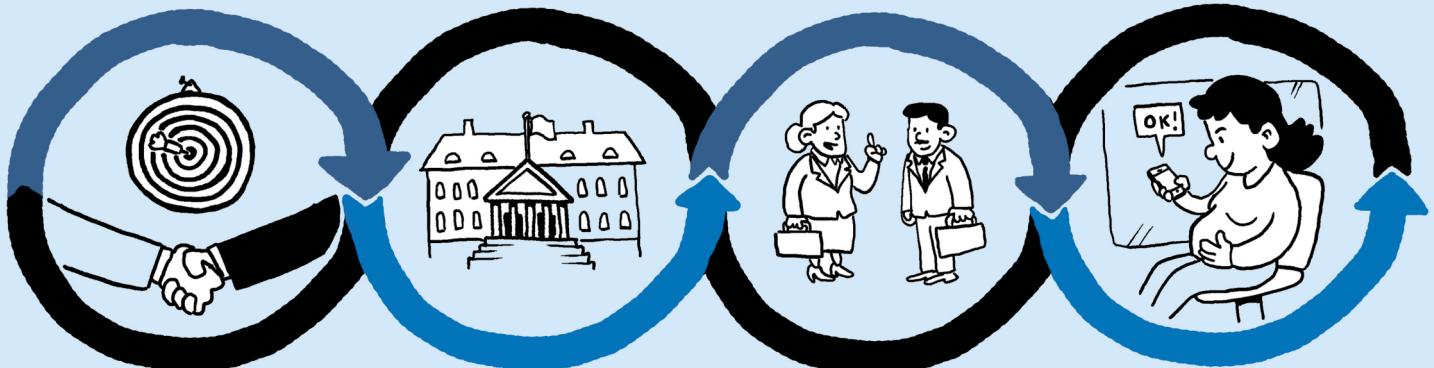


# DIGITAL MATERNITY CARDS

in the Nordic and Baltic countries



# Contents

Preface	3
<b>1 Introduction</b>	<b>5</b>
Reliability assessment	6
<b>2 Review of maternity cards in the Nordic countries</b>	<b>7</b>
2.1 General status and challenges	7
2.2 Situation in the Nordic countries	8
2.3 Summary and ideas for development	11
<b>3 Review of maternity cards in the Baltic countries</b>	<b>13</b>
3.1 Estonia	13
3.2 Latvia	16
3.3 Lithuania	18
3.4 Summary	21
<b>A References</b>	<b>23</b>
<b>B Attachments</b>	<b>24</b>
<b>About this publication</b>	<b>63</b>

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# Preface

During the Finnish presidency in 2021, a three-year project, Achieving the World's Smoothest Cross-Border Mobility and Daily Life Through Digitalisation was launched to promote the mobility of data. Focusing on the data exchange between authority organisations, the project aimed to make the needs of people's everyday lives the centre of attention. Focusing on data exchange across borders, co-operation in different sectors and between different authority organisations was built into the project structure.

The project produced a Baseline study of Cross-Border Data Exchange in the Nordic and Baltic countries in 2021, and later on a Handbook of Cross-Border Data exchange. In both of these publications, the use of health services in other Nordic or Baltic countries was raised as a topic to look into. Within this framework, the Finnish Institute for Health and Welfare in cooperation with the Norwegian Directorate of e-Health conducted a report on the status of maternity card development in the Nordic and Baltic countries. The aim of this report is to share knowledge between the Nordic and Baltic countries on the stages of development, each country's aims and the content of digital maternity cards.

As stated in the Handbook of Cross-Border Data Exchange Within the Nordic and Baltic Countries (TemaNord 2023:542), we would like to highlight one of the key results of the publication:

*From an equality standpoint, it is essential to ensure that the different user groups are accounted for and that they can access the kind of health data that is necessary for them. Gender equality is generated where ordinary decisions are made, resources are allocated, and norms are created.<sup>[1]</sup>*

In the case of developing cross-border health data exchange, the development of an electronic maternity card at the national level would enable and promote the mobility of women and families. Well-functioning national information systems are the starting point and foundations for further development as well as international co-operation. To ensure interoperability, the project has from its part aimed to share knowledge to overcome barriers in developing cross-border data exchange, and support actors in need of information to act on these barriers. Following the "Cross-border by default" principle, the international co-operation on online public services benefits from the dialogue between the developers of national infrastructures.

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1. <https://norden.diva-portal.org/smash/get/diva2:1283606/FULLTEXT01.pdf>

The current state of this report would not have been possible without the cooperation between the Nordic countries and the preliminary survey in 2022 on the Nordic countries done by the Norwegian Directorate of e-Health on the possibilities of developing the digital maternity card. Broadening the context to cover the status of Baltic countries, we hope that this study will act as a good starting point and inspiration in the Nordic-Baltic dialogue on digital maternity cards.



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# 1 Introduction

Digital maternity cards are being developed at the same time in many of the Nordic and Baltic countries. They are expected to aid in optimizing workflows, maximizing the value of clinical data, and connecting medical professionals. Currently, there is no cross-border agreement on developing the digital maternity card and its data models. Development is done separately in each country, and the utilization of international data standards varies. However, the EU allows the exchange of patient summaries and electronic prescriptions (ePrescriptions) and aims to have medical images, laboratory results and reports, and hospital discharge reports available across the EU<sup>[2]</sup>.

Based on these digitalization efforts, a common Nordic vision for developing digital maternity cards and its data models could ensure 'cross-border by default' to be considered in the development as well as possibly create cost savings in case the development teams benefit from the shared data and experiences. The cross-border digital maternity card strengthens the continuity of care, which includes both planned and unplanned care. Especially between the Nordic and Baltic countries, there is a large population of working-age cross-border commuters. Pregnant women cannot be excluded from this group, and it is an important aspect of ensuring gender equality. Based on the Nordic cooperation program on gender equality, it is stated that men's and women's equal access to care services and equal treatment in healthcare are important conditions for participating in the public and private spheres<sup>[3]</sup>. In addition to cross-border commuting, people in the Nordic and Baltic countries travel across borders for many other reasons, for example for services and family visits on both sides of the border.

The aim of the study is to share knowledge between the Nordic and Baltic countries on the stage of development, aims, and content of digital maternity cards. To achieve this, KPMG Finland interviewed Minna Maria Hernandez regarding the digital maternity card situation in the Nordic countries. Minna Maria Hernandez is a Norwegian official for the Directorate of e-Health. The Directorate of e-Health is a sub-institution of the Norwegian Ministry of Health and Care Services. The main responsibilities of the Directorate of e-Health include developing and implementing the national policy on e-Health as well as establishing standards and administrating the use of e-Health methodology nationwide.<sup>[4]</sup> The Directorate of e-Health conducted a preliminary survey in 2022 on the Nordic countries of the possibilities to develop a digital maternity card. The result of the survey was that it

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2. eHealth Network [eHealth Network \(europa.eu\)](#)

3. Nordic cooperation programme on gender equality [FULLTEXT01.pdf \(diva-portal.org\)](#)

4. Directorate of e-Health [English - ehelse](#)

might be possible to develop the digital maternity card. KPMG Finland broadened its understanding of the Norwegian survey by interviewing Minna Maria Hernandez, and on this basis, created a similar study in the Baltic countries. As a result, a broader comparison between Nordic and Baltic countries is possible. An important clarification in this regard is that KPMG Finland's purpose was not to survey the Nordic countries but to gather similar information on the Baltic countries as e-Health had gathered on the Nordic countries.

The overall core process of collecting pregnancy data in each Nordic and Baltic country is illustrated in Figure 1 below. The maternity card discussed in this paper refers to and contains information on the following steps: data about the prenatal period, data about birth, and data about the postnatal period. It is possible that other information on pregnancy is being collected, but the interest of this paper is focused on the core elements of the maternity card.



**Figure 1**

The results of the interviews are presented in this report, and the content is structured as follows. At first, KPMG presents the current situation in the Nordic countries based on the interview with Minna Maria Hernandez. Subsequently, the results of our own interviews in the Baltic countries are presented. Both of the main chapters contain summary sections comparing the countries covered. Attachment B.4 summarizes the most relevant information in a table, allowing a cross-comparison between the Nordic and Baltic countries.

## Reliability assessment

Before proceeding to a further review of the results, it is important to assess the reliability of this report. Firstly, the background information for the project (regarding Nordic countries and their state) was based on an interview with Minna Maria Hernandez, not on written records. Therefore, some of the background information may be incorrect and/or misunderstood. Secondly, the information collection process for the study was rapid. It included partly interviews and partly email conversations, and it was conducted in a foreign language (not the mother tongue of any of the participants). However, the reliability of the information was aimed to be improved by a comment period during which participants were given the opportunity to correct information that concerned them. The errors identified during the comment period were corrected in the final version of this report.

# **2 Review of maternity cards in the Nordic countries**

The Norwegian Directorate of e-Health is focusing on the development of a digital maternity card. E-Health has conducted a review in 2022 on maternity data sharing in the Nordic countries. The review included Norway, Sweden, Denmark, Finland, Iceland, and in addition, Germany and the Netherlands. Germany and the Netherlands were included because they have defined the data elements used in the digital maternity card. In this context, data elements refer to the components of a data model.

This chapter addresses the general status of maternity cards in the Nordic countries, discusses the challenges, and reviews ideas for future development. It also presents the country-specific current implementation of the maternity card. Attachment B.4 provides the overall results in a quick glanceable format, and more detail is given below. The Nordic survey will serve as a background to the report, while the main focus will be to carry out a similar survey in the Baltic countries. More on that in Chapter 3.

## **2.1 General status and challenges**

Overall, the content of the maternity card has remained largely unchanged for several decades. While minor updates may have been made to include additional data fields, the core structure has remained the same. The transition from paper to digital maternity cards is ongoing but still in its early stages in many countries. This leads to healthcare professionals finding themselves making double entries in various systems when using a paper and a digital maternity card in tandem. In addition, not all essential data from the paper-based maternity cards are seamlessly integrated into the medical record systems, resulting in data fragmentation and redundancy. One of the current, most fundamental challenges we identified was defining and standardizing the data elements for digital maternity cards. The interview revealed that implementing the digital maternity card requires changes in legislation. The use of the paper-based maternity card may also lead to the prevalent practice of consistently printing new lines on the maternity card to record various aspects of a patient's journey, such as outpatient clinic visits. As a result, multiple versions of the same paper maternity card are in circulation, further complicating data management. Compounding the issue is the fact that municipalities usually have the autonomy to select and use the systems they deem fit for their needs. Consequently, a multitude of different systems are in use, each catering to their own unique requirements.

Regarding data fragmentation and redundancy, one possible solution that emerged was providing clear written guidance outlining the necessary data elements nationally. Healthcare operators in the private sector also have their own interests in system investments, which may influence interoperability and compatibility. When developing cross-border data exchange, it is worth noting the European Interoperability Framework (EIF)<sup>[5]</sup>. It ensures legal, organizational, semantical, and technical aspects of interoperability. For example, concerning the legal environment, it was proposed that legislation should outline what can be stored in the national register. It is imperative that all the data requirements are enshrined in law before practical implementation can take place. Also, organizational interoperability takes into consideration the visualization of information. Currently, the data are presented differently in paper and digital form. The interoperability aspect should be considered through the visualization of data in a way that data exchange is compatible whether the exchange data are in paper or digital format.

All Nordic countries are collecting secondary data regarding maternity. When disparate systems do not seamlessly exchange data, midwives and other healthcare professionals must record the same information twice, leading to inefficiencies and potential errors. It also requires logging in to multiple systems, each housing fragments of the patient's data. This scattered approach to data management creates an undue workload and may impact the efficient delivery of maternal healthcare services. It appears that there is a need to streamline and integrate these systems to alleviate the burden on healthcare professionals, enhance the quality of care provided to expectant mothers, and enable the cross-border exchange of maternity data in the future.

## 2.2 Situation in the Nordic countries

This section describes in more detail the situation in each Nordic country according to the information received from e-Health. Based on the interview, we can describe the current format of the maternity card, the sharing of information between health professionals, and the situation regarding the national contact point. It is also important to note that our information is not absolute, so in reality, country-specific situations may differ from how this report presents them. This should therefore be taken as an indicative overview.

### Norway

Currently, in Norway, maternity care is operated using paper-based maternity cards. Norway has an expert organization, e-Helse, that sets the premises, guidelines, and standards for the maternity card so that the solution can be developed by others. There is an aspiration for digitizing the maternity card, but the

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5. European Interoperability Framework [eif\\_brochure\\_final.pdf.europa.eu](http://eif.brochure_final.pdf.europa.eu)

implementation has not yet been decided on the national level. Early studies and preparations have been made to identify the data elements to be included in the maternity card.

In Norway, data transfer between healthcare professionals is implemented using a nationally centralized database. The information included in this type of maternity card follows the national standard to some degree, although different healthcare organizations on the national level may also have their own guidelines regarding the data collected on maternity cards. Norway's centralized database is already in use for cross-border data exchange of medicines and prescription data. Overall, Norway strictly uses international standards for healthcare data, as it wants to be EU-compatible.

## Sweden

In Sweden, maternity monitoring is done through local municipal digital services. There are national recommendations on how to monitor pregnancy, but ultimately it is up to the municipalities to decide how to handle the monitoring. The maternity cards have essentially the same data content, but the information is stored on different systems. This means there is no centralized information system at the national level where pregnancy data can be viewed by the healthcare professional or the mother, and no standardized format for presenting the information. Therefore, information sharing between healthcare actors is poor. For example, if a mother in northern Sweden is treated in southern Sweden, she may not have access to information about the pregnancy. Sweden also lacks a paper record, but municipalities have their own websites for pregnancy monitoring that provide centralized information that can be monitored by the pregnant mother.

## Finland

In Finland, digital and paper-based maternity cards are used in parallel. THL (Finnish Institute for Health and Welfare) defined the data elements used in the maternity card in 2016. This includes the minimum data that must be on the maternity card and the minimum requirement for treatment at all stages of pregnancy. However, the digital maternity card was not implemented nationally in 2016 because it was not prioritized for government resources. Finland also has an IT system called Ipana, which covers a third of all births in Finland and where healthcare professionals and mothers can log in and see information related to maternity<sup>[6]</sup>. The appearance and content of the platform are similar for mothers and health professionals. In Ipana, there are also multiple information packages related to maternity, which are in line with THL's guidance. Ipana's popularity is due to the involvement of professionals in its development. Ipana itself is connected to Kanta through the main patient information system, but not directly.

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6. Ipana [Suosittu esitietopalvelu uudistui | Ipana äitiys](#)

Because the pregnancy information must be collected somewhere, the benefits of the paper card are mainly for those without ID and those who do not speak any of the languages spoken in Finland. (The Kanta system requires a Finnish personal identification number and strong identification.) There are also mothers who do not give consent to the transfer of data based on the GDPR and some who do not want to use e-services in general. Under the GDPR, mothers can also opt out of digital maternity recording in the middle of the pregnancy and continue only with a paper card, in which case the pre-collected data is anonymized but retained. On the other hand, sometimes mothers may want a paper card because they don't want their data to be seen by a familiar healthcare professional (in small villages, for example).

## **Denmark**

Denmark uses paper-based maternity cards and has a national standard for pregnancy monitoring. They also have a country-specific centralized information system that brings together data from different regions. The digital maternity card has been tested as a project in one hospital and its surrounding municipalities. The system worked in such a way that the mother herself could log in and check her own data, and the hospital/neighbouring municipalities used the same system. However, the digital maternity card caused some duplicate entries and additional work (e.g. logging in to several systems), which left healthcare professionals unsatisfied. Professionals in Denmark highlighted the need for an all-in system, so that there is no situation where some of the data comes on paper and the rest within the system. However, mothers were pleased with the experiment, as they could follow their pregnancy in digital form.

## **Iceland**

Iceland is the only Nordic country to fully implement the digital maternity card. They have an integrated electronic health record system where both the pregnant woman and the healthcare professional see mostly the same information in the digital maternity card. The exception is a dedicated feature where the midwife can enter extra-sensitive information in the system, such as when there is suspected or confirmed domestic violence that is not shared in the patient portal. Information sharing between healthcare professionals is in a good state. For example, if a pregnant mother gets into an accident, the healthcare professional who comes to provide help sees a notification in the shared electronic health record about the pregnancy and will be able to access all relevant information needed about the pregnancy due to nationally interconnected electronic health records. Moreover, the real-time data flow is to the National Birth Registry for secondary data usage on the national level. Iceland's interconnected health information system could serve as a point of contact for a possible cross-border data exchange in the future.

## **Germany and the Netherlands**

Germany and the Netherlands are included in this report because they have already defined the data elements of the digital maternity card and, at least in the case of the Netherlands, have tested it in practice.

