

REPORT OF THE MATERNITY PATHWAY

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Note - The acronyms AUSL and AOU used in the report, mainly in the graphs, refer to Local Health Authorities (LHA) and Teaching Hospitals (TH) respectively.

INTRODUCTION

by Sabina Nuti

Since 2004 the Management and Health Laboratory (MeS Laboratory) of the Scuola Superiore Sant'Anna of Pisa has been a partner of the Tuscany Regional Health Department in the development and use of a set of indicators which timely monitor the performance of the Tuscany Regional Health System, also in comparison with other Italian regions (<http://performance.sssup.it/network/lib/index.php>). This systematic activity of measurement and evaluation of results is based on a multi-dimensional approach. It considers both the family care centre-health aspects and the viewpoint of users and employees of the healthcare system. This has enabled Tuscany to improve its performance over the years, to reduce the internal variability of results and therefore to obtain greater equity for its citizens.

At the level of regional healthcare system the performance of healthcare organizations operating within the system is the most relevant aspect. At a local level, it is essential to reflect on the determinants of the results, which in most cases depend on organisational factors, to make an impact on results and activate processes of change and improvement. Within this perspective the involvement and active

participation of healthcare professionals is absolutely necessary. The identification of indicators at hospital unit, district and family care centre level, enables an understanding of how each unit contributes to the comprehension of the overall result. This points out best practices and local realities as examples of potential improvement. Furthermore, working together with the professionals of the maternity pathway allows identifying new indicators and deepening the determinants of results. This approach can better guide the action of the professionals and help them to know more about the existing correlations between the different pointed out factors. In order to allow healthcare professionals in taking on responsibility the outcomes of their own patients as well as of all Tuscany users, a sharing and research process has been activated.

"Professional families" have been involved in in-depth analysis, carried out in collaboration with healthcare managers, regional referents and researchers from the MeS Laboratory and the Regional Healthcare Agency of Tuscany. They are activated to discuss the performance results and the additional required focuses. This process introduces a new perspective, and they

shift from being merely "health service providers" to being components of an integrated healthcare system. Therefore, patients are provided with integrated care pathways involving both district and hospital services.

This "report" dedicated to the maternity pathway is the first issue of a series. It is produced by MeS Laboratory team with the supervision of Daniela Matarrese and thanks to the work carried out in recent years together with Tuscany health professionals.

The series of reports of professional families begins with this volume. Starting from the maternity pathway, it is of particular importance for various reasons:

- * we are dealing with a physiological and not pathological pathway;
- * for families it represents a moment of growth and confidence in the future;
- * it also represents an opening moment driven by needs for cultural change;
- * it is a mirror of the quality of the whole health system;
- * it lays down foundations as regards the potential of healthcare for the entire population.

It is therefore a pathway creating trust and trusting others.

Sabina Nuti



the
MATERNITY PATHWAY
through the eyes of women



It is necessary to encourage better communication and coordination between the operators of the family care centre and those of the hospital since they often provide conflicting information.



In the maternity pathway a multi-disciplinary team of professionals is in charge of the women needs. That team is made up of gynaecologists, obstetricians, geneticists, neonatologists, nurses and paediatricians, etc.. The antenatal and postnatal care is entrusted to family care centres, whereas the birth hospitals provide care during delivery. The coordination among all the professional figures who meet the women, within an integrated pathway, care increases the levels of efficiency and safety for both women and children, and ensures a continuity of care with time as well. The woman is the key actor of the care delivery process, care in all the stag-

es of the pathway. By investigating her experience, with specific aspects (provision of information, continuity and coordination of care, promotion of the birth naturalness, supporting activities in postnatal period) or the overall process, is possible to outline the actual pathway and measure its care quality. Since 2004, with the collaboration of the MeS Laboratory of the Scuola Superiore Sant'Anna of Pisa, the Tuscany Regional Health System has regularly carried out a survey on women experience with the maternity pathway. This makes possible to involve women in the process of measurement of care quality (Nutti and Murante, 2013). The women's opinions and their evaluation is an important and unique starting point for both management and health professionals in order to promote the child and mother care.

The 2012-2013 survey

The latest survey, conducted between 2012 and 2013, was joined by 4599 women who compiled the questionnaire received at home about a month after the birth.

The questionnaire investigates the prenatal, birth and postnatal care) and the overall evaluation of the pathway. The questionnaire was translated into Arabic, Chinese, French, English and Rumanian to enable non-Italian women to participate, as was the case for the 414 foreign women who responded.

The administered questions are formulated in a reporting and rating style. These enable respondents (i) to refer specific events or aspects experienced by women during the access to the pathway, and (ii) to evaluate the quality of the services.

This approach differs from the investigation of satisfaction and it was preferred since it allows to identify more actionable improvement areas due to the possibility of collecting precise and useful information. In this work some significant survey results will be presented. Together with data on quality of care provided by family care centres and hospitals, experience results produce an overall picture of the responsiveness of services.

The report, complete with all the results of the survey, is downloadable from: <http://www.meslab.sssup.it/it/index.php?page=report-indagini>.

The willingness to recommend the maternity pathway services

The assessment of the overall care pathway and the willingness to recommend the services to friends or relatives have always been considered two valuable indicators of quality of care. The monitoring activity carried out since 2004 by the Tuscany Regional Health System showed that the willingness to recommend is lower than the positive overall rates (<http://performance.sssup.it/toscana/>). Furthermore, as stated in the literature, the determinants of satisfaction and those of the willingness to return/recommend are different (Cheng et al, 2003).

In the last years the British National Health System has introduced the Friends and Family Test with the aim of surveying, also among the users of maternal care, the willingness to recommend the healthcare services to relatives and friends (Coulter et al, 2014). However, measurement of the quality of the maternity pathway, from the point of view of women, cannot be limited to this. In fact, by exploring the components of the service and factors that influence the women experiences is possible to better understand the women's evaluations. The willingness to recommend by itself does not give

useful elements for the improvement of care quality. In the following pages the authors present the results of the willingness to recommend the services or professionals providing care through the prenatal, birth and postnatal stages (survey 2012-2013).

For each of the three stages we identified the determinants and components of both the willingness to recommend the services and the overall evaluations expressed by the women. To this end, ordinal logistic regression models were performed. The variables considered as covariates of the models are: nationality, age, educa-

tional level and variables concerning some aspects of women's experience with the services.

The willingness to recommend the family care centre or professional who followed the woman during the prenatal period

The percentage of women in Tuscany who would recommend to relatives and friends the family care centre or professional who followed them during pregnancy is on average greater than 83%.

Results show that the tendency to recommend "certainly" to others the family care centre or professional who followed the woman for the antenatal care:

- * is greater among Italian women than among foreign women (by 1.7 times);
- * is greater among women in the age range of 30-35 compared with younger women (by 1.5 times);
- * is less among women with a degree with respect to those who attended compulsory education (by 0.8 times);
- * is less among women who received the pregnancy booklet from the midwife of the family care centre compared with those who received it from other professionals (by 0.7 times);
- * is greater for the women who, on receiving the pregnancy booklet, obtained information regarding the whole pathway compared with those who did not receive it (by 2.5 times);
- * is greater for women who had a prenatal screening test and who declared that they were rather well, very well or completely informed on the risks of tests compared with those who said they had been given little or no information (by 1.8 times);
- * is greater for women who could easily access the services compared to those who had difficulties (by 2.8 times).

The tendency of the women to express an overall positive evaluation (excellent or good) of the quality of the services they had access to during the prenatal period:

- * is greater with increasing level of education (by 1.5 times for the women with high school diploma and by 1.9 times for the women with a degree compared with the women with a primary or middle school education);
- * is greater for women who, on receiving the pregnancy booklet, obtained information regarding the whole pathway (by 1.9 times);
- * is greater when antenatal examinations were booked by professionals involved in the provision of maternal care rather than by the woman herself (by 1.4 times);
- * is greater if women were followed during pregnancy by a professional employed by the Regional Health System (within the family care centre and hospital) centre or by general practitioners (by 1.3 times);
- * is greater among the women who

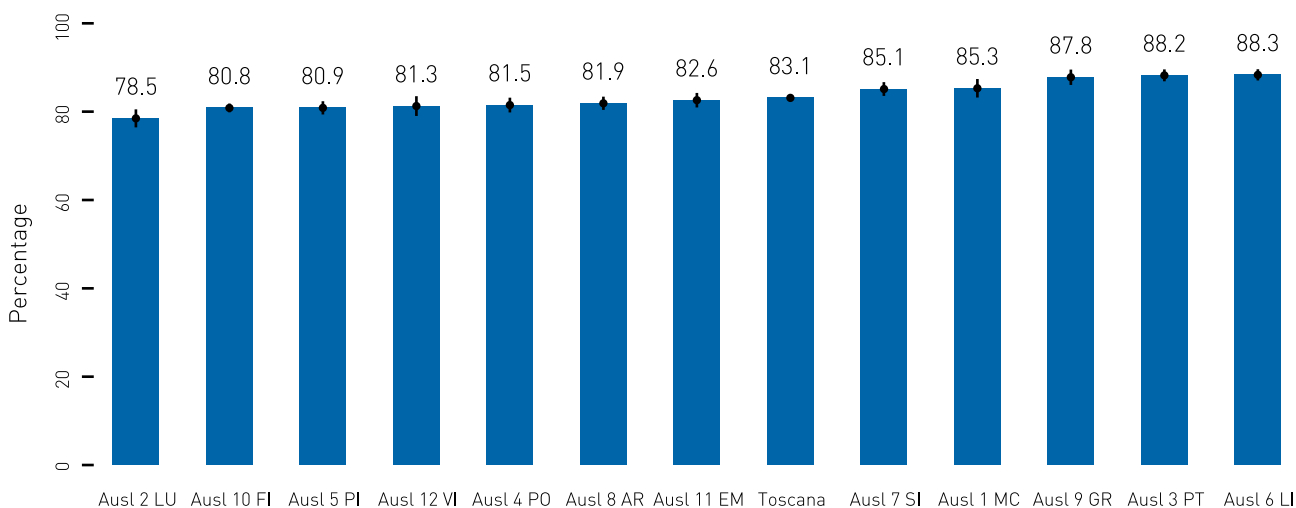


Figure 1 - Women who would "certainly" recommend the institution or professional that followed them during pregnancy (Year 2012-2013; Local Health Authority of residence; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").

had a prenatal screening test and declared they were quite, very or completely informed regarding the purposes and risks of the test (by 2.6 times);

* is greater for the women who had no difficulties in accessing the services (by 12.4 times).

The socio-demographic variables (age and nationality) do not significantly impact on the overall evaluations of antenatal care.

The willingness to recommend the birth hospital

The tendency to recommend to others the birth hospital in which the delivery occurred (on average 83.8% at a regional level):

* is less among the women who chose the birth hospital according to closeness to their or their family's home compared with the women who made the choice for

other reasons (by 0.5 times);

* is less among the women who declared they had been left alone, in particular during labour and in the other moments of the stay in the birth hospital than that of the delivery and in the first hours following birth (respectively by 2.6 and 2.5 times);

* is greater among the women who declared that enough or a great deal was done to manage the pain felt after delivery (by 3.1 times);

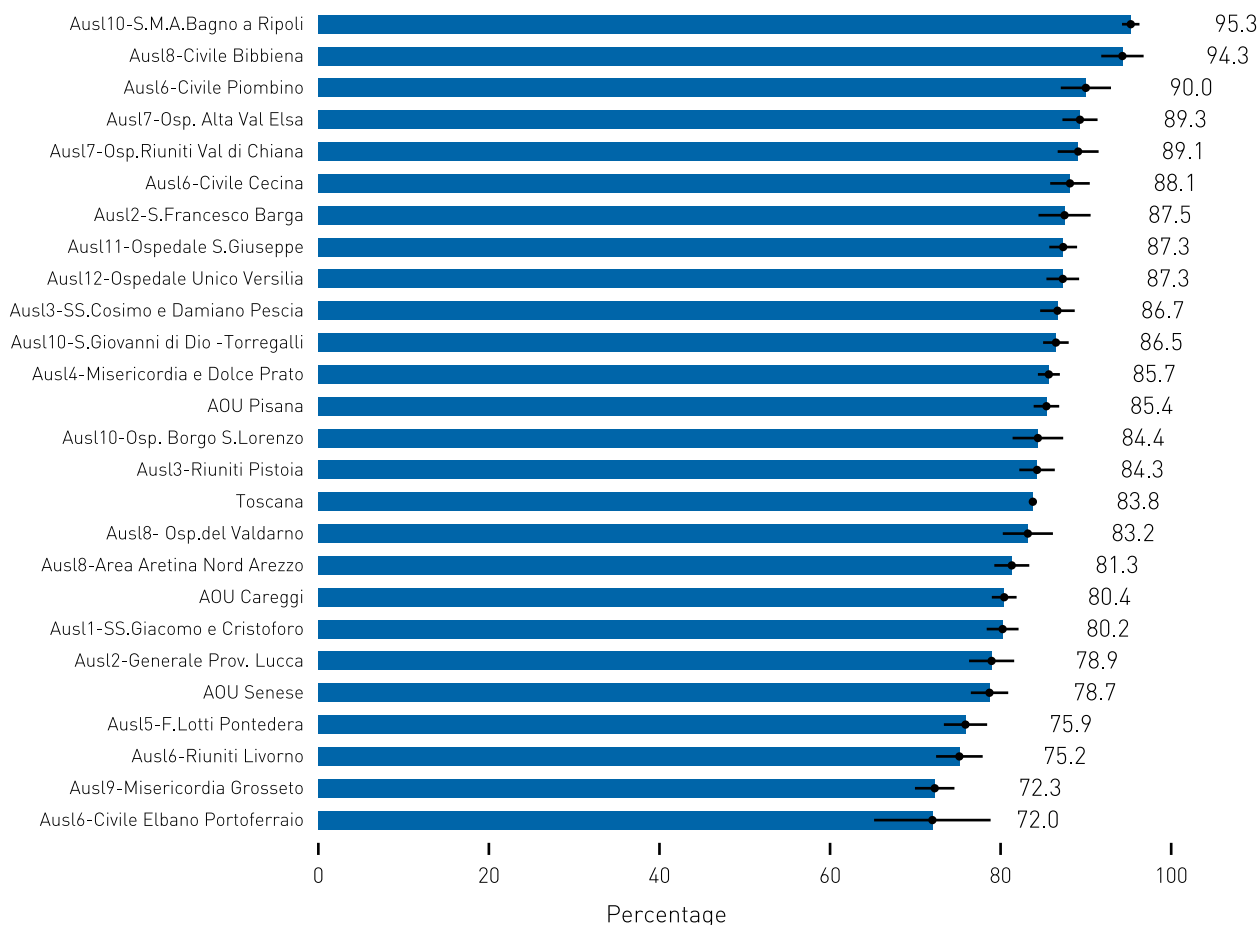


Figure 2 - Women who would "certainly" recommend the birth hospital where they delivered (Year 2012-2013; Birth hospital; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").

- * is greater among the women who received quite, very or completely concordant information on breastfeeding from the birth hospital personnel (by 1.5 times);
- * is greater among the women who declared that they trusted midwives and the medical staff compared with those who had little or no trust (respectively by 5.1 and 3.5 times);
- * is greater when the teamwork of the birth hospital staff was evaluated excellent or good (by 5.9 times).

Furthermore, the tendency to express an excellent or good assessment of the quality of care received during the hospital stay:

- * is greater among women with university degree compared with those with only compulsory school education (by 1.2 times);
- * is less with increasing age (by 0.8 times);
- * is less among the women who chose the birth hospital on the basis of closeness to their or their

- family's home (by 0.6 times);
- * is greater for the women who, before the birth, met hospital medical staff and were able to refer to them their medical history (by 0.8 times);
- * is less among the women who declare that they were left alone, in particular during labour (by 2.5 times), in the hours following delivery (by 2.4 times) and in other moments of the stay (by 4.5 times);
- * is greater among the women who declare that enough, a lot or a great

FOCUS

When knowing the results can make the difference

It was observed that a positive and statistically significant correlation exists between the willingness to recommend the birth hospital and the importance the maternity department employees give to the knowledge of the comparative results. The birth hospitals, where personnel consider important to know the performance results of their organization in benchmarking with the other ones, are also the birth hospitals that women would certainly recommend to relatives or friends. This result sheds light on relations between the role of the comparative performance measurement and the quality perceived by users of the healthcare services.

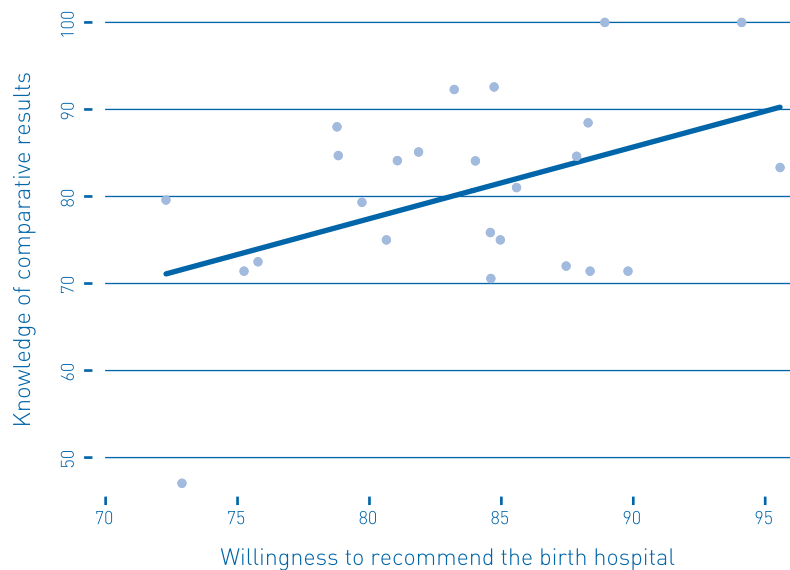


Figure 3 - Correlation between the extent to which Tuscany birth hospital employees consider useful to know comparative results (survey of internal services climate, 2012) and the willingness to recommend the birth hospital expressed by women ($p < 0.05$) (Source: Indagine sull'esperienza delle donne, 2012-2013).

- deal was done to manage after birth pain (by 2.0 times);
- * is greater among the women who received from the centre personnel information that was quite, very or completely concordant regarding breastfeeding (by 2.7 times);
- * is greater among the women who declared that they trusted the midwives and medical staff compared with those who had little or no trust (respectively by 3.9 and 2.4 times);
- * is greater among the women who expressed positive evaluations regarding the cleanliness of the environment (by 2.0 times);
- * is greater for the women who had rooming in (by 1.3 times);
- * is greater when the teamwork of the birth centre personnel was evaluated as excellent or good (by 15.6 times).

The willingness to recommend the family care centre, hospital structure or professional figures of the postnatal care services

The tendency to recommend to relatives or friends the family care centre, hospital or professional met during the postnatal period (on average 79.5% at a regional level):

- * is greater among the women (by 1.4 times);
- * is less among women with difficulties during pregnancy (by 0.7 times);
- * is greater among the women who had access to services of the family care centre or another structure of the Local Health Authority (by 1.8 times);
- * is greater among the women who,

after having contacted the family paediatrician for a problem, declare that he/she helped them to solve it (by 2.3 times).

The results also showed that the women age, their level of education, and having other children do not influence in a statistically significant way the women's choice to recommend to relatives or friends the family care centre, hospital or professional taking in charge them in the first months after the birth.

The following sections regarding the maternity pathway deal with significant aspects of maternal care, which are analysed through the data concerning the women's experience and the data from the regional health information system.

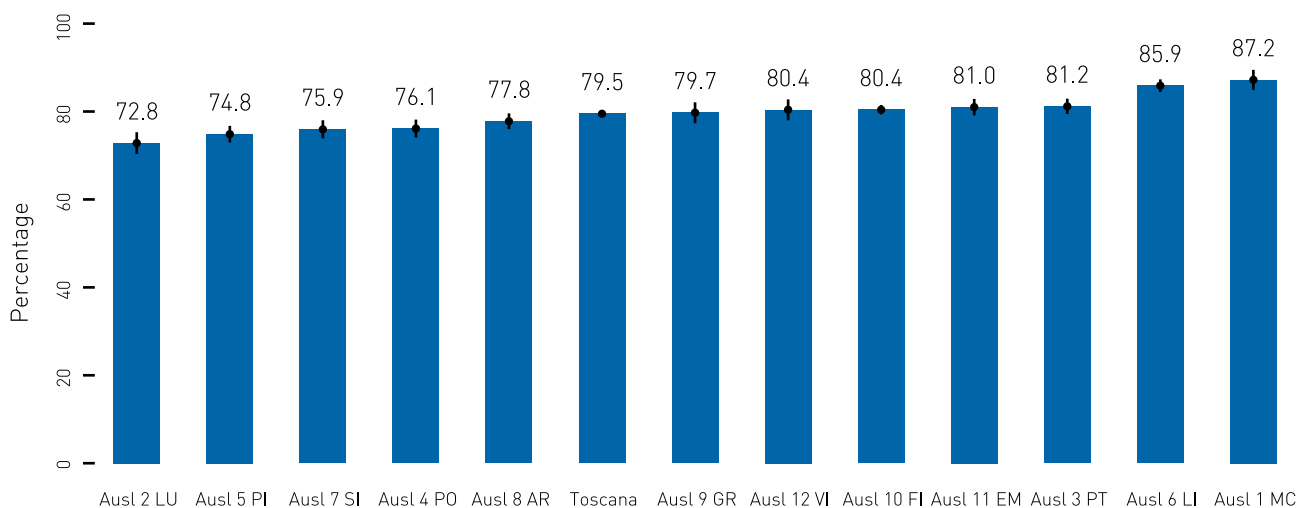


Figure 4 - Women who would "certainly" recommend the family care centre, hospital, or professional taking in charge them in the first months after the birth (Year 2012-2013; Local Health Authority of residence; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").



the

PREGNANCY



Now that I have personally got in touch with the family care centre, I understand much better the importance of its activities, also as regards prevention, particularly about the mother-new born relationship and the support proving to the mother in the first period after the birth. I now appreciate more the importance of the activities and time that the midwife (both in the department and the family care centre) dedicates to women during pregnancy and after the birth.



On average 75.1% of women who give birth in the Tuscany Region rely on the care of a private specialist during pregnancy. In 64.4% of the cases this specialist is a gynaecologist, only in 0.4% of cases a midwife and in 10.3% of cases an intramural gynaecologist. The women declare that they chose a private professional above all because of the following reasons: 1) because she/he is the specialist they normally refer to for gynaecological care (60.4%), 2) to be certain to be followed by the same professional throughout the pregnancy period (32.8%), 3) because she/he is the specialist who followed them during previous pregnancies (19.6%) or 4) because she/he is the specialist working in the birth hospital where they have decided to have the birth (16.5%). It is therefore clear that the need for continuity in the care is the main reason for the choice. This involves both inter-personal continuity, i.e. the need

to always relate to the same figure, and also longitudinal continuity, that is the need for continuity of care during the whole pathway. Few women choose to use the public health system for their maternity pathway. In fact, only 15.4% of women choose to be followed by a gynaecologist (11.7%) or midwife (3.7%) of the family care centre. Non-Italian women referred to those professionals more frequently (54.4%) than Italians (12%), as well as the women who attended at most the middle school (24.5%) compared to the women who went to university (13.3%). On the other hand, on average 8.7% of women decide to be followed by a gynaecologist (7.6%) or midwife (1.1%) at hospital level, whereas the rest 0.8% by their family doctor or other practitioner, or no one in particular.

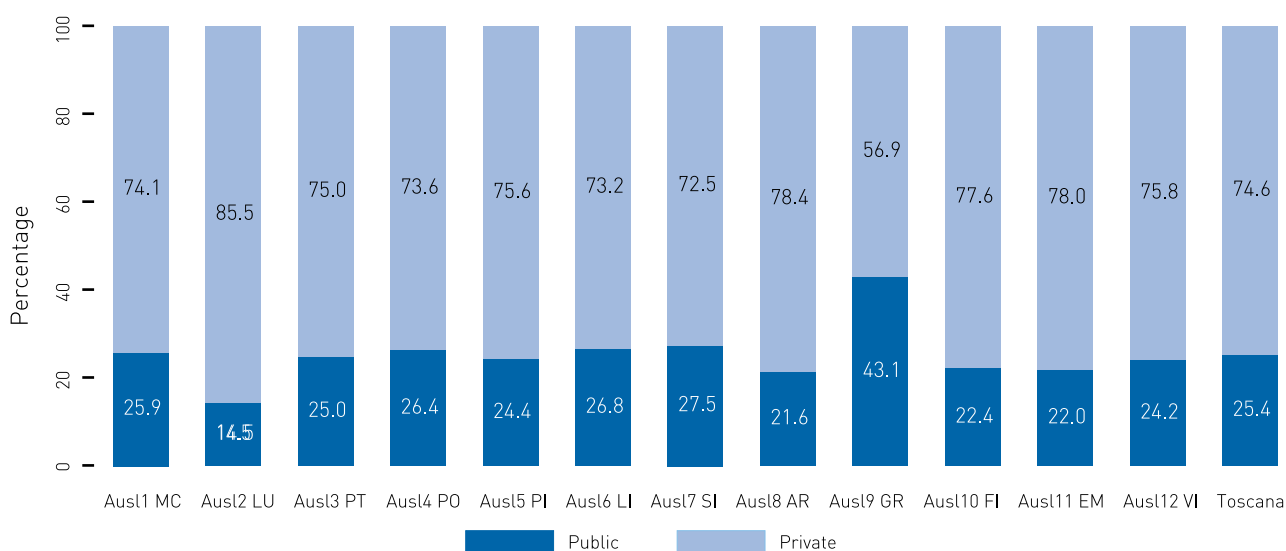


Figure 5 - Women who were followed during pregnancy mainly by a professional working within the public health system (midwife/gynaecologist of the family care centre, the hospital or family doctor) or private practitioners (private or intramural gynaecologist or private midwife) (Year 2012-2013; Local Health Authority of residence; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").

The strategies prompting the women orientation throughout the maternity pathway services

An effective taking in charge during pregnancy has a positive impact on the health of both mother and child. It is a moment of accompanying women and couples to the birth of their children and to the undertaking of the role of parents. The underuse of antenatal care increases the risk of negative outcomes. Especially foreign women have difficulties in accessing the maternity pathway and using antenatal care. In order to overcome the first obstacle of accessing care during pregnancy, the presentation of the maternity pathway by the professionals has a great importance. The family care centre is the key service at district level in Tuscany Region with the task of accompanying women throughout the maternity pathway, starting from the consignment of the pregnancy booklet. This booklet, together with the information regarding check-ups and tests advisable during pregnancy, also collects instructions and the required prescriptions for access to the antenatal care services. When midwives consign the pregnancy book, they also inform women of all the

available services for pregnant women, in order to ensure complete familiarity with the maternity pathway services and to encourage their further use. Also the possibility of prompt booking of pregnant tests by the family care centre staff is a strategy that reduces the obstacles of access. Access is an important component of the service, to the extent that it conditions the willingness to recommend the antenatal services (cfr pag.9).

Consignment of the "pregnancy book" and pathway presentation

The 1998-2000 regional Healthcare Plan identifies the family care centre midwife as the most qualified figure to consign the "pregnancy book", containing all the required prescriptions of antenatal care services, to pregnant women. However, still about 2 women out of 10 report that they received it from another person (hospital midwife, family care centre or hospital

gynaecologist, but also administrative personnel). Depending on the ways adopted at the Health Authority level for consignment of the booklet, the percentage of women declaring that they received a complete presentation of the pathway varies significantly. In fact, the majority of women in Tuscany benefitted from a presentation that was quite or very complete of the various maternity pathway stages and of the available care services (81%). However, this percentage decreases in the Health Authority in which the women report that the "pregnancy book" is not given to them by the family care centre midwife. On the contrary, when this good practice is ensured, the entire pathway usually results as being well presented. Adequate information on the pathway conditions significantly condition the tendency to recommend the prenatal services and assess them positively (cfr pp. 9-19).

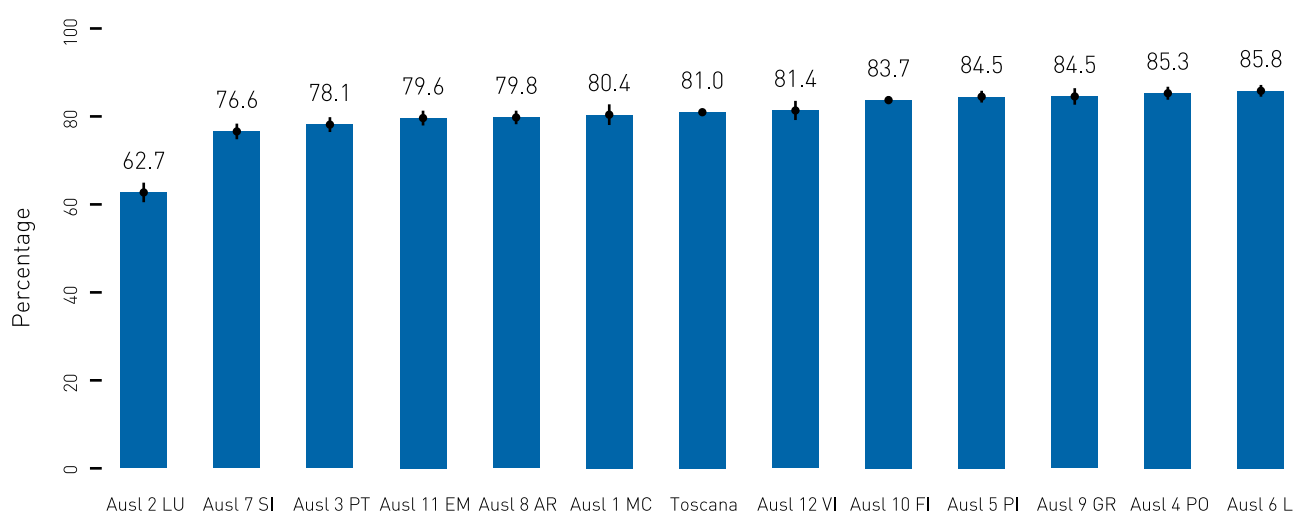


Figure 6 - Women to which the maternity pathway was presented (quite enough, very much or completely) at the moment of consignment of the "pregnancy book" (Year 2012-2013). Local Health Authority of residence; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne".

Who books the tests during pregnancy?

A strategy to favour a prompt use of the maternity pathway services can be the reservation of the tests during pregnancy directly by the pathway personnel. This facilitates access to the services and ensures longitudinal continuity in the overall care of the woman by the operators.

The booking of tests by pathway personnel is however not widespread practice, with only 14.8% of women at a regional level who declare that they used this service. In reality, in 9 hospitals out of 12 this percentage is lower than 10% and only in two cases the booking of tests by social-care personnel seems to be the norm. It can be observed that in the Local Health Authorities with a particularly low percentage of women who had their tests booked by the personnel, there is a higher number of women who declared that they had booked the tests late due to long waiting times.

Being able to use the operator booking

service is a determinant that influences the expression of a positive evaluation by the woman regarding prenatal services (cfr pg.10).

Delayed access of foreign women to pregnancy care

Foreign women, in particular those coming from countries with a strong migratory pressure, have a greater likelihood of encountering difficulties in orientation among the services. These include not using the services due to linguistic and communicative-relational problems, organisational obstacles and different customs which also influence health behaviour. These difficulties can result in a delayed access to services during pregnancy and in underuse of the care services and the various healthcare opportunities available in the maternity pathway. The services should activate strategies that facilitate access to care on the part of the more fragile categories of women.

In particular, it is important to avoid a delayed access to prenatal services. As shown in the European Perinatal Health Report (2013), having the first medical visit during pregnancy by the end of the first three-month period enables early identification of problems which require specific supervision ("at risk" pregnancies) or which are of a social nature. This also ensures that there is information on the possibility of using the services and carrying out tests, together with indications on how to avoid risk factors. In Tuscany in the last three years there has been a drop from 16% to 13% in the number of foreign women who have their first medical visit beyond the 12th week of pregnancy. However, there is wide variability between the hospitals and the Local Health Authority districts.

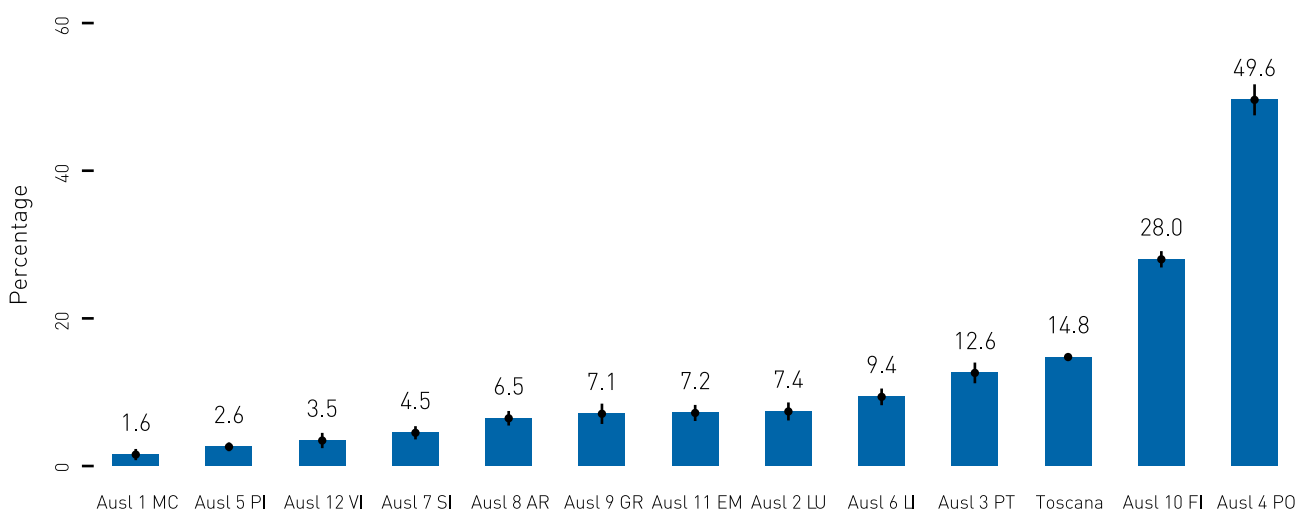


Figure 7 - Women whose tests during pregnancy were booked by personnel of the maternity pathway (Year 2012-2013; Local Health Authority of residence; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").

