

# Contracting Compliance: A Discussion of the Ethical Implications of Behavioural Contracts in the Rehabilitation Setting

Jane Cooper, Ann Heesters, Andria Bianchi, Kevin Rodrigues and Nathalie Brown

Volume 2, Number 2, 2019

URI: <https://id.erudit.org/iderudit/1065693ar>  
DOI: <https://doi.org/10.7202/1065693ar>

[See table of contents](#)

## Publisher(s)

Programmes de bioéthique, École de santé publique de l'Université de Montréal

## ISSN

2561-4665 (digital)

[Explore this journal](#)

## Cite this article

Cooper, J., Heesters, A., Bianchi, A., Rodrigues, K. & Brown, N. (2019). Contracting Compliance: A Discussion of the Ethical Implications of Behavioural Contracts in the Rehabilitation Setting. *Canadian Journal of Bioethics / Revue canadienne de bioéthique*, 2(2), 97–101. <https://doi.org/10.7202/1065693ar>

## Article abstract

The pervasive use of contracts in healthcare is a source of unease for many healthcare ethicists and patient advocates. This commentary examines the use of such contracts with individuals in rehabilitation settings who have complex medical and behavioural issues. The goals of this paper are to examine the many factors that can lead to contract use, to discuss some legal and ethical implications of contract use, and to assess contract use in light of concerns about health equity. The paper concludes with some practical alternatives to the use of such contracts, and refers specifically to tools that might be borrowed from the field of behavioural therapy.

All Rights Reserved ©, 2019 Jane Cooper, Ann Heesters, Andria Bianchi, Kevin Rodrigues, Nathalie Brown



This document is protected by copyright law. Use of the services of Érudit (including reproduction) is subject to its terms and conditions, which can be viewed online.

<https://apropos.erudit.org/en/users/policy-on-use/>

**Érudit**

This article is disseminated and preserved by Érudit.

Érudit is a non-profit inter-university consortium of the Université de Montréal, Université Laval, and the Université du Québec à Montréal. Its mission is to promote and disseminate research.

<https://www.erudit.org/en/>

COMMENTAIRE CRITIQUE / CRITICAL COMMENTARY (ÉVALUÉ PAR LES PAIRS / PEER-REVIEWED)

# Contracting Compliance: A Discussion of the Ethical Implications of Behavioural Contracts in the Rehabilitation Setting

Jane Cooper<sup>1,2,3</sup>, Ann Heesters<sup>2,4</sup>, Andria Bianchi<sup>2,4</sup>, Kevin Rodrigues<sup>2</sup>, Nathalie Brown<sup>5,6</sup>

## Résumé

L'utilisation généralisée de contrats dans les soins de santé est une source de malaise pour de nombreux éthiciens de la santé et associations de patients. Ce commentaire examine l'utilisation de tels contrats avec des personnes en milieu de réadaptation ayant des problèmes médicaux et comportementaux complexes. Les objectifs de ce commentaire sont d'examiner les nombreux facteurs qui peuvent conduire à l'utilisation de contrats, de discuter de certaines implications juridiques et éthiques de l'utilisation de contrats et d'évaluer leur utilisation à la lumière des préoccupations relatives à l'équité en matière de santé. Le commentaire conclut par quelques alternatives pratiques à l'utilisation de tels contrats et se réfère spécifiquement aux outils pouvant être empruntés au domaine de la thérapie comportementale.

## Mots-clés

contrats, contrats de patients, comportements, réadaptation, éthique

## Abstract

The pervasive use of contracts in healthcare is a source of unease for many healthcare ethicists and patient advocates. This commentary examines the use of such contracts with individuals in rehabilitation settings who have complex medical and behavioural issues. The goals of this paper are to examine the many factors that can lead to contract use, to discuss some legal and ethical implications of contract use, and to assess contract use in light of concerns about health equity. The paper concludes with some practical alternatives to the use of such contracts, and refers specifically to tools that might be borrowed from the field of behavioural therapy.

## Keywords

contracts, patient contracts, behaviours, rehabilitation, ethics

## Introduction

The term “patient contract,” for the purposes of this paper, refers to a written document developed by clinical teams and/or healthcare administrators, with the goal of encouraging patients to modify behaviours. A patient contract generally contains a list of expectations that the patient must adhere to in order to retain access to services, while some may be employed to encourage patients to adopt a healthier lifestyle [1]. Although their legal standing is disputed (even though they are often signed by patients and providers), patient contracts are familiar to healthcare audiences in many contexts since they are employed for a myriad of purposes including suicide prevention, medication management, and behaviour modification [1].

