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Reducing waiting times in the Italian NHS: The case of Emilia-Romagna

This is the final peer-reviewed author's accepted manuscript (postprint) of the following publication:

Published Version:

Toth, F. (2020). Reducing waiting times in the Italian NHS: The case of Emilia-Romagna. *SOCIAL POLICY & ADMINISTRATION*, 54(7), 1110-1122 [10.1111/spol.12588].

Availability:

This version is available at: <https://hdl.handle.net/11585/781134> since: 2020-11-18

Published:

DOI: <http://doi.org/10.1111/spol.12588>

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(Article begins on next page)

This is the final peer-reviewed accepted manuscript of:

Federico Toth (2020): Reducing waiting times in the Italian NHS: The case of Emilia-Romagna, Social Policy & Administration, 54 (7): 1110-1122

The final published version is available online at:

<https://doi.org/10.1111/spol.12588>

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Reducing Waiting Times in the Italian NHS: The Case of Emilia-Romagna

Federico Toth

Abstract

In 2015, the Emilia-Romagna regional government implemented a plan to reduce waiting times for elective outpatient procedures. The objective set by the regional government establishes that at least 90% of specialist services are to be provided within the following maximum waiting times: 30 days for the first specialist consultation, and 60 days for diagnostic tests.

The plan adopted by the Emilia-Romagna regional government is of particular interest because it encompasses a combined strategy. Some of the interventions envisaged in the plan aim at increasing the supply of specialist services. Others address the demand side, seeking to reduce inadequate requests and discourage no-shows by patients. And others focus on combining supply and demand, and neutralizing the effects of some perverse incentives.

The Emilia-Romagna plan appears to have had a successful outcome. In the first four years of implementation, the 90% target has not only been achieved, but also widely exceeded.

Keywords

Waiting lists – Waiting time – Elective outpatient care – Health services – Italy – Emilia-Romagna .

Introduction

The healthcare systems of many OECD countries are heavily impacted by long waiting times (Iversen & Siciliani, 2011; Borowitz & Moran, 2013; Viberg et al., 2013; Siciliani et al., 2014).

This issue affects in particular those countries where healthcare services are publicly funded and where the specialist care provision system is not free to adapt to fluctuations in demand as it is, to some extent, subject to restrictions (Cullis et al., 2000; Hoel & Saether, 2003; Siciliani & Hurst, 2005; Kreindler, 2010; Riganti et al., 2017). In recent decades, different strategies have been employed - at national or sub-national level - to contain the problem: some of them address the supply of health care services, while others focus on the demand side (Siciliani & Hurst, 2005; Willcox et al., 2007; Kreindler, 2010; Iversen & Siciliani, 2011; Borowitz & Moran, 2013).

This article presents specific experiences from the Region of Emilia-Romagna, Italy, where a plan was launched in 2015 to reduce waiting times for elective outpatient procedures. This case study of Emilia-Romagna is interesting for at least two reasons. The first reason is that the plan is achieving its objectives; specifically, during the first four years of implementation the waiting times for the specialist services identified in the plan have been considerably reduced. The second reason for interest lies in the fact that the “policy package” made available by the regional government of Emilia-Romagna tackled the issue of long waiting times from several perspectives, using many different policy instruments. Some of these instruments have an effect on the demand, while others intervene on the supply of health care services. The plan includes both positive incentives (*carrot*), as well as more stringent rules and the threat of sanctions (*stick*).

In addition to the data on waiting times provided by the Region of Emilia-Romagna, the information contained in this article was collected through some semi-structured interviews. At the regional level, two managers who were responsible for the preparation and implementation of the plan were interviewed. These regional managers were asked to reconstruct in detail the process that led to the approval of the regional plan, and provide us with data regarding the plan’s implementation process. In each local healthcare agency, the managers in charge of handling waiting lists were interviewed. Since eight local health agencies operate in Emilia-Romagna, eight managers were interviewed, one for each healthcare agency. The managers were asked to evaluate which measures from the regional plan were actually implemented within their organization, in what ways and with what effects. The interviews were conducted from May 2017 to April 2018. The managers of the local health agencies responsible for waiting times were interviewed by Anna Rio, for whose collaboration I am most grateful. The interviews with regional managers were conducted by the author of this article.