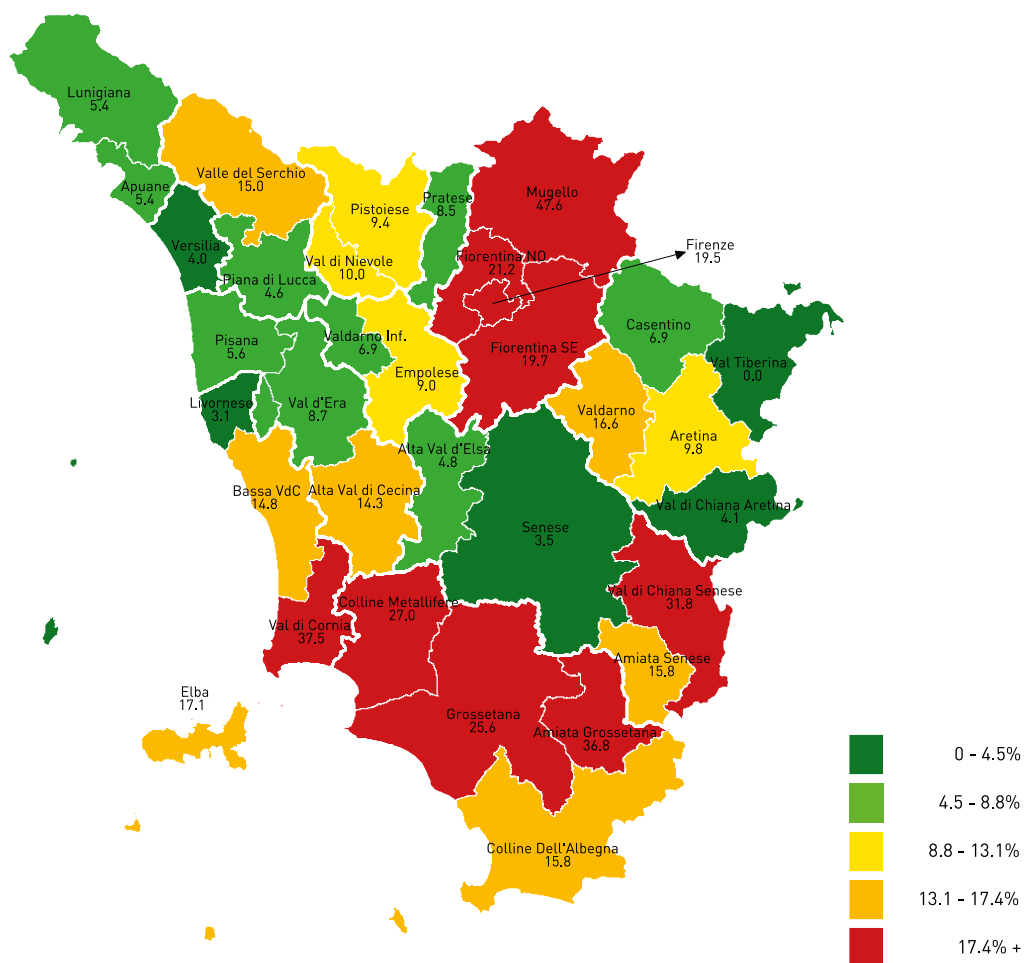
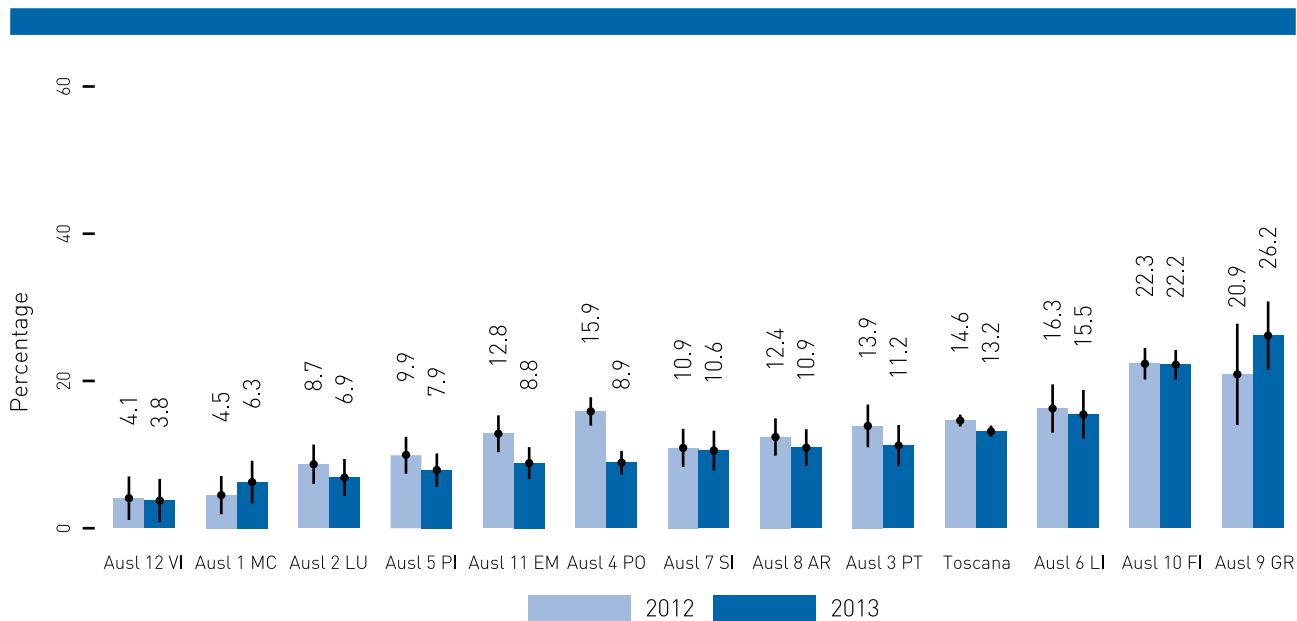


Figure 8 - Foreign women who have a late first antenatal visit (beyond the 12th week of pregnancy) (Year 2012-2013; Local Health Authority of residence; Source: Regional data flow of Certificate of Pregnancy Care).

Figure 8a - Foreign women who have a late first antenatal visit (beyond the 12th week of pregnancy) (Year 2013; LHA district of residence; Source: Regional data flow of Certificate of Birth Care).

Prenatal screening: when the choice is fully conscious

The Tuscany Region guarantees prenatal screening (bi-test and nuchal translucence) to pregnant women. Prenatal screening has a high predictive value, and is aimed at the reduction of invasive diagnostic procedures where there is no evidence of chromosomal anomaly or congenital defects. It is important that the choice to undergo screening is a conscious choice, based on adequate information regarding its purposes, the way of carrying out the test, its potential and its limits.

In the two-year period of 2012-2013 there is a progressive number of women that undergo this kind of screening in the age band of under 35, in opposition to the limited recourse to amniocentesis and chorionic villus sampling. The data from the 2012 survey confirm that women of less than 35 years old undergo prenatal screening more frequently than those of the higher age brackets, whereas level of education is not correlated with the decision to carry out this test, nor to have amnio-

centesis and chorionic villus sampling. There is a high percentage of women who report that they have been informed on the purposes and possible risks of screening. Awareness is one of the factors that positively influence the woman's experience in the prenatal phase. This is in terms of both the overall evaluation of the care during pregnancy, and also as willingness to recommend the service or professional figure she was followed by (cfr pp.9-10).

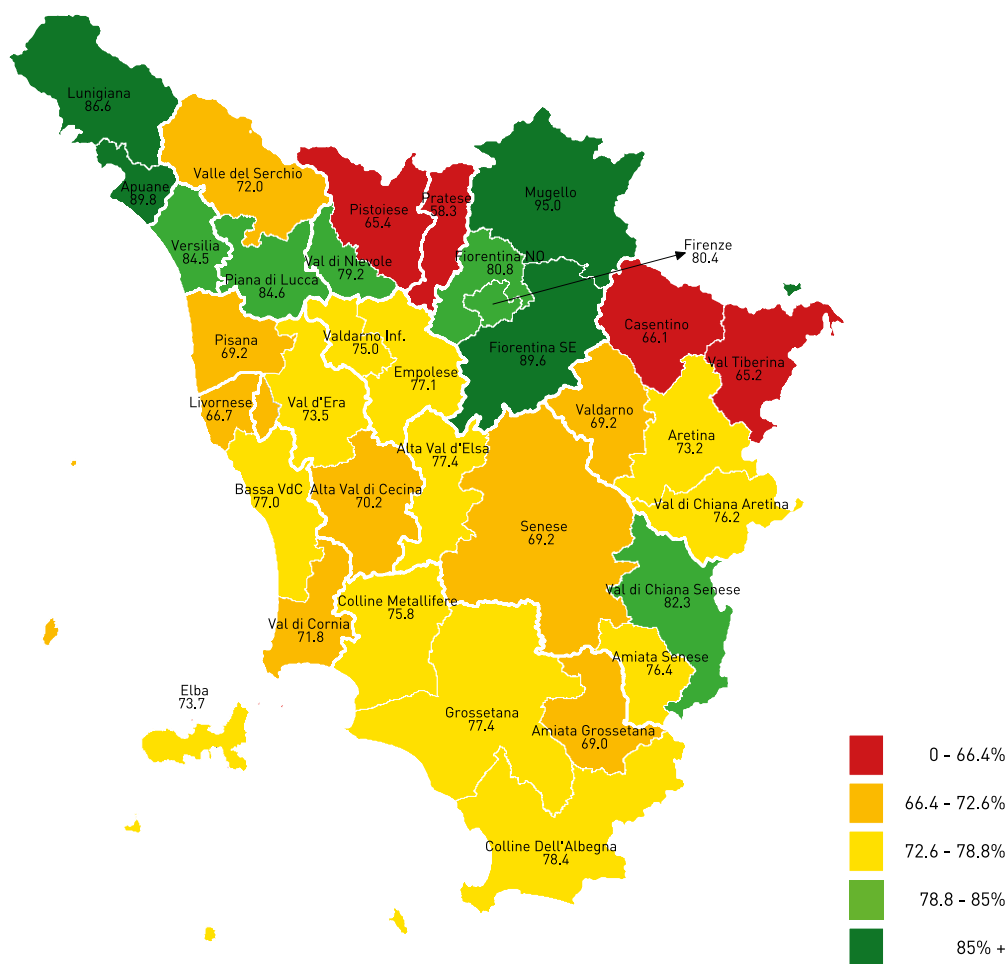


Figure 9 - Women who undergo prenatal screening (Year 2013; Zone-district of residence; Source: Regional flow of CAP - Certificate of Pregnancy Assistance).

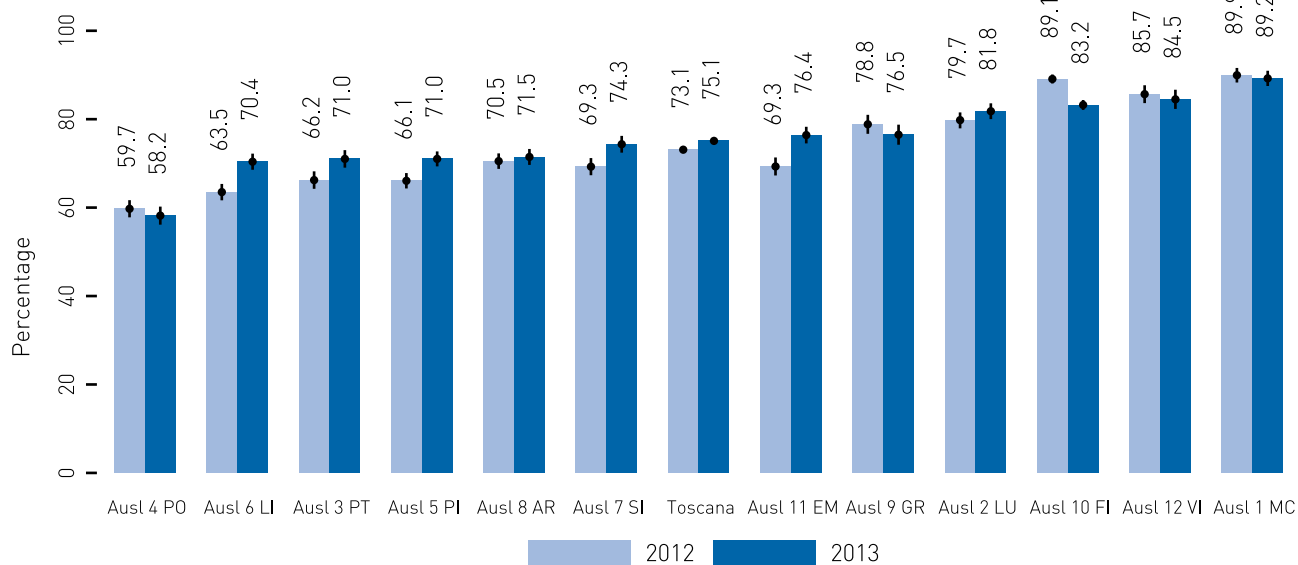


Figure 9a - Women who undergo prenatal screening (Year 2012-2013; Local Health Authority of residence; Source: Regional data flow of Birth Care Certificate).

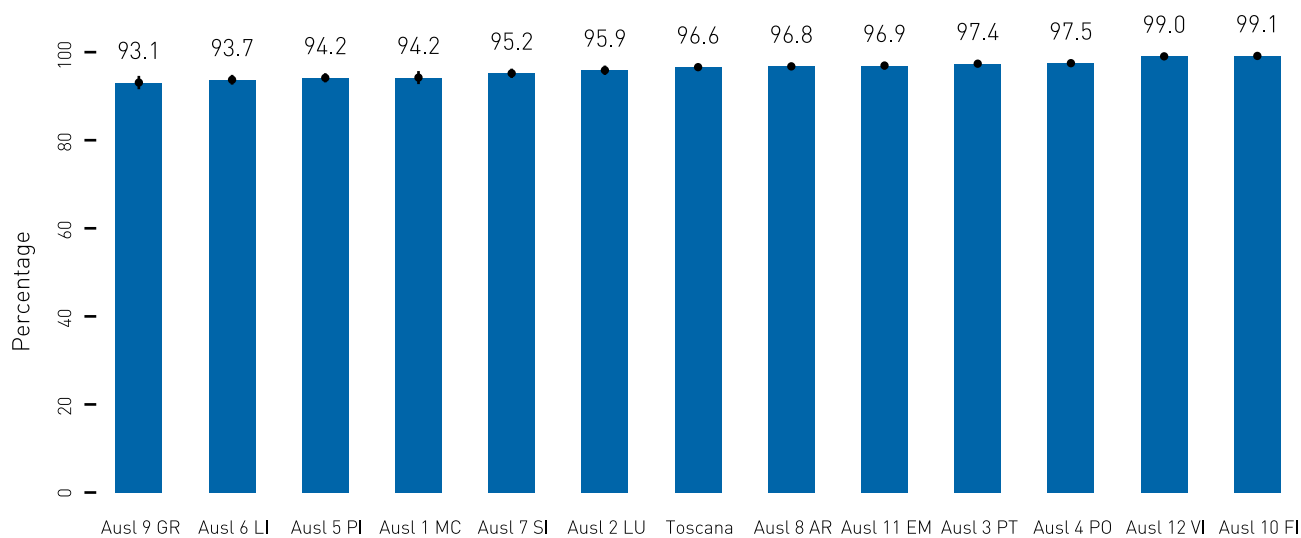


Figure 10 - Women who have received information on prenatal screening (feeling to be enough, a lot or totally informed) - (Year 2012-2013; Local Health Authority of residence; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").

Antenatal classes: a missed opportunity



Improving pregnancy accompaniment with the aim of putting the woman and her child at the centre of the work and listening more to the woman who is about to become mother, help her to become as self aware as possible of her potential. This accompanying process supports and reinforces women in their choices.



The Antenatal Classes (CAN in Italian), organized mainly by the services of the family care centre, allow to promote the empowerment of the woman and in general of the future parents. This is in order to reinforce the natural skills of the woman and make the couple fully aware of its capacity to receive a child and face the requirements of the postnatal period. Classes are conceived as moments of discussion and exchange of useful information.

These courses are particularly relevant. As systematically indicated by the results of various studies on the maternity pathway at a national level, they are positively associated with a lower risk of inappropriate practices or procedures, for example recourse to Caesarean delivery, and they encourage more positive outcomes, such as greater use of breastfeeding (Baglio et al, 2000; Lauria et al, 2012). The possibility of attending at least three of the planned meetings is particularly important for women experiencing maternity for the first time because they may have more doubts and sometimes also more fears regarding the arrival of the baby and the right pathway to follow. Through participation on these courses doubts and fears can be overcome, thanks to discussion with both the obstetrician and the other practitioners involved,

and also through the exchange of information with other mothers. In assessing participation on the courses a minimum of three encounters is recommended. Although there is a slight regional increase in participation on the courses by primiparas (41.5% in 2012 to 45.1% in 2013), still less than one primipara out of two in Tuscany takes advantage of the opportunity offered by the prenatal courses.

The main reason reported by the women for not attending the courses is lack of time (29%). In this regard the services could intervene by modifying organisation in terms of timing and logistics of the courses so as to better meet the needs of the women. This is also considering the fact that 15% say that they did not participate due to the inconvenient time of the course and 11% because they lived far from the course location.

A further relevant point is that one woman out of five did not attend because the course was not considered useful. It is therefore important that the family care centres communicate adequately to the women the benefits of participating. At the same time the offer and content of the courses should meet the women's needs so that the women themselves who may recognise the advantages of the course and recommend it to others because of its usefulness.

The participation in the antenatal classes is also a positive factor as regards further attendance at other encounter groups during pregnancy. According to the data of the 2012 survey, in fact, the mothers who attended the courses reported more frequently than others that they had also attended meetings regarding breastfeeding, parenthood and other topics associated with birth.

Disparities in participation in the antenatal classes

Increasing women's access to the antenatal class is obviously a priority of family care centres in order to improve the maternity pathway. At the same time it is necessary to

guarantee a fair exploitation of this healthcare opportunity irrespective of socio-economic or cultural differences. National surveys have shown the existence of inequalities of access to the courses based on the level of education. In fact, the courses are mainly attended by women with a high level of education, who have less difficulty in expanding their level of maternal health literacy (Lauria et al., 2013). This is defined as the cognitive and social skills that determine the motivation and ability of the woman to succeed in accessing, understanding and using the information in order to safeguard her health and that of her children (Renkert, Nutbean, 2001). Also in Tuscany there is a problem of equity in course participation, measured on the basis of educational qualification of the women. The primiparas with a lower level of education (i.e. up until the end of middle school) attend a total of three encounters of the courses less frequently than the more highly educated women (i.e. with at least a degree). The difference in participation between the groups is more than 30% in 2013 at a regional level. This is an increase compared to the previous year, and with percentages of above 40% in some districts. Therefore, despite a medium level of participation in the courses in Tuscany, there are still relevant disparities of access and use of the courses, given that the differences observed between the groups are predictable, avoidable and unfair. The women with a low level of education, in fact, like the foreign women who have similar problems of access, should receive greater support from the services. On the basis of the logics of vertical equity, offering initiatives appropriately ranging in response to varied needs of healthcare, the family care centre services could propose antenatal classes which organisationally and logistically better correspond to the needs of the socio-economically less advantaged sector of the population. A proactive offer of these courses should promote access to the facilities available.

It is of particular interest to observe the data regarding the two indicators

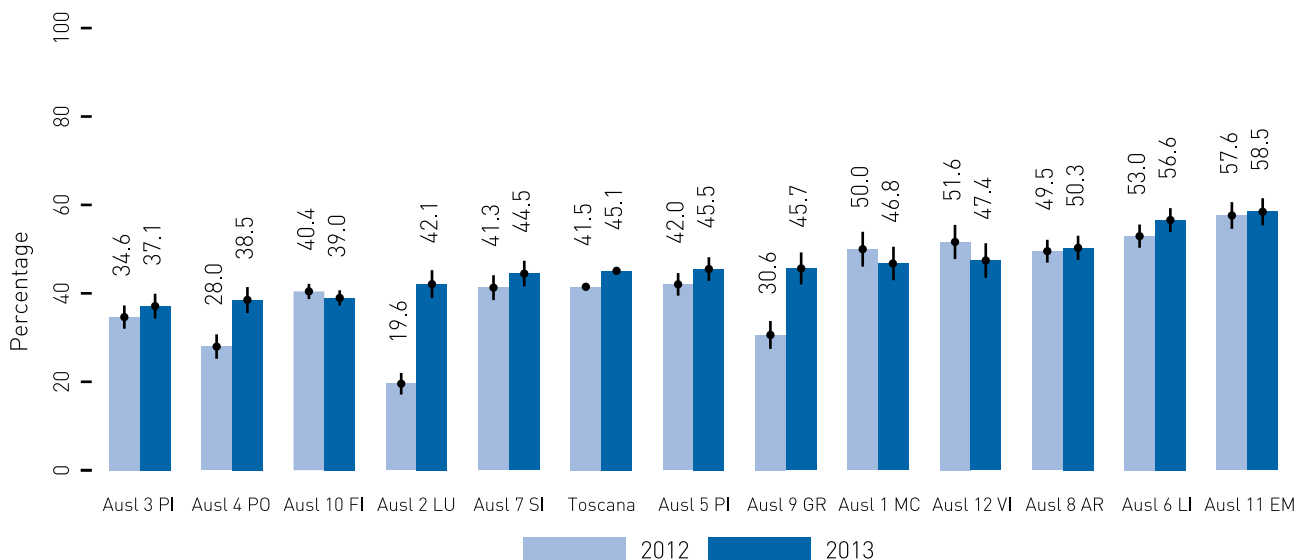


Figure 11 - Women with at least three attendances at the antenatal classes (Year 2012-2013; Local Health Authority of residence; Source: Regional data flows of Family care centre and of Certificate of Birth Care).

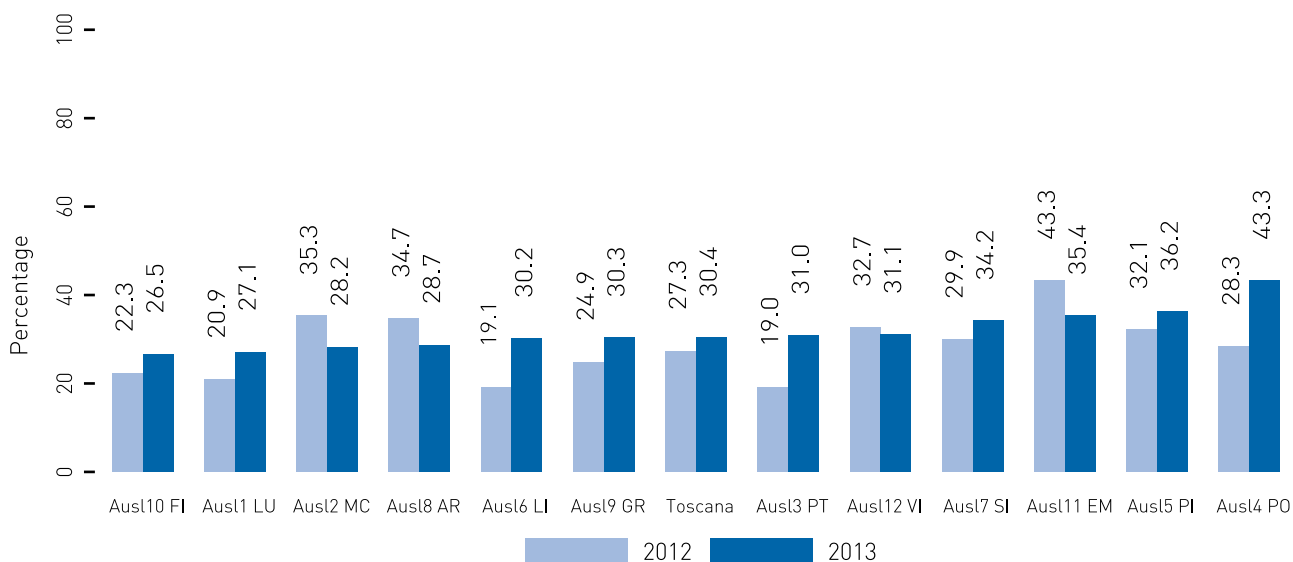


Figure 12 - Difference in participation in antenatal classes between the group of women with high (at least university degree) and low education (no qualification or primary or middle school certification). (Year 2012-2013; Local Health Authority of residence; Source: Regional data flows of Family care centre and of Certificate of Birth Care - NB: The Local Health Authority of Lucca and Pistoia have no data for 2011 due to technical difficulties in data coding).

relative to the antenatal classes at the district level, a level that best corresponds to the effective work of the local family care centre. Comparing the two maps (Figures 13 and 14), we can see that there are few districts able to ensure a high and equal participation in the courses. Green shading corresponds, respectively, to a higher course attendance on the basis of the level of education and smaller difference in access to the courses on the basis of education level. A particularly

critical situation is that of the districts where participation in the courses is good (green and dark green in Figure 13), but where equity of access is low (orange and red in Figure 14).

quarters of the sample interviewees considering the courses to be of a good or excellent quality. Many topics are faced in the courses. Although they usually deal with labour, birth and feeding, also other themes are dealt with, such as neonatal care, care during puerperium and the birth hospitals available in the territory. Fewer than one woman out of five reports that she had a lot of or a great deal of information on contraception, vaccinations and regulations regard-

Evaluation of the antenatal course

The women who attend the courses generally express a positive evaluation of the experience, with three

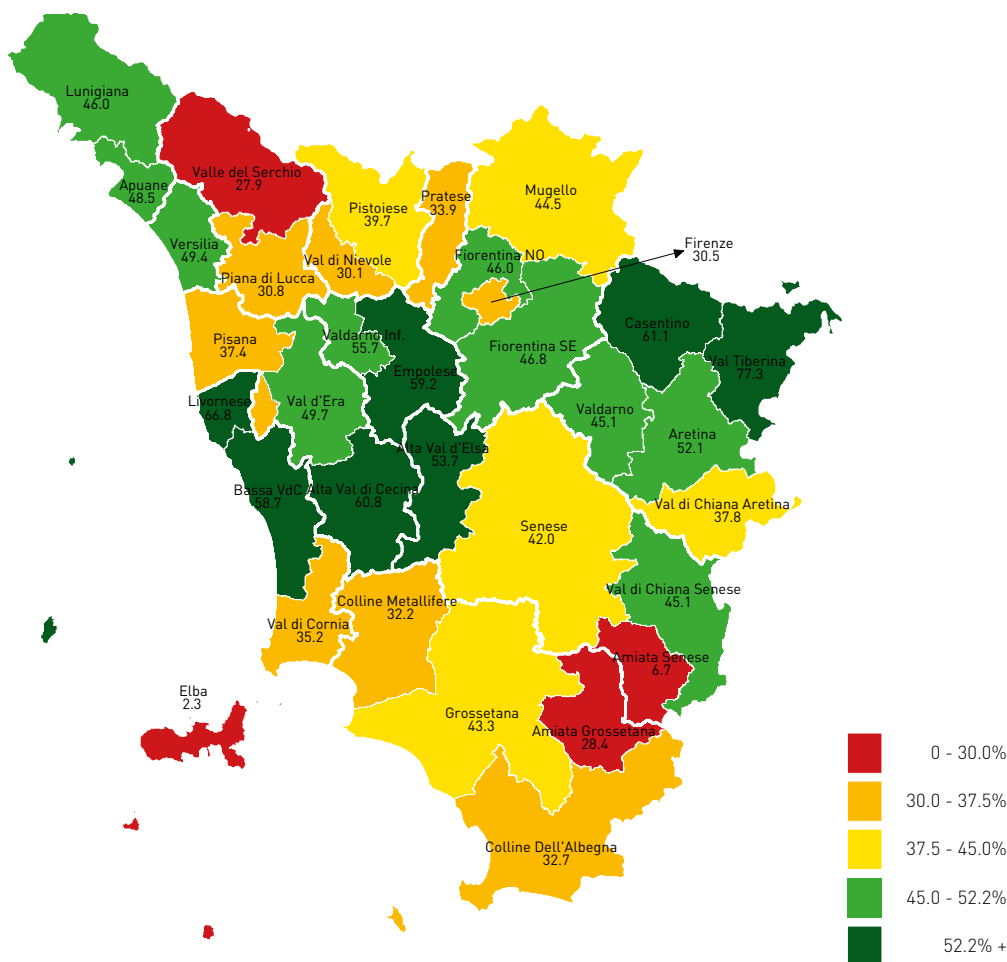


Figure 13 - Women with at least three attendances at antenatal classes (Year 2012-2013; District of residence; Source: Regional data flows of family care centre and of Birth Care Certificate).

ing the safeguarding of the pregnant woman. Not taking advantage of the courses to face topics of interest for the woman and the safeguarding of her health and that of her child is another missed opportunity, in particular regarding the use of contraception (Joseph K, Whitehead A, 2012). Differences can be observed between health authorities regarding the way the women said they were treated on the prenatal courses. This clearly shows the lack of a common standard

in the content of the courses across the Local Health Authorities. Besides the content, it is very important to ensure the way the courses should be carried out. The approach should give precedence to interaction between participants and course leaders, as recommended in the national guidelines regarding physiological pregnancy (SnIG-ISS, 2010).

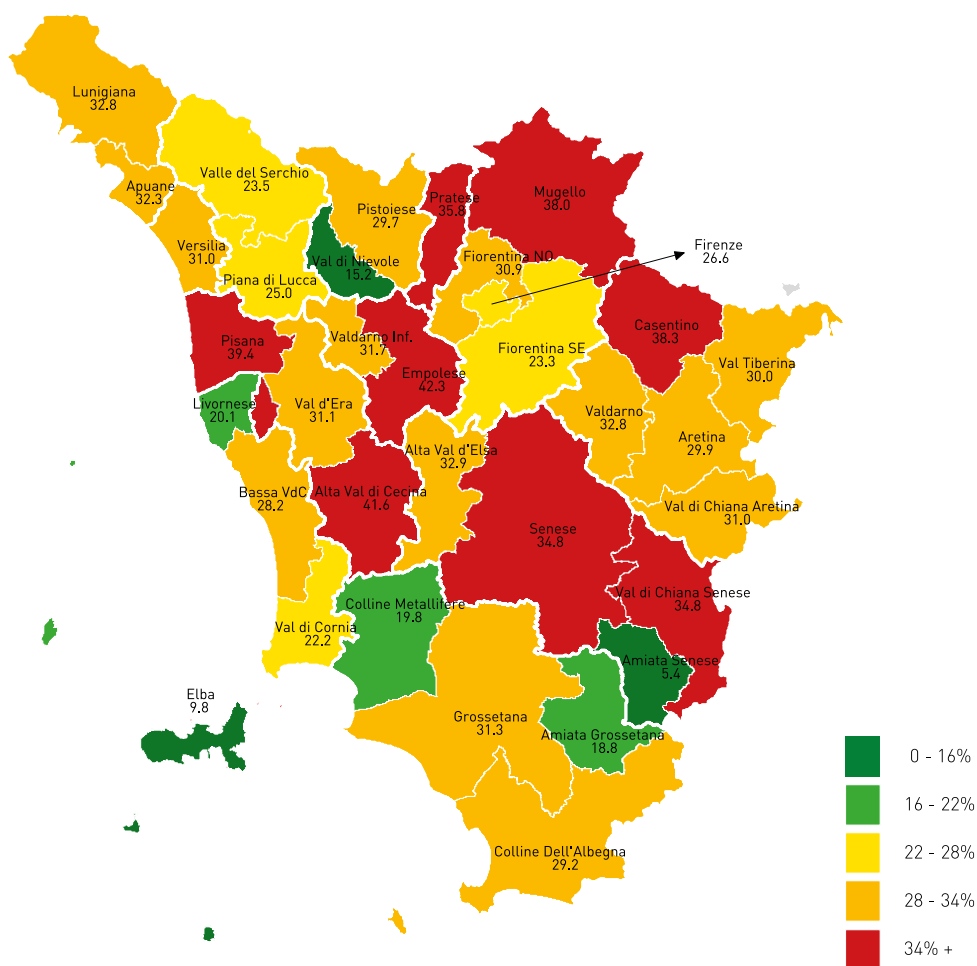


Figure 14 - Difference in participation in antenatal classes according to the women's level of education (Year 2012-2013; District of residence; Source: Regional data flows of family care centre and of Birth Care Certificate).

More participation, but only of the graduates

The results show that the prenatal course is an opportunity that is taken up mainly by women with a high level of education, given that in the areas (districts) where participation is higher there is also a greater difference in participation according to education. This means that the services manage to improve access to the courses above all for those who have a greater health seeking behaviour. According to the logic of a proactive service, on the other hand, the family care centres should manage to reach above all the women with the greatest need and who have a limited capacity to exploit the services offered. This could be done both by improving information on the courses and also proposing organisation which better meets the needs of women with a lower level of education.

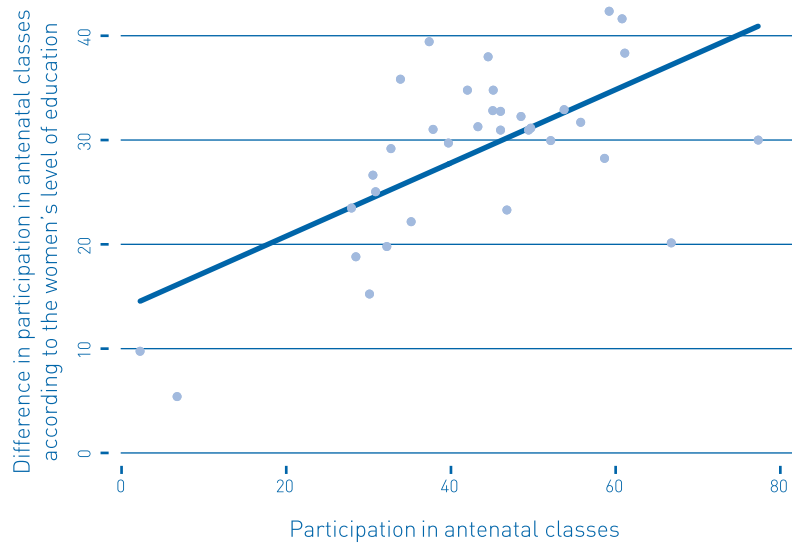


Figure 15 - Correlation between the difference in participation in antenatal classes according to the women's level of education and the overall level of participation at these antenatal classes ($p < 0.001$) (Years 2012-2013; District of residence; Source: Regional data flows of family care centre and of Birth Care Certificate).

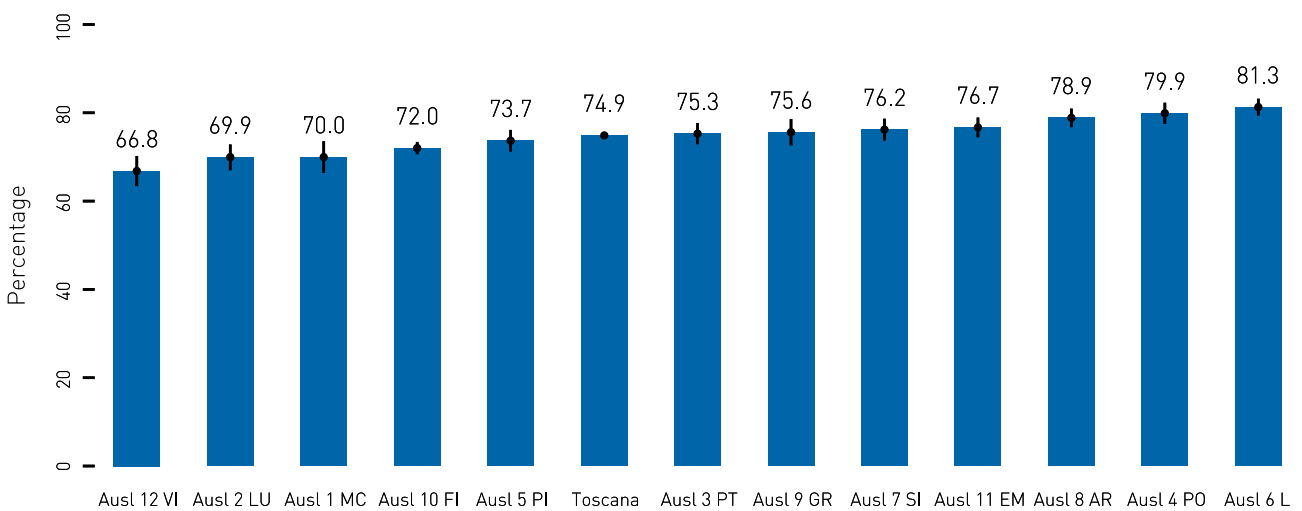


Figure 16 - Women who evaluate the antenatal classes as overall 'good' or 'excellent' (Year 2012-2013; Local Health Authority of residence; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").

the

BIRTH



THE BIRTH

The choice of the institution where the child is to be born is often motivated by specific reasons. Except for the women who contacted the birth hospital closest to their home or that of their close family (45.6%), 15.7% of women choose the birth hospital because they consider it more suitable for dealing with complex situations. This is above all when the choice regards one of the three Tuscany Teaching Hospitals (49.4% of women gave birth at the Pisa Teaching Hospital, 36.7% at the Siena

Teaching Hospital and 44.8% at the Florence Careggi hospital). The offer of healthcare services available at the birth hospital, such as rooming in or being able to request an epidural during labour, is the third reason in order of frequency most chosen by women (15%). 13.5% of women give birth in the birth hospital of the specialist who followed them during their pregnancy. This reiterates once again the need for care continuity, this time at all stages of the pathway. Finally,

10.3% of women choose the birth hospital either based on recommendation given by relatives or friends (5.2%) or by their regular gynaecologist (4.2%) or because labour started when the woman was close to that birth hospital (0.9%).