Diversity with respect to their intended functions and content has led to varied assessments of their efficacy, and the literature is replete with articles that endorse and condemn their use. The authors' clinical experiences have led them to suspect that there has been an increase in the implementation of patient contracts in Canada and other western countries, and health care literature is beginning to note that development [2].

While advocates of contracts champion them as a means to foster transparency and reduce the potential for harm, contracts have received scrutiny from some clinicians and members of the bioethics community. Those opposed to contracts typically cite the power imbalances that make contracts seem coercive and speak to their potential to undermine trust and stigmatize vulnerable populations. Importantly, the erosion of trust has been shown to lead to treatment non-adherence [1]. We believe that gaining greater clarity about exactly what is at stake is important as contracts continue to be used in a range of settings despite inadequate evidence about their effectiveness [3]. Given increased interest in enhancing patient-centred and equitable care (as evidenced by the rise in patient councils and advisory committees), this is a particularly auspicious moment for reconsidering the ethical standing and clinical efficacy of contracts. Although our goal is to provide guidance to clinicians working in rehabilitation settings, we anticipate that our suggestions will be transferable to other contexts.

## Use and Advocacy

Arguably, the most uncontroversial defense of a contract is its purported ability to promote the good of patients. Patient contracts are advocated as a means to increase adherence to treatment regimens, and there has been a strong desire across healthcare professions for tools that can further this goal. It has been said that “increasing the effectiveness of adherence interventions may have a far greater impact on the health of the population than any improvement in specific medical treatments” [4], whereas poor adherence is known to reduce treatment effectiveness and undermine health outcomes [3]. Clinicians can be attracted to contracts simply because they are a vehicle to get patients to pledge their commitment to treatment plans.

Another factor that seems to drive contract use is the desire to eliminate the effects of unwanted patient behaviours. Challenging behaviours associated with withdrawal or continued substance use can surface in rehabilitation facilities because these patients have survived their acute episode and have recovered greater function and independence. Particularly in the context of the opioid crisis, clinicians may be searching for strategies that can offer safeguards against dependency in the case of prescribing opioid therapy to manage chronic pain. Behavioural contracts have been employed as one of these (somewhat controversial) strategies, where the patient is notified that their doctor may discontinue prescription if certain terms of use are not followed [2,5,6]. Additionally, and not necessarily related to substance use disorders, worries about violence

against healthcare providers, other patients and visitors can motivate the imposition of behavioural contracts [7]. Contracts may also be employed in an attempt to mitigate physician risk and safeguard against medical malpractice litigation (e.g., the risk of being sued for an unsafe discharge) [5].

In addition to the belief that contracts promote positive outcomes, they may also be appealing from an administrative perspective. Contracts are easily reproduced and there is a misperception that they require little training to implement; templates are available online and adaptable to various situations; clinicians can simply modify them to suit their needs [5,7]. Because of this, some contract advocates have suggested that they constitute a fiscally responsible way to standardize departmental practices [3]. For instance, contracts may be employed to educate patients or to clarify hospital policies, and signing these contracts may be a way to reinforce important information and verify comprehension [1]. We have worries, however, about a one size fits all approach since contracts used in this way require little critical engagement, and stress the importance of tailoring information to meet the specific needs of individual patients.

## Ethical and Legal Considerations

The physician-patient relationship is typically characterized as a fiduciary relationship both from an ethical standpoint and as a matter of common law [7]. This understanding ought to prompt reflection on the nature and extent of healthcare providers' duties to act in the best interests of their patients. In addition to these obligations, healthcare providers are expected to possess professional virtues (expressed through the guidelines of their respective regulatory colleges), such as trustworthiness, compassion, and integrity [8], which are oriented toward good health outcomes. Patients rely on clinicians to receive care and, because of their dependence on clinicians, the relationship is marked by a power imbalance. It is important to note, moreover, that some patients are more vulnerably situated than others owing to their socioeconomic status, limited understanding of medical terminology, and/or histories of trauma or abuse [1,9]. With some patients, particularly those who are more vulnerably situated, an attitude of trust can be difficult to establish and maintain. Even when contracts are presented with the best of intentions, these patients may feel pressured to sign them and fear that if they do not their health may be compromised or access to care terminated. As patients' needs are significant and pressing, and access to treatment is often limited by geographical inequities or available expertise, patients may face what is essentially a Hobson's choice; that is, they may accept services on their providers' terms or find themselves with no offer of services at all. We believe that patient worries regarding abandonment are not unwarranted, as some guides to behavioural contracts specify that contracts are useful tools to "support terminating provider-patient relationships" [10].