In Germany, they use a paper maternity card and have predefined all its data elements. The data elements are reasonably consistent with Norway, and developers can access the data elements online. In addition to the paper maternity card, there exists a first draft of the digital version, which has not yet been adopted by anyone. There is a strong desire to digitalize the maternity card, but for the time being, the paper card is still in use. The situation in the Netherlands is very similar to that in Germany, i.e. the data elements have been defined and are available for use by developers. A special characteristic of the Netherlands is that the mother and fetus are considered to be separate individuals, which may make it difficult to transfer maternity data between countries in the future.

## **2.3 Summary and ideas for development**

In summary, pregnancy monitoring and the flow of information between healthcare professionals in the Nordic countries are generally in a good state. The Nordic countries also often have a national contact point that could possibly be used for information exchange in the future. In addition, no clear barriers to further development of the digital maternity card were identified. Iceland seems to be the most advanced of the Nordic countries in the digitalization of the maternity card, while Sweden seems to have the most room for development when it comes to enabling the digital maternity card in the future. A summary table for comparison can be found in attachment B.4.

We will now go through the development ideas for the digital maternity card identified through the interview. Regarding the defining of data elements, comprehensive documentation and guidance on how to structure all text fields and employ the appropriate code language was seen as essential. This step could ensure uniformity and consistency in the data recorded, facilitating seamless integration and analysis. In addition, one fundamental principle that emerged was the idea that maternity card projects should be designed to be cross-border by default. This would better ensure that the digital maternity card can function effectively across different regions and also across borders, enabling expectant mothers and healthcare professionals to access comprehensive and coherent healthcare information seamlessly. The existence of a central system for health data at the national level is important, as it serves as an enabler for cross-border data exchange. Central system for health data refers to a system into which healthcare information flows from other, possibly locally used, information systems. The national contact point could later serve as a platform for international maternity data transfer.

Another possible consideration is the need for a universal version of the paper maternity card. By modifying the paper versions used in different countries, universal data elements could make it easier to reconcile the data elements of internationally operating healthcare systems. In addition, it is worth noting that all countries developing their electronic maternity cards are using their own language or other official languages of the country. When developing a cross-border data exchange, it could be feasible to use commonly understood language to enhance interoperability.

# 3 Review of maternity cards in the Baltic countries

KPMG Finland arranged interviews with healthcare representatives from each Baltic country – Estonia, Latvia, and Lithuania – to find out the status of pregnancy care and maternity cards in these countries. The focus of the interviews was specifically on the overall responsibility of pregnancy care, the pregnancy data collection and recording procedures, the extent of digitalization of the maternity cards, and the kind of standards in place regarding pregnancy care. In addition, some challenges to cross-border pregnancy data exchange were discussed. The results from the interviews are presented in the following chapters. For more information on the dates of the interviews and the people involved, see [attachment B.1](#). A summary of the status of pregnancy care in the participating countries is provided in table format in [attachment B.4](#). The specific contents included in maternity cards used in the Baltic countries are provided as [attachment B.5](#).

## 3.1 Estonia

### Overall responsibility of pregnancy care

The Health and Wellbeing Information System Center ('TEHIK') is the authority that manages all health data procedures and development in Estonia. TEHIK is also responsible for managing the central health information system for pregnancy data collection. TEHIK manages the development of health data in accordance with the requirements and guidelines issued by the Ministry of Social Affairs. In addition, TEHIK is responsible for informing all the healthcare providers in the country about these laws and demands set by the Ministry.

At the moment, the overall responsibility of pregnancy care is on the local healthcare providers. The healthcare provider that first confirms the pregnancy usually starts the pregnancy care process and takes responsibility for the whole process until birth. A normal pregnancy can be supervised by a family doctor and nurse or most often by a midwife in a maternity hospital. Other healthcare providers, such as an obstetrician, get involved in the process if complications occur. Regular monitoring and tracking of a pregnancy consist of three to five meetings during the pregnancy. However, Estonia is currently rebuilding their entire health information system, which is why the organization of pregnancy care is likely to change in the country in the following years.

## Pregnancy data collection and recording practices

For the collection and recording of pregnancy data, there are national guidelines in place that guide the actions of local healthcare providers in the country. The pregnancy monitoring guidelines were written about 15 years ago. In addition, Estonian law requires that every healthcare service must be documented. There are specific rules on what kind of data healthcare providers should record at the reception and that the data should be recorded digitally in the systems. However, since the rules were defined before digital documentation, today's actual clinical practice may not always be in line with the rules of pregnancy data collection. Thus, there can be variations in the data collection and recording practices between establishments, as some healthcare providers might still record some of the data manually and in their own way. Note that Estonia has recently hired a person to take on the challenge of digitalizing pregnancy and birth data. The first results of this are expected by the end of 2024.

In summary, the data is stored in the establishment's own local information system, on paper cards held locally, and, to some extent, in the central information system. This means that the data gathered during pregnancy is fragmented in the country, as it may exist only in specific local information systems or establishments or on paper. The most important pregnancy data, like birth information, patient summaries, and medical prescriptions, are recorded in the central information system. Usually, at least some kind of summary ends up digitalized also in local information systems, but this information is not structured or machine-readable. During birth, some data gets documented on paper, and some establishments have a fillable form that is digitalized and stored in the local information system.

Even though the pregnancy data collection and recording process varies between healthcare providers, the overall process is digital, as many of the local healthcare providers record pregnancy data in digital format in the local information systems. Shared data is sent to the central health information system via X-road. X-road connects all central databases and medical establishments in Estonia. Data that are made available on the central information system is available to all parties, including the patient, unless the patient has prohibited access to their patient portal. Data are of varying quality, even though there are some standards in place. Data is mostly document-based and not structured or machine-readable. According to the interview, audits say that important information about the birth process and pregnancy is missing.

## Extent of digitalization of the maternity card

In Estonia, some hospitals have digitized the pregnancy care process to a fairly large extent, while others do it more manually. Both the paper and digital versions of the maternity card are in place. For the pregnant woman, the paper version of the maternity card is the main source of information; it includes detailed data on

her pregnancy. Pregnant women can also access their pregnancy data via the patient portal of the central information system, where the data is more general.

There are some variations in the presentation of data structures and data contents between the paper and digital versions of the maternity cards. Even though TEHIK and the Ministry of Social Affairs give guidelines on what kind of data to collect in the pregnancy care process, there are no uniform data definitions for the data in question. Thus, local solutions for data collection and recording can emerge, as local operators emphasize some pregnancy data that others do not. It was noted in the interview that the data elements of the maternity cards may change during the digitalization process, but they will still be in line with WHO standards.

## **Standards**

Regarding the use of standards on pregnancy care, there are several international standards in use in Estonia. For example, ICD-10 and HL7 CDA. Some hospitals have a few SNOMED CT elements. Estonia is moving towards utilizing HL7 FHIR and SNOMED CT more widely in the future. In addition to these, the European Patient Summary is in use in pregnancy care. The systems are based on Nictiz systems, but there is no direct cooperation between the authorities at Nictiz and Estonia. WHO guidelines are also in use regarding pregnancy care, and the contents of the maternity cards are largely based on these standards. The standards mentioned in these chapters are presented in more detail in attachment B2 of the report.

## **Challenges related to cross-border data exchange**

Currently, there is no interoperability for cross-border pregnancy data exchange in Estonia, even though the national contact point or centralized information system is in place. The transmission of data across borders is still in its infancy, and mainly medical prescriptions and patient summaries can be sent across borders. However, the tools for cross-border data transfers are available. In addition, there is a clear will in Estonia to increase data exchange in this area in the coming years.

According to the interview, time and organizational issues are seen as the main challenges in enabling data exchange across borders. The pregnancy data first needs to be in a structured format at all establishments. Also, the data must be transferred from local establishments to the central health information system before there can be data transfers across borders.

## **3.2 Latvia**

### **Overall responsibility for pregnancy care**

There is national-level regulation in place regarding pregnancy care in Latvia. The National Health Service (NHS) works in close cooperation with healthcare providers regarding pregnancy care, and every healthcare provider uses the same information related to pregnancy care. The NHS is a direct administrative institution under the Latvian Ministry of Health. The responsibilities of NHS include implementing state policies for planning and the availability of healthcare services for pregnant women as well as implementing the eHealth program according to the policy decided by the state. In addition, the NHS is producing some statistics related to pregnancy care, which is paid for by the government.

Pregnancy care and monitoring are carried out by specialists who have a contract with the NHS. Thus, the overall responsibility and practical implementation of the whole pregnancy care process is on healthcare providers like gynaecologists, family doctors or practitioners, or midwives. Pregnancy monitoring, including consultations with a physician and midwife, laboratory, and diagnostic investigations during certain weeks of the pregnancy, are funded from the state budget.

### **Pregnancy data collection and recording practices**

The collection and recording practices of pregnancy data are mainly manual in Latvia. There is a central health information system that collects data about the performed examinations and visits, but not about the results of the examinations and the progress of the pregnancy. Hospitals have their own digital platforms and databases, which are not connected to other hospitals. Due to this, pregnancy data is very location-based and fragmented. Even though the data collection and recording process is mainly manual, there is an eHealth platform in place, where some parts of the pregnancy data can be recorded in digital format. For example, ultrasound is included in this platform. However, its use is not mandatory for healthcare providers. There are also some kind of fee-based private data portals or platforms available to hospitals and clinics. The data portals can be used mainly for sharing specific laboratory tests nationally, and this way, the data about laboratory results can also be made available to other hospitals and clinics. For example, the results of blood tests, urine tests, and infection tests can be stored in private portals. In addition, some specific examinations made during the pregnancy period can be stored there. The use of these private platforms is not mandatory either.

As pregnancy-related data is not necessarily shared in the eHealth platform or private data portals, there is potential for making duplicate tests when pregnant women visit different healthcare providers. However, healthcare professionals are responsible for pregnancy care and they keep documents on important things like medical prescriptions and patient summaries regarding the pregnancy. Some

hospitals and clinics with large databases might share data with the Centre for Disease Prevention and Control (ECDC) from their own databases. It was noted in the interview that there is no data available on pregnant women who only use the private sector for pregnancy care. In addition, pregnant women who are not Latvian citizens, non-citizens, foreigners with a permanent residence permit in Latvia, stateless persons who have been granted stateless status in Latvia, refugees or persons who have been granted alternative status, and asylum seekers must use only the private sector for pregnancy care, so no information is recorded even if they have a maternity passport.

### **Extent of digitalization of the maternity card**

There are two types of cards used for pregnancy data in Latvia, which are both paper versions. Pregnancy data is recorded on the maternity card by the healthcare professionals as well as on a maternal passport held by a pregnant woman. Healthcare professionals use the maternity card for tracking the progress of the pregnancy; it is the main tool for data exchange between healthcare providers. The card is usually in the possession of the responsible healthcare provider. The pregnant woman has her own maternal passport, which contains data about her pregnancy in detail. The maternity card and maternal passport are regulated in the same way, so the documents are similar in their form and data contents. During the delivery or birth in the hospital, a third card is created regarding the delivery. This card includes descriptions of the phases in the hospital during and after the birth. Patients will also get a version of this card at their home after the delivery, where the data contents of the card are provided very shortly and on a high level.

According to the interview, the transition towards digital maternity cards in Latvia is difficult because each hospital uses its own platforms, databases, and information systems for pregnancy data collection and recording. Thus, the IT systems are very different between healthcare providers, and they are not easily connected to the possible national centralized information system. It was noted during the interview that if a digital version of the maternity card is published in the future, it will probably resemble the paper version in terms of data content and data structures.

### **Standards**

In Latvia, they have standardized national-level regulations that set out procedures and guidelines for the minimum standard of care. Although they are not directly based on any international document, they are based on internationally recognized guidelines. The data collection and storing process is done according to the GDPR. Also, several tests like blood tests must be performed according to certain codes. It was noted in the interview that Latvia is planning to start using the NOMESCO codes regarding pregnancy care next year. These standardized code sets are used for classifying medical procedures, diagnoses, and interventions, which are utilized primarily in the Nordic countries.

## **Challenges related to cross-border data exchange**

According to the interviews, the most difficult challenges in cross-border data exchange are organizational and technical in nature, as well as resource constraints. Due to these aspects, the digitalization of the pregnancy care process is very slow. For example, there is a need for a national contact point for cross-border data exchange in Latvia. To make this possible, data transfers from local hospitals need to be organized in such a way that at least the most important data on pregnancy care are transferred to a central health information system. As every hospital is using its own digital platforms and IT systems, there is a need for integrators.

## **3.3 Lithuania**

### **Overall responsibility of pregnancy care**

There is national regulation in place regarding pregnancy care in Lithuania. The Ministry of Health makes legal acts regarding procedures and policies of pregnancy care services in the country. Pregnancy care is organized on three levels –primary, secondary, and tertiary. Primary-level services include pregnancy care services, where for example family doctors and gynaecologists are involved in the process. Secondary-level or tertiary-level services are provided for pregnant women when there are high-risk factors related to the pregnancy. In these cases, obstetrician-gynaecologists and other specialists are involved in the process. There is also a special protocol for special cases in which the family doctor can ask for support from specialized doctors. However, hospitals have the overall responsibility of pregnancy care in the country. Family doctors or gynaecologists support the hospitals in taking responsibility for pregnancy care and providing services for pregnant women. Also, some special institutions collect data related to pregnancy care and births and provide statistics and analysis of the status of pregnancy care in the country.

### **Pregnancy data collection and recording practices**

In Lithuania, there is a national eHealth information system that stores the medical records of each resident (patient) and also allows integrating data from all internal information systems of the healthcare institution into a unified system. Such integration allows for the creation, storage, and transfer of EHRs. This system stores different types of records, for example, prescriptions and outpatient visits of the pregnant woman. Specialists, like family doctors, can use national portals and eHealth records in which data about pregnancy is collected. By accessing these national portals, specialists do not necessarily have to have access to internal data. Although most hospital information systems are linked to the national eHealth

information system, some data can only be found at certain hospitals, making pregnancy information unavailable to all parties in all situations. However, family doctors should always have access to inpatient/outpatient visits, referrals, prescriptions, vaccinations, and birth/death certificates. In case the family doctors need to have access to pregnancy period-related data, they can also receive electronic reports that include data about the progress of a pregnancy.

In terms of collecting and recording pregnancy data, there are national guidelines in place that guide what data related to pregnancy, maternity, and childbirth should be collected in the records. Thus, certain hospitals may have different data collection and recording structures, and the data held in these hospitals may be more extensive than in the centralized national information system. Pregnancy care-related data is collected as pregnant women visit hospitals or other healthcare providers, and most data is recorded digitally in local hospitals' information systems. The data collected during the visit include special types of data that describe the pregnancy case and data about who filed the forms during the period. References to status reports are also included in the systems.

It was noted during the interview that the centralized national information system is big and well-structured. In addition, the availability of pregnancy data should be ensured, as the patient has the right to ask for their records about the pregnancy at any time, and hospitals should be able to deliver the records to patients. There can sometimes be technical issues that prevent this.

### **Extent of digitalization of the maternity card**

The maternity card used in Lithuania has been digitalized since 2015. In 2015, several healthcare service providers started to use the system to share maternity card data. Data sharing was created for healthcare specialists; patient access to this maternity card information was not developed. The starting point for developing a digital maternity card was paper-based maternity cards, which are still in place. The paper-based maternity cards include data about the visits of a patient during the pregnancy period.

Today, Lithuania has a national eHealth system where different types of eHealth records are stored, such as inpatient/outpatient visits, referrals, prescriptions, vaccinations, and birth/death certificates. All healthcare providers are connected to this system and use it to record and share patient eHealth records. Between 2023 and 2024, a project is underway to integrate the current national maternity card system. This will allow patients and health professionals to access maternity card data.

Currently, the maternity card is the main source of information for the pregnant woman. The card has been described by pregnancy care specialists. The maternity card includes a pregnancy care plan, contact information, high-risk pregnancy factors, urine and blood tests, medical history (like infections), vaccinations,

domestic violence, work-life data, data in the outpatient clinic during pregnancy, and ultrasounds. Each visit is presented in different sections on the maternity card. The data contents of the original paper card and the digital version of the maternity card are largely the same.

## **Standards**

There are national-level eHealth record data sets in place for collecting data on the pregnancy period, birth, and childcare. International standards are also in use, for example, SNOMED CT, ICD-10, HL7 FHIR, and ATC. For laboratory results, the LOINC standard is used.

Lithuania aims at making the national eHealth information system more interoperable with other European countries' eHealth systems. This could be achieved by using internationally used data coding standards. Lithuania has a national contact point for eHealth services and is in the process of implementing cross-boarding services for ePrescription and ePatient summary services.

## **Challenges related to cross-border data exchange**

According to the interview, there are many technical, legal, and organizational challenges regarding cross-border data exchange in Lithuania. The exchange of data abroad poses technical challenges for information systems and the national contact point. The implementation of cross-border data exchange is not easy because the European eHealth record exchange format differs from the data set used in the national eHealth environment, and this sets challenges for countries. One technical challenge that was noted in the interview was related to providing translations for data classification tables in the healthcare information systems. There are also some legal aspects to consider when making all or just some ePrescriptions when travelling abroad. Also, questions regarding what patients should expect from visits to foreign hospitals regarding pregnancy care as well as questions about how patients can have access to their pregnancy data abroad should be solved.