The article is organized as follows. The first section, of a theoretical nature, attempts to summarize the underlying causes of long waiting lists and waiting times. The second section provides the reader with some contextual elements to bring the Italian case into focus. The plan adopted by the Emilia-Romagna regional government is detailed in the third section, while the fourth and fifth sections respectively dwell on the results achieved in the first four years of implementation of the plan, and the measures that were actually implemented in the eight Emilia-Romagna local health agencies.

1. What Causes Waiting Lists?

Essentially, waiting lists in the healthcare sector result from excessive demand for given services over the services that are actually available. There being an imbalance between supply and demand, the issue of waiting times can be addressed from two sides (Cullis et al., 2000; Siciliani & Hurst, 2005; Kreindler, 2010; Iversen & Siciliani, 2011): we can intervene on the demand side, limiting requests for certain healthcare services, or on the supply side, increasing the availability of such services. Indeed, these two strategies can also be combined, simultaneously controlling both demand and supply.

Demand for Healthcare Services

There are essentially two factors that may lead to an excessive demand for healthcare services: 1) low costs to patients (or low copayments) for medical treatments; 2) inadequacy of referrals.

Patients may be led into creating an excessive demand for healthcare services when they do not pay (or pay only a small part) for the services they make use of. Patients - knowing that their expenditure will not be proportional to their actual consumption - are tempted to

request redundant or not strictly necessary medical procedures that they would not request if they were to pay the market price.

"Inadequate" referrals (Foote et al., 2004; Kreindler, 2010) are a second factor contributing to an excessive demand for healthcare services. Patients may indeed undergo "inappropriate" medical examinations and treatments that are not suited to their needs, either because they will not bring them any benefit, or because alternative, more effective treatments are available. In systems where patients have direct access to secondary care and in those where gatekeeping physicians do not efficiently filter requests, there is the risk that a substantial part of specialist care is inappropriate.

Supply of Healthcare Services

In principle, the supply system may prove inadequate with respect to demand for three reasons: 1) the shortage of resources destined for the provision of given services; 2) the misuse of available resources; 3) the presence of *perverse incentives* that induce providers to self-limit their production capacity.

Limited provision of given procedures may result from a shortage of resources: the provision system is under-sized compared to demand. The shortage may concern *human* resources (e.g., few physicians capable of performing given examinations or treatments), *physical* resources (few hospitals where given procedures are performed), or *technological* means (lack of suitable equipment).

However, it may also happen that the available resources, albeit being adequate – at least in theory – to meet the needs of users, are not fully exploited (Cullis et al., 2000). This is essentially a problem of organizational inefficiency. Suboptimal use of available resources may stem from lack of motivation of healthcare personnel, which, in turn, may depend on the absence of effective incentives to maintain high levels of productivity (Siciliani & Hurst, 2003).

There is another element, partially linked to the previous factor, that may contribute to the low productivity of healthcare facilities and hence the long waiting times: the presence of *perverse incentives* (Street & Duckett, 1996). An example of perverse incentives comes from the "dual practice" of specialist physicians (Gonzalez, 2004). As is well known, in many countries physicians are permitted to practice their profession in both public and private facilities. One of the main reasons why patients turn to the private sector - paying out of their own pocket, or taking out a private insurance - stems from the long waiting times of public facilities (Besley et al., 1999). Doctors practicing both in the public and in the private sector can thus benefit from the long waiting times of public facilities, as they can indeed increase their earnings through private practice (Iversen, 1997; Cullis et al., 2000; Siciliani & Hurst, 2005; Kreindler, 2010).

Interaction between Supply and Demand

We have so far kept separate the factors affecting demand from those that influence supply. Some authors (Siciliani & Hurst, 2005; Martin & Smith, 1999; Borowitz et al., 2013), however, point out that supply and demand interact with each other.

A first feedback mechanism between supply and demand is linked to waiting times intended as a *rationing mechanism* (Lindsay & Feigenbaum, 1984; Street & Duckett, 1996; Iversen & Siciliani, 2011). Long waiting times indeed tend to discourage demand towards a given facility: because of the long waiting times, some potential users decide to forgo the service, or turn to other facilities (Hoel & Saether, 2003; Iversen & Siciliani, 2011; Borowitz et al., 2013). The longer the waiting times, the higher should be the number of potential users who decide to make do without the service. And yet, the opposite is just as likely to occur: the reduction of waiting times may prompt users to increase demand, even for inadequate medical procedures. A constant balancing mechanism hence exists between supply and demand.

