IDIS report

PRIVATE HEALTHCARE, PROVIDING VALUE

2013 RESA Study

Healthcare Outcome Indicators of Private Heathcare


Instituto para el Desarrollo
e Integración de la Sanidad

Contents

Presentation

The presentation of the second edition of the RESA (Healthcare Outcomes) study coincides with the third anniversary of IDIS, a event that is characterised by several noteworthy facts. IDIS was founded in order to bring together under one roof all those individuals who play a major role in private healthcare and who view it with particular interest, through objectives and synergies established with a clear vision of the future. The main goal of IDIS is to maintain a strong and consistent presence in the strategic definition of the new healthcare model that is being consolidated in Spain, which must be founded on the integration and complementarity of both public and private systems of provision and insurance.

Since its inception, IDIS has sought to take part in public debate, not through demagoguery or dogma but with solid arguments and data based on in-depth studies and analyses prepared by independent experts. These have confirmed what the sector has reiterated time and again: a firm commitment to quality of care, developed by the best professionals at centres equipped with the latest technology in each area and department; a determination brought on by research and development, by regular participation in the pharmacological R&D procedures, especially in the earliest stages; a boost for the in-service training of its professionals, and a proactive collaboration in intern training at 12 university hospitals that are already a part of private healthcare in Spain; an increasing role in managing the complexity of vital fields such as oncology, cardiovascular surgery, neurosurgery, paediatric surgery, etc.; a social commitment to our patients and their families in terms of certified quality and accredited social responsibility; and an important contribution to the generation of wealth and qualified employment, an important aspect to consider as unemployment, disillusionment and despair darken our future.

The past three years have been very productive, full of enthusiasm, commitment, tenacity and perseverance in our positioning and in fulfilling our mission, vision and values. Such a young institution has rarely achieved so much in so little time, with highly commendable results at every turn, particularly in enhancing a sector, private healthcare, that greatly contributes to society, including in relief to the public healthcare sector, which is undergoing increasing efficiency problems brought on by different factors in a system that needs to be reassessed and updated.

Incessant demand, an ageing population, an increasing life expectancy for our society, the subsequent increase in chronic diseases, new technologies and innovations, which are becoming more accurate and specific but also much more expensive, new diseases, unregulated cross-border phenomena, etc.: all these aspects show that the system needs to be reassessed urgently, not from a particular point of view, but from a global level involving all stakeholders, whether public or private.

A broad pact is required for the sustainability and future of the Spanish healthcare system. This pact should take into account the contributions of each entity and all of their members. As such, within this strategic framework, private healthcare needs to be listened to and taken into account, since it provides huge contributions to the system through its performance and by decreasing the financial and healthcare pressure put on the public system, as has been repeatedly and consistently demonstrated.

The unburdening of public healthcare by private healthcare users, with their voluntary double insurance, means that the current waiting lists would not be increased asymmetrically, dramatically and oppressively. As it stands, our public system could not absorb the nearly 10 million more private healthcare users, who represent roughly a quarter of the Spanish population.

Undoubtedly the quality of care seen in the daily management of our hospitals means that patients and families speak more and more highly of private healthcare, especially thanks to the invaluable work of our professionals who obtain optimal clinical results and high rates of satisfaction from our patients. These parameters are subject to annual review by the Private Healthcare Barometer, which was recently presented and whose conclusion is that more than 89% of respondents with double insurance would recommend private healthcare to their families and friends. Regarding clinical results, the second edition of the RESA study shows data obtained from a sample of more than 100 hospitals, which demonstrate the loyalty of our patients and their families to our centres.

With this kind of transparency, private healthcare shows its results to the general public, thus revealing the existing important movement in private healthcare towards implementing policies for quality of care and patient safety, as well as excellent efficiency management for the benefit of the entire health system. The quality indicators obtained from patient databases show quality levels similar or even superior to those of any other national or international healthcare institution.

With this study, IDIS wishes to confirm the line of continuity it announced last year with the presentation of the first RESA study. This will contribute to the regular understanding of the business and performance of private healthcare.

In short, the data demonstrates a reality, a sector that generates trust through the quality of its centres and equipment, the high level of its professionals and the reliability of its processes, which year-after-year gain the trust and credibility of our patients and their families.

Jose Ramón Rubio

President of the Instituto para el Desarrollo e Integración de la Sanidad (IDIS)

1. Study objectives

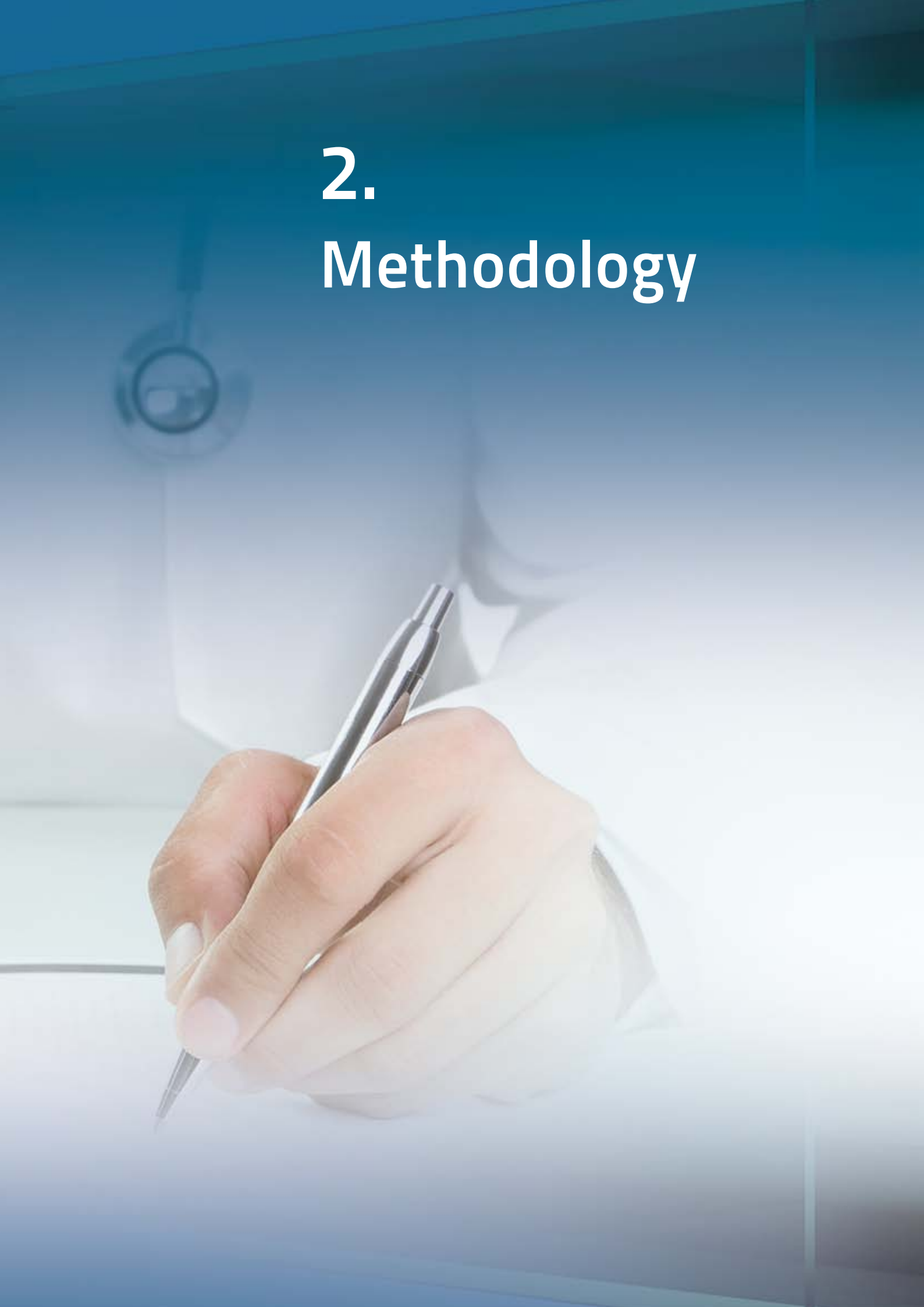
The Health Outcomes Study (RESA) is being presented for the second year in a row. This report responds to a private healthcare initiative sponsored by the Instituto para el Desarrollo e Integración de la Sanidad (IDIS), which, in the interests of transparency, wants to demonstrate to the general public the results and levels of quality of care of all private hospitals.

The mission of the Instituto para el Desarrollo e Integración de la Sanidad (IDIS) is to raise awareness, promote and foster the institutional representation of the Spanish private healthcare sector in a manner consistent with its economic and social importance, by giving value to its reality and professionalism and highlighting the important contributions it can make to the national healthcare system.

To achieve these objectives, the Board of IDIS has promoted the 2013 RESA Study, which picks up from where the 2012 RESA Study left off, while expanding the selection of result indicators. In this way, it seeks to show the general public not only its healthcare results, but also the quality of the private healthcare sector, by providing **a set of indicators representative of private healthcare:**

- Created from currently available information.
- Visualising the role and major achievements of quality in our health.
- Understandable by the general population and professionals.

2. Methodology



2.1. Participants

The 2013 RESA Study has significantly expanded the number of participating centres. This year there have been **103 participants** (18% more than in the 2012 study).

	2012	2013	Difference in participants	Change in participation (%)
RESA Study	87	103	+ 16	+ 18%

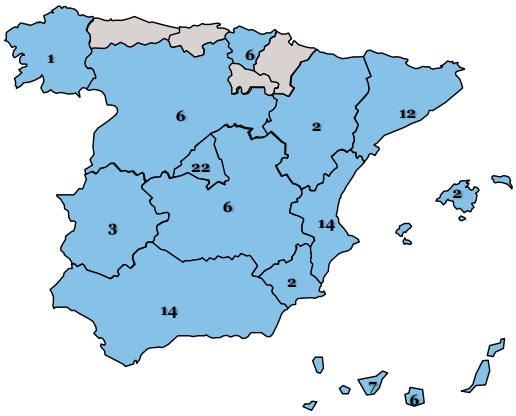
- 82 Private hospitals (no public assistance)
- 6 Hospitals that are functionally integrated in the public health system
- 15 Outpatient clinics

The 2013 RESA Study has increased the number of participating centres by 18% this year.

The 2013 RESA Study therefore offers an even more comprehensive and **meaningful view of the Spanish private healthcare sector**. The 103 centres participating in the study include the largest private hospitals and groups, according to the range of services offered, number of patients seen, number of beds (10,548) and activity.

In addition to having more participants, **the profile is more diverse**, having included a number of private centres that are functionally integrated into public healthcare, as well as more outpatient surgical clinics and diagnostic services. This year, the representation of the private sector is higher not only in number but also in the diversity of the models.

Representation of the number of healthcare centres participating in the 2013 RESA Study by Autonomous Community



This study, therefore, includes the participation of both independent major hospitals and the largest private hospitals in Spain, with a very high regional geographical representation (section 8.5 of this report contains a list of all study participants).

All hospitals that participated in the study have submitted data from 2012, as this was the object of analysis. Furthermore, most

of the centres have also provided data for 2009, 2010 and 2011, which allows us to observe the longitudinal progression of the indicators. This time series is of great interest in observing the progression of the different indicators, although somewhat limited by the unavailability of information from all centres for every year.

The 103 participating centres include the largest private hospitals and groups (by range of services offered and activities).

2.2. Basic details of the participating centres

The hospitals participating in the 2013 RESA Study had the following activity and resource figures in 2012:

Figure 1
Basic details of hospitals participating in the 2013 RESA Study

Healthcare activities	2011	2012	% Increase
Hospital discharges	586,587	706,086	20
Surgeries performed under general anaesthesia	240,639	245,764	2
Attended emergencies	3,263,959	3,581,312	10
Hospital resources	**2011**	**2012**	
No. of conventional hospital beds	8,729	10,548	21
ICU beds for adults	507	684	35
Beds for neonates and paediatrics	274	376	37
Operating theatres for major surgery	495	565	14
Delivery rooms	111	137	23

2.3. Indicator selection process

A RESA Study Committee was created to select the indicators for this new study, which included nine experts from major hospital groups/private insurance companies and five fieldwork managers.

The 2013 RESA Study Committee defined the criteria for selecting indicators. The objectives set out were to achieve a good balance between indicators representative of hospital healthcare, that the general public is able to understand, and to use data that would be available in the information systems of as many hospitals as possible.

The following table shows the final selection of the study indicators:

The selected indicators allow a clear visualisation of the role and main quality achievements of private healthcare.

The current study includes almost all the indicators that were viable in the previous study in order to compare the series with previous years, thus providing a dynamic view of the situation. Only some indicators that implied a significant manual collection workload for centres, and for which no notable changes are expected over short periods, were not included. As such, it was decided to examine these indicators biennially or triennially in future editions.

Figure 2
2013 RESA Study Indicators

Code	Name of indicator	Type of indicator
1	Average stay adjusted by case	Result
2	Average wait time for scheduling additional tests (Mammogram, MRI and CT)	Process
3	Average delivery time for additional test reports (Mammogram, MRI and CT)	Process
4	Average scheduling time for first specialist consultation (Ophthalmology, Dermatology, Trauma and Obstetrics & Gynaecology)	Process
5	Average triage time at A&E	Process
6	Average wait time for medical treatment at A&E	Process
7	Average surgery wait time	Process
8	Average time between diagnosis and treatment in breast cancer	Process
9	Average time between diagnosis and treatment in colon cancer	Process
10	Average time between diagnosis and treatment in lung cancer	Process
11	Rate of return to A&E within 72 hours of discharge for the same diagnosis	Result
12	Hospital readmission rate 30 days from discharge	Result
13	Accreditation and certification of hospital units and departments	Process
14	Policies and procedures implemented for patient safety	Process
15	Rate of safe surgical procedures (surgical checklist)	Process
16	Survival rate of patients hospitalised for Acute Coronary Syndrome	Result
17	Rate of hip replacement surgeries within 48 hours after admission	Result
18	Rate of colonoscopies performed under deep sedation	Process
19	Rate of gastroscopies performed under deep sedation	Process
20	Readmission rate after discharge following outpatient surgery at 30 days	Result

2.4. Indicator collection and process

All data refer to 2012, completed with previous years in centres that took part in the 2012 RESA Study.

The data were collected between April and May 2013 through standardised databases requested from the centres. Quantitative indicators were always collected through patient databases, and only those that met all the preset requirements were considered. This highly demanding condition meant that different denominators existed in certain indicators.