Under common law, if contracts are to be legally binding, they must include: 1) an agreement between the parties and 2) consideration (i.e., the exchange of something of value). Patient contracts often fail to meet these conditions. First, owing to the power imbalance that exists between patients and clinicians, many patients do not enter freely into contracts, and some patients may lack the capacity to consent. As ethicists often note, for consent to be valid, a patient must be able to "understand the information that is relevant to making a decision and able to appreciate the reasonably foreseeable consequences of a decision or lack of decision" [11]. In a recent study of 162 opioid contracts, researchers found that the contracts were written, on average, at a Grade 14 reading level despite recommendations that such documents be composed at the Grade 6-7 level [5]. Many patients in the rehabilitation setting (e.g., those with progressive neurological disorders) may be incapable of giving valid consent or may have capacities that are unclear or fluctuating. Second, the consideration criterion requires that each of the parties agree to exchange something of value. In our experience, most patient contracts simply include a list of rules that the patient must accept. Without reciprocal promises from clinicians, there is no consideration exchanged, unless the consideration could be described as the continued provision of health care – care to which patients have a pre-existing right [1]. When a duty of care is legally required, however, the language of contracts can be redundant or even conflict with the fiduciary relationship that binds providers and patients.

In addition to the fact that many contracts may not be legally valid, there are other issues to consider. In instances where there is no legal basis for imposing contracted consequences against the patient, a case recently has been made for the documents to be re-named 'agreements' in order to avoid the legal connotations associated with the term 'contract' [13]. However, while this may seem more palatable, the term 'agreement' may also mislead. While it suggests a departure from the power imbalances inherent in many examples of contracts, with the term 'agreement' connoting an arrangement that is equally and freely agreed upon between parties, this is often *not* the case for the reasons we have already offered. Moreover, even if the name 'contract' is replaced with 'agreement,' so long as such documents are presented in a manner that resembles a contract, patients may believe that they have no option but to sign. Additionally, if consequences are articulated in the contractual document but not enforced (which may be the case if they are not legally-binding), then this may exacerbate mistrust and erode the credibility of healthcare providers.

## Known impact of contract use on patient outcomes

Good ethics requires good facts. Efforts to assess the ethical standing of patient contracts must address the question of their efficacy. Despite significant interest in the topic, studies have repeatedly failed to show conclusive evidence of the benefits of contract use. A 2009 review conducted by The Cochrane Collaboration and a 2010 review by Starrels and colleagues evaluated available data related to contract efficacy and the results were not reassuring [3,14]. The Cochrane review evaluated thirty-one published trials on patient contracts and assessed contract success by measuring various outcomes such as reduced

harm, improved health status and decreased costs. The review concluded that, despite some limited benefit, there was not enough reliable evidence to recommend the use of contracts in healthcare [3]. Similarly, the review by Starrels and colleagues, which looked at the effectiveness of opioid treatment agreements, showed weak evidence supporting a modest reduction in “opioid misuse” when contracts were used. The lack of high-quality evidence has implications for the ethical defensibility of patient contracts. A common argument in favour of contracts is their purported ability to increase treatment adherence [3], but without robust evidence to support this claim, the use of contracts appears to increase patient burden without providing concomitant benefits.

## Health Equity and Contracts

Health equity, which “involves the fair distribution of resources needed for health, fair access to the opportunities available, and fairness in the support offered to people when ill” [15], is an underappreciated consideration in efforts to assess the merits of patient contracts. Patient contracts can undermine efforts to promote health equity, since the factors that lead to a contract may include implicit biases that result in disproportionate burdens for marginalized patients. Multiple studies have identified the presence of implicit and explicit biases among healthcare professionals against vulnerable and historically underserved groups [16,17]. Because these groups are sometimes seen as less trustworthy by healthcare providers, it is reasonable to be concerned that this could translate into the overuse of contracts [18]. While discriminatory behaviours may exist toward marginalized populations even without a contract, the implementation of a contract may more explicitly reinforce existing patterns of discrimination. As patient-clinician trust is a “key component of the therapeutic relationship” and “may impact important health-related behaviours, relationships, and outcomes” [18], all practices that have the potential to exacerbate negative stereotypes warrant substantial ethical attention.