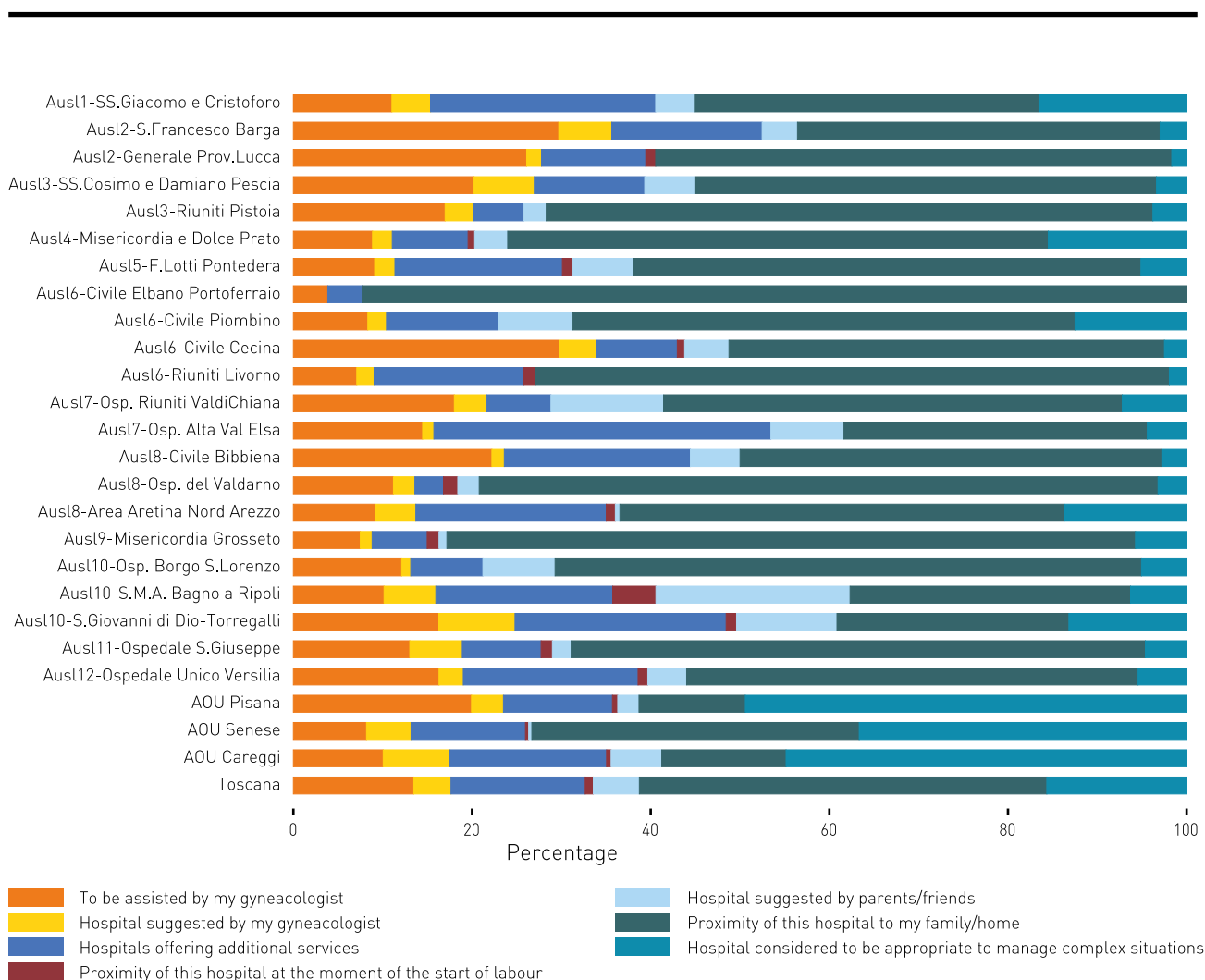


Figure 17 - Reasons behind the choice of birth hospital where to deliver (Year 2012-2013; Birth hospital; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").

The birth: a return to naturalness?



When the services work well and personnel provide good care, an already beautiful experience may be experienced more calmly.



The moment of birth is an extraordinary and delicate event in the life of a woman. The recovery of the physiology of the birth enables the woman to experience the birth in all its naturalness, in respect of human and relational needs. To what extent the choice of the practitioners involved is the appropriate one? Efficient, and at the same time personalised, care also includes correct pain management, respecting the needs of the woman. But do all women find an adequate solution close to home?

Caesarean, induced and operative deliveries

In Tuscany recourse to Caesarean sections (25.7%) is lower than the Italian average (37.7% in 2011). However, it is certainly higher than the standard indicated by the WHO (15%). Although the issue has been at the centre of the political-health debate for several years, there has still not been any inversion of trend either at a national or regional level. Furthermore, there remains a clear variability among birth hospitals (from 14.9 to 38.8%). This variability seems mainly due to inappropriate and divergent care practices with respect to clinical in-

dications. The indicator "Percentage of Nulliparous Term Singleton Vertex (NTSV) Caesarean sections" focuses on a specific range of cases, made up of primiparas, with full term delivery, not twin birth and with the child in vertex presentation. This indicator makes it possible to compare birth hospitals with different case records, but also to understand a wide range of population consisting of about 32-39% of Caesarean sections [Evaluation of Caesarean delivery, 2000].

With a decrease in Caesarean sections (-12.8% since 2007), the induced and operative deliveries counter this tendency. In the period 2007-2013 they go from respectively 17.7% to 20.4% and from 4.9% to 6.9%. The induction of the delivery is an emerging problem in Tuscany, where in 2013 9 LHAs out of 15 went beyond the threshold of 20%, considering that the estimated international average is 10%. During recent years in Tuscany there has been an increase in induced and operative deliveries of 15.0% and 39.2% respectively. A similar trend is evident also in other regions of Italy [Bonini and Nuti, 2013]. The complexity of the phenomenon prompts a multiple strategy approach, which reconsiders the entire maternity pathway. This should involve the rationalisation of the care offer to new organisational models, capable of integrating diverse care levels and settings – at a local hospital level – thus differentiating the pathways for physiological pregnancy and pathological or risk pregnancies.

Pain management during labour

A high percentage of women (79.7%) believe that the maximum possible was done to control pain during labour

(Figure 21). The woman's pain during labour can be limited with pharmacological or non-pharmacological means. Among the non-pharmacological techniques, one-to-one obstetric care is the most efficient and the most recommended by the WHO for low risk labour. This is where the care techniques, even more so, respond to a limited interaction with the natural course of the labour and as little as possible invasiveness, birth hospital appropriateness, graduality of action, and efficient methodology. Among pharmacological techniques, peridural analgesic is the most effective for limiting pain. However, as regards the peridural analgesic, if on the one hand studies confirm its efficiency, on the other hand they also indicate potential risks to mother and fetus-newborn and the organisational need for safe delivery. The methods of controlling pain are often an important decision for the woman in the conscious choice of birth hospital. However, whichever method is used, the most important element is the care given at this stage by the operators involved in the birth. Giving the couple various opportunities to choose is important to enable a fully aware decision to be made.

Births outside the residence area

The choice to give birth in a birth hospital far from home, in the case of uncomplicated pregnancies, implicitly expresses a negative opinion of the assistance of the hospital in the person's area of residence. About one woman out of six decides to give birth outside the area where she lives, with very variable results across Tuscany (from 8 to 30%).

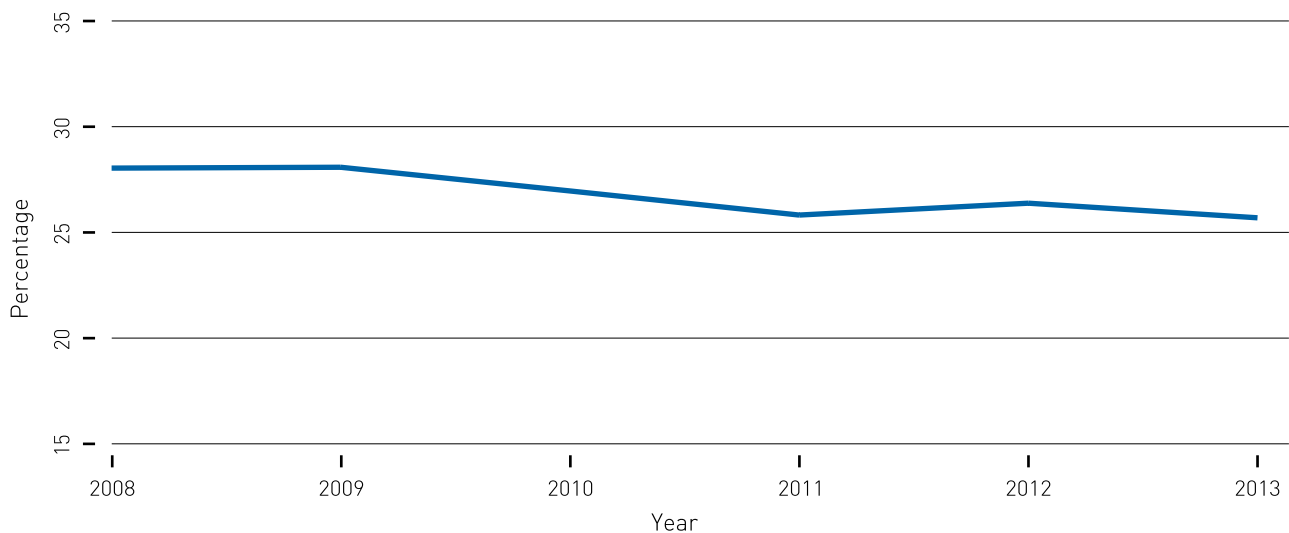
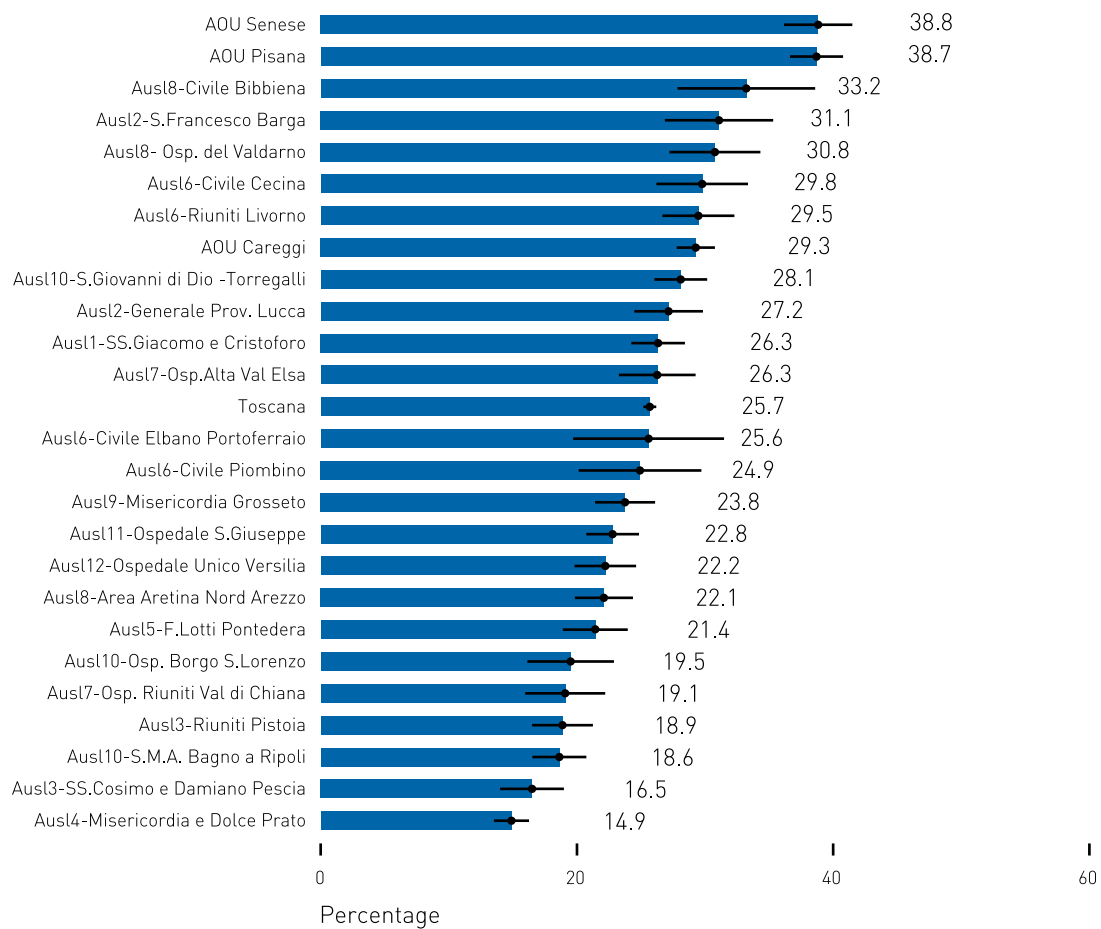


Figure 18 (upper) - Crude rate of Caesarean sections by birth hospital (Year 2013; Birth hospital; Source: Regional data flow of Birth Care Certificate).

Figure 18a (lower) - Crude rate of Caesarean sections: Temporal trend for 2007-2013; Tuscany region; Source: Regional data flow of Birth Care Certificate).

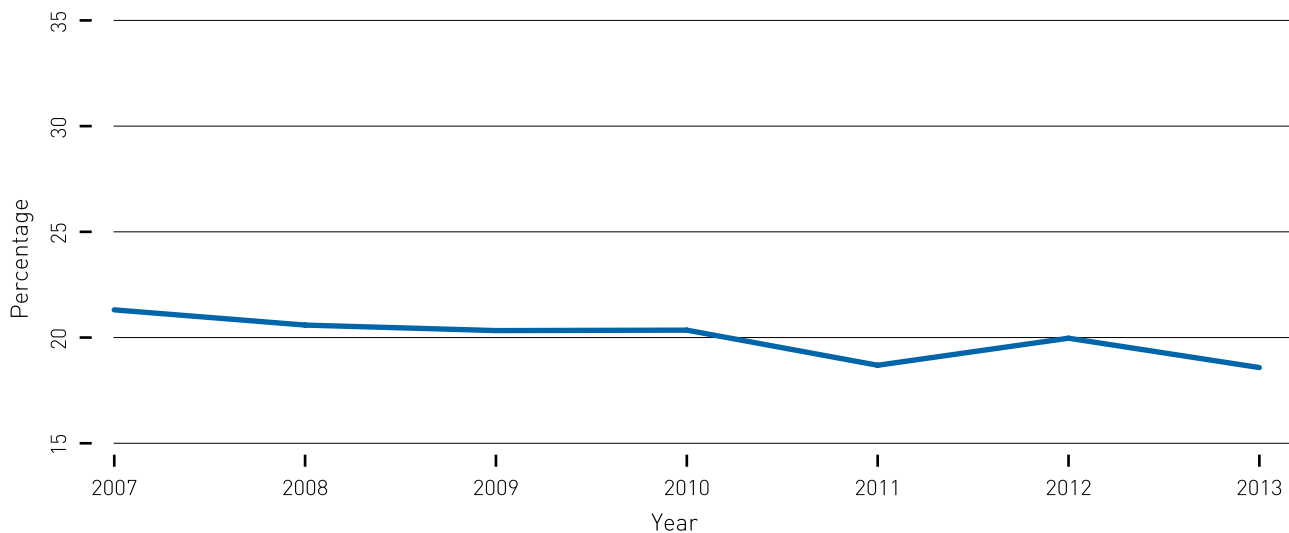
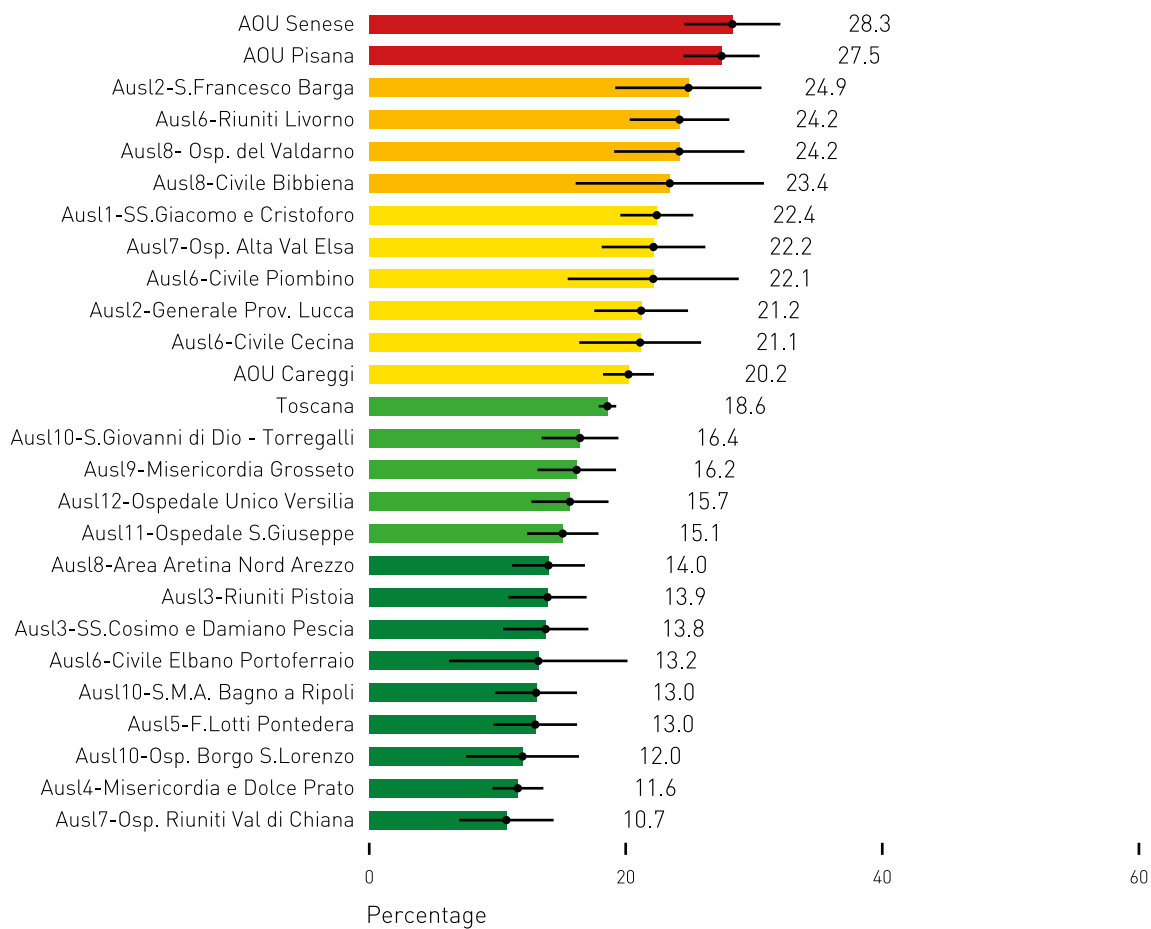


Figure 19 (upper) - The NTSV Caesarean sections by birth hospital (Year 2013; Birth hospital; Source: Regional data flow of Birth Care Certificate).

Figure 19a (lower) - The NTSV Caesarean sections : Temporal trend 2007-2013; Tuscany region; Source: Regional data flow of Birth Care Certificate).

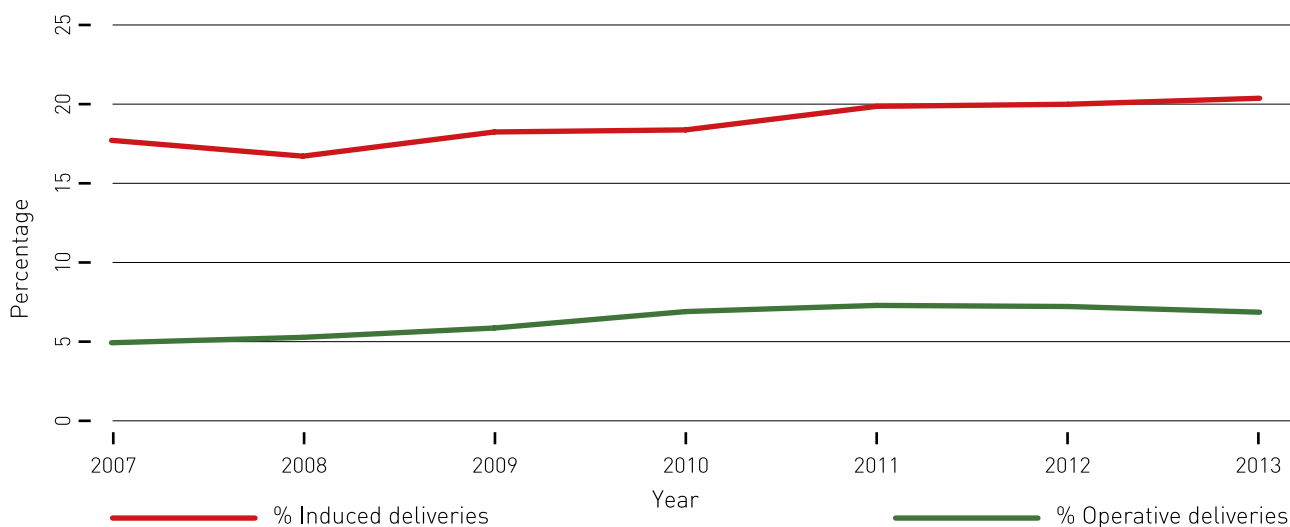
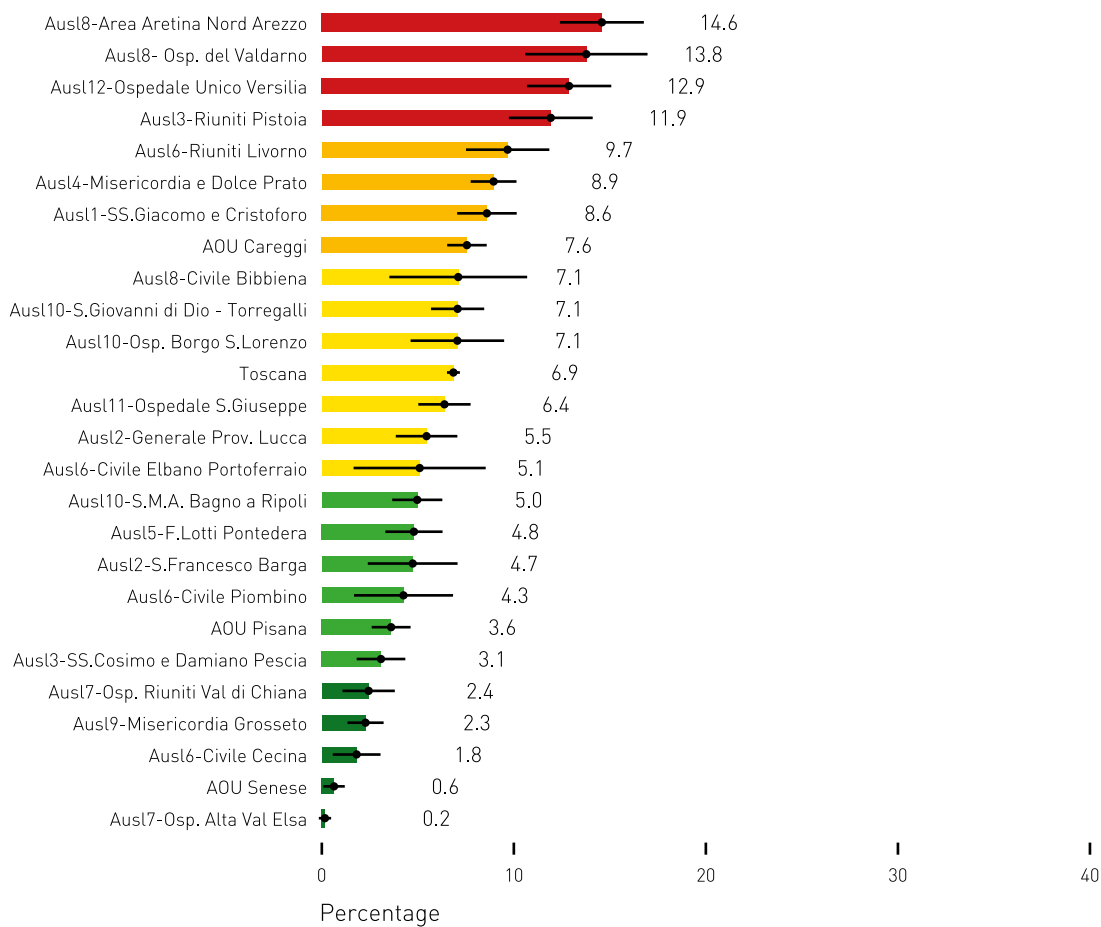


Figure 20 (upper) - Operative deliveries (forceps or ventouse) (Yers 2013; Birth hospital; Source: Regional data flow of Birth Care Certificate).

Figure 20a (lower) - Induced deliveries (vaginal deliveries with induced labor) and operative deliveries (Temporal trend 2007-2013; Tuscany region; Source: Regional data flow of Birth Care Certificate).

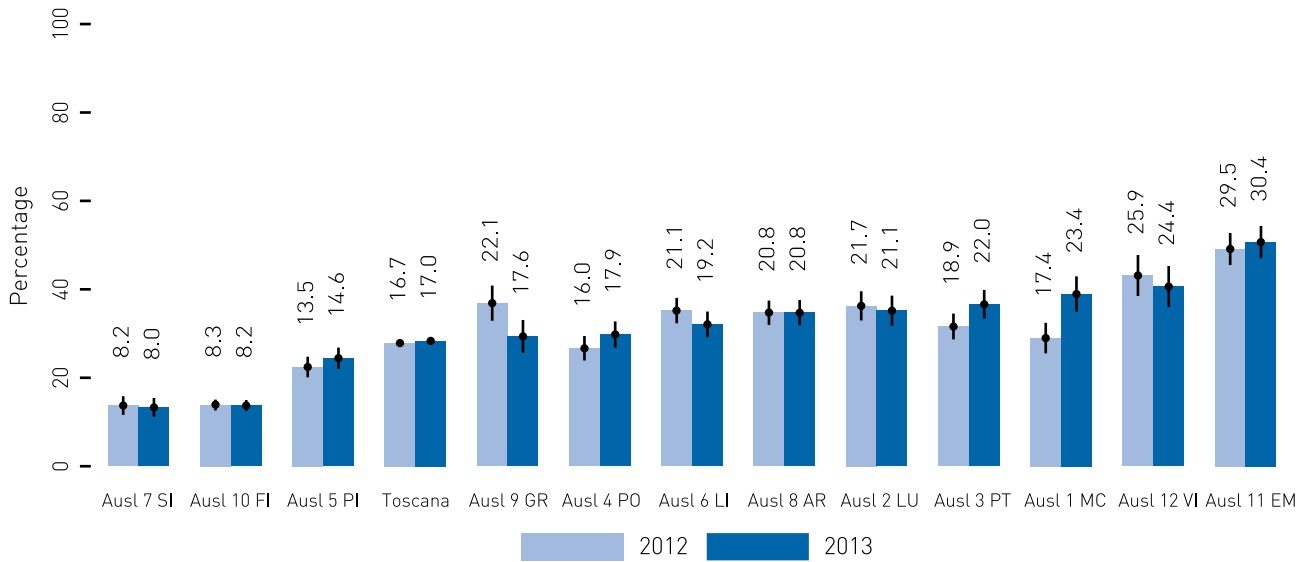
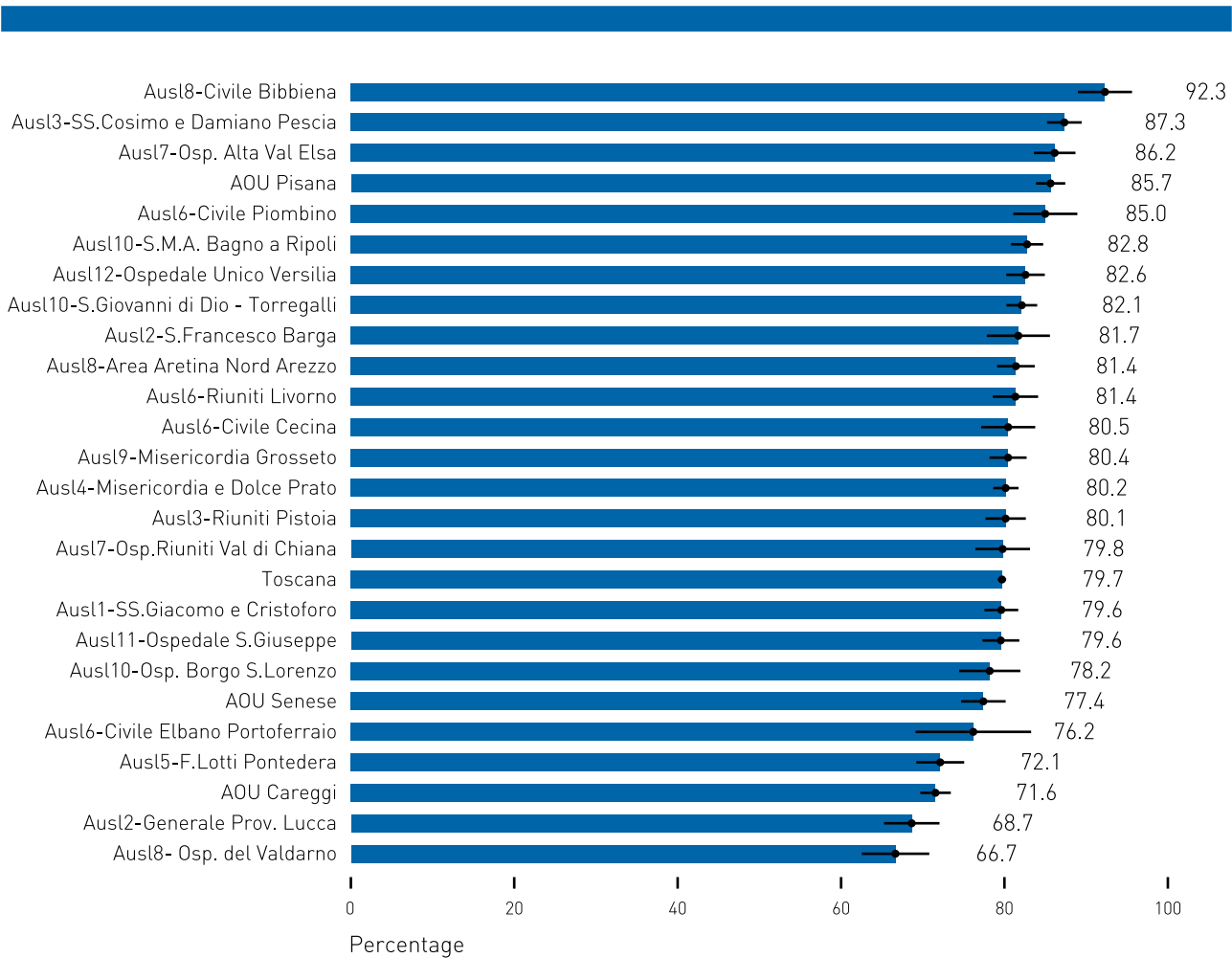


Figure 21 (upper) - Women who think the maximum possible was done to limit their pain during their labour (Year 2012-2013; Birth hospital; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").

Figure 22 (lower) - Births outside the residence area (Year 2012-2013; Birth hospital; Source: Regional data flow of Hospital discharge records).

Can the team make the difference?

The quality of healthcare is the result of the professional and relational skills of all the healthcare operators. A sensitive and personalised relationship is often essential for the good outcome of a birth, similar to that of a technical skill applied accurately. However, the synergy of various competent professionals is equally important within a multidisciplinary context.

Efficient teamwork can positively influence the quality of healthcare, en-

sure high levels of safety and guarantee better working conditions. Working in the same unit is not the same as working in a team. Team must be recognised as such, and have a clear objective to achieve, developing and using efficient systems of communication. Team must be coordinated in the single healthcare stages, share common protocols and procedures, and use adequate mechanisms of problem-solving and resolution of internal conflicts.

There are various studies, also in Tuscany, which shed light on the importance of the perception of teamwork for users of the healthcare services (Seghieri et al 2008; Murante and Nuti, 2011), supporting what is mentioned in the first pages of this work (cfr pg.11).

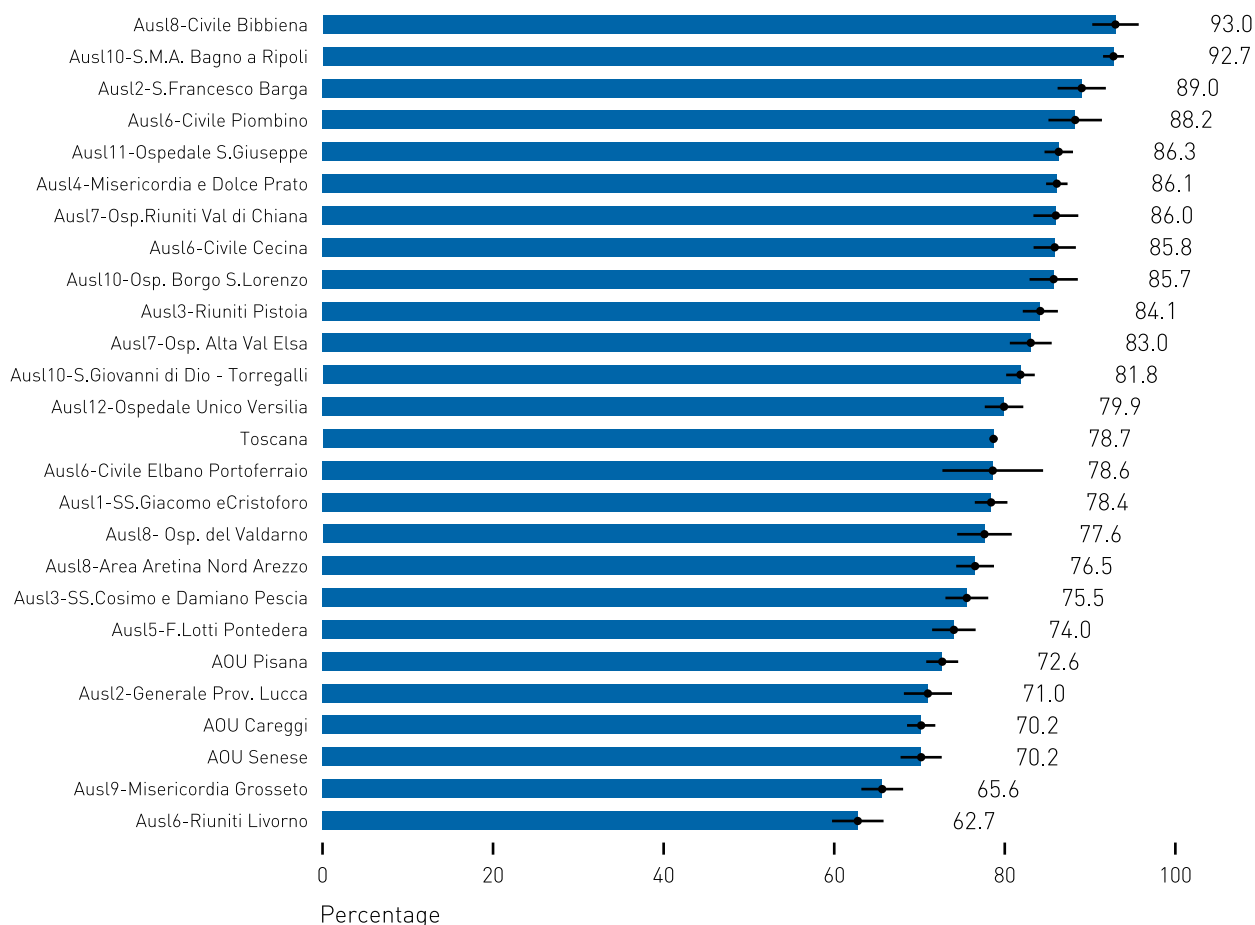


Figure 23 - Women who judge as 'good' or 'excellent' the teamwork of birth hospital staff (Year 2012-2013; Birth hospital; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").

Teamwork

How professionals work together can influence the quality and safety of assistance, but also improve the idea of being looked after in an efficient and secure way. This prompts women to express very positive evaluations on the service received and encourages them to recommend the birth hospital to friends and relatives (cfr pg 11). The perception the women have of the

teamwork of the hospital personnel is generally positive (78.7%). In some birth hospitals the perception of the positive evaluations (good or excellent) goes beyond 90%.