Even though some challenges were identified regarding the implementation of cross-border data exchange, Lithuania shows interest in increasing the data exchange of pregnancy data in the coming years. According to the interview, countries that are participating in the cross-border data exchange regarding pregnancy data need support and extensive resources for its implementation, as there is no comprehensive base and experience of large-scale data exchange between the Nordic and Baltic countries.

### **3.4 Summary**

The digitalization of maternity cards in the Baltic countries seems to be in different states. In Estonia, both the paper version and digital version of the maternity cards are in use. Latvia lags behind other Baltic countries in the digitalization of maternity cards, with most pregnancy data collected and stored manually in paper versions of the cards. Lithuania, on the other hand, is the most advanced, as the cards have been digitalized since 2015. All the Baltic countries have a centralized authority that is responsible for managing pregnancy data-related procedures and policies. In addition, local pregnancy care providers, like family doctors, nurses, and midwives, have overall responsibility for pregnancy care in these countries. Note that Estonia and Lithuania have centralized information systems in place that act as national contact points for cross-border data exchange. Latvia has not yet established a centralized information system for pregnancy data.

There are national-level guidelines in place regarding the collection and recording of pregnancy data in the Baltic countries. There are also variations in the local establishments regarding the collection and recording practices of pregnancy data in each of the countries. In Estonia, for example, some of the data is recorded in local hospitals' information systems, paper and digital versions of maternity cards, and some data is transferred to a centralized information system. Pregnancy data is usually quite fragmented in the countries, as it can be recorded for some specific establishments or on the paper versions of the maternity cards. In addition, there are no uniform data definitions for the data to be recorded in these countries. Thus, data is mostly document-based and not structured and machine-readable.

The exchange of pregnancy data across borders is still in its infancy in the Baltic countries. Mainly medical prescriptions and patient summaries can be sent across borders. The possible tools for wider cross-border data exchange are available in Estonia and Lithuania, and there is a clear willingness to increase the data exchange in this area in the coming years. In Latvia, the transition towards cross-border data exchange and digital maternity cards is more challenging because there is no national contact point in place. In each country, local establishments and hospitals are using their own platforms, databases, and information systems for pregnancy data collection and recording, which are not always connected to the central information systems of the countries. Estonia is the most advanced in using international standards for pregnancy care, while Latvia and Lithuania are mainly using national-level standards. However, the Baltic countries intend to utilize more international-level standards.

The main challenges regarding the cross-border exchange of pregnancy data are mostly time and resource-related and technical and organizational in nature. It was noted that the implementation of cross-border data exchange will not be easy because many countries can have different versions of patient summaries, for example, and the migration of these summaries sets challenges for countries. According to the interviews, the key to enabling cross-border data exchange is to

ensure that there is a national-level information system in place in each of the countries and that local information systems are connected to the central information system. At least the most important data, like patient summaries and medical prescriptions, should be recorded in the central information systems. In addition, pregnancy data should be structured and uniform, which would enable the cross-border exchange of pregnancy data.

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# B Attachments

## B.1 Interviews with Baltic countries

**Estonia** 19.10.2023

- Product Lead Patrick Pihelgas from Estonian Health Insurance Fund Tervisekassa

**Latvia** 20.10.2023

- Deputy Director Anete Baskevica from the Department of Medical Services in the National Health Service of Latvia
- Director of Department Alda Reinika from the Department of Medical Services in the National Health Service of Latvia.

**Lithuania** 31.10.2023

- Senior Legal Adviser Linas Kavolius from the Health System Information Resources Development Division in the Ministry of Health of Lithuania.
- Advisor Greta Makauskaite from the Health System Information Resources Development Division in the Ministry of Health of Lithuania.
- Advisor Simona Griciena from the Health System Information Resources Development Division in the Ministry of Health of Lithuania.

## B.2 Interview questions

What kinds of policies do you have for collecting and recording the progress of a pregnancy?

- Who has overall responsibility regarding pregnancy care in your country, and how is pregnancy care organized?
- To what extent is the process digital or manual?

What kind of information is gathered at the reception of the clinic/polyclinic/hospital?

- To what extent is this digital or manual?
- Where is the information during the pregnancy recorded? What about information related to birth in the hospital?

How is information transferred between clinics and hospitals or other actors in the care chain within the country?

How is the stored information available to different actors in the care chain (clinic, hospital, others)? Is the information consistent, and how is it expressed/what is consistent?

Standards, semantic interoperability

- What guidelines/recommendations do you have in place at the national level?
- Do you use any international standards? If yes, which?
- What are the data elements and the data model?

Do these differ from international standards?

- Medizinische Informationsobjekte (MIO) and Nictiz (services in Germany and the Netherlands that develop and maintain standards for digital information in healthcare)
- WHO guideline, semantic HL7, SNOMED, IPS (International Patient Summary)

Technical interoperability

- Cross-border data exchange requires a central national contact point. Is there a central database in the country for storing client and patient data through which information could be transmitted across national borders?

Do you see any particular obstacles or challenges to the development of cross-border information exchange in this area? E.g. legal, organizational

## B.3 Definitions of standards

### **ICD-10 (International Classification of Diseases, Tenth Revision):**

The International Classification of Diseases (ICD) is designed to promote international comparability in the collection, processing, classification, and presentation of mortality statistics. This includes providing a format for reporting causes of death on the death certificate. The reported conditions are then translated into medical codes through the use of the classification structure and the selection and modification rules contained in the applicable revision of the ICD, published by the World Health Organization (WHO). These coding rules improve the usefulness of mortality statistics by giving preference to certain categories, by consolidating conditions, and by systematically selecting a single cause of death from a reported sequence of conditions. The single selected cause for tabulation is called the underlying cause of death, and the other reported causes are the

non-underlying causes of death. The combination of underlying and non-underlying causes is the multiple causes of death.<sup>[7]</sup>

### **HL7 CDA (Clinical Document Architecture):**

The Clinical Document Architecture (CDA) Release 2 standard provides an exchange model for clinical documents (such as discharge summaries and progress notes) and brings the healthcare industry closer to the realization of an electronic medical record. By leveraging the use of XML, the HL7 V3 Reference Information Model (RIM) and coded vocabularies, CDA makes documents both machine-readable (so they are easily parsed and processed electronically) and human-readable (so they can be easily retrieved and used by the people who need them).<sup>[8]</sup>

### **HL7 FHIR (Fast Healthcare Interoperability Resources):**

HL7 FHIR is a next-generation interoperability standard created by the standards development organization Health Level 7. FHIR is designed to enable health data, including clinical and administrative data, to be quickly and efficiently exchanged. The philosophy behind FHIR is to create a set of resources that, individually or in combination, satisfy the most common use cases. The Patient Resource, for example, includes demographic data related to a patient, such as their name, address, and phone number. Resources also improve granular data retrieval so that a request returns just the relevant data rather than a full record or document that itself must then be searched.<sup>[9]</sup>

### **SNOMED CT (Systematized Nomenclature of Medicine Clinical Terms):**

SNOMED CT is an international terminology for structuring information generated in healthcare. SNOMED CT is used for data retrieval, statistical use of data, and data transfer between different information systems. The terminology includes concepts and terms used in medicine, nursing, service organization and patient management descriptions of hierarchies between concepts. The glossary is maintained by SNOMED International, an international standardization organization for healthcare terms.<sup>[10]</sup>

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7. National Center for Health Statistics. International Classification of Diseases, Tenth Revision (ICD-10). <https://www.cdc.gov/nchs/icd/icd10.htm>.
  8. Health Level 7. CDA – Clinical Document Architecture. <https://www.hl7.org.uk/standards/hl7-standards/cda-clinical-document-architecture/>.
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  10. Terveyden ja hyvinvoinnin laitos. SNOMED CT. <https://thl.fi/fi/web/tiedonhallinta-sosiaali-ja-terveysalalla/koodistopalvelu/snomed-ct>.

## **European Patient Summary (EPS):**

The European Patient Summary (EPS) guideline specifies a minimal data set of essential and important information for unplanned or emergency care initially defined in the epSOS project with the aim of improving patient safety and quality of care. The eHealth Network of European Union (EU) Member State (MS) representatives established under Article 14 of the EU directive 2011/24 on patient rights to cross-border healthcare adopted the PS guideline in November 2013. Since then, the guideline has been part of MS strategic eHealth implementation plans, standardization efforts, and concrete regional, national, European, and international projects.<sup>[11]</sup>

## **IPS: International Patient Summary**

The International Patient Summary is a minimal and non-exhaustive set of basic clinical data of a patient, specialty-agnostic, condition-independent, but readily usable by all clinicians for unscheduled (cross-border) patient care. This summarized version of the patient's clinical data gives health professionals the essential information they need to provide care in case of an unexpected or unscheduled medical situation (e.g. an emergency or accident). While this data is mainly intended to aid health professionals in providing unscheduled care, it can also be used to provide planned medical care, e.g. in the case of citizen movements or cross-organizational care paths, or even as a crystallization point for health records.<sup>[12]</sup>

## **Nictiz:**

Nictiz is the competence centre for digital information management in healthcare in the Netherlands. Nictiz develops and maintains standards for digital information management, ensuring that healthcare information can be recorded and exchanged unambiguously. In addition, Nictiz has an advisory function that shares knowledge about digital information management in healthcare, focusing not only on the Netherlands but also on international developments.<sup>[13]</sup>

## **NOMESCO (Nordic Medico-Statistical Committee) codes:**

The NOMESCO consists of 15 main chapters of surgical procedures arranged according to the functional-anatomic body system, four subsidiary chapters containing therapeutic and investigative procedures associated with surgery, and one supplementary chapter. The procedure codes of the main and subsidiary

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11. National Library of Medicine: National Center for Biotechnology Information. European Patient Summary Guideline: Focus on Greece. <https://pubmed.ncbi.nlm.nih.gov/27225544/>.  
12. The International Patient Summary: Standards and Specifications. <https://international-patient-summary.net/>.  
13. Nictiz: About Nictiz. <https://nictiz.nl/about-nictiz/>.

chapters are basic procedure codes, each assigned as a unique identifier to a uniquely defined procedure. The basic procedure codes include and represent all accepted surgical procedures and constitute the only complete and independent procedure codes.<sup>[14]</sup>

## B.4 Comparison table for the Nordic and Baltic countries

The table is divided into three main categories: a national solution for pregnancy data collection, the country's technical capacity for cross-border data exchange, and other issues. The information in the table regarding the international standards in use is not complete. It is therefore possible that a certain country uses a standard that is not indicated in the table. The sub-headings are explained below.

**National solution for pregnancy data collection** = Are there uniform and mandatory guidelines at the national level on how to monitor pregnancy?

**Is information transferred between healthcare actors at the national level?** = Is information about pregnancy transferred between hospitals or health centres across the country?

**Maternity card form** = Whether the maternity card is mainly digital or in paper format. In some cases, both may be in use. In Finland, for example, a digital maternity card may be used locally but not nationally.

**Are there national and/or international standards in use?** = Are any national or international standards being followed, and if so, what are they? Related to this, our information on the Nordic countries is not absolute.

**Is there a national contact point or database?** = Is there a centralized national health information system? (This does not mean that all the data on the maternity card will be transferred to this information system.)

**Other issues** = Other findings related to potential challenges for the digital maternity card and cross-border data exchange.

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14. Nordic Health and Welfare Statistics. NCSP - Classification of Surgical Procedures. <https://nhwstat.org/publications/ncsp-classification-surgical-procedures>.

	Norway	Sweden	Finland	Denmark	Iceland	Estonia	Latvia	Lithuania
National solution for pregnancy data collection	Are there national guidelines for pregnancy monitoring?	Yes	No	Yes	Yes	Yes	Yes	Yes
	Is information transferred between healthcare actors at national level?	Yes	No	Yes	Yes	Yes (to some extent)	No	Yes (to some extent)
	Maternity card form	Paper	Digital	Digital/Paper	Paper	Digital	Paper	Digital
	Are there national and/or international standards in use?	Some degree of international standards in use (WHO), willingness to comply with the international standards.	Same data at national level, but no harmonised format for presenting the data. Follows at least WHO's standard.	THL has defined the data content of the maternity card in 2018 that complies with WHO standard.	Complies at least with the national standard, no absolute certainty about international standards	Iceland is using international standards for the maternity card, such as ICD-10 codes as well as national codes.	HL7, SNOMED and WHO standards in use to some extent, even more international standards planned to be used in the future.	Standardized national level regulations, which set out procedures and guidelines for a minimum standard of care. Although they are not directly based on any international document, they are based on internationally recognized guidelines.
	WHO	x	x	x		x		
	HL7					x		x
	SNOMED				x	x		x
	IPS							x

The country's technical capacity for cross-border data exchange	Is there a national contact point or database?	Yes	No	Yes	Yes	Yes	Yes	No	Yes
Other issues	E.g. legal and organisational findings or barriers to cross-border data exchange, e.g., for medicines and prescription data. Norway is careful to use international standards, as it wants to be EU-compatible.	A centralized database is already in place for cross-border data exchange, e.g., for medicines and prescription data. Norway is careful to use international standards, as it wants to be EU-compatible.	Emergency baptism is in use in Finland, which is not known in other Nordic countries	Healthcare professionals not happy with the pilot of the electronic maternity card, as it caused double entries.	Challenges are seen in the defining of data elements (which has not yet been done), time, and the willingness of organisations to change. There is a readiness for change at the idea level, but not necessarily a readiness to take concrete action.	The hardest barrier to transition is the IT arrangements and the resources needed for this on behalf of the Government.	There are not enough resources, so the transition is slow.	The key challenges regarding the interoperability aspect are organizational, legal and technical in nature, e.g., migration of patient summaries with other countries.	

## B.5 Contents of the maternity cards in the Baltic countries

### B.5.1 Estonia

<b>1. Naise isikuandmed</b>	2.9.1. Tänav	<b>5. Verepreparaatide</b>	10.2. Pikkus (cm)
1.1. Eesnimi	2.9.2. Maja	<b>Ülekanne</b>	10.3. Kaal enne rasedust
1.2. Perekonnanimi	2.9.3. Postikood	5.1. Ei	(kg)
1.3. Isikukood	2.9.4. Linn/vald	5.2. Jah	10.4. Kehamassiindeks
1.4. Sünniaeg (pp.kk.aaaa)	2.9.5. Maakond	5.2.1. Ülekande järgsed	(KMI)
1.5. Vanus	2.9.6. Riik	reaktsioonid	10.5. Viimase
1.6. Sugu	2.10. Töökohaandmed	(vabatekstiväli)	menstruatsiooni algus
1.6.1. Mees	2.11. Asutus		10.5.1. Kuupäev
1.6.2. Naine	2.12. Ametikoht		(pp.kk.aaaa)
1.7. Rahvus <sup>[15]</sup>		<b>6. Analüüs</b>	10.5.2. Sünnituse oletatav
1.8. Perekonnaseis <sup>[16]</sup>	<b>3. Tervisekäitumine</b>	6.1. Analüüsni nimetus	tähtaeg menstruatsiooni
1.9. Haridus <sup>[17]</sup>	3.1. Naine	6.2. Referentsväärus	järgi (pp.kk.aaaa)
1.10. Tavategevusal	3.1.1. Suitsetab	6.3. Kuupäev (pp.kk.aaaa)	10.6. Kuupäev
1.11. Tegelik elukoht	3.1.1.1. Ei	6.4. Tulemus (1 või enam	(pp.kk.aaaa)
1.11.1. Tänav	3.1.1.2. Jah		10.6.1. Kunstlik
1.11.2. Maja	3.1.1.2.1. Mitu sigaretti		viljastamine (IUI)
1.11.3. Postikood	päevas (tk)		10.6.2. Kehaväline
1.11.4. Linn/vald	3.1.1.2.2. Passiivne		viljastamine (IVF)
1.11.5. Maakond	suitsetamine		10.6.3. Külmutatud
1.11.6. Riik	3.1.1.3. Lõpetas I trimestril		embrüo siirdamine (KES)
1.12. Kontaktandmed	3.1.2. Alkoholi liigtarbimine		10.7. Raseduse suurus
1.12.1. Telefoninumber	3.1.2.1. Ei		ultraheliuuringu (UHD)
1.12.2.	3.1.2.2. Jah		järgi (nädal + päev)
Mobiiltelefoninumber	3.1.3. Tarvitab muid		10.7.1. Kuupäev
1.12.3. E-posti aadress	söltuvusaineid		(pp.kk.aaaa)
1.13. Kontaktisikud	(narkootikumid, ravimid)		10.7.2. Raseduse kestus
1.13.1. Eesnimi	3.1.3.1. Ei		nädalates ja päevades
1.1.1. Perekonnanimi	3.1.3.2. Jah		(nädal + päev)
1.1.2. Seos patsiendiga <sup>[18]</sup>	3.1.3.2.1. Vabatekstiväli		10.7.3. Sünnituse oletatav
1.1.3. Telefoninumber	3.1.3.3. Lõpetas I trimestril		tähtaeg UHD järgi
1.2. Patsiendi perearst	3.1.4. Toitumisharjumused		(pp.kk.aaaa)
1.2.1. Eesnimi	(vabatekstiväli)		<b>11. Uuringud</b>
1.2.2. Perekonnanimi	3.2. Mees		11.1. Kuupäev (pp.kk.aaaa)
1.2.3. Arsti	3.2.1. Suitsetab		11.2. Koodid (HK, NCSP)
registreerimiskood	3.2.1.1. Ei		11.3. Nimetus(ed)
1.3. Patsiendi töökohaandmed	3.2.1.2. Jah		11.4. Uuringu kirjeldus
1.3.1. Asutus	3.2.2. Alkoholi liigtarbimine		(vabatekstiväli)
1.3.2. Amet	3.2.2.1. Ei		<b>12. Jälginine raseduse ajal</b>
	3.2.2.2. Jah		<b>(tabelina)</b>
<b>2. Mehe isikuandmed</b>	3.2.3. Tarvitab muid		12.1. Kuupäev (pp.kk.aaaa)
2.1. Ei avalda	söltuvusaineid		12.2. Raseduse jälgija
2.2. Eesnimi	(narkootikumid, ravimid)		(eesnimi, perekonnanimi,
2.3. Perekonnanimi	3.2.3.1. Ei		reg.kood):
2.4. Isikukood	3.2.3.2. Jah		12.2.1. Eesnimi
2.5. Sünniaeg (pp.kk.aaaa)		<b>4. Veri</b>	12.2.2. Perekonnanimi
2.6. Rahvus <sup>[19]</sup>	<b>4.1. Veregrupp,</b>	4.1. Veregrupp,	12.3. Raseduse kestus
2.7. Haridus <sup>[20]</sup>	reesusfaktor, antikehad	(reesusfaktor, antikehad)	(nädal + päev)
2.8. Tavategevusal	(analüüs vastuselt)		12.4. Kaal (kg)
2.9. Tegelik elukoht			
		<b>9. Märkused</b>	
		<b>(vabatekstiväli)</b>	
		<b>10. Rasedus</b>	
		10.1. Esmane visiit	
		10.1.1. Kuupäev	
		(pp.kk.aaaa)	
		10.1.2. Raseduse kestus	
		(nädal + päev)	