Equity-based considerations are especially salient in a rehabilitation setting, where there are often shortages of available beds and pressure to provide care only to those who are most likely to benefit. Whereas access to acute care is generally seen as a right (especially in urgent circumstances), the authors have seen that it can be easier to conceive of access to rehabilitation as a privilege. Such beliefs may persist despite the fact that timely access to rehabilitation often offers the best hope for patients to recover function or to live with greater independence [19]. The result of this framing can be a temptation to accept termination of care as the inevitable consequence for contract breaches. However, a patient’s substance use disorder, psychiatric illness, or complex psycho-social dynamics do not obviate the patient’s need for, and ability to benefit from, rehabilitation. In fact, screening out patients with these needs is contrary to principles of health equity. The authors have found that in many cases, offers of support and the introduction of harm reduction strategies have been more effective and ethically defensible than the imposition of inflexible rules. Many patients can benefit from participation in rehabilitation programs, but certain behaviours or histories can present barriers to access these services (e.g., behaviours such as alcohol misuse that can co-present with symptoms of a major health event [20]).

None of our observations are intended to challenge the reality that rehabilitation clinicians are stewards of limited resources. However, we offer a reminder that, as in the case in acute care facilities, some rehabilitation patients require additional resources or more creative solutions to achieve desired health outcomes. Patients’ challenging psychosocial circumstances ought not to count as grounds for denying them opportunities to achieve worthwhile rehabilitation goals. Indeed, the most complex patients might be better understood as those with the greatest need owing to their multiple vulnerabilities. On many occasions, even when their preferences and values are seen as problematic from a clinical perspective, a patient’s aims may be achievable and consistent with the broader commitments of their rehabilitation providers. A patient who works hard to return a state of relative independence – even when that independence includes practices or an environment that outsiders find distressing – is someone who may well be rehabilitation-ready.

## Solutions and Next Steps

We recognize that where patient contracts are likely to be ineffective, or ethically and legally problematic, other tools and techniques are needed. A promising and often underused source of guidance can be found in the discipline of behavioural therapy. Behavioural therapy tools are designed to benefit patients by identifying and capitalizing on their existing strengths rather than by emphasizing their vulnerabilities. They provide alternatives that do not entail a reduction in the quality or availability of care provided to patients with serious psychological and physical illnesses. Below, we provide a brief glimpse of tools and strategies that we have found helpful in our rehabilitation setting. They doubtless are transferable to other contexts as well.

Behavioural tools come in many forms, and their implementation may begin even prior to a patient’s formal admission. For instance, we have found social scripts [22], which are similar to movie scripts in their attention to detail and ability to clarify roles, have been invaluable in preparing patients for a rehabilitation stay. They can be used to set facility expectations and goals, and to help patients and clinicians mitigate foreseeable concerns. Once patients have arrived at a facility, collaborative goal setting can be used to increase patients’ investments in their own care, investments that are positively correlated with better patient outcomes [23]. As one might expect, success in achieving such goals is more likely when care plans are rooted in patient values, as opposed to those of staff [24].

Additional behavioural tools are well-suited to patients who exhibit challenging behaviours. These tools include those outlined by William R. Dubin, whose core clinical strategy for psychiatric patients consists of using verbal intervention techniques, as well as active clinician responses, such as direct eye contact and body language. Dubin emphasizes prevention in his non-pharmacological strategies, which include risk assessments and psychotherapeutic interventions when caring for patients who exhibit behavioural challenges or show warning signs of aggression. His observation that “implementing strategies that minimize humiliation and helplessness will almost always lead to a safer and more successful outcome” [25], is important because it shifts some of the onus for patient behaviours away from the patient and toward the professional(s). Another promising technique is motivational interviewing, which originated in efforts to address alcohol-dependence disorders [1]. At its core, this technique aims to return a sense of power and responsibility to the patient by inviting clinicians to focus on three skills (listening, asking, and informing) and four principles (resist the righting reflex, understand the patient’s motivation, listen to the patient, and empower the patient) [25]. This is a particularly appropriate approach in a rehabilitation context due to its compatibility with goal setting and a rehabilitation philosophy that aims to empower patients and foster independence. Finally, clinicians might employ “token economies” [27] to motivate patients to complete tasks and engage in their care. Successful implementation of this strategy requires a careful assessment of the rewards that are likely to motivate a specific patient. Patient rewards should be designed to enrich the care experience and are not meant to serve as compensation for deprived environments. Although these methods differ from one another, and require different levels of expertise, the purpose is the same: to effectively and equitably mitigate the impact of variables that negatively influence a patient’s clinical care and subsequent health outcomes.

