Chapter 11
An Interprofessional Approach to Shared Decision Making: What it Means and Where Next

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Introduction

Given the emphasis on integrated healthcare services and engagement of patients as partners in their care, finding effective ways to involve patients in shared decision making is critical [1–3]. An interprofessional healthcare team approach is a process by which two or more professionals collaborate to provide integrated and cohesive patient care to address the needs of their population [4]. Professionals include any healthcare workers involved in patient care across the spectrum from prevention to treatment and/or rehabilitation. An interprofessional approach to shared decision making enables interprofessional teams to support patients facing decisions, meet their decisional needs, and reach healthcare choices that are agreed upon by the patient and the interprofessional team together [5, 6]. To date, shared decision making models are limited to the patient–physician dyad, yet care is increasingly planned and delivered through interprofessional teams [4, 7–12]. An interprofessional approach to shared decision making has the potential to link multiple professionals (e.g., physicians, nurses, physical therapists, psychologists) and healthcare levels with patients and their families, thereby bridging gaps and minimizing the silos that

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exist within the healthcare system. In other words, an interprofessional approach to shared decision making could improve the quality of decisions made by patients and their healthcare teams by fostering integrated healthcare services and continuity across health sectors and throughout the continuum of care [13]. This in turn could increase quality of care, reduce practice variations, and improve the fit between what patients want and what they receive throughout the life cycle [14].

Oncofertility care exemplifies the necessity and potential for interprofessional shared decision making. Oncologists, reproductive endocrinologists, nurses, and psychologists must work together in order to provide quality oncofertility care. Even if a patient does not want to engage in fertility preservation, the oncologist and his or her staff must be familiar with the topic of cancer-related infertility in order to broach the topic and provide appropriate information and referrals. In addition, several institutions have found success using midlevel providers as oncofertility "point persons" to ensure that patients receive information in a timely manner.

This chapter reviews the state of knowledge regarding an interprofessional approach to shared decision making in healthcare. It also summarizes the lessons learned from current initiatives and provides suggestions for future research and development in this area.

Do Patients Want to Be Engaged in Decision Making, and Are They?

In a systematic review of optimal matches of patient preferences about information, decision making, and interpersonal behavior, findings from 14 studies, a majority of which were conducted among cancer patients, showed that a substantial proportion of patients (26–95 %, with a median of 52 %) was dissatisfied with the information given, and preferred to have an active role in decisions concerning their health, especially when they understood the expectations around this role [15]. The same review showed that the better the match between the information desired and the information received, the better the patient outcomes [15]. Patient participation in making decisions with their health providers is also linked to favorable patient outcomes [16–18]. However, in a recently published systematic review of 33 studies which took place in nine countries and assessed the extent to which healthcare providers involve patients in decision making from a third-party perspective, the mean OPTION score was 23 ± 14 % (0 = no involvement at all to 100 % = maximum involvement) [19]. The most prevalent clinical topic was cancer screening and/or treatment. Patients across the world are thus not being actively engaged in decision making pertaining to their health, and oncology clinical settings are no exception.

What Interventions are Effective for Engaging Patients in Decision Making?

A Cochrane systematic review of 86 studies of patients making treatment or screening decisions showed that patient decision aids improve patient engagement in decision making. Of these 86 studies, 18 were focused on cancer screening, 11 on cancer surgery, 9 cancer genetic testing, and 2 chemotherapy. Furthermore, patient decision aids were found to enhance decision quality by reducing uncertainty and among patients, improving the decision process measures of feeling informed and being clear about values [20]. These programs have been found to improve the clinical decision-making process by reducing overuse of options not clearly associated with benefits for all [21] and by enhancing use of options clearly associated with benefits for the majority [22]. In other words, patient decision aids foster a shared understanding among providers and patients, which in turn is positively associated with resolution of problems and symptoms [23, 24], satisfaction with the provider [25] and the clinical encounter [26], trust in and endorsement of the provider's recommendations [27], adherence to the chosen option [28], and self-efficacy when faced with a chronic disease [29]. However, these studies are limited to the patient's perspective and that of one health provider, without consideration of family members or of an interprofessional team.