15. Kasutatud publitseerimiskeskuses avaldatud loendit  
 16. Kasutatud publitseerimiskeskuses avaldatud loendit  
 17. Kasutatud publitseerimiskeskuses avaldatud loendit  
 18. Kasutatud publitseerimiskeskuses avaldatud loendit  
 19. Kasutatud publitseerimiskeskuses avaldatud loendit  
 20. Kasutatud publitseerimiskeskuses avaldatud loendit

12.5. Kaal iive (kg)	<b>17. Põetud ja kroonilised haigused (gruppeeritakse RHK-10 peatükkide järgi; siin toodud loetelu ei ole lõplik; loetelu saab täiendada vabatekstiväljaga):</b>	20.2.2.1. antenataalne loote surm 20.2.2.2. intranataalne loote surm	<b>24. Töökorralduse ja/või töökeskkonna ajutise või alalise muutmise vajadus, põhjus, kestus (algus- ja lõppkuupäev)</b>
12.6. Arteriaalne vererõhk (mm/Hg)	17.1. Endokrinoloogilised haigused (E00-E35)	20.2.3. Lapse sugu:	<b>25. Töövõimetusleht</b>
12.6.1. Parem käsi	17.1.1. Ei	20.2.3.1. M	25.1. Liik
12.6.1.1. süstoolne	17.1.2. Jah	20.2.3.2. N	25.2. Number
12.6.1.2. diastoolne	17.1.2.1. Vabatekstiväli	20.2.3.3. ebaselge	25.3. Koostaja:
12.6.2. Vasak käsi	17.2. Ainevahetushaigused (E40-E89)	20.2.4. Lapse kaal (g)	25.3.1. eesnimi
12.6.2.1. süstoolne	17.2.1. Ei	20.2.5. Raseduse ja sünnituse kulgu (vabatekstiväli)	25.3.2. perekonnanimi
12.6.2.2. diastoolne	17.2.2. Jah	20.3. Abort	25.3.3. registreerimiskood
12.7. Emakapõhja kõrgus (cm)	17.2.2.1. Vabatekstiväli	20.3.1. Varasemate abortide liik:	25.3.4. erialakood
12.8. Loote südametegevus:	17.3. Kõrgvererõhtkõbi (I10-I15)	20.3.1.1. spontaanabort (arv)	25.4. Töövabastuse periood
12.8.1. Normaalne	17.3.1. Ei	20.3.1.2. terapeutiline abort (meditsiinilistel näidustustel) (arv)	25.4.1. Alguskuupäev (pp.kk.aaaa)
12.8.2. Tahhükardia	17.3.2. Jah	20.3.1.2.1. terapeutilise abordi näidustused	25.4.2. Lõppkuupäev (pp.kk.aaaa)
12.8.3. Bradükardia	17.3.2.1. Vabatekstiväli	20.3.1.3. emakaväline rasedus (O00.0-O00.9) (arv)	
12.8.4. Kuupäev (pp.kk.aaaa)	17.4. Südamehaigused (I00-I09)	20.3.1.4. abort omal soovil (arv)	
12.8.5. KTG tehtud (märge kui on tehtud)	17.4.1. Ei	20.3.1.5. muu abort (arv)	
12.9. Liigutused (+,-)	17.4.2. Jah	20.4. Märkused (vabatekstiväli)	
12.10. Looteseis raseduse ajal:	17.4.2.1. Vabatekstiväli	20.5. Tüsistused (RHK-10 või vabatekstiväli)	
12.10.1. pikiseis	<b>18. Operatsioonid</b>	20.5.1. Sünnitusaeagsed ja sünnitusjärgsed tüsistused	
12.10.2. ristiseis	18.1. Kuupäev (pp.kk.aaaa)	20.5.2. Abordijärgsed tüsistused	
12.10.3. pöökiseis	18.2. operatsiooni nimetus ja kood haigekassa loendi järgi ning nimetus(ed)/kood(id)		
12.10.4. eesseis:	NCSP järgi		
12.10.4.1. pea eesseis	<b>19. Lähisugulastel esinenud suhkrutööde:</b>		
12.10.4.2. vagnaotsseis	19.1. Sugulusside	<b>21. Ravimid</b>	
12.10.4.3. muu	19.2. Kommentaar (vabatekstiväli)	21.1. Raseduse kestus (nädal + päev)	
12.11. Tursed:	<b>20. Varasemad rasedused (kronoloogilises järjekorras köige varasemast)</b>	21.2. Kuupäev (pp.kk.aaaa)	
12.11.1. ei	20.1. Kuupäev (pp.kk.aaaa, kk.aaaa, aaaa, teadmata)	21.3. Retsepti nr	
12.11.2. jah	20.2. Sünnitus	21.4. Toimeaine nimetus	
12.11.2.1. Vabatekstiväli märkuste jaoks	20.2.1. Ajalisus:	21.5. Ravimivorm	
12.12. Märkused (vabatekstiväli)	20.2.1.1. Ajaline (37 nädalat + 0 päeva...41 nädalat + 6 päeva)	21.6. Annustamise sagedus ja kestvus	
12.13. Kaebused (vabatekstiväli)	20.2.1.2. Enneaegne (22 nädalat + 0 päeva...36 nädalat + 6 päeva)	21.7. Manustamiskordade arv	
<b>13. Emakapõhja kõrguspilt (kujutatakse graafikuna; x-rasedusnädal; y-cm)</b>	20.2.1.3. Ülekantud ( $\geq$ 42 nädalat + 0 päeva)	21.8. Ühekordne annus ja lisainfo	
<b>14. Rasedusaegne nõustamine</b>	<b>20.2.2. Sünnituse tulem:</b>	<b>22. Muu ravi (vabatekstiväli)</b>	
14.1. Vabatekstiväli või hiljem, kui loend kinnitatakse, valik rippmenüüst	20.2.2.1. Elussünd	22.1. Rasedusnädal (RN)	
<b>15. Allergiad</b>	20.2.2.1.1. Surnud	22.2. Kuupäev (pp.kk.aaaa)	
15.1. Kuupäev (pp.kk.aaaa)	20.2.2.1.1.1. Surma kuupäev (pp.kk.aaaa)	22.3. Ravimid (vabatekstiväli)	
15.2. Ravimi toimeaine/aine/materjal, mille suhtes allergiline	20.2.2.1.1.2. Vabatekstiväli	22.4. Insuliin	
15.3. Allergia avaldumine:	20.2.2.2. Surnultsünd	22.4.1. Jah	
15.3.1. diagnoosi nimetus RHK-10 järgi		22.4.2. Ei	
15.3.2. kood RHK-10		22.4.3. Ravimi nimetus	
15.4. Kliiniline diagnoos (arsti sõnaline diagnoos)		22.4.4. Annus	
<b>16. Vaginaalne staatus</b>	<b>23. Raviplaan (vabatekstiväli)</b>		
16.1. Kuupäev (pp.kk.aaaa)			
16.2. Vabatekstiväli			

## I. Grūtnieces aprūpe

1. Pirmreizējais apmeklējums no 8. nedēļas līdz 12. grūtniečbas nedēļai (ja grūtniečbas laiks lielāks, par pildus veic visus iepriekš paredzētos izmeklējumus unpasākumus)	Ginekologs, dzemdību speciālists, vecmāte vai grūtnieces ģimenes ārsts	Izvērtētās:	Nodrošināta:	Nodrošināta:	1. Ja grūtnieces aprūpi veic ginekologs, dzemdību speciālists vai vecmāte, grūtniece iesniedz ģimenes ārsta atzinumu par grūtnieces veselības stāvokli un ieteikumus turpmākai aprūpei.	1. Informē par:
		<p>1) sūdzības;</p> <p>2) ģimenes, džīves, reproduktīvo anamnēzi, tai skaitā iepriekšējo grūtniečbu un dzemdību norisi, psihisko veselību, informāciju par hronisku slimību ešību, ārstniecisku diētu un medikamentu lietošanu (ja pirms grūtniečbas iestāšanās sievietei ārstēts sifiliss, nepieciešams dermatologa venerologa atzinums par preventīvās terapijas nepieciešamību. Ja ģimenes anamnēzē iedzīmtas anomālijas vai genētiskas (pārmantotas) saslimšanas, vai potenciāla teratogēna ieteikme, nepieciešama ārsta genētika konsultācija);</p> <p>3) profesiju un darba apstākļus;</p> <p>4) veselībai kaitīgos ieradumus;</p> <p>5) sociālo stāvokli, iespējamo vardarbību ģimenē;</p>	<p>1) ķermeņa masas indeksa noteikšanu;</p> <p>2) orgānu sistēmu apskati un izmeklēšanu;</p> <p>3) krūšu dziedzeru vizuālu apskati un palpāciju un ginekologisko izmeklēšanu (dzemdes kakla apskate spogulos);</p> <p>4) US<sup>[21]</sup> ar kakla krokas mēriju grūtniečbas 11.–13. nedēļā un 14. nedēļas pirmajās sešās dienās (turpmāk – 11.–13.<sup>+6</sup>);</p> <p>5) ja grūtnieci ir 35 gadi un vairāk, viņai grūtniečbas 10.–11. nedēļā asinīs nosaka bioķīmiskos rādītājus PAPP-A un βHGT un grūtnieci nosūta pie noteikumu 5. pielikuma 2.1. apakšpunktā minētā eksperta līmeņa US<sup>[22]</sup> speciālista augla padzīlinātai izmeklēšanai un iedzīmtu genētisku patologiju riska noteikšanai grūtniečbas 11.–12. nedēļā un 13. nedēļas pirmajās sešās dienās</p>	<p>1) pilnas asins ainas izmeklēšanu;</p> <p>2) ferītīna noteikšanu;</p> <p>3) uřīna analīzes veikšanu ar indikatora strēmelīšu testu;</p> <p>4) asinsgrupas un Rh(D)<sup>[23]</sup> piedeības noteikšanu;</p> <p>5) antieritrocīto antivielu noteikšanu un identifikāciju, ja konstatēts pozitīvs rezultāts;</p> <p>6) HBsAg<sup>[24]</sup>;</p> <p>7) RPR<sup>[25]</sup>;</p> <p>8) TPHA<sup>[26]</sup>;</p> <p>9) antivielu pret HIV 1/2 (anti-HIV 1/2)<sup>[27]</sup> laboratorisko noteikšanu (ar pirmstesta un pēctesta konsultēšanu);</p> <p>10) maksts pH<sup>[28]</sup> noteikšanu visām grūtniecēm, iztrippi uz maksts mikrofloru, ja pH<sup>[29]</sup> ≥ 4,4;</p> <p>11) hlamīdiju noteikšanu riska grupas grūtniecēm<sup>[30]</sup>;</p>	<p>2. Ja grūtniece ir kāda speciālista dinamiskā aprūpē, tā iesniedz attiecīgā speciālista atzinumu un ieteikumus turpmākai aprūpei.</p> <p>3. Ja sifilisa vai HIV testi pozitīvi, ārsts informē par to grūtnieci un nosūta pie atbilstoša speciālista (ja konstatēts sifiliss, – pie dermatologa venerologa, ja konstatēts HIV, – pie atbilstoši kvalificēta infektologa kliniskajā universitātes slimnīcā), kurš sniedz atzinumu un ieteikumus turpmākai aprūpei un novērošanai.</p> <p>4. Seruma skrīninga rezultātus kopā ar mātes vecumu un kakla krokas mēriju ievada datorprogrammā, kur tiek aprēķināts iedzīmto hromosomālo augļa patologiju risks.</p>	<p>1) fizioloģiskām izmaiņām grūtniečības laikā;</p> <p>2) apauglošanos, augla attīstību un teratogēno faktoru iedarbību;</p> <p>3) neinfekciju slimību izplatības ierobežošanu, sabalansēta uztura nozīmi, minerālvielu un vitamīnu (tai skaitā joda, folskābes, D vitamīna) profilaktiskas lietošanas nozīmi;</p> <p>4) nikotīna, alkohola un citu atkařību izraisošo vielu, medikamentu, kā arī dzimumceļu un TORCH<sup>[31]</sup> grupas infekcijas slimību ietekmi uz grūtniečbas norisi;</p> <p>5) iedzīmītu augla attīstības anomāliju diagnostikas iespējamību;</p> <p>6) grūtnieces aprūpes kārtību un simptomiem, kad jāvēršas pēc medicīniskās paīdīzības;</p>

21. US – ultrasonogrāfiskā izmeklēšana.

22. US – ultrasonogrāfiskā izmeklēšana.

23. Rh(D) – rēzus faktors.

24. HbsAg – hepaīta B viršmas antigēns.

25. RPR – ātrais plazmas reagīnu tests.

26. TPHA – izmeklējums sifilisa noteikšanai (Treponema pallidum hemaglutinācijas reakcija).

27. Anti HIV – cilvēka imūndefiċīta vīrusa infekcijas noteikšana.

28. pH – vides skābums.

29. pH – vides skābums.

30. Hlamīdiju noteikšana riska grupas grūtniecēm – hlamīdiju noteikšana grūtniecēm līdz 24 gadu vecumam, sociālā riska grūtniecēm, kā arī gadījumā, ja anamnēzē vai šīs grūtniečbas laikā diagnosticēta seksuāli transmišīva infekcija vai ir kliniskās pažīmes (endocerviċīts, mukopurulenti izdalījumi).

31. TORCH grupas infekciju slimības – toksoplazmoze, masaliņas, citomegalovīrusu un herpesvīrusu infekcijas, sifiliss u. c.