## Conclusions

In conclusion, we suggest that the widespread use of patient contracts ought to be re-evaluated on practical and ethical grounds. Although contracts may have limited value in select circumstances, the evidence for their effectiveness is weak and their potential to undermine trust and exacerbate existing disparities makes them problematic. It is our view that rehabilitation (and other) professionals would benefit from access to a more comprehensive “toolkit” designed to help address challenges that arise in the care of patients who present with so-called “behavioural difficulties”. Behavioural therapists, and the strategies that are well-developed in their practices, have the potential to offer significant benefits to their colleagues in rehabilitation medicine and beyond. Equitable, accessible, and patient-centred care are goals that we believe all healthcare providers can embrace. In that case, it is worth further examining the ethical standing of contracts and exploring alternatives to “contracting compliance.”

### Remerciements

Nous aimerions remercier deux patients partenaires de l’UHN pour les commentaires dont ils nous ont fait part durant l’élaboration du présent document et pour leurs points de vue sur les contrats de patients. Ce travail a été appuyé en partie par une généreuse subvention du Fonds de recherche pour les étudiants de premier cycle en arts et en sciences de l’Université Queen’s.

### Conflits d’intérêts

Certains auteurs (Heesters, Bianchi, Rodrigues et Brown) travaillent comme employés salariés pour un réseau hospitalier financé par l’État qui comprend des établissements de réadaptation. Nos opinions ne reflètent pas nécessairement celles de notre employeur.

### Responsabilités des évaluateurs externes

Les recommandations des évaluateurs externes sont prises en considération de façon sérieuse par les éditeurs et les auteurs dans la préparation des manuscrits pour publication. Toutefois, être nommé comme évaluateurs n’indique pas nécessairement l’approbation de ce manuscrit. Les éditeurs de la *Revue canadienne de bioéthique* assument la responsabilité entière de l’acceptation finale et de la publication d’un article.

**Édition/Editors:** Loubna Affdal, Zubin Master & Aliya Affdal

**Évaluation/Peer-Review:** Catherine Régis

### Affiliations

- <sup>1</sup> Department of Arts and Sciences, Queen’s University, Kingston, Canada
- <sup>2</sup> Bioethics Program, University Health Network, Toronto, Canada
- <sup>3</sup> Department of Bioethics, Harvard Medical School, Boston, United States of America
- <sup>4</sup> Dalla Lana School of Public Health, University of Toronto, Toronto, Canada
- <sup>5</sup> Brain Program of Toronto Rehab, University Health Network, Toronto, Canada
- <sup>6</sup> Department of Education, Western University, London, Canada

**Correspondance / Correspondence:** Andria Bianchi, [andria.bianchi@uhn.ca](mailto:andria.bianchi@uhn.ca)

**Reçu/Received:** 4 Feb 2019

**Publié/Published:** 23 Oct 2019

### Acknowledgements

We would like to thank two UHN patient partners for providing us with their feedback and perspectives on patient contracts during the development of this paper. This work was supported in part by a generous grant from the Queen’s University’s Arts and Science Undergraduate Research Fund.

### Conflicts of Interest

Some of the authors (Heesters, Bianchi, Rodrigues, and Brown) work as salaried employees for a publicly funded hospital network that includes rehabilitation facilities. Our opinions are not necessarily those of our employer.

### Peer-reviewer responsibilities

Reviewer evaluations are given serious consideration by the editors and authors in the preparation of manuscripts for publication. Nonetheless, being named as a reviewer does not necessarily denote approval of a manuscript; the editors of *Canadian Journal of Bioethics* take full responsibility for final acceptance and publication of an article.

Les éditeurs suivent les recommandations et les procédures décrites dans le [Code of Conduct and Best Practice Guidelines for Journal Editors](#) de COPE. Plus précisément, ils travaillent pour s'assurer des plus hautes normes éthiques de la publication, y compris l'identification et la gestion des conflits d'intérêts (pour les éditeurs et pour les auteurs), la juste évaluation des manuscrits et la publication de manuscrits qui répondent aux normes d'excellence de la revue.

The editors follow the recommendations and procedures outlined in the COPE [Code of Conduct and Best Practice Guidelines for Journal Editors](#). Specifically, the editors will work to ensure the highest ethical standards of publication, including: the identification and management of conflicts of interest (for editors and for authors), the fair evaluation of manuscripts, and the publication of manuscripts that meet the journal's standards of excellence.