All centres were invited to participate in all indicators, except in those that did not apply to specific centres because they did not correspond to their activity.

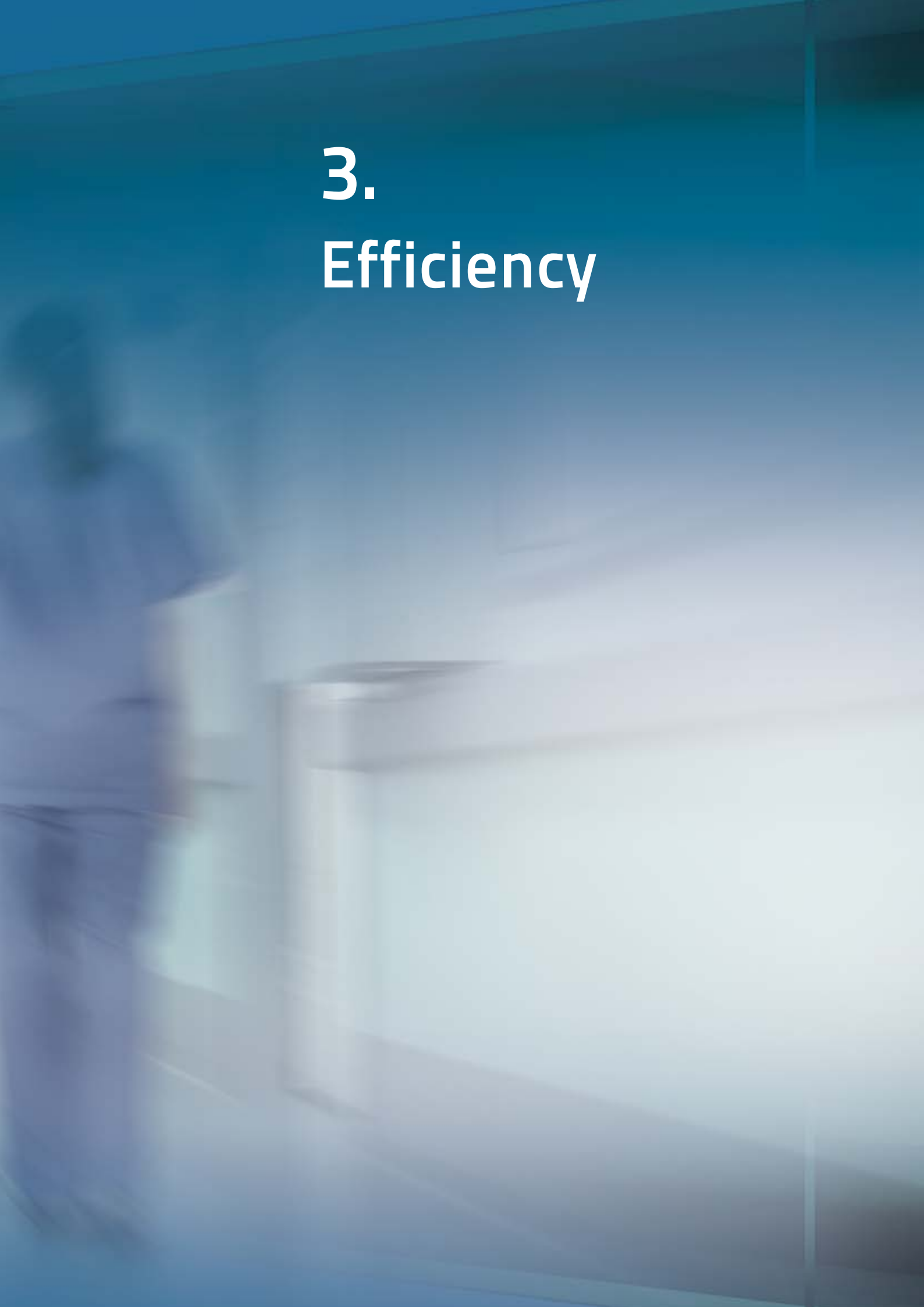
The source of many of the indicators is the Minimum Data Set (MDS) of hospitalisation, which is collected and coded at patient discharge in all centres, and which must be sent to the corresponding health administration with an official fee statement for the centre's activity.

The charts always show the total number of cases they have seen. For all indicators, data are collected from 2012: set fee and standard deviation of centres' fees. When the information report allows it, the progression since 2009 is indicated.

The study results are shown below in groups that were the basis for selection:

1. Efficiency
2. Accessibility (response times in different types of care).
3. Healthcare results (patient return).
4. Patient Quality and Safety (as part of quality and safety policies and quality indicators).

The indicator results are briefly described below.



3. Efficiency

3.1. Average stay adjusted by case

This year again, the average stay results show a high efficiency in bed management. The significant decrease in this indicator in 2013 (a stay of half a day less) corresponds to the inclusion in the study of new centres with lower average stay, as shown in the scatter plot, thus extending the lower limit and not the upper limit (the number of discharges included this year was double that in last year's study).

The average stay adjusted by case measures the average number of days that patients are hospitalised (extreme cases or "outliers" are eliminated).

The adjustment by case is performed to ensure that the differences are not due to the different type of patients treated at each hospital. That is, we calculated the average stay that would have resulted if all the centres had had an identical cohort of patients.

Besides being an indicator of efficiency, a hospital stay that is appropriate to need is a comfort factor for patients, in allowing them to return home as soon as possible and by improving safety (prevents hospitalisation-related risks).

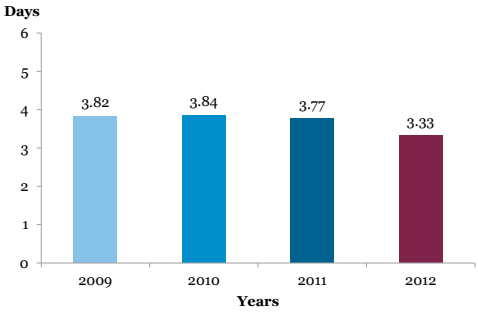
The results of this indicator continue to rank among the best international results at participating centres.

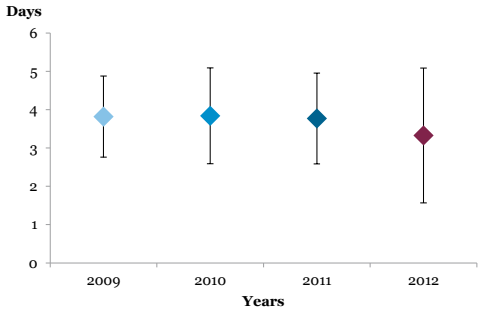
The results of this indicator continue to rank among the best international results at participating centres, with an average stay of under four days, and, in extreme cases, of fewer than five days. It is, therefore, a result that shows the high efficiency in the management of hospital procedures by private centres.

Indicator 1

Average stay adjusted by case (2009–2012, measured in days)

Number of hospital admissions in 2009: 115,725; 2010: 118,763; 2011: 133,279 and 2012: 285,697





4.
Accessibility in healthcare

The RESA Study has addressed the assessment of accessibility by analysing patient waiting times prior to receiving care. Also, where appropriate, a second component of the delays was measured: the delivery time for the report.

4.1. Average waiting time for scheduling additional tests

This indicator has measured accessibility in terms of additional tests, by measuring this accessibility in **average waiting time for scheduling the appointment**.

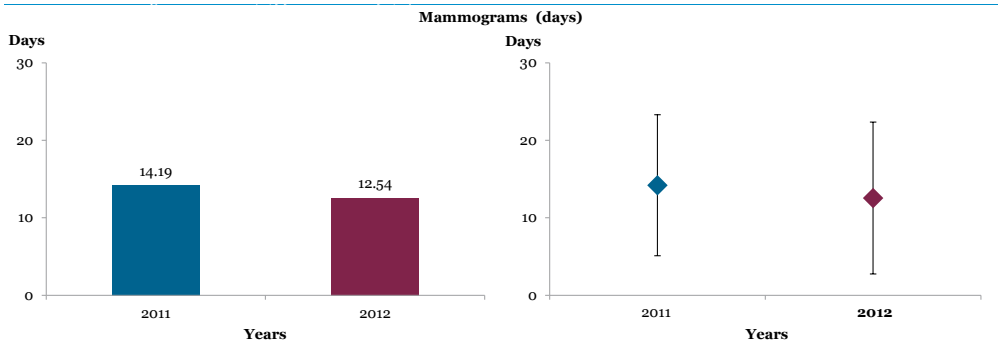
The three imaging techniques that were included last year have been retained: Mammogram, Magnetic Resonance Imaging (MRI) and Computed Tomography (CT).

The average times for scheduling additional tests were measured for all tests performed, i.e. ranging from preferential-based tests to scheduled examinations or non-urgent tests scheduled according to the patient's preference.

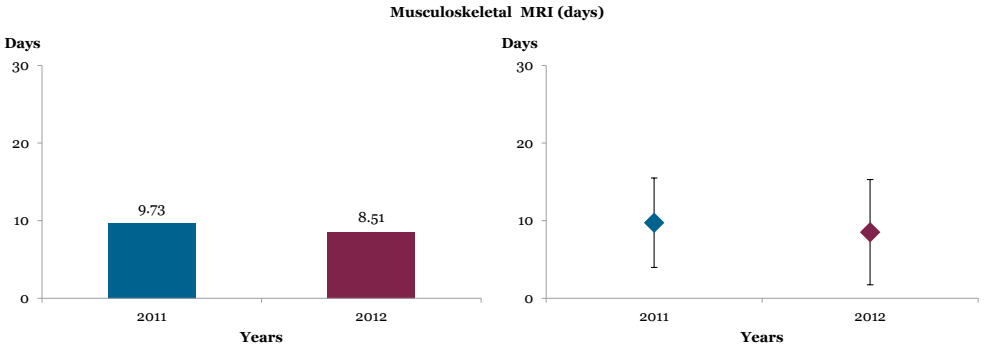
The absence of delays in scheduling tests continues to be standard practice.

Indicador 2
Average waiting time for scheduling additional tests

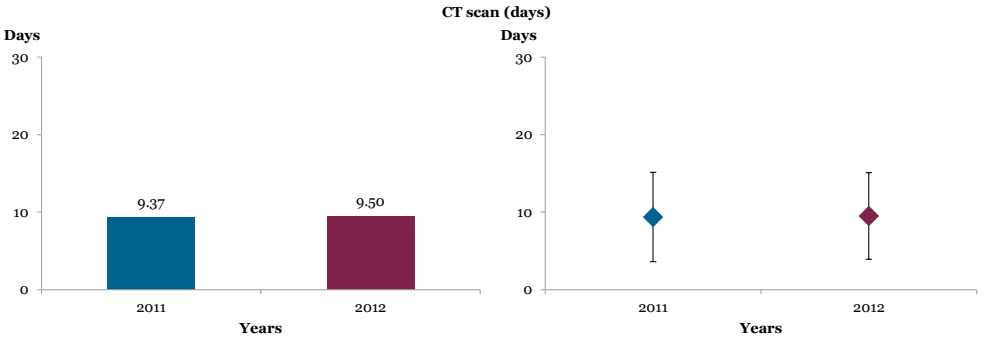
Indicator 2.1
Average waiting time for scheduling additional tests (2011–2012, time in days)
Number of mammograms in 2011: 71,996 and 2012: 96,140



Indicator 2.2
Average waiting time for scheduling additional tests (2011–2012, time in days)
Number of MRIs in 2011: 179,604 and 2012: 183,501



Indicator 2.3
Average waiting time for scheduling additional tests (2011–2012, time in days)
Number of CT scans in 2011: 96,682 and 2012: 110,969



Data from this year continue to show the same situation as the one seen last year: the average times of the three tests analysed (including, as mentioned, scheduled examinations) are under two weeks and barely exceed three weeks in the cases of greatest delay. This pattern indicates that the standard practice in the private sector is the absence of delays in scheduling these tests.

4.2. Average delivery time for additional test reports

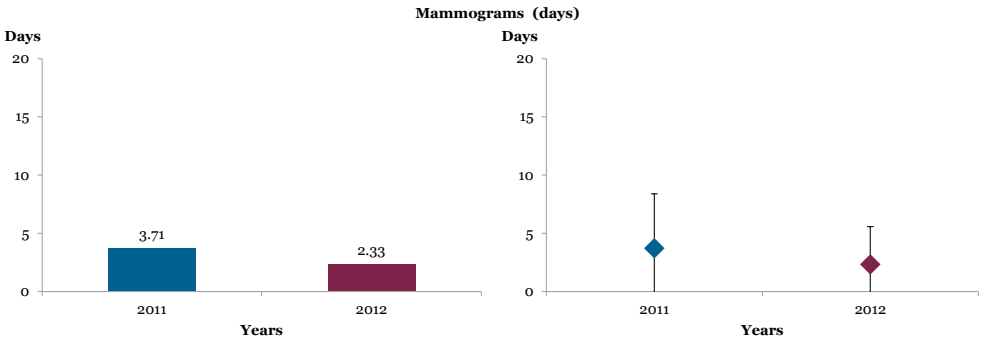
The other important component regarding accessibility in terms of additional tests is the preparation and delivery of the medical report after their completion.

In this case, we have measured the time from the point when the test is performed to the point when the report with the results is prepared and becomes available for the patient or doctor to collect.

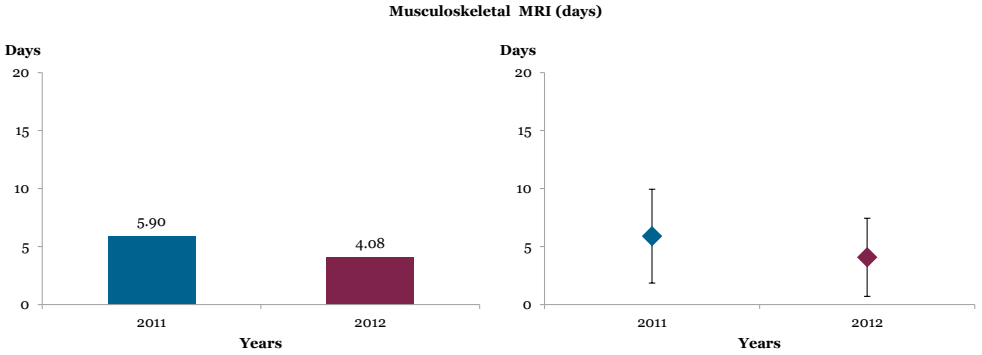
The high number of centres participating in the indicators for average delivery time for additional tests should be noted.