6) grūtnieces un gimenes attieksmi pret esošo grūtniečību;  
7) kura no Ministru kabineta 2006. gada 25. jūlijā noteikumu Nr. 611 "Dzemību palīdzības nodrošināšanas kārtība" (turpmāk – noteikumi) 4. punktā minētajām ārstniecības personām veiks turpmāko grūtnieces aprūpi;  
8) paredzamo dzemību termiņu (pēc I trimestra skrīninga US<sup>[32]</sup> veikšanas)

12) dzemdes kakla citologisko izmeklēšanu, ja tā nav veikta organizētā vēža skrīninga ietvaros, kurā pēdējos trijus gados sanemtā atbilde ir norma;  
13) nosūtījumu uz I trimestra grūtnieču skrīningu (Ministru kabineta 2006. gada 4. aprīļa noteikumu Nr. 265 "Mediçīnisko dokumentu lietvedības kārtība" 98. pielikums);  
14) visām grūtniecēm vienlaikus ar I trimestra US<sup>[33]</sup> ( $\pm$  1–2 dienas) – seruma skrīningu ar biokīmiskajiem markieriem – PAPP-A<sup>[34]</sup> un bīrvo  $\beta$  HGT<sup>[35]</sup>

5. Grūtniecei ar augstu risku ( $\geq$  1:50) veic invažīvo diagnostiku – horija biopsiju I trimestrī vai amniocentēzi II trimestrī ar sekojošu augla genētiskā materiāla izmeklēšanu (augla kariotips vai hromosomu ekspresdiagnostika (FISH<sup>[36]</sup> vai QF- PCR<sup>[37]</sup>)).  
6. Grūtniece ar vidēju risku (1:51–1:1000) tiek nořikota atkārtotai US<sup>[38]</sup> pie noteikumu 5. pielikuma 2.1. apakšpunktā minētā eksperta īmēna US<sup>[39]</sup> speciālista augla padzīlinātai izmeklēšanai ar dopleru un tiek izvērtēti I trimestra US<sup>[40]</sup> marķieri – augla deguna kauls, venozā vada (ductus venosus) plūsma un tīsviru vārstuļu plūsma (grūtniečības 11.–13.<sup>+</sup>).  
7. Ja grūtniecei tiek uzrādīts koriģētais augstais risks, to nořiko izmeklējumu veikšanai, izmantojot invažīvās diagnostikas metodes – horija biopsiju vai amniocentēzi –, augla kariotipa noteikšanai.

8. Pirms diagnostiski invažīvā izmeklējuma genētiskā riska grupas grūtnieces nosūta pie ārsta genētiķa uz konsultāciju invažīvā izmeklējuma veida, apjoma un parauga izmeklēšanas nozīmēšana koriģētais augstais risks, to nořiko izmeklējumu veikšanai, izmantojot invažīvās diagnostikas metodes – horija biopsiju vai amniocentēzi –, augla kariotipa noteikšanai.

7) mutes veselības nozīmi;  
8) gripas bīstamību grūtniečības laikā un nepieciešamību vakcinēties pret gripu.  
2. Grūtniecei izsniedz atzinumu (Ministru kabineta 2006. gada 4. aprīļa noteikumu Nr. 265 "Mediçīnisko dokumentu lietvedības kārtība" 12. pielikums "Izraksts no stacionāra pacienta/ ambulatorā pacienta medicīniskās kartes" (veidlapa Nr. 027/u)) iesniegšanai darba devējam, kuram pēc tā saņemšanas aizliegs nodarbināt grūtnieci un sievieti pēcdzemību periodā līdz vienam gadam, bet, ja sieviete baro bērnu ar krūti, – visā barošanas laikā, ja tiek atzīts, ka attiecīgā darba veikšana rada draudus sievietes vai viņas bērna drošībai un veselībai.  
3. Ja grūtniece Rh(D)<sup>[41]</sup> negatīva, rekomendē noteikt Rh(D)<sup>[42]</sup> bērna tēvam

32. US – ultrasonogrāfiskā izmeklēšana.

33. US – ultrasonogrāfiskā izmeklēšana.

34. PAPP-A – ar grūtniečību saistīts asins plazmas proteīns.

35.  $\beta$  HGT – beta horiongonodotropīns.

36. FISH – fluorescentē *in situ* hibridizācija.

37. QF-PCR – biežāko hromosomu aneiploidiju prenatālā diagnostika, izmantojot kvantitatīvu fluorescējošu PKR.

38. US – ultrasonogrāfiskā izmeklēšana.

39. US – ultrasonogrāfiskā izmeklēšana.

40. US – ultrasonogrāfiskā izmeklēšana.

41. Rh(D) – rēzus faktors.

42. Rh(D) – rēzus faktors.

2. 16.– 18. grūtniečības nedēļa	Ginekologs, dzemdību speciālists, vecmāte vai gimenes ārsts	Izvērtē: 1) sūdzības; 2) ārsta genētiķa atzinumu, ja apstiprināta hromosomāla patologija vai strukturāla patologija auglim. Grūtnieces, kurām konstatētas augla strukturālās anomālijas (pēc diagnozes apstiprinājuma), nosūta uz konsultāciju BKUS <sup>[43]</sup> . Medicīniskās genētikas un prenatālās diagnostikas klinikā. Grūtniečības vadīšanas taktiku lemj ārstu konsilijs prenatālās diagnostikas centrā vai BKUS <sup>[44]</sup> . Medicīniskās genētikas un prenatālās diagnostikas klinikā, konsilijā piedaloties genētikim Izvērtē: 1) sūdzības; 2) ārsta genētiķa atzinumu, ja apstiprināta hromosomāla patologija	Nodrošina: 1) kermēja masas noteikšanu; 2) AT <sup>[45]</sup> noteikšanu; 3) augla sirdstoņu izklausīšanu (ar fetālo dopleru); 4) US <sup>[46]</sup> 20.–21. grūtniečības nedēļā un 22. nedēļas pirmajās sešās dienās (izmeklējuma kopiju pievieno mātes pasei); 5) ehokardiogrāfiju auglim 20.–23. grūtniečības nedēļā riska grupas grūtniecēm <sup>[47]</sup> ; 6) gravidogrammas aizpildi	Nodrošina: 1) uřīna analīzes veikšanu ar indikatora strēmelīšu testu; 2) seruma skrīningu ( $\alpha$ FP <sup>[48]</sup> , bīrvais estriols, kopējais HGT12) 15.–19. grūtniečības nedēļā grūtniecēm, kuras vēlini stājušās uzskaitē, ar neskaidru grūtniečības laiku, adipozām, kā arī grūtniecēm, kurām nevar nodrošināt I trimestra US <sup>[49]</sup> un nevar izskaitīt risku	1. Ja aprūpi veic gimenes ārsts vai vecmāte, nodrošina ginekologa, dzemdību speciālista konsultāciju. 2. Ja I trimestra US3 un seruma skrīnings uzrāda augstu risku un grūtniecei nav veikta horija biopsija vai II trimestra skrīnings norāda uz augstu risku (grūtniecēm, kurām nebija iespējams veikt kvalitatīvu pirmā trimestra skrīningu), grūtnieci no ūko diagnostiskās amniocentēzes veikšanai (augsta riska grūtniecēm) ar sekojošu augla genētiskā materiāla izmeklēšanu (augla kariotips vai hromosomu ekspresdiagnostika (FISH <sup>[50]</sup> vai QF- PCR <sup>[51]</sup> ). 3. Pirms diagnostiski invažīvā izmeklējuma genētiskā riska grupas grūtnieces nosūta pie ārsta genētiķa uz konsultāciju invažīvā izmeklējuma veida, apjoma un parauga izmeklēšanas nozīmēšanai	1. Informē par grūtniečības norisi – fizioloģiju, psiholoģiju, gaīgās veselības aspektiem grūtniečības un pēcdzemdību periodā, medicīnisko aprūpi, darba un sociālajām garantijām, personīgo un dzimumdzīves higienu, fiziskajām aktivitātēm, uzturu, nemedikamentozās ārstniečības metodēm, risku un tā novēršanu. 2. Izsnidez mātes pasi. 3. Personām no 18 gadu vecuma, kuras džīvo kopā ar grūtnieci, iesaka krūšu kurvja orgānu Rtg <sup>[52]</sup> izmeklēšanu, ja tā nav veikta pēdējā gada laikā
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43. BKUS – valsts sabiedrība ar ierobežotu atbildību "Bērnu kliniskā universitātes slimnīca".

44. BKUS – valsts sabiedrība ar ierobežotu atbildību "Bērnu kliniskā universitātes slimnīca".

45. AT – arteriālais asinsspiediens.

46. US – ultrasongrāfiskā izmeklēšana.

47. Ehokardiogrāfija auglim 20.–23. grūtniečības nedēļā riska grupas grūtniecēm – augla sirds anatomijas un funkcijas izmeklējums ar ultraskaņas aparātu. Riska faktori mātei: gimenes anamnēzē VCC (pirmās pakāpes ratiem vai probandam), mātei metabolikas slimības (DM, FKU), kardiologisko teratogēnu iedarbību (retinōdi, fenitoīns, karbamazepīns, valproātskābe u. c.), grūtniečības laikā lietoti prostaglandīnu sintetāzes inhibitori (ibuprofēns, aspirīns, indometācīns), mātei grūtniečības laikā pierādīta infekcijas slimība (masaliņas, parvovīrus B19, Coxsackie), mātei autoimūnas slimības (Anti-Ro, Anti-La), ŠS, SSV, AR, gimēnei iedzīmētas slimības (Marfāna sindroms, Noonan's sindroms u. c.), IVF grūtniečība. Riska faktori auglim: aizdomas par augla sirds patoloģiju rutinas US, ekstrakardiāla augla patoloģija, hromosomāla augla patoloģija, augla aritmija vai persistējoša bradikardija, persistējoša tahikardija vai persistējošs neregulārs ritms, Hydrops fetalis, kakla kroka 11.–13.+6 grūtniečības nedēļā lielāks par 95 procentīlēm, monohorāli dīvji ar aizdomām par TTTS.

48.  $\alpha$ FP – alfa fetoproteīns.

49. US – ultrasongrāfiskā izmeklēšana.

50. FISH – fluorescents in situ hibridizācija.

51. QF-PCR – biežāko hromosomu aneiplōidiju prenatālā diagnostika, izmantojot kvantitatīvu fluorescējošu PKR.

52. Rtg – rentgenogrāfija.

3. 25.– 26. grūtniečības nedēļa	Ginekologs, dzemdību speciālists, vecmāte vai gimenes ārsts	Izvērtē: 1) sūdzības; 2) augla kustību raksturu	Nodrošina: 1) kermeņa masas noteikšanu; 2) AT <sup>[53]</sup> noteikšanu; 3) dzemdes augstuma noteikšanu un fiksēšanu gravidogrammā; 4) augla sirdstoņu izklausīšanu (ar fetālo dopleru)	Nodrošina: 1) Hb <sup>[54]</sup> noteikšanu; 2) uřīna analīzes veikšanu ar indikatora strēmelīšu testu; 3) OGTT <sup>[55]</sup> paplašināta riska grupas grūtniecēm; 4) Rh(D) <sup>[56]</sup> negatīvām grūtniecēm 28. grūtniečības nedēļā veic asinsgrupas, Rh(D) <sup>[57]</sup> piederības noteikšanu, antieritrocitāro antivielu skrīningu; antenatālu imūnprofilaksi Rh(D) <sup>[58]</sup> negatīvām grūtniecēm bez antieritrocitārām antivielām, kurām ir Rh(D)4 pozičīvs partneris vai partnera Rh(D)4 piederība nav zināma	Informē par: 1) grūtniečības norisi; 2) partnera lomu veiksmīgā grūtniečības, dzemdību un pēcdzemdību perioda norisē; 3) dabisko dzemdību priekšrocībām; 4) krūts ēdināšanas priekšrocībām; 5) augla stāvokļa novērtēšanas metodēm un kustību skaičīšanas principiem
4. 29.– 30. grūtniečības nedēļa	Ginekologs, dzemdību speciālists, vecmāte vai gimenes ārsts	Izvērtē: 1) sūdzības; 2) augla kustību raksturu	Nodrošina: 1) kermeņa masas noteikšanu; 2) AT <sup>[59]</sup> noteikšanu; 3) dzemdes augstuma noteikšanu un fiksēšanu gravidogrammā; 4) augla sirdstoņu izklausīšanu (ar fetālo dopleru)	Nodrošina: 1) Hb <sup>[60]</sup> un feritīna noteikšanu; 2) uřīna analīzes veikšanu ar indikatora strēmelīšu testu; 3) RPR <sup>[61]</sup>	1. Informē par: 1) nepieciešamību izvēlēties bērnam gimenes ārstu un iegūt rakstisku apstiprinājumu no tā par gatavību aprūpēt jaundzimušo (kontakttālrunis, vārds, uzvārds, paraksts);

53. AT – arteriālais osinsspiediens.

54. Hb – hemoglobīns.

55. OGTT – orālais glikozes tolerances tests paplašināta riska grupas grūtniecēm – grūtniecēm, kurām ir paaugstināts kermeņa svars ( $KMI \geq 25 \text{ kg/m}^2$  vai  $\geq 20\%$  virs ideālā svara) un kādi no papildu riska faktoriem (zema fiziskā aktivitāte, I pakāpes radiniekiem konstatēts cukura diabēts, pacientei anamnēzē gestācijas cukura diabēts vai bērnu dzīmšanas svars  $> 4,1 \text{ kg}$ , arteriāla hipertensija  $\geq 140/\geq 90 \text{ mmHg}$  vai antihipertenīvā terapija, dislipidēmija ( $TG \geq 2,82 \text{ mmol/l}$  un/vai ABL-holesterīns acantosis nigricans, morbīda aptaukošanās), anamnēzē kardiovaskulāras slimības, paciente pierder pie augsta riska etniskas populācijas (latīnamerikāni, indiāni, Klusā okeāna salu iedzīvotāji, afroamerikāni)), vecums  $\geq 35$  gadi, smēķēšana.

56. Rh(D) – rēzus faktors.

57. Rh(D) – rēzus faktors.

58. Rh(D) – rēzus faktors.

59. Ekhardiogrāfija auglim 20.–23. grūtniečības nedēļā riska grupas grūtniecēm – augla sirds anatomijas un funkcijas izmeklējums ar ultraskanu aparatūru. Riska faktori mātei: gimenes anamnēzē VCC (pirmās pakāpes radiem vai probandam), mātei metabolas slimības (DM, FKU), kardiologisko teratogēnu iedarbība (retinoīdi, fenitoīns, karbamazepīns, valproātskābe u. c.), grūtniečības laikā lietoti prostaglandīnu sintetāzes inhibitori (ibuprofēns, aspirīns, indometacīns), mātei grūtniečības laikā pierādīta infekcijas slimība (masalījas, parvovīrus B19, Coxsackie), mātei autoimūnas slimības (Anti-Ro, Anti-La), SS, SSV, AR, gimenē iedzīmītas slimības (Marfāna sindroms, Noonan's sindroms u. c.), IVF grūtniečība. Riska faktori auglim: aizdomas par augla sirds patoloģiju rutīnās US, ekstrakardiāla augla patoloģija, hromosomāla augla patoloģija, augla aritmija vai persistējoša bradikardija, persistējoša tahikardija vai persistējoša neregulārs ritms, Hydrops fetalis, kakla kroka 11.–13.+6 grūtniečības nedēļā lielāka par 95 procentīlēm, monohoriāli dīvīni ar aizdomām par TTS.

60. OGTT – orālais glikozes tolerances tests paplašināta riska grupas grūtniecēm – grūtniecēm, kurām ir paaugstināts kermeņa svars ( $KMI \geq 25 \text{ kg/m}^2$  vai  $\geq 20\%$  virs ideālā svara) un kādi no papildu riska faktoriem (zema fiziskā aktivitāte, I pakāpes radiniekiem konstatēts cukura diabēts, pacientei anamnēzē gestācijas cukura diabēts vai bērnu dzīmšanas svars  $> 4,1 \text{ kg}$ , arteriāla hipertensija  $\geq 140/\geq 90 \text{ mmHg}$  vai antihipertenīvā terapija, dislipidēmija ( $TG \geq 2,82 \text{ mmol/l}$  un/vai ABL-holesterīns acantosis nigricans, morbīda aptaukošanās), anamnēzē kardiovaskulāras slimības, paciente pierder pie augsta riska etniskas populācijas (latīnamerikāni, indiāni, Klusā okeāna salu iedzīvotāji, afroamerikāni)), vecums  $\geq 35$  gadi, smēķēšana.