When waiting times are reduced, demand increases, and waiting times will start growing again. Conversely, if waiting times become too long, many patients end up forgoing the service they seek: they opt out of the waiting list, which will, at least temporarily, become shorter.

A second feedback mechanism between supply and demand is linked to the reasons that lie behind subscribing to a *private insurance*. In many countries, patients manage to avoid waiting lists if they have insurance coverage to supplement mandatory or public coverage. In countries where there are long waiting lists, the incentive to take out a supplementary private policy should be greater (Besley et al., 1999). The subscriber of a supplementary policy can decide whether to enter a waiting list for a public facility or turn to private practice (where waiting times are usually much shorter). In the latter case, the individual advantage (shortening waiting time) is combined with a collective benefit: the patient receiving private healthcare services leaves an available slot on the list, reducing waiting times for those who do not have private insurance and do not resort to private practice (Hoel & Saether, 2003). The spread of supplementary private insurance can indeed have a beneficial effect on waiting times, as it eases the pressure on public providers. Nonetheless, the reduction of waiting times weakens the incentive to purchase supplementary insurance (Siciliani & Hurst, 2005). Also in this case, the two factors thus end up compensating each other.

2. The Italian NHS and the Issue of Waiting Times

The *National Health Service* (NHS) currently operating in Italy is funded mainly through taxation. The NHS is committed to providing a wide range of primary and specialist care to all residents. Starting from the early 1990s, Italian regions enjoy great autonomy in planning and organizing healthcare services in the territory under their jurisdiction (Mapelli, 2012; Toth, 2014a; Toth, 2014b; Riganti et al., 2017).

The Italian NHS adopts a mandatory gatekeeping system: with the exception of emergency care, access to specialist services is only available when prescribed by the family doctor. About two-thirds of the healthcare services financed by the National Health Service are provided by public providers (belonging to the NHS), while one-third is provided by private providers under contract with the public service (Mapelli, 2012; Toth, 2016).

In addition to their public practice, the medical staff of the Italian NHS are also allowed to work as private professionals - hence outside normal working hours (Fabbri & Monfardini, 2009). NHS physicians wishing to pursue their private practice can choose between two alternatives: the so-called *intra-moenia* and *extra-moenia*. *Intra-moenia* refers to private practice within the public facility where the physician is employed, whereas *extra-moenia* refers to an independent activity outside the NHS, performed in private facilities. Doctors who agree to carry out private practice under the *intra-moenia* regime receive an economic premium (referred to as “exclusivity compensation”). Compared to the “*extra-moenia*” private practice, the *intra-moenia* regime should have a double advantage (Toth, 2014a). On one hand, it allows doctors to work exclusively within their own structure (thus avoiding the situation in which a doctor works in the morning in a public structure and in the afternoon in a private structure). On the other hand, *intra-moenia* represents a source of additional revenue for public hospitals for the use of space and equipment. In fact, doctors are required to pay a percentage of the proceeds from their private practice to the institutions that host them (Toth, 2012).

Patients who decide to avail themselves of *intra-moenia* services are required to pay the full price of the consultation. Furthermore, patients resort to *intra-moenia* services, paying out of their own pocket, for two main reasons: 1) the possibility to personally choose a specific healthcare specialist; and 2) the possibility to obtain healthcare services faster than those offered by the public facilities. Public health agencies usually organize two separate booking

systems (Fattore et al., 2013): one for public and the other for *intra-moenia* practice.

The Issue of Waiting Times and the 2010 National Plan

When Italians are asked to evaluate their National Health Service, the aspect they complain about most is the long waiting times (Censis, 2017; Eurispes, 2017; Cittadinanzattiva, 2019). It should be noted that in Italy the problem of long waiting times almost exclusively affects public facilities; private clinics usually have much shorter response times. Also, the services provided by NHS physicians under the *intra-moenia* regime generally have very short waiting times. Just a few examples to understand the differences between the various regimes: for knee magnetic resonance imaging, the average waiting time is 80 days in public facilities, 11 days for *intra-moenia* private practice and only 5 days for extra-moenia private practice; for a cardiology examination in private clinics, waiting times average 5 days, increasing to 7 in the *intra-moenia* regime and 67 in public facilities (Censis, 2017). In the face of these differences, it is understandable that many patients prefer to pay out of their own pocket and turn to the private sector or the *intra-moenia* practice. As confirmed by recent research (Censis, 2017), over half (52%) of those who have sought the services of private healthcare providers, paying the full cost, state to have done so because of the long waiting times in public facilities.

