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8 **Key components of effective collaborative goal setting in the chronic care encounter**9
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13
14 **Abstract**

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17 *Collaborative goal setting in patient–provider*
18 *communication with chronic patients is the*
19 *phase in which – after collecting the data re-*
20 *garding the patient’s health – it is necessary*
21 *to make a decision regarding the best therapy*
22 *and behaviors the patient should adopt until*
23 *the next encounter. Although it is considered a*
24 *pivotal phase of shared decision-making, there*
25 *remain a few open questions regarding its com-*
26 *ponents and its efficacy: What are the factors*
27 *that improve or impede agreement on treatment*
28 *goals and strategies?; What are the ‘success con-*
29 *ditions’ of collaborative goal setting?; How can*
30 *physicians effectively help patients make their*
31 *preferences explicit and then co-construct with*
32 *them informed preferences to help them reach*
33 *their therapeutic goals? Using the theoretical*
34 *framework of dialogue types, an approach de-*
35 *veloped in the field of Argumentation Theory, it*
36 *will be possible to formulate hypotheses on the*
37 *‘success conditions’ and effects on patient com-*
38 *mitment of collaborative goal setting.*

39
40 *Keywords: argumentation schemes; chronic care;*
41 *decision-making; deliberation dialogue; doctor–*
42 *patient communication; presumptive reasoning*

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45 **1. Introduction**

46
47 Focusing on the process of collaborative goal
48 setting, considered to be a crucial part of shared
49 decision-making in the medical encounter,

in this contribution I will propose a theoreti-
cal and interdisciplinary perspective aimed at
answering some of the questions that are still
open regarding the relationship between com-
munication styles between doctors and patients
and outcomes. As Street (2013) points out, it
is important that observations regarding com-
munication in the medical setting are set within
a clear theoretical background, and that the
assumptions and implications that derive from
the theory are also explained.

In particular, some of the existing models on
decision-making in the medical encounter – for
example, the shared decision-making model
outlined by Charles *et al.* (1997, 1999) and that
describing the formation and development of
patient preferences in Street *et al.* (2012) – have
reached a very advanced level of descriptive
power, but still lack the capacity to explain *why*
certain features are more preferable than others.
Such capacity could be achieved by integrating
these existing models with more complex models
of communication, which will make it possible
to explain the complexity of dialogical interac-
tions and instances of ‘pragmatic ambiguity’; i.e.
cases in which it is hard to define what kind of
communicative ‘actions’ the interlocutors are
performing (Charles *et al.* 1997: 689).

Various complex models of this kind are
available in the fields of Pragmatics and of Argu-
mentation Theory, offering the opportunity for
a fruitful interdisciplinary merging of research
questions and theoretical approaches. In particu-
lar, in this contribution I will propose adapting
an abstract model developed within the field of

1 Argumentation Theory – the model of delibera-
 2 tion dialogue (Walton and Krabbe 1995; Walton
 3 2006; Walton *et al.* 2010; Walton 2010; Walton
 4 *et al.* 2014) – for the description and understand-
 5 ing of the dialogical components of the process of
 6 collaborative goal setting in the chronic care con-
 7 sultation. This will make it possible to identify
 8 its ‘success conditions’ and formulate hypotheses
 9 on which of its components are more likely to
 10 impact positively on patient commitment, thus
 11 fostering adherence to healthy lifestyles.

12 The paper is structured as follows: in Sec-
 13 tions 1 and 2 I discuss the main literature on
 14 the process of shared decision-making in the
 15 medical encounter, suggesting that collaborative
 16 goal setting should be considered as a part of
 17 this process – which, however, leaves a few open
 18 questions. In order to provide answers to these
 19 questions, in Section 3 I introduce the delibera-
 20 tion dialogue model, along with its characteristic
 21 features. In Sections 4 and 5, I discuss two crucial
 22 features of deliberation which both play a role
 23 in collaborative goal setting: the speech act of
 24 ‘proposal’ as a key to understanding the success
 25 conditions of collaboratively setting goals, and
 26 the challenge posed by preferences and values for
 27 practical reasoning in the chronic care encoun-
 28 ter. The final section is devoted to discussion and
 29 implications for further research.

32 2. Making decisions cooperatively in the 33 medical encounter

35 In the rich literature on effective consultation
 36 and communication in the medical encounter
 37 (among many others: Street *et al.* 1993; Coup-
 38 land *et al.* 1994; Beach and Dixson 2001; Roter
 39 and Hall 2006; Heritage *et al.* 2007; Labrie 2012;
 40 Pilgram 2012), a topic that stands out is that of
 41 decision-making, with its corollary of how to
 42 improve patient adherence to treatment and to
 43 healthy behaviors. These are aims that are par-
 44 ticularly relevant in chronic care (among others:
 45 Charles *et al.* 1997, 1999; Elwyn *et al.* 2000, 2012;
 46 Emmons and Rollnick 2001; Entwistle *et al.* 2004;
 47 Taylor 2009; Politi and Street 2011; Epstein and
 48 Street 2011; Street *et al.* 2012).