61. RPR – ātrais plazmas reaģīnu tests.

- 2) sagatavošanos dzemdībām – relaksāciju, elpošanas paņēmieniem, dzemdību pozām, partnera atbalstu.
2. Noskaidro grūtnieces izvēli attiecībā uz dzemdību vietu un gimenes dzemdībām.
3. Izskaidro nepieciešamību pievērst uzmanību un sekot augla kustībām

5. 34.– 36. grūtniečības nedēļa	Ginekologs, dzemdību speciālists, vecmāte vai gimenes ārstas	Izvērtē: 1) sūdzības; 2) augla kustību raksturu; 3) augla gulu, ja auglis nav galvas guļā, izvērtē kontrindikācijas augla ārējam apgrožījumam un nosūta ārēja apgrožījuma veikšanai 37. grūtniečības nedēļā	Nodrošina: 1) kermēņa masas noteikšanu; 2) AT <sup>[62]</sup> noteikšanu; 3) dzemdes augstuma noteikšanu un fiksēšanu gravidogrammā; 4) augla sirdstooju izklausīšanu (ar fetālo dopleru); 5) augla gulas noteikšanu; 6) US3 riska grupas grūtniecēm <sup>[63]</sup>	Nodrošina: 1) uřīna analīzes veikšanu ar indikatora strēmelīšu testu; 2) Hb <sup>[64]</sup> noteikšanu; 3) antieritrocitāro antivielu noteikšanu Rh(D) <sup>[65]</sup> negatīvām grūtniecēm, ja nav veikta antenatāla imūnprofilakse; 4) B grupas beta hemošitiskā streptokoka noteikšanu, izmantojot uzsējumu no maksts, starpenes un rectum (taisnās zarnas vai anālās atveres) 37. grūtniečības nedēļā	1. Grūtniece iesniedz gimenes ārsta vai pediatra rakstiku apliecinājumu par jaundzimušā aprūpes nodrošināšanu, kas ietver ārsta kontaktālu numuru un ārstniečības iestādes juridisko adresi. 2. Ja grūtniece izvēlas gimenes dzemdības, informē grūtnieci un viņas partneri par partnera atbalstu dzemdībās un mātes pasē veic ierakstu par sniegtu informāciju	Informē par: 1) jaundzimušajam veselīgiem un drošiem dzīves apstākļiem atbilstoši noteikumam 4. pielikumam; 2) dzemdību priekšvēstnešiem; 3) dzemdību gaitu; 4) iespējamām medicīniskām manipulācijām; 5) pēcdzemdību perioda norisi, iespējamiem sarežģījumiem un to novēršanu; 6) nepieciešamību plānot ķeizargriezienu, ja tam ir medicīniskas indikācijas (atbilstoši vadlīnijām vai uzrādot speciālista atzinumu); 7) rekomendē iepazīties ar dzemdību nodālu, kurā plāno
62.	Ekardiogrāfija auglim 20.–23. grūtniečības nedēļā riska grupas grūtniecēm – augla sirds anatomijs un funkcijas izmeklējums ar ultraskanas aparātu. Riska faktori mātei: gimenes anamnēzē VCC (pirmās pakāpes radiem vai probandam), mātei metabolas slimības (DM, FKU), kardiologisko teratogēnu iedarbība (retinoīdi, fenitoīns, karbamazepīns, valproātskābe u. c.), grūtniečības laikā lietoti prostaglandīni sintetāzes inhibitori (ibuprofēns, aspirīns, indometacīns), mātei grūtniečības laikā pierādīta infekcijas slimība (masaliņas, parvovīrus B19, Coxsackie), mātei autoimūnās slimības (Anti-Ro, Anti-La), SS, SSV, AR, gimenē iedzīmitas slimības (Marfāna sindroms, Noonan's sindroms u. c.), IVF grūtniečība. Riska faktori auglim: aizdomas par augla sirds patoloģiju rūtīnas US, ekstrakardiāla augla patoloģija, hromosomāla augla patoloģija, augla aritmija vai persistējoša bradikardija, persistējoša tachikardija vai persistējošs neregulārs ritms, Hydrops fetalis, kakla kroka 11.–13.+6 grūtniečības nedēļā lielāka par 95 procentīlēm, monohoriālī dīvīni ar aizdomām par TTTs.					
63.	Perinatālās aprūpes centra prenatālās diagnostikas nodālu – ārstniečības iestādes prenatālās diagnostikas un augsta riska grūtnieču aprūpes kabinets/nodāla, kura atrodas ārstniečības iestādē ar ginekologijas nodālu, dzemdību nodālu un jaundzimušo intensīvās terapijas nodālu, kas atbilst normatīvojos aktos noteiktajām obligātajām prašībām ārstniečības iestādēm un to struktūrvienībām.					
64.	Hb – hemoglobīns.					
65.	Rh(D) – rēzus faktors.					

62. Ekardiogrāfija auglim 20.–23. grūtniečības nedēļā riska grupas grūtniecēm – augla sirds anatomijs un funkcijas izmeklējums ar ultraskanas aparātu. Riska faktori mātei: gimenes anamnēzē VCC (pirmās pakāpes radiem vai probandam), mātei metabolas slimības (DM, FKU), kardiologisko teratogēnu iedarbība (retinoīdi, fenitoīns, karbamazepīns, valproātskābe u. c.), grūtniečības laikā lietoti prostaglandīni sintetāzes inhibitori (ibuprofēns, aspirīns, indometacīns), mātei grūtniečības laikā pierādīta infekcijas slimība (masaliņas, parvovīrus B19, Coxsackie), mātei autoimūnās slimības (Anti-Ro, Anti-La), SS, SSV, AR, gimenē iedzīmitas slimības (Marfāna sindroms, Noonan's sindroms u. c.), IVF grūtniečība. Riska faktori auglim: aizdomas par augla sirds patoloģiju rūtīnas US, ekstrakardiāla augla patoloģija, hromosomāla augla patoloģija, augla aritmija vai persistējoša bradikardija, persistējoša tachikardija vai persistējošs neregulārs ritms, Hydrops fetalis, kakla kroka 11.–13.+6 grūtniečības nedēļā lielāka par 95 procentīlēm, monohoriālī dīvīni ar aizdomām par TTTs.
63. Perinatālās aprūpes centra prenatālās diagnostikas nodālu – ārstniečības iestādes prenatālās diagnostikas un augsta riska grūtnieču aprūpes kabinets/nodāla, kura atrodas ārstniečības iestādē ar ginekologijas nodālu, dzemdību nodālu un jaundzimušo intensīvās terapijas nodālu, kas atbilst normatīvojos aktos noteiktajām obligātajām prašībām ārstniečības iestādēm un to struktūrvienībām.
64. Hb – hemoglobīns.
65. Rh(D) – rēzus faktors.

6. 38.– 40. grūtniečibas nedēļa	Ginekologs, dzemdību speciālists, vecmāte vai gimenes ārsts	Izvērtē: 1) sūdzības; 2) augla kustību raksturu	Nodrošina: 1) kermeņa masas noteikšanu; 2) AT <sup>[66]</sup> noteikšanu; 3) dzemdes augstuma noteikšanu; 4) augla sirdstoņu izklausīšanu (ar fetālo dopleru); 5) augla guļas noteikšanu	Nodrošina uřīna analīzes veikšanu ar indikatora strēmelīšu testu	Atbilstoši noteikumu 4. pielikumā minētajām tēmām informē par: 1) pirmo kontaktu ar jaundzimušo, jaundzimušā kopšanu un ar to saistītām raksturīgām grūtībām; 2) zīdišanu – priekšrocībām, tehniku, iespējamām grūtībām un to novēršanu
7. 41.	Ginekologs, dzemdību speciālists, vecmāte vai gimenes ārsts	Izvērtē: 1) sūdzības; 2) augla kustību raksturu	Nodrošina: 1) kermeņa masas noteikšanu; 2) AT <sup>[67]</sup> noteikšanu; 3) augla sirdsdarbības izmeklēšanu ar kardiotokogrāfu; 4) augla guļas noteikšanu	Novērtē augla stāvokli un pieņem lēmumu par turpmāko ūčību. Dzemdību indukcijai uz dzemdību iestādi grūtnieci nosūta no 41. grūtniečibas nedēļas līdz 42. grūtniečibas nedēļai	

66. AT – arteriālais asinsspiediens.

67. AT – arteriālais asinsspiediens.

8.	Ginekologs, Dzemdības speciālists vai vecmāte (ja fiziologiskas dzemdības) atbilstoši noteikumu III nodalai	Izvērtē: 1) sūdzības; 2) dzemdes kontrakciju raksturu; 3) riska faktorus; 4) anamnēzes datus; 5) antenatālās aprūpes laikā veikto izmeklējumu rezultātus	Nodrošina: 1) kermeņa masas noteikšanu; 2) AT <sup>[68]</sup> noteikšanu; 3) augla sirdsdarbības izmeklēšanu ar kardiotorogrāfu (20–30 minūtes), iestājoties stacionārā, vai ar fetālo dopleru plānotās ārpusstacionāra dzemdībās; 4) augla stāvokļa uzraudzību visu dzemdību laiku atkarībā no riska faktoriem un dzemdību norises; 5) augla guļas noteikšanu ar Leopolda paņēmieniem; 6) atbilstošas dzemdību pašidības sniegšanu; 7) Ja BGS <sup>[69]</sup> pozitīvs, dzemdībās veic BGS23 izraišītu komplikāciju profilaksi. Ja dzemdību būdī mātes pasē nav pieejama informācija par BGS <sup>[70]</sup> nēsāšanu, pielieto uz risku vērstu stratēģiju, nozīmējot antibakteriālu terapiju riska grupas dzemdētājām <sup>[71]</sup>	Ja grūtniece iestājas dzemdību nodalā dzemdību pašidības saņemšanai un nav pieejamas ziņas par attiecīgās grūtnieces B hepatīta, HIV infekcijas vai sifilisa testēšanas rezultātiem, nekavējoties, izmantojot laboratorās ekspressmetodes, veic šādus izmeklējumus: 1) HBsAg <sup>[72]</sup> ; 2) antivielas pret HIV ½ (anti-HIV ½) <sup>[73]</sup> (ar pirmstesta un pēctesta konsultēšanu); 3) RPR <sup>[74]</sup> , TPHA <sup>[75]</sup> (ja rezultāts ir pozitīvs, nosaka antivielu titru ar kvantitatīvo metodi)
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68. AT – arteriālais asinsspiediens.

69. BGS – B grupas streptokoks.

70. BGS – B grupas streptokoks.

71. BGS riska grupas dzemdētājas – anamnēzē iepriekš dzimis bērns ar BGS; BGS bakteriūrija (simptomātiska vai asimptomātiska) šīs grūtniečības laikā (sievietēm ar BGS uřinceļu infekciju nepieciešama ārstēšana tūlit pēc diagnozes noteikšanas un arī dzemdībās); dzemdības līdz 37. grūtniečības nedēļai (ja ir BGS vai nav zināms, veic makssts un rektālo BGS uzsējumu un uzsāk ārstēšanu, ja pēc 48 stundām uzsējums nav audzis, tad ārstēšanu pārtrauc); bezūdens periods  $\geq 18$  stundas; paaugstināta dzemdētājas kermeņa temperatūra  $\geq 38^{\circ}\text{C}$ ; auglūdeņi ar smaku.

72. HbsAg – hepatīta B virsmas antigēns.

73. Anti HIV – cilvēka imūnodefīcīta vīrusa infekcijas noteikšana.

74. RPR – ātrais plazmas reagīnu tests.

75. TPHA – izmeklējums sifilisa noteikšanai (Treponema pallidum hemaglutinācijas reakcija).

9.	Ginekologs, dzemību periods (līdz sestajai dienai pēc dzemībām)	Izvērtē: 1) sūdzības; 2) pēcdzemību perioda norisi; 3) zīdišanas efektivitāti	Nodrošina: 1) anti-D rēzus imūnglobuļina ievadi 72 stundu laikā pēc dzemībām, ja Rh(D) <sup>[76]</sup> negatīvai nesensibilizētai (bez Rh(D) <sup>[77]</sup> antivielām) nedēļnieci piedzimis Rh(D)4 pozitīvs bērns; 2) krūšu kurvja orgānu Rtg <sup>[78]</sup> izmeklēšanu nedēļniecei līdz sestajai dienai pēc dzemībām vai pirms izrakstīšanās no stacionāra	1. Informē par: 1) vēlino pēcdzemību periodu, iespējamām problēmām; 2) zīdišanas priekšrocībām; 3) pēcdzemību depresiju un tās profilaksiju; 4) partnerattieībām jaunajā dzīves situācijā, dzimumdžives atsākšanu, kontracepciju pēc dzemībām, ginekoloģisko saslimšanu profilaksi; 5) neatliekamām situācijām, kad nepieciešams vērsties pie gimenes ārsta, ārsta speciālista vai neatliekamās medicīniskās pašidzības. 2. Sievieti, kurai konstatēti pozitīvi sifilisa testi, informē par analīžu rezultātiem un nosūta pie dermatologa venerologa turpmākai novērošanai un ārstēšanai. 3. Sievieti, kurai konstatēta HIV infekcija, informē par analīžu rezultātiem, konsultē un nosūta pie atbilstoši kvalificēta infektologa kliniskajā universitātes slimīnīcā
10. 6.–10. nedēļa pēc dzemībām	Ginekologs, dzemību speciālists vai vecmāte	Izvērtē: 1) sūdzības; 2) sievietes psihomencionālo stāvokli	Veic ginekoloģisku apskati atbilstoši normatīvajiem aktiem par veselības aprūpes organizēšanas un finansēšanas kārtību	Informē par: 1) atpūtu un aktivitātēm pēcdzemību periodā; 2) personīgo higiēnu; 3) uzturu; 4) dzimumdživi pēc dzemībām; 5) drošu kontracepcijas metožu lietošanu; 6) zīdišanu un jaundzimušā ēdināšanu; 7) drošības pasākumiem, kas jāievēro, lai netiktu apdraudēta jaundzimušā veselība un dzīvība

76. US – ultrasonogrāfiskā izmeklēšana.

77. Rh(D) – rēzus faktors.

78. Rtg – rentgenogrāfija.

### III. Jaundzimušā veselības aprūpe

Periods	Ārstniečības persona	Mātes anamnēzes un jaundzimušā riska novērtējums	kliniskā	Izmeklēšana			Pasākumi
				laboratoriskā	sijājošā diagnostika (skrīnings)	papildu (paaugstināta riska grupai)	
1	2	3	4	5	6	7	
11. Pēc piedzimšanas	Ginekologs, dzemību speciālists vai vecmāte, neonatologs vai pediatrs	Atkārtoti izvērtē grūtniečības un dzemību riska faktorus	1. Tūlit pēc piedzimšanas izvērtē jaundzimušā stāvokli atbilstoži JPR <sup>[79]</sup> prasībām. 2. Pirmās minūtes beigās un piektajā minūtē izvērtē jaundzimušo pēc Apgares skalas. 3. Vizuāli novērtē jaundzimušo par lielo vai mazo anomāliju ešību. 4. Nosaka ķermeņa masu, garumu, galvas un krūšu apkārtmēru		1. Ja māte ir Rh(D) <sup>[80]</sup> negatīva vai grūtniečības laikā konstatētas antieritrocitāras antivielas, nabassaites asiņis nosaka: 1) asiņ grupu; 2) Rh(D) <sup>[81]</sup> piederību; 3) bilirubīna līmeni; 4) tiešo Kumbasa reakciju (nepilno antieritrocitāro antivielu skrīnings). 2. Ja māte ir HIV pozitīva, asiņis nosaka: 1) HIV RNS pirmajās 48 stundās pēc dzimšanas, paraugu nogādājot uz RAKUS <sup>[82]</sup> , ja ārstniečības iestādes rīcībā ir pieejami resursi šī izmeklējuma nodrošināšanai; 2) Hb <sup>[83]</sup> , eritrociņu skaitu		Ja nepieciešams, tūlit pēc piedzimšanas veic JPR <sup>[84]</sup> pasākumus. Ja JPR <sup>[85]</sup> pasākumi nav nepieciešami, nodrošina: 1) vismaz 20 minūšu ilgu jaundzimušā ādas-ādas kontaktu ar māti; 2) zīdišanas uzsāšanu 30 minūšu laikā pēc dzimšanas (ja māte HIV pozitīva – ēdināšana no krūts aizliegta); 3) primāro apkopi; 4) gonoblenorejas profilaksi <sup>[86]</sup> ; 5) K vitamīna atkarīgās asiņošanas profilaksi*; 6) HIV ekspozīcijas gadījumā jaundzimušajam sešu stundu laikā uzsāk antiretrovirālu terapiju
12. 24 stundu laikā pēc piedzimšanas	Neonatologs vai pediatrs un bērnu aprūpes māsa vai vecmāte	1. Izvērtē riska faktorus adaptācijas procesa norisei un jaundzimušā veselībai. 2. Izvērtē iespējamās problēmas zīdišanai	Veic: 1) jaundzimušā primāro apskati; 2) iedzīmtu anomāliju ešības izvērtēšanu; 3) pašādā uzsākt zīdišanu		Ja ir aizdomas par sifilisu, jaundzimušajam veic serologiskās analīzes: 1) RPR <sup>[87]</sup> ; 2) TPHA <sup>[88]</sup>		1. Nodrošina VHB <sup>[89]</sup> vakcināciju atbilstoši normatīvajiem aktiem par vakcinācijas kārtību

79. JPR – jaundzimušo primārā reanimācija.

80. Rh(D) – rēzus faktors.

81. Rh(D) – rēzus faktors.

82. RAKUS – sabiedrība ar ierobežotu atbildību "Rīgas Austrumu kliniskā universitātes slimnīca".

83. Hb – hemoglobīns.

84. JPR – jaundzimušo primārā reanimācija.

85. JPR – jaundzimušo primārā reanimācija.

86. Gonoblenorejas profilakse – profilakse, ko veic jaundzimušajam, ja mātei grūtniečības laikā diagnosticēta seksuāli transmisīva infekcija vai konstatētas kliniskās indikācijas.

