

# Purposeful SDM—A Schema of Shared Decision Making Problems and Purposes

Ian Hargraves Ph.D.<sup>1</sup>, Victor Montori, M.D. MSc<sup>1,2</sup>., Juan Brito M.D. MSc.<sup>1,2</sup>, Marleen Kunneman Ph.D.<sup>1,8</sup>, Kevin Shaw BSc.<sup>1</sup>, Christina LaVecchia Ph.D.<sup>1</sup>, Michael Wilson M.D.<sup>1,3,4,7</sup>., Laura Walker M.D.<sup>5</sup>, Bjorg Thorsteinsdottir M.D.<sup>1,3,6,7</sup>.

<sup>1</sup>KER Unit, <sup>2</sup>Division of Endocrinology, Diabetes and Nutrition; <sup>3</sup>Kern Center for The Science of Health Care Delivery; <sup>4</sup>Division of Pulmonology and Critical Care; <sup>5</sup>Department of Emergency Medicine; <sup>6</sup>Division of Community Internal Medicine; <sup>7</sup>Program in Bioethics **Mayo Clinic, Rochester, Minnesota.** <sup>8</sup>Department of Biomedical Data Sciences **Leiden University Medical Center, Leiden, The Netherlands**



## Concept and Methods of SDM Grounded in Problems

**Background:** There are many instances in everyday clinical care where patients and clinicians need to and are making decisions together. Arguably, these are all instances of shared decision making (SDM). These SDM conversations range from fairly straightforward discussions of which intervention is most preferred by the patient (e.g. birth control or antidepressants) to end of life, or gender confirmation discussions. The difference between these decisions is not only in diagnosis, clinical urgency, participants, roles, involvement, knowledge asymmetries and options. **These decisions vary by the humanly experienced problem that makes decision making necessary, what kind of resolution decision making needs to provide, and consequently by how decision-making proceeds.** For example, it may be appropriate to decide on an antidepressant by weighing the pros and cons of the options, yet using a weighing approach in gender confirmation decisions may be highly inappropriate as gender identity is not a matter of pros, cons or preference.

**Purposeful SDM:** We developed an initial **schema of kinds of situations** in which patients, caregivers, and clinicians need to and are making decisions together; appropriate **methods** of SDM; and the **purposes** that they pursue. [Table 1] Purposeful SDM is informed by the work of the philosopher Richard McKeon<sup>1</sup> and the design studies theorists Richard Buchanan<sup>2</sup> and Ian Hargraves<sup>3</sup>.

**An Alternative Conceptual Beginning for SDM: Involvement Logic** The dominant premise of SDM from its inception to the current day is that SDM is a response to the need to **involve** patients in decision making. The focus on patient involvement naturally leads to a concern for matters such as the roles of patients and clinicians involved in decision making, patient power and knowledge, engaging patients in discussing options, communitive techniques for supporting involvement etc. The involvement focus is also reflected in evaluating SDM<sup>4</sup>. Focused on involvement in deliberation, deliberation itself

becomes an important but secondary matter e.g.<sup>5</sup>. Recently, unease about the conceptual beginnings of SDM has been expressed e.g.<sup>6</sup>.

**Problem|Purpose Logic** Purposeful SDM's premise is that medical decision making, including SDM, arises from the need to act well in response to particular patient problems Just as the involvement logic leads to a concern for how patients are involved, the **problem|purpose** logic [Figure 1] naturally leads to a concern for how appropriate action is formed in response to **problems** i.e. methods and purposes of deliberation. Conceptually and methodologically, Purposeful SDM takes the position that questions of how communication should be employed; deliberation happens, in pursuit of which purpose and guided by which values, are each answered through attending to the particularity of a patient's problems rather than established a priori or normatively.

**Conclusion:** Purposeful SDM offers a complimentary theoretical and methodological approach to SDM. It's applicability to diverse care situations warrants further research. Further development of Purposeful SDM may help address adoption challenges as it positions SDM as part of the everyday work that clinicians need to and are doing with patients.

1. McKeon R. Philosophic Semantics and Philosophic Inquiry. In: McKeon Z, editor. Freedom and History and Other Essays : An Introduction to the Thought of Richard McKeon, 1990.
2. Buchanan R. Strategies of Design Research: Productive Science and Rhetorical Inquiry. In: Michel R, editor. Design Research Now: Essays and Selected Projects.
3. Hargraves I. People Matter: Care in Design and Healthcare. Manuscript Carnegie Mellon University. 2012.
4. Gärtner FR, Bomhof-Roordink H, Smith IP, Scholl I, Stiggelbout AM, Pieterse AH. The quality of instruments to assess the process of shared decision making: A systematic review. PloS One. 2018
5. Elwyn G, Durand MA, Song J, Aarts J, Barr PJ, Berger Z, et al. A three-talk model for shared decision making: multistage consultation process. BMJ. 2017
6. Gerwing J, Gulbrandsen P. Contextualizing decisions: Stepping out of the SDM track. Patient Education and Counseling. 2019

Different modes of SDM are required for different purposes in order to act well in response to different patient problems

While it may be appropriate to decide on an antidepressant by weighing the pros and cons of options, involving patients in a weighing approach for gender confirmation decisions may be highly inappropriate as gender identity is not a matter of pros, cons or preferences