Albeit having sometimes a high descriptive
 strength, none of these models and approaches
 are able to explain *why* certain communication
 styles impact positively on patient satisfaction or
 outcomes. Paradigms such as the paternalistic
 model, informed decision-making model, and
 the professional-as-agent model (described in
 Charles *et al.* 1997) all assume an ‘information-
 plus-choice’ pattern for the realization of
 decision-making, in which decisions seem to
 ‘flow’ directly from the information the patient
 receives. However, for this to be true, we would
 have to assume that patients and physicians
 share the same criteria for the interpretation of
 information, but this does not seem to be always
 the case (Charles *et al.* 1997: 688; Epstein and
 Street 2011: 458; Elwyn *et al.* 2012). Moreover,
 these models are often only aimed at providing
 practical indications on how to realize certain
 communication styles, such as a successful
 shared decision-making (for example, Elwyn *et al.*
 2012). The fact of not being based on a theory
 of dialogue, however, weakens their potential
 for improving clinical practice, because they are
 not able to provide more general criteria and
 explanations for how things should happen in a
 certain way.

3. Collaborative goal setting as part of the process of shared decision-making

A ‘sub-category’ of the studies on decision-
 making focuses in particular on collaborative
 goal setting, a term more specifically referring
 to the discussion that arises between patient
 and physician, when – after collecting the data
 regarding the patient’s health – it is necessary to
 make a decision regarding the best therapy and/
 or behaviors the patient should adopt until the
 next encounter. In this sense, collaborative goal
 setting is the part of the decision-making process
 taking place in a medical encounter (typically, in
 a collaborative one; see Politi and Street 2011:
 580), in which preferences emerge or are co-
 constructed (Street *et al.* 2012). Another feature
 that distinguishes shared decision-making and
 collaborative goal setting (and the main reason

1 for choosing to address the latter rather than
 2 the former in the present article) is that ‘shared
 3 decision-making’ is often used as a term referring
 4 to a specific paradigm of patient–physician com-
 5 munication. My interest in this contribution is to
 6 consider a dialogical process rather than a model;
 7 moreover, I am interested in decision-making
 8 regarding behavior change, and the concept of
 9 ‘collaborative goal setting’ seems both appropri-
 10 ate and intuitive enough to be used without fear
 11 of misunderstandings.

12 Collaboratively setting goals is seen to feature
 13 among the strategies that build self-management
 14 support, together with assessment, action plan-
 15 ning, problem-solving, and follow-up (Langford
 16 *et al.* 2007: 140S). Self-management support, in
 17 turn, is one of six key components in the Chronic
 18 Care Model, an approach presented as a way of
 19 improving chronic care delivery (Wagner 1998).
 20 Albeit having been acknowledged as a crucial
 21 phase, there remain a few open questions regard-
 22 ing its components and its efficacy: What are
 23 the factors that improve or impede agreement
 24 on treatment goals and strategies (Heisler *et al.*
 25 2003)?; What are the ‘success conditions’ of col-
 26 laborative goal setting (Lafata *et al.* 2013)?; How
 27 can physicians effectively help patients make
 28 their preferences explicit and then co-construct
 29 with them informed preferences to help them
 30 reach their therapeutic goals (Epstein and Gram-
 31 ling 2013)?

33 **3.1. What do we know about collaborative** 34 **goal setting in chronic care?**

35 The literature addressing the features of commu-
 36 nication in the chronic care medical encounter
 37 stresses the importance of proactive, participa-
 38 tory patient–provider communication (Naik *et al.*
 39 2008), providing evidence to show that active
 40 patient participation increases health outcomes
 41 (Lafata *et al.* 2013). Indeed, studies in diabetes
 42 care settings have shown negative correlations
 43 between exertive or dominant communicative
 44 behaviors on the part of physicians and out-
 45 comes such as patients’ satisfaction, adherence,
 46 and health (Street *et al.* 1993). Indeed, effective
 47 chronic care happens when self-patient care
 48 and medical care are combined and attuned,
 49

which can only be achieved when there is good
 collaboration between physicians, on the one
 hand, and patients and their families, on the
 other (von Korff *et al.* 1997). Good patient–
 provider collaboration, in turn, is constructed
 and realized during the encounter and by means
 of communication.

Studies suggest that the most relevant
 moments in the process of constructing effec-
 tive patient–provider collaboration are the
 collaborative definition of problems, targeting,
 goal setting, and planning (von Korff *et al.* 1997;
 Heisler *et al.* 2002). However, it is not clear how
 patient–provider communication styles impact
 positively on patient outcomes. In particular, it
 remains to be understood which aspects inher-
 ent in shared decision-making are most effective
 in promoting patient self-management. There is
 evidence to show that patient self-efficacy – i.e.
 patients’ understanding of their condition and
 treatment, and patients’ self-confidence in their
 own self-care abilities – is positively related to
 treatment adherence (Heisler *et al.* 2002). So,
 do collaborative communication styles impact
 directly on the self-management abilities, or via
 self-efficacy? Provisional results suggest that the
 provision of information is an important part
 of this process (Heisler *et al.* 2002), but others
 stress the fact that information alone cannot
 be sufficient to foster the necessary motivation
 for patients to maintain long-term treatment
 adherence (Epstein and Gramling 2013). Heisler
et al. (2003) show that patients who shared in
 treatment decision-making and discussed the
 relevant content areas with their physicians were
 more likely to display agreement with the physi-
 cians, something which is positively correlated
 with health outcomes.