87. RPR – ātrais plazmas reagīnu tests.

88. TPHA – izmeklējums sifilisa noteikšanai (*Treponema pallidum* hemaglutinācijas reakcija).

89. VHB – vīrushepatīts B.

13. Agūnais neonatālais periods (līdz sestajai džives dienai)	Stacionārā – neonatologs, pediatrs un bērnu aprūpes māsa vai vecmāte. Ārpus stacionāra – pediatrs, gimenes ārsti un vecmāte, bērnu aprūpes māsa vai ārsta palīgs	Atkārtoti izvērtē riska faktorus jaundzimušā veselībai	<p>1. Veic:</p> <ul style="list-style-type: none"> <li>1) jaundzimušā klinisko izmeklēšanu;</li> <li>2) adaptācijas perioda norises izvērtēšanu;</li> <li>3) ūdiņšanas efektivitātes izvērtēšanu;</li> <li>4) ķermēņa masas dinamikas kontroli;</li> <li>5) dzirdes pārbaudi ar otoakustiskās emisijas metodi – līdz izrakstīšanai no stacionāra (plānotās ārpusstacionāra dzemdībās – līdz sestajai džives dienai).</li> </ul> <p>2. Nodrošina pulsa oksimetrijas skrīningu &gt; 24 stundas pēc dzimšanas līdz izrakstīšanai no stacionāra</p>	<p>1. Veic asins paraugu pirmreizēju panemšanu** paplašinātā jaundzimušo skrīninga izmeklējumiem visiem jaundzimušajiem laikā no 48. līdz 72. džives stundai***.</p> <p>2. Nodrošina:</p> <ul style="list-style-type: none"> <li>1) jaundzimuša fenilketonūrijas skrīningu ar kvantitatīvu fenilalanīna noteikšanu, izmantojot florisences metodi;</li> <li>2) jaundzimušo iedzimtas hipotireozes skrīningu ar kvantitatīvu tireotropā hormona noteikšanu, izmantojot fluoriscences metodi;</li> <li>3) cistiskās fibrozes jaundzimušo skrīningu ar imūnreaktīvā tripsinogēna (IRT) noteikšanu ar fluorometrisko enzīmu imūntestu (FEIA) un izmaiņita IRT rezultāta gadījumā dF508 noteikšanu, izolējot DNS no sausa asins piliena, izmantojot reālā laika polimerāzes kēdes reakciju (RT-PKR);</li> <li>4) galaktozēmijas jaundzimušo skrīningu ar kopējās galaktozes kvantitatīvo fluorometrisko noteikšanu un enzīma GALT aktivitātes noteikšanu jaundzimušajiem ar dzimšanas svaru zem 2000 g vai jaundzimušajiem ar primāri izmaiņītiem galaktozes rādītājiem;</li> </ul>	<p>1. Ja māte HIV pozitīva, rekomendē bērnam sešu nedēļu vecumā konsultāciju RAKUS<sup>[90]</sup> pie pediatra.</p> <p>2. Ja mātei anamnēzē pārslimots sifiliss, rekomendē bērnam viena mēneša vecumā konsultāciju BKUS<sup>[91]</sup> pie dermatologa venerologa.</p> <p>3. Ja māte HBsAg<sup>[92]</sup> pozitīva vai VHC<sup>[93]</sup> pozitīva, rekomendē bērnam triju mēnešu vecumā konsultāciju BKUS<sup>[94]</sup> pie infektologa.</p> <p>4. Nekavējoties nodrošina amonjaka īmeņa noteikšanu riska grupas bēriem</p>	<p>1. Nodrošina BCG<sup>[95]</sup> vakcināciju atbilstoši normatīvajiem aktiem par vakcinācijas kārtību.</p> <p>2. Ja bērns dzimis HIV inficēti mātei, BCG<sup>[96]</sup> vakcinācija dzemdību nodļā aizliegta.</p> <p>3. Ja dzirdes pārbaudē ar otoakustiskās emisijas metodi iegūta atbildē, kas rada šaubas, izsniedz nosūtījumu pie speciālista izmeklēšanai ar objektīvās audiometrijas metodi.</p> <p>4. Neskaidru ārejo dzimumorgānu vai abpusēja kriptorhisma (kas konstatēts zēniem, dzimušiem pēc 36. gestācijas nedēļas) gadījumā nodrošina asins parauga nosūtīšanu uz kariotipa analīzi.</p> <p>5. Ja paplašinātā jaundzimušo skrīninga rezultāti ir pozitīvi vai šaubīgi, izsniedz nosūtījumu konsultācijas saņemšanai BKUS.</p> <p>6. Ja paplašinātā jaundzimušo skrīninga rezultāti ir kritiski, izsniedz nosūtījumu neatliekamai bērna stacionēšanai BKUS</p>
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90. RAKUS – sabiedrība ar ierobežotu atbildību "Rīgas Austrumu kliniskā universitātes slimnīca".

91. BKUS – valsts sabiedrība ar ierobežotu atbildību "Bērnu kliniskā universitātes slimnīca".

92. HbsAg – hepatīta B virsmas antigēns.

93. VHC – vīrushepatīts C.

94. BKUS – valsts sabiedrība ar ierobežotu atbildību "Bērnu kliniskā universitātes slimnīca".

95. BCG – vakcīna pret tuberkulozi.

96. BCG – vakcīna pret tuberkulozi.

14. Vēlinais jaundzimušā periods (no septītās līdz 28. dzīves dienai)	Ģimenes ārsts vai pediatrs un vecmāte, bērnu aprūpes māsa vai ārsta paļgs	Atkārtoti izvērtē vai nosaka: 1) riska faktorus jaundzimušā veselībai; 2) sociālā riska faktorus	Veic: 1) jaundzimušā veselības stāvokļa novērtēšanu; 2) ūdiņšanas efektivitātes izvērtēšanu	1. Paplašinātā jaundzimušo skrīninga ietvaros nodrošina atkārtotu šis tabulas 13. punktā minēto laboratorisko izmeklējumu veikšanu***: 1) priekšlaikus dzimušiem bērniem, ja dzīmšanas svars < 2000 g un/vai dzīmšanas laiks $\leq 33+6$ gestācijas nedēļas; 2) jaundzimušajiem, kuri saņēmuši asins preparātu transfūziju, parenterālu barošanu un terapiju ar glikokortikoidiem	1. Turpina K vitamīna atkaīgās asiņošanas profilaksi, ja K vitamīns saņemts perorāli. 2. Nodrošina bērnu profilaktiskās apskates atbilstoši normatīvajiem aktiem par veselības aprūpes organizēšanas un finansēšanas kārtību. 3. Ja paplašinātā jaundzimušo skrīninga rezultāti ir pozitīvi vai šaubīgi, izsniedz nosūtījumu konsultācijas saņemšanai vai bērnu stacionēšanai BKUS. 4. Ja paplašinātā jaundzimušo skrīninga rezultāti ir kritiski, izsniedz nosūtījumu neatliekamai bērnu stacionēšanai BKUS
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\* K vitamīna atkaīgās asiņošanas profilakse – K vitamīna ievadīšana jaundzimušajam 24 stundu laikā pēc dzīmšanas un jaundzimušā ģimenes ārsta rakstiska informēšana par turpmāko K vitamīna profilakses veikšanu.

\*\* Nogādā BKUS divu darba dienu laikā. Jaundzimušā skrīninga lapiņa (aizpildīts skrīninga nosūtījums ar asins piliena paraugiem) tiek uzglabāta BKUS laboratorijā vienu gadu un pēc tam tiek iznīcināta saskaņā ar laboratorijā noteikto kārtību.

\*\*\* Ja plānota asins preparātu transfūzija, jaundzimušo skrīningu veic 48 stundu laikā pēc dzīmšanas. Ja māte saņēmusi terapiju ar glikokortikoidiem, jaundzimušo skrīningu veic pēc 72 stundu vecuma.

### B.5.3 Lithuania

Vardas, pavardė

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Amžius \_\_\_\_\_

A.k.	lytis	gimimo data								
		metai	mėnuo	diena						

Gyvenamoji vieta

---

(gatvė, namo Nr., buto Nr., miestas, rajonas, seniūnija, kaimas, valstybė  
(užsienietėms)

Telefonas \_\_\_\_\_

Asmens, kuriam gali būti teikiama informacija, kontaktinis telefonas: .....  
.....

Nėščiąjų prižiūri:  akušeris  šeimos gydytojas  gydytojas akušeris ginekologas.

.....

(vardas, pavardė, spaudo Nr. arba spaudas, telefonas)

## NĒŠTUMO PRIEŽIŪROS PLANAS

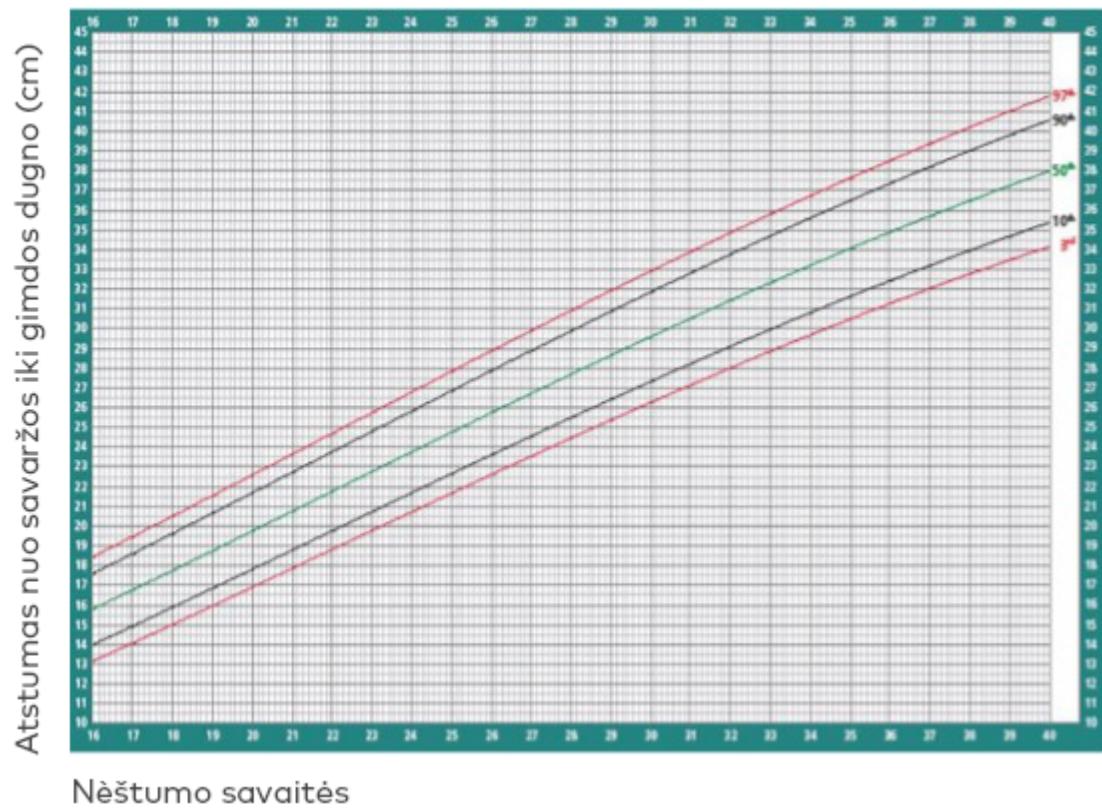
Veiksmai	Nēštumo dydis savaitėmis						
	Iki 12	11 <sup>+0</sup> – 13 <sup>+6</sup>	14–28			29–40	≥41
			18 <sup>+0</sup> – 20 <sup>+0</sup>	24–28	27–28		
Apsilankymai*	1		2		2–3		1
Bendras kraujo tyrimas, RPR, ŽIV						32 sav.	
Gliukozės kraujo plazmoje nustatymas							
Kraujo tyrimas dėl hepatito B (HBsAg)							
Kraujo grupė ir Rh (D) faktorius							
Rh (D) antikūnų nustatymas**	12 sav.						
Šlapimo pasėlis besimptomei bakteriurijai nustatyti							
Vaisiaus ultragarsinis tyrimas							
Kardiotokograma							
Gliukozės toleravimo mèginys							
Pasėlis dėl BGS infekcijos rizikos							
Odontologo konsultacija							
Vidaus ligų/šeimos gydytojo konsultacija							
Gydytojo akušerio ginekologo konsultacija							
Kity specialistų konsultacijos:							

\* KMI apskaičiuojamas pirmo apsilankymo metu; kiekvieno apsilankymo metu renkama, tikslinama anamnezė; matuojamas AKS; tiriamas šlapimas; gimdos dugno aukštis matuojamas ir VŠR vertinama nuo 24 nėštumo sav. \*\* kai moters Rh (-), o vyro Rh (+)

**DIDELĖS RIZIKOS NĖŠTUMO VEIKSNIAI**

<b>Nepalanki akušerinė anamnezė</b>	<b>Pildymo data</b>	<b>Nepalanki nėštūsios būklė</b>	<b>Pildymo data</b>
<input type="checkbox"/> nevaisingumas		<input type="checkbox"/> pirmą kartą gimdysianti nėščioji yra vyresnė nei 40 m.	
<input type="checkbox"/> vienas ir daugiau iš eilės neišešioti nėštumai (vėlyvi ( $\geq 14^{+0}$ nėštumo savaitės) persileidimai ir (ar) priešlaikiniai gimdymai)		<input type="checkbox"/> pirmą kartą gimdysianti nėščioji yra jaunesnė nei 18 m.	
<input type="checkbox"/> cėzario pjūvio operacija		<input type="checkbox"/> nėščioji, gimdysianti 5 kartą ar daugiau	
<input type="checkbox"/> gimdos operacija		<input type="checkbox"/> Rh ir kita izomuminė sensibilizacija	
<input type="checkbox"/> eklampsija		<input type="checkbox"/> iki 12 nėštumo savaitės nustatytas kūno masės indeksas yra 30 ar didesnis	
<input type="checkbox"/> sunki preeklampsija		<input type="checkbox"/> pagalbinis apvaisinimas	
<input type="checkbox"/> tromboembolinės komplikacijos		<b>Vaisiaus patologija</b>	
<input type="checkbox"/> perinatalinė mirtis		<input type="checkbox"/> stambus vaisius (svoris didesnis nei 90 procentilių)	
<input type="checkbox"/> naujagimio centrinės nervų sistemos pažeidimas		<input type="checkbox"/> nepakankamas vaisiaus augimas (svoris mažesnis nei 10 procentilių)	
<input type="checkbox"/> naujagimio sklaidos trūkumai		<input type="checkbox"/> vaisiaus sklaidos trūkumai	
<input type="checkbox"/> naujagimio hemolizinė liga		<input type="checkbox"/> vaisiaus vandenė	
<b>Nėštumo patologija</b>		<input type="checkbox"/> vaisiaus širdies aritmija	
<input type="checkbox"/> netaisyklinga vaisiaus padėtis nuo 36 nėštumo savaitės		<b>Nėštūsios ligos</b>	
<input type="checkbox"/> daugiaavaisis nėstumas		<input type="checkbox"/> nėštūsios liga, komplikuojanti nėštumo eigą	
<input type="checkbox"/> oligohidramnionas		<input type="checkbox"/> cukrinis diabetas: <input type="checkbox"/> I tipo <input type="checkbox"/> II tipo	
<input type="checkbox"/> polihidramnionas		<input type="checkbox"/> gestacinis diabetas	
<input type="checkbox"/> hipertenzinės būklės		<input type="checkbox"/> pielonefritis	
<input type="checkbox"/> kraujavimas		<input type="checkbox"/> onkologinės ligos	
<input type="checkbox"/> nėstumas tėsiasi po nustatyto gimdymo termino ( $> 41^{+0}$ nėštumo savaitės)		<input type="checkbox"/> lyties organų sklaidos trūkumai	
<input type="checkbox"/> placentos pirmeiga ar kitas patologinis prisitvirtinimas		<input type="checkbox"/> gimdos miomas, komplikuojančios nėštumo eigą	
		<input type="checkbox"/> alkoholizmas, narkomanija	
		<input type="checkbox"/> ŽIV, AIDS, hepatitas B ir (ar) C	

## GIMDOS DUGNO AUGIMO KREIVĖ



## ANAMNEZĖ

### Šeimos anamnezė:

- |  |   |
|--|---|
| <input type="checkbox"/> cukrinis diabetas ..... | <input type="checkbox"/> širdies ir kraujagyslių patologija ..... |
| .....  | .....   |
| <input type="checkbox"/> sklaidos trūkumai ..... | <input type="checkbox"/> cukrinis diabetas .....                  |
| .....  | .....   |
| <input type="checkbox"/> Z63.0 .....             | <input type="checkbox"/> urologinė patologija .....               |
| .....  | .....   |
| <input type="checkbox"/> kita .....              | <input type="checkbox"/> hipertonicinė liga .....                 |
| .....  | .....   |
|  | <input type="checkbox"/> tuberkuliozė .....                       |
|  | .....   |
|  | <input type="checkbox"/> kitos .....                              |
|  | .....   |

## Moters žalingi įpročiai:

	Iki nėštumo	Nėštumo metu
rūkymas	<input type="checkbox"/> ne <input type="checkbox"/> taip	<input type="checkbox"/> ne <input type="checkbox"/> taip
pasyvus rūkymas	<input type="checkbox"/> ne <input type="checkbox"/> taip	<input type="checkbox"/> ne <input type="checkbox"/> taip
alkoholio vartojimas	<input type="checkbox"/> ne <input type="checkbox"/> taip  <input type="checkbox"/> piktnaudžiauja	<input type="checkbox"/> ne <input type="checkbox"/> taip  <input type="checkbox"/> piktnaudžiauja
narkotikų vartojimas	<input type="checkbox"/> ne <input type="checkbox"/> taip  <input type="checkbox"/> piktnaudžiauja	<input type="checkbox"/> ne <input type="checkbox"/> taip  <input type="checkbox"/> piktnaudžiauja

## **Skiepai:**

nuo gripo:  neskiepyta  skiepyta

nuo kokliušo:  neskiepyta  skiepyta

### Alergija:

□ nera

yra .....