Example of situations and problems where patients and clinicians need to and are making decisions together	SDM Purpose: To resolve	SDM Method	SDM Method focused on	Kind of Situation
Rachel, a newly married 24 year-old-woman is dissatisfied with her current birth control. She has a conversation with her primary care clinician about the pros and cons of other methods of contraception.	Which alternative is best?	Weighing	<b>Alternatives</b>	It is uncertain what the harmful and beneficial <b>outcomes of alternative interventions</b> will be for a patient and their <b>preferences</b>
Two years later Rachel and her husband decide to start a family. In the third trimester of pregnancy, Rachel talks with her obstetrician. Rachel comes from a country where 90% of births are via C-section but she is interested in vaginal delivery. Rachel is conflicted. Rachel and her doctor talk to help Rachel understand what she wants.	What do we want, and can agree on?	Agreement / negotiation	<b>People Choosing &amp; Agreeing</b>	Personal or professional <b>concerns, interests, or agenda</b> are ambiguous or in conflict between or within parties
Ten days after delivery, Rachel is admitted to the ICU with sepsis. Rachel, her clinicians, and family discuss how to manage her care, how to care for the breast-fed baby, and how often someone from the family should be with Rachel.	How do we manage and resolve the current situation?	Inquiry / problem solving	<b>Problematic Situation</b>	The <b>problematic human situation</b> and what to do about it is <b>intellectually, practically, and emotionally</b> fraught
Three weeks later, Rachel is unresponsive and on life support. Her parents and husband argue about what Rachel would want and how to care for the baby.	What ultimately matters?	Insight gathering	<b>Humanity</b>	The <b>humanity</b> of an individual or community is compromised or in existential transition

Table 1 Modes of SDM by Situational Problems

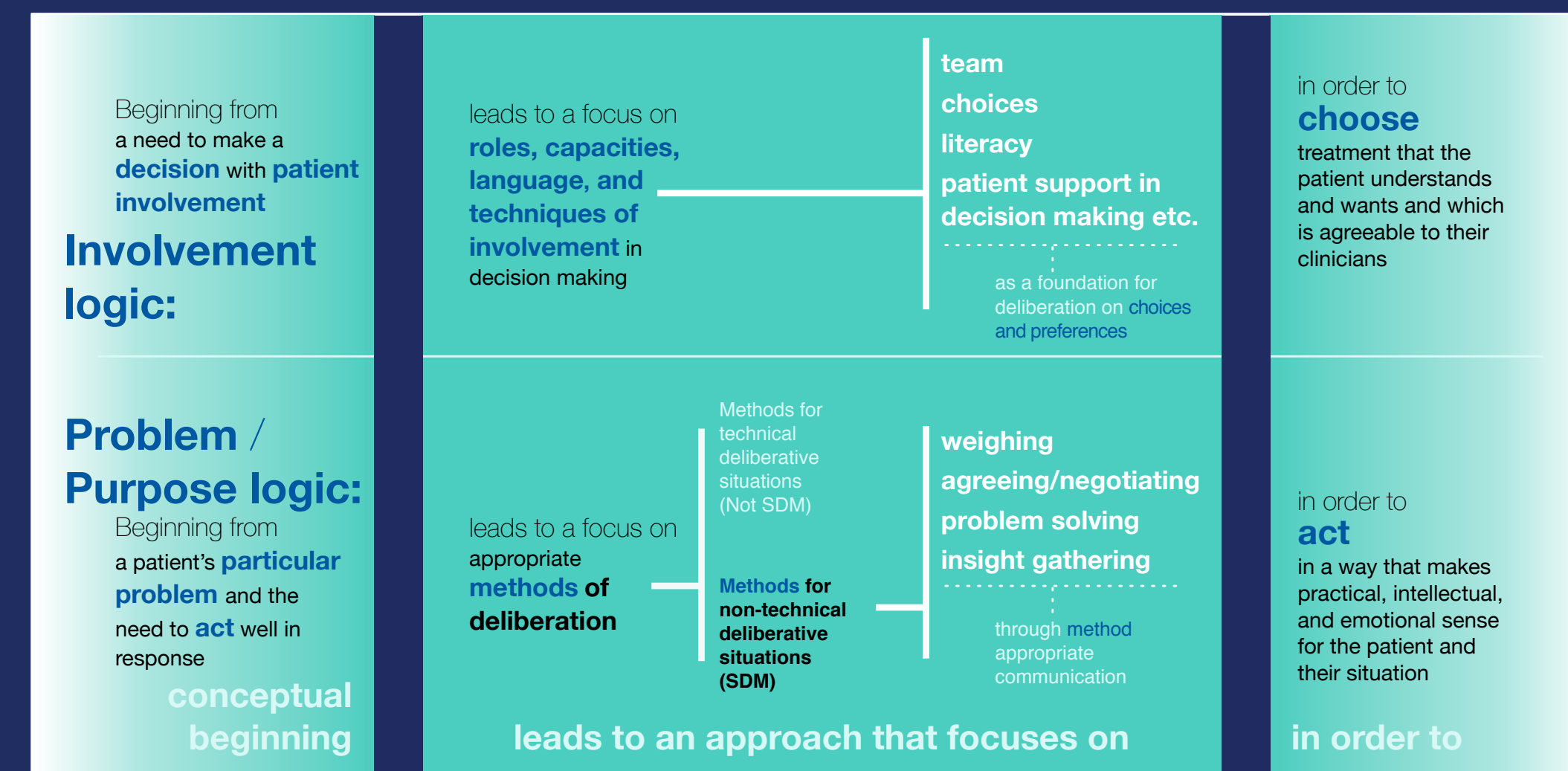


Figure 1 Contrasting Conceptualizations of SDM Based on Patient Involvement and Patient Problems