However, it is not clear what the factors are
 that favor or impede patient–provider agreement
 on treatment goals and strategies. Shared goal
 setting has also been found to improve patients’
 perceptions of ownership and accountability,
 which are key components in effective diabetes
 self-management (Langford *et al.* 2007). Other
 studies agree on the fact that patients involved in
 collaborative goal setting reported a higher per-
 ception of self-management competence and of
 having a trusting relationship with their physician

(Naik *et al.* 2008; Lafata *et al.* 2013). However, it also looks like collaborative goal setting is not equally beneficial under certain conditions: if, for example, the communication exchanges do not facilitate a positive patient–clinician rapport or patients’ confidence to achieve any goals set during the exchange (Lafata *et al.* 2013).

Addressing more specifically the components of decision-making, Epstein and Gramling (2013) highlight the crucial role of preferences, ‘statements by individuals regarding the relative desirability of a range of health experiences, treatment options and health states’ (Brennan and Strombom 1998: 259, cited in Epstein and Gramling 2013), which in the clinical practice are often contextual, conditional, and provisional.

To sum up the findings and insights regarding collaborative goal setting: it is a process that involves providing information and making shared decisions; evidence shows that it correlates positively with patient self-management, treatment adherence, and trust in the patient–provider relationship; and its effectiveness is tightly bound with the parties’ ability to construct a shared set of preferences, which will support shared decisions, provide motivation, and favor rapport building. Based on this summary, the ‘pathways’ from communication

styles to patient outcomes in the chronic care encounter are mapped out in Figure 1, where the elements to the left of the arrows are considered to be the best conditions for the elements to the right of the arrows to come about.

However, the arrows – it can be said – hide the inner dialogical and behavioral mechanisms that lead from one box to the next. Awareness of these would make it possible to map out the inherent elements that build the process of collaborative goal setting within decision-making. This would lead to a better understanding of the factors that favor agreement between physicians and their patients (Heisler *et al.* 2003). It would also make it possible to highlight the conditions under which collaborative goal setting is beneficial (Lafata *et al.* 2013). Finally, we would be able to answer the question of how to manage implicit preferences in the process of decision-making during the medical encounter (Epstein and Gramling 2013).

In the following sections, I propose to use the model of deliberation dialogue (Walton and Krabbe 1995; Walton 2006; Walton *et al.* 2010; Walton 2010; Walton *et al.* 2014) as a tool to uncover the inner mechanisms involved in the process of collaboratively setting goals during the chronic care medical encounter.

