

**Silvia Gabriela Scîntee, Cristian Vlădescu, Anna Sagan and
Cristina Hernández-Quevedoc**

The unexpected outcomes of the closure of 67 inpatient care facilities in 2011 in Romania

**Article (Published version)
(Refereed)**

Original citation:

Scîntee, Silvia Gabriela and Vlădescu, Cristian and Sagan, Anna and Hernández-Quevedoc, Cristina (2018) The unexpected outcomes of the closure of 67 inpatient care facilities in 2011 in Romania. Health Policy. ISSN 0168-8510

DOI: [10.1016/j.healthpol.2018.08.010](https://doi.org/10.1016/j.healthpol.2018.08.010)

Reuse of this item is permitted through licensing under the Creative Commons:

© 2018 Elsevier
CC-BY 4.0

This version available at: <http://eprints.lse.ac.uk/90404/>
Available in LSE Research Online: October 2018

LSE has developed LSE Research Online so that users may access research output of the School. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. You may freely distribute the URL (<http://eprints.lse.ac.uk>) of the LSE Research Online website.



Contents lists available at ScienceDirect

Health Policy

journal homepage: www.elsevier.com/locate/healthpol



Health Reform Monitor

The unexpected outcomes of the closure of 67 inpatient care facilities in 2011 in Romania[☆]

Silvia Gabriela Scîntee^{a,*}, Cristian Vlădescu^{a,b}, Anna Sagan^c,
Cristina Hernández-Quevedo^c

^a National School of Public Health Management and Professional Development, Bucharest, Romania

^b University of Medicine and Pharmacy Timișoara, Romania

^c European Observatory of Health Systems and Policies, LSE Health, London

ARTICLE INFO

Article history:

Received 17 January 2018

Received in revised form 12 July 2018

Accepted 22 August 2018

Keywords:

Inpatient care

Efficiency

Population needs

Public-private partnership

Romania

ABSTRACT

One of the main objectives of the National Strategy for Hospitals Rationalization approved by the Romanian Government in 2011 was to resize the hospital sector in order to improve efficiency. To this end, the government decided the closure of 67 inpatient care facilities with low efficiency scores, giving them the opportunity to become nursing homes for elderly under a national programme financed by the Ministry of Labour, Family and Social Protection. The measure faced a tremendous public opposition that put pressure on politicians to re-open some hospitals, while other hospitals were re-opened by the governments that followed in order to consolidate their power. Since only 20 closed institutions have been reorganized as nursing homes for elderly and almost 40 are currently performing medical activities, this decision was generally perceived as a policy failure. Nevertheless, a thorough analysis, shows that the medical facilities that are still functioning – either merged with other hospitals, or re-organized as state or private medical institutions have improved efficiency by reshaping services provided to the population needs, mobilizing communities and local authorities investments and initiating public-private partnerships. Besides revealing the unexpected benefits resulted from the implementation of this policy, the Romanian experience provides some useful insights for other countries that are also facing the challenge of reducing the oversized hospital sector.

© 2018 The Author(s). Published by Elsevier Ireland Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Purpose of the policy

In 2011, the Romanian government decided to close 67 underperforming inpatient care facilities, giving them the option to transform into nursing homes for older people. This policy was part of the 2011 National Strategy for Hospital Rationalization, aiming to improve the performance of the hospital sector and to ensure sustainable financing and the efficient use of resources in the health care sector as a whole [1]. Other measures within the 2011 National Strategy included: shifting the responsibility for a large number of hospitals from the Ministry of Health to the local authorities; developing a new methodology for hospital classification; reducing the number of hospital beds; and merging hospitals. According to the Minister of Health, closures and mergers of a total of 182

inpatient care facilities (including the 67 health facilities described in this paper) between 2011 and 2012 were expected to cut 560 administrative jobs and save over 20 million lei (4.4 million euros) [2].

2. Policy background

The Romanian health system relies heavily on inpatient care with underuse of outpatient, primary and community care [3]. Patients tend to bypass primary care services and directly consult specialists in hospital or call an ambulance, even for minor health problems [3]. Following people preferences, and also because of better financing, the inpatient care system is very extensive, with a total of 503 hospitals in 2010 (428 state and 75 private hospitals) [4]. Besides hospitals, inpatient care is provided by other medical facilities like sanatoria, preventoria (these are sanatorium-type health institutions for patients infected with tuberculosis who do not yet have an active form of the disease), medico-social care units, and even by health care centres, which in many other health systems provide outpatient care only.

[☆] Open Access for this article is made possible by a collaboration between Health Policy and The European Observatory on Health Systems and Policies.

