

THE USE OF SWOT ANALYSIS IN CASE MANAGEMENT OF PATIENTS IN DETENTION CENTERS

Daniel PETRESCU, MD, PhD candidate

Titu Maiorescu University, Faculty of Medicine
Department of Preclinical Disciplines

CURRENT CONTEXT

SARS-CoV-2 epidemic imposed adaptation of the general rules of entire social activity [1]. Even though they were solely intended to limit the impact of the infection on the general public, they also determined reduction of population mobility [2].

In order to implement the rules, preventive detention centers subordinated to the Romanian Police (hereinafter referred to as *centers*) also implemented specific measures. At the coordination center, SWOT analysis [3] has been used to optimize provision of medical care and case management.

PROVISION OF MEDICAL CARE in the *centers*. Opiate users present many conditions, management of which involves numerous interactions [4] between detainees, medical personnel and police workers. Thus, after completing specific administrative and medical procedures, these patients receive methadone substitution treatment. If medical history is not available, in order for the psychiatrist to recommend administration of methadone, a complex evaluation is necessary; still, establishing the optimal dose for an individual is only possible after a period of monitoring [5].

Before the national state of emergency, detainees were incarcerated in the nearest *center* (one in each county). Since methadone treatment can be administered only in *centers* in Bucharest, in order to complete specific medical evaluation and receive medication, patients were transferred to the capital to be incarcerated in one of the 11 available *centers*.

THE PURPOSE of this scientific paper is to proof benefit of using SWOT analysis to support decision-making process in provision of medical care to drug users in the *centers*.

The purpose of this scientific approach is to illustrate how to use the SWOT analysis in order to support epidemiological and medical decisions in preventive detention centers. We will present how this work tool supported the decision-making process in the activity of providing medical assistance to drug users in the *centers*.

RESULTS

7 During the SARS-CoV-2 epidemic, prophylactic measures were adopted to reduce the epidemiolog-

THE OBJECTIVE of the research is to validate the use of SWOT analysis in the case management of patients taken into custody in detention centers.

THE METHODS used are case presentation and comparative analysis of the obtained results.

THE RESULTS confirm that systematic use of SWOT analysis in decision-making brings benefits in medical case management.

CONCLUSIONS: it is recommended to expand medical case management approach through managerial reasoning and prepare medical professionals for this paradigm shift.

Keywords: SWOT analysis, case management, substitution treatment, preventive detention centers, SARS-CoV-2 infection.

ical risk involved in methadone treatment in *centers* [6]. It was necessary to establish in which *center/s* patients would encounter minimum epidemiological risk while receiving the treatment [7]; analysis of the two available options has been performed using SWOT method (see Table 1). First proposal (I.) was to administer medication only in the central detention *center*; the alternate option (II.) was provision of treatment in all 11 *centers*.

In favor of solution (I.) permanent availability of medical assistance on the premises, existence of a separate sector for women [8], possibility of easy separation of functional circuits and accessibility of location were recorded; the cumbersome access (due to bureaucratic procedures) to the medical office for treatment administration was identified as a weak point. Since administrative procedures were just about to be revised, establishing of functional circuits represented an opportunity to update center's management; though, lack of compliance with the universal protective measures, resistance to change and high staff turnover are representing major vulnerabilities.

In the smaller *centers* functional circuits can be made more easily and there are no other difficulties to surpass in order medication to be administered (strong points). The large number of interactions between patients, workers and medical personnel increases the epidemiological risk (weak point). However, despite the fact that this option would offer an opportunity for many workers to receive training on topics related to hygiene and sanitary issues, considering the high total costs (threat), the first option (I.) has been chosen.

Later, SWOT analysis was applied in the medical activity. An appropriate example to discuss is a male detainee (N.B.), opiate user, taken into custody by a county *center*, prior to incarceration he underwent methadone treatment abroad. He is serologically positive for HIV and HCV but is currently not receiving treatment. After the onset of the COVID-19 pandemic and also due to poor level of formal instruction, he could no longer find work in that country of residence and was repatriated. As he could not find official methadone suppliers in his county of residence he relapsed into heroin consumption. A month before he underwent surgery at the county general hospital for →

a calf fracture for which the orthopedic solution was a monoplane mono-axial external fixator (see Photo 1 Postoperative aspect of the fracture, Source: N.B., with permission); postoperatively he was forbidden to load the pelvic limb, was recommended to use axillary crutches for three months and undergo physical therapy to learn proper use of crutches and transfers. After a short period of hospitalization, he was discharged upon request, but got recommendation to return when needed. At the medical visit he had the axillary crutches but was not able to use them appropriately; he also related severe withdrawal symptoms and was confirmed positive with SARS-CoV-2 after triage and tests. Also, serous crusts were present around the fixator nails.

Since he was to remain in custody for at least 30 days, the question arose of identifying the *center* where he could receive most appropriate care. Given the epidemiological

of substitute treatment only in Bucharest, no solution could be considered perfect, therefore choice has been made and the final decision has been taken based on information resulting from the SWOT analysis (Table 1).