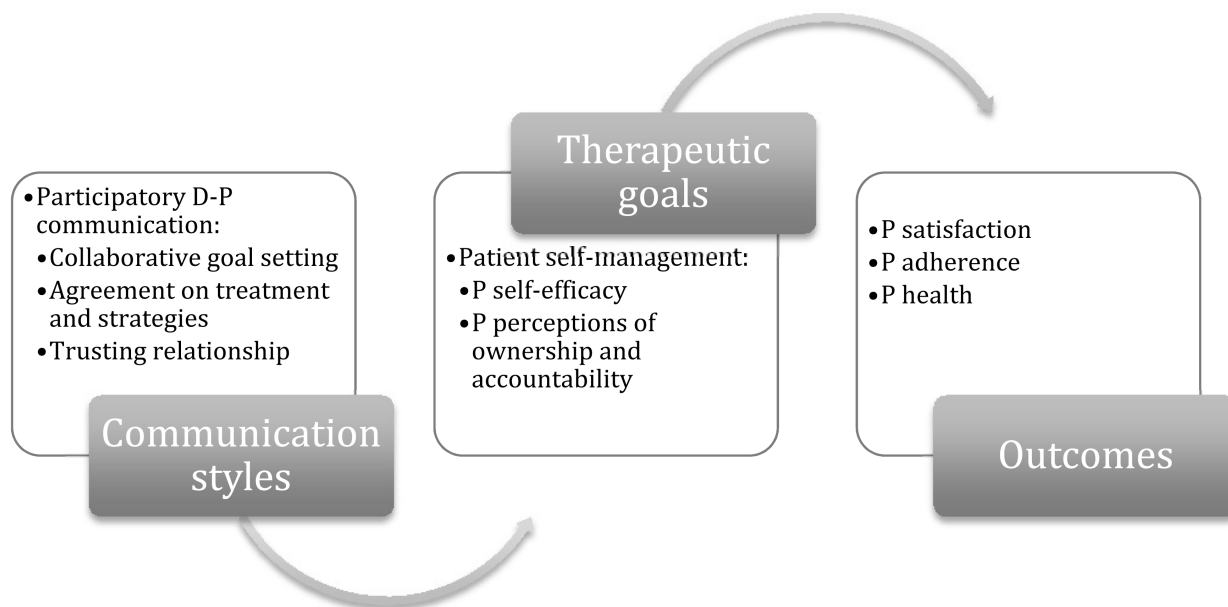


Figure 1. ‘Pathways’ from communication styles to patient outcomes

1 **4. Dialogue types and the deliberation**
 2 **dialogue**

3
 4 The deliberation dialogue is one of seven basic
 5 types of dialogue, described by Walton and
 6 Krabbe (1995). Dialogue types are ideal models
 7 of different kinds of interaction (McBurney *et al.* 2007) and have been outlined by looking at
 8 different dialogical contexts – i.e. by consider-
 9 ing the different aims that people have when
 10 they interact in different situations (Walton and
 11 Krabbe 1995). Figure 2 represents the types of
 12 dialogue as described in McBurney //check//
 13 and Parsons (2001):

14
 15 Each dialogue type has specific rules for the
 16 management of commitments and often, within
 17 longer sequences, dialogues shift from one type
 18 to another.

19
 20 **4.1. Deliberation dialogues and their**
 21 **characteristic features**

22
 23 Deliberation dialogues are abstract patterns
 24 that outline the most effective dialogical moves
 25 aimed at finding an acceptable course of action
 26 to achieve a certain goal (Walton and Krabbe
 27 1995; Walton *et al.* 2010; Walton 2010).¹ Parties
 28 in deliberation dialogues are out to reach a *col-*
 29 *lective* goal, which can be contrary to or differ-
 30 ent from the individuals’ personal goals; in the
 31 medical encounter, the patient’s health can be
 32 construed as a collective goal because it is the
 33 only reason for physician and patient to come
 34 together in the interaction field of the hospital
 35 or out-patient clinic (Bigi 2012).

Deliberation dialogues result from the combination of the information-seeking dialogue and the persuasion dialogue: on the one hand, the development of the deliberation dialogue involves the ability of the participants to share information that is relevant in view of the collective goal and to adapt to new information (Walton *et al.* 2014). On the other hand, however, the core feature of deliberation dialogues is the discussion of the proposals that are put forward by each of the participants in the dialogue, who may also decide to support or criticize the proposals by putting forward arguments in favor or against them. This is the crucial point in which the deliberation and persuasion dialogues are combined and work together towards the definition of the best course of action in the given circumstances; indeed, it is often the case that, in view of new information introduced by any one of the participants, the proposal accepted in the end is very different from the ones put forward at the beginning (Walton 2006).

Deliberation dialogues develop in three stages: the opening stage, the argumentation stage, and the closing stage. In the case of the medical consultation, these stages correspond to the process of shared decision-making. The opening stage is where the parties share information and preferences and formulate the governing question (McBurney *et al.* 2007) – i.e., the question regarding the actions to take. In the argumentation stage, proposals are put forward and possibly changed if new information comes in, modifying the initial scenario. At this stage, parties may want to argue in favor of or against

TYPE OF DIALOGUE	INITIAL SITUATION	PARTICIPANT’S GOAL	GOAL OF DIALOGUE
<i>Persuasion</i>	Conflict of opinions	Persuade other Party	Resolve or clarify issue
<i>Inquiry</i>	Need to have proof	Find and verify evidence	Prove (disprove) hypothesis
<i>Discovery</i>	Need to find an explanation of facts	Find and defend a suitable hypothesis	Choose best hypothesis for testing
<i>Negotiation</i>	Conflict of interests	Get what you most want	Reasonable settlement both can live with
<i>Information-Seeking</i>	Need information	Acquire or give information	Exchange information
<i>Deliberation</i>	Dilemma or practical choice	Co-ordinate goals and actions	Decide best available course of action
<i>Eristic</i>	Personal conflict	Verbally hit out at opponent	Reveal deeper basis of conflict