Indicator 3
Average delivery time for additional test reports

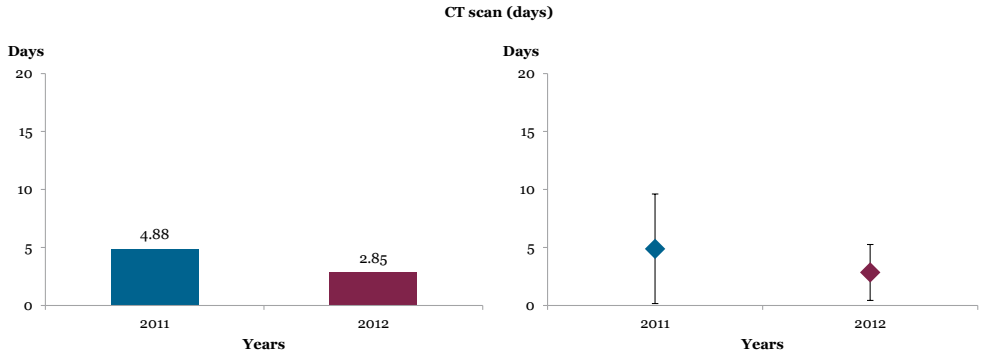
Indicator 3.1
Average delivery time for additional test reports (2011–2012, time in days)
Number of mammograms in 2011: 70,255 and 2012: 95,665



Indicator 3.2
Average delivery time for additional test reports (2011–2012, time in days)
Number of MRIs in 2011: 168,906 and 2012: 191,290



Indicator 3.3
Average delivery time for additional test reports (2011–2012, time in days)
Number of CT scans in 2011: 98,630 and 2012: 140,495



As shown in the graphs, delivery times for imaging tests continue to have excellent results: 4 days for MRI and fewer than 3 days for CT and mammogram.

The delivery of the tests is almost immediate in most urgent cases, as shown by the lower limits of the standard deviation, which are less than a day.

In these indicators, the addition of new centres **has brought little change in the result, and in these cases it has been an improvement.** The results observed are therefore positive.

Delivery of test results is almost immediate in most urgent cases, with the average being only 3 days.

4.3. Average scheduling time for specialist consultations

This year we have incorporated a new delay indicator for the first specialist consultation, which we have applied to the four specialisms with the highest volume in the private sector: Ophthalmology, Dermatology, Trauma and Obstetrics & Gynaecology.

This indicator measures the time in days from the point when the patient requests the first appointment with the specialist from the centre to the point when the consultation occurs. It also includes elective visits, which take place on a date that is convenient for the patient and not on the first available date.

Despite being four specialisms with very different profiles, we can see that in this respect they follow an almost identical pattern: the average times are under or very close to two weeks, and the variability is very similar in all cases. It should be noted that centres at the lower limit have delays under five days, while for those at the upper limit they are a little more than 20 days.

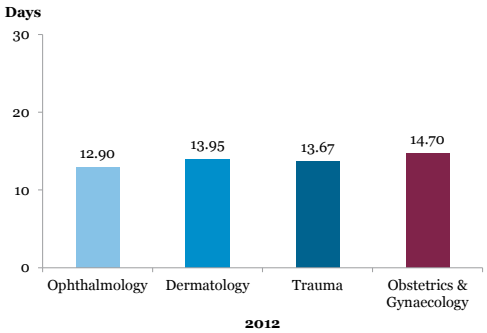
The flexibility in meeting requests for specialist consultation is clear, with a average of 14 days.

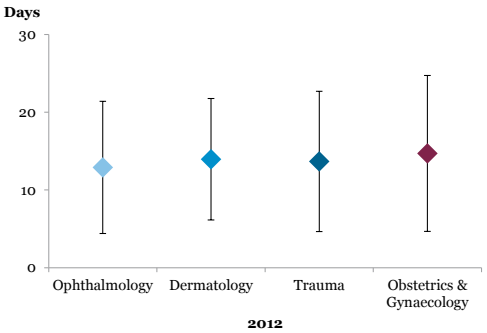
This aspect clearly reinforces the idea of the flexibility of private centres in responding to demand.

Indicator 4

Average scheduling time for specialist consultations (2012, time in days)

Number of consultations Ophthalmology: 153,998; Dermatology: 186,158; Trauma: 305,520 and Obstetrics & Gynaecology: 182,490





4.4. Average waiting time for treatment in A&E

We have again assessed waiting times for treatment in A&E. As for last year, we have considered the two stages in which this care is generally organised:

- Assessment of the patient upon arrival at A&E and classification of the patient based on priority/severity of his/her case (triage).
- Time between triage and actual medical care given by the appropriate doctor.

We therefore measure average waiting times in minutes for triage care and for definitive treatment by the appropriate doctor in each case.

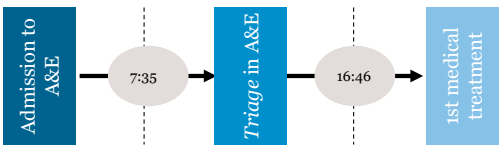
The average waiting times obtained, both for triage and for medical treatment, may be considered to show exceptional flexibility in emergency care, with an average that did not exceed 25 minutes until the patient received care in more than one and a half million emergency cases in 2012.

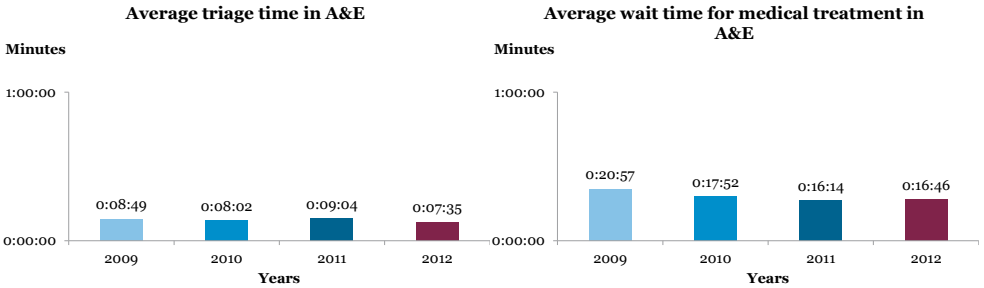
In more than 1.5 million emergency cases assessed in 2012, the average waiting time between triage and medical treatment has been reduced by more than 5 minutes since 2009.

By observing the progression over four years, we can see a clear downward trend that has already been reduced by more than five minutes from the 2009 data. On these lines the addition this year of new centres has not changed the profile of this indicator at all, and has even improved the data slightly from the previous year

Indicator 5
Average triage time in A&E

Indicator 6
Average waiting time for medical treatment in A&E (2009-2012, time in minutes)
Number of emergency cases in 2009: 891,659; 2010: 897,765, 2011: 1,298,027 and 2012: 1,621,722





4.5. Average surgery waiting time

This indicator examines surgery waiting times for major surgery (under general anaesthesia) scheduled, while excluding emergency surgery from the calculation.

We have measured times from the moment the pre-anaesthesia consultation is carried out to the time the surgery is performed: in private centres, it is difficult to obtain an indicator of time spent waiting for surgery from the beginning of the process (the decision for surgery made by the doctor) because, in most cases, the decision is taken by professionals outside the centre.

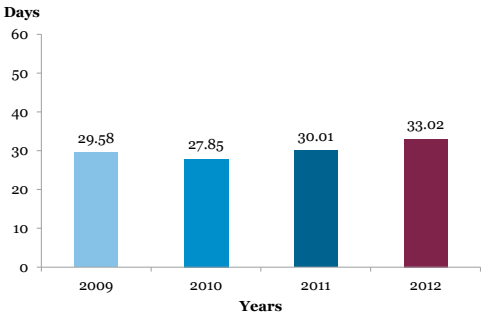
There is an excellent availability of surgical resources, as evidenced by an average waiting time of around 30 days.

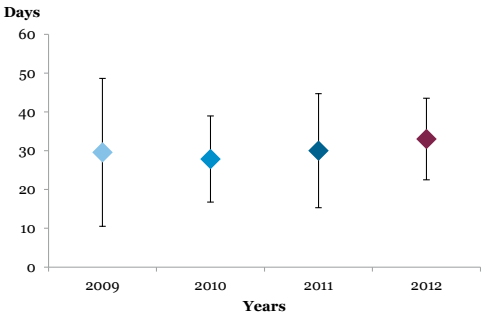
This indicator is still about 30 days, which is an excellent example of the availability of surgical resources at private centres; especially considering that elective surgeries, where the date is scheduled according to the patient's preference, are included in the data.

Indicator 7

Average surgery waiting time (2009–2012, time in days)

Number of surgical procedures in 2009: 34,761; 2010: 40,325; 2011: 45,915 and 2012: 50,022





4.6. Average time between diagnosis and treatment in cancer procedures

In addition to knowing the average delays, it is very important to differentiate delays in cases where surgery is truly important and is carried out in serious instances where the patient's life is at risk.

Last year we began this series by analysing the times for the start of breast cancer treatment.

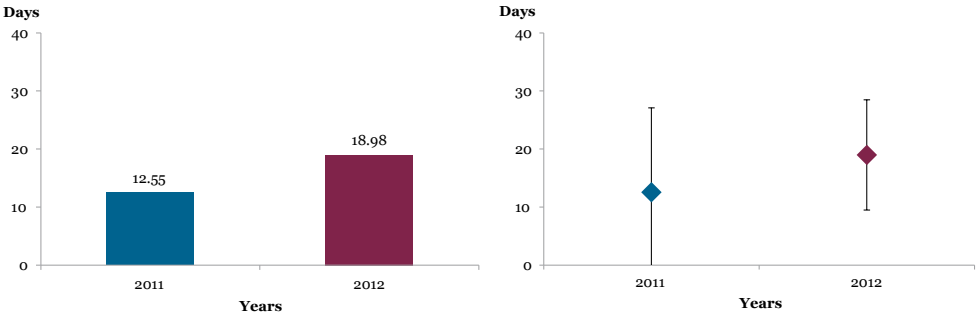
This indicator measures the average delay between diagnosis and the start of the therapeutic treatment indicated in each case at the centres participating in the study.

The average response time for breast cancer is less than 3 weeks; this is well below the recommendations of healthcare programmes, which are between 8 and 10 weeks.

Indicator 8

Average time between diagnosis and treatment in breast cancer (2011–2012, time in days)

Number of patients in 2011: 1,993 and 2012: 2,168



In this case the recommendations of the healthcare programmes are usually estimated, as an appropriate standard, at delay times between 8 and 10 weeks for breast cancer care. In our study we can see that the response times are found to be much shorter than this standard, with an average of less than three weeks. Even at the upper limit, care is given within four weeks, which is still much quicker than the top international recommendations.

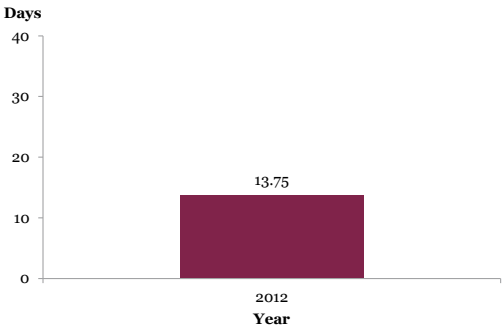
This year we added two new procedures to these indicators: colon cancer and lung cancer, also measuring the time from diagnosis to the start of treatment.

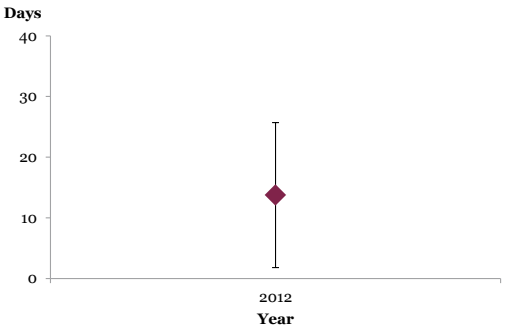
In colon cancer and lung cancer, the average time from diagnosis to treatment is from 14 to 12 days, respectively, which are excellent results.

Indicator 9

Average time between diagnosis and treatment in colon cancer (2012, time in days)

Number of patients in 2012: 646



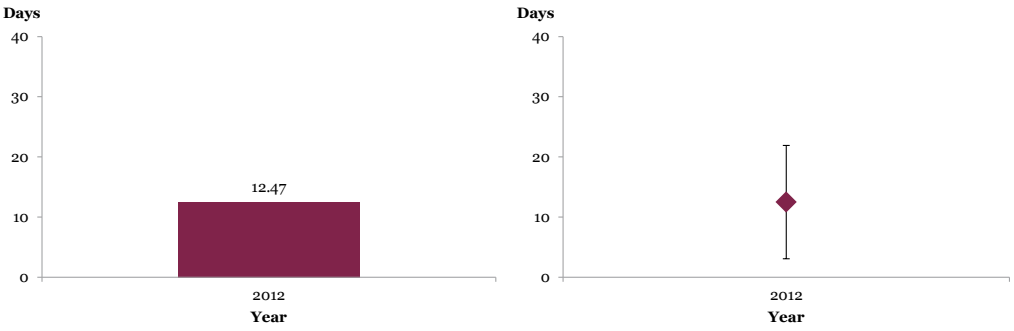


We can also see excellent results in the case of colon cancer: the average number of days of delay between diagnosis and surgery is less than two weeks and even the upper limit barely reaches four weeks.

Indicator 10

Average time between diagnosis and treatment in lung cancer (2012, time in days)

Number of patients in 2012: 611



We noted that in the case of lung cancer both the average delay and the upper limit on the scatter plot, which is close to 20 days, are even lower than in the previous case.

Together we see these indicators extend to other common cancers, maintaining the excellent results we had already observed for breast cancer.

5. Healthcare results

In terms of healthcare results, the assessment of the two indicators representing efficacy in resolution in A&E and by hospitalisation has been repeated this year.

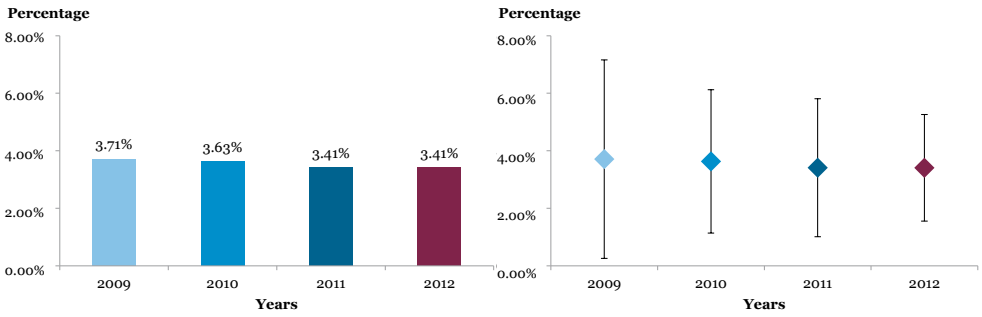
These indicators, commonly used in hospital settings, measure the rate at which patients return to A&E and hospitalisation.

