



**NEXUS / OBSTETRICS**

OBSTETRICS  
IN FOCUS



## NEXUS / OBSTETRICS: The complete obstetrics system

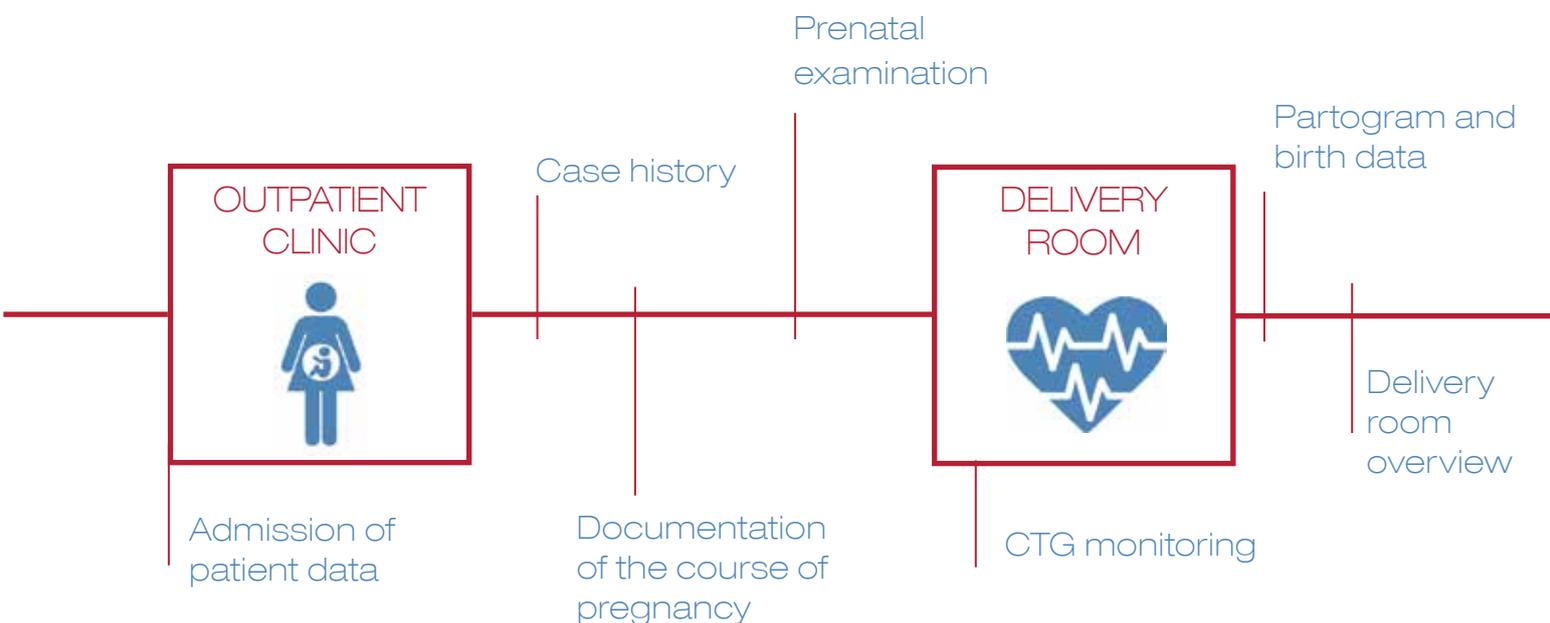
NEXUS / OBSTETRICS makes an important contribution to process optimisation in women's hospitals and obstetric wards.

Consistent, fast availability of patient information is a prerequisite for high-quality care of your patients. NEXUS / OBSTETRICS provides you with all decisive information from diagnoses to individual treatment in a uniform system.

NEXUS has developed a flexible information system to this end, which can be adapted completely in line with the requirements of your clinic thanks to its modular structure. Digital image and diagnosis documentation, the most modern CTG monitoring functions and high-performance documentation tools round out the solution for a comprehensive concept.

### Simple, fast and certified

NEXUS / DIS has been providing technical innovations to women's clinics for more than 20 years. Our customers have appreciated the expertise and experience of our highly motivated staff for many years. We exchange information about current trends and requirements in gynecology and obstetrics continually with relevant specialist associations. You can find this expertise accumulated over many years reflected in our products. In addition, we are continually in contact with our numerous customers and improve our ward software constantly.





## Easy handling and high integration

**NEXUS / OBSTETRICS offers a simple, user-friendly and reliable information system, designed specifically for the needs of women's hospitals. The solution can be adapted flexibly to individual requirements.**

The function modules of the software solution can be parameterised completely in line with your needs into the already existing IT infrastructure of your hospital. You can access current information about findings and diagnoses at any time, even in delivery rooms, and generate required organisation aids with minimum work.