48
 49 Figure 2. *The seven basic dialogue types (McBurney and Parsons 2001)*

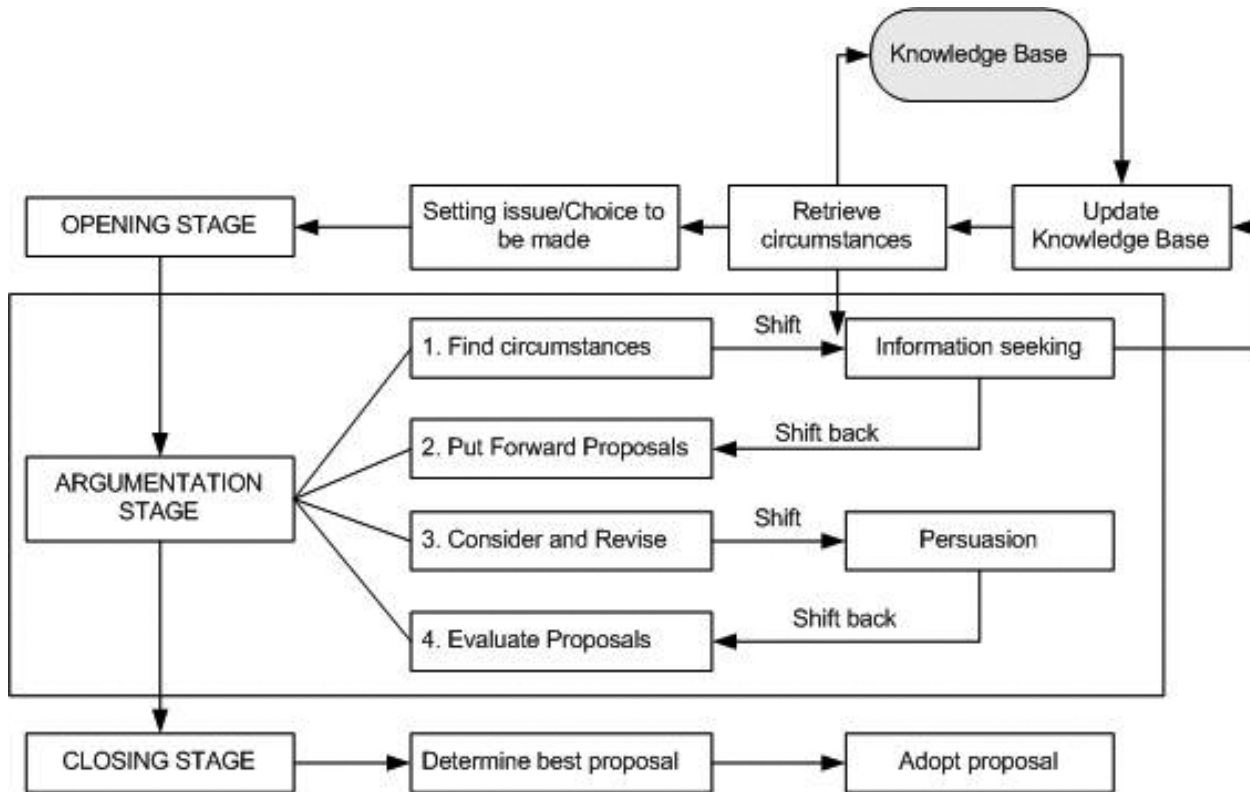


Figure 3. *The three stages in deliberation dialogues* (Walton et al. *forthcoming*)

a proposal, thereby shifting to a persuasion dialogue. In the closing stage the parties agree on a course of action, thus committing to jointly perform it in order to achieve the collective goal.²

Figure 3 represents the structure of deliberation dialogues, highlighting in particular the interaction between the information-seeking and persuasion dialogues within the argumentation stage (Walton *et al.* 2014: 9):

If the model of deliberation dialogue in Figure 3 can be considered as a representation of the process of shared decision-making within the chronic care consultation, its argumentation stage could be considered as the phase of collaborative goal setting, in which – after collecting the data regarding the patient’s health (opening stage) – it is necessary to make a decision regarding the best therapy and behaviors the patient should adopt until the next encounter. On the backdrop of this new perspective on collaborative goal setting, in the following sections I will propose initial answers to the open questions described in Section 2.

5. Proposals and the ‘success conditions’ of collaborative goal setting

According to Lafata,

not all ‘collaborative goal setting’ is equal in its ability to improve patient outcomes. [...], while our findings, on the one hand, support previously demonstrated benefits of active patient participation during office visits, they also continue to illustrate *the challenges in understanding the mechanisms through which active participation leads to these benefits* and how best to foster productive participation processes during clinical encounters as well as how to do so in a timely, proactive fashion. (Lafata *et al.* 2013: 98; italics added)

Viewed within the larger framework of the deliberation dialogue, collaboratively setting a goal is a process that develops around the pivotal ‘action’ of making proposals and discussing them, together. However, it still needs to be considered how this is achieved in a ‘timely, proactive fashion’.

According to Walton (2006), ‘making a proposal’ within the deliberation dialogue is

1 the pivotal dialogical move and is defined as
 2 a 'speech act'. A speech act is the combination
 3 of a proposition (e.g. 'you have gained weight')
 4 with an illocutionary force (e.g. a reprimand, or
 5 worry). In order to reach their intended commu-
 6 nicative goal, speech acts have to be performed
 7 by respecting certain 'felicity conditions'. If
 8 they do not, **the risk is for** a failed communica-
 9 tion (Austin 1962). In the case of the proposal
 10 within a deliberation dialogue, Walton indicates
 11 three different types of conditions that must be
 12 realized in order for the proposal to be a valid
 13 speech act.