5.1. Rate of return to A&E within 72 hours of discharge for the same diagnosis

Indicator 11

Rate of return to A&E within 72 hours of discharge for the same diagnosis (2009–2012, %)

Number of emergency cases in 2009: 448,985; 2010: 557,906; 2011: 785,513 and 2012: 764,569



The indicator for patients returning to A&E, in which virtually the same centres as last year took part, shows a continued positive progression, maintaining the same average and decreasing variability, and at a level comparable to national and international studies.

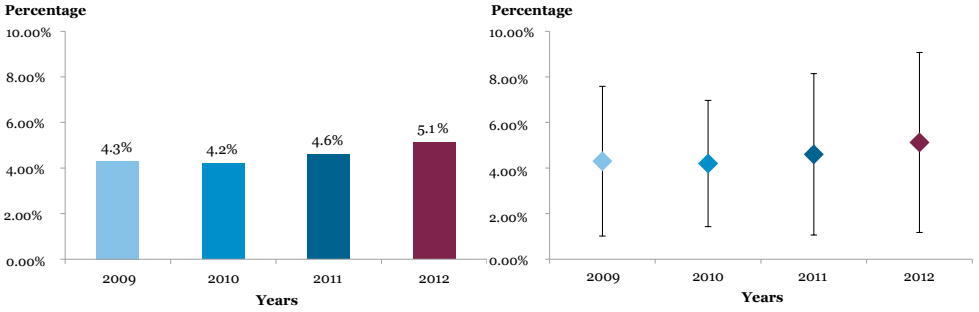
The results of the indicators on patients returning to A&E reveal normal proportions in hospital care and are in line with international standards

5.2. Hospital readmission rate 30 days from discharge

Indicator 12

Hospital readmission rate 30 days from discharge (2009–2012, %)

Number of admissions in 2009: 366,366; 2010: 399,823; 2011: 485,871 and 2012: 699,762



The readmission indicator after 30 days remains at levels comparable to those observed in the literature and within normal international standards. Although the number of admissions analysed has increased by more than 30% to around 700,000, the indicator has experienced only a modest increase, with the data remaining very similar to last year, close to 5%.

6.
Patient quality and safety

The implementation of quality assurance policies in hospitals is one of the most significant trends in the past two decades, and one of those that requires the greatest effort on the part of hospital organisations.

To assess this item, the 2013 RESA Study has combined two approaches:

- A **qualitative assessment of the implementation of the most significant policies** on the certification of quality and patient safety.
- Various **quantitative indicators on results in aspects of patient safety** that can be measured with the data available.

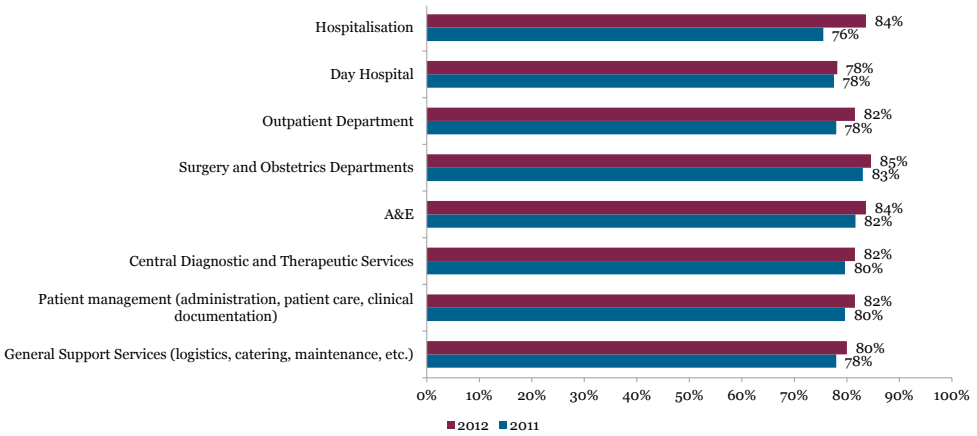
6.1. Accreditation and certification of hospital units and departments

A classical approach in quality management is to use external agencies to certify that hospital processes have been documented and standardised to ensure quality.

In the study, centres have been asked to send a copy of the certifications obtained. Only certifications from internationally recognised agencies were considered acceptable: ISO, European Foundation for Quality Management and Joint Commission for Hospital Accreditation.

The implementation of quality assurance policies is a clear trend in the private sector.

Indicator 13
Accreditation and certification of hospital units and departments
Number of hospitals: 2011: 59 and 2012: 65



In this year's analysis, we went back to see how the majority of participants make external accreditations or certifications available and also how these are extended to almost all areas of the hospital, especially the most important.

To further examine the issues of quality and patient safety, certain quality indicators used internationally have been added to the study.

6.2. Policies and procedures implemented for patient safety

Since the mid-2000s, concern for patient safety in hospitals has led international organisations to put forward a series of policies intended to prevent or minimise the adverse effects of hospital care that may be preventable. The implementation of the safety policies established by the World Health Organisation (WHO), among others, underscores the commitment of private healthcare to offering high-quality care to its patients.

These indicators measure whether the institution has committed to and formulated an explicit policy on patient safety in the organisation. This means that centres define, approve, disseminate and monitor best practices in each area.

As with the 2012 RESA Study, this year hospitals were once again asked to furnish all documents related to five of the most important initiatives of this policy:

1. Hand hygiene protocol
2. Assessment protocol for bed sores on admission
3. Identification protocol for medication-related problems
4. Anonymous adverse event reporting system
5. Safe surgery protocol ("Checklist")

As for last year, and using the same criteria, we have measured whether these practices have been standardised, documented and formally approved in the participating centres. Through these policies, the departments show that they promote, facilitate and supervise the implementation of best quality practices.

The documents received have been analysed according to predefined standards and only those that meet all pre-established requirements are marked as valid.

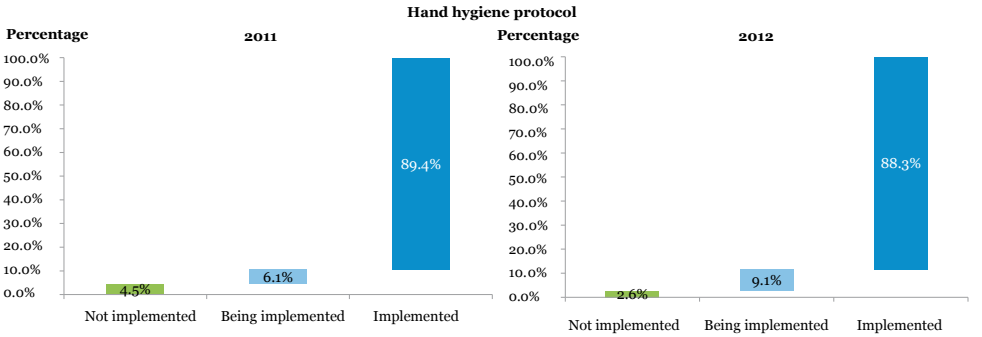
The implementation of safety policies established by the WHO, among others, underscores the commitment of private healthcare to offering high-quality care.

Indicator 14
Policies and procedures implemented for patient safety

6.2.1. Hand hygiene protocol

Hand hygiene policies constitute some of the most established and proven practices for preventing patient infection in hospitals and are obviously the focal point of international recommendations on safe practices in hospitals and health centres.

Indicator 14.1
Policies and procedures implemented for patient safety (2011–2012, protocols drafted as a %)
Number of hospitals 2011: 66 and 2012: 77



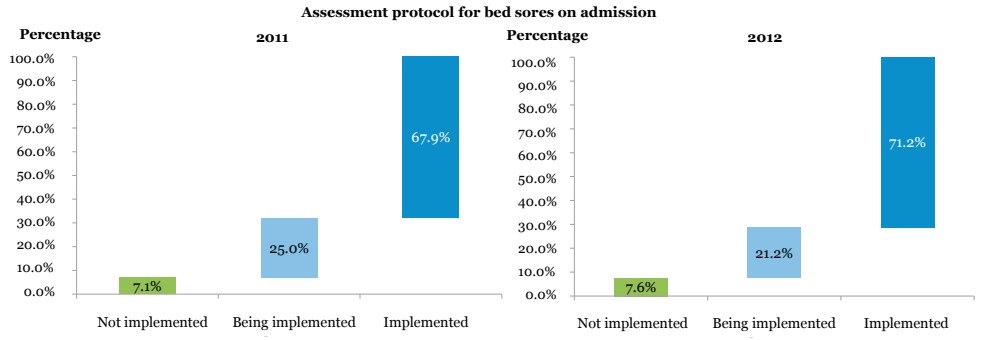
It is therefore not surprising that nearly all the centres included in the indicator have these policies duly formalised or in the process of being implemented. This year we saw another good development: though more centres have been included, the proportion of centres that have not yet formalised this policy has gone down. We also noted that many of the centres that were in the process of implementing it last year are now ready to do so fully. Thus, the inclusion of new hospitals in the study slightly increased the percentage of centres in the process of implementing this policy.

6.2.2. Assesment protocol for bed sore risk on admission

The bed sore risk assessment made by nursing staff at admission is also a procedure that has proven effective in preventing this problem in bedridden patients, especially the elderly.

This involves assessing standardised scales that measure the patient's risk of developing bed sores and, based on this assessment, implementing preventive measures.

Indicator 14.2
Policies and procedures implemented for patient safety (2011–2012, protocols drafted as a %)
Number of hospitals 2011: 66 and 2012: 77

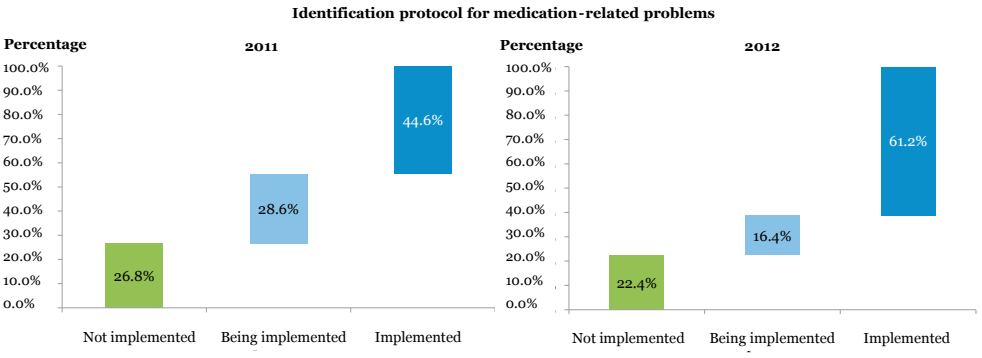


In addition, the participating centres which have implemented or are implementing this policy exceed 90% of the total and, above all, highlight the positive progression this indicator has had, with almost 4% of centres going from being in the process of implementing it to having it fully implemented.

6.2.3. Identification protocol for medication-related problems

Identifying and preventing medication-related problems requires specific resources from the hospital pharmacy and the availability of quite complex procedures. Because they are difficult to implement, these are policies that are not yet common at hospitals.

Indicator 14.3
Policies and procedures implemented for patient safety (2011–2012, protocols drafted as a %)
Number of hospitals 2011: 66 and 2012: 77

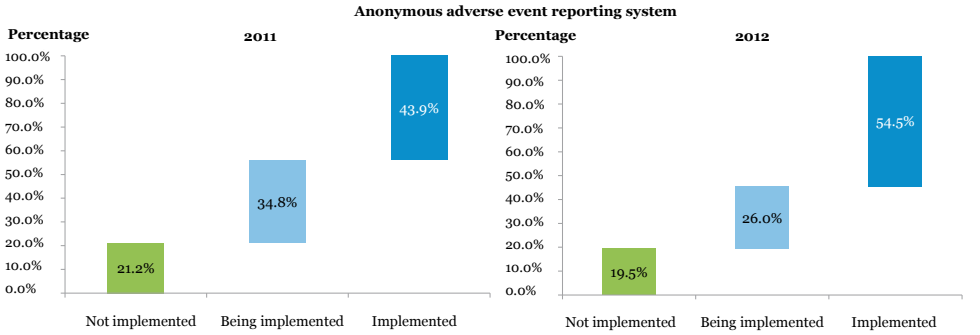


As such, we assess the fact that over 77% of the centres have these policies, or are in the implementation phase, as being quite positive. As in the previous case, we also assessed the large increase (almost 50%) that has occurred among the centres that have already implemented such policies.

6.2.4. Anonymous adverse event reporting system

Adverse event reporting systems are also included in recommended best practices. This consists of having a system in which professionals can anonymously report that an adverse event has occurred or a that a high-risk situation involves an adverse event. Based on this reporting, the centre conducts an analysis of the causes in order to prevent this situation from happening again.

Indicator 14.4
Policies and procedures implemented for patient safety (2011–2012, protocols drafted as a %)
Number of hospitals 2011: 66 and 2012: 77



Here, as with the above cases, we confirm a very positive progression with a significant increase of the centres that have already implemented such policies and a decrease of those which have not yet started this practice.

In conclusion, we once again see situation concerning the implementation of these policies that indicates:

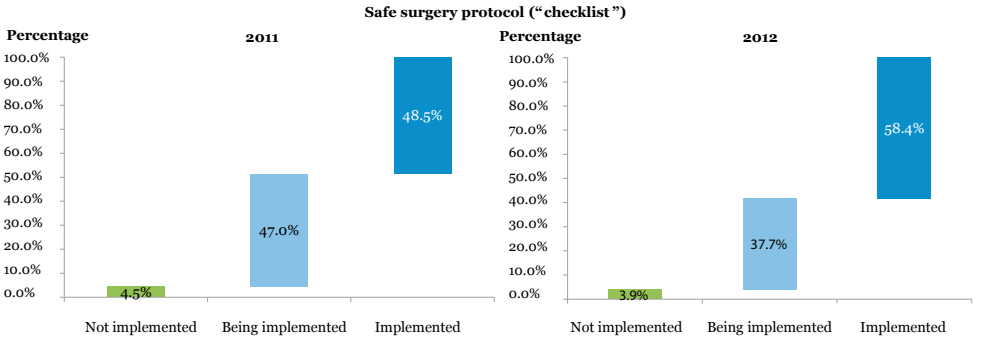
- **Interest in and commitment to quality and patient safety is widespread** among centres that have taken part, which can be seen in all indicators reviewed.
- These initiatives **have increased significantly with respect to last year**. The addition of more centres has maintained and improved the implementation of patient safety policies.