The NEXUS / OBSTETRICS information system uses one database for all functional areas. As a result, documented data are available everywhere in every phase of pregnancy and birth.

Long years of experience, continual exchanges with our users and permanent further development have resulted in a uniform interface, which supports the obstetrics workflow to a high degree.

Thanks to the shared data model, you can structure position- and ward-overlapping reports and statistics completely in line with your needs.

All required quality assurance measures are supported.

NEXUS / DIS GmbH is internationally recognised as an ISO-certified manufacturer of medical products (DIN EN ISO 9001:2008; DIN EN ISO 13485:2003). Our solution NEXUS / OBSTETRICS has already been installed in seven languages. Additional languages are available on request.



## A vision of the digital future: NEXUS / OBSTETRICS

All documentation tasks can be handled: from the day the pregnancy is registered until discharge from the childbirth center, helping to ensure efficient record-keeping right from the start.

State-of-the-art system architectures and intuitive user interfaces guarantee efficient use of the system. In addition to maternal diagnoses and medical procedures, users are provided with a detailed partogram display, activity recording and all necessary functions. The delivery room overview completes the solution.

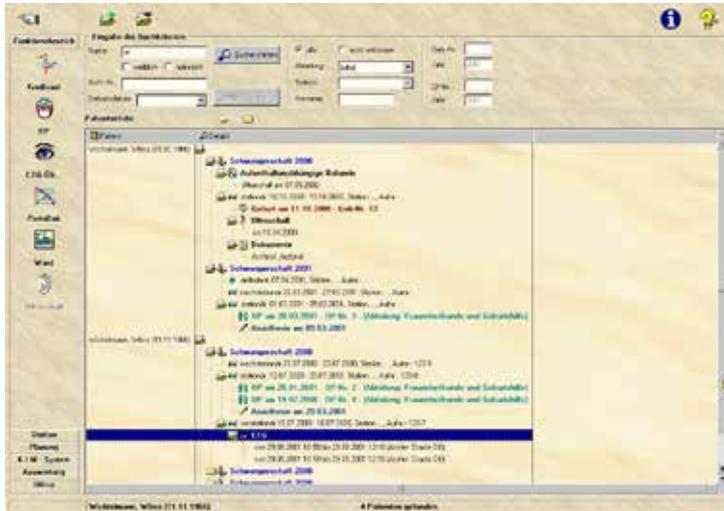
Information from a previous examination or medical procedure completed during this pregnancy can be viewed at any time. NEXUS / OBSTETRICS follows the maternity guidelines of the Federal Committee of Physicians and Health Insurers.



# “Never start stopping – never stop starting”

Marcus Tullius Cicero

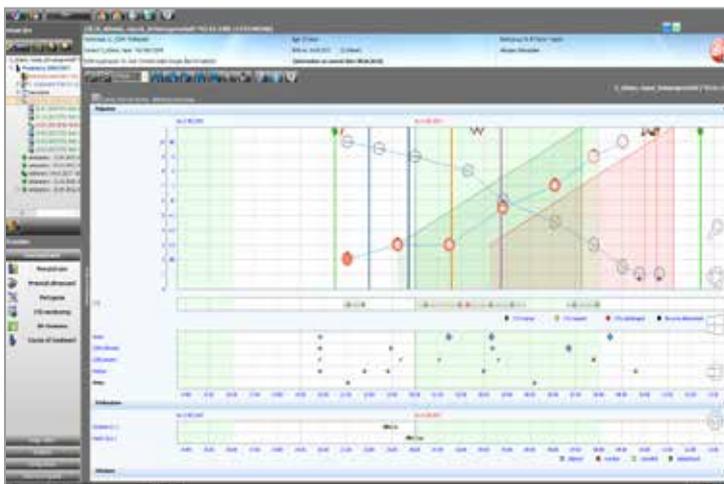
The evolution of our obstetric software over the past 25 years