To tackle this problem, in 2010 the Italian government laid out a *National Plan for the Management of Waiting Lists* for three years to follow. The 2010 National Plan combines the strategies of maximum waiting times, and prioritization of waiting lists (Siciliani & Hurst, 2005; Kreindler, 2010). When writing their referrals, GPs are required to indicate the level of urgency. Services considered *deferrable* must be provided within the following maximum waiting times: 30 days for the first specialist consultation, and 60 days for diagnostic tests. In the years following implementation of the national plan, such provisions have been largely disregarded (Fattore et al., 2013; Toth, 2014a).

3. The Emilia-Romagna Regional Plan

In July 2015, the Emilia-Romagna regional government implemented an ambitious plan for the reduction of waiting times in healthcare. The objective set by the regional council establishes that at least 90% of specialist services are to be provided within the maximum waiting times stipulated by the 2010 *National Plan for the Management of Waiting Lists*. As previously stated, the maximum acceptable delay is 30 and 60 days for the “first specialist visit” and diagnostic tests, respectively. At present, the Emilia-Romagna regional government’s commitment involves only 42 specialist services identified as critical at a national level (the complete list of the 42 services included in the monitoring is included in the Appendix).

The reform package adopted by the Emilia-Romagna regional government encompasses measures that address the issue of waiting times from different perspectives. The plan includes: 1) measures aimed at increasing supply; 2) interventions meant to reduce inadequate demand; 3) structural incentives to reward the achievement of objectives and neutralize the effect of some perverse incentives; 4) measures for managing waiting lists and monitoring waiting times.

[table 1 around here]

The Supply Side

A relevant part of the measures envisaged in the Emilia-Romagna plan aims to increase the number of available specialist services.

A first measure focuses on “*full use of productive potential*”, to be achieved by extending opening hours. For specialist services that show performance indexes below the set 90%

target, outpatient clinics are to stay open in evenings and on weekends. Depending on demand, such a measure may concern both public and accredited private facilities.

A second measure concerns the set-up of an *ad hoc* fund (10 million Euros to be used by the end of 2016) aimed at reducing waiting times. These resources are to be used primarily to recruit new staff in the most critical areas.

Local Health Agencies facing critical issues are given the opportunity to enter into specific supply agreements with accredited private facilities. An aspect considered to be particularly critical (and where the current public supply is deemed insufficient) involves magnetic resonance imaging.

Individual Health Agencies can request specific consultations from “intra-moenia” private practice that will be provided to users at a reduced fee: patients pay the same co-payment due to the public facility and the rest is borne by the local health agency.

The Demand Side

The Emilia-Romagna plan also includes some measures aimed at reducing demand for certain healthcare services.

Waiting lists are often “inflated” by users who book a given procedure, but then miss the appointment. We are referring to the problem of “no-show patients”. As stated by the regional managers who were interviewed for this study, this phenomenon was not negligible at the time of the plan’s approval: in public structures of Emilia-Romagna, 11% of specialist consultations were not performed because patients did not show up for the appointment. The Emilia-Romagna regional government, therefore, resolved to discourage such behaviour by fining users who miss appointments. Starting from April 2016, patients who do not show up for the appointment without cancelling at least two days in advance, are still required to co-pay the fixed amount due (up to a maximum of 46 Euros).

The 2015 plan confirms a previously approved measure relating to the *adequacy* of referrals. For a few years now, some regional health agencies have been using a so-called *semantic search engine*: this software is designed to analyse the data in the individual referrals from family doctors, and assess to what extent they are complete and consistent with the guidelines set by the regional government.

Structural Incentives

As mentioned previously, some perverse incentives may exist that may end up deterring health professionals from reducing waiting times. The Emilia-Romagna regional government has introduced two measures to counteract such disincentives: the first is a rewarding measure, the second is a penalty in case of opportunistic behaviour.

An economic incentive is contemplated for general managers of local health agencies, managers in charge of handling waiting lists and chief medical officers of facilities directly involved in the provision of the 42 specialist services. As provided by the regional plan, a substantial part of the productivity remuneration of such professionals depends on the actual achievement of the set objective (90% of healthcare services provided within the maximum waiting times).

Local health agencies are entitled to suspend *private practice* related to specialist services where waiting times are excessively long. Private practice may be suspended if the following conditions arise: 1) waiting times for a given specialist service systematically exceed the maximum permissible limit, or 2) there is, in the same specialty, an imbalance in the relationship between private "*intramoenia*" and public practice. In the event that both conditions occur, the Local Health Agency is empowered to block the private practice of the physicians who are directly involved.