The effective application of procedures to patients is widely shared.

- The effective application of procedures to patients **is widely shared,** as we have seen in the group of centres that has already computerised safe surgical practice, thereby obtaining very good and encouraging results.

6.2.5. Safe surgery protocol ("Checklist")

Indicator 14.5
Policies and procedures implemented for patient safety (2011, protocols drafted as a %)
Number of hospitals: 66



The surgical safety protocol (checklist) consists of the systematic verification of a series of parameters that are performed while the patient is conscious, and then once he/she has been anaesthetised and before and after surgery, in order to ensure that issues such as patient identification and type of surgery to be performed, among others, are correct. This practice has recently been shown in repeated studies to be highly effective in preventing adverse effects in patients.

The recent implementation of this safety procedure (2008 WHO recommendation) means that it is not yet established in many hospitals.

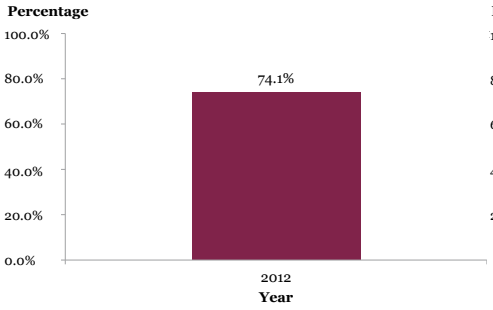
The observed progression in this indicator is therefore excellent news: close to 60% of the centres have already implemented this protocol, with both the centres that do not have it and those in the process of implementing it having decreased significantly.

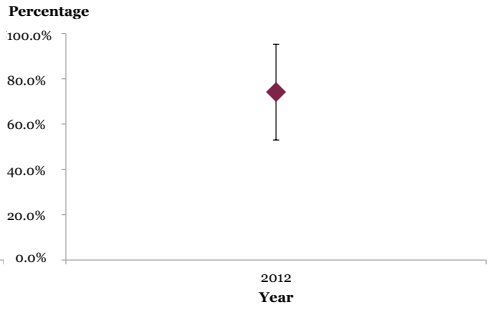
6.2.6. Rate of safe surgical procedures (surgical checklist)

It is precisely the progress on the implementation of this safety practice which has allowed us to include a new indicator this year that was not possible to collect last year. This involves not only measuring whether or not the centre has implemented the protocol, but also knowing the proportion of patients it has been applied to.

Measuring this aspect necessarily implies that the centre has integrated the assessment of compliance with the procedure for each patient undergoing surgery into its computer system (to be able to make an actual confirmation).

Indicator 15
Rate of safe surgical procedures (surgical checklist) (2012, %)
Number of surgical procedures in 2012: 77,788





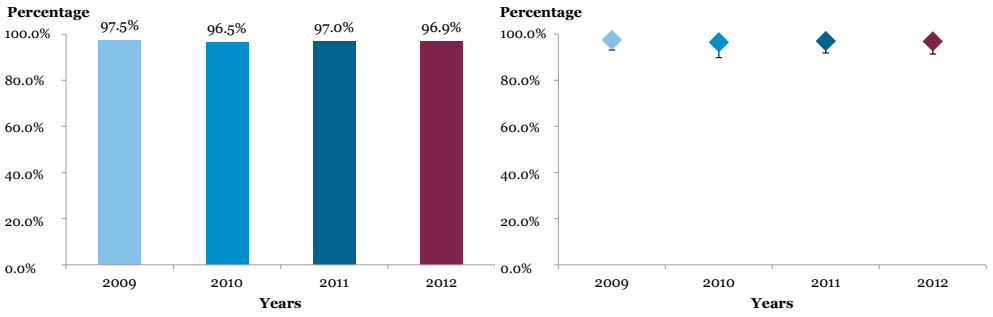
A significant development is that last year this indicator could not be assessed; this year 14 centres already have this automated information in their systems and have been able to provide us the surgery database with this item included.

The centres that have this information already apply this protocol to three-quarters of their patients. As this is a new procedure, we have to consider this proportion as very positive and, above all, be pleased with the fact that the measure of this indicator is being implemented gradually, but already significantly, in centres.

6.3. Survival rate for patients hospitalised for acute coronary syndrome

Acute coronary syndrome (myocardial infarction) is one of the diseases with the highest mortality rates, and survival rate in the first few hours is one of the most important indicators of hospital quality.

Indicator 16
Survival rate for patients hospitalised for acute coronary syndrome (2009–2012, %)
Number of patients hospitalised for AMI in 2009: 987; 2010: 909: 2011: 1,711 and 2012: 4,137



This year we once again confirm that survival rates are similar to the good results of previous years, remaining almost unchanged and with little variation between centres, even with an increase in the number of procedures greater than 100%.

The literature on clinical standards describes survival rates in Europe between 98.5% and 96.8%, and so the data indicate results that are within the normal range in European hospitals and which have been maintained in recent years.

The survival rate in patients admitted for AMI is within the normal range in European hospitals and has thus been maintained in recent years.

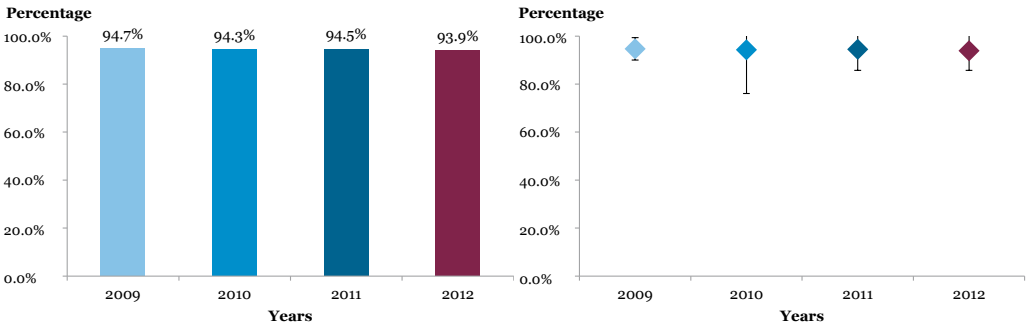
6.4. Rate of hip replacement surgery within 48 hours after hospital admission

Early surgery after hip fracture is considered a good quality indicator by the US Agency for Healthcare Research & Quality (AHRQ). It is believed that early surgery reduces mortality and facilitates an immediate start to rehabilitation.

Indicator 17

Rate of hip replacement surgery within 48 hours after hospital admission (2009–2012, %)

Number of patients in 2009: 1,396; 2010: 1,550; 2011: 2,205 and 2012: 2,664



We observed how the high rates (94%) are maintained, which are much better than those found in the literature in many hospitals (including rates between 30% and 50% of patients operated on after 48 hours in some countries).

The rate of hip replacement surgeries after 48 hours, remains close to 94% over the past four years, results significantly higher than those found in the literature.

6.5. Rate of colonoscopies and gastroscopies performed under deep sedation

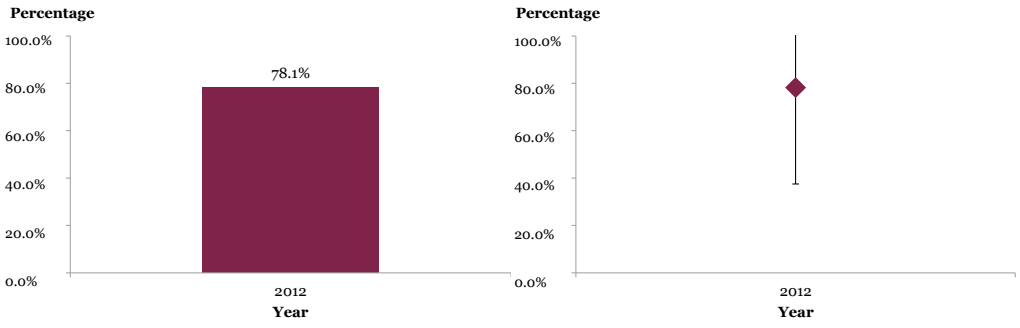
The RESA Study seeks to gradually add indicators that measure the quality of private healthcare in plain terms for the general public.

This year we added two care process indicators that add safety and comfort to common examinations: performing upper and lower gastrointestinal endoscopies with the patient sedated.

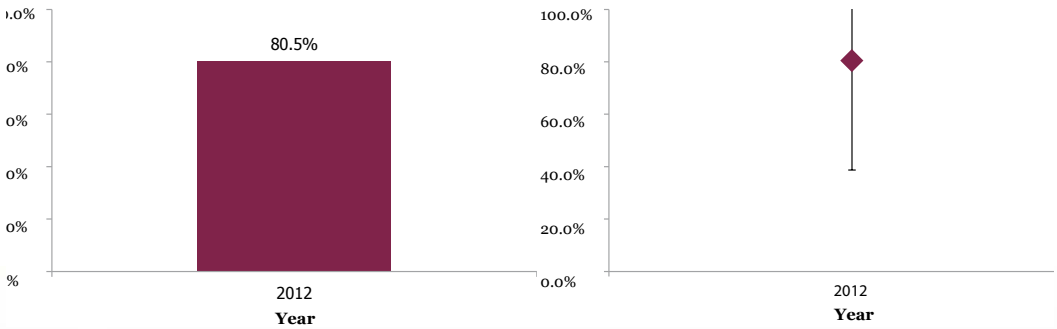
The input of data was significantly higher in the case of colonoscopies, most likely due to the recommendation of performing regular preventive colonoscopies in people at risk for colon cancer, a practice that is not recommended for gastric cancer.

For colonoscopies and gastroscopies we can see a high average of performing these procedures with sedation, although in this case the variability between centres shows that there remains room for improvement in this practice.

Indicator 18
Rate of colonoscopies performed under deep sedation (2012, %)
Number of colonoscopies in 2012: 27,217



Indicator 19
Rate of gastroscopies performed under deep sedation (2012, %)
Number of gastroscopies in 2012: 6,037



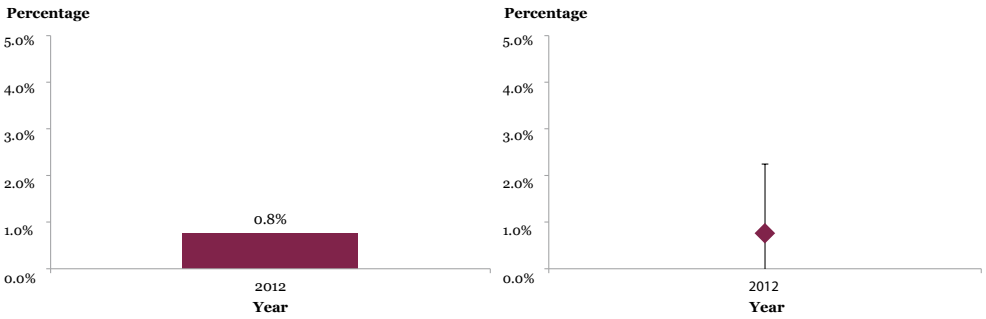
6.6. Readmission rate for outpatient surgery at 30 days

Another new indicator we assessed this year is the percentage of patients who have to be admitted for some complication or problem after undergoing outpatient surgery.

Indicator 20

Readmission rate for outpatient surgery at 30 days (2012, %)

Number of outpatient procedures in 2012: 141,030



The indicator gives excellent results, with less than 1% of patients admitted, which hardly reaches 2% in the upper limit of the centres. This figure, though hardly comparable because of differences between cases, is among the best reported in the literature.

7. Conclusions

In general, the good news this year is not so much that a large sample of private centres was voluntarily measured for quality indicators, but that **participation of centres increased by about 20%**. The highlights of this increase include:

- **The growth itself in the number of participants**. We have gone from 87 to 103 centres taking part in this measurement and clarity exercise, which therefore represents a large part of private-sector activity.

- **Greater diversity in the type of participants**. The new additions have greatly increased the presence of other types different to the traditional private hospital, such as private centres that work for the public sector or outpatient surgical and diagnostic clinics.

- The practice of facilitating indicators is standardised: the conduct of the second study **has consolidated the practice of transparency as a regular exercise** in which each time we hope to have more participation.

- **More centres means better results**. The addition of new participants has improved the results of the previous study across the board. We could always think that the centres that agree to be measured are the best, and that therefore the increased participation would alter the results. But so far this is not the case, **and the general trend has been one where the results of the previous study remain the same or clearly improve**.

We reassessed the **excellent level of EFFICIENCY management in favour of patients and the healthcare system**. The average stay indicator, adjusted by case, with an average hospital stay of under four days per patient, clearly reconfirms that level.

The **ACCESIBILITY of private healthcare is demonstrated with good indicators of response times**. This situation is already widely known and is part of the public assessment of private healthcare. Yet it is important to go back to compare this assessment with the actual data, which reveal that:

- Accessibility in terms of waiting time for scheduling additional tests has some excellent data with regard to average, which in many cases involves an almost immediate response. These data are also confirmed by the short response time in the preparation of the reports for these tests.

- The average response times in A&E are considered more than positive, and they have improved from the previous year, with an average waiting time of under eight minutes for triage and just over 15 minutes for medical treatment.

- The study results regarding surgery waiting times are also very positive, with an average waiting time of 33 days, very similar to the previous year.

- Adding the measure of waiting time for colon cancer and lung cancer surgery confirms last year's good results, and which are maintained for breast cancer.

In terms of HEALTHCARE RESULTS, the indicators of return to A&E or hospital readmissions for the same diagnosis remain at the usual proportions in hospital care.

Moreover, the existing strong commitment **to private healthcare for implementing QUALITY AND SAFETY POLICIES not only remains in place but is also improved**:

- The qualitative indicators obtained show that the vast majority of private centres actively implement quality and patient safety policies:

  - A large majority of participants have certificates of accreditation or certification. The centres that have these certificates also have almost all areas of the hospital within their scope of application.

- Also in most of the centres the international recommendations for improving patient safety are primarily in a status of full implementation or in a very advanced stage of this process.

- In measuring the actual inclusion of patients under these protocols, in the safe surgical practice indicator, the centres that have computerised processes already include the vast majority of patients.