Our software interface from 2000



... 10 years later



NEXUS / OBSTETRICS in 2017

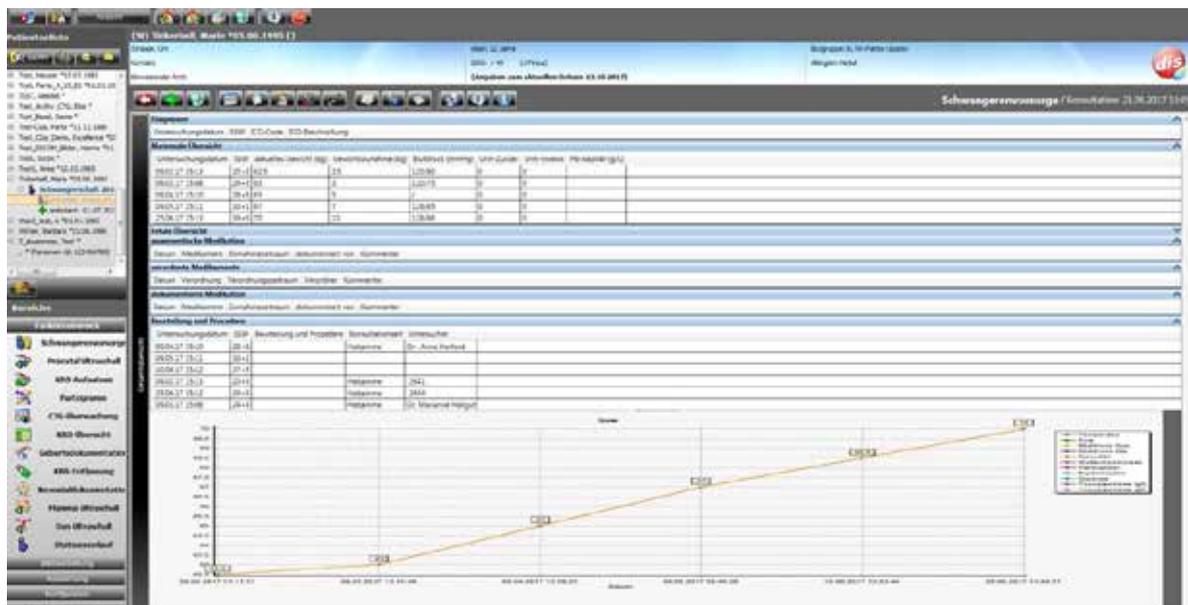


## Prenatal Care: Documentation during pregnancy

You use the Prenatal Care module of NEXUS / OBSTETRICS to record all examinations that are essential during pregnancy and the prepartum period. The Prenatal Care module also supports the recording of all relevant information, including a case history, various tests, medical measures and lab results as well as drug administration and prescriptions.

The overall summary provides a quick overview of all the findings/examinations/procedures etc. that have been documented to date during the pregnancy.

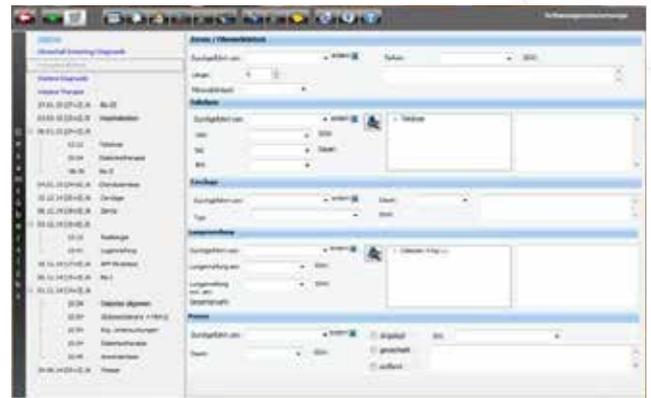
The module can be dynamically and individually customised according to the day-to-day requirements of your facilities. Once entered in the relevant module, all data are subsequently available to all other modules for the further course of the pregnancy, saving time and avoiding duplication of documentation.