Continuity during labour

Communication and coordination are two important instruments for the team to work effectively, ensuring an

effective and safe healthcare service. A clear and detailed passing on of responsibilities between the obstetricians during labour, for example due to shift changes, guarantees a continuity of the healthcare process in an extremely delicate moment that exposes the woman and newborn to high risks if the action of who is assisting is not coordinated. When during delivery a shift change of personnel occurs, it is necessary to dedicate maximum attention to the transition

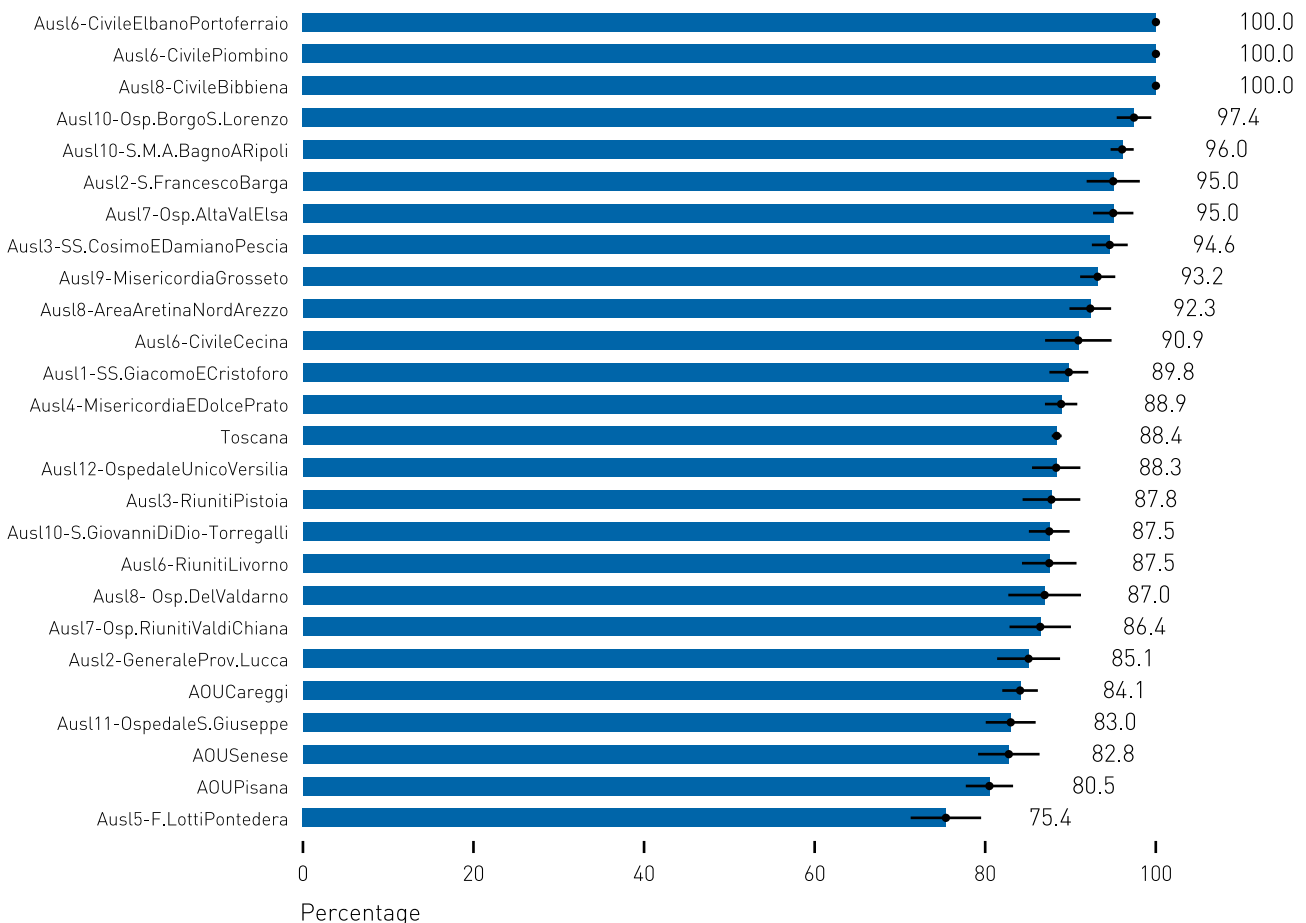


Figure 24 - Women who during labour, following a shift change, report that there was 'quite enough', 'a lot' or 'complete' continuity of care and communication between midwives (Year 2012-2013; Birth hospital; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").

in order to ensure continuity. This should regard not only the more technical information, but also the direct knowledge of the woman, in order to maintain the sense of trust and confidence to the new practitioner. Among the women who participated in the survey and reported having been followed by more than one obstetrician due to shift change (37%), 88% declare that they perceived continuity with the new personnel. The results at the level of birth hospital

are on the whole positive, with some locations in which the entire sample expressed positive evaluations.



I would have preferred a single obstetrician to follow me from beginning to end of labour. I understand that there are shifts to respect, but not all the obstetricians apply the same methods.



FOCUS

Is teamwork decisive for continuity of care?

It has been observed that there is a correlation between the perception that women have of teamwork and that regarding the continuity of care among the obstetricians that follow the woman during labour. The continuity of support during labour is greater in the birth hospitals where the women positively evaluated the teamwork of operators.

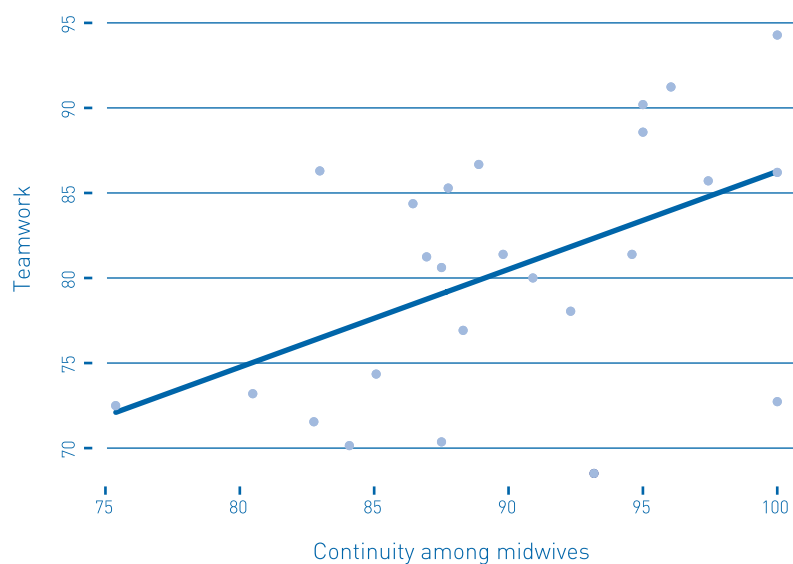


Figure 25 - Correlation between the perception women have of the birth hospital staff teamwork and of the continuity of care among midwives during their shift change ($p < 0.05$) (Year 2012-2013; Birth hospital; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").

Breastfeeding: between myth and reality

The mother's milk is undoubtedly the best food for the newborn child. Serving as a "first vaccination" for the newborn, it is fundamental for the development of the skills of the child in the learning process, and has a significant role in the prevention of obesity and other chronic diseases. The benefits for the mother are also well known: lower probability of close pregnancies, more rapid physical recovery, lower risk of post-partum depression and cancer. Considering all

the beneficial effects breastfeeding brings from a physical and psychological point of view, breastfeeding is the best way to begin a good relationship between parents and children. In order to stimulate an adequate production of milk, mother and newborn baby have to be together as early and as often as possible. In the spirit of the recovery of a certain naturalness of the birth, the exploitation of the "first hour" with the skin to skin sensation immediately after birth and the

practice of rooming-in are effective actions in support of a positive outcome of the maternal feeding.

Prompt breastfeeding attachment: a good start

Breastfeeding is the best feeding method to ensure healthy growth and development of newborn children and has a unique biological and emotional

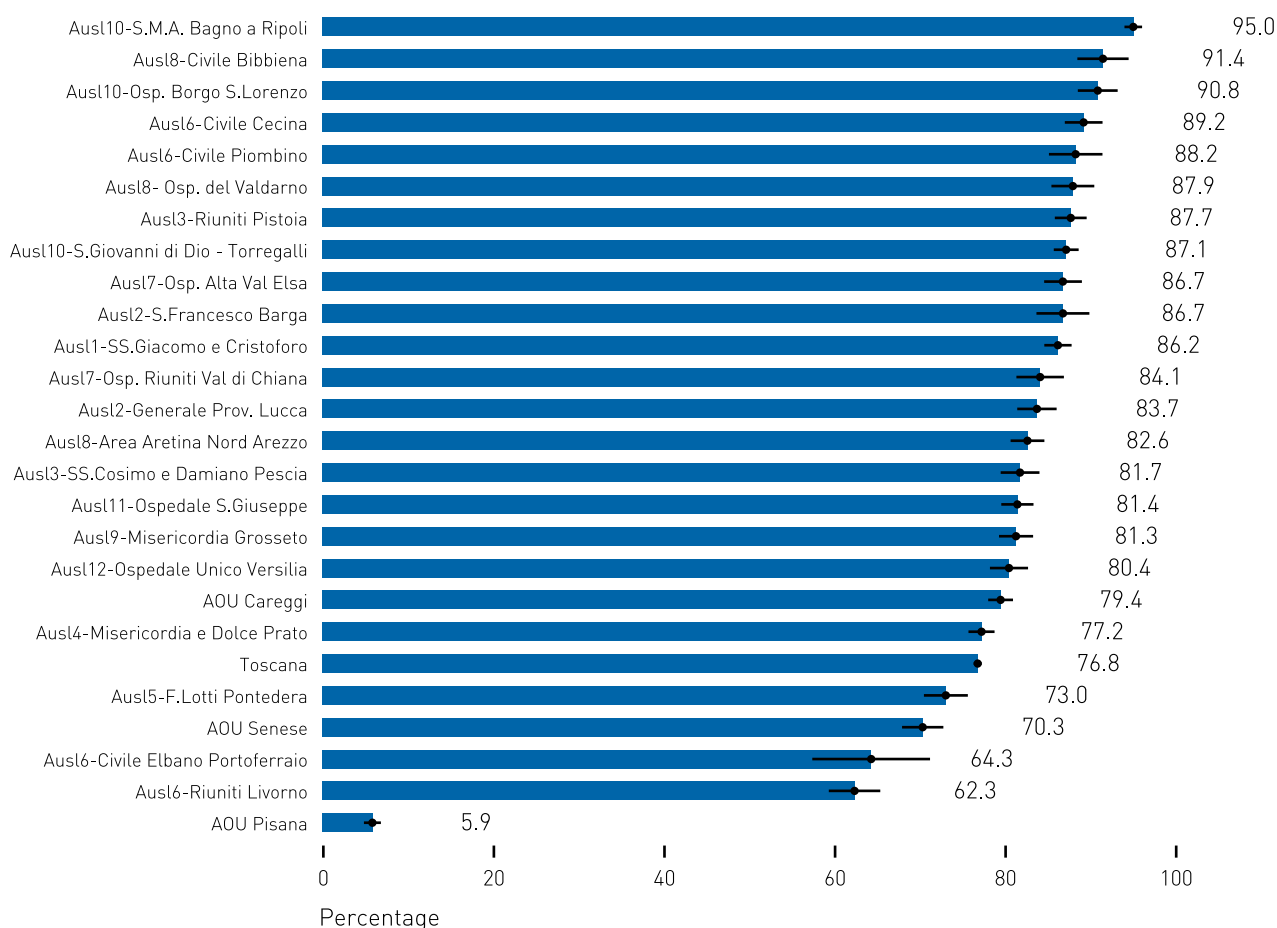


Figure 26 - Women who declare having an early breastfeeding attachment, within 2 hours from birth (Year 2012-2013; Birth hospital; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").

influence on the health of both mother and child. The good practices that favour breastfeeding, such as the skin to skin contact within two hours from the delivery, are very widespread at a regional level. An exception has been observed at the Teaching Hospital of Pisa, where the values are significantly lower. Also there is a high percentage of breastfeeding only on discharge from hospital (79%). This last indicator represents an approximate indicator on this aspect, in the lack

of a better indicator of outcome such as exclusive breastfeeding at three months from birth.



It would have liked more information/advice about breastfeeding. I would have liked to know about the difficulties involved - it's not all nice and easy as they showed us.

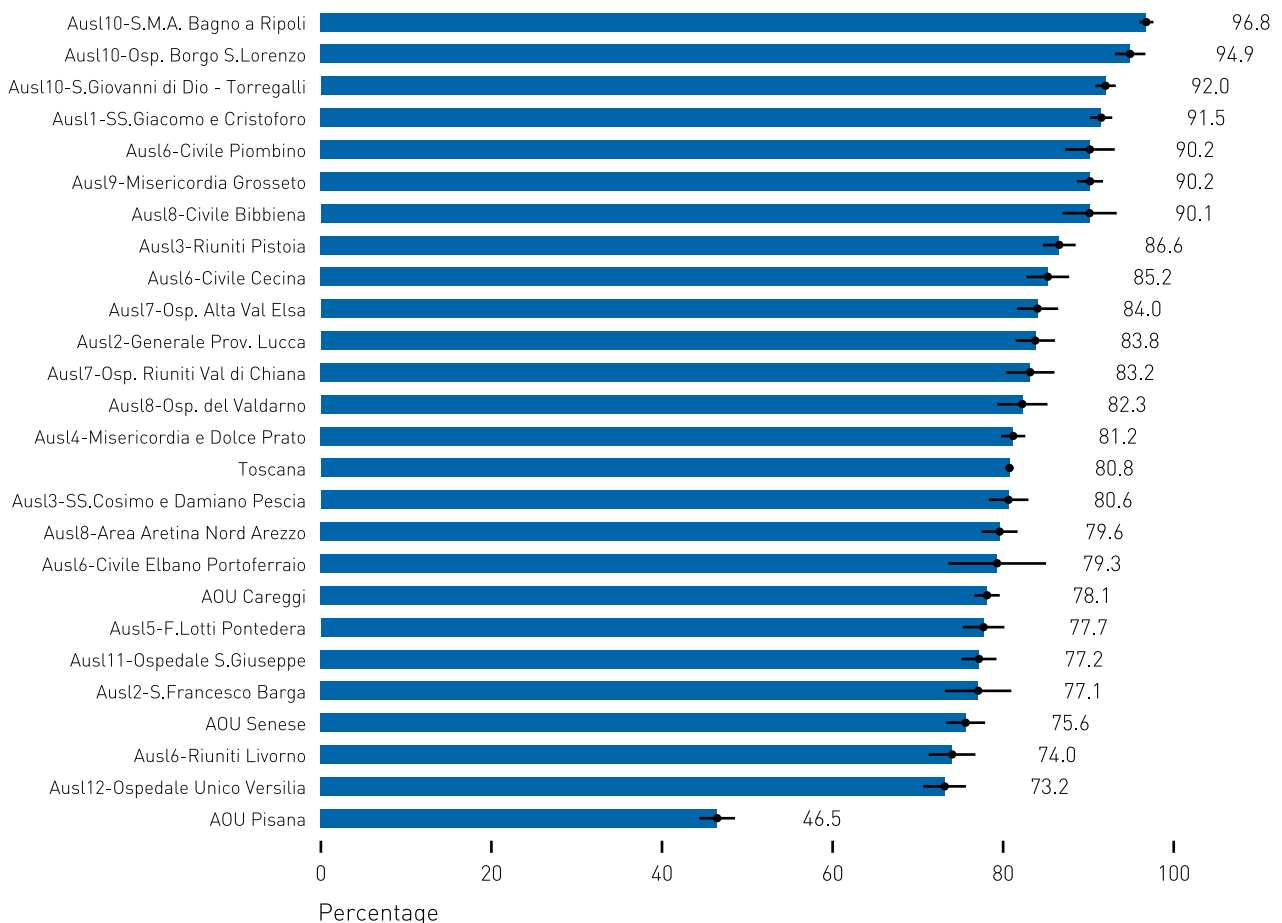


Figure 27 - Women who declare that the child at discharge was exclusively breastfed (Year 2012-2013; Birth hospital; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").

Maternal breastfeeding

It has been widely shown that early contact between child and mother favours a more natural and easier approach to breastfeeding. The Caesarean section is a factor that negatively influences the capacity of the woman to feed her baby if there is not adequate support in the first days after birth. Therefore, the birth hospitals that have the highest percentages of Caesarean sections have a lower number of women who only breastfeed at discharge from hospital.

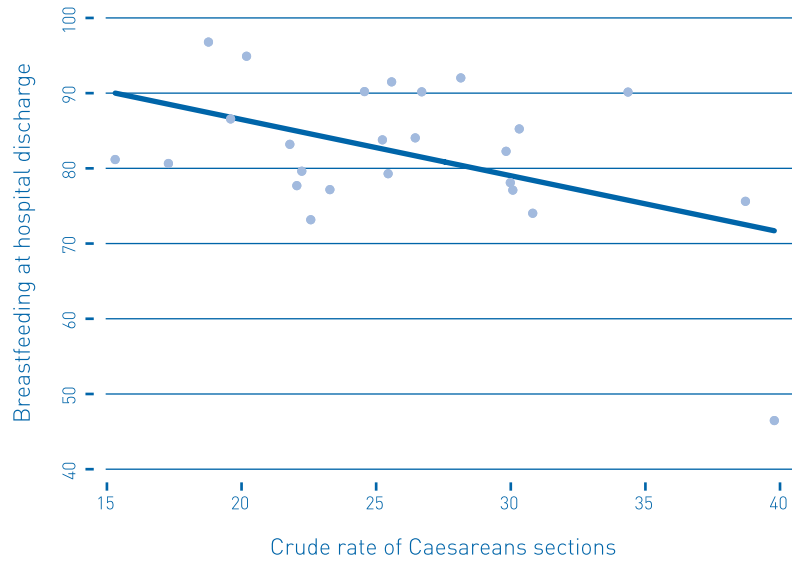


Figure 28 - Correlation between Caesarean sections and breastfeeding at the hospital discharge ($p < 0.05$) (Year 2012-2013; Birth hospital; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").

If at early hours of life the newborn is kept in skin to skin contact with the mother, mutual knowledge is facilitated and consequently a tight contact is also the best strategy for breastfeeding. The strong correlation between data is further confirmation of what has emerged from many researches that show that the newborn babies, through skin to skin contact, have a greater likelihood of being breast fed and for a longer period than those that have not had this early contact.

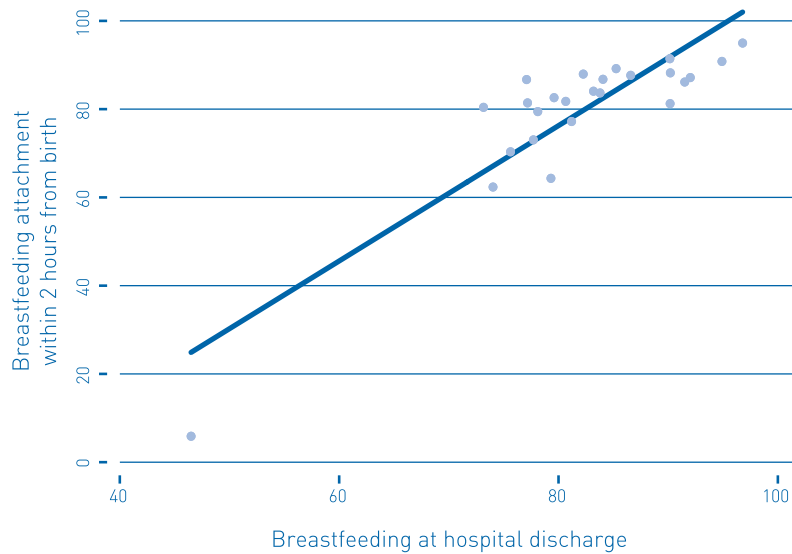


Figure 28a - Correlation between breastfeeding at hospital discharge and the breastfeeding attachment within 2 hours from birth ($p < 0.001$) (Year 2012-2013; Birth hospital; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").



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POSTPARTUM

Once the new mother is back home after the birth, she can encounter difficult moments. She can decide to seek help from family members or friends (80.4%), or from a professional of the healthcare service such as the family paediatrician (84.8%), the family care centre obstetrician (37.7%), or the family doctor (31.2%). Only one woman out of four has sought help from a private paediatrician (27.8%). Very few women contact self-help groups made up of mothers (9.9%) or feeding consultants (15.7%).

The response received to the request for help is satisfied above all when the help comes from the private paediatrician (91.4%). Women say they were helped (completely, a lot, or enough) by family members and friends (90.8%), by the family paediatrician (89.4%), by the family care centre obstetrician (88.7%), by the family doctor (86%) and less by mothers' self-help group (76.2%) and the feeding consultant (78.5%).

“

I would have liked to have more advice from the paediatrician on what I could do before moving to formula feeding. I would have liked more support during breastfeeding, which in my case didn't end well.

”

Prompt care for a long lasting relationship

The family paediatrician has a central role in the growth of the child, and -at the same time- he is a reference point for the whole family. A prompt choice of the family paediatrician helps to set up a pathway of care that is rapid and fully appropriate. Furthermore, meeting the family for the first time at home, where the day to day family activities take place, helps the paediatrician to know the socio-familial context of the child. In this way a profitable alliance and relationship with the parents is established.

Choosing the paediatrician in hospital

In the birth hospitals of Tuscany, immediately after birth, it is possible to

choose the paediatrician for the care of the newborn baby. Although there are some women unaware of this service (11.4%), on the whole half women make a choice of paediatrician in hospital, and in some birth centres this practice is particularly widespread (89.8%).

The paediatrician at home within 25 days from the birth

In the Tuscany region the family paediatrician is required to visit the family at home within 25 days from enrolment in the patients' list. This visit covers all the first-born children, including those in perfect health. The aim of this rule is to enable the paediatrician to

rapidly take care of the child and enter into contact with the family.

The home visit enables the paediatrician to be aware of the family context in which the child lives. In this way the practitioner understands possible social difficulties or family issues and, if required, takes a more proactive and sensitive approach.

Unfortunately, a third of women in Tuscany do not know that they can request the first visit at home, and two out of five do not make an informed request. It is 32% of women that receive the first paediatric visit at home after having made the request (in some healthcare districts the percentage reaches 53.2%), while 6.4% are asked to take the child to the surgery and 1.4% receive no medical examination.

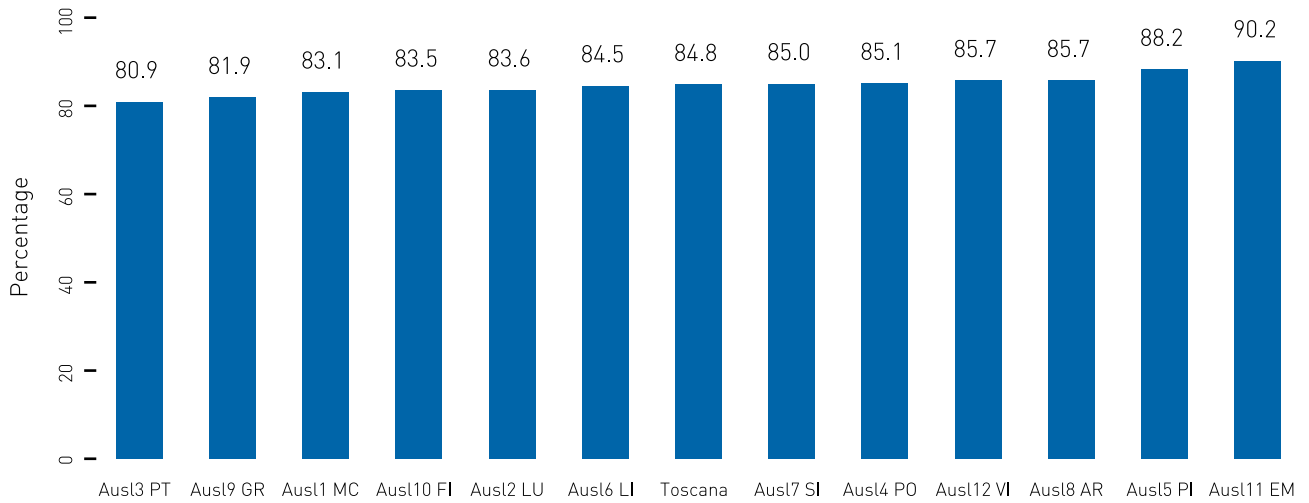


Figure 29 - Women who during postpartum requested help from the family paediatrician (Year 2012-2013; Local Health Authority of residence; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").

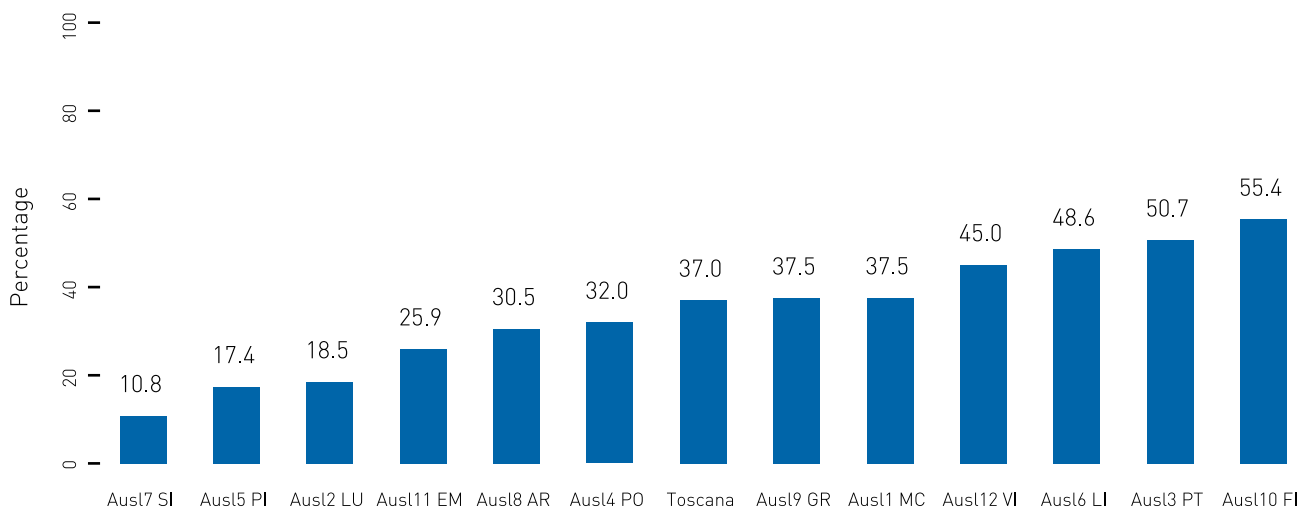


Figure 30 - Women who during postpartum requested help from the midwife of the family care centre/district (Year 2012-2013; Local Health Authority of residence; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").

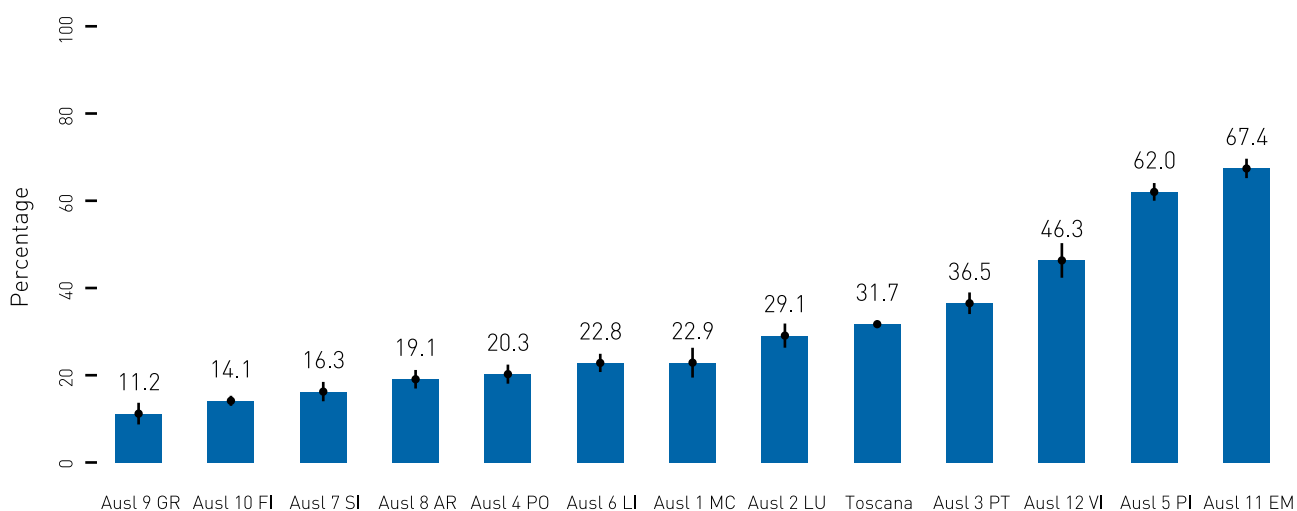
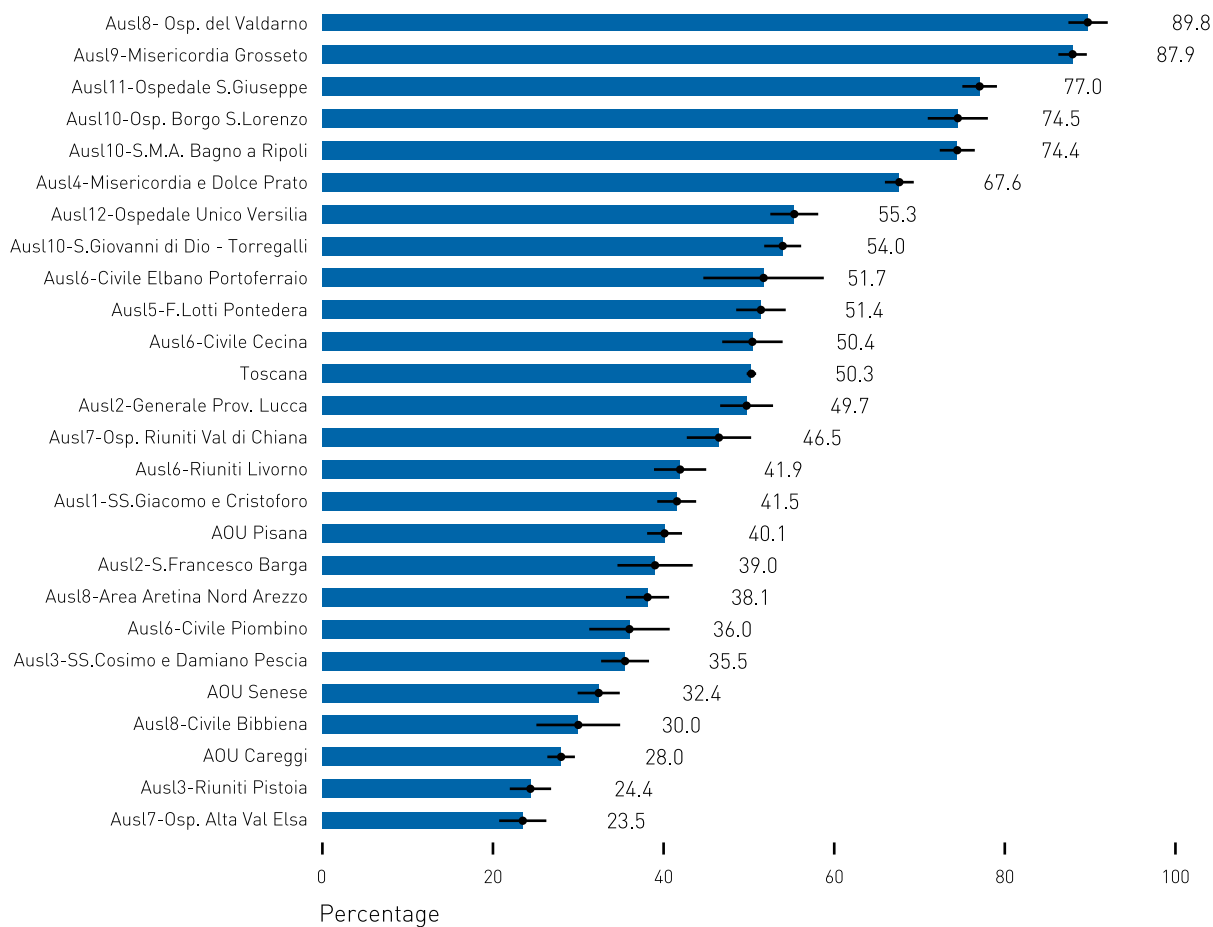


Figure 31 (upper) - Women who, after making a request, receive the first home visit within 25 days from the enrolment of the child in the patients' list of family paediatrician (Year 2012-2013; Local Health Authority of residence; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").

Figure 32 (lower) - Women who, after making a request, receive the first home visit within 25 days from the enrolment of the child in the patients' list of family paediatrician (Year 2012-2013; Local Health Authority of residence; Source: Survey "Il Percorso Nascita in Toscana: l'esperienza delle donne").

The family care centre: an answer for all new mothers?



It would be nice to have a “growth pathway” where staff (obstetricians, psychologists) can give advice and help in the first year of life of the child, through encounter groups in order to be closer to the mothers, supporting them in their thousands of doubts regarding a growth that is healthy also at a moral as well as physical level.



Assistance during puerperium is important for both mother and newborn child. It is a moment to identify possible complications that require prompt action. In this phase assistance must promote healthy behaviour and offer support in breastfeeding and the consolidation of parenthood.

The family care centre has been identified as the local institution of reference also at this stage of the pathway. But how aware are mothers of the services offered by the family care centre? It is the proactivity of the family care centres in promoting healthcare services that ensures care continuity between the institutional actors of local LHAs.

Proactivity and access to the family care centre

Only 40% of care services, including birth hospitals and family care centres, offer activities of postnatal care in Tuscany Region, despite a wide variability among LHAs. Increasingly the women report that they have contacted the family care centre after the birth under recommendation by the birth hospital. Sometimes, it is also the family care centres themselves that directly invite the women in childbirth, and within the single LHA the proactivity of the two services is different. It is important that the

input to contact the family care centre comes from the hospital or the family care centre itself, but it is even more important that this input is given to all the women. This is a relevant criticality since it comes from the fact that more than a quarter of women have not used the socio-health services of the family care centre as they did not know that they were available.

More than half of the women giving birth in Tuscany have at least one access to a family care centre in the postnatal period (results vary from 16% to 84%). It is noteworthy that the four Local Authorities that have the highest level of access are those having the most proactive family care centre-based services in the postnatal period.

The wide variability in access to family care centres during puerperium can be observed both by comparing results between LHAs, and also within the same LAHs and between districts. This confirms the existence of different organisational scenarios in the family care centres, producing different outcomes in terms of capacity to reach service users.

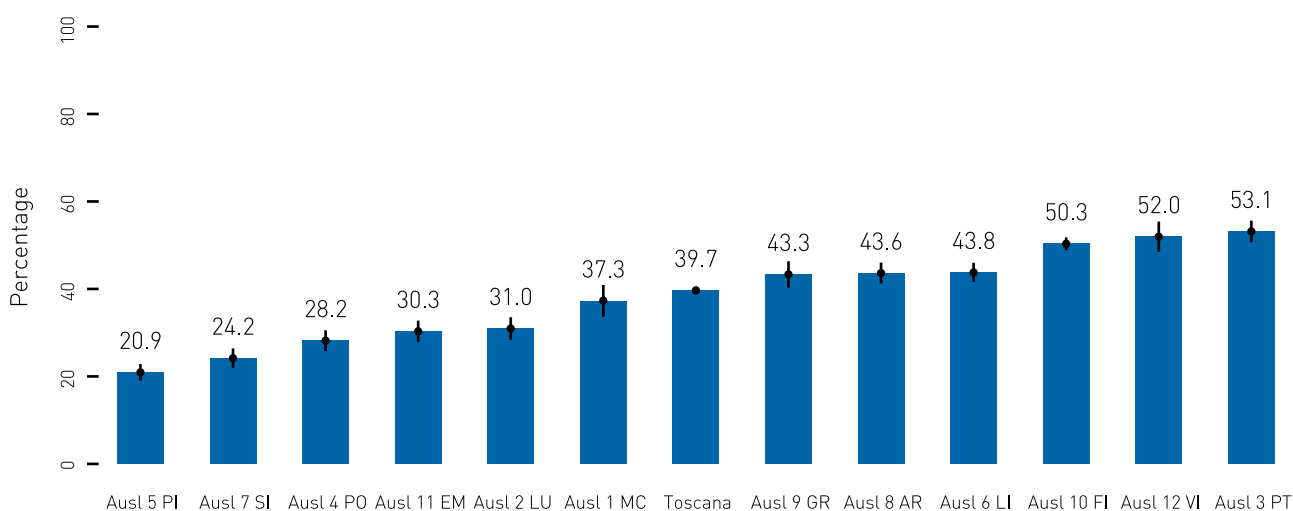


Figure 33 - Women who during the postpartum period used the family care centre services since invited by its personnel or as suggested by the birth hospital (Year 2012-2013; Local Health Authority of residence; Source: Survey “Il Percorso Nascita in Toscana: l’esperienza delle donne”).