* Corresponding author.

E-mail address: sscintee@snspsms.ro (S.G. Scîntee).

<https://doi.org/10.1016/j.healthpol.2018.08.010>

0168-8510/© 2018 The Author(s). Published by Elsevier Ireland Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Romania had more hospital beds than the EU average in 2010 (6.3 beds vs. 5.3 beds per 1000 inhabitants) [5], preserving the model of overreliance on hospitals' characteristics of many Central and Eastern European (CEE) countries (e.g., 7.2 beds in Hungary, 7.0 in Czech Republic, 6.8 in Lithuania and 6.6 in Poland). The main reductions of beds in 1992, 2003 and 2010 [3] were not properly accompanied by developing alternative services; by contrary, during the same time the existing outpatient services provided by policlinics were also reduced [6]. The preference for inpatient care is also proved by the number of hospital discharges, also higher than the EU average (237 vs. 176 per 1000 population), with Romania having the highest number of discharges among CEE countries, after Bulgaria (e.g., 254 hospital discharges per 1000 population in Bulgaria, 224 in Lithuania, 212 in Slovak Republic, 203 in Poland, 192 in Czech Republic) in 2010. The number of outpatient contacts per person in Romania was also below the European average in 2010 (5.2 vs. 6.8 in the EU) [3] and the estimated avoidable hospitalization rate was 7% [7].

Inpatient care represented also the highest share of health spending in 2010 – 48.5% of total expenditure on health according to WHO National Health Accounts data. Romania was placed among the EU countries with the highest spending on inpatient curative care as a percentage of total spending on health – with 40% in 2010, compared to the EU average of 31%. The high spending on inpatient curative care was also noticed in other CEE countries (41% Bulgaria, 36% Poland, 33% Latvia, 32% Slovenia and Czech Republic) [5].

The 2011 National Strategy was preceded by many other reforms that intended to reduce the size of the hospital sector and to strengthen the role of primary care. Even if the number of hospital beds was reduced over the years, the situation was still far from the expected results, as health care provision remains characterized by under-provision of primary and community care and inappropriate use of inpatient and specialized outpatient care, including care in hospital emergency departments [3].

3. Health policy process

The development of the 2011 policy for hospital rationalization was a lengthy process. Between 2003 and 2009 several strategic reports on the Romanian hospital sector were elaborated by external experts within four international funded projects and within an internal project commissioned by the Romanian Presidency [1]. The first strategy on hospital rationalization was approved in 2004, but never implemented, mainly due to political instability. The rationale for this work was the low overall performance of the health care system, largely attributed to the overuse of hospital services [3].

In 2009, against the backdrop of the global economic crisis, Romania was forced to obtain financial assistance from external lenders. The 20 billion euros loan from the International Monetary Fund, the European Commission, the European Bank for Reconstruction and Development and the World Bank conditioned the receipt of financial assistance on the satisfactory implementation of certain measures, which included rationalizing the hospital sector. The Ministry of Health also received technical assistance for the revision and updating of the 2004 Strategy on hospital rationalization (see above). This process resulted in the adoption of the 2011 National Strategy for Hospital Rationalization, which included, among other measures (see Section 1), the closure of 67 underperforming inpatient care facilities.

Following recommendations from the external experts and the framework outlined in the 2011 National Strategy (see Section 4), the Ministry of Health appointed a commission tasked with selecting hospitals or other medical institutions providing inpatient care that would no longer be allowed to sign contracts with the NHIH

Box 1: Criteria for inpatient care facility selection.

Phase I criteria:

- ability to provide services in accordance to the institution's approved organizational structure;
- ability to ensure continuity of care;
- distance to hospitals with a higher level of competence;
- appropriate staffing;
- accessibility of the population in the catchment area to emergency medical services and specialized health services;
- legal and physical state of the building.

Phase II criteria:

- percentage of cases readmitted in the same institution or in other hospitals for the same diagnostic code in less than 48 h after discharge;
- the percentage of cases transferred to other hospitals for the same diagnostic code in less than 48 h after discharge;
- the complexity of cases;
- number of patients, % of patients from other districts, average length of stay (ALoS), mortality rates, % of operations among the cases admitted in surgical wards, etc.

and would instead be included in the national programme “Development of nursing homes for older people” financed by the Ministry of Labour. The planned closure of inpatient care facilities was justified by their poor performance: low standards of care; lack of health personnel and medical equipment resulting in a high rate of referrals to other hospitals; and inappropriate use of care (predominantly treating cases that could have been handled in ambulatory settings) [8].