› This is reflected in the fact that the **quality indicators obtained from patient databases show levels of results comparable or superior to those of any other institution**:

- The survival of patients with acute coronary syndrome remains at the same levels as last year and is comparable with the results obtained in studies conducted in the leading European centres.

- The proportion of patients who needed to be admitted after outpatient surgery is among the best in the national and international literature.

- Surgery within the first 48 hours for hip fracture shows excellent results, which are among the best data known.

Interpreting healthcare indicators always involves many nuances, **but at all events the 2013 RESA Study shows results from participating private centres that are comparable and even better than those published by most European centres**.

The **exercise of transparency for the general public**, which was the objective of this project, has already become an **established reality** with this second edition, which shows **similar or improved results in the vast majority** of cases with respect to the first edition.

8. Appendices

8.1. Selection process for indicators

The indicators included in the RESA Study have been chosen and defined through a process of detailled reflection on the part of healthcare professionals.

An expert committee was established to select the indicators, consisting of nine professionals from the most relevant healthcare groups in the Spanish private healthcare system and three external advisers.

The RESA Study Committee has decided to keep the guiding principles established for the 2012 study to define the indicators:

- **Representative**: indicators must provide relevant information on the objective of the study.
- **Available**: the healthcare centres must have the possibility of obtaining the information needed for the calculations. Clearly this criterion has significantly limited the availability of indicators that would be of considerable interest (such as patient satisfaction or ability to choose).
- **Understandable**: the general public must be able to understand the significance of the indicator and the value of its result.
- **Concise**: No more than 20 to 25 indicators should be selected.
- **Useful**: the set of indicators selected must offer value to the general public in the way they are communicated and by continually improving private healthcare.

Among the first thoughts of the Committee was the need to ensure continuity with all the indicators that were part of last year's RESA Study, in order to assess their progression and facilitate data extraction for the healthcare centres to be able to calculate them.

Regarding this issue, taking into account the experience gained in the 2012 RESA Study, the Study Committee decided that the indicator for "**Rate of central catheter–related bacteraemia in Intensive Care Units (ICU)**" should be calculated every two years, due to the difficulty encountered when manually extracting the data needed to calculate it.

The Committee also suggested expanding the selection of hospital indicators in various fields.

One area of particular interest is that of envisioning the complexity of case-by-case care. It was suggested that indicators reflecting the complexity of patients be obtained, especially surgical procedures that are performed at private centres. To do this, we researched some indicators that were not viable, due to the technical impossibility of applying the initial approach of using the classification of the Consejo General de Colegios de Médicos based on the MDS. It has therefore been suggested that this type of indicator be included in future editions.

Another priority area considered by the Committee was the need to provide a greater presence in the outpatient area, with ever-increasing importance in hospitals and clinics. To do this, it was suggested that the following indicators be developed:

- Average waiting time for scheduling first specialist consultation (Ophthalmology, Dermatology, Trauma and Obstetrics & Gynaecology).
- Proportion of colonoscopies performed under deep sedation.
- Colonoscopies performed under deep sedation with an anaesthetist present.
- Gastroscopies performed under deep sedation.
- Gastroscopies performed under deep sedation with an anaesthetist present.
- Readmission rate at 30 days after discharge following Major Outpatient Surgery (MOS).
- Telephone follow-ups after discharge from MOS.

All these indicators were viable in the previous research and were included, except for the telephone follow-up after discharge from MOS, where computerised records of post-discharge telephone calls were missing at most centres.

The indicator for anaesthetist's presence during deep sedation was calculated but not included in the report, as it almost totally overlaps with that of deep sedation.

Lastly, considering the entire process of reflection, the 2012 RESA Study Committee selected 26 indicators for the definitive data collection.

8.2. Review of the definition of indicators

The second stage of the RESA Study Expert Committee aimed to validate the definition of the indicators performed by the consultant team and to validate the process and the tools for collecting the information needed to calculate the indicators selected.

As such, the set of indicators validated by the RESA Study Expert Committee was set at 20: indicators that reflect the continual improvement of private healthcare in a more relevant way.

Finally, we identified the hospital groups and centres that were to participate in the study.

The sections of the document that follow are part of the data collection manual given to participants.

8.3. Indicator sheets

The following sheets detail the definition, formula and terms of each of the indicators of the 2013 RESA Study:

Code: 1	**Name**: Average stay adjusted by case
Definition: Number of days of hospitalisation that patients were treated at the hospital for each DRG over the number of discharges by DRG.	
Formula: ((A1 * P1)+...+(An * Pn)) / ((B1 * P1)+...+(Bn * Pn))	
Numerator (A and P): A1....An: Total number of days of hospitalisation for patients classified in GRD 1...GRD n, excluding outsiders. P1....Pn: Proportion of GRD 1...GRD n cases in all centres studied (Standard)	**Denominator (B and P):** B: Total number of patients discharged from hospital for a GRD 1...GRD n, excluding outsiders. P1....Pn: Proportion of GRD 1...GRD n cases in all centres studied (Standard)

Code: 2 (2.1, 2.2, 2.3)	**Name**: Average waiting time for scheduling additional tests
Definition: Average number of days that patients should expect from the request for an appointment to undergo an additional test (general mammogram, musculoskeletal MRI and cranial CT scan) until the date it is performed (appointment).	
Formula: ∑ (A-B)/C	
Numerator (A and B): A: Patient appointment date. B: Request date for additional test.	**Denominator (C):** Number of patients who have been scheduled for an additional test.

Code: 3 (3.1, 3.2, 3.3)	**Name**: Average delivery time for additional test reports
Definition: Average patient waiting time for delivery of the report attached to additional tests, considering as start date the day of the test and as end date the availability of the report by the doctor. The tests to be considered are: mammogram, musculoskeletal and limb MRI and CT.	
Formula: ∑ (A-B)/C	
Numerator (A and B): A: Date on which the doctor has the additional test report. B: Date on which the patient undergoes the test.	**Denominator (C):** Number of patients who have undergone an objective additional test.

Code: 4 (4.1, 4.2, 4.3, 4.4)	**Name**: Average scheduling time for specialist consultations (Ophthalmology, Dermatology, Trauma and Obstetrics & Gynaecology)
Definition: Average number of days that patients should expect from the date an appointment is requested for a first specialist consultation (Ophthalmology, Dermatology, Trauma and Obstetrics & Gynaecology) until the date it is performed (appointment).	
Formula: ∑ (A-B)/C	
Numerator (A and B): A: Patient appointment date. B: Request date for specialist consultation.	**Denominator (C):** Total number of patients scheduled to undergo an initial consultation with a specialist.

Code: 5	**Name**: Average triage time in A&E
Definition: Average waiting time from check-in at A&E until triage in A&E.	
Formula: ∑ (A-B)/C	
Numerator (A and B): A: Date and time of triage in A&E. B: Date and time of check-in at A&E.	**Denominator (C):** Number of patients checked in at A&E.

Code: 6	**Name**: Average waiting time for medical treatment in A&E
Definition: Average waiting time from triage at A&E until medical care.	
Formula: ∑ (A-B)/C	
Numerator (A and B): A: Date and time of medical care. B: Date and time of triage in A&E.	**Denominator (C):** Number of patients checked in at A&E.

Code: 7	**Name**: Average surgery waiting time
Definition: Total number of days between the appointment date for pre-anaesthetic consultation and the surgery date (in a specific cut-off date, including procedures performed and pending procedures).	
Formula: ∑ [(A-B)+(C-A)]/ D	
Numerator (A, B and C): A: Appointment date for pre-anaesthetic consultation. B: Request date for pre-anaesthetic consultation. C: Date of the surgical procedure.	**Denominator (D):** Total number of patients with surgery date and pre-anaesthetic work-up.

Code: 8	**Name**: Average time between diagnosis and treatment in breast cancer
Definition: Average number of days between a definite diagnosis of breast cancer and the start of cancer treatment. Patients who have not been diagnosed at the hospital or who have not started treatment, as well as voluntary discharges and/or referrals to other centres, are excluded.	
Formula: ∑ (A-B)/C	
Numerator (A and B): A: Appointment date for starting breast cancer treatment (it can be adjusted with the closing date of the diagnostic report for patients whose treatment is pending). B: Date of breast cancer diagnosis.	**Denominator (C):** Total number of patients diagnosed with breast cancer.
Adjustments: Patients who have not been diagnosed at the hospital are excluded. Patients who have not started treatment at the hospital are excluded. Voluntary discharges and referrals to other hospitals are excluded.	

Code: 9	**Name**: Average time between diagnosis and treatment in colon cancer
Definition: Average number of days between a definite diagnosis of colon cancer and the start of cancer treatment. Patients who have not been diagnosed at the hospital or who have not started treatment, as well as voluntary discharges and/or referrals to other centres, are excluded.	
Formula: ∑ (A-B)/C	
Numerator (A and B): A: Appointment date for starting colon cancer treatment (can be substituted with the closing date of the diagnostic report for patients whose treatment is pending). B: Date of colon cancer diagnosis.	**Denominator (C):** Total number of patients diagnosed with colon cancer.
Adjustments: Patients who have not been diagnosed at the hospital are excluded. Patients who have not started treatment at the hospital are excluded. Voluntary discharges and referrals to other hospitals are excluded.	

Code: 10	**Name**: Average time between diagnosis and treatment in lung cancer
Definition: Average number of days between a definite diagnosis of lung cancer and the start of cancer treatment. Patients who have not been diagnosed at the hospital or who have not started treatment, as well as voluntary discharges and/or referrals to other centres, are excluded.	
Formula: ∑ (A-B)/C	
Numerator (A and B): A: Appointment date for starting lung cancer treatment (can be substituted with the closing date of the diagnostic report for patients whose treatment is pending). B: Date of lung cancer diagnosis.	**Denominator (C):** Total number of patients diagnosed with lung cancer.
Adjustments: Patients who have not been diagnosed at the hospital are excluded. Patients who have not started treatment at the hospital are excluded. Voluntary discharges and referrals to other hospitals are excluded.	

Code: 11	**Name**: Rate of return to A&E within 72 hours of discharge for the same diagnosis
Definition: Percentage of patients who return to the hospital's A&E less than 72 hours before their first check-in at A&E.	
Formula: (A/B)*100	
Numerator (A): Total number of patients discharged from A&E who return to A&E in fewer than 72 hours (calculated using the check-in time at A&E).	**Denominator (B):** Total number of patients discharged from A&E during the study period up to 72 hours before the end date and time of the study period.

Code: 12	**Name**: Hospital readmission rate 30 days from discharge
Definition: Percentage of readmission after discharge of a patient at the same hospital, within 30 days after the initial episode (readmission must be caused by the disease for which he/she was initially admitted or by a related disease).	
Formula: (A/B)*100	
Numerator (A): Total number of discharged patients (index cases) who are readmitted to the hospital for the same cause, or for a reason that may be related to the initial disease, within 30 days of discharge.	**Denominator (B):** Total number of patients admitted to hospital who have completed the "Discharge" administrative procedure.

Code: 13	**Name**: Accreditation and certification of hospital units and departments
Definition: Number of units and/or departments that have been awarded external recognition of quality (certification, accreditation, etc.) in the main hospital operating areas (self-declaration indicator).	
Formula: ∑ A/B	
Numerator (A): Number of hospitals that have obtained, during the study period, an ISO, EFQM or Joint Commission quality certificate and/ or accreditation by hospital service: a) Hospitalisation; b) Day Hospital; c) Outpatient Department; d) Surgery and obstetrics departments; e) A&E; f) Central diagnostic and therapeutic services; and g) Patient Management (Admissions, patient care, clinical documentation).	**Denominator (B):** Number of hospitals that participated in the study.

Code: 14 (14.1, 14.2, 14.3, 14.4, 14.5)	**Name**: Policies and procedures implemented for patient safety
Definition: Number of patient safety policies and procedures implemented at the hospital in priority areas: 1) hand hygiene; 2) assessment protocol for pressure ulcers; 3) identification protocols for medication-related problems; 4) anonymous adverse event reporting system; 5) surgery checklist. Self-declaration indicator.	
Formula: ∑ A/B	
Numerator (A): Number of patient safety policies and procedures implemented at the hospital that meet the defined criteria.	**Denominator (B):** Number of hospitals participating in the study.

Code: 15	**Name**: Rate of safe surgical procedures (surgical checklist)
Definition: Percentage of surgeries performed under general anaesthesia with a completed safety checklist compared with the total number of surgeries performed at the hospital.	
Formula: (A/B)*100	
Numerator (A): Number of surgeries performed under general aneasthesia with consistency in clinical documentation of a standardised surgical safety checklist that meets the criteria for safe surgery, completed and signed.	**Denominator (B):** Total number of surgeries performed under general anaesthesia at the hospital during the period specified.

Code: 16	**Name**: Survival rate for patients hospitalised for acute coronary syndrome
Definition: Percentage of patients who died within 48 hours of admission for Acute Myocardial Infarction compared with the total number of admissions for the same diagnosis.	
Formula: (A/B)*100	
Numerator (A): Total number of discharges of patients admitted to the hospital with a main diagnosis of acute coronary syndrome (ICD: 410.xx and 411.xx), and whose discharge reason is "death/exitus", during the study period, within 48 hours of admission.	**Denominator (B):** Number of discharges of patients admitted to the hospital with a main diagnosis of acute coronary syndrome (ICD: 410.xx and 411.xx.).
Adjustments: Discharges due to patient transfer to another hospital are excluded.	

Code: 17	**Name**: Rate of hip replacement surgeries within 48 hours after admission
Definition: Number of procedures performed within 48 hours after emergency admission compared with the total number of hip replacement surgeries performed during the study period.	
Formula: (A/B)*100	
Numerator (A): Total number of hip replacement surgeries performed within 48 hours of the patient's emergency admission and carried out during the study period.	**Denominator (B):** Total number of hip replacement surgeries performed during the study period in patients with emergency admission.

Code: 18	**Name**: Rate of colonoscopies performed under deep sedation
Definition: Percentage of colonoscopies performed under deep sedation compared with the total number of colonoscopies carried out at the hospital.	
Formula: (A/B)*100	
Numerator (A): Total number of patients who have undergone a colonoscopy under deep sedation.	**Denominator (B):** Total number of patients who have undergone a colonoscopy at the hospital.

Code: 19	**Name**: Rate of gastroscopies performed under deep sedation
Definition: Percentage of gastroscopies performed under deep sedation compared with the total number of gastroscopies carried out at the hospital.	
Formula: (A/B)*100	
Numerator (A): Total number of patients who have undergone a gastroscopy under deep sedation.	**Denominator (B):** Total number of patients who have undergone a gastroscopy at the hospital.