Monitoring of Waiting Times and Implementation of the Regional Plan

Some measures concern the monitoring and assessment of the effectiveness of the various interventions provided for in the plan.

Each local health agency is required to appoint a manager in charge of handling waiting lists. The task of this role is to coordinate the monitoring of waiting times and assess the effectiveness of the measures provided for in the regional plan within the local area of their competence.

The plan provides for the regional health service to have software that allows for real-time monitoring of waiting times. In each local health agency, this software provides the waiting list manager and the general management with daily updates on the performance of the 42 services under observation.

A new Regional Observatory for Waiting Times is established. This regional body is composed of the eight waiting list managers of the local health agencies, three chief medical officers and the regional managers responsible for community and hospital care. The Regional Observatory has the task of assessing the effectiveness of the interventions made and of proposing any corrective measures.

4. Results Achieved to Date

The purpose of this section is to analyse the results that the plan approved in 2015 by the Emilia-Romagna regional government has achieved so far.

The 90% regional average target was reached, and largely exceeded, as early as six months after approval of the plan. The result does not seem to stem from an extemporaneous and contingent effect, because the objective was regularly achieved even in the following semesters. We can hence conclude that the Emilia-Romagna plan has served its purpose.

[Graph 1 around here]

Graph 1 – Percentage of specialist services provided within maximum waiting times

Source: Regione Emilia-Romagna, www.tdaer.it

Let us consider the overall regional data pertaining to the 42 services envisaged in the plan (see Graph 1). At the time of approval of the plan, in July 2015, 73% of specialist services were provided within the maximum waiting times. Six months later, in January 2016, the 90% target had not only been achieved, but also widely exceeded. In just six months, it rose from 73% to 97.7% of services provided "on time". One year later (July 2016), the results improved further, with 98.4% of services provided within the maximum waiting times. The percentage rose even in the following semester: in January 2017, the Region of Emilia-Romagna reached 99.4% of healthcare services provided within the maximum time limits. After a slight decline in April 2017 (96.7%), the data relative to services provided "on time" resumed an upward trend as from January 2018 (98.9%). Also in the course of 2018, there was a decline in spring, and growth in the following months, up to the result 99% in January 2019.

5. Measures Actually Taken

Table 2 shows which measures among those envisaged in the plan have been effectively used, and to what extent they have been implemented. As previously indicated, information regarding the implementation of the regional plan in the eight local health agencies was collected through interviews with the eight managers who were responsible for the waiting lists.

[Table 2 around here]

Outpatient Clinics Open Evenings and Weekends. Particularly in the first months following approval of the regional plan, all the Emilia-Romagna local health agencies decided to stay open out of hours: in the evening (even until 10:00 p.m.) on weekdays, all day on Saturdays, and Sunday mornings. The services performed out of hours were limited to those with the longer waiting times. As the agencies started to comply with the maximum permissible waiting times, the provision of services out of hours decreased.

Recruiting New Staff. The Emilia-Romagna regional government stated that the 10 million Euros allocated in 2015 were used in the months immediately following approval of the regional resolution to hire about 150 new professionals, including physicians, nurses and healthcare technicians. The regional managers interviewed for this research stated that the Emilia-Romagna regional authorities invested an overall amount higher than the 10 million Euros envisaged in the resolution of the summer of 2015 to finance the various measures set forth in the plan. In 2016, the additional expenditure amounted to about 15 million Euros; spending in 2017 and 2018 totalled an equivalent amount.

Agreements with Accredited Private Facilities. Almost all local health agencies renegotiated their contracts with private providers to enhance provision of the 42 services under observation. Efforts focussed mainly on magnetic resonance imaging in private practice.

Intra-moenia Private Practice Services financed by Public Health Agencies. Some local health agencies have availed this opportunity, albeit to a limited extent.

Sanctions for Patient No-shows. Fines for no-show patients became applicable as from April 2016. Penalties have certainly had a deterrent effect: the number of "no-shows" has dropped dramatically. One year after the entry into force of the sanctions, "no-shows" dropped from 11% to 1% of total appointments.

Improving the Adequacy of Referrals. Prior to the 2015 plan, all Emilia-Romagna local health agencies had already set the objective of improving the adequacy of referrals. Previously, we

mentioned the so-called "semantic search engine" used to carry out *ex-post* assessment of the accuracy of referrals from family doctors. This tool was initially tested by two local health agencies, and was subsequently extended to the others.