4. Content of reform

The process of selecting those inpatient care facilities to be closed, as outlined in the 2011 National Strategy, consisted of two phases (Box 1).

Applying the chosen criteria, all public hospitals with over 130 beds, with the exception of one hospital in Bucharest, were excluded in Phase I. In Phase II, all remaining public institutions providing inpatient care were mapped and assessed during field visits. This phase resulted in the selection of 67 underperforming institutions: 29 city and municipal hospitals, 20 health centres, nine rural hospitals, eight long-term hospitals for chronic diseases, and one preventorium.

Selected inpatient care facilities were not allowed to enter into contracts with the NHIH and were instead eligible to apply for the national programme on nursing homes (see Section 3). This programme initially ran for 33 months from 1 April 2011 to 31 December 2013 and was later extended for an additional period of 22 months until October 2015. Enrolled institutions also qualified to access EU structural investment funds.

5. Policy implementation

The decision to close 67 inpatient care facilities was poorly explained to the population and drew opposition from almost all affected stakeholder groups, which put pressure on politicians to re-open some hospitals, using all possible channels, including appealing the measure in court.

Since hospitals and health centres tend to be the main employers in small cities, the strongest resistance came from health care professionals faced with job loss or relocation. People living in catchment areas of the affected institutions also showed strong

	2011	2012	2013	2014	2015	2016	2017	
67 closed institutions								
	2	3	3	4			1	13 Re-opened as independent hospitals
		4	2	4	4	1	1	16 Re-opened as structures of other public hospitals
		3	1	1	1	1		7 Re-opened as public-privat partnerships
	15	3		1	1			20 Nursing homes for elderly
								11 Still closed

Fig. 1. The re-opening of closed inpatient care facilities.

Source: Authors' compilation based on data from health facilities webpages and mass media.

opposition, bringing dramatic examples of denied hospital access to the attention of the mass media (see for example [9]) and thereby also fuelling opposition's critique of the already unpopular (due to introduced austerity measures) government [10]. Finally, many local authorities, not willing or not knowing how to manage the transformation of hospitals into nursing homes, also resisted the change and few of them even appealed the measure in court.

Strong political pressure against hospital closures led to the reopening of 36 institutions by 2017 (see Fig. 1): 13 were re-opened as independent hospitals (two in the same year, following a court decision, and 11 more over the next years, the last one in 2017 after some restructuring); 16 inpatient care facilities were re-opened, after re-negotiating the new structure with the health authorities, as external wards of other hospitals (most of them operate as day care departments, ambulatory departments or long-term care wards; some provide a mix of inpatient and outpatient services as “multifunctional health centres”) and seven institutions re-opened as private entities, with local authorities letting the facilities to private practices or hospitals. Only 20 institutions decided to transform into nursing homes. Further, 11 institutions which were mainly former health centres providing inpatient care, remained closed.

6. Preliminary outcomes: expected and unexpected

Since the transformation of 67 inpatient care facilities into nursing homes for older people was part of a broader hospital rationalization policy (see Section 1), it is difficult to evaluate to what extent the achieved outcomes (that is, beds reduction) are attributable to this specific measure. The total number of public hospitals was reduced by 16% in 2011 compared to the previous year [11], while the target was 15%. A 10% reduction of hospital admissions (from 23.6 admissions to 100 inhabitants in 2010 to 21.3 in 2011) [11] was achieved, as anticipated. The decrease of hospital expenditures was also expected: while 39.5% of total expenditure on health was spent on inpatient care in 2010, the percentage decreased to 33.7% in 2011, then increasing again to 35.5% in 2012 [12].

With only 20 inpatient care facilities undertaking transformation into nursing homes and with over half of the closed institutions reopening in the subsequent years, the policy may at first appear as an outright failure. Some newly established nursing homes have been very successful in attracting beneficiaries and funds, while others have run into financial difficulties after the state financing contemplated in the nursing homes programme has ended. Overall, the number of nursing homes increased by only 30 between 2010 and 2015 (from 88 to 118) and waiting lists for nursing homes increased from 1251 persons in 2010 to 1407 in 2015 [4].

However, a closer look at the 36 reopened hospitals shows some unexpected positive outcomes that the process has brought about, such as the replacement of inpatient care with outpatient services (as they reopened with a changed structure and profile of services provided) or increased investments, including resource pooling (see Box 2).

Box 2: Positive outcomes of the policy on reopened institutions.