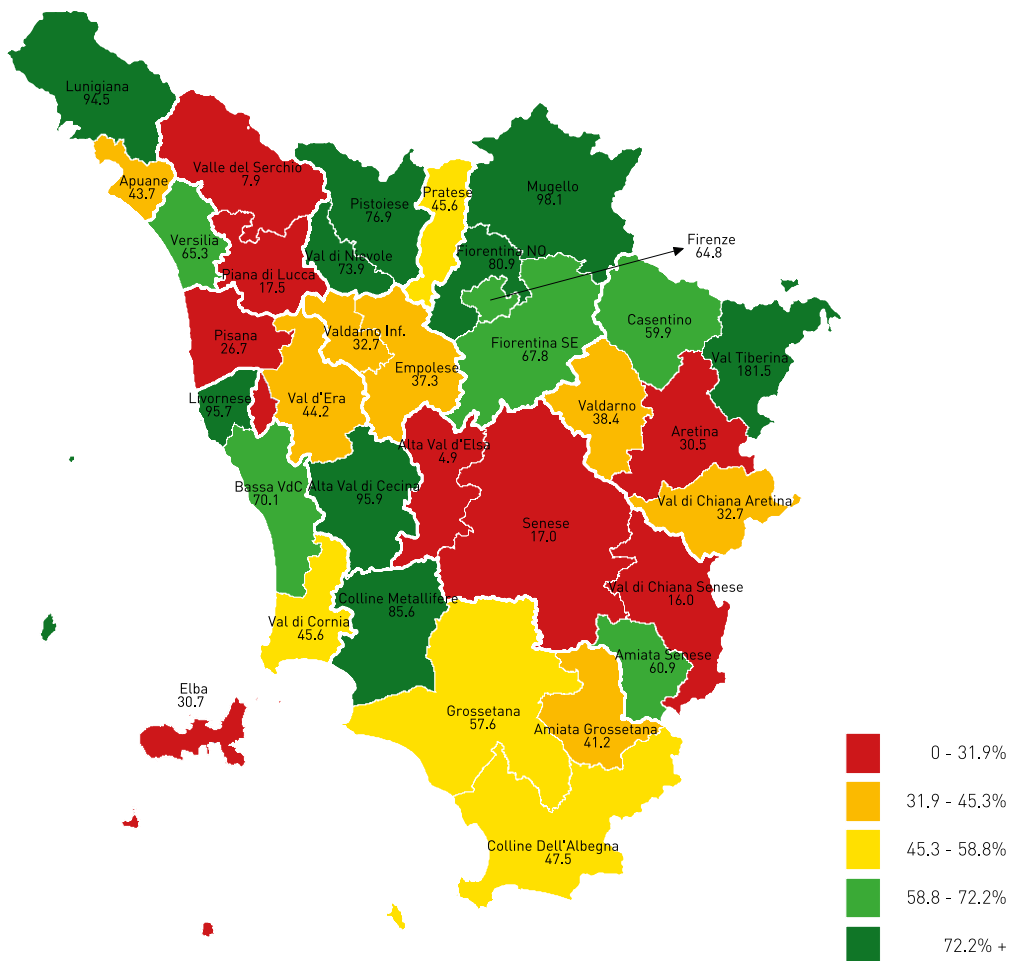
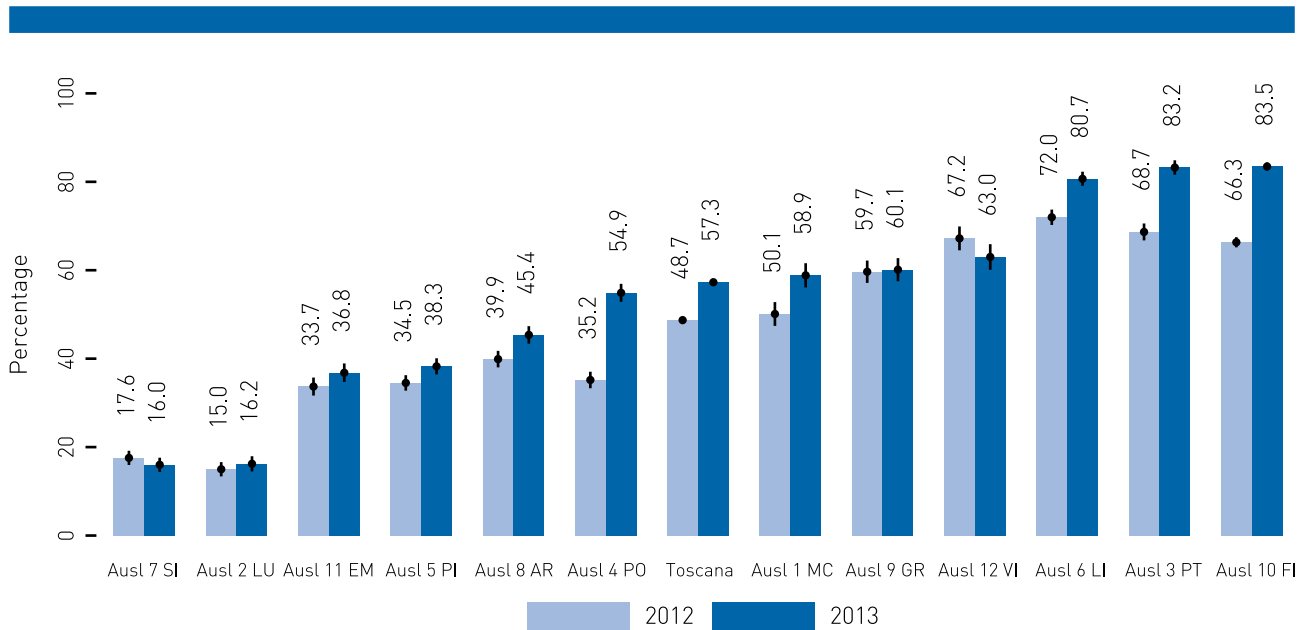


Figure 34 (upper) - Women with at least one access to the family care centre in the postpartum period (Year 2012-2013; Local Health Authority of residence; Source: Regional data flows of Family care centre and of Birth Care Certificate).

Figure 34a (lower) - Women with at least one access to the family care centre in the postpartum period (Years 2012-2013; District of residence; Source: Regional data flows of family care centre and of Birth Care Certificate).

Which role does hospital-community integration play in paediatric admissions?

The care in the first year of life of the child is ensured by a network of actors. Among these, the paediatrician, directly in support of the family, plays an important role. The paediatrician verifies, in line with clinical guidelines, the correct growth of the child, giving the parents the right advice in terms of primary or secondary prevention or care. Hospital admissions in the first year of life are strictly influenced by the state of health of the child at birth and by the degree of his/her prematurity. However, the high admissions

of non-pathological newborn children can represent an index of the demand expressed and not completely satisfied at the community level. This results in a consequent inappropriate use of hospital structures.

The Italian data show very high values when compared with international statistics. Consequently, this raises some doubts as to the organisational models adopted by the various regional health systems. These are perhaps not attentive enough as regards the use of available resources or the real needs

of the child and family. In the first year of life, about 38 out of 100 children resident in Tuscany are admitted for an ordinary examination, with wide variability among the different areas of residence: hospitalisation in fact varies from 25.6 to 70.3% of children. Triple the number of admissions in some districts compared to others. This shows different levels of care of the patient and integration between local community services and hospital.

FOCUS

Fostering loyalty of women to the service

With participation on the antenatal classes the woman has the possibility to familiarise herself well with the family care centre, the services offered throughout the maternity pathway and the practitioners involved. This involves first of all the obstetrician. The information given during the courses on the services available locally and in the hospital is aimed at raising the awareness of the woman and making her more capable of choosing the best care for her specific needs. It can be seen that there is a correlation between the course participation (at least three encounters) and access to the family care centre after the birth (at least one access). This confirms the fact that there is an association between level of knowledge and level of use of the service also during the postpartum period.

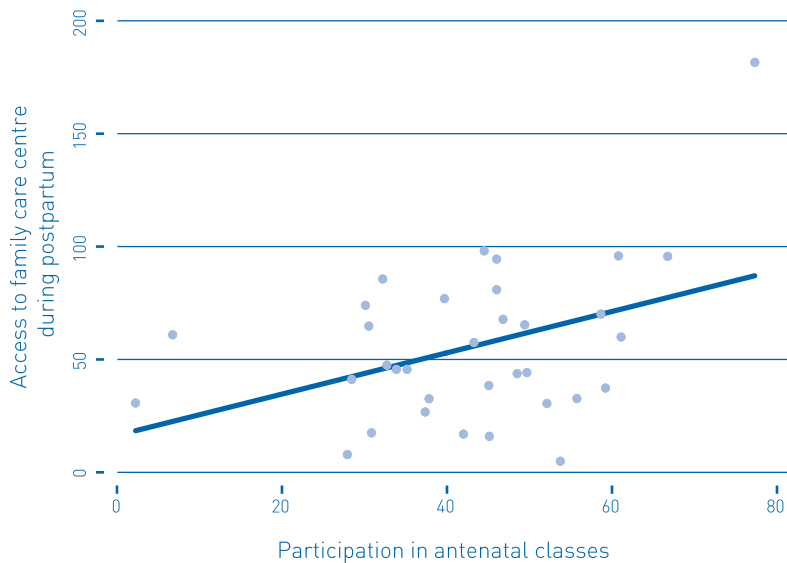


Figure 35 - Correlation between the level of participation in antenatal classes (at least three attendances) and following access to the family care centre during postpartum ($p < 0.05$) (2012-2013; District-district of residence; Source: Regional data flows of family care centre and of Birth Care Certificate).

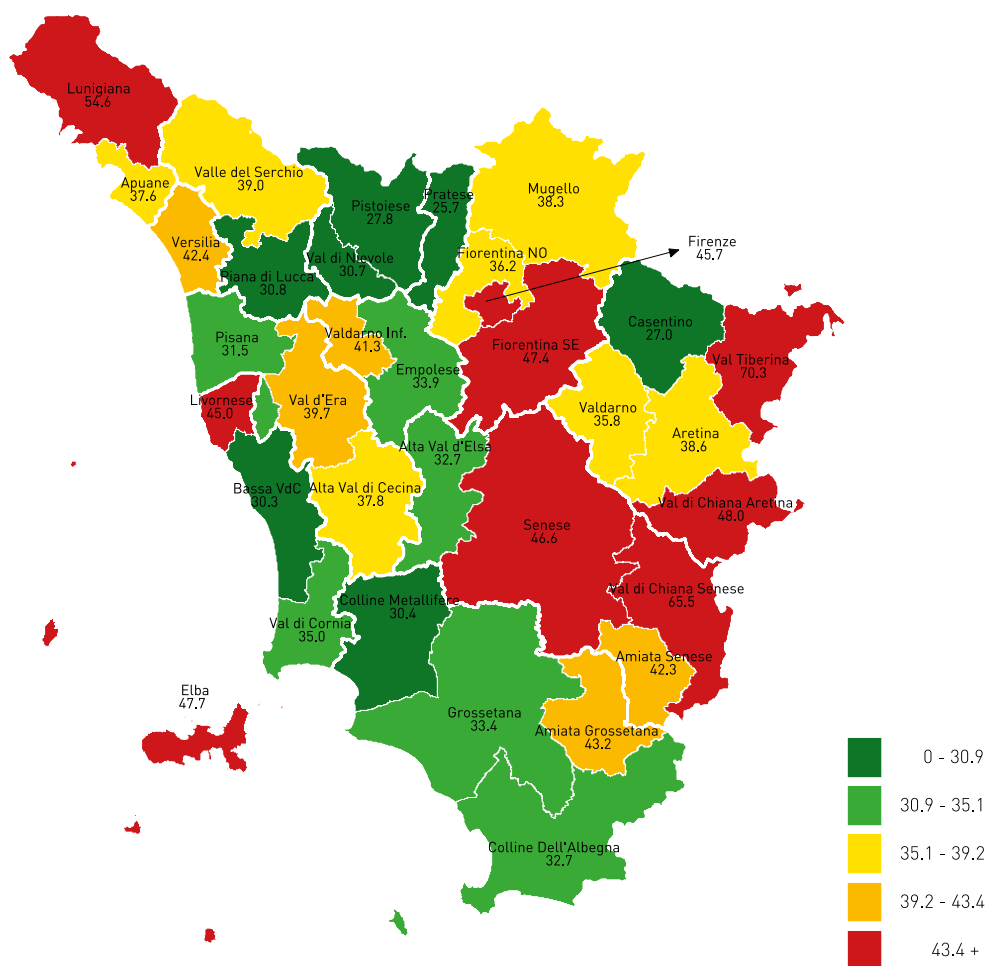
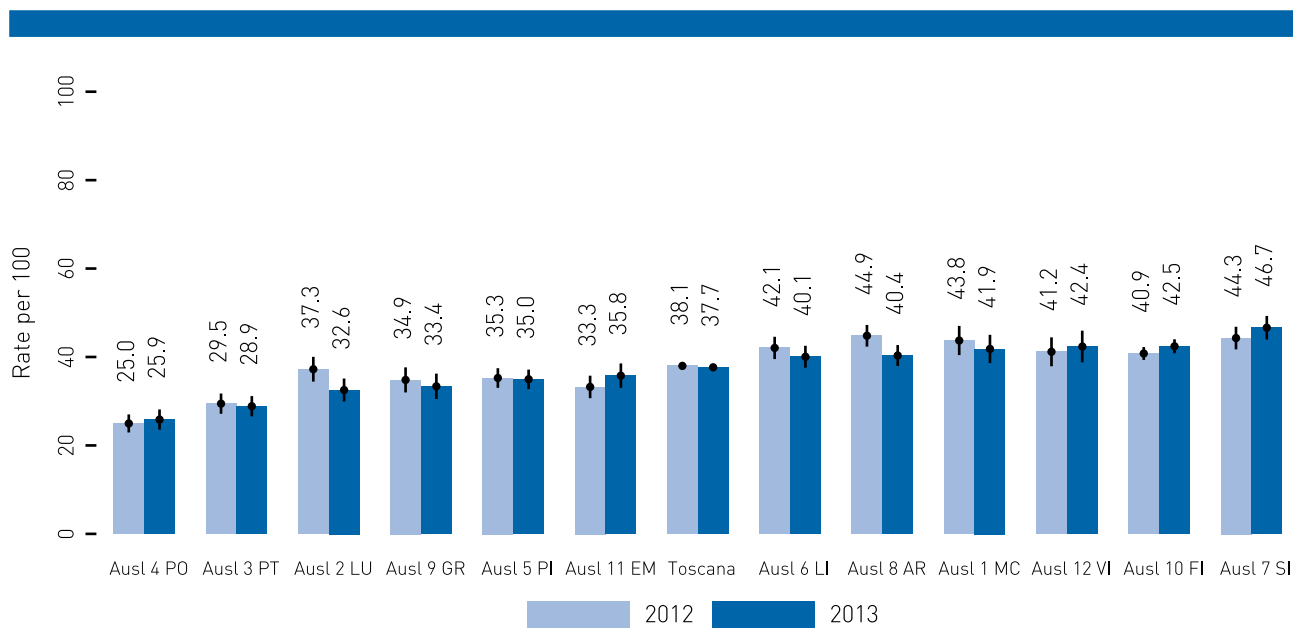


Figure 36 (upper) - Hospitalization rate of healthy newborns in the first year of life (Year 2012-2013; Local Health Authority of residence; Source: Regional data flow of Hospital discharge records).

Figure 36a (lower) - Hospitalization rate of healthy newborns in the first year of life (Year 2012-2013; District of residence; Source: Regional data flow of Hospital discharge records).



the
PERSONNEL
of birth hospitals

In the healthcare services the health professionals are the main asset, that is the fundamental resource for ensuring the quality and appropriateness of the offer. In order to evaluate the functioning of a healthcare organisation it is important therefore to analyse in which conditions, with which values and operating mechanisms the personnel works. The capacity for teamwork, mutual esteem and work organisation are in fact essential elements that directly influence both family care centre results, and the satisfaction of patients.

Every two years the MeS Laboratory carries out a survey among all the healthcare operators in the Tuscany health service. This kind of survey is aimed at investigating the perceptions and reasons for satisfaction and dissatisfaction of employees of Local Health Authorities and Teaching Hospitals, particularly as regards organisational issues.

Also, its results make possible to reflect on the dynamics which impact on the working context. In fact, surveys on the organisational climate identify the perception of employees regarding the organisational structure to which they belong, the relations developed and the managerial capacities of the heads of the complex units.

The results of this survey are a valid instrument helpful for the "internal listening" and for activating organisational diagnosis on strong points and

areas to improve. It constitutes the starting point for launching processes of change.

The 2012 survey of organisational climate

The 2012 survey involved about 24000 employees of the LHAs and THs in Tuscany.

Two different types of questionnaires were administered to employees according to their work role. Questionnaire 1 was for heads of complex units and questionnaire 2 for all other employees. The first questionnaire investigates topics that are linked to the health organization management; hence, it investigates the climate and the internal dynamics by a different perspective.

Both questionnaires are divided into sections. These represent the different dimensions of which the complex structure of internal climate is composed. In particular, the tool, which is based on organisational-managerial issues, requires the employees to express their opinion on various factors. These include their working conditions, communication and information inside the HAs, opportunities for professional development, the quality of relations with colleagues and superiors, teamwork, knowledge of the planning and monitoring tools, objec-

tives and results of the health organization of belonging, and personnel training. The survey used Computer Assisted Web Interviewing (CAWI) methodology: each employee could compile the questionnaire connecting to a dedicated web platform set up by the Scuola Superiore Sant'Anna. The site was accessible 24/7 throughout the survey and the questionnaires could be filled in from any Internet point, both at work and out of office. To access the page the employee used a personal login and password. The data, inserted through a graphical user interface, were collected in a dataset hosted on the MeS Laboratory server. Before receiving the questionnaire, the CEO of each HA sends a letter of presentation of the survey to the employees, followed by a letter of operating instructions for compilation of the questionnaire.

The use of this methodology ensured absolute protection of the confidentiality of the information supplied.

The climate in the maternity departments

In total, 1098 hospital employees of the maternity departments filled in the 2012 questionnaire.

The results of the maternity area were elaborated by department only in the cases in which there was a sufficient number of participants, so as to ensure anonymity. Among the most important dimensions investigated with the 2012 survey are:

- * the capacity for teamwork;
- * clear roles and responsibilities in carrying out one's work;
- * internal communication;
- * managerial competences of the heads of units.

Within this framework particular importance is given to the results that describe teamwork. This is as perceived by the hospital operators of the

maternity pathway, also as regards the work planning activity within the team and to what extent each team member feels responsible in the achievement of results. In the previous sections (cfr pag.11) it was shown how the woman's overall evaluation of hospital is influenced by her perception of the teamwork of the practitioners. This is an element to strengthen,

also in the light of the results on the climate survey gathered in 2012. The hospital employees of the maternity pathway certainly feel that they are part of a team collaborating to achieve common aims. However, this can vary from birth hospital to birth hospital (Figure 37).

It is equally important that individuals are clear on their single roles and responsibilities in the supply of the service, so that the entire organisation can benefit in terms of overall quality and objectives reached.

However, in the birth hospitals of Tuscany the percentage of practitioners involved in the maternity pathway that feel they are entrusted with the quality of results/services, varies from 25% to 69.3% (Figure 38).

Finally, the planning of work within the team, useful for achievement of the objectives assigned, is an instrument that is used only partially within the Tuscany maternity departments (Figure 40), and this is with a range of results that is very variable from birth hospital to hospital.

Knowledge of the results achieved

In conclusion, it seems very important to consider to what extent the employees have been able to know the results from the Performance Evaluation System of previous years. This includes the results of surveys on the experience of users and on internal climate. In fact, knowledge of the results is certainly an important factor in motivating the personnel to modify behaviour particularly towards

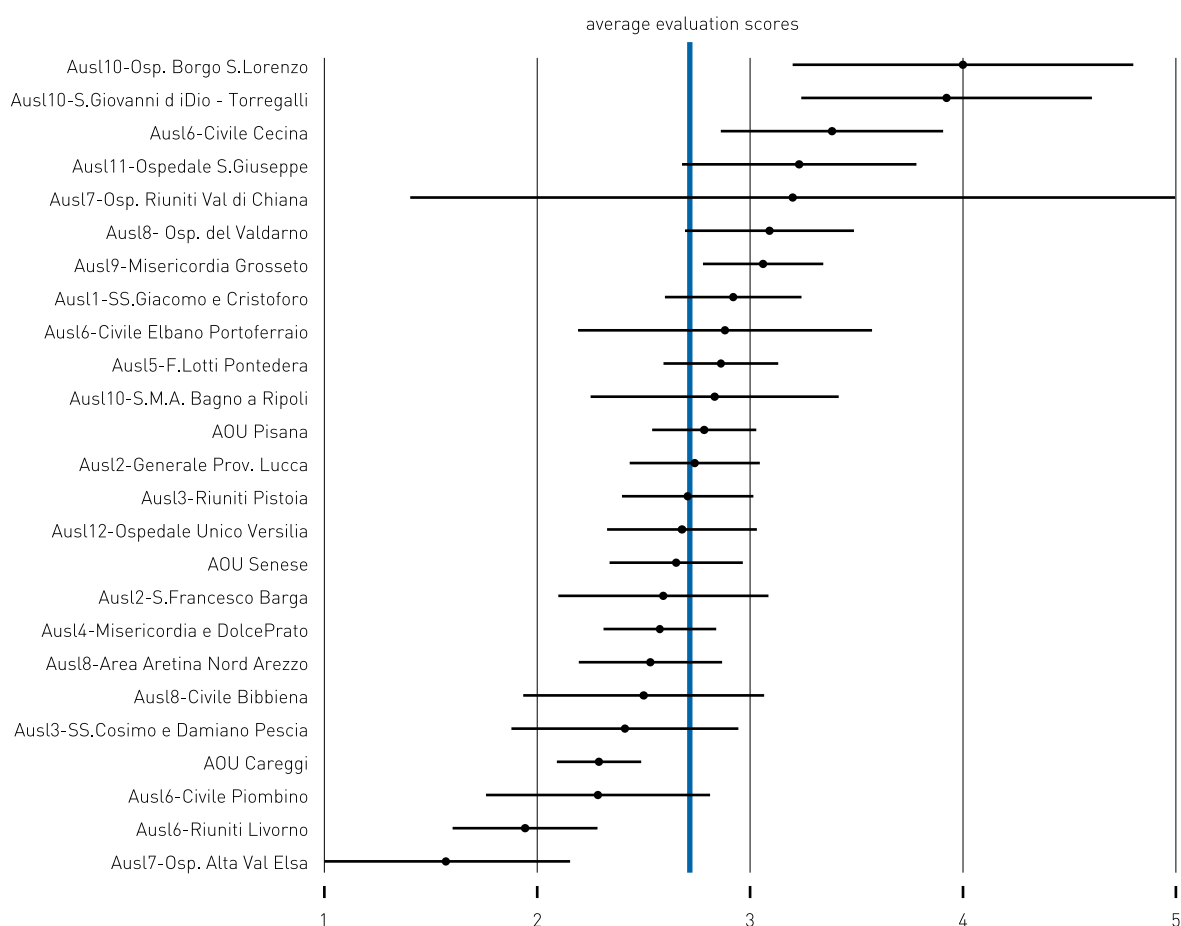


Figure 37 - To what extent the hospital professionals of the maternity pathway feel part of a team that collaborates in order to reach common objectives (Scale 1-5, 1 is totally negative and 5 totally positive) (Year 2012; Birth hospital; Source: Survey "Indagine di clima interno").

service users and to improve their own relational skills. It has been observed, in fact, that in the organisations where the knowledge of survey data on users' experience is higher, such experience is more positive (Murante et al, 2014).

For this reason it is important for employees to receive feedback on activities carried out and on how such activities have contributed to the overall performance of the department, health facility and HAs. The results of the 2012 Internal Climate survey show

middle to low knowledge of the performance of the employees' own HAs. In some cases the levels of knowledge are different among employees who work in different birth hospitals within the same HAs (Figure 39).

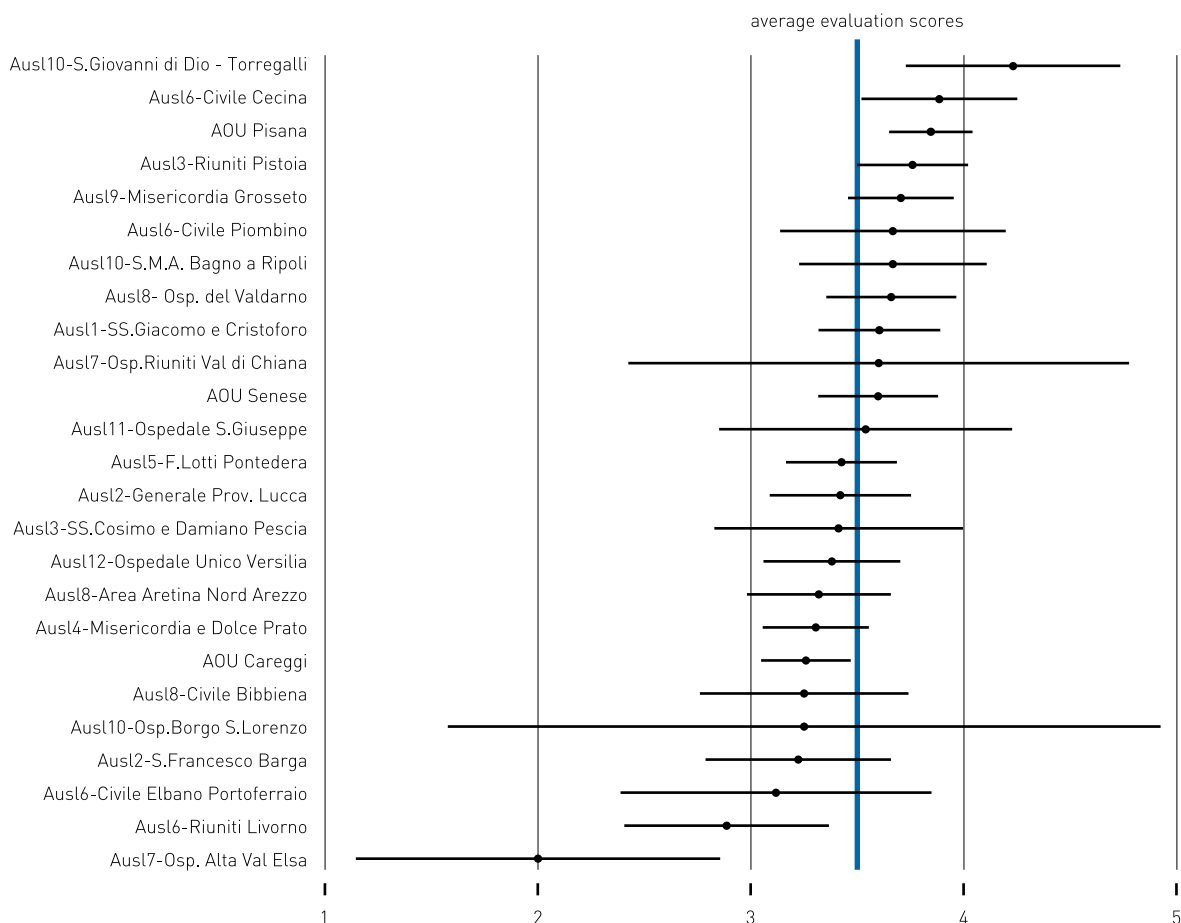


Figure 38 - To what extent the hospital professionals of the maternity pathway feel to be invested with responsibility regarding the quality of results/services related to their work (Scale 1-5, 1 is totally negative and 5 totally positive) (Year 2012; Birth hospital; Survey "Indagine di clima interno").

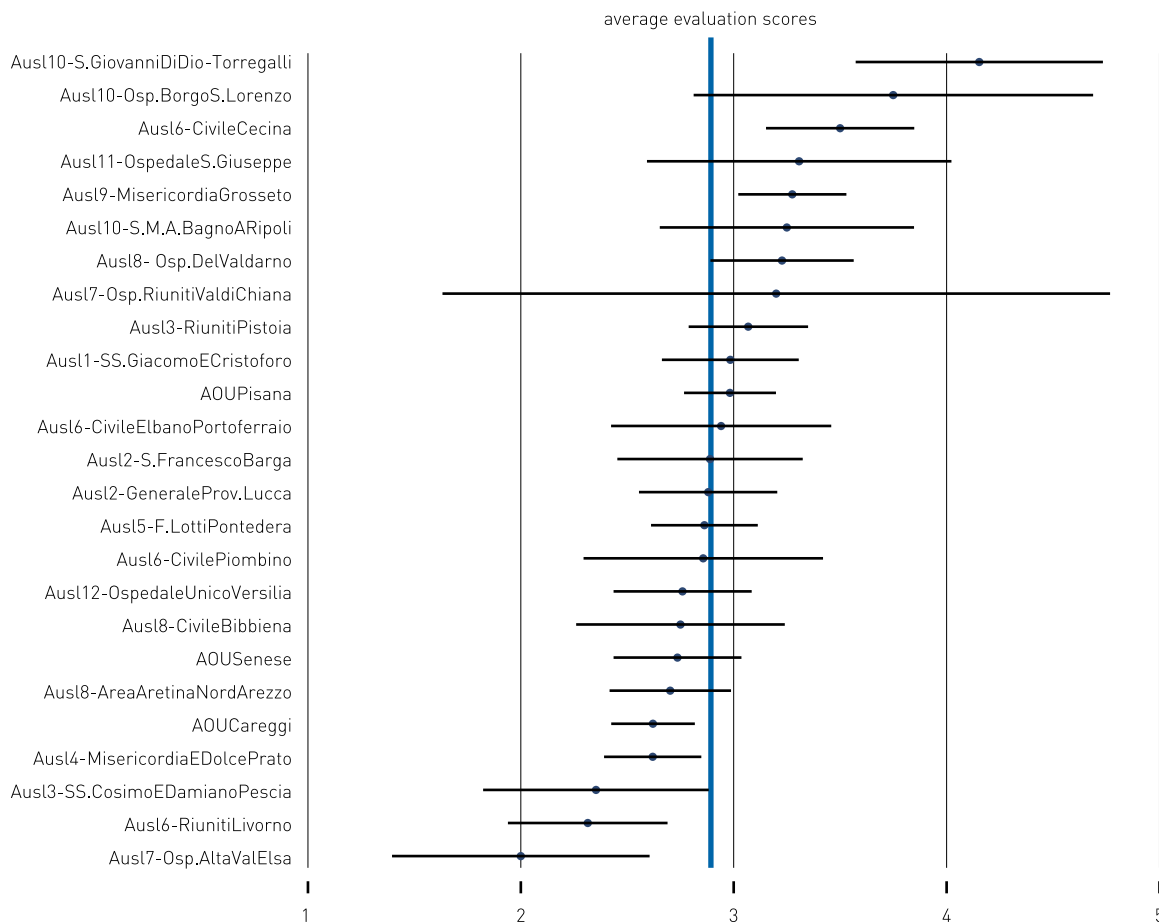
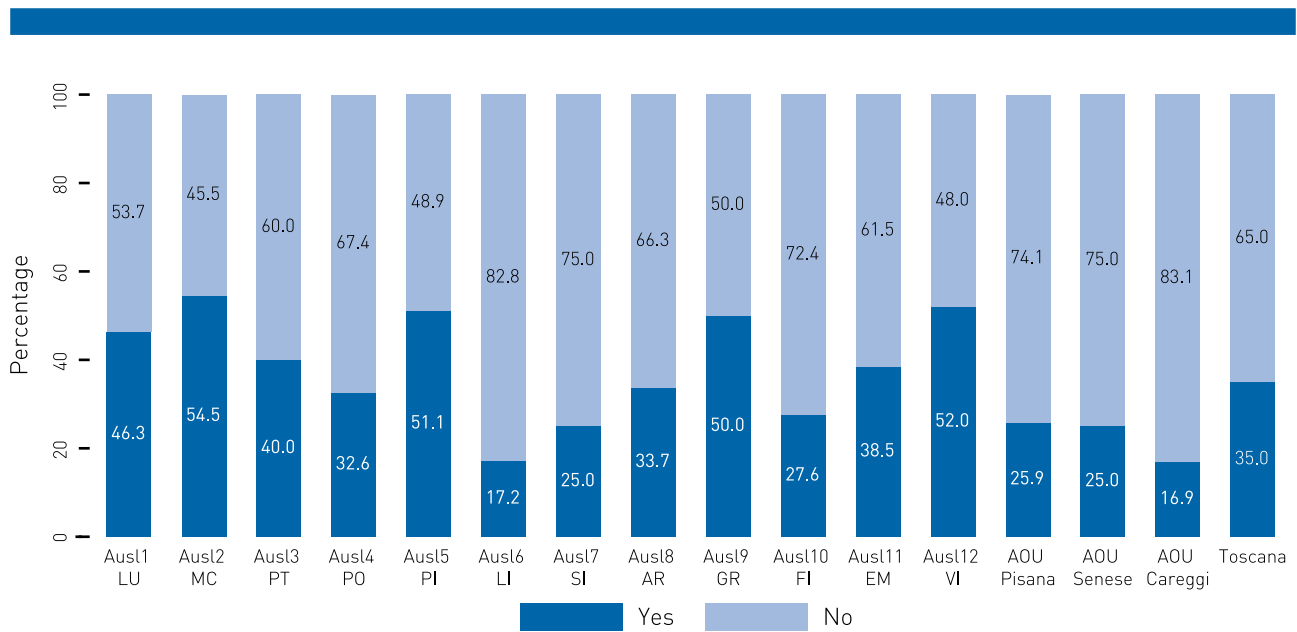


Figure 39 (upper) - To what extent the hospital professionals of the maternity pathway are aware of the evaluation system of the health system performance, as well as of the results of their Birth hospital performance (Year 2012; Local Health Authority; Source: Survey "Indagine di clima interno").

Figure 40 (lower) - To what extent the hospital professionals of the maternity pathway recognise that within their team the work is well planned and this enables them to reach the established objectives (scale 1-5, 1 is totally negative and 5 totally positive) (Year 2012; Birth hospital; Source: Survey "Indagine di clima interno").



the

EVALUATION

Florence Nightingale (1820-1910) maintained that "The ultimate goal is to manage quality. However you cannot manage it until you have a way to measure it, and you cannot measure it until you can monitor it". In order to offer a quality response to the population's needs it is essential to monitor the capacity of the system, in its entirety and in its single features. Measuring the results obtained, the actions that have produced them and the resources that have made them possible is therefore essential in order to manage the quality in a successful, appropriate and efficient way.

It is with these premises that, since 2005 the Tuscany Region has monitored the performance of the healthcare organisations adopting the Performance Evaluation System (PES) developed by the research group of the MeS Laboratory of the Scuola Su-

periore Sant'Anna of Pisa. PES is also adopted by all the Tuscany healthcare authorities, and helps the management and operators that work in the Regional Health System to give an evaluation of their results.

The Tuscany Region evaluates the performance of the Regional Health System by means of standards already defined at an international and national level. If there is no external reference standards, the assessment of the performances is carried out on the basis of a regional standard or using benchmarking among Health Authorities.