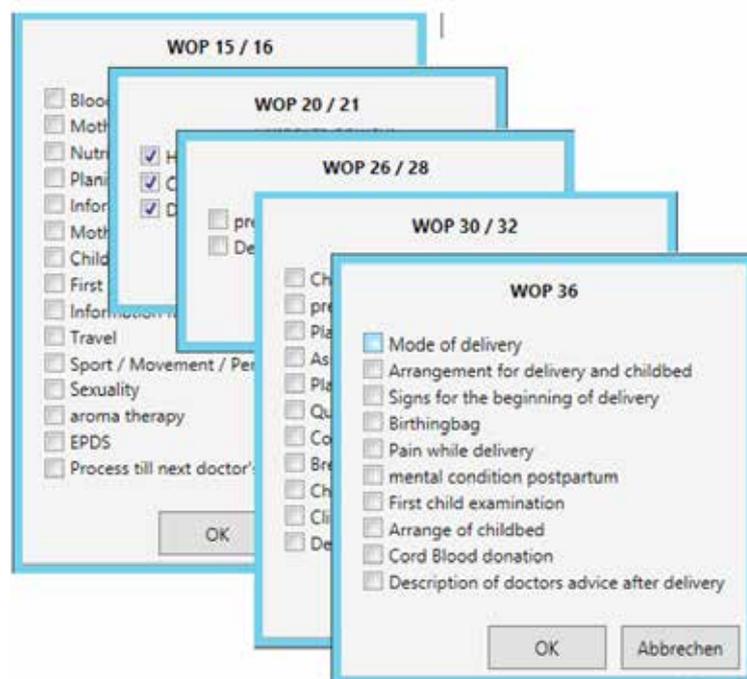


## All examinations at a glance

- + Overview of all examinations and findings
- + Aligned to the maternity record
- + Fast access to individual examinations
- + Record of maternity and family history
- + Detailed recording of lab results
- + Documentation of therapeutic measures and medical procedures during the course of pregnancy
- + CTG analysis of written CTGs
- + Provision of required data for the subsequent documentation
- + Freely defined text modules (customisation to in-house nomenclature)
- + High degree of configuration flexibility to align the system to the facilities' needs
- + Freely defined doctor's letter design



*Recording of findings during pregnancy*



*Configurable checklists*



## ADVANTAGES

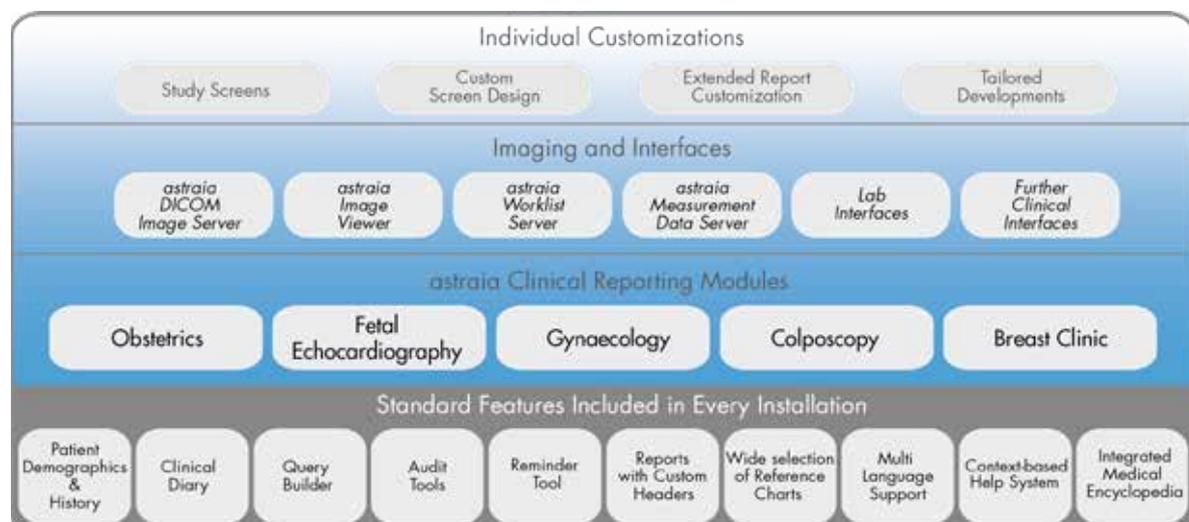
- + Powerful software for end-to-end pregnancy documentation
- + Holistic overview
- + High degree of configuration flexibility
- + Add-on to NEXUS / OBSTETRICS Complete solution



## Benefit from our Integration with astraia

NEXUS AG and astraia software gmbh have decided to join for the benefit of our customers. Now we can offer an extended portfolio of medical software where astraia has been fully integrated. The team at astraia benefits from the experience and potential of a well-established company which offers additional resources to meet the expectations of our customers.

The astraia software solutions offer a scalable and flexible data management tool with advanced medical functionalities. The software has been designed for and in collaboration with healthcare professionals in Obstetrics and Gynecology to optimise their daily workflows. Using our structured report templates, it takes only a few clicks to create an appealing report to hand out to the patient or for the referring doctor. The modular structure of astraia allows you to tailor the installation to your needs. Our entry-level solution is a standalone installation, ideal for a private practice with limited connectivity needs. It can then be easily extended as the practice grows and needs change. Any installation can be expanded into a highly complex network installation, with unlimited users, a multitude of interfaces, and a seamless integration into the existing IT environment.