- The majority of reopened institutions have changed their organizational structure, changing the type of services provided, in accordance to the main policy objectives of decreasing expensive hospital care and increasing outpatient care;
- The 13 re-opened institutions had fewer beds (40–90) compared to before (70–130)
- All re-opened institutions (incl. those reopened as external wards of other hospitals) were rehabilitated by local authorities* or through public-private partnerships (hospitals that reopened as private entities)
- More efficient spending was achieved in some cases by pooling funds; for example, one hospital was re-opened as a multifunctional centre (within a nearby municipal hospital) on the joint initiative of nine local councils. These councils jointly cover the monthly administrative costs of the centre. Pooling of funds has also included public-private partnerships.

Note: * Local authorities invested funds in consolidating the buildings, buying equipment and furniture, and even paid salaries until contracts with the NHIH were concluded. This was different from 2010, when hospitals were shifted from the Ministry of Health to local authorities – at that time many local councils were reluctant to release any funds.

The closed institutions that have not been transformed are in various situations. Three institutions remain closed as the buildings were retroceded (i.e. returned to the owner – hospitals were nationalized in 1949; after the revolution, owners were entitled to claim back ownership). Seven institutions remain closed and most of the buildings are deteriorating, while the local authorities have no plans for transformation or for investments. Four out of seven are still hosting on-duty centres for family doctors to ensure continuity of care or emergency units of the district ambulance service. In very few cases, the buildings are preserved to be re-opened as medical institutions. The institutions that remained closed were either situated in the proximity of other hospitals (20–40 km), or the number of cases in the catchment area was too small to justify their continuity. For example, one hospital became an external TB ward of the district hospital in 2014, but since it had only six patients, it was eventually closed in 2017. In the isolated area of Danube Delta, a better equipped emergency unit to ensure the rapid transportation to a hospital was better justified as well. Hence, no implications on the accessibility of the population were found, with admissions to the nearby hospitals not increasing significantly after the hospitals' closure [13].

7. Conclusions

Although many opponents of the 2011 hospital rationalization policy have argued that it was an outright failure, a closer inspection reveals some positive outcomes.

Decisions to reopen inpatient care facilities were often political but also reflected the actual demand for health care services that could not have been met otherwise. Hospital closures were based on recommendations from external experts and analysis of hospitals' performance [8], without taking into account the population needs for health care services. Hospitals were closed without any concrete plans to provide outpatient services as an alternative to inpatient care, which was no longer available. The re-opening of most institutions was negotiated and it was approved only on the basis of justified for covering the actual needs. For example, underused maternity or other wards were replaced by outpatient departments, physiotherapy or palliative care departments that did not exist previously or that were insufficient. An even better fit might have been achieved had the local health care needs been formally assessed before the closing decision was taken.

A positive development was the unprecedented level of involvement of local authorities (see note under **Box 2**), contrary to earlier years. Local communities were also mobilized, even becoming shareholders of the local medical institutions selected for closure. The policy also brought about collaborations among local authorities, including partnerships to pool resources in order to support a local medical institution, and public-private partnerships, which helped ease pressure on the public sector.

The rate of transformation into nursing homes was disappointingly low (20 out of 67 or 30%). Local authorities that did not apply for it claimed that there was no demand for such services in their area. Although demand for nursing care is not covered at the national level, transformation of hospitals into nursing homes was indeed not justified in all of the 67 locations (e.g. in rural areas, where informal care is widespread and demand for formal nursing care is very low). Results show that a better assessment of local health care needs was missing.

In a context where other CEE countries are also facing the challenge of reducing the oversized hospital sector [14,15], and hospital reforms being delayed due to unpopular decision-making and lack of effective planning, the Romanian experience provides some useful insights. In particular, it shows the importance of assessing separately the situation of each inpatient care facility to be closed, and the need to negotiate in advance with local authorities and the communities the support they might provide for replacing the inpatient facility with an alternative form of health care, with decisions aligned with population needs and available resources. Further, it shows that an effective engagement of public, professionals and local authorities through better communication is key in hospital reform processes. Finally, it highlights the need of appropriate technical support (e.g. some transformed institutions face difficulties due to the lack of managerial expertise and human resources).

In Romania, those lessons have been considered in the development of further reforms. In particular, the implementation of the 2014–2020 National Health Strategy aimed at increasing the

volume of services provided within primary and community care settings, will be based on mapping population health needs and will benefit from the necessary technical support, rationalizing the use of hospital services more effectively.