We published two systematic reviews on interventions to improve the adoption of shared decision making by healthcare providers: a Cochrane review with outcomes evaluated from a third-party perspective, and another review with outcomes reported by the patient [30, 31]. We recently updated these reviews and found 20 new eligible studies. Overall, out of the 40 identified studies, 13 showed increased use of shared decision making in clinical practice. Effective interventions included patient-mediated interventions such as patient decision aids often provided together with training of providers. Only three focused on an interprofessional approach by training two professions in shared decision making: physicians and nurses regarding end-of-life treatment care [32], diabetes management [33], and colorectal cancer screening [34]. Interestingly, these three studies were found to be positive. In summary, engaging an interprofessional team in shared decision making may make better use of the particular contributions of each professional involved, allowing them to work to the full scope of their practice, and thus making implementation of shared decision making both more effective and more sustainable.

An Interprofessional Healthcare Team Approach to Shared Decision Making

When two or more healthcare professionals collaborate with the patient to reach an agreed upon decision, interprofessional shared decision making has been achieved. Interprofessionality involves continuous interaction, open communication and

knowledge sharing, understanding of professional roles and common health goals [8, 35]. Interprofessionality also involves exploring a variety of education and care issues, all the while seeking to optimize the patient's participation. Interprofessional collaborations build on the strengths of each profession's approach to care delivery such that professionals practice within their full scope of practice and without intentional duplication of services. Theories about decision making suggest that people do not have stable and preexisting beliefs about self-interest but construct them in the process of eliciting information [36]. Therefore, the way healthcare providers as a team give information is crucial in assisting patients to construct preferences and then decide on a course of action. In others words, an interprofessional approach to shared decision making is about improving the decision-making process among healthcare teams and their patients so that decisions can lead to a choice that is not only informed by the best evidence but also in line with what patients value most.

However, constraining factors on the optimization of interprofessional collaboration in the health sector are numerous and well documented. Mainly they relate to differences in professional perspectives that arise from differing core values [37] and levels of responsibility among professions, as well as from hierarchical relations between professions [38, 39]. Moreover, in a systematic review addressing barriers and facilitators perceived by health professionals from 18 countries for implementing shared decision making in clinical practice, the vast majority of participants ($n = 3{,}231$) were physicians (89 %), i.e. there was little interprofessional perspective [40].

In oncofertility clinical practice, there are additional barriers at the organizational level that interfere with achieving an interprofessional approach. These include the different schedules of oncology (often crisis-based) and reproductive endocrinology clinics mainly consumer demand-driven [41]. Oncologists often do not have standing relationships with reproductive endocrinologists, and patients are left to themselves to find fertility-related information and care concurrent with cancer treatment planning [42, 43]. Some have called for a specific specialty of oncofertility care [44], although this would not obviate the need for interprofessional collaboration.

A Model for an Interprofessional Approach to Shared Decision Making

Since 2007, guided by the *Knowledge to Action* (KTA) framework [45], and with the overarching goal of implementing shared decision making using an interprofessional approach, an interdisciplinary and international group have devised a conceptual model to support applied research in this field [5, 6]. This model was based on an extensive review of the literature combined with theory analysis [46]. Briefly, the interprofessional shared decision making model has two main axes: a vertical axis representing the shared decision making process and a horizontal axis representing individuals involved in the process (Fig. 11.1). Elements at the micro level are