Remuneration of Executives depending on Compliance with Maximum Waiting Times. The productivity remuneration of general managers, chief medical officers and waiting list managers of local health agencies is now dependent on compliance with the maximum permissible waiting times.

Suspension of Private Practice. None of the local health agencies in Emilia-Romagna has so far adopted such a measure. This does not mean that the measure has not been effective, as the "threat" of suspending private practice may have served as a deterrent.

Appointment at each Agency of a Manager in Charge of Handling Waiting Lists. Each local health agency has identified a manager responsible for waiting times.

Monitoring Software. All the local health agencies throughout the region have been provided with the real-time waiting list monitoring software. Weekly updates on actual waiting times - detailed by service and agency - are available online.

Regional Observatory for Waiting Times. The regional observatory has been established and meets on a regular basis, about once a month.

6. Conclusions

The plan passed by the Emilia-Romagna regional government in 2015 appears to have had a successful outcome. The initial objective (at least 90% of the first specialist consultations and diagnostic tests performed within 30 and 60 days, respectively) has not only been achieved, but also widely exceeded.

It is opportune to ask the reasons why the Emilia-Romagna plan has generated positive results and what lesson could be learned from this regional experience by the policy makers of other countries (but also by the administrators of the other Italian regions).

As argued in the first section of this article, the issue of long waiting times is complex and multifaceted, and can be brought about by the combination of different factors. The peculiarity of the Emilia-Romagna plan lies in the fact that it does not focus on a single cause, but approaches the problem from a wide perspective, tackling it from more than one side.

If we consider the different strategic options that can be used to reduce waiting times (Siciliani & Hurst, 2005; Kreindler, 2010; Iversen & Siciliani, 2011), the one adopted by the Emilia-Romagna regional government can certainly be considered a "combined" strategy (Siciliani & Hurst, 2005; Borowitz & Moran, 2013). In the third section of this work, we have seen how some of the interventions envisaged in the plan aim at enhancing the availability of specialist services. Others address the demand side, seeking to reduce inadequate requests and discourage no-shows by patients. And others focus on combining supply and demand, and neutralizing the effects of some perverse incentives.

We should also note that the Emilia-Romagna authorities have resorted to policy instruments characterized by different levels of coercion (**see Table 1**). Some of the measures taken are definitely coercive, and specify sanctions and fines for both users and healthcare professionals. Conversely, other provisions reflect a softer approach, based on rewarding mechanisms or on the use of moral suasion to encourage behaviours that are deemed appropriate. In other words, the Emilia-Romagna plan uses both carrot and stick.

Although the case study presented in this article seems to have been a success, some limits should also be considered.

Firstly, the results that are currently available only refer to the first four years of implementation: there is a possibility that the effectiveness of the adopted measures may weaken over time.

Secondly, the Emilia-Romagna plan only covers 42 outpatient procedures. It would be important to extend the strategy to other medical procedures as well.

Finally, we ought to keep in mind that the objective stated by the Emilia-Romagna government was set on 90% of the services provided. The target could be raised further to reach 100% of the available services. If the maximum waiting time is considered to be a patient's right (or even just a quality standard that the regional authorities wish to guarantee), then all healthcare services (and not only 90%) should be provided within the maximum waiting times.

The foregoing limitations lead us to regard the results achieved to date in Emilia-Romagna as positive, but the future is certainly open to further improvement.