14 *Pre-conditions* define the characteristics of the
 15 dialogical situation in which 'making a proposal'
 16 can be considered a speech act: a proponent
 17 and a respondent are engaged in a deliberation
 18 dialogue (a doctor and a patient are engaged in
 19 collaborative goal setting), there is a governing
 20 question of the dialogue ('what can be done
 21 about your weight gain?'), the proponent puts
 22 forward a proposition saying s/he *proposes* it
 23 (the doctor or patient proposes a treatment or
 24 behavior change, e.g. the patient could propose
 25 to exercise more), and the proposal is an appro-
 26 priate answer to it (either party suggests actions
 27 that are relevant for the problem, e.g. if weight
 28 loss is the problem, eating less pasta or exercising
 29 more would be relevant actions).

30 *Defining conditions* set the function and
 31 structure of proposals by positing that when a
 32 proposition describing an action is put forward
 33 in the argumentation phase, it is a speech act.
 34 Therefore, by performing it, the proponent is
 35 advocating that both parties commit to carrying
 36 out the action proposed. For example: the doctor
 37 suggests an action that will help the patient lose
 38 weight. The problem that may arise in relation to
 39 defining conditions is referred to as 'pragmatic
 40 ambiguity'; i.e., it is not always very clear which
 41 dialogical activities the participants are perform-
 42 ing (for example, is the doctor *explaining* the
 43 mechanisms that favor high levels of sugar in
 44 the blood, or is she *arguing* in favor of healthier
 45 eating habits?).³

46 *Post-conditions* define the conditions of valid-
 47 ity for commitment and response. The propo-
 48 nent's commitment to the action is assumed
 49 as soon as s/he proposes it. So, for example,

if the patient proposes to cut down on pasta,
 the doctor may assume that s/he is commit-
 ting to this course of action and may consider
 the patient responsible for acting or not on this
 proposal in the future. Of course, in the context
 of the chronic care relationship 'considering
 someone responsible for their actions' should be
 considered in the perspective of patient empow-
 erment, whereby holding patients accountable
 is done as a way of letting them progressively
 develop a sense of ownership and responsibility,
 which will increase the perception of self-efficacy
 and lead to the goal of self-management. The
 post-conditions also describe the ways in which
 the respondent can criticize a proposal. This can
 be done in various ways, basically by objecting
 that the proposal does not represent an appropri-
 ate way to reach a solution to the problem agreed
 upon at the beginning of the discussion (Walton
 2006: 33).

The three sets of conditions describe the valid-
 ity conditions of making proposals, and we may
 argue that validly putting forward proposals is
 a success condition for collaboratively setting
 goals. More specifically, in order for proposals
 to be validly performed, an effective process of
 collaborative goal setting should feature the fol-
 lowing elements for both parties:

- (1) awareness that there is room for putting forward proposals that have to do with what the patient should perform in order to improve his/her own health conditions, e.g. a 'trigger' from the doctor such as: 'So, Mr. Smith, what do you think you could do until our next meeting to lose at least two kilos?';
- (2) awareness that doing something is necessary and unavoidable if the higher values of better health, satisfaction, and adherence are to be achieved; e.g. if the patient does not seem convinced about the necessity for taking action, the doctor should explicitly address this issue before moving on to the phase of putting forward proposals (argumentation stage); and
- (3) the possibility to comment on or express doubt about the proposals that are being

1 put forward, e.g. if the patient does not
2 propose anything, immediately accepts
3 the doctor's proposal or remains silent,
4 s/he should be stimulated by the doctor
5 to comment or express any perplexities
6 regarding the proposal at issue.

7
8 In all cases, if proposals are put forward when the
9 validity conditions have not been fulfilled, they
10 are not valid speech acts, i.e. they cannot have
11 the same force of 'changing reality'. And in this
12 context, 'reality' would correspond to patients'
13 commitments.

14 6. The problem of preferences and values 15 in practical reasoning

16
17
18
19 I now turn to the other open questions regarding
20 collaborative goal setting: what are the factors
21 that improve or impede agreement on treat-
22 ment goals and strategies (Heisler *et al.* 2003)?,
23 and how can physicians effectively help patients
24 make their preferences explicit and then co-
25 construct with them informed preferences to
26 help them reach their therapeutic goals (Epstein
27 and Gramling 2013)? To answer these questions
28 we must turn to the structure of the reasoning
29 that is embedded in the deliberation dialogue
30 and to the problem of preferences and values.

31 Preferences and values come into play in two
32 crucial moments for decision-making: the defi-
33 nition of the goal, and the choice of the means
34 to bring about the goal. These two evaluative
35 steps are presupposed by the pattern of practical
36 reasoning, in which deliberation is rooted and
37 which can be represented as follows:

38 I have a goal G.
39 Bringing about A is necessary (or sufficient) for
40 me to bring about G.
41 Therefore, I should (practically ought to) bring
42 about A.