Code: 20	**Name**: Readmission rate after discharge following outpatient surgery at 30 days
Definition: Percentage of patients who have undergone a Major Outpatient Surgery (MOS) and who have been admitted to the same centre where the MOS was performed for surgery-related complications.	
Formula: (A/B)*100	
Numerator (A): Total number of patients who have undergone an MOS and who have been hospitalised due to a surgery-related complication within 30 days.	**Denominator (B):** Total number of patients who have undergone an MOS at a hospital and an outpatient clinic.

8.4. Methodological specifications

The information supplied is provided in the Excel Questionnaire template for 2013 IDIS RESA.

MDS

In the Excel file the Minimum Data Set database for last year (2012) is requested. This could have been sent both in the same Excel file or in Access format, ensuring that all fields requested had been filled out.

The DRG classification system used for the MDS should also be recorded.

In all cases, and to avoid confusion in the management of aggregate data, the hospital identification code was recorded. This code could be the official hospital registration code or any identification code that had to be reported.

Completion of the identification item of users in the MDS and of patients in required indicators.

The patients' personal data should not be included in the databases that were used in the study.

For indicators, the provision of individual patient identification was necessary to cross data in order to obtain, for example, readmission rates. This number could be the medical history or any other number that guaranteed patient anonymity (e.g. a centre could provide us with a random personal identification number that could only be linked by the head of the centre to the patient's medical history or personal identification).

These personal identification numbers were coded by the study managers so that no identifier that could trace patient data from his/her medical history or personal identification was left in the database. The correspondence between the codes assigned by the study and the codes assigned initially by the centre was returned to the centre, and no copy was kept by the study managers.

8.4.1. Average stay adjusted by case

The average stay adjusted by case was calculated using the data required in the MDS operation.

8.4.2. Average waiting time for scheduling additional tests

The following tests performed in 2012 were included:

- Mammogram.
- Computed Tomography (CT).
- Musculoskeletal Magnetic Resonance Imaging (MRI).

For each of the tests the following data were provided:

- Test (of the three shown).
- Request date for test (dd/mm/yyyy), whether made by a professional or by the patient.
- Scheduled date for the test (dd/mm/yyyy).

Source: Hospital Information System (HIS) or departmental test systems.

8.4.3. Average delivery time for additional test reports

Only the following tests performed in 2012 were included:

- Screening mammogram.
- Computed Tomography (CT).
- Musculoskeletal Magnetic Resonance Imaging (MRI).

It was determined whether the patient was an inpatient or outpatient (including patients at A&E for these tests).

The following data were provided for each test type:

- Test (of the three shown).
- Date of the test. The date is recorded as dd/mm/yyyy, while the time is recorded as hh:mm.
- End date of test availability. The date on which the doctor can have the report in electronic format or hand-delivered, or the date on which the test is available for pick-up by the patient, regardless of when he/she actually picks it up, is recorded in the same format.

Source: Hospital Information System (HIS) or departmental test systems.

8.4.4. Average scheduling time for first specialist consultation

The following specialist consultations performed in 2012 were included:

- Ophthalmology
- Dermatology
- Trauma
- Obstetrics and Gynaecology

All first consultations with a set date (regardless of whether the consultation has taken place or not) in 2012, in which the patient is given an appointment in the first available space on the calendar or another date that is convenient for the patient, were included.

For each of the first consultations the following data were provided:

- Request date for first consultation (dd/mm/yyyy).
- Scheduled date for the consultation (dd/mm/yyyy).

Source: Hospital Information System (HIS).

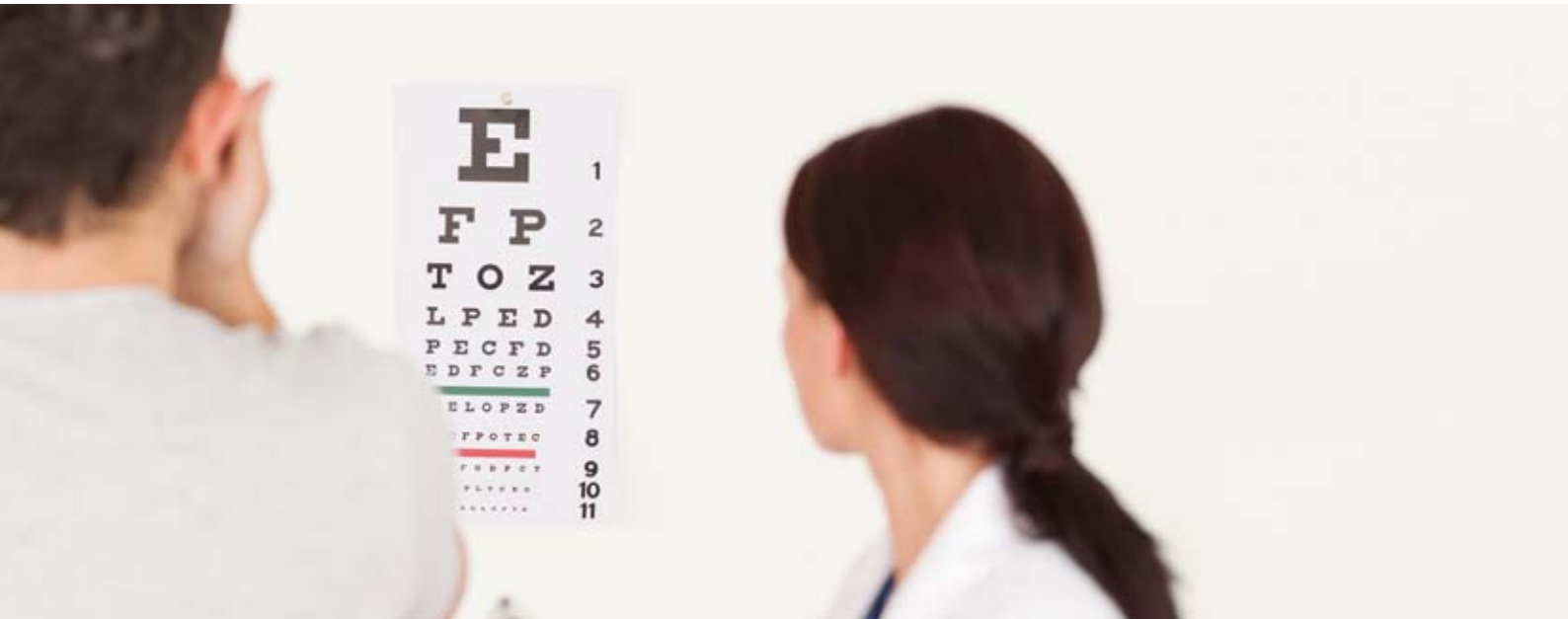
8.4.5. Average triage time at A&E

All patients seen at A&E in 2012 were included.

The following information was provided:

- Date (dd/mm/yyyy) and time (hh:mm) of check-in at A&E (or date and time of arrival to A&E if this is the existing record). The centre was excluded if admission to A&E was not recorded on arrival.
- Date (dd/mm/yyyy) and time (hh:mm) of start of triage care provided by nursing staff or doctors.

Source: Hospital Information System (HIS).



8.4.6. Average waiting time for treatment in A&E

All patients seen at A&E in 2012 were included.

The following information was provided:

- Date (dd/mm/yyyy) and time (hh:mm) of start of triage care provided by A&E nursing staff or doctors. The centre was excluded if triage at A&E was not recorded.
- Date (dd/mm/yyyy) and time (hh:mm) of start of care provided by the first doctor who sees the patient.

Source: Hospital Information System (HIS).

8.4.7. Average surgery waiting time

All patients undergoing scheduled surgery under general anaesthesia were included (including with and without admission of the patient).

Patients whose surgery had been scheduled within the year were included, including cases subsequently cancelled for any reason.

The following information was sent:

- Date (dd/mm/yyyy) and time (hh:mm) of request for anaesthesia consultation prior to surgery.
- Date (dd/mm/yyyy) and time (hh:mm) of scheduled surgery.
- Total number of patients scheduled for surgery performed under general anaesthesia and with anaesthesia consultation conducted prior to surgery.

8.4.8. Average time between diagnosis and treatment in breast cancer

All patients whose diagnosis and first treatment (surgical or medical) had been performed at the hospital during the study period were included. For the diagnoses made at the end of the reference year and treated in the early months of the following year, the cut-off date for inclusion in the study was 31 January of the following year (2012 to 31 January 2013).

The following information was provided:

- Confirmation date of the diagnosis (dd/mm/yyyy).
- Start date of the first surgical or medical treatment (dd/mm/yyyy).

Patients whose diagnosis and the start of the first treatment were not performed at the centre were excluded, as were patients referred to other centres and voluntary discharges.

Source: Electronic record, HIS or departmental service systems.

8.4.9. Average time between diagnosis and treatment in colon cancer

All patients whose diagnosis and first treatment (surgical or medical) had been performed at the hospital during the study period were included. For the diagnoses made at the end of the reference year and treated in the early months of the following year, the cut-off date for inclusion in the study was 31 January of the following year (2012 to 31 January 2013).

The following information was provided:

- Confirmation date of the diagnosis (dd/mm/yyyy).
- Start date of the first surgical or medical treatment (dd/mm/yyyy).

Patients whose diagnosis and the start of the first treatment were not performed at the centre were excluded, as were patients referred to other centres and voluntary discharges.

Source: Electronic record, HIS or departmental service systems.

8.4.10. Average time between diagnosis and treatment in lung cancer

All patients whose diagnosis and first treatment (surgical or medical) had been performed at the hospital during the study period were included. For the diagnoses made at the end of the reference year and treated in the early months of the following year, the cut-off date for inclusion in the study was 31 January of the following year (2012 to 31 January 2013).

The following information was provided:

- Confirmation date of the diagnosis (dd/mm/yyyy).
- Start date of the first surgical or medical treatment (dd/mm/yyyy).

Patients whose diagnosis and the start of the first treatment were not performed at the centre were excluded, as were patients referred to other centres and voluntary discharges.

Source: Electronic record, HIS or departmental service systems.

8.4.11. Rate of return to A&E within 72 hours of discharge for the same diagnosis

The last year (2012) was requested in the Excel file attached. Two items were included:

1. Patients with 2 or more visits within 72 hours. All patients who had visited A&E more than once within 72 hours, from the time of admission of the first visit to the time of admission of the second visit, were included.

- The principal diagnosis is optional if it is recorded in the centre's information systems.

2. A description of the total number of visits made to A&E by patients was requested, which was segmented by age group and gender in order to obtain rates of repeat visits.

Source: Hospital Information System (HIS) or similar.

8.4.12. Hospital readmission rate 30 days from discharge

The readmission rate at 30 days was calculated using the data required in the MDS operation.

8.4.13. Accreditation and certification of hospital units and departments

Only certifications granted by top internationally recognised agencies were included:

- ISO
- European Foundation of Quality Management
- Joint Commission of Hospital Accreditation

They could include multi-annual accreditations obtained before the requested period that were in force during that period.

Not included: citations, awards and the like from non-professional organisations.

Since there can be a wide range of cases, it was recommended to consult doubtful cases.

An electronic copy of the supporting documents included in the study was received.

8.4.14. Policies and procedures implemented for patient safety

A collection of certain patient safety policies and procedures that are in place. The policies included were:

a) **Hand hygiene protocol**. It involves at least implementing a systematic training plan for at least healthcare personnel, reviewing and providing areas to wash hands with alcohol solution, monitoring the implementation of hand washing and conducting various communication activities. There should be formalised documentation containing the hand hygiene plan (attach electronic copy).

b) **Assessment protocol for bed sores on admission**. It involves implementing a formal protocol approved by governing bodies (attach electronic copy), defining PU risk criteria in patients, the preventive assessment of ulcers in at-risk patients, by at least identifying at-risk patients, implementing a standardised classification for the entire centre, and the quarterly calculation of a PU indicator, the information of which is systematically provided to management.

c) **Identification protocol for medication-related problems**. It involves procedures performed by a professional other than the patient's usual care professional in order to identify the medication prescribed to the patient at the hospital at discharge and the medication prescribed or used prior to admission and to perform at least one duplication and incompatibility analysis. The protocol must be in writing (send electronic copy).

d) **Anonymous adverse event reporting system**. It involves implementing a mechanised system to report adverse events in patients treated, respecting the anonymity of the notifier, conducting an analysis of the adverse event (Ishikawa diagram, root cause or other cause analysis tools) and disseminating the findings to the unit(s) involved. The operating information used for the system is included electronically so that personnel are aware of it.

e) **Safe surgery protocol (Checklist)**. It involves, as mentioned above, implementing a protocol that is formally approved by the hospital's governing bodies and enforceable at the surgery department, including checking the main patient risk variables (attach electronic copy).

To be considered as such, a safety policy or procedure should:

- Have been collected and detailed in a formal document (send electronic copy).
- Have been formally approved by the centre's management (considering as such healthcare departments and the like).
- Have been generally implemented in selected areas or departments (not necessarily in all of the hospital's departments or areas). Regarding committees, should have had at least one meeting every six months.
- Personnel training activities should have been carried out.
- At least one assessment, control or monitoring should have been carried out.

8.4.15. Rate of safe surgical procedures (surgical checklist)

It involves depigmentation a protocol that is formally approved by the hospital's governing bodies and enforceable at the surgery department (scheduled surgery performed under general anaesthesia with or without admission of the patient), including checking the main patient risk variables.

The sample collected by centres was a part of a month (consecutive days) after 31 August 2012, which was freely chosen by the hospital.

Completion of the checklist was considered valid provided that:

1) The patient's clinical documentation included a check sheet in accordance with the centre's approved programme.

2) This sheet was signed by the person(s) responsible.

3) At least one of the items recorded by the tool had been completed, and the centre had a written record of its completion. (This year the indicator does not include the quality of the completion, but only the actual completion.)

The information requested is as follows:

- Numerator: Total number of scheduled surgeries performed under general anaesthesia during the month selected (with or without admission of the patient), which include completion of a checklist protocolised by the hospital.
- Denominator: Total number of scheduled surgeries performed under general anaesthesia during the sample period (with or without admission of the patient).

8.4.16. Survival rate for patients hospitalised for acute coronary syndrome

The survival rate for patients hospitalised for acute coronary syndrome was calculated using the data required in the MDS operation.

8.4.17. Rate of hip surgeries within 48 hours after admission

The rate of hip replacement surgery within 48 hours after hospital admission was calculated using the data required in the MDS operation.