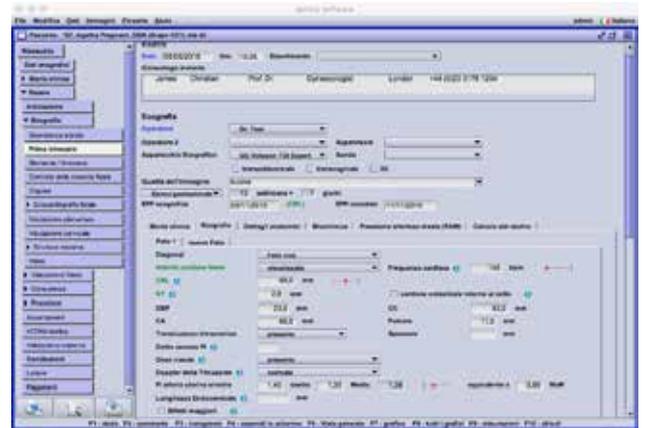


*About astraia*

# Astraia Obstetrics & Fetal Echocardiography cover:

- + the entire pregnancy and prenatal diagnostics
- + Antenatal history and diagnostic findings
- + Family history with pedigree builder
- + Complete ultrasound examination of fetus and maternal structures
- + User-selectable reference charts and graphical representation of measurement results
- + Documentation of invasive and non-invasive procedures
- + Fetal and maternal Doppler screens
- + Genetic counselling
- + Various risk assessments (first and second trimester)
- + Documentation of patient demographics, medical history, diagnosis, outcome, and conclusions
- + Case summaries and automatic highlighting of significant examination results
- + Transfer DICOM images, clips, and volumes with one click
- + Hundreds of reference charts available
- + Screen configuration tool to hide fields, make fields mandatory, or add user-defined fields in order to tailor astraia to your workflow needs
- + Supports various studies, e.g., the joint EU project about improving the risk assessment of pre-eclampsia and the effect of Aspirin (ASPRES, EU grant)
- + Extra tool for Fetal Echocardiography: with priori findings to decide on the best examination strategy for your patient

More information:  
[www.astraia.com](http://www.astraia.com)



*astraia Obstetrics*



*Fetal Echocardiography*



## ADVANTAGES

- + FMF First Trimester Risk Calculation according to the specification of FMF London
- + Long year co-operation with leading scientists and experienced practitioners resulted in standardized terminology
- + Available in more than 20 languages
- + Highly configurable user interface and print out
- + Connectivity to major ultrasound systems and biochemical analyzers



## CTG monitoring

NEXUS / OBSTETRICS is both an innovative software solution and a reliable, innovative and secure CTG monitoring system.

Stable and scalable system architecture, easy operation, clearly arranged and unambiguous display of information as well as complete integration into obstetrics documentation are basic prerequisites for a modern CTG monitoring system.

NEXUS / CTG MONITORING already fulfils these requirements as a basis system. Various options enable the display of maternal parameter alarms, for example, and support innovative CTG analysis methods. In addition, NEXUS / OBSTETRICS enables CTG archiving in the electronic patient records of a hospital information system.



CTG monitoring



## Maternal alarms

Use maternal alarms to help you keep an eye on the relevant parameters at all times.

Set upper and lower limits to trigger alarms in the event of abnormal maternal vital parameters. Assures maximum safety at all times both for healthcare professionals and patients.

**Brady / Tachy**

Enter a range between 50 and 210.

Tachy:  ▲▼

Brady:  ▲▼

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**maternal Alarms**

	lower limit	upper limit
pulse:	<input type="text" value="65"/> <span>▲▼</span>	<input type="text" value="125"/> <span>▲▼</span>
Systole:	<input type="text" value="110"/> <span>▲▼</span>	<input type="text" value="150"/> <span>▲▼</span>
Diastole:	<input type="text" value="80"/> <span>▲▼</span>	<input type="text" value="110"/> <span>▲▼</span>
SpO2:	<input type="text" value="96"/> <span>▲▼</span>	<input type="text" value="100"/> <span>▲▼</span>
Temp:	<input type="text" value="36"/> <span>▲▼</span>	<input type="text" value="38"/> <span>▲▼</span>
ECG:	<input type="text" value="65"/> <span>▲▼</span>	<input type="text" value="125"/> <span>▲▼</span>

OK
 off
 Abort

*The alarm limits for fetal and maternal parameters can be individually configured*

## Algorithms and approval

In addition to supporting you with integrated algorithms, we also provide process support.

The **FIGO option** allows the condition of the fetus to be accurately assessed during labour based on international criteria. A score is calculated and displayed for every CTG on the basis of the live data from the CTG equipment.

During the pregnancy, the **STV algorithm** is an optional additional tool for assessing the fetal heart rate. The information is also presented on the single bed display.

We also support special communication with **STAN** CTG equipment. We evaluate the STAN protocol in order to display extended STAN parameters, including STAN events.

Our **approval function** permits the retroactive creation