The performance evaluation is based on six analysis dimensions which have the aim of assessing: (A) the health status of the population, (B) the capacity to carry out regional strategies, (C) socio-healthcare, (D) the experience of users, (E) the organization

climate and (F) operational efficiency. Since 2008 also other Italian Regions have adopted the performance evaluation. This has created a network which, through regional benchmarking, works towards the management and improvement of service quality.

The maternity pathway is one of the pathways monitored and assessed within the PES. The measuring and collecting of information on the performances of services that cooperate in the maternity pathway help ensure the best response to the needs of women and their newborn children. Now it is the moment to pull things together and offer an overall picture of the results obtained.

In this chapter we present the targets and evaluations of the maternity pathways of the Tuscany healthcare authorities.

The evaluation of the maternity pathway

The evaluation of the performances of the maternity pathway is expressed in five bands:

- * green band, the band closest to the core target, corresponding to an excellent performance. In a five-band evaluation scale, the raw score is between 4 and 5;
- * light green band, when the performance is good and the raw score ranges between 3 and 4;
- * yellow band, when the evaluation is between 2 and 3 and the performance is not negative but there is certainly room for improvement;
- * orange band, when the evaluation is between 1 and 2 and gives a cause for concern in terms of performance (the performance can be, or rather must be improved);
- * red band, when the performance is below 1.

Assignment of the evaluations from 0 to 5 takes place on the basis of calculation criteria that take into account the

distribution of results among the Local Health Authorities with respect to a reference parameter. Depending on the type of indicator the parameter can be:

- * a recognised international standard (for example: maximum Caesarean sections delivery rate identified by the WHO);
- * a regional standard defined by regional legislation or the regional health plan;
- * the regional mean corrected with risk adjustment or standardisation procedures to make comparison possible between Health Authorities.

Within the PES there are also "observation indicators". These are those newly adopted, or used for deeply analysing results from indicators that use evaluation scores. They are useful to describe a given phenomenon in its entirety.

There are 59 indicators in the Tuscany PES which measure the performanc-

es of the maternity pathway (Table 1). The data sources for calculation of the indicators are various.

The indicators about assistance and access to service (dimension C) are calculated on the basis of the data collected through the administrative dataflows, that are: the Certificate of Birth (CAP) and the Family centre services (SPC).

The indicators that measure the performance of the pathway, on the basis of the women's experience (dimensions C and D) use as a data source the periodical surveys carried out among a sample of women who access the services of the maternity pathway in Tuscany. For these indicators the evaluations on a 0-5 scale are assigned after a procedure which follows these steps:

- * transformation of patient responses into a continuous 0 to 100 scale;
- * application of risk adjustment procedure to correct data for the

variables of age, education level, preterm delivery, primipara, length of pregnancy, nationality and Caesarean delivery;

- * calculation of the adjusted mean value per health authority;
- * definition of the evaluation bands from 0 to 5 on the basis of the distribution among Health Authorities (on the position above and below the mean).

Only for some indicators, such as for example the proactivity of the services in the puerperium, the evaluation is defined on the basis of predefined bands which refer only to some responses (that are: "Yes, I was advised to discharge from hospital" and "Yes, on recommendation of the institution"). The indicators that describe performance through the perspective of the operators (dimension E) are calculated starting from the results of the survey on organisational climate relative to the maternity department. Also in this case, like the dimension D indicators, the procedure followed is that described at points 1, 2, 3 and 4, with the only difference being in the adjustment factors used (for these indicators the factors considered are: sex and age).

The indicators are calculated to represent the performance of Health Authorities (by considering the services delivered to anybody or the services delivered to their population by any other Health Authority), of the birth hospitals or the districts. The indicators measuring the performances of the Teaching Hospital consider the services delivered to anybody who has access to the hospital. All the indicators are available on web at the addresses <http://performance.sssup.it/toscana/> and <http://performance.sssup.it/district/> and collected in the downloadable report at <http://www.meslab.sssup.it/it/index.php?page=report>.

This work analyses only some indicators on the maternity pathway that are used within the PES of the Tuscany Regional Health System. In particular, it features the indicators that focus on the maternity pathway. Additional specific data, which concern for example access to the services by immigrants, have been dealt with in other research works (S.Nuti, G.Maciocco and S.Barsanti, 2013).

Page 58 lists the indicators selected to represent in this report the performances of the maternity pathway of the Tuscan Health Authorities, with

details of the minimum values for each evaluation bands (Table 2).

The following pages give a graphical presentation of the performances of all Local and Teaching Tuscany Health Authorities:

- * using the image of a target (Figure 42), with the 22 indicators that trace spokes on the target. Depending on the evaluation assigned, the indicators are positioned in one of the evaluation bands;
- * representing the maternity pathway in the three prenatal, birth and postnatal stages (Figure 43).

The target is the graphical solution used to represent the performance evaluation system adopted by the Tuscany Region and developed by the MeS Laboratory. This enables a clear visualisation of whether or not the HAS have managed to "hit the target" with their performance in the maternity area. The temporal sequence of the three stages of the maternity pathway, on the other hand, enables observation of the possible differences in quality of care supplied in each phase. It can also shed light on the integration between services in the local territory and the hospital.



Figure 41 - Evaluation bands of the performance evaluation system, valid also for the targets of the maternity pathway.

DESCRIPTION OF INDICATOR	Evaluation indicator	Level		
		Local Health Authority	Birth hospital	District
C7b – Birth care	x	✓	✓	
Hospital activities				
NTSV Caesarean sections (%)	x	✓	✓	
Crude rate of Caesarean sections (%)		✓	✓	
Vaginal deliveries with induced labor (%)	x	✓	✓	
NTSV deliveries with episiotomy (%)	x	✓	✓	
Births outside the residence area (%)	x	✓		
Operative deliveries (forceps or ventouse) (%)		✓	✓	
Breastfeeding attachment within 2 hours from birth (%)	x	✓	✓	
Exclusive breastfeeding during hospital stay (%)		✓	✓	
Proposal of skin-to-skin contact (Percentage of women to whom skin-to-skin contact was proposed) (%)		✓	✓	
C7c – Maternal care in local territory	x	✓		✓
Clinic activities				
Access to family care centre of resident women in fertile age (%)		✓		✓
Late access to antenatal care of foreign women (Percentage of foreign women who have a late antenatal visit, beyond the 12 th week of pregnancy) (%)	x only at district level	✓		✓
Underuse of antenatal care by foreign women (Percentage of foreign women who have less than 4 antenatal visits) (%)	x only at district level	✓		✓
Access of foreign women to maternity pathway services at family care centre (%)	x	✓		✓
Participation in antenatal classes of resident nulliparous (Percentage of resident nulliparous with at least three attendances at antenatal classes) (%)	x	✓		✓
Equity of access to antenatal classes for residents nulliparous by level of education (Difference between percentages of participation in antenatal classes between the highest and the lowest educated women) (%)	x	✓		✓
Postpartum access to family care centre of resident women (Percentage of resident women with at least one postpartum access to family care centre) (%)	x	✓		✓
Underage conception rate (per 1000 resident women 12-17 years)		✓		✓
Elective abortion rate (per 1000 residents women)	x	✓		✓
Elective abortion rate of foreigners (per 1000 residents foreign women)	x only at district level			✓
Access of youth to family care centre (per 1000 residents 14-24 years old young)		✓		✓
Access of youth to family care centre for contraception reasons (14-24 years)	x	✓		✓
Paediatrics				
Hospitalization rate in paediatric age (per 100 residents < 14 years)	x	✓		✓
Paediatric hospitalization rate for asthma (per 100,000 2-17 years old residents)		✓		✓
Paediatric hospitalization rate for gastroenteritis (per 100,000 underage residents)	x	✓		✓
Paediatric hospitalization rate for pneumonia (per 100,000 underage residents)		✓		✓
Hospitalization for tonsillectomy (per 100,000 underage residents)	x	✓		✓

DESCRIPTION OF INDICATOR	Evaluation indicator	Level		
		Local Health Authority	Birth hospital	District
D17 – Evaluation by maternity pathway users	x	✓		
Continuity of care in maternity pathway				
Overall coordination of maternity pathway	x	✓		
Continuity during labour		✓		
Concordant information on breastfeeding	x	✓		
Antenatal				
Antenatal classes		✓		
Presentation of maternity pathway by personnel	x	✓		
Waiting time	x	✓		
Accessibility	x	✓		
Willingness to recommend antenatal services]	x	✓		
Delivery				
Trust in doctors	x	✓	✓	
Trust in nurses	x	✓	✓	
Trust in midwives	x	✓	✓	
Cleanliness of environment	x	✓	✓	
Pain management during labour	x	✓	✓	
Pain management during delivery		✓	✓	
Postpartum pain management	x	✓	✓	
Teamwork of birth hospital staff	x	✓	✓	
Willingness to recommend birth hospital	x	✓	✓	
Postpartum				
Support requested from midwives of family care centre/districtt		✓		
Support requested from family paediatrician		✓		
Support requested from family doctor		✓		
Support requested from hospital doctor		✓		
Willingness to recommend postpartum services		✓		

Table 1 - (follows from previous page) Indicators of the maternity pathway within the evaluation system of Tuscany Region health system performance and corresponding level of performance measurement.

DESCRIPTION OF INDICATOR		Evaluation				
		excellent	good	medium	poor	very poor
Social and healthcare evaluation	NTSV Caesarean sections*	≤ 15	≤ 19	≤ 23	≤ 27	> 27
	Vaginal deliveries with induced labor*	≤ 15	≤ 18	≤ 21	≤ 24	> 24
	Births outside the residence area*	≤ 10	≤ 15	≤ 20	≤ 25	> 25
	Operative deliveries (forceps or ventouse)*	≤ 2,5	≤ 5,0	≤ 7,5	≤ 10,0	> 10,0
	Breastfeeding attachment within 2 hours from birth**	> 88	> 82	> 76	> 70	≤ 70
	Late access to antenatal care of foreign women *	≤ 4,9	≤ 9,4	≤ 13,9	≤ 18,4	> 18,4
	Participation in antenatal classes of resident nulliparous **	> 52,5	> 45	> 37,5	> 30	≤ 30
	Equity of access to antenatal classes of resident nulliparous by level of education*	≤ 16	≤ 22	≤ 28	≤ 34	> 34
	Postpartum access to family care centre of resident women **	> 72,2	> 58,8	> 45,3	> 31,9	≤ 31,9
	Prenatal screening**	> 85,0	> 78,8	> 72,6	> 66,4	≤ 66,4
	Hospitalisation in first year of life*	≤ 30,9	≤ 35,1	≤ 39,2	≤ 43,4	> 43,4
User evaluation	Overall evaluation of maternity pathway users**	> 70,1	> 69,1	> 68,2	> 67,2	≤ 67,2
	Evaluation of antenatal classes**	> 75,3	> 73,9	> 72,4	> 70,9	≤ 70,9
	Presentation of maternity pathway by personnel**	> 67,7	> 63,7	> 59,6	> 55,5	≤ 55,5
	Willingness to recommend antenatal services**	> 92,1	> 90,7	> 89,4	> 88,0	≤ 88,0
	Antenatal test and visit booking by maternity pathway personnel**	> 60	> 45	> 30	> 15	≤ 15
	Pain management during labour**	> 69,2	> 66,6	> 63,9	> 61,3	≤ 61,3
	Teamwork of birth hospital staff**	> 79,3	> 76,4	> 73,4	> 70,5	≤ 70,5
	Willingness to recommend birth hospital**	> 92,3	> 90,4	> 88,5	> 86,7	≤ 86,7
	Choosing paediatrician before hospital discharge**	> 70	> 57	> 44	> 31	≤ 31
	First home visit of paediatrician**	> 51	> 39	> 27	> 15	≤ 15
Proactivity of healthcare services in postpartum period**	> 62	> 54	> 46	> 38	≤ 38	
Employee evaluation	Capacity of employees for teamwork**	> 53,5	> 47,3	> 41,2	> 35	≤ 35
	Responsibility regarding quality of work**	> 70,8	> 64,8	> 58,8	> 52,8	≤ 52,8
	Work planning to reach established objectives**	> 57,6	> 51,5	> 45,4	> 39,3	≤ 39,3

* The performance of the indicator worsens with increase in its value

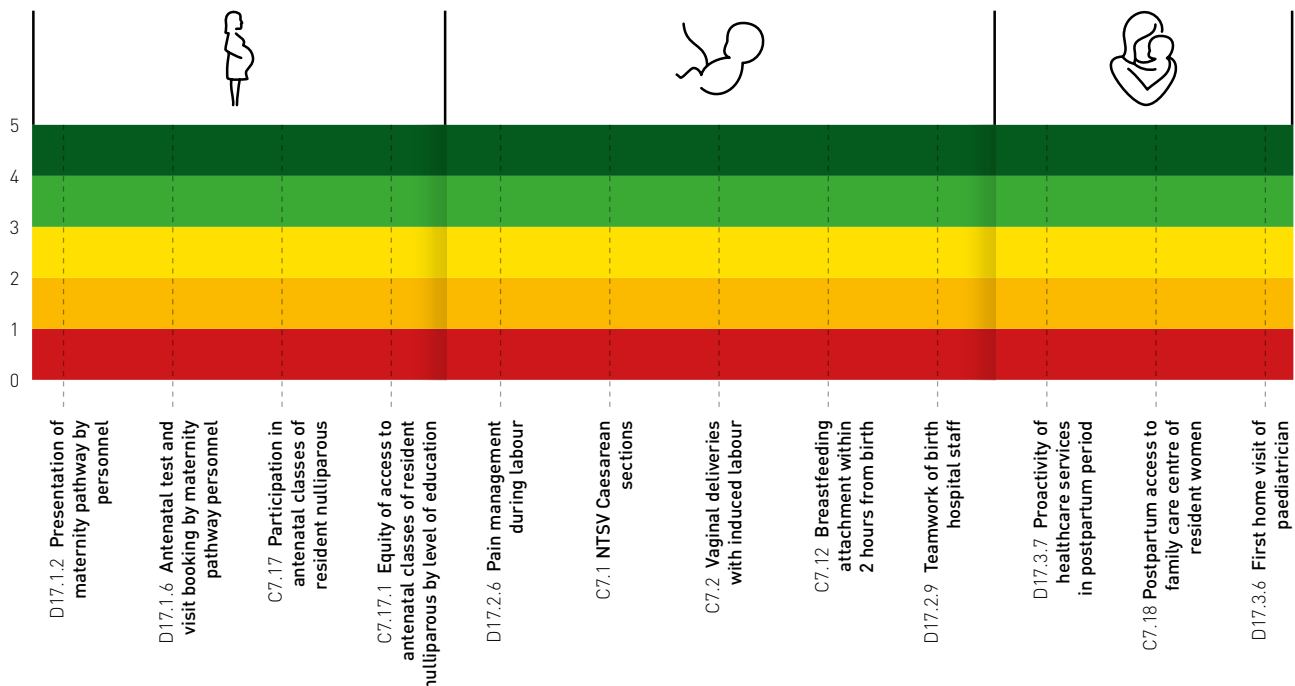
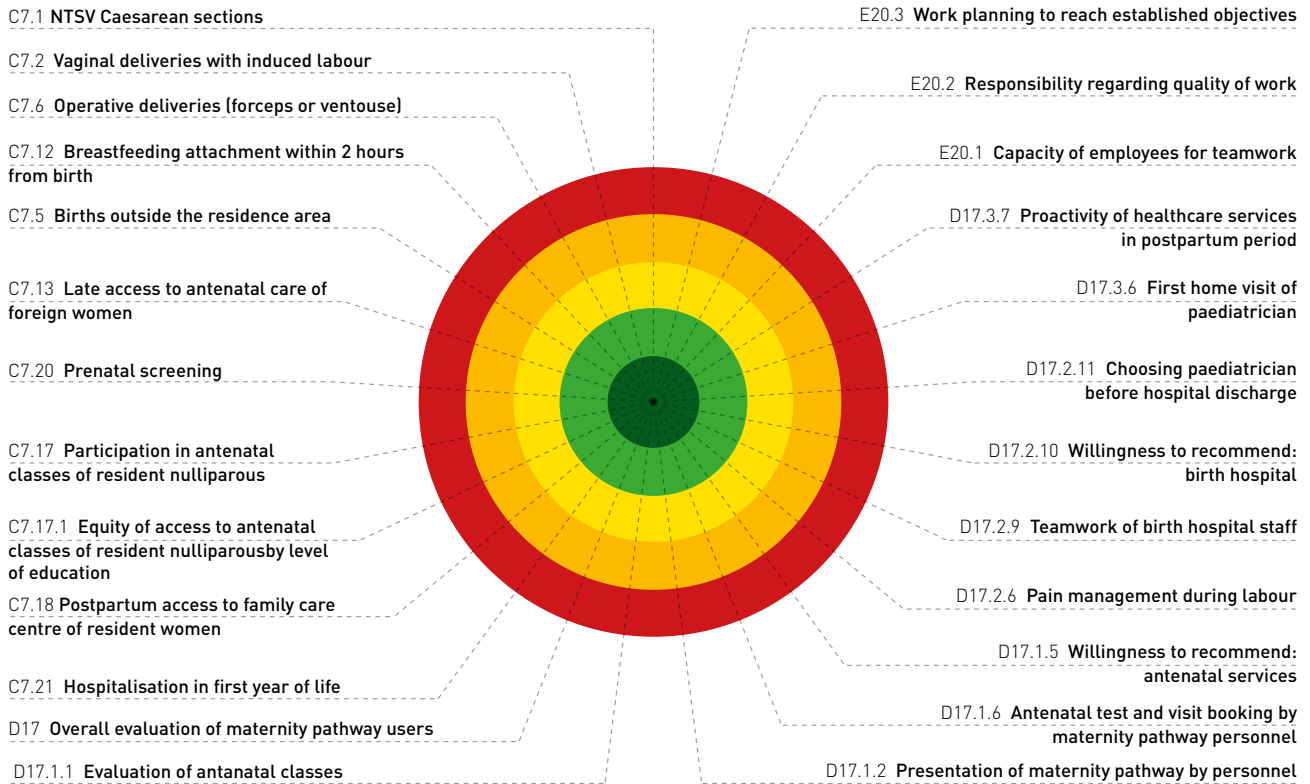
** The performance of the indicator improves with increase in its value

Table 2 - Indicators included in the targets of the maternity pathway and minimum values of the evaluation bands.

Figure 42 (opposite page - upper) - Graphical representation of performances in mother and child health area: the target, with 5 evaluation bands.

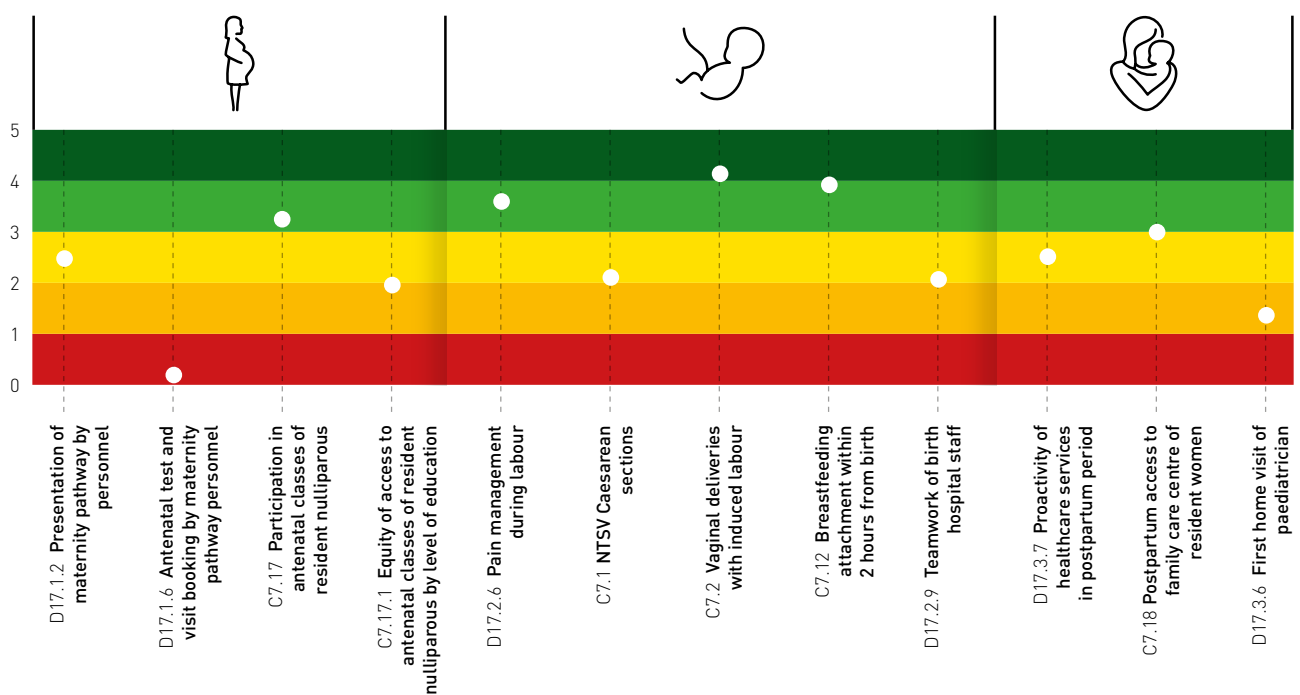
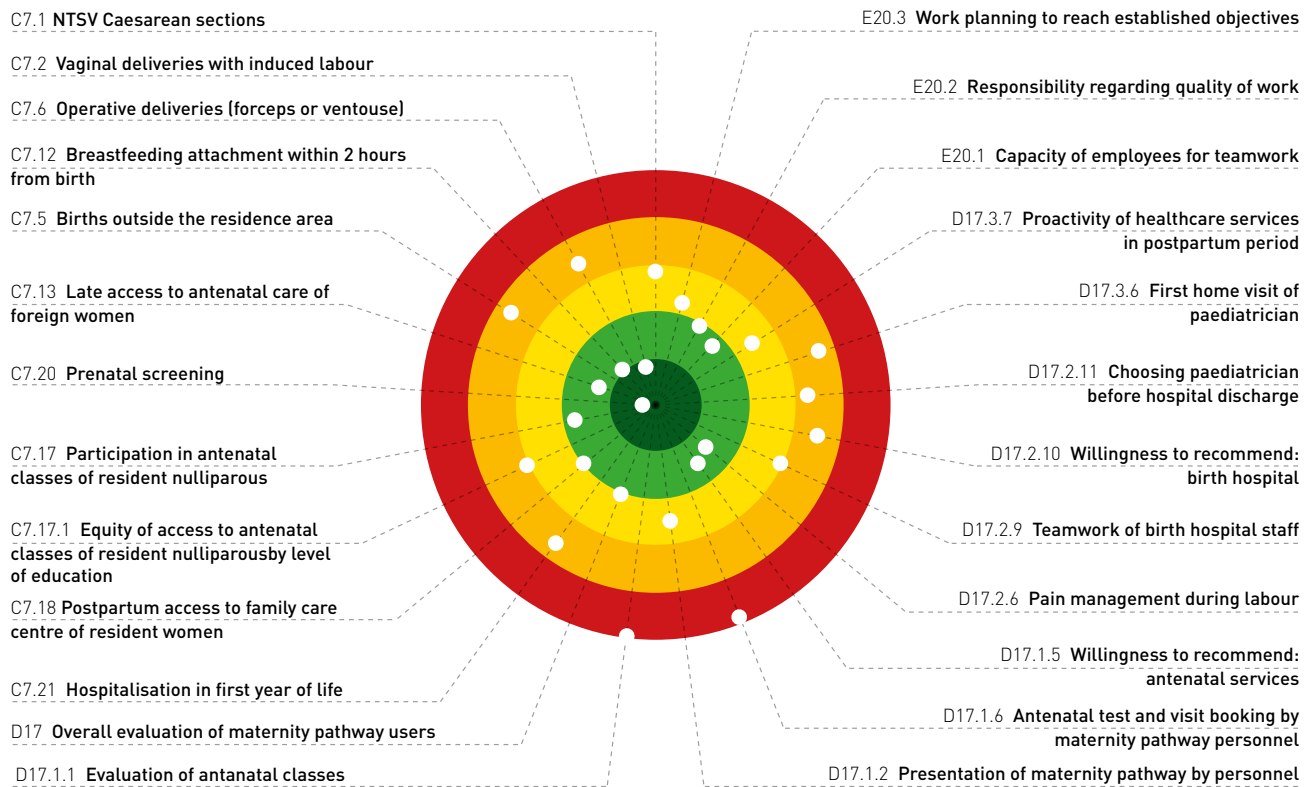
Figure 43 (opposite page - lower) - Graphical representation of performances of maternity pathway in its three stages of antenatal, delivery and postpartum period.

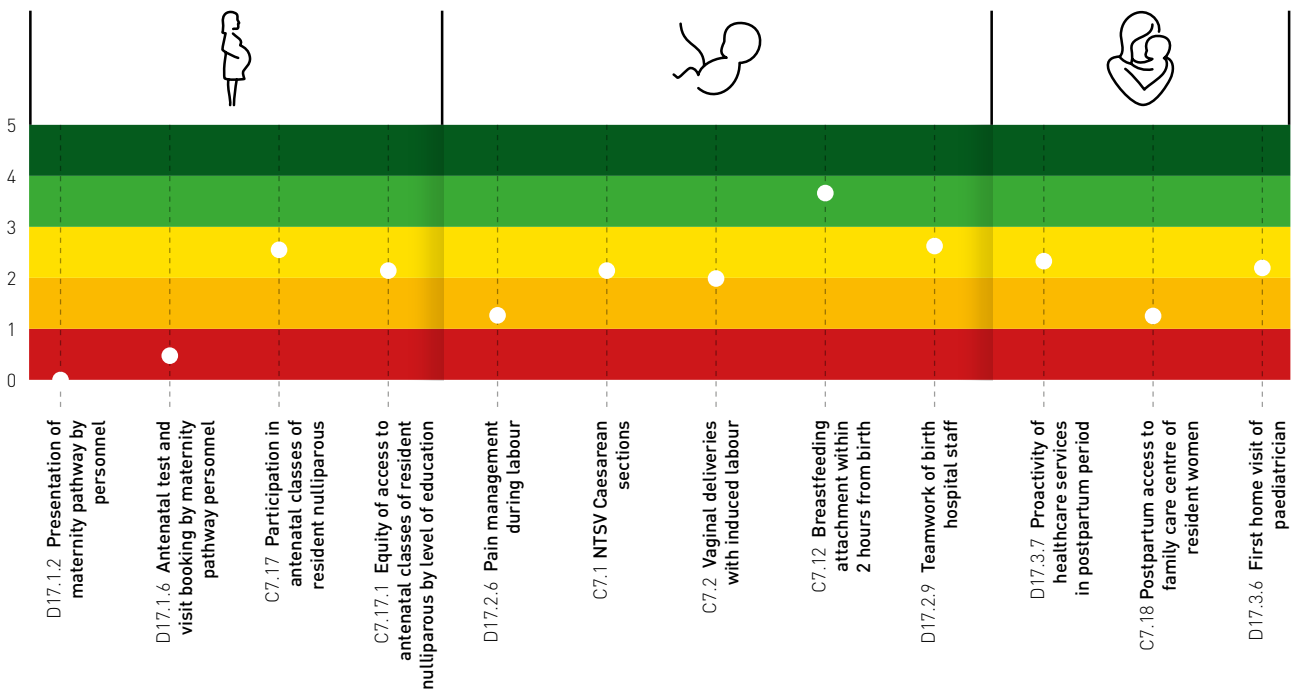
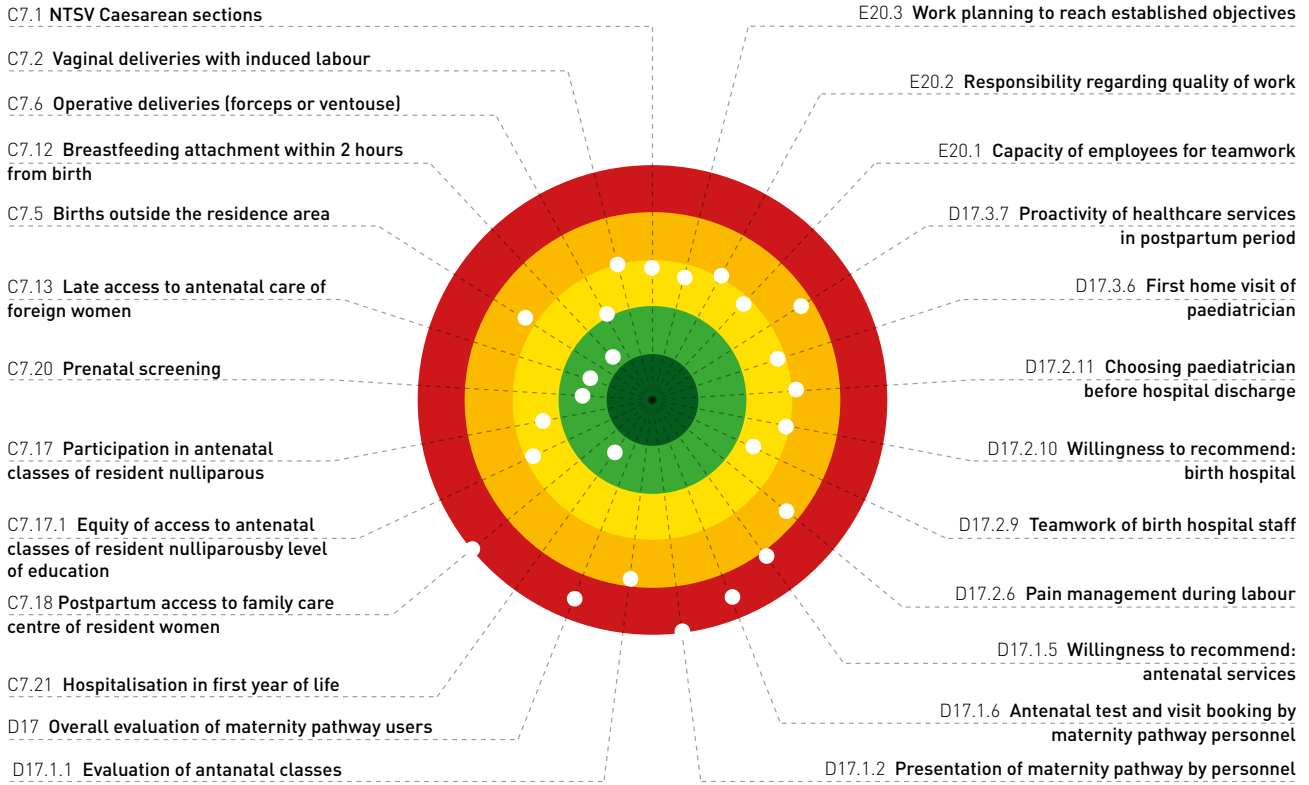
The performance: from target to pathway

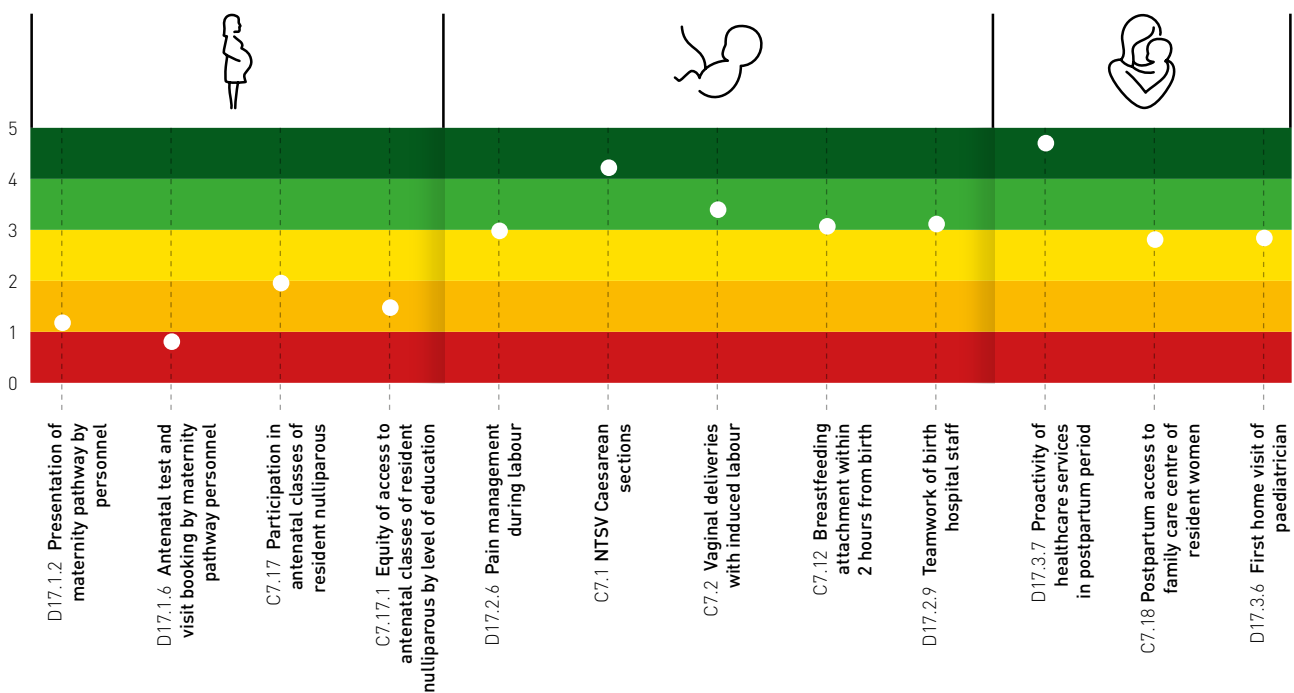
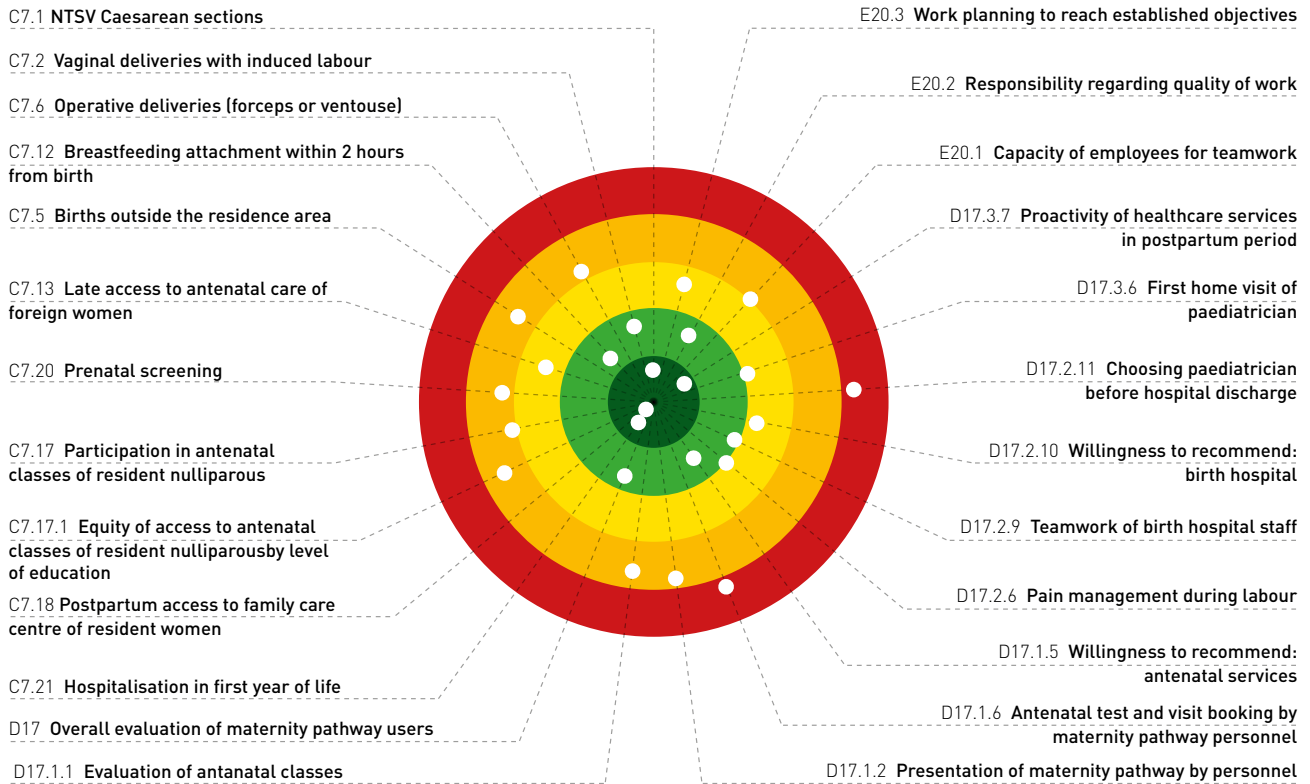