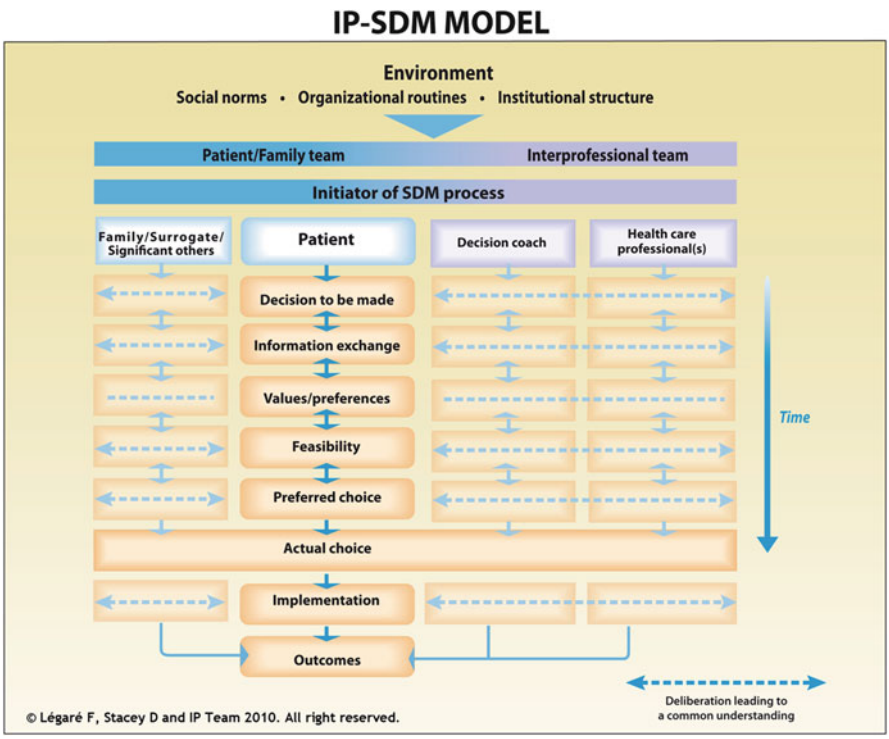

Fig. 11.1 Interprofessional shared decision making model

embedded within family and interprofessional team systems; both are situated within broader environmental influences. There are four key assumptions underlying the model. First, involving patients in the shared decision making process is essential for achieving patient-centered care and reaching decisions that are informed and based on individual patient values. Second, achieving a common understanding of the essential elements of the shared decision making process among the interprofessional team and recognizing the influence of the various individuals on this process will improve success in reaching a shared decision. Third, achieving an interprofessional approach to shared decision making may occur synchronously in the example of family conferences in the intensive care unit, but more often occurs asynchronously and therefore requires a shared framework with this common understanding. Fourth, family or significant others are important stakeholders involved or implicated by the decision and their values and preferences may not be the same as those of the patient.

We recently completed a pilot study of an interprofessional approach to shared decision making with an interprofessional home care team in Quebec City and another, in Edmonton [47]. We developed a toolkit (i.e. a training program, educations tools, and a video) to facilitate the implementation of an interprofessional approach to shared decision making and overcome barriers to implementation (See Appendix). We found that most providers had a high intention to engage in interprofessional shared decision making but depending on their profession, the barriers varied.

This model has also been applied in research projects focused on decisions about withdrawal of life support in an oncology intensive care unit and prostate cancer treatment for newly diagnosed men.

What Training Programs Are Available to Facilitate Implementing an Interprofessional Approach to Shared Decision Making in Clinical Practice?

An international scan of shared decision making training programs indicated that very few programs target interprofessional teams [48]. In fact as of February 2013, only four out of 80 shared decision making training programs targeted an interprofessional approach (http://decision.chaire.fmed.ulaval.ca/index.php?id=180&L=2#c406). Of these four, two have been published: one from Germany in a rehabilitation context [49], and one from Canada in primary care [6] that has subsequently been used to train oncology professionals.

What Are the Priorities for Future Development and Research?