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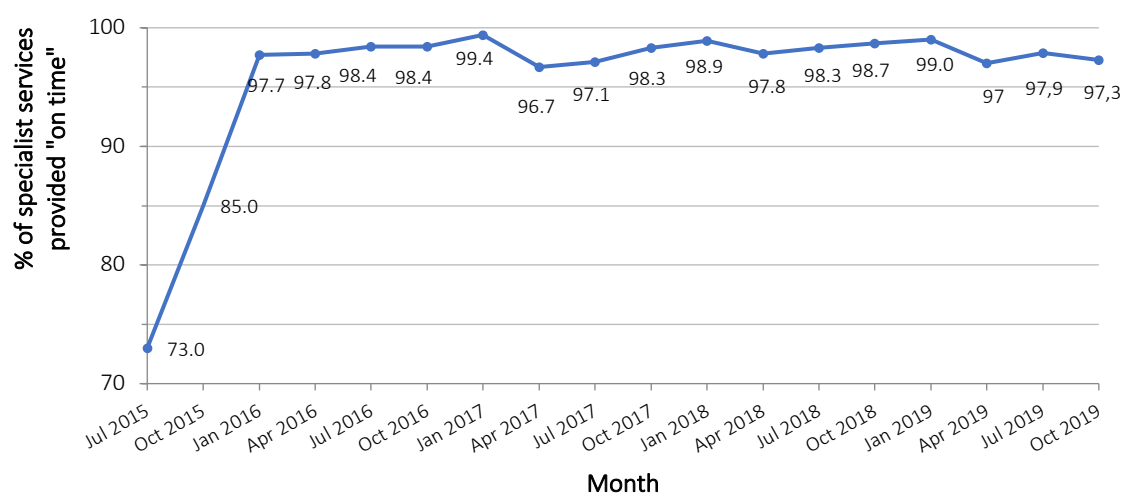
Table 1 – Measures Included in the Plan

Problem	Planned measures
Insufficient supply resulting from lack of resources and underexploited productive potential	<i>Outpatient clinics open evenings and weekends</i>
	<i>Recruiting new staff</i>
	<i>Agreements with accredited private facilities</i>
	<i>Intra-moenia private practice services financed by public health agencies</i>
No-show patients	<i>Sanctions for no-show patients</i>
Inadequacy of referrals from family doctors	<i>Improving the adequacy of referrals</i>
Lack of rewarding incentives and presence of “perverse incentives”	<i>Remuneration of executives depending on compliance with maximum waiting times</i>
	<i>Suspension of private practice</i>
Lack of updated data on waiting times	<i>Monitoring software</i>
Lack of coordination and revision of the adopted measures	<i>Appointment at each local health agency of a manager responsible for waiting times</i>
	<i>Regional Observatory for waiting times</i>

Table 2 – Measures Actually Taken

Planned measures	Implemented measures
<i>Outpatient clinics open evenings and weekends</i>	✓ Particularly in the first months following approval of the plan
<i>Recruiting new staff</i>	✓
<i>Agreements with accredited private facilities</i>	✓
<i>Intra-moenia private practice services financed by public health agencies</i>	✓ Only in some local health agencies and, in any event, on a small scale
<i>Sanctions for no-show patients</i>	✓
<i>Improving the adequacy of referrals</i>	✓ The measures already in place are being pursued
<i>Remuneration of executives depending on compliance with maximum waiting times</i>	✓
<i>Suspension of private practice</i>	✗
<i>Monitoring software</i>	✓
<i>Appointment of a manager responsible for waiting times at each local health agency</i>	✓
<i>Regional Observatory for waiting times</i>	✓

Graph 1 – Percentage of specialist services provided within maximum waiting times



Source: Regione Emilia-Romagna, www.tdaer.it

Appendix

List of the 42 services subject to waiting time monitoring

Specialistic examinations

1. Eye examination
2. Urological check-up
3. Physiatric examination
4. Endocrinological examination
5. Neurological examination
6. Orthopaedic examination
7. Oncology consultation
8. Cardiovascular assessment
9. Gynecological check-up
10. Dermatologic physical examination
11. Ear, Nose and Throat (ENT) exam
12. Vascular surgery consultation
13. Gastroenterological evaluation
14. Pneumalogical check-up
15. Diabetes check-up
16. Obstetric examination
17. Clinical breast exam

Diagnostic tests

18. Colonoscopy
19. Electromyography
20. Ecocolordoppler
21. Abdominal Ultrasound
22. Gastroscopy
23. CT Head Scan
24. Abdominal CT Scan
25. Magnetic Resonance Imaging (MRI) of the brain
26. Magnetic Resonance Imaging (MRI) of the abdomen
27. Magnetic Resonance Imaging of the spinal cord

28. CT scan of the spine
29. CT scan of the hip
30. CT scan of the chest
31. Breast Ultrasound
32. Doppler Echocardiography
33. Electrocardiogram (ECG)
34. Holter electrocardiogram (ECG)
35. Audiometry Test, Hearing Test
36. Spirometry
37. Mammogram
38. Head and Neck Ultrasound
39. Obstetrical & Gynecological Ultrasound
40. Exercise Electrocardiogram (ECG)
41. Magnetic Resonance Imaging (MRI) of skeletal muscle
42. Dilated Fundus Examination