All the elements and valid information resulting from the SWOT analysis have been analyzed by the case resolution committee, which also took into account aspects related to risks involved in each of the alternatives and those related to the available resources (Table 2).

Thus, the following have been taken into account: the necessary travel and the costs involved - including for the conduct of legal proceedings; accessibility of the surgeon and availability of substitution treatment and other necessary care, as well as family support; workers' reluctance to the epidemiological risk; the possibility of temporarily closing the *center*; the opportunity to speed up the creation of functional circuits. Thus, the solution was chosen to be hospitalized in a general hospital, under police escort, where he could receive all the necessary medical care, with high costs but with the reduction of the epidemiological risk for the *center's* workers.

DISCUSSIONS AND CONCLUSIONS. Analyzing the data centralized by the Romanian Government [9] [10], as a result of the use of SWOT analysis in the management of individual situations, there were no deaths among the prison population and among the workers in the *centers*. The approach based on using SWOT analysis in medical coordination in *centers* was limited by the fact that personal data and those that cannot be made public could not be mentioned. The results of the application of this analysis in the presented conditions,

however, demonstrate and underline the usefulness of managerial methods, tools and reasoning in medical

Photo 1 - Postoperative aspect of the fracture



Sursa: N.B., cu permisiune)

Source: N.B., with permission

restrictions on consultations and hospitalization, the need for quick access to the attending surgeon and availability

Table 1 - Use of SWOT analysis to establish the center/s where the treatment should be administered

	I.	II.
S	1. On site medical office 2. Dedicated section for men / women 3. Large interior spaces 4. Accessible location	1. Functional circuits 2. Easy acces for treatment administration
W	1. Cumbersome acces to medical office	1. Numerous interactions
O	1. Sistematizare proceduri administrative	1. Training opportunity for personnel
T	1. Reluctance to change 2. Personnel turnover 3. Non-compliance with universal medical precoutions	1. Time consuming 2. High costs

decision-making, despite of the medical domain where these are applied, opening the perspective of expanding this kind of approach and anticipating the paradigm shift regarding the training of professionals in the medical field, including those who work in such kind of medical units. The medical decision needs as much valid and relevant information as possible, and local particularities and case

details have to be methodically approached in order to support the specific decision (of course, by taking the whole general context into account), and the model provided by the SWOT analysis can be useful, both for strategic decisions and for those related to the management of particular situations that require quick and effective decisions.

Table 2 - SWOT analysis for case management

	Local center	Bucharest center	Penitentiary hospital	General hospital
S	Attending surgeon Family support Minimal travel	Methadone available Medical care	Methadone available Medical care	Methadone available Comprehensive medical care
W	Reluctance to change No methadone Isolation	Travel Lack of family support	Travel Lack of family support	Travel Lack of family support
O	Functional circuits	Integrative care	Reduced risk	Minimum risk
T	COVID-19 related risk	Cost	High costs	Very high costs

References

1. Petrica, M, Stochitoiu, RD, Leordeanu, M, et al. A regime switch analysis on Covid-19 in Romania. *Sci Rep* 12, 15378 (2022). <https://doi.org/10.1038/s41598-022-18837-x>
2. <https://www.cipd.org/uk/knowledge/factsheets/swot-analysis-factsheet/>
3. <https://www.semrush.com/blog/swot-analysis-examples/>
4. Hoffman, KA, Foot, C, Levander, XA, Cook, R, Terashima, JP, McIlveen, JW, Korthis, PT, McCarty, D. Treatment retention, return to use, and recovery support following COVID-19 relaxation of methadone take-home dosing in two rural opioid treatment programs: A mixed methods analysis, *JSAT*, Vol. 141, 2022 October [https://www.jsatjournal.com/article/S0740-5472\(22\)00083-6/fulltext](https://www.jsatjournal.com/article/S0740-5472(22)00083-6/fulltext)
5. Donelan CJ, Hayes E, Potee RA, Schwartz L, Evans EA. COVID-19 and treating incarcerated populations for opioid use disorder. *J Subst Abuse Treat.* 2021 May; 124:108216. DOI: 10.1016/j.jsat.2020.108216. Epub 2020 Dec 2. PMID: 33288348; PMCID: PMC7708799.
6. Coronavirus (COVID-19) opioid substitution treatment in prisons - evaluation: patient experience follow-up report Published 7 July 2021 Directorate Population Health Directorate Part of Coronavirus in Scotland, Health and social care. ISBN: 9781802011289 <https://www.gov.scot/publications/evaluation-opioid-substitution-treatment-scotlands-prisons-covid-19-contingency-patient-experience-follow-up-report/>
7. <https://americanhealth.jhu.edu/news/improving-access-methadone-jails-and-prisons>
8. Frank D. A chance to do it better: Methadone maintenance treatment in the age of Covid-19. *J Subst Abuse Treat.* 2021 Apr; 123:108246. doi: 10.1016/j.jsat.2020.108246. Epub 2020 Dec 13. PMID: 33612189; PMCID: PMC7834469.
9. <https://covid19.stirioficiale.ro/informatii>
10. <https://www.statista.com/topics/6240/coronavirus-covid-19-in-romania/#topicOverview>