More can be done to refine the preliminary work in conceptual models underlying an interprofessional approach to shared decision making. More specifically, existing models can be validated across clinical settings and cultural contexts. Very little has been achieved in the area of measurement of interprofessional approaches to shared decision making. In a recent review, we were not able to find any existing instruments to measure such an approach. Also, implementation challenges to achieving an interprofessional approach to shared decision making will need to be overcome given that different factors influence different professions. Finally, rigorous studies to evaluate the implementation of an interprofessional approach to shared decision making are required, but these types of studies will involve large numbers of a diverse range of health professionals. Furthermore both the costs and the outcome measures for such studies may be quite different from those for traditional health services research.

Conclusion

The current healthcare context in many countries reinforces the need for interprofessional teams to address the emerging challenges in providing more patient-centered healthcare. An interprofessional approach to shared decision making is needed now because the number of patients facing difficult treatment decisions and needing

patient-centered decision support is growing rapidly and clinical decision-making processes need to be improved to better involve patients and recognize their preferences. The interprofessional approach to shared decision making model provides a framework that can guide healthcare teams in making decisions with their patients. However, more research is required to determine effective ways to implement such an interprofessional approach in clinical practice. Oncology, particularly with respect to oncofertility, is no exception. Importantly, an interprofessional approach to shared decision making may prove instrumental in allowing oncofertility patients to become partners in their own care without having to search for their own speciali sts and coordinate their own care. Medical care, and cancer care in particular, is increasingly interdisciplinary. Models of shared decision making should take account of this fact and determine how to best engage patients while promoting interprofessional dialogue.

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References

1. Flynn D, Knoedler MA, Hess EP, Murad MH, Erwin PJ, Montori VM, et al. Engaging patients in health care decisions in the emergency department through shared decision-making: a systematic review. Acad Emerg Med. 2012;19(8):959–67.
2. Ricciardi L, Mostashari F, Murphy J, Daniel JG, Siminerio EP. A national action plan to support consumer engagement via e-health. Health Aff (Millwood). 2013;32(2):376–84.
3. Dentzer S. Rx for the 'blockbuster drug' of patient engagement. Health Aff (Millwood). 2013;32(2):202.
4. D'Amour D, Ferrada-Videla M, San Martin Rodriguez L, Beaulieu MD. The conceptual basis for interprofessional collaboration: core concepts and theoretical frameworks. J Interprof Care. 2005;19 Suppl 1:116–31.
5. Legare F, Stacey D, Pouliot S, Gauvin FP, Desroches S, Kryworuchko J, et al. Interprofessionalism and shared decision-making in primary care: a stepwise approach towards a new model. J Interprof Care. 2011;25(1):18–25.
6. Legare F, Stacey D, Gagnon S, Dunn S, Pluye P, Frosch D, et al. Validating a conceptual model for an inter-professional approach to shared decision making: a mixed methods study. J Eval Clin Pract. 2011;17(4):554–64.
7. Coulter A. Paternalism or partnership? Patients have grown up-and there's no going back [editorial; comment] [see comments]. BMJ. 1999;319(7212):719–20.
8. D'Amour D, Oandasan I. Interprofessionality as the field of interprofessional practice and interprofessional education: an emerging concept. J Interprof Care. 2005;19 Suppl 1:8–20.
9. Oandasan I. Teamwork and healthy workplaces: strengthening the links for deliberation and action through research and policy. Healthc Pap. 2007;7 Spec No. 98–103; discussion 9–19.
10. Oandasan I, Reeves S. Key elements of interprofessional education. Part 2: Factors, processes and outcomes. J Interprof Care. 2005;19 Suppl 1:39–48.
11. Oandasan I, Reeves S. Key elements for interprofessional education. Part 1: The learner, the educator and the learning context. J Interprof Care. 2005;19 Suppl 1:21–38.
12. Health Professions Network Nursing and Midwifery Office Within the Department of Human Resources for Health. Framework for action on interprofessional education & collaborative practice. Geneva: World Health Organization; 2010.