**Vaiko biologinio tėvo amžius (\_\_\_\_m.)** Svoris: \_\_\_\_\_ kg, ūgis \_\_\_\_\_  
**ir žalingi išročiai:** cm

### **Persirgtos ir gretutinės ligos (pažymeti ir papildyti):**

## ŠIO NĖŠTUMO DUOMENYS

Mėnesinių ciklas:

Preliminari nėštumo ir gimdymo atostogų pradžios

ANKSTESNI NĖŠTUMAI IR JŲ BAIGTYS							
Baigtys / Metai							
Savaiminis persileidimas ir (ar) nesivystantis nėštumas							
Ektopinis nėštumas							
Nėštumo nutraukimas savo noru							
Nėštumo nutraukimas pagal med. indikacijas							
Gimdymas (nurodyti): gimdymo būdą (priežastį) nėštumo savaites naujagimio lyti naujagimio svorį							
Informacija apie naujagimį:							
gimė išnešiotas, sveikas							
gimė neišnešiotas							
gimė negyvas							
mirė 0–6 parų							
mirė 7–27 parų							
Nustatyti sklaidos trūkumai / raidos ydos							

reguliarus: \_\_\_\_/\_\_\_\_

**data:**

neregularus

nuo -----

Paskutinių normalių mėnesinių data ----- \_\_\_\_

**Folinės r. vartojimas:**

**Patvirtintas gimdymo terminas** ----- \_\_\_\_

iki pastojimo

Pagal paskutines mėnesines ----- \_\_\_\_

pastojus

Pagal ultragarsių tyrimų ----- \_\_\_\_

didesnis kiekis

### APSILANKYMAI

Data	Savijau-ta/nusis-kundimai	Svoris (kg)/prie-augis nėštumo metu	Arterinis kraujo spaudimas		Vaisiaus širdies ritmas (VŠR)	Vaisiaus judesiai	Vaisiaus padėtis ir pirmeiga	Diagnozė	Paskyrimai, gydymas	Nėščiąjų apžiūréjusio sveikatos priežiūros specialisto vardas, pavardė, spaudo Nr. arba spaudas, parašas
			Dešinė	Kairė						

## TYRIMAI

### Kraujo grupė, Rh (D) faktorius (pažymėti)

Nėščiosios: <input type="checkbox"/> O(I) <input type="checkbox"/> A(II) <input type="checkbox"/> B(III) <input type="checkbox"/> AB(IV) Rh (D) faktorius: <input type="checkbox"/> teigiamas <input type="checkbox"/> neigiamas	Vaiko biologinio tėvo: <input type="checkbox"/> O(I) <input type="checkbox"/> A(II) <input type="checkbox"/> B(III) <input type="checkbox"/> AB(IV) Rh (D) faktorius: <input type="checkbox"/> teigiamas <input type="checkbox"/> neigiamas
<b>Tyrimas dėl antikūny</b>	<b>Anti-D imunoglobulinis</b>
____-_____ <i>(data)</i>	Rasta antikūny: <input type="checkbox"/> ne <input type="checkbox"/> taip: titras ____:
____-_____ <i>(data)</i>	Rasta antikūny: <input type="checkbox"/> ne <input type="checkbox"/> taip: titras ____:

### Kraujo tyrimas

Data	Eritrocitai	Hemoglobinas	Hematokritas	Leukocitai	Trombocitai

Tyrimas dėl sifilio (RPR)		Tyrimas dėl ŽIV	
_____- (data)	Rezultatas: <input type="checkbox"/> neigiamas <input type="checkbox"/> teigiamas: titras _____ :	_____- (data)	Rezultatas: <input type="checkbox"/> neigiamas <input type="checkbox"/> teigiamas
_____- (data)	Rezultatas: <input type="checkbox"/> neigiamas <input type="checkbox"/> teigiamas: titras _____ :	_____- (data)	Rezultatas: <input type="checkbox"/> neigiamas <input type="checkbox"/> teigiamas
Gliukozės krauso plazmoje tyrimas			
_____- (data)	_____ mmol/l	_____- (data)	HBsAg: <input type="checkbox"/> neigiamas; <input type="checkbox"/> teigiamas; <input type="checkbox"/> netirta
Šlapimo pasėlio tyrimas dėl besimptomės bakteriurijos		Pasėlio tyrimas dėl naujaginių B grupės streptokoko (BGS) infekcijos rizikos	
_____- (data)	Rezultatas: <input type="checkbox"/> norma <input type="checkbox"/> bakterijų $\geq 10^5$ KVF/ml	<input type="checkbox"/> tirta (data.....): <input type="checkbox"/> nerasta <input type="checkbox"/> rasta  <input type="checkbox"/> netirta: <input type="checkbox"/> gimdymo metu yra rizika <input type="checkbox"/> nėra rizikos	
Gliukozės toleravimo mėginys (GTM)			
<input type="checkbox"/> Nėra indikacijų _____- (data)	I - _____ mmol/l II - _____ mmol/l III - _____ mmol/l		
Prenatalinė chromosomų anomalijų patikra		Prenatalinė diagnostika	Vaisiaus chirurginės procedūros
<input type="checkbox"/> kombinuotasis testas <input type="checkbox"/> trigubas testas <input type="checkbox"/> laisvos vaisiaus DNR tyrimas	<input type="checkbox"/> choriono gaurelių biopsija _____ - _____ (data) <input type="checkbox"/> amniocentezė _____ - _____ (data) <input type="checkbox"/> kordocentezė ----- (data)	<input type="checkbox"/> kraujo transfuzija <input type="checkbox"/> lazerio procedūra esant DTS <input type="checkbox"/> stento įdėjimas <input type="checkbox"/> kita .....	

### Šlapimo tyrimas

Data	Baltymas	Leukocitai	Eritrocitai	Gliukozė	Ketonai	Nitritai

**Kiti svarbi informacija** (siejama su tyrimų atlikimu bei rezultatais):

Data	Konsultavusio specialisto pareigos, vardas, pavardė	Konsultavusių specialistų nustatyta diagnozė, išvados ir rekomendacijos
	<p>Šeimos arba vidaus ligų gydytojas:</p> <p>Odontologas:</p> <p>Kiti specialistai <i>(irašyti)</i></p>	

## INFORMACIJA APIE GYDYMĄ STACIONARE NĘŠTUMO METU

*(Pažymėti, jei buvo gydyta stacionare nęštumo metu. Nurodyti datą, diagnozę, stacionarinio gydymo išvadas ir rekomendacijas)*

Data	Gydymo įstaiga	Diagnozė/išvados	Rekomendacijos

### KITA SVARBI INFORMACIJA

#### **VAISIAUS ULTRAGARSINIS TYRIMAS 11<sup>+0</sup>-13<sup>+6</sup> NĘŠTUMO SAVAITĘ**

Formos Nr. 025-113/a 1  
priedas

Pacientė \_\_\_\_\_ ESI Nr. \_\_\_\_\_

Tyrimo data -----

Gautas žodinis pacientės sutikimas atliliki tyrimą Paskutinių normalių mėnesinių data \_\_\_\_\_

Nęštumo trukmė pagal mėnesines: \_\_\_\_\_ sav. + \_\_\_\_\_ d. Tyrimo sąlygos:  geros  apsunkintos dėl: \_\_\_\_\_  
*jirangos kokybės / moters kūno ypatumų / vaisiaus padėties / kt.:*

Vienvaisis / daugiavaisis nęštumas (1 lapas 1 vaisiui)

Chorioniškumas:  DC /  MC Amniotiškumas:  DA /  MA

**Gimdos kaklelio ilgis** \_\_\_\_\_ mm

(matuojamas tik esant persileidimo ar priešlaikinio gimydymo rizikai)

#### **Kraujotakos tyrimas**

Gimdos arterijos: Dešinioji PI \_\_\_\_\_ RI \_\_\_\_\_ Protodiastolinė banga +/- Kairioji PI \_\_\_\_\_ RI \_\_\_\_\_  
Protodiastolinė banga +/-

**Gimdos priedų išvaizda:**  norma  netirta.  patologija

Matmuo	mm	Nėštumo trukmė (savaitės ir dienos)
Viršugalvio sėdmenų matmuo		
Sprando vaiskuma		
Biparietalinis matmuo		
Galvos apimtis		
Pilvo apimtis		
Šlaunikaulio ilgis		

Pastabos, detali informacija apie patologinius radinius:

<b>Ultragarsinis vaisiaus anatomijos tyrimas</b>	<b>Norma</b>	<b>Netirta</b>	<b>Patologija</b>
<b>Galva</b>			
Forma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kaukolés kaulėjimas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skliauto pjautuvas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kraujagysliniai rezginiai	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Veidas</b>			
Akidoobės	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Profilis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nosies kaulas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Kaklas</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Krūtinės ląsta</b>			
Plaučių sritis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diafragma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Širdis</b>			
Širdies veikla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dydis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Širdies ašis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 kamery vaizdas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Pilvas</b>			
Skrandis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Žarnynas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inkstai	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Šlapimo pūslė	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pilvo siena / virkštelių tvirtinimosi vieta	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Virkštelių kraujagyslės	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Stuburas</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Galūnės</b>			
Deš. ranka su plaštaka	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deš. koja su pėda	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kair. ranka su plaštaka	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kair. koja su pėda	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Kraujotaka</b>			
Pro triburži vožtuvą	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pro veninį lataką	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Širdies susitr. dažnis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Ultragarsu nustatyta nėštumo trukmė:** sav. <sup>+</sup> —d.

**Išvada:**

- norma, atliktas visas ištyrimas
- norma, atliktas ne visas ištyrimas
- patologija

**Rekomendacijos:**

- detalesnis ultragarsinis tyrimas nereikalingas
- pakartotinas tyrimas, esant \_\_\_\_\_ nėštumo sav.
- išsiųsta konsultacijos j .....

Kita svarbi informacija

.....  
.....  
.....  
.....  
.....

---

(tyrėjo vardas, pavardė, spaudo Nr. arba spaudas, parašas)

*Pilka spalva pažymėtose skiltyse  
nurodyti tyrimai neprivalomi*

**Placentos lokalizacija gimdoje:**

- priekinėje sienoje                      
 užpakalinėje sienoje  
 aukštai                                     žemai
- 

**VAISIAUS ULTRAGARSINIS TYRIMAS**

Pacientė \_\_\_\_\_ ESI Nr. \_\_\_\_\_

Tyrimo data ----- \_\_\_\_\_

Gautas žodinis pacientės sutikimas atlikti tyrimą Paskutinių normalių mėnesinių data \_\_\_\_\_

Nėštumo trukmė pagal mėnesines: \_\_\_\_\_ sav. +\_d. Nėštumo trukmė pagal ankstyvą ultragarsių tyrimą\_sav. +\_d. Tyrimo sąlygos:  geros  apsunkintos dėl:

*irangos kokybės / moters kūno ypatumų / vaisiaus padėties / kt.:*

---

Vienvaisis / daugiavaisis nėštumas (1 lapas 1 vaisiui)

Chorioniškumas:  DC /  MC

Amniotiškumas:  DA /  MA

**Placentos lokalizacija gimdoje:**

- priekinėje sienoje                     užpakalinėje sienoje                     dugne

**Placenta:**

- nedengia vidinių gimdos kaklelio žiočių  
 dengia vidines gimdos kaklelio žiotis  
 yra \_\_\_\_\_ mm nuo vidinių žiočių

**Placentos išvaizda:**

- norma                                     patologija

**Patologinis placentos prisitvirtinimas:**

*(vertinamas esant randui gimdoje ir(ar) placentos pirmeigai)*

- nėra                                     jstariamas                                     yra

Matmuo	mm	Nėštumo trukmė (savaitės ir dienos)
Biparietalinis matmuo		
Galvos apimtis		
Pilvo apimtis		
Šlaunikaulio ilgis		
Žastikaulio ilgis		
Vaisiaus svoris (g)		

### Kraujotakos tyrimas

Virkštelės arterija: PI\_\_\_\_\_ RI\_\_\_\_\_ S/D santykis

Kraujotakos klasė:  norma  žema diastolė  nulinė kraujotaka

reversinė (grįžtamoji)

Vidurinė smegenų PI\_\_\_\_\_ RI\_\_\_\_\_ S/D santykis arterija:

PSV (Vmax)\_\_\_cm/s (\_\_\_MoM)

Veninis latakas: PI\_\_\_\_\_

Blužnies arterija: PI\_RI\_\_\_\_\_ PSV (Vmax)\_cm/s (\_MoM)

Gimdos arterijos: Dešinioji PI\_RI\_\_ Protodiastolinė banga +/- Kairioji PI\_RI

Protodiastolinė banga +/-

### Vaisiaus vandenys:

norma       patologija      VVI\_\_\_\_\_ / VVK\_\_\_\_\_ mm

18 <sup>+0</sup> -20 <sup>+0</sup> nėštumo savaitę	Formos Nr. 025-113/a 2 priedas		
Pilvo siena, virkštelės tvirtinimosi vieta	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Galūnės</b>			
Dešinioji ranka su plaštaka	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kairioji ranka su plaštaka	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dešinioji koja su pėda	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kairioji koja su pėda	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Virkštelė:</b> trys kraujagyslės			
<b>Lyties organai</b>			
Vyriškieji	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Moteriškieji	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Ultragarsinis vaisiaus anatomijos tyrimas</b>	Norma	Netirta	Patologija

<b>Galva</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kaukolés forma, kontūrai	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skaidrioji pertvara	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vidurinè linija	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smegeny branduoliai	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smegenèlés (mm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Didžioji cisterna (mm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Šoniniai skilveliai			
Dešinysis priekinis ragas (mm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kairysis priekinis ragas (mm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dešinysis užpakalinis ragas (mm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kairysis užpakalinis ragas (mm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kraujagysliniai rezginiai	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Didžioji jungtis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sprando raukšlė (mm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Veidas</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Profilis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Viršutinè lüpa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Akidoebès	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nosis, šnervės	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smakras	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nosies kaulas (mm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prienosinių audinių storis (mm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Kaklas</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Stuburas</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Krūtinès ląsta</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Krūtinès ląstos forma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Plaučiai	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diafragma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Širdis</b>			
Širdies veikla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dydis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Širdies ašis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Keturių kamerų vaizdas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aortos išvarymo traktas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plautinio kamieno išvarymo traktas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Pilvas</b>			
Skrandis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Žarnynas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Inkstai</b>			
Dešinysis inkstas (geldelė, mm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kairysis inkstas (geldelė, mm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Šlapimo pūslė	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pilvo siena, virkštelių tvirtinimosi vieta	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Galūnės</b>			
Dešinioji ranka su plaštaka	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kairioji ranka su plaštaka	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dešinioji koja su pėda	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kairioji koja su pėda	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Virkštelių: trys kraujagyslės</b>			
<b>Lyties organai</b>			
Vyriškieji	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Moteriškieji	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Gimdos kaklelio ilgis** \_\_\_\_\_ mm

(matuojamas tik esant persileidimo ar priešlaikinio gimdymo rizikai)

**Kraujotakos tyrimas**

Gimdos arterijos:

DešiniojiPI \_\_\_\_ RI \_\_\_\_ Protodiastolinė banga +/-

Kairioji PI \_\_\_\_ RI \_\_\_\_ Protodiastolinė banga +/-

**Gimdos priedų išvaizda:**  norma       netirta     patologija

Pastabos, detali informacija apie patologinius radinius:

**Ultragarsu nustatyta nėštumo trukmė:** \_\_\_ sav. + — d.

**Išvada:**

- norma, atliktas visas ištyrimas
- norma, atliktas ne visas ištyrimas
- patologija

**Rekomendacijos:**

- detalesnis ultragarsinis tyrimas nereikalingas
- atlikti pakartotinį tyrimą, esant \_\_\_\_\_ nėštumo sav.
- siųsti konsultacijos į . . . . .

Kiti svarbi informacija

.....  
.....  
.....  
.....  
.....

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(tyrėjo vardas, pavardė, spaudo Nr. arba spaudas, parašas)

# About this publication

## Digital Maternity Cards in the Nordic and Baltic countries

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