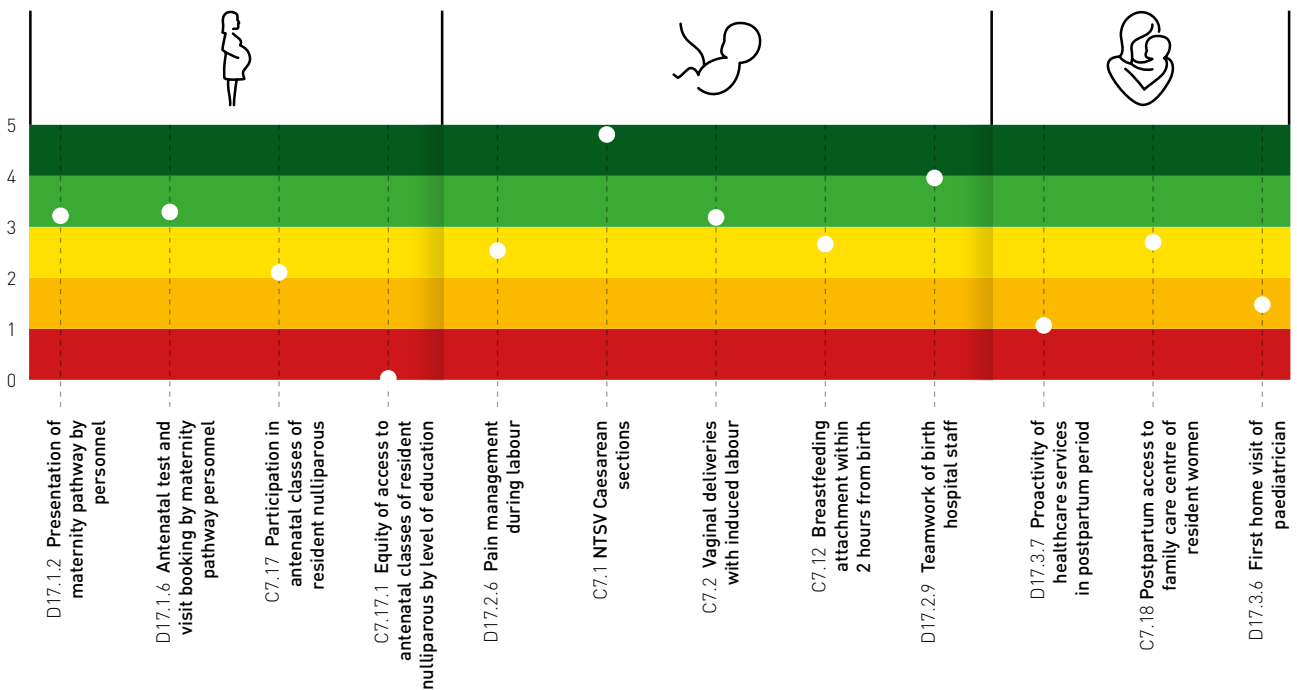
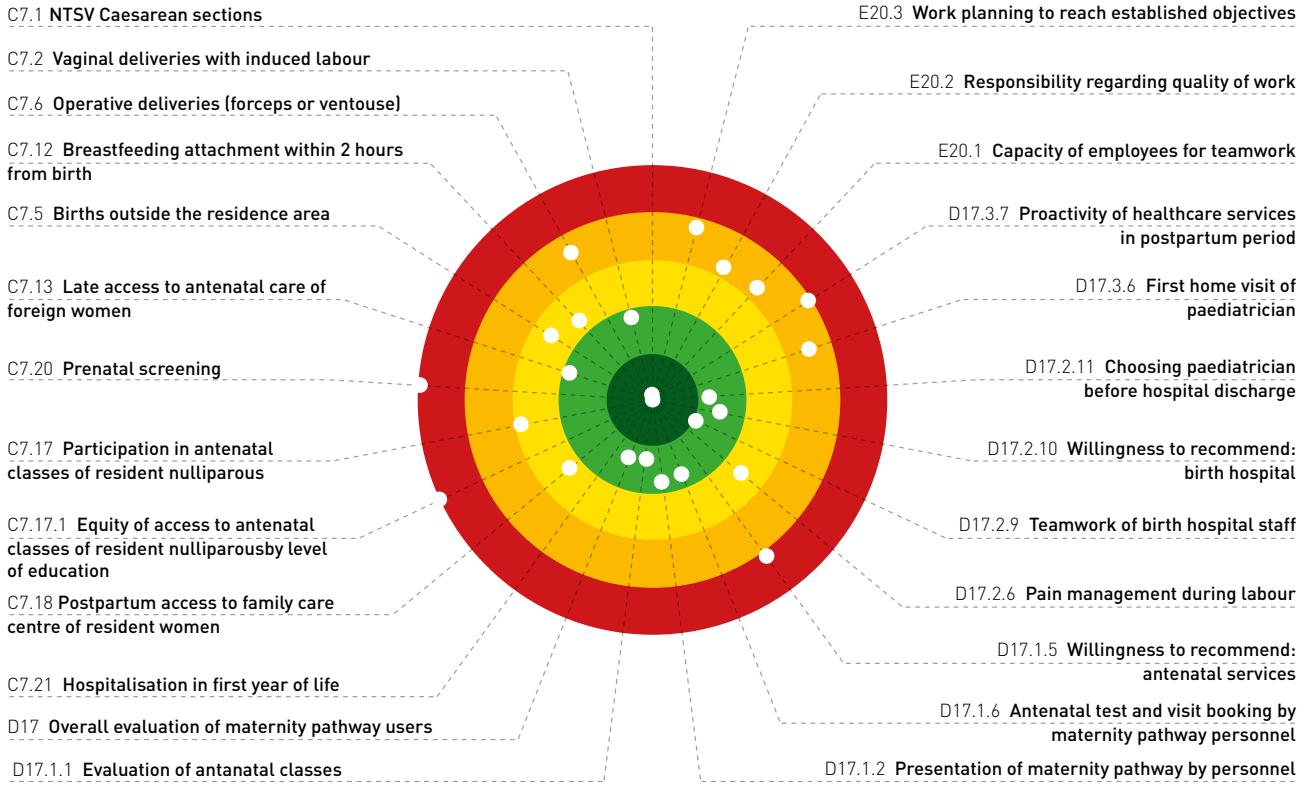
Performances of the maternity pathway by Local Health Authority

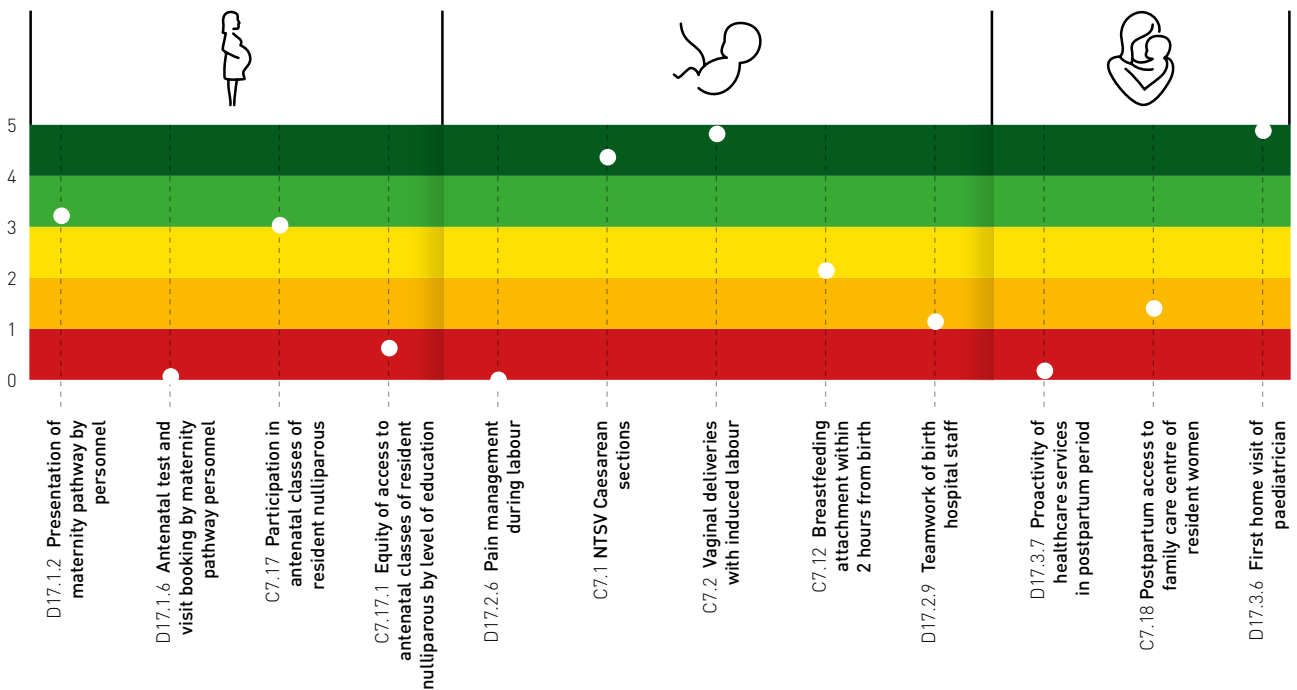
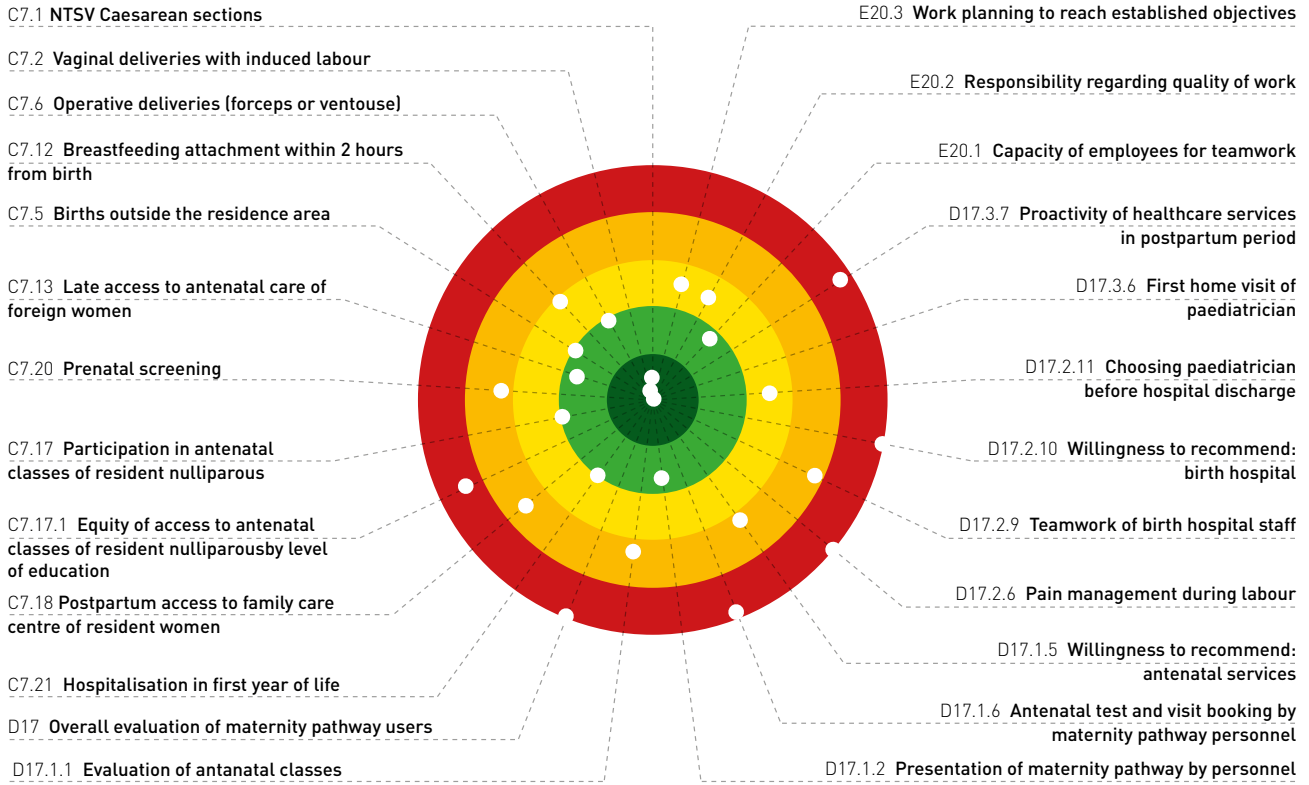
AUSL 1 Massa

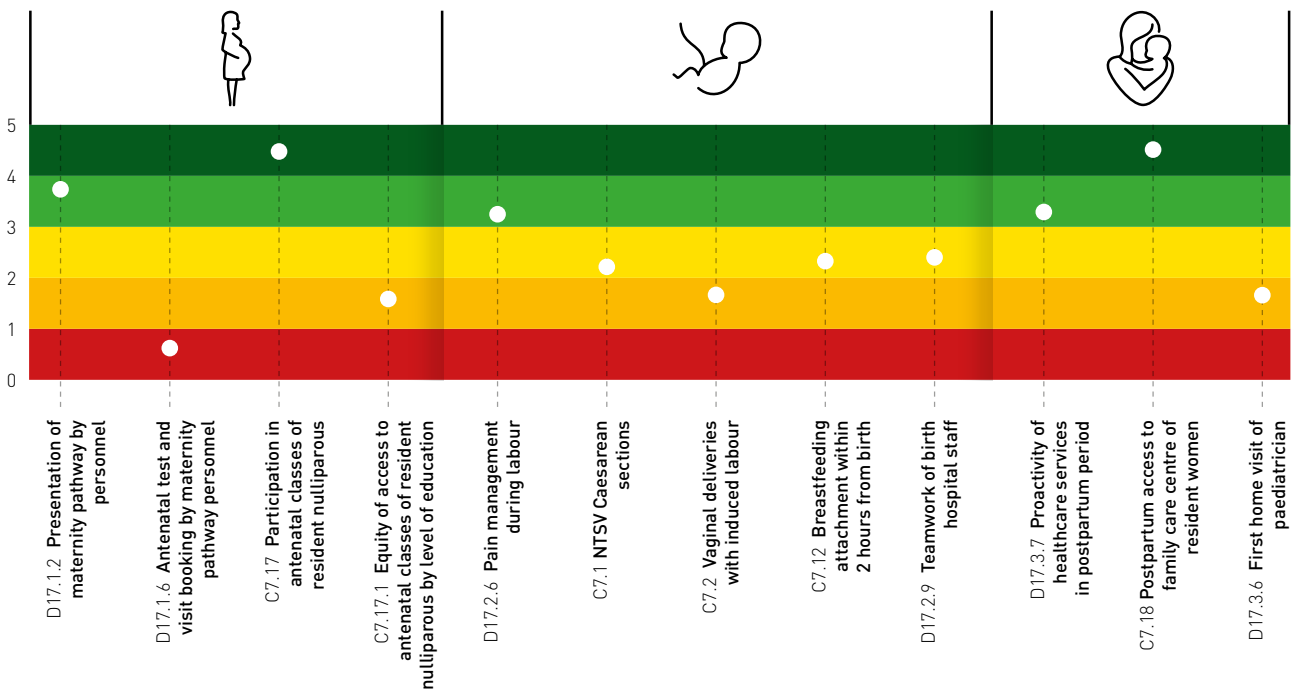
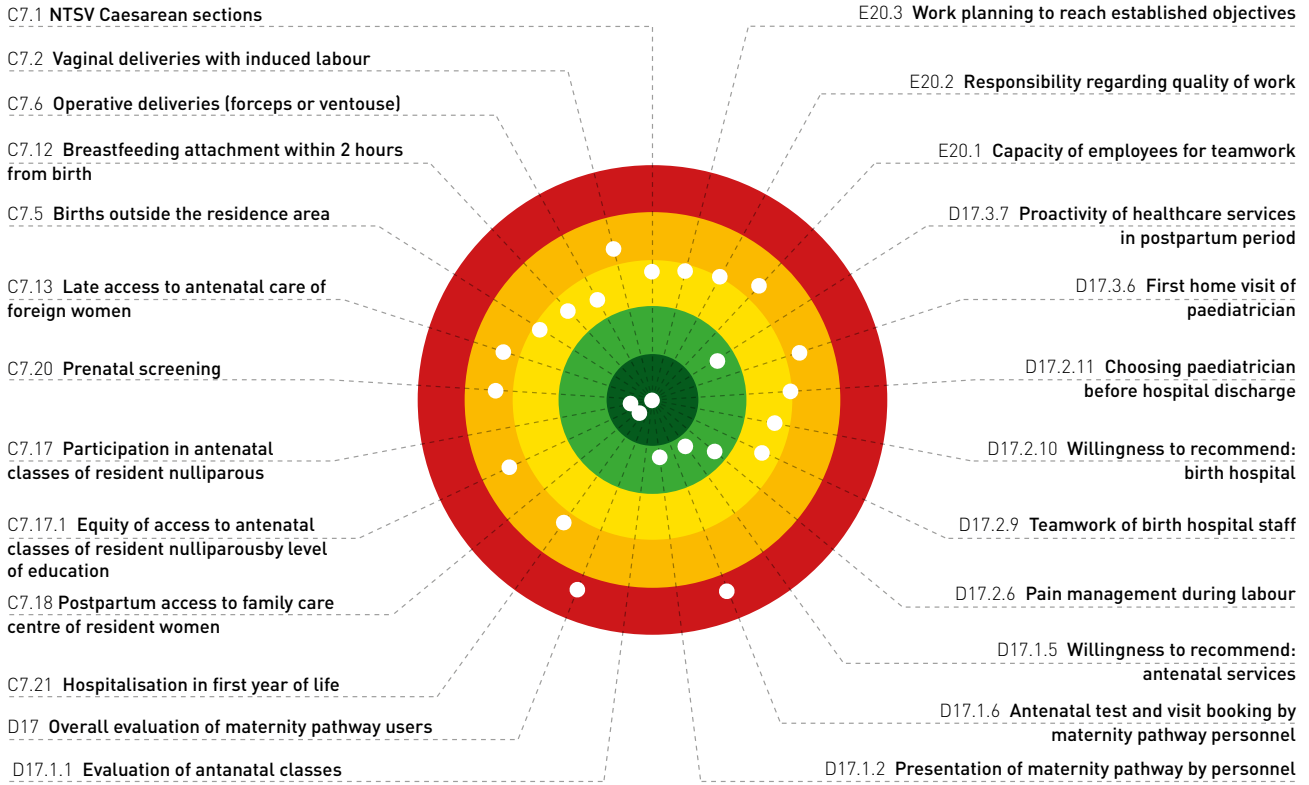


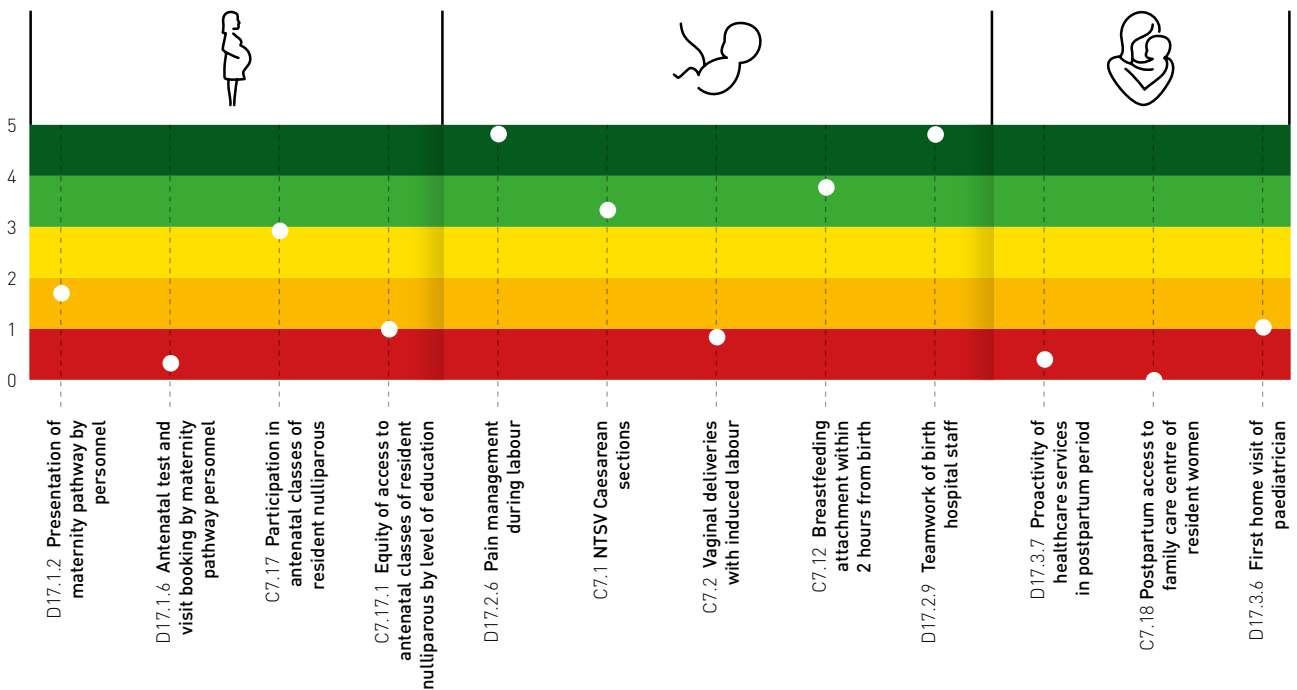
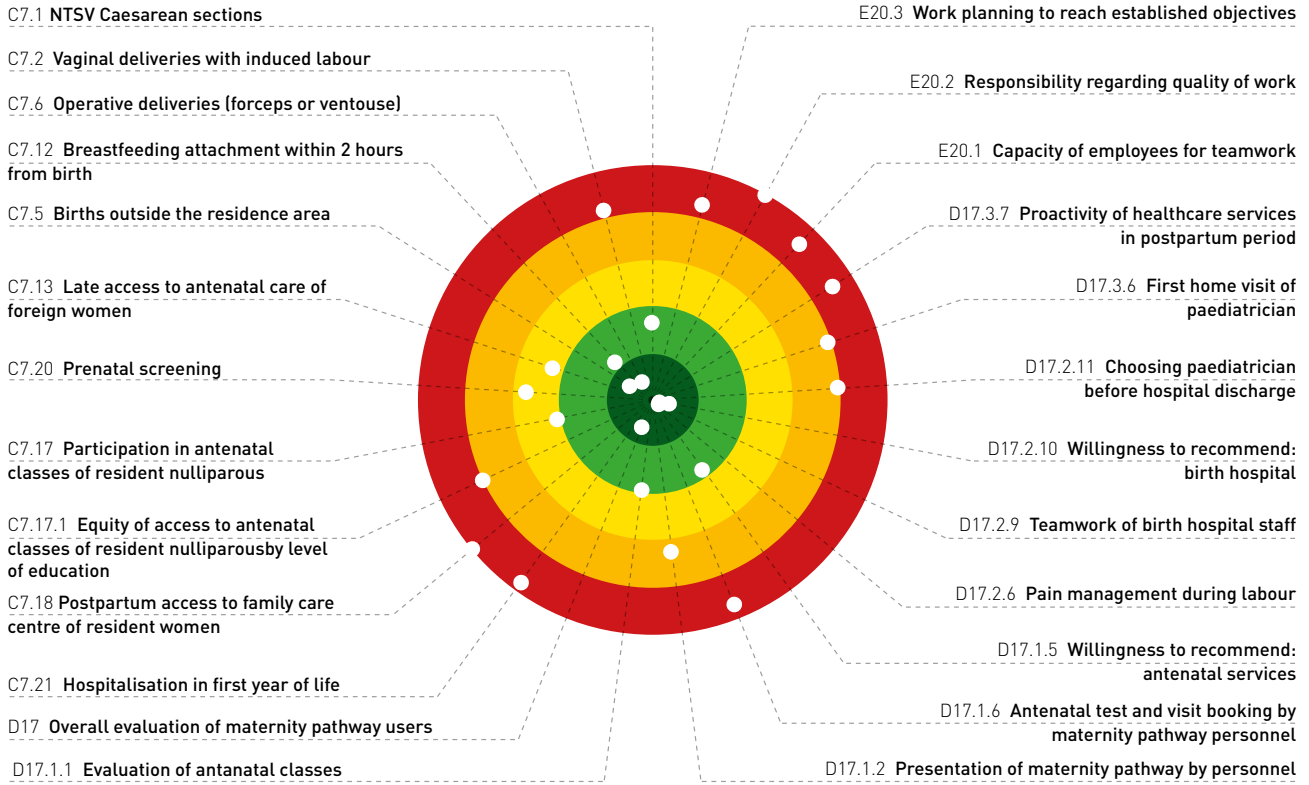


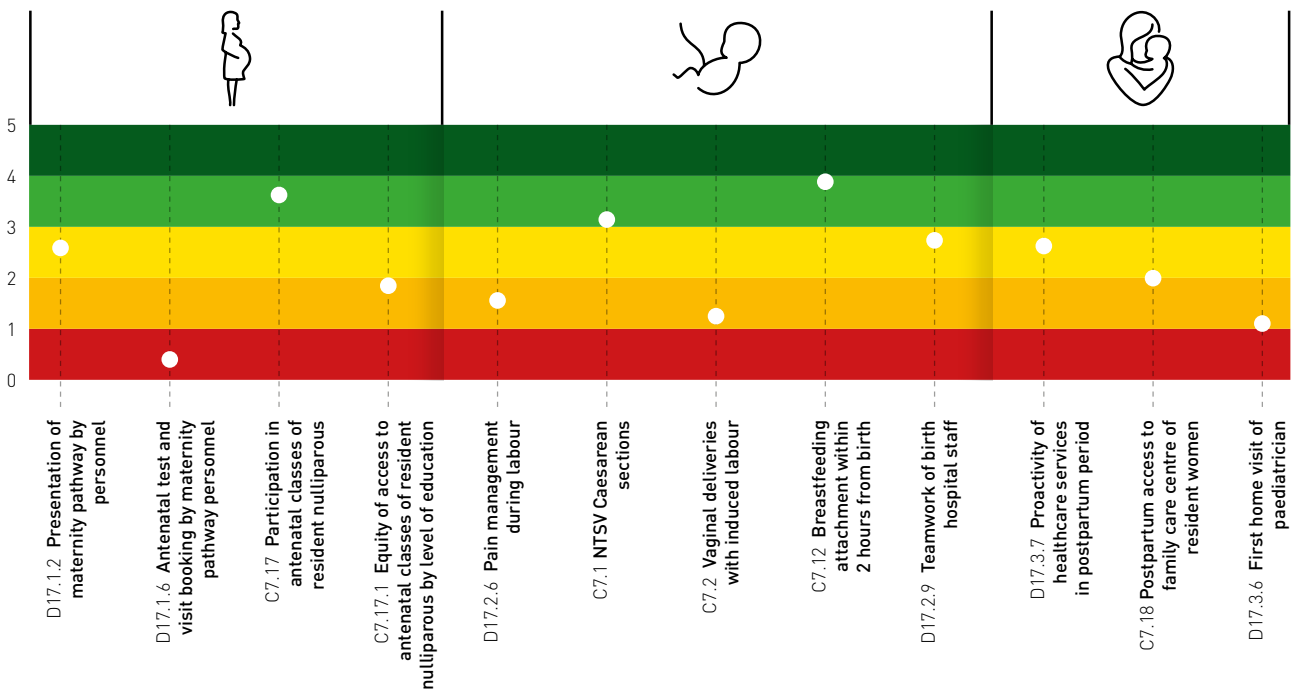
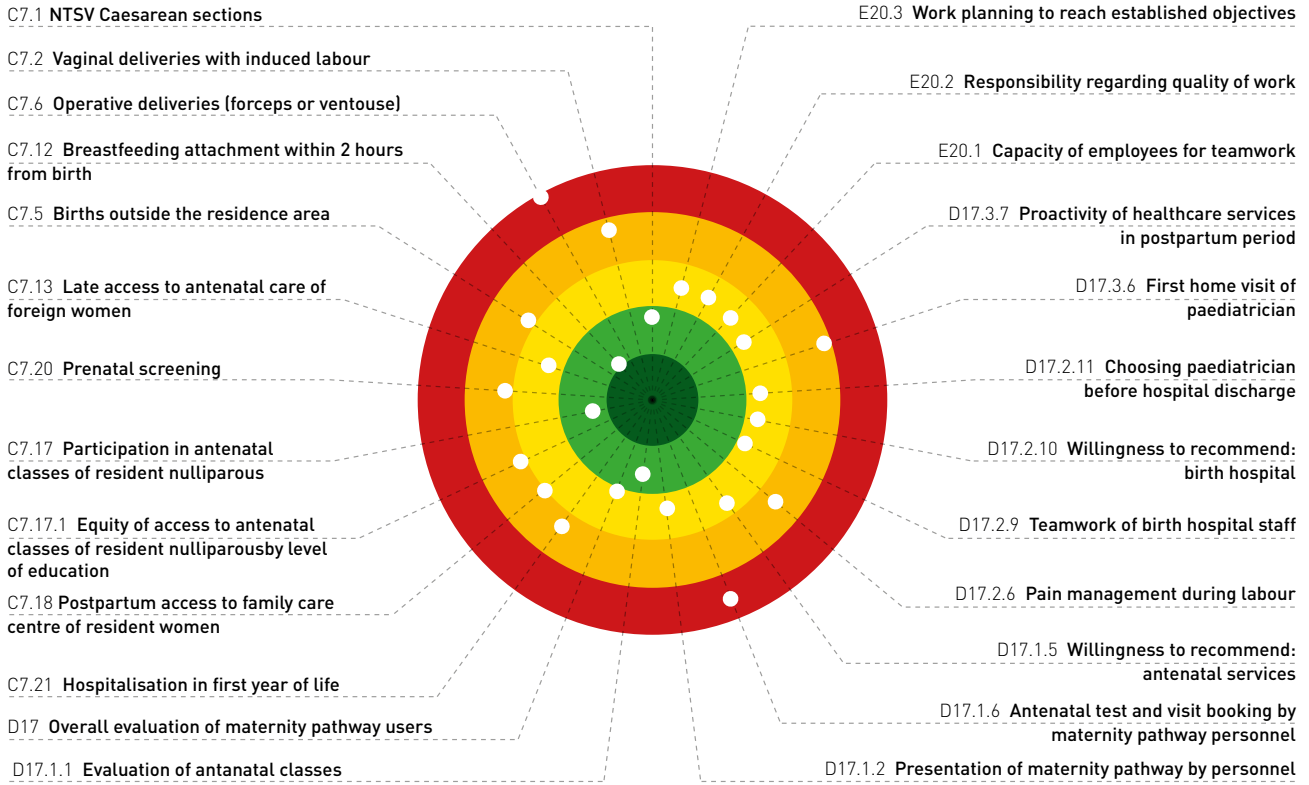


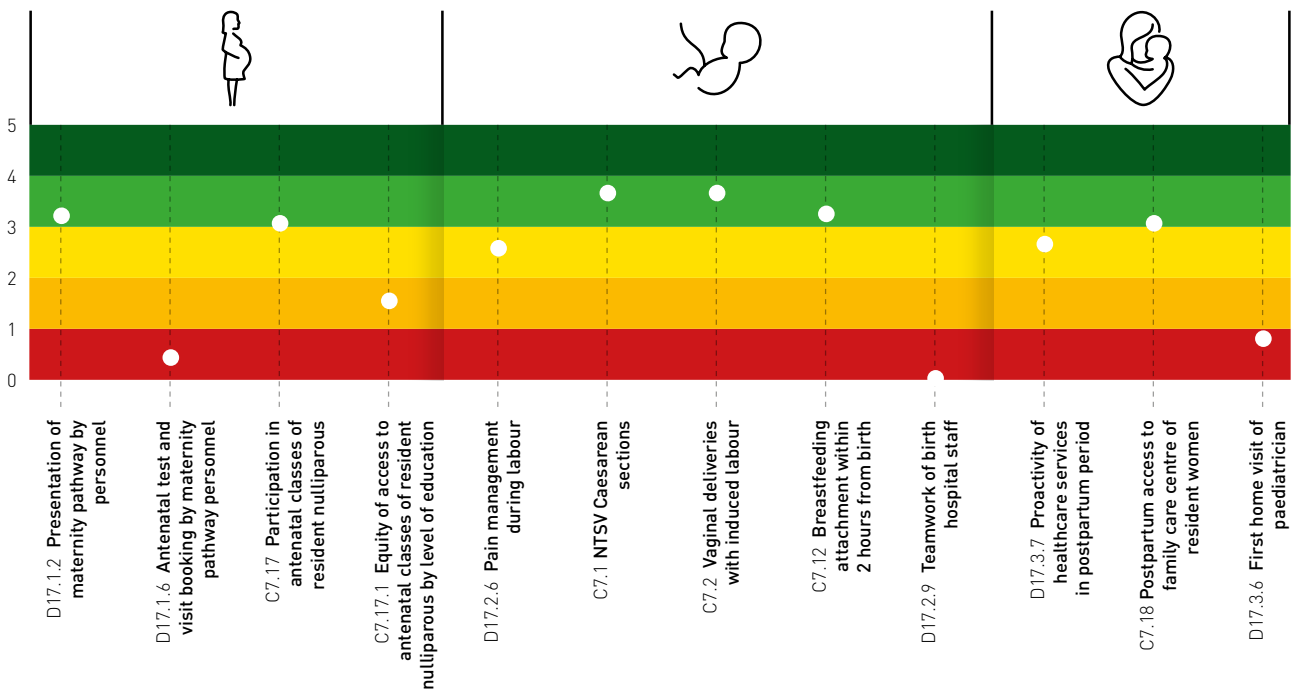
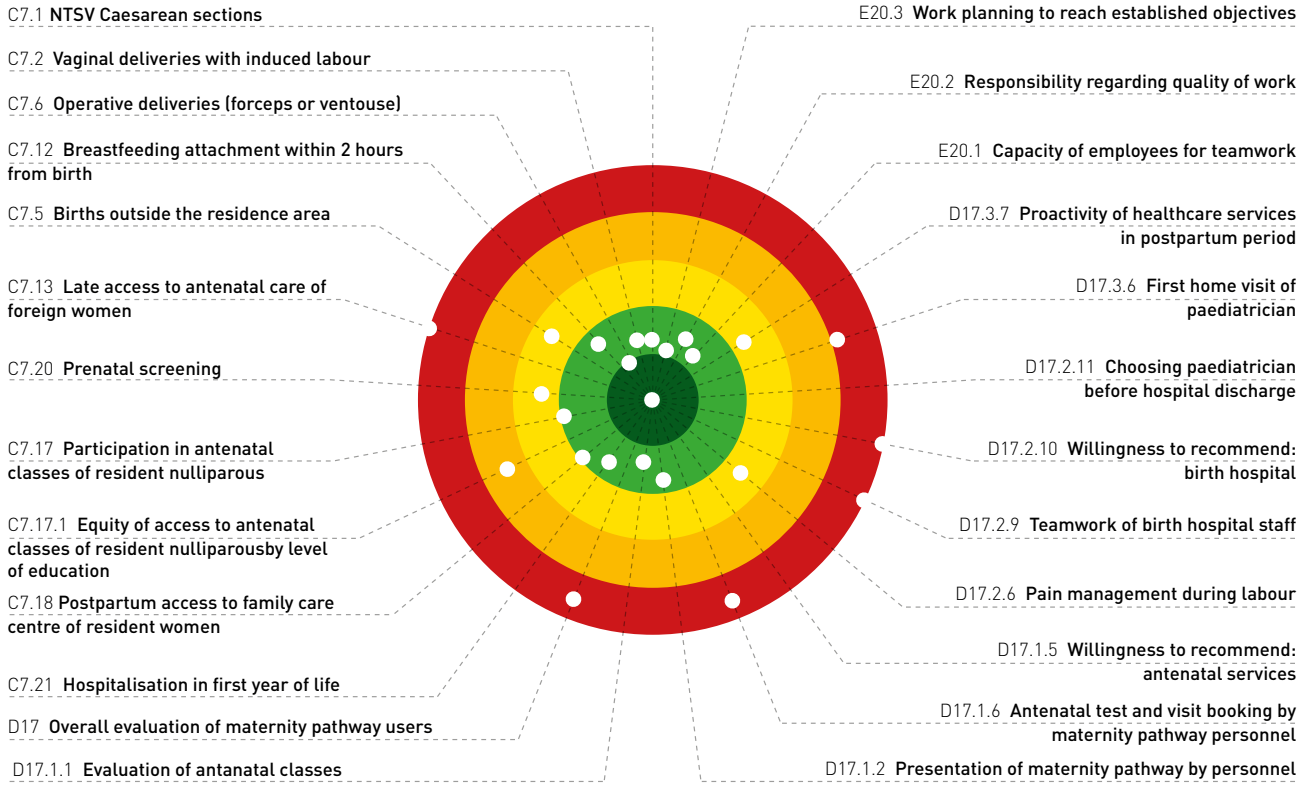