13. Haggerty JL, Reid RJ, Freeman GK, Starfield BH, Adair CE, McKendry R. Continuity of care: a multidisciplinary review. BMJ. 2003;327(7425):1219–21.
14. Bisognano M, Goodman E. Engaging patients and their loved ones in the ultimate conversation. Health Aff (Millwood). 2013;32(2):203–6.
15. Kiesler DJ, Auerbach SM. Optimal matches of patient preferences for information, decision-making and interpersonal behavior: evidence, models and interventions. Patient Educ Couns. 2006;61(3):319–41.
16. Carlsen B, Aakvik A. Patient involvement in clinical decision making: the effect of GP attitude on patient satisfaction. Health Expect. 2006;9(2):148–57.
17. Hack TF, Degner LF, Watson P, Sinha L. Do patients benefit from participating in medical decision making? Longitudinal follow-up of women with breast cancer. Psychooncology. 2006;15(1):9–19.
18. Hibbard JH, Greene J. What the evidence shows about patient activation: better health outcomes and care experiences; fewer data on costs. Health Aff (Millwood). 2013;32(2):207–14.
19. Couët N, Desroches S, Robitaille H, Vaillancourt H, Leblanc A, et al. Assessments of the extent to which healthcare providers involve patients in decision making: a systematic review of studies using the OPTION instrument. Health Expect. 2013 Mar 4.
20. Stacey D, Bennett CL, Barry MJ, Col NF, Eden KB, Holmes-Rovner M, et al. Decision aids for people facing health treatment or screening decisions. Cochrane Database Syst Rev. 2011(10):CD001431.
21. Evans R, Edwards A, Brett J, Bradburn M, Watson E, Austoker J, et al. Reduction in uptake of PSA tests following decision aids: systematic review of current aids and their evaluations. Patient Educ Couns. 2005;58(1):13–26.
22. O'Connor AM, Bennett C, Stacey D, Barry MJ, Col NF, Eden KB, et al. Do patient decision aids meet effectiveness criteria of the international patient decision aid standards collaboration? A systematic review and meta-analysis. Med Decis Making. 2007;27(5):554–74.
23. Starfield B, Wray C, Hess K, Gross R, Birk PS, D'Lugoff BC. The influence of patient-practitioner agreement on outcome of care. Am J Public Health. 1981;71(2):127–31.
24. Bass MJ, Buck C, Turner L, Dickie G, Pratt G, Robinson HC. The physician's actions and the outcome of illness in family practice. J Fam Pract. 1986;23(1):43–7.
25. Krupat E, Rosenkranz SL, Yeager CM, Barnard K, Putnam SM, Inui TS. The practice orientations of physicians and patients: the effect of doctor-patient congruence on satisfaction. Patient Educ Couns. 2000;39(1):49–59.
26. Fagerberg CR, Kragstrup J, Stovring H, Rasmussen NK. How well do patient and general practitioner agree about the content of consultations? Scand J Prim Health Care. 1999; 17(3):149–52.
27. Krupat E, Bell RA, Kravitz RL, Thom D, Azari R. When physicians and patients think alike: patient-centered beliefs and their impact on satisfaction and trust. J Fam Pract. 2001;50(12): 1057–62.
28. Sewitch MJ, Abrahamowicz M, Barkun A, Bitton A, Wild GE, Cohen A, et al. Patient nonadherence to medication in inflammatory bowel disease. Am J Gastroenterol. 2003;98(7): 1535–44.
29. Heisler M, Vijan S, Anderson RM, Ubel PA, Bernstein SJ, Hofer TP. When do patients and their physicians agree on diabetes treatment goals and strategies, and what difference does it make? J Gen Intern Med. 2003;18(11):893–902.
30. Legare F, Ratte S, Stacey D, Kryworuchko J, Gravel K, Graham ID, et al. Interventions for improving the adoption of shared decision making by healthcare professionals. Cochrane Database Syst Rev. 2010(5):CD006732.
31. Legare F, Turcotte S, Stacey D, Ratte S, Kryworuchko J, Graham ID. Patients' perceptions of sharing in decisions: a systematic review of interventions to enhance shared decision making in routine clinical practice. Patient. 2012;5(1):1–19.
32. Murray MA, Stacey D, Wilson KG, O'Connor AM. Skills training to support patients considering place of end-of-life care: a randomized control trial. J Palliat Care. 2010;26(2):112–21.