## References

1. Lieber SR, Kim SY, Volk ML. [Power and control: contracts and the patient-physician relationship](#). International Journal of Clinical Practice. 2011;65(12):1214-7.
2. Volk ML, Lieber SR, Kim SY, Ubel PA, Schneider CE. [Contracts with patients in clinical practice](#). The Lancet. 2012;379(9810):7-9.
3. Bosch-Capblanch X, Abba K, Prictor M, Garner P. [Contracts between patients and healthcare practitioners for improving patients adherence to treatment, prevention and health promotion activities](#). Cochrane Database of Systematic Reviews. 2007;(2):CD004808.
4. Haynes RB, McDonald HP, Garg AX. [Helping patients follow prescribed treatment](#). JAMA. 2002;288(22):2880-3.
5. Tobin DG, Forte KK, Mcgee SJ. [Breaking the pain contract: A better controlled-substance agreement for patients on chronic opioid therapy](#). Cleveland Clinic Journal of Medicine. 2016;83(11):827-35.
6. Washington State. [Sample opioid treatment agreement](#). Washington State Department of Labor & Industries. 2019.
7. Statistics Canada. [Health reports: factors related to on-the-job abuse of nurses by patients: Findings](#). Statistics Canada. Government of Canada; 2009.
8. Canadian Medical Association. [CMA Code of Ethics and Professionalism](#). Canadian Medical Association. 2019.
9. Shaul RZ, Hing MNT. A. 7.2.2. [Professional Obligations in the face of Risks to Personal Health](#). The Royal College of Physicians and Surgeons of Canada. 2018.
10. MedPro Group. [Using behavior contracts to improve patient adherence and address behavioral issues](#). 2017.
11. Ontario Human Rights Commission. [16. Consent and capacity](#). Ontario Human Rights Commission. 2018.
12. Zlotnik Shaul R, Ng Thow Hing M. [7.2.2 Professional obligations in the face of risks to personal health](#). 2018.
13. Payne R. [A rose by any other name: pain contracts/agreements](#). The American Journal of Bioethics. 2010;10(11):5-12.
14. Starrels JL. [Systematic review: treatment agreements and urine drug testing to reduce opioid misuse in patients with chronic pain](#). Annals of Internal Medicine. 2010;152(11):712-20.
15. Whitehead M, Dahlgren G. [Concepts and principles for tackling social inequities in health: levelling up part 1](#). World Health Organization. 2006.
16. Sabin JA, Nosek BA, Greenwald AG, Rivara FP. [Physicians' implicit and explicit attitudes about race by MD race, ethnicity, and gender](#). Journal of Health Care for the Poor and Underserved. 2009;20(3):896-913.
17. FitzGerald C, Hurst S. [Implicit bias in healthcare professionals: a systemic review](#). BMC Medical Ethics. 2017;18(1):19.
18. Buchman DZ, Ho A. [Whats trust got to do with it? Revisiting opioid contracts](#). Journal of Medical Ethics. 2013;40(10):673-7.
19. Coleman ER, Moudgal R, Lang K, Hyacinth HI, Awosika OO, Kissela BM, Feng W. [Early rehabilitation after stroke: a narrative review](#). Current Atherosclerosis Reports. 2017;19(12):59.
20. Pagulayan KF, Temkin NR, Machamer JE, Dikmen SS. [Patterns of alcohol use after traumatic brain injury](#). Journal of Neurotrauma. 2016;33(14):1390-6.
21. Sandman L, Munthe C. [Adherence, shared decision-making, and patient autonomy](#). Medicine Healthcare and Philosophy. 2011;15(2):115-127.
22. Loveland KA, Tunali B. [Social scripts for conversational interactions in autism and Down syndrome](#). Journal of Autism and Developmental Disorders. 1991;21(2):177-86.
23. Hibbard JH, Greene J. [What the evidence shows about patient activation: better health outcomes and care experiences; fewer data on costs](#). Health Affairs. 2013;32(2):207-14.
24. Epstein RM, Street RL. [The values and value of patient-centered care](#). The Annals of Family Medicine. 2011;9(2):100-3.
25. Dubin WR, Jagarlamudi K. [Safety in the evaluation of potentially violent patients](#). 2010;27(7).
26. McCain J. [Motivational Interviewing to improve adherence](#). Biotechnology Healthcare. 2012;9(4):10-2.
27. Liberman RP. [The token economy](#). American Journal of Psychiatry. 2000;157(9):1398.