks key elements teaching framework for shared decision making (SDM) with older patients who are frail.

Key element	Explanatory remarks
Create a knowledge base	Many older patients have several chronic diseases, use multiple medications and are frail, which complicates patient management (Ayyar et al., 2010; Lacas & Rockwood, 2012). Knowledge of geriatric syndromes and a basic set of geriatric assessment and care competencies are therefore indispensable (Atkinson et al., 2013; Tersmette et al., 2013; Tullo, Spencer, & Allan, 2010). Geriatrics should therefore receive substantial attention throughout education. Repeated practice based geriatrics courses, appealing role models and contact with geriatric patients are helpful (Atkinson et al., 2013; Chang et al., 2014; Srinivasan et al., 2011; van de Pol, Lagro, Fluit, Lagro-Janssen, & Olde Rikkert, 2014).
Train	To acquire complex competencies, training and practice are essential (Bernacki, Block, & Care, 2014; Frenk et al., 2010; Kelley et al., 2012; Revello & Fields, 2015). Because almost all health professionals are likely to contribute to serving the healthcare needs of older patients, it is essential that training starts early in education and continues during clinical practice to consolidate competencies (Buss, Alexander, Switzer, & Arnold, 2005; Williams, Cantillon, & Cochrane, 2001). For all core competencies regarding SDM with older patients who are frail (Table 1) training is necessary, however eliciting values and goals of care are most challenging. Interactive case-based practice sessions are considered effective and should focus on initiating discussions with patients adequately, and encouraging them to discuss nonmedical goals as well (Alexander, Keitz, Sloane, & Tulsy, 2006; Bernacki et al., 2014; Kelley et al., 2012; Revello & Fields, 2015; Schonwetter, Walker, Solomon, Indurkha, & Robinson, 1996).
Facilitate communication	Communication skills training receives a considerable amount of attention during undergraduate education (van den Eertwegh et al., 2013). However, SDM with frail older patients requires advanced communication skills on topics such as goal setting and patient empowerment that do not receive much attention (Alexander et al., 2006; Bernacki et al., 2014; Cooper et al., 2016; Eubank, Geffken, Orzano, & Ricci, 2012; Kelley et al., 2012; Williams et al., 2001). Although the practice recommendations and 'prompts' in Table 5 can help structure SDM communication, training will also be necessary.
Identify discussion partner	In many geriatric patients decision capacity may be limited due to cognitive decline, emotional distress, their multiple chronic conditions or a combination of these (Vellinga, Smit, van Leeuwen, van Tilburg, & Jonker, 2004). Therefore, assessment of decision capacity in frail older patients is an important, but also a complex, competency for most health professionals. Assessment of decision capacity requires knowledge of and ability to use specific assessment tools as well as advanced communication skills and clinical judgement expertise (Moye & Marson, 2007; Rodin & Mohile, 2008; van Laarhoven, Henselmans, & De Haes, 2014; Vellinga et al., 2004). Education should focus on teaching assessment tools in combination with experience-based learning under the supervision of experienced and well trained clinicians (Moye & Marson, 2007; van Laarhoven et al., 2014; Vellinga et al., 2004).
Engage the patient	To perform SDM adequately, health professional and patient need to become active participants in the conversation. Patients need help to become engaged or empowered (Aujoulat, Marcolongo, Bonadiman, & Deccache, 2008; Dotseth, 2014; Russell, Daly, Hughes, & Hoog, 2003). Health professionals therefore need to focus on the relationship with the patient, create a dialogue and give specific instructions (Dotseth, 2014; Eubank et al., 2012). Practical training for health professionals may work, but more tailored programmes to train health professionals are necessary (Bayliss et al., 2007; Benbow, 2012; Dwamena et al., 2012; Trummer, Mueller, Nowak, Stidl, & Pelikan, 2006).
Collaborate inter-professional	The care for frail older patients is often delivered by a team of health professionals (van de Pol et al., 2015). Every professional has a specific expertise and can contribute to obtain an overview of the patient. Moreover, during daily care situations patients may share important information with different health professionals. Both participants and literature therefore stimulate collaboration and inter-professional education to improve patient outcomes (Gair & Hartery, 2001; Groene, Orrego, Sunol, Barach, & Groene, 2012).

Strengths and limitations

A major strength of this study is that we included both parties involved in SDM: patients and health professionals. The inclusion of both parties enables us to draw more solid conclusions from the inquiry. A second strength is that participants were from different countries. Another strength is that we compared our results from the

qualitative inquiry with existing literature on the defined core competencies and educational needs.

However, this study also has some methodological limitations. We only compared our results with existing literature in English and did not search educational websites (like POGe.org). Nevertheless, we were able to strengthen the results of our qualitative inquiry with literature support. Another possible limitation is that the qualitative inquiry was done in English and Dutch. However, the inquiry and the responses were translated by a native English speaker with extensive qualifications as a medical translator to preserve, as closely as possible, the nuances of the responses.

Summary and future work

This article presents a novel teaching framework and communication recommendations for SDM with older patients who are frail that may be useful to clinicians, educators, and researchers who aim to promote SDM with older patients who are frail. In view of the importance of SDM for all clinicians, teaching should start early in education and should carefully transfer skills and competencies to clinical practice.

Implementation of the proposed teaching framework for SDM with older patients who are frail and further educational development may meet several important obstacles. However, there is an urgent need for improvement of decision making in this field, as many educational materials about SDM are focused on disease specific treatment decisions, whereas SDM with older patients who are frail needs a much broader perspective, taking into account the patients' global health care goals and preferences. Further research is necessary to develop different SDM training programs for undergraduate education and clinical practice, and to evaluate what kind of education is most effective and at what time. Moreover, we need to evaluate the impact of SDM on quality of life and care of older patients who are frail.

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