8.4.18. Rate of Colonoscopies performed under deep sedation

Colonoscopies performed in patients under deep sedation during a month in 2012 were requested. The sample month could have been selected by the health centre, considering that a minimum of 30 colonoscopies (minimum n = 30) should be included. In cases where the selected month did not reach the minimum number, the sample was completed by adding to the selected month the consecutive days after the selected month, until reaching the minimum number.

Source: Hospital Information System (HIS) or similar.

8.4.19. Rate of Gastroscopies performed under deep sedation

Gastroscopies performed in patients under deep sedation during a month in 2012 were requested. The sample month could have been selected by the health centre, considering that a minimum of 30 gastroscopies (minimum n = 30) should be included. In cases where the selected month did not reach the minimum number, the sample was completed by adding to the selected month the consecutive days after the selected month, until reaching the minimum number.

Source: Hospital Information System (HIS) or similar.

8.4.20. Readmission rate after discharge following outpatient surgery at 30 days

To calculate the readmission rate after discharge following outpatient surgery, all surgical procedures included in the MDS, the admission date of which was the same as the discharge date, were taken into account.

The calculation of the indicator did not include patients whose discharge records indicated that they had been referred to another hospital.

Source: MDS of surgical procedures in the Hospital Information System (HIS) or similar.

8.5. Participant ratio

8.5.1. Hospitals and clinics

List of hospitals and clinics participating in the 2013 RESA Study.

Asisa Clinics

- CLÍNICA MONTPELLIER
  Zaragoza
- CLÍNICA NUESTRA SEÑORA
  DEL PERPETUO SOCORRO
  Lleida
- CLÍNICA VISTAHERMOSA
  Alicante
- HOSPITAL EL ÁNGEL
  Málaga
- HOSPITAL LA VEGA
  Murcia
- HOSPITAL MONCLOA
  Madrid

Igualatorio Medico Quirurgico (IMQ) Clinics

- IMQ V. SAN SEBASTIÁN
  Bilbao
- IMQ VIRGEN BLANCA
  Bilbao

HM Hospital Group

- HM HOSPITAL UNIVERSITARIO DE MADRID
  Madrid
- HM HOSPITAL UNIVERSITARIO
  DE MONTEPRÍNCIPE
  Boadilla del Monte
- HM NUEVO BELÉN
  Madrid
- HM UNIVERSITARIO SANCHINARRO
  Madrid
- HM UNIVERSITARIO TORRELODONES
  Torrelodones
- POLICLÍNICO DE ESPECIALIDADES Y
  GIMNASIO DE REHABILITACIÓN SUCHIL
  Madrid
- POLICLÍNICO HM ARAPILES
  Madrid
- POLICLÍNICO HM DISTRITO TELEFÓNICA
  Madrid
- POLICLÍNICO HM TORRELODONES
  Torrelodones
- POLICLÍNICO HM SANCHINARRO
  Madrid

Quirón Hospital Group

- CENTRO DE CIRUGÍA AMBULATORIA QUIRÓN AVE MARÍA
  Seville
- CENTRO DE REPRODUCCIÓN ASISTIDA QUIRÓN
  BILBAO
  Biscay
- CENTRO DE REPRODUCCIÓN QUIRÓN DEXEUS
  MURCIA
  Murcia
- CENTRO DE REPRODUCCIÓN QUIRÓN PAMPLONA
  Pamplona
- CENTRO DE REPRODUCCIÓN QUIRÓN TORRENTE
  Torrente
- CENTRO MÉDICO A CORUÑA
  A Coruña
- CENTRO MÉDICO AMBULATORIO DEPORTIVO
  MEDIPLAN Vitoria
- CENTRO MÉDICO QUIRÓN ARABA SPORT CLINIC
  Zurbano
- CENTRO MÉDICO QUIRÓN ALJARAFE
  Seville
- CENTRO MÉDICO FERROL
  A Coruña
- CENTRO MÉDICO QUIRÓN FUENGIROLA
  Fuengirola
- CENTRO MÉDICO QUIRÓN LA PALMERA
  Seville
- CENTRO MÉDICO QUIRÓN NERVIÓN
  Seville
- CENTRO MÉDICO QUIRÓN ORIHUELA
  Orihuela

- CENTRO MÉDICO QUIRÓN SA POBLA
  Sa Pobla
- CENTRO MÉDICO QUIRÓN SANTA POLA
  Santa Pola
- CENTRO MÉDICO QUIRÓN SEVILLA ESTE
  Seville
- CENTRO OFTALMOLÓGICO A CORUÑA
  A Coruña
- HOSPITAL QUIRÓN A CORUÑA
  A Coruña
- HOSPITAL QUIRÓN BARCELONA
  Barcelona
- HOSPITAL QUIRÓN BIZKAIA
  Erandio
- HOSPITAL QUIRÓN COSTA ADEJE
  Adeje
- HOSPITAL QUIRÓN MÁLAGA
  Málaga
- HOSPITAL QUIRÓN MARBELLA
  Marbella
- HOSPITAL QUIRÓN MURCIA
  Murcia
- HOSPITAL QUIRÓN PALMAPLANAS
  Palma de Mallorca
- HOSPITAL QUIRÓN SAGRADO CORAZÓN
  Seville
- HOSPITAL QUIRÓN SAN CAMILO
  Madrid
- HOSPITAL QUIRÓN SAN JOSE
  Madrid
- HOSPITAL QUIRÓN SAN SEBASTIÁN
  San Sebastián
- HOSPITAL QUIRÓN TENERIFE
  Santa Cruz
- HOSPITAL QUIRÓN TORREVIEJA
  Torrevieja
- HOSPITAL QUIRÓN VALENCIA
  Valencia
- HOSPITAL QUIRÓN VITORIA
  Vitoria
- HOSPITAL QUIRÓN ZARAGOZA Y HOSPITAL DE DÍA QUIRÓN ZARAGOZA
  Zaragoza
- HOSPITAL UNIVERSITARIO QUIRÓN MADRID
  Pozuelo de Alarcón
- INSTITUT UNIVERSITARI QUIRÓN DEXEUS
  Barcelona
- INSTITUTO OFTALMOLÓGICO QUIRÓN BARCELONA
  Barcelona

San Roque Hospital Group

- HOSPITAL SAN ROQUE LAS PALMAS
  Las Palmas
- HOSPITAL SAN ROQUE MASPALOMAS
  San Bartolomé de Tirajana

NISA Hospital Group

- HOSPITAL AGUAS VIVAS
  Valencia
- HOSPITAL 9 DE OCTUBRE
  Valencia
- HOSPITAL PARDO DE ARAVACA
  Madrid
- HOSPITAL REY DON JAIME
  Castellón de la Plana
- HOSPITAL SEVILLA ALJARAFE
  Castilleja de la Cuesta
- HOSPITAL VALENCIA AL MAR
  Valencia
- HOSPITAL VIRGEN DEL CONSUELO
  Valencia

Hospiten Group

- MD ANDERSON CANCER CENTER
  Madrid
- HOSPITEN BELLEVUE
  Puerto de la Cruz
- HOSPITEN CLÍNICA ROCA
  San Bartolomé de Tirajana
- HOSPITEN ESTEPONA
  Estepona
- HOSPITEN LANZAROTE
  Tías
- HOSPITEN RAMBLA
  Santa Cruz
- HOSPITEN SUR
  Arona

IDC Salud Group

- IDC SALUD CLIDEBA
  Badajoz
- IDC SALUD CLÍNICA ALBACETE
  Albacete
- IDC SALUD CLÍNICA ALCALÁ DE HENARES
  Alcalá de Henares
- IDC SALUD CLÍNICA ALCÁZAR
  Alcázar de San Juan
- IDC SALUD CLÍNICA CIUDAD REAL
  Ciudad Real
- IDC SALUD CLÍNICA DEL VALLÉS
  Sabadell
- IDC SALUD CLÍNICA VIRGEN DE GUADALUPE Cáceres
- IDC SALUD FUNDACIÓN JIMÉNEZ DÍAZ
  Madrid
- IDC SALUD HOSPITAL DE DÍA DE TALAVERA Talavera de la Reina
- IDC SALUD HOSPITAL GENERAL DE CATALUÑA
  Sant Cugat del Vallés
- IDC SALUD HOSPITAL SANTA JUSTA
  Villanueva de la Serena
- IDC SALUD HOSPITAL SUR
  Alcorcón
- IDC SALUD HOSPITAL TRES CULTURAS
  Toledo
- IDC SALUD HOSPITAL UNIVERSITARIO SAGRADO CORAZÓN
  Barcelona
- IDC SALUD HOSPITAL INFANTA ELENA
  Valdemoro
- IDC SALUD HOSPITAL UNIVERSITARIO REY JUAN CARLOS
  Móstoles

Innova Ocular Group

- INSTITUTO LLEIDA DE OFTALMOLOGIA
  Lleida
- CENTRO OFTALMOLOGICO MUIÑOS
  Santa Cruz
- CLINICA DE OFTALMOLOGIA DE CORDOBA
  Córdoba
- CLINICA DR. VILA
  Valencia
- CLINICA OFTALMOLOGICA DR. SOLER
  Elche
- CLÍNICA REMENTERIA
  Madrid
- CLINICA VIRGEN DE LUJAN
  Seville
- INSTITUTO DE OFTALMOLOGIA AVANZADA
  Madrid
- BEGITEK CLINICA OFTALMOLOGICA
  San Sebastián
- OCULSUR
  Cádiz

Recoletas Group

- GR HOSPITAL RECOLETAS PALENCIA
  Palencia
- HOSPITAL CAMPO GRANDE
  Valladolid
- HOSPITAL FELIPE II
  Valladolid
- HOSPITAL RECOLETAS BURGOS
  Burgos
- HOSPITAL RECOLETAS CUENCA
  Cuenca
- HOSPITAL RECOLETAS SEGOVIA
  Segovia
- HOSPITAL RECOLETAS ZAMORA
  Zamora

Vithas Group

- HOSPITAL MONTSERRAT
  Lleida
- HOSPITAL NUESTRA SEÑORA DE AMÉRICA Madrid
- HOSPITAL NUESTRA SEÑORA DE FÁTIMA
  Vigo
- HOSPITAL NUESTRA SEÑORA DE LA SALUD Granada
- HOSPITAL PARQUE SAN ANTONIO
  Málaga
- HOSPITAL PERPETUO SOCORRO
  Alicante
- HOSPITAL SANTA CATALINA
  Las Palmas
- HOSPITAL SANTA CRUZ
  Tenerife
- HOSPITAL SAN JOSÉ
  Vitoria
- HOSPITAL VIRGEN DEL MAR
  Almería

Ribera Salud

- HOSPITAL DE TORREVIEJA
  Torrevieja
- HOSPITAL DEL VINALOPO
  Elche

Sanitas Hospitals

- CLÍNICA HOSPITAL CIMA
  Barcelona
- HOSPITAL MANISES
  Manises
- HOSPITAL SANITAS LA MORALEJA
  Sanchinarro
- HOSPITAL DE TORREJON
  Torrejón de Ardoz
- HOSPITAL SANITAS LA ZARZUELA
  Aravaca

Other

- CENTRO MEDICO TEKNON
  Barcelona
- CLINICA LA LUZ
  Madrid
- CLÍNICA ROTGER
  Palma
- HOSPITAL INFANTA LUISA
  Seville
- POLICLÍNICA COMARCAL DEL VENDRELL, S.L. Santa Oliva
- XANIT HOSPITAL INTERNACIONAL
  Benalmádena

8.5.2. Expert committee

The expert committee of the 2013 RESA Study is composed of:

- **Benito García-Legaz,** Asisa.
- **Celia Moar,** HM Hospitals.
- **Cristina García,** idcsalud.
- **Ignacio Conde,** Innova Ocular Group.
- **Juan Abarca,** IDIS.
- **Luis Delgado.** Sanitas.
- **Manuel Vilches.** Nisa.
- **Nicolás Guerra,** IMQ Group.
- **Pedro Rico,** Quirón Group.

8.5.3. Responsible Entities (IDIS and Antares Consulting)

The team behind the fieldwork for the 2013 RESA Study is composed of IDIS and Antares Consulting employees:

- **Coordination: Manuel Vilches,** Director de Operaciones IDIS.
- **Carmen Ruiz,** IDIS.
- **Victoria Ramirez,** IDIS.
- **Esteban Carrillo,** Antares Consulting.
- **Joan Barrubés,** Antares Consulting.
- **Víctor Cañellas,** Antares Consulting.

8.6. IDIS Members

IDIS patrons

- ACES
- ADESLAS SegurCaixa
- ASISA
- AXA
- CASER
- DKV
- ERESA
- Gehosur Hospitals
- Quirón Hospital Group
- Innova Ocular Group
- Recoletas Hospital Group
- Hospital de Madrid
- Nisa Hospitals
- Hospiten
- IDC Salud
- IMQ
- MAPFRE
- Red Asistencial Juaneda
- Sanitas
- Unilabs
- Vithas

Honorary members

- Consejo General de Colegios de Enfermería
- Consejo General de Colegios Oficiales de Farmacéuticos
- Facme
- Farmaindustria
- Fenin
- Foro español de pacientes
- Organización Médica Colegial

Sponsors

- Boston Scientific
- GE Healthcare
- Johnson & Johnson Medical Companies
- Medtronic
- Otsuka
- Philips
- Sanofi Pasteur
- Siemens
- Zeltia

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- Aliad
- A.M.A.
- Almirall
- Amgen
- Bayer
- BD (Becton, Dickinson and Company)
- Carburos Medica
- Covidien
- DNV
- Dräguer
- Elekta
- Esteve
- Everis
- Future Health Technologies
- Grupo Cofares
- Hartmann
- InterSystems
- Kantar Health
- Mindray
- Novartis
- Palex
- Pfizer
- Willis Iberia

IDIS associates

- Abacid
- Asefa
- Best Doctors
- Centro Médico Teknon
- Cerba Internacional
- Clínica La Luz
- Clínica Rotger
- Clínica San Francisco
- Clínica San Roque
- Clínica Santa Elena
- Contrata Ambulancias y Emergencias
- Ginefiv
- Grupo Hospitalario Modelo
- Grupo IMO
- Grupo Previsión Sanitaria Nacional
- HealthTime
- Hospital Perpetuo Socorro
- Hospital San Francisco de Asís
- Igualatorio Cantabria
- Policlínico La Rosaleda
- Santalucía
- Xanit Hospital Internacional


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