33. Mullan RJ, Montori VM, Shah ND, Christianson TJ, Bryant SC, Guyatt GH, et al. The diabetes mellitus medication choice decision aid: a randomized trial. Arch Intern Med. 2009; 169(17):1560–8.
34. Schroy III PC, Emmons K, Peters E, Glick JT, Robinson PA, Lydotes MA, et al. The impact of a novel computer-based decision aid on shared decision making for colorectal cancer screening: a randomized trial. Med Decis Making. 2011;31(1):93–107.
35. Xyrichis A, Ream E. Teamwork: a concept analysis. J Adv Nurs. 2008;61(2):232–41.
36. Tversky A, Kahneman D. The framing of decisions and the psychology of choice. Science. 1981;211:453–8.
37. Oddi L, Cassidy V. The message of SUPPORT: study to understand prognosis and preferences for outcomes and risks of treatment. Change is long overdue. J Prof Nurs. 1998;14(4):165–74.
38. Emanuel L. Structured deliberation to improve decision-making for the seriously ill. Hastings Cent Rep. 1995;25(6):S14–8.
39. Sundin-Huard D, Fahy K. Moral distress, advocacy and burnout: theorizing the relationships. Int J Nurs Pract. 1999;5(1):8–13.
40. Legare F, Ratte S, Gravel K, Graham ID. Barriers and facilitators to implementing shared decision-making in clinical practice: update of a systematic review of health professionals' perceptions. Patient Educ Couns. 2008;73(3):526–35.
41. Knapp CA, Quinn GP. Healthcare provider perspectives on fertility preservation for cancer patients. Cancer Treat Res. 2010;156:391–401.
42. Loren AW, Brazauskas R, Chow EJ, Gilleece M, Halter J, Jacobsohn DA, et al. Physician perceptions and practice patterns regarding fertility preservation in hematopoietic cell transplant recipients. Bone Marrow Transplant. 2013 July 17.
43. Vadaparampil S, Quinn G, King L, Wilson C, Nieder M. Barriers to fertility preservation among pediatric oncologists. Patient Educ Couns. 2008;72(3):402–10.
44. Kondapalli LA. Oncofertility: a new medical discipline and the emerging scholar. Cancer Treat Res. 2007;138:221–34.
45. Graham ID, Logan J, Harrison MB, Straus SE, Tetroe J, Caswell W, et al. Lost in knowledge translation: time for a map? J Contin Educ Health Prof. 2006;26(1):13–24.
46. Stacey D, Legare F, Pouliot S, Kryworuchko J, Dunn S. Shared decision making models to inform an interprofessional perspective on decision making: a theory analysis. Patient Educ Couns. 2010;80(2):164–72.
47. Legare F, Stacey D, Briere N, Fraser K, Desroches S, Dumont S, et al. Healthcare providers' intentions to engage in an interprofessional approach to shared decision-making in home care programs: a mixed methods study. J Interprof Care. 2013;27(3):214–22.
48. Legare F, Politi MC, Drolet R, Desroches S, Stacey D, Bekker H. Training health professionals in shared decision-making: an international environmental scan. Patient Educ Couns. 2012 Feb 1.
49. Korner M, Ehrhardt H, Steger AK, Bengel J. Interprofessional SDM train-the-trainer program "Fit for SDM": provider satisfaction and impact on participation. Patient Educ Couns. 2012 May 28.