References

- [1] Guvernul României Hotărârea nr. 303/2011 pentru aprobarea Strategiei naționale de raționalizare a spitalelor Text publicat în M.Of. al României. În vigoare de la 31 martie 2011 [Government Decision no. 303/2011 for the approval of the National Strategy for hospitals reorganization Published in the Official Gazette at 31 March 2011]. (<https://lege5.ro/Gratuit/ge2demzshe/hotararea-nr-303-2011-pentru- aprobarea-strategiei-nationale-de-rationalizare-a-spitalelor/4>, accessed 27 November 2017).
- [2] GhidCabinet.ro Stiri pentru medici [News for physicians]. Comasările din sistemul sanitar provoacă reducerea a 560 de funcții de conducere [Mergers in the health system could lead to a reduction of 560 managerial jobs]. <http://www.ghidcabinet.ro/2011/02/comasarile-din-sistemul-sanitar-provoaca-reducerea-a-560-de-functii-de-conducere/> February 2, 2011.
- [3] Vlădescu C, Scîntee SG, Olsavszky V, Hernández-Quevedo C, Sagan A. Romania: health system review. *Health Systems in Transition* 2016;18(4):1–170.
- [4] National Institute of Statistics. *Romanian statistical yearbook 2016*. Bucharest: NIS; 2017.
- [5] OECD, 2012 Health at a glance: Europe. Paris: OECD Publishing; 2012. <http://dx.doi.org/10.1787/9789264183896-en>.
- [6] Rechel B, McKee M. Health reform in central and eastern Europe and the former Soviet Union. *Lancet* 2009;374:1186–95.
- [7] Ciutan M, Scîntee SG, Dosius M, Mototolea C, Vlădescu C. Geographical distribution of avoidable hospital conditions in Romania. *Procedia Environmental Sciences* 2016;32:318–26. ECOSMART - Environment at Crossroads: Smart Approaches for a Sustainable Development <http://www.sciencedirect.com/science/article/pii/S1878029616001821>. Accessed 27 November 2017.
- [8] Guvernul României Hotărârea nr. 345/2011 privind aprobarea pentru anul 2011 a Raportului comisiei de selecție a unităților sanitare cu paturi care nu pot încheia contracte cu casele de asigurări de sănătate, precum și a listei acestor unități sanitare Text publicat în M.Of. al României. În vigoare de la 31 martie 2011 [Government Decision no. 345/2011 on the approval for the year 2011 of the Report of the Commission for the selection of the sanitary units with beds which cannot sign contracts with health insurance houses, and of the list of these units, published in the Official Gazette at 31 March 2011]. (<https://lege5.ro/Gratuit/ge2denbsgi/hotararea-nr-345-2011-privind- aprobarea-pentru-anul-2011-a-raportului-comisiei-de-selectie-a-unitatilor-sanitare-cu-paturi-care-nu-pot-incheia-contracte-cu-casele-de-asigurari-de-sanatate-precum-si-a->, accessed 27 November 2017).
- [9] Stiri PRO.TV [PRO.TV News] Un pacient a murit in fata unui spital desfiintat. Altul a decedat pe drum [A patient died in front of a closed hospital. Another one died on the way] 7 April 2011 <http://stirileprotv.ro/stiri/actualitate/un-pacient-a-murit-in-fata-unui-spital-desfiintat-altul-a-decedat-pe-drum.html>.
- [10] Mediafax.ro News on-line. ANALIZĂ: Ce spun șefii medicali și autoritățile locale despre reorganizarea spitalelor [Analysis: What the medical heads and local authorities say about hospitals reorganization] 3 February 2011 <http://www.mediafax.ro/social/analiza-ce-spun-sefii-medicali-si-autoritatile-locale-despre-reorganizarea-spitalelor-7947404>.
- [11] National Centre for Health Statistics and Information. *Health statistics yearbook 2014*. Bucharest: National Institute of Public Health; 2015.
- [12] National Institute of Statistics, Sistemul conturilor de sănătate (SCS) în România 2013 [The National Health Accounts: Romania 2013]. Bucharest, NIS, 2015.
- [13] Ciutan M, Preda A, Chiriac ND, Dosius M, Vlădescu C. The evaluation of hospital services using after implementation of restructuring measures in Romania. *Management in Health* 2011;16(May (4)):13–23, 2012.
- [14] Edwards N. Improving the hospital system in the Republic of Moldova. Health policy paper series No.1. Denmark: WHO Europe; 2011. Accessed 10 July 2018 http://www.euro.who.int/_data/assets/pdf.file/0020/153353/e95885.pdf?ua=1.
- [15] Pesheva P, Georgieva E, Hristov N, Zahariev V, Dimitrova D. The hospital reform in Bulgaria. *European Journal of Public Health* 2017;27(3).