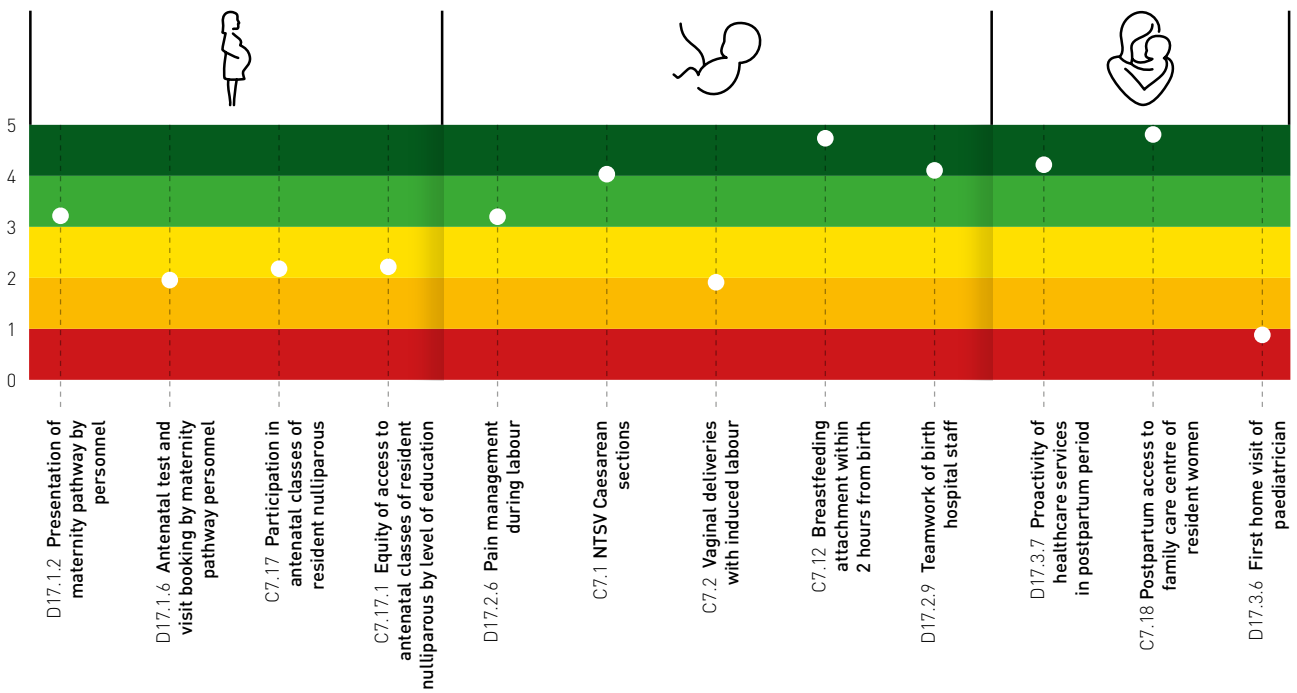
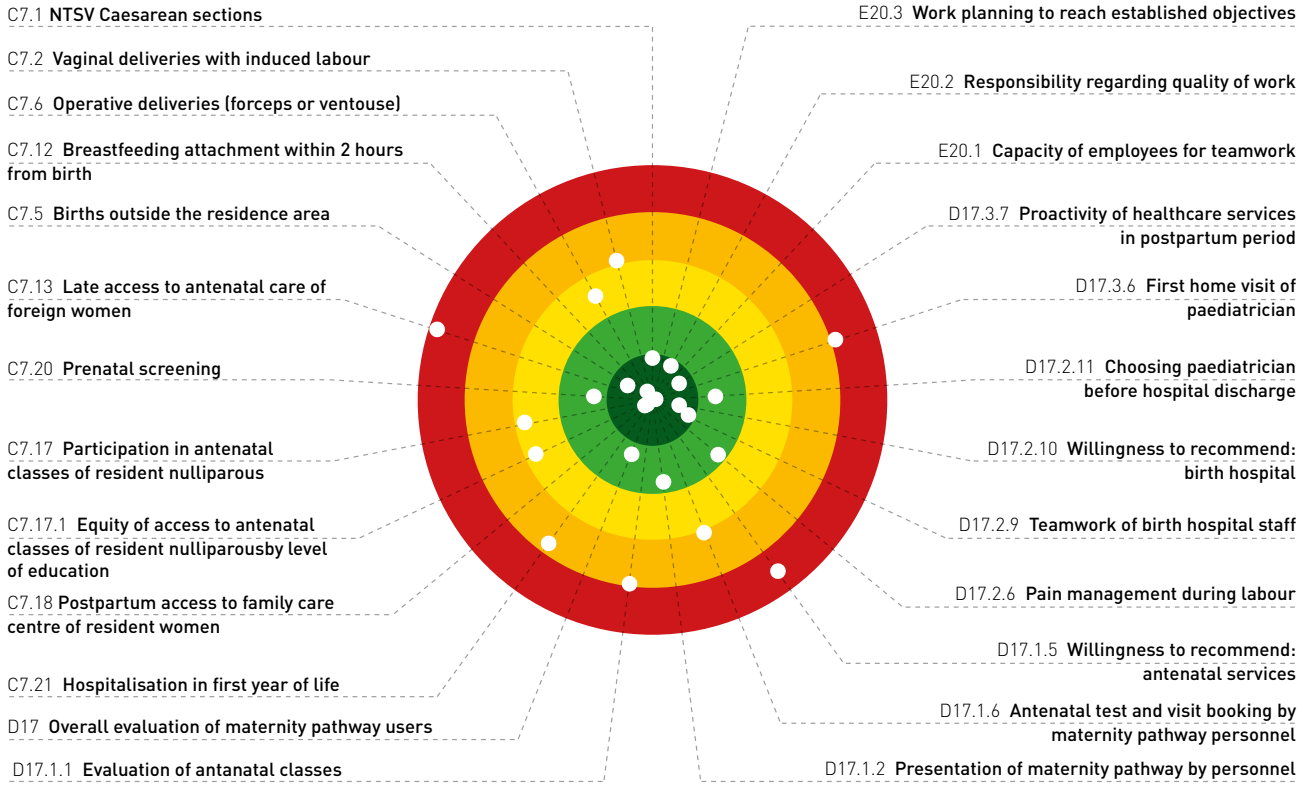


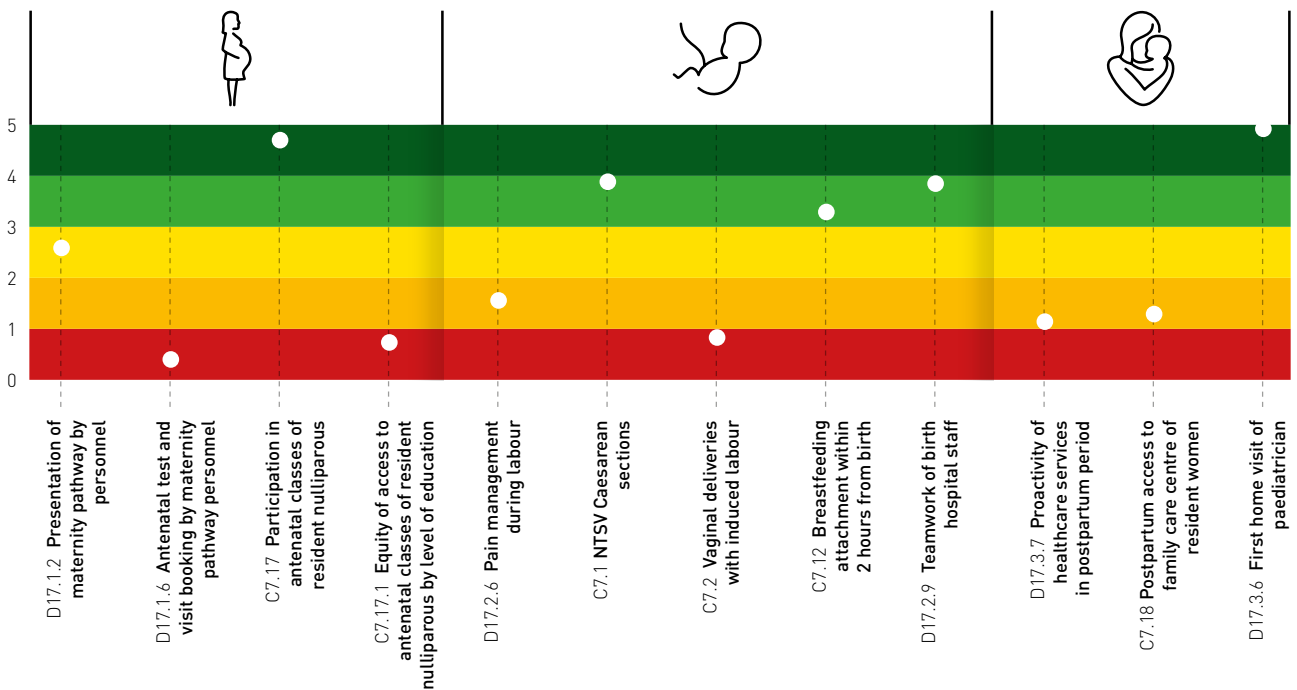
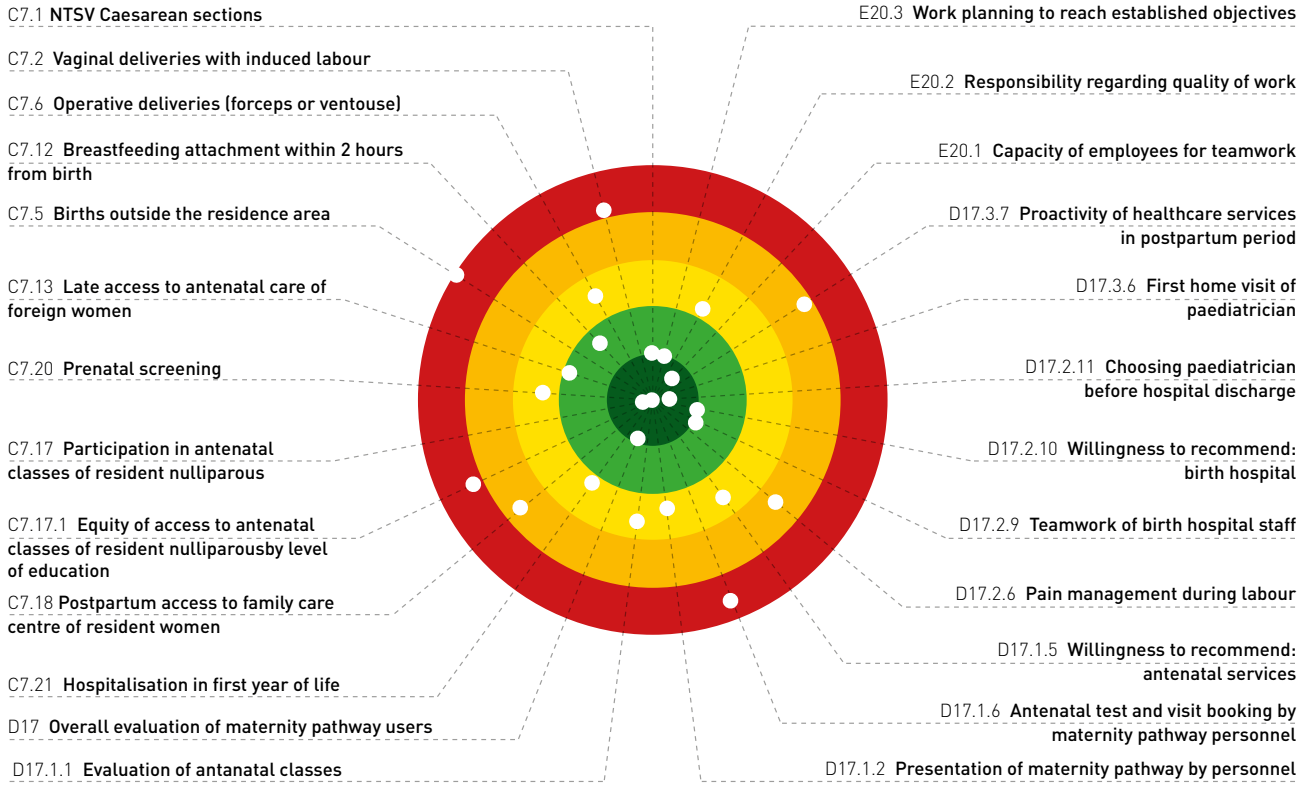


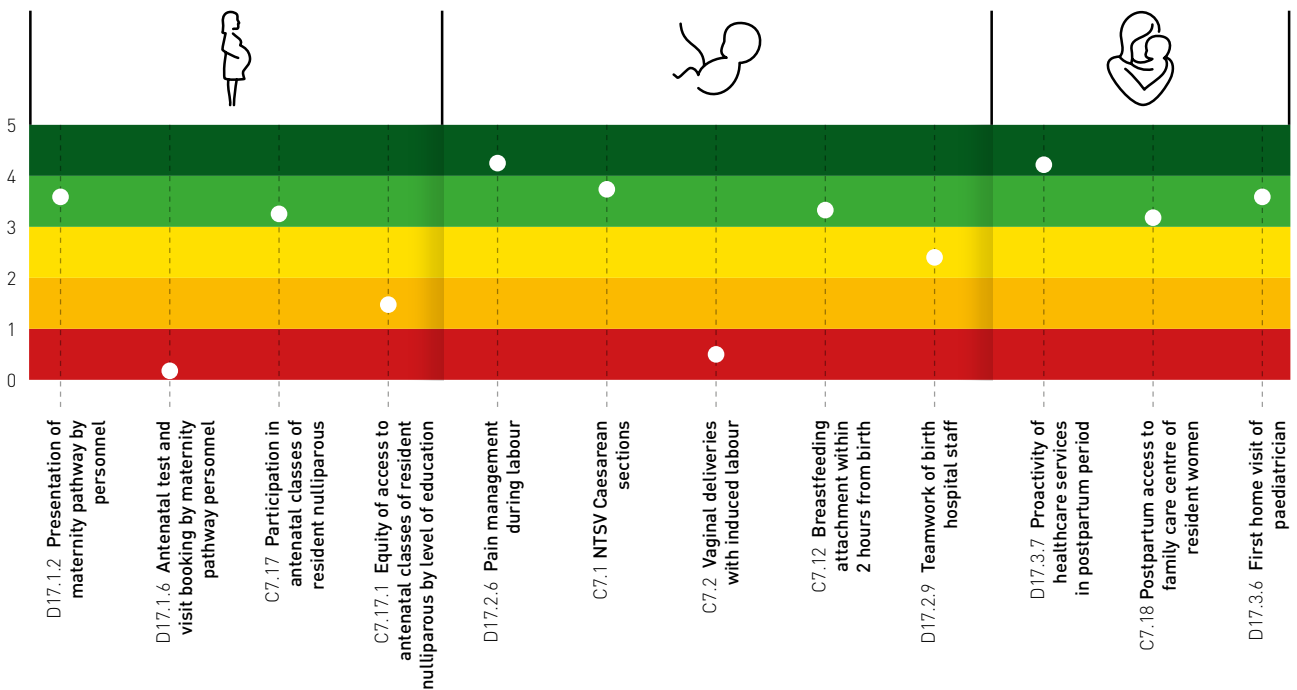
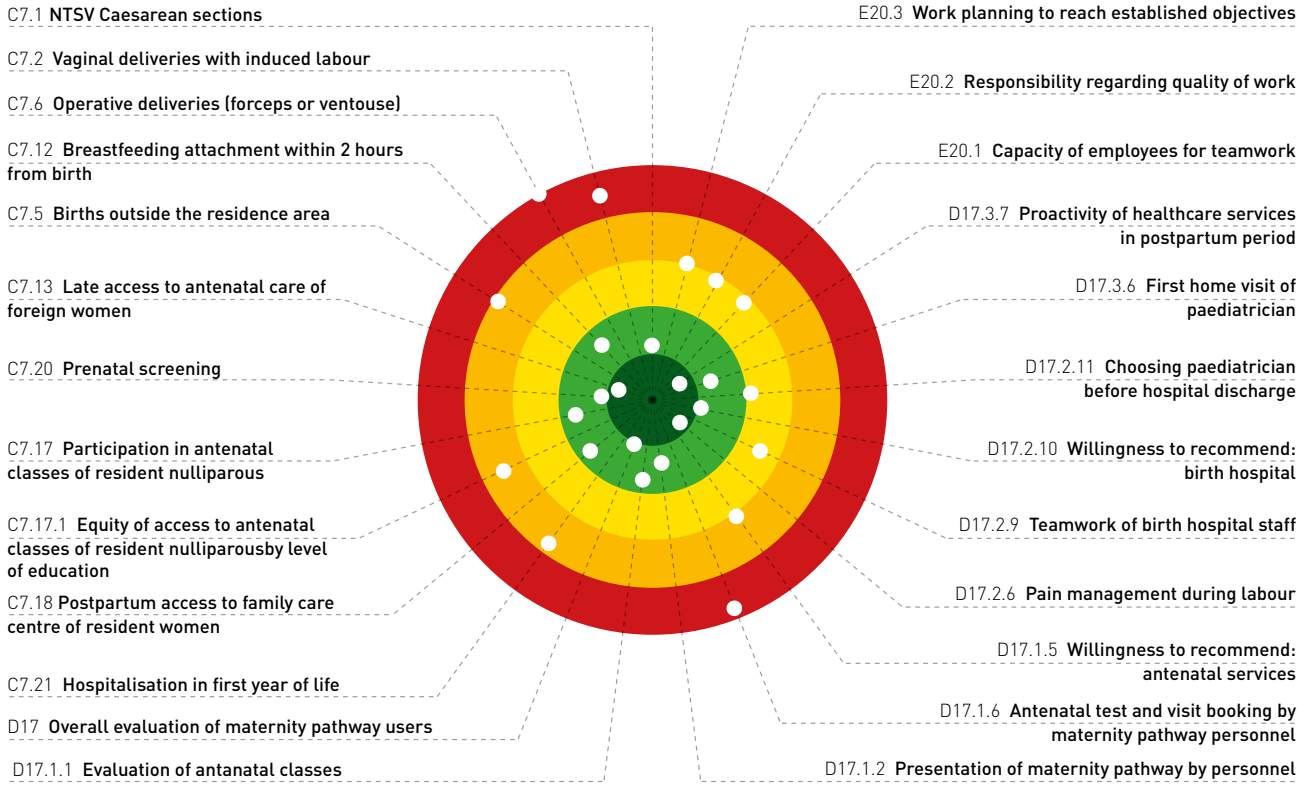




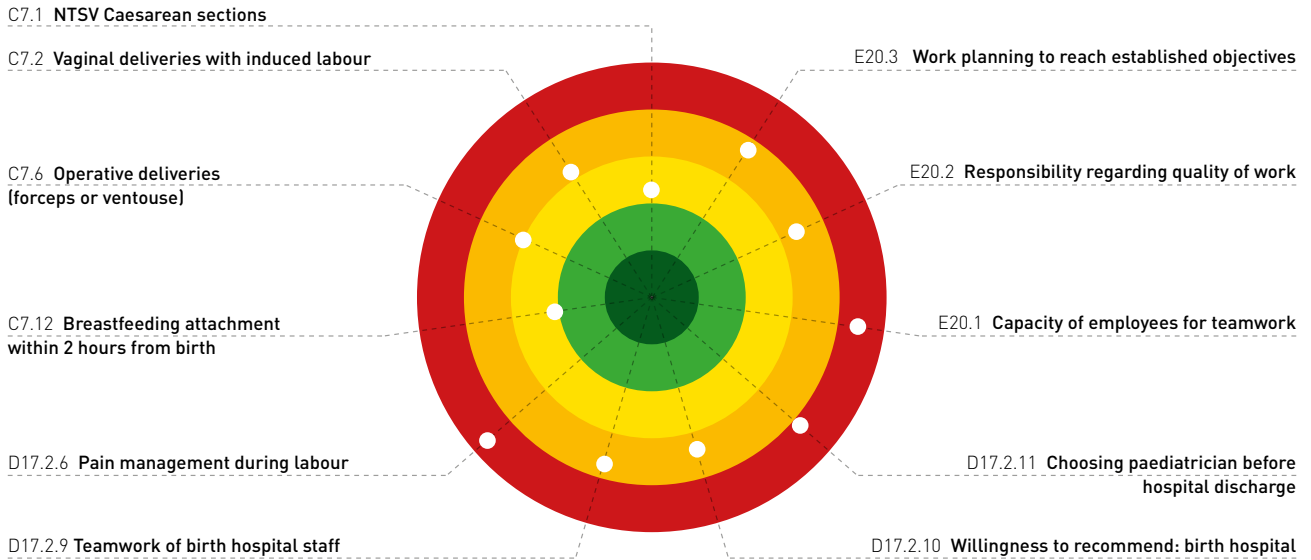




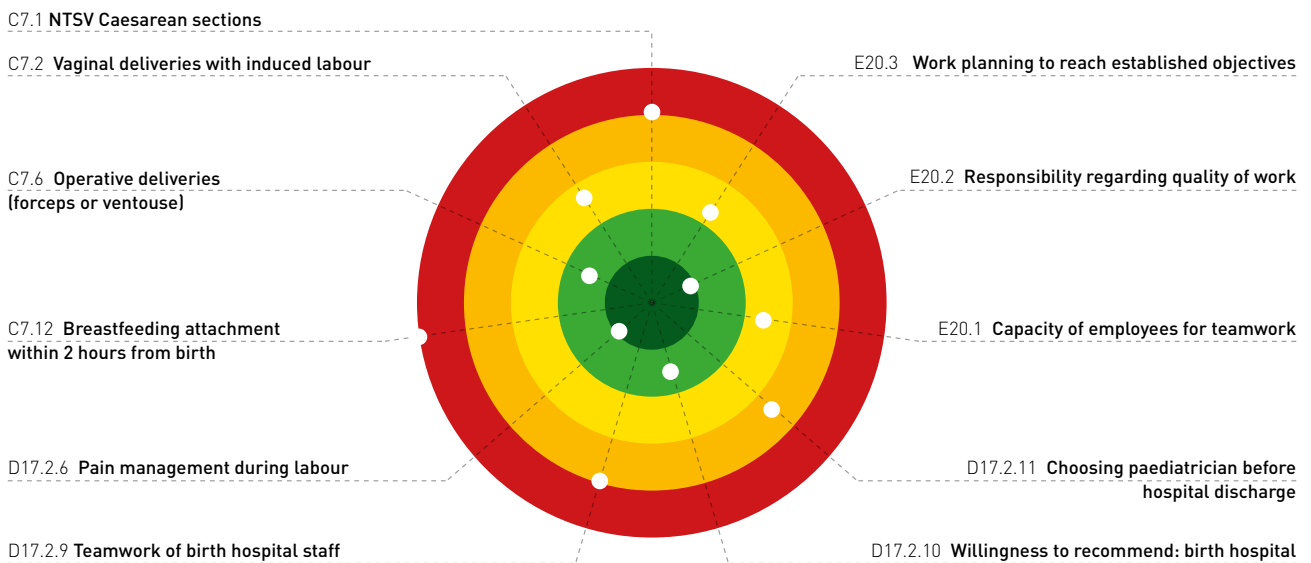


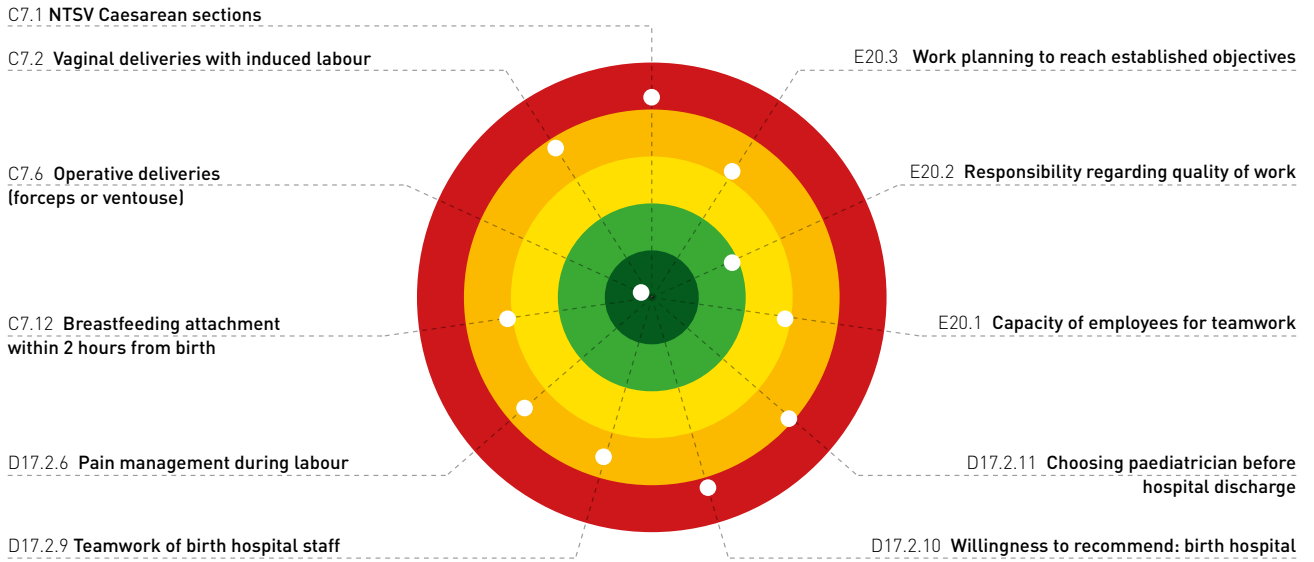


AOU Careggi (Florence)



AOU Pisa







by Daniela Matarrese

"From women's eyes this doctrine I derive: they sparkle still the right Promethean fire; They are the books, the arts, the academes, that show, contain, and nourish all the world." In this way William Shakespeare speaks of the eyes of women, underlining how they are an inexhaustible source of knowledge and wisdom.

We are fully aware that perception is not always a faithful representation of reality. However reflection on the experience in using the services of the maternity pathway on the part of users is an important aspect of evaluation. This should guide our strategies and constitute a part of the monitoring, with the aim of looking after women in this fundamental moment of their life. With this aim in mind, also by using the evaluations in this volume, some guidelines need to be traced and implemented immediately. These can be the basis of a legislative redesign to make the maternity pathway more modern, usable and appropriate. This must be coherent with the inspiring principles of the Regional Health Plan of a healthcare service that is for everyone, public, innovative and of high quality.

What do the women say? In the first stage before childbirth, they emphasise that there is little information on the services offered by the public institutions. There is a need to implement strategies of integrated communication, using all the channels open to us today. Above all, given the age band involved, this should be done by using the most innovative means. Within the pathway, we need to pay particular attention to the moment when the pregnancy booklet is consigned, by the obstetrician, during a personal interview. The booklet itself should be interactive and a source of further information, a veritable guide for the women using the service. There is clearly a need to continue along the road already chosen, which means that linguistic, cultural or social differences pose no barriers. On the contrary, these are opportunities to reorganise the services by making access simpler. The experimentation of good practice for the weaker social groups, such as the booking of tests

directly in the family care centre, or the choice of the paediatrician already present in the hospital, should be extended to everyone. This must be combined with greater communicative and relational empathy that should be for everyone and not only for the women coming from countries with strong immigration pressure. This is obviously not forgetting the specific nature of foreign users of the services, who require intercultural communication and mediation services. All users require a compromise between the healthcare service timetable and their working day or typical day-to-day organisation. A typical example is the underuse of prenatal courses, an important instrument of information and knowledge for healthcare management during pregnancy and the pregnancy itself. However, although it is certainly necessary to improve in order to create a real and efficient equity of service access, once the first pathway stage has been entered, the services effectively have a universal approach and offer the same opportunities and quality to everyone. This is an important level to be maintained and developed.

It is of absolute priority to relaunch the role of the family care centres, integrated on one hand with the network of hospital services, with a clear mission of the various birth hospitals, and on the other hand with other institutions of the local territory. Points of contact must be found both with paediatricians and general practice within the "Aggregazioni Funzionali Territoriali" (similar to Primary Care Groups) and also with the "Case della Salute" (healthcare centres). Similar attention must be paid to the postnatal stage. This should ensure the choice of paediatrician before discharge from the birth hospital, the booking of the first home call already at the birth hospital and within 25 days from discharge, and a sharing of intent between paediatrician and community services.

However, we cannot ignore the fact that 3 women out of 4 during pregnancy entrust their health to a private specialist. This is generally the same professional used for gynaecological care. Only 15% of women use the service of a professional from the public

sector.

Reversing this trend is important and this can be done only by taking into account that at the basis of this choice there is the need to rely, if possible, on the same professional figure for the whole pathway. Therefore, it is not enough to merely increase personnel but it is also important to ensure that the practitioners interacting with the woman are known to her and are members of a team working in harmony. The experience of having really been taken care of makes a big difference on the evaluation of the entire pathway in its various stages of care. Being welcomed, informed and guided in the choice of services, followed and accompanied, in the different stages of the pathway, especially in those of risk pregnancy and screening, is a sign of acknowledged quality in the service. It is reason for recommendation to others and on the contrary, without these conditions, one of the causes of entrusting one's healthcare to a private practitioner. Also, this prompts the approval of innovative techniques for the prenatal diagnosis.

The same need for being taken care of during the prenatal period is felt at the moment of birth and explains the choice of the birth hospital. "Not being left alone" during labour, feeling that there is teamwork of personnel, for example the prompt changeover of obstetricians between shifts, are all essential elements. In the first hours after birth, the women interviewed evaluate the following factors as positive: correct pain management, rooming in, information and support concerning feeding, the possibility of choosing the paediatrician while still in hospital, receiving the first home call in the first few days following discharge, and having the chance to receive an active offer of family care centre services in the woman's residential area. These are all practices to enhance in respect of her needs. In particular, the aim is to renew the WHO-UNICEF protocol in order to relaunch attention on feeding and encourage baby-friendly hospitals and communities. Furthermore, it is essential to extend to other hospital contexts the care of the physiological pregnancy in line with the "Margher-

ita" experience of the Careggi Teaching Hospital in Florence. Together with personalised care, for correct pain management and limitation of Caesarean and induced deliveries, it is necessary to ensure accessibility and the real possibility of choosing birth analgesia throughout the regional area. It is important to identify in hospitals the minimum standards of functioning and organisational arrangements, with reference also to

the need in terms of personnel, and to implement the guidelines on pain control during delivery established by the Regional Health Council. Its merit is also to include pharmacological birth analgesia, non-pharmacological techniques and complementary medicine among the therapeutical options. It is also necessary to increase the levels of information on these fields, also by using the antenatal classes. The evaluation and monitoring system

implemented by the Tuscany Region, specifically regarding the maternity pathway, makes publicly available all the results of single services and the functioning of the integrated network. The intent is to supply everyone with tools to reflect and improve, pitting one's wits with time and respect to others, also through women's eyes.

Daniela Mafarouze

REFERENCES

American College of Obstetricians and Gynecologists Task force on Cesarean Delivery Rates.

Evaluation of Cesarean Delivery

Washington DC, ACOG 2000.

Baglio G, Spinelli A, Donati S, Grandolfo ME.

Valutazione degli effetti dei corsi di preparazione alla nascita sulla salute della madre e del neonato

Annali Istituto Superiore di Sanità 2000; 36(4):465-78.

Cheng SH, Yang MC, Chiang TL.

Patient satisfaction with and recommendation of a hospital: effects of interpersonal and technical aspects of hospital care

International Journal for Quality in Health Care 2003, 15.4: 345-355.

Coulter A, Locock L, Ziebland S, Calabrese J.

Collecting data on patient experience is not enough: they must be used to improve care

BMJ 2014, doi: 10.1136/bmj.g2225.

EURO-PERISTAT Project with SCPE and EUROCAT.

European Perinatal Health Report. The Health and care of pregnant women and babies in Europe in 2010

May 2013. Available www.europeristat.com

Joseph K, Whitehead A.

Unintended pregnancy and therapeutic abortion in the postpartum period. Is an opportunity to intervene being missed?

N Z Med J 2012;125(1359):30-40.

Lauria L, Bonciani M, Spinelli A, Grandolfo ME.

Inequalities in maternal care in Italy: the role of socioeconomic and migrant status

Ann Ist Super Sanita 2013;49(2):209-18.

Lauria L, Lamberti A, Buoncristiano M, Bonciani M, Andreozzi S.

Percorso nascita: promozione e valutazione della qualità di modelli operativi. Le indagini del 2008-2009 e del 2010-2011.

Roma: Istituto Superiore di Sanità 2012. (Rapporti ISTISTAN, 12/39).

Murante AM, Nuti S.

A marketing approach for creating patient oriented pathways in hospital services in the proceeding of International Marketing Trends Conference

Ed. Jean-Claude Andreani and Umberto Collesei, Paris: Marketing Trends Association. Paris, 2011.

Nuti S, Bonini A (a cura di).

Il sistema di valutazione della performance dei sistemi sanitari regionali: Basilicata, Liguria, Marche, P.A. Bolzano, P.A. Trento, Toscana, Umbria, Veneto. Report 2012

Edizioni ETS, Pisa 2013.

Nuti S, Maciocco G, Barsanti S.

Immigrazione e salute - Percorsi di integrazione sociale

Il Mulino 2013.

Nuti S, Murante AM (a cura di).

Il Percorso Nascita in Toscana: l'esperienza delle donne. Report 2012-2013

Laboratorio Management e Sanità 2013.

Renkert S, Nutbean D.

Opportunities to improve maternal health literacy through antenatal education: an exploratory study

Health Promot Int 2001;16(4):381-8.

Seghieri C, Sandoval GA, Brown AD, Nuti S.

Where to focus efforts to improve overall ratings of care and willingness to return: The case of Tuscan emergency departments

Academic Emergency Medicine 2009, 16(2), 136-144.

SNLG-ISS.

Gravidanza fisiologica. Linea Guida 20

Roma: Ministero della Salute, Istituto Superiore di Sanità, Centro per la valutazione dell'efficacia dell'assistenza sanitaria; 2010.

Sistema di valutazione delle performance della sanità toscana

<http://performance.sssup.it/toscana/>

***Sistema di valutazione delle performance della sanità toscana per zone/
distretto***

<http://performance.sssup.it/zone/>

***Sistema di valutazione delle performance dei sistemi sanitari regionali
di Basilicata, Emilia-Romagna, Friuli Venezia Giulia, Liguria, Marche,
Toscana, Umbria e Veneto e P.A. Bolzano e P.A. Trento***

<http://performance.sssup.it/network/>

Il Percorso Nascita in Toscana: l'esperienza delle donne. Report 2012-2013

<http://www.meslab.sssup.it/it/index.php?page=report-mi-2013>

Regione Toscana - Gravidanza e nascita

<http://www.regione.toscana.it/cittadini/salute/gravidanza-e-nascita>