43 This pattern sets the relationship between
44 something that is desirable (G) and the means to
45 achieve it (A). But how do agents determine what
46 is desirable (the goal)? As explained in Macagno
47 (forthcoming), the evaluative process leading
48 to the identification of what can be defined
49

'good' and 'better' is complex and rooted in two
subsequent logical steps: the argument from
classification and the argument from values.⁴
The argument from classification describes the
process through which an entity is classified as
desirable or not.⁵ The link between this judgment
and the commitment to a goal is made through
the argument from values,⁶ in which the value
judgment that caused a state of affairs to be
defined as desirable (e.g. my health) becomes the
premise for the evaluation of a goal to be consid-
ered acceptable (e.g. lose weight), which in turn
causes the commitment of the agent to this goal
(e.g. starting to eat less pasta).

It is at this point that practical reasoning is
called into play, by connecting a commitment
to a goal with the means that are necessary for
the goal to be achieved:

I have the goal of losing weight.
Eating less pasta is necessary (or sufficient) for
me to lose weight.
Therefore, I should (practically ought to) start
eating less pasta.

In everyday dialogues, the arguments from
classification and from values that lead to
practical reasoning usually remain implicit:
the classificatory criteria and the values (in
other words, the preferences) that substanti-
ate the acceptability of the goal indicated in
practical reasoning are assumed, depending on
the context of the interaction, based on social
conventions and the knowledge shared between
the interlocutors. It is quite clear that, espe-
cially in contexts where there is a considerable
amount of unshared knowledge between the
interlocutors, the parties often do not share the
evaluations behind practical reasoning. In these
cases, parties involved in a deliberation dialogue
merely assume a shared goal and discuss certain
means to achieve it, but serious misunderstand-
ings may occur and failure to arrive at a shared
solution is frequent.

Connected to this is the issue of the evalua-
tion of what actions to pursue in order to reach
the intended goal. In this case, it is fundamen-
tal to assess the consequences of the different
options for action. This is done by using the
argument from positive/negative consequences;

1 for example: 'if I take these pills, I will feel
2 better'/if I take these pills, I will suffer from
3 side effects'. When this argument is used within
4 a dialogue, the assumption is made that there
5 are common standards between the parties for
6 what can be considered 'good' and 'bad' values.
7 It would be interesting to collect systematic
8 evidence to observe how frequently the argu-
9 ment from consequences is used in chronic
10 care encounters, by whom, and based on what
11 values.

12 At the heart of the reasoning behind both the
13 definition of a goal and of the choice of the means
14 to reach a goal, we find preferences and values.
15 However, in both cases these remain 'hidden' in
16 the implicit (presupposed) part of the reasoning.
17 This indicates that one factor that could surely
18 improve agreement on treatment goals and strat-
19 egies (Heisler *et al.* 2003) would be to make sure
20 the values and preferences that guide decisions
21 are shared.

22 The model of the deliberation dialogue offers
23 a realistic blueprint for doing this, by indicat-
24 ing that the knowledge base from which the
25 deliberation starts should be 'reopened' during
26 the argumentation stage, to allow for new cir-
27 cumstances and criteria for the evaluation of
28 proposals. In other words, the model indicates
29 that the most effective way of finding agreement
30 is to avoid taking for granted the knowledge
31 base, which includes the preferences and values
32 that drive decisions and that may have changed
33 over the course of time. This leads us to the final
34 question: how can physicians effectively help
35 patients make their preferences explicit and
36 then co-construct with them informed prefer-
37 ences to help them reach their therapeutic goals
38 (Epstein and Gramling 2013)? Again the model
39 of the deliberation dialogue indicates that the
40 preferred path leading to the co-construction of
41 informed preferences resides in the close interac-
42 tion between the information-seeking dialogue
43 and the persuasion dialogue.⁷ By allowing for the
44 knowledge base to be 'reopened' during the argu-
45 mentation stage, the parties will allow for new
46 information to be addressed, evaluated and – if
47 it is the case – integrated in the knowledge base,
48 which amounts to the process of 'making prefer-
49 ences explicit', 'co-constructing preferences' and

'making informed decisions'. For example, the
argumentation stage may begin based on the
patient's decision to refuse a certain pill due to
his/her preference for avoiding side effects; but
the doctor may inform the patient about the
existence of a new pill with lesser side effects,
thereby updating the patient's knowledge base
and bringing him/her to a modification of his/her
preferences. Of course the issues are not always
so simple and the model will need to be applied
to various chronic care settings in order for its
functioning to be discussed in more detail, but
I believe its explanatory and normative poten-
tial can be understood even from such a simple
example.⁸

7. Discussion and implications for further research

To sum up, it is possible to say that an optimal collaborative goal setting in the chronic care encounter should feature:

- (1) an opening phase in which it is clear to both parties that 'something has to be done'. Doctors should therefore make sure that the urgency for action is clear also to their patients;
- (2) a complete argumentation stage, in which both parties have the chance to put forward proposals and to comment on all of them;
- (3) an explicit closing stage, in which both parties agree on one proposal, thus committing to it: the patient committing to carrying it out, the doctor guaranteeing for its relevance to the attainment of the collective goal and committing to checking its effects during the next encounter.

The analysis of the deliberation process through the lens of the deliberation dialogue shows that it develops through the uncovering of relevant information and a shared discussion about what to do (opening and argumentation stages). Both these factors can be expected to enhance patients' self-efficacy, which is a hypothesis that

1 should be verified through empirical studies. If
 2 this were confirmed, however, we would be able
 3 to answer the question formulated by Heisler *et al.* (2002) through showing that collaborative
 4 goal setting does not impact directly on the self-
 5 management abilities, but via self-efficacy.
 6

7 Moreover, the requirements of the model of
 8 deliberation confirm that information alone is
 9 not sufficient to foster the necessary motivation
 10 for patients to maintain long-term treatment
 11 adherence (Heisler *et al.* 2002; Epstein and
 12 Gramling 2013). As has been argued, commit-
 13 ment is generated by a process of definition
 14 (argument from classification), which qualifies
 15 a certain state of affairs as desirable, or 'good'.
 16 Through the argument from values, this judg-
 17 ment is then connected to a commitment, i.e. a
 18 decision to act in view of the desirable goal. In
 19 order to enhance patients' commitment towards
 20 the collective goal of their improved health, the
 21 provision of information needs to be accompa-
 22 nied by an explicit process of value and prefer-
 23 ence sharing.

24 In conclusion, the biggest advantage of the
 25 approach described in this paper is that it moves
 26 from a theoretical model rather than from
 27 empirical data, allowing the outline of an over-
 28 arching framework that can include all particular
 29 cases and offering a normative perspective on
 30 the issue of optimal communication styles in
 31 chronic care. This approach goes in the direc-
 32 tion of addressing the problem of the lack of an
 33 'overarching theory for why things happen as
 34 they do between doctors and patients' (Roter
 35 and Hall 2006: 40), an issue addressed by many
 36 researchers who have observed the proliferation
 37 of empirical studies on communication between
 38 doctors and patients that are not systematic, rely
 39 on very diverse theoretical models, have often
 40 not been validated and produce results that are
 41 not comparable (among many others, Heritage
 42 and Maynard 2006; Wirtz *et al.* 2006; Street
 43 2013). The approach outlined in this paper also
 44 allows the formulation of hypotheses that can
 45 be tested on real-life cases, in contrast to start-
 46 ing from patient outcomes (a complex notion in
 47 itself) and trying to empirically reconstruct the
 48 factors that influence them.
 49

Notes

1. Dialogue types, along with argumentation schemes, have been applied especially in the field of Artificial Intelligence, in particular in computer-assisted argument mapping technology, which has very interesting applications – e.g. in the field of e-democracy (Atkinson *et al.* 2005; Walton 2005) and intelligence analysis (Atkinson *et al.* 2012; Toniolo *et al.* 2013).
2. It is necessary to note that in the case of the medical encounter the collective goal will not be achieved by a *joint action* of the parties. Only the patient will act, so the deliberation is about an action that both parties need to *agree* on. The doctor's agreement is necessary because of his counseling role in the interaction; on the other hand, only the patient knows which actions are possible for **him** in the specific circumstances of **his** life at that moment in time.
3. On this issue, see Bigi and Labrie (in preparation).
4. According to Walton and Reed (2002), argumentation schemes are argument forms that represent inferential structures of arguments used in everyday discourse.
5. Argument from classification (Macagno, forthcoming):
 - Premise 1: If some particular thing *a* can be classified as falling under verbal category *C*, then *a* has property *P* (in virtue of such classification)
 - Premise 2: *a* can be classified as falling under verbal category *C*
 - Conclusion: *a* has property *P*
6. Argument from values (Macagno, forthcoming):
 - Premise 1: The state of affairs *x* is *positive/negative* as judged by agent *A* according to Value *V* (value judgment)
 - Premise 2: The fact that *x* is *positive/negative* affects the interpretation and therefore the evaluation of goal *G* of agent *A* (If *x* is *good*, it supports commitment to goal *G*)
 - Conclusion: The evaluation of *x* according to value *V* is a reason for retaining/retracting commitment to goal *G*
7. In the literature on patient–physician encounters, persuasion is usually considered a form of manipulation. Rubinelli (2013) distinguishes four

forms of persuasion and argues that ‘rational persuasion’ can actually be beneficial in the medical encounter, as it aims at changing the patients’ beliefs in order to change their attitude and behaviors by proposing various reasons in support of a certain point of view. This leaves the patient in the position to object or refuse the proposed persuasion, thus distinguishing it from manipulation and proposing a communication style that is actually quite inclusive and participatory. See also the contributions by Milos Jenicek on the role and use of reasoning in medicine (Jenicek and Hitchcock 2005; Jenicek 2009).

8. A paper is in preparation in which the model of the deliberation dialogue, which is here described on a theoretical level, will be applied as an analytical tool to real-life consultations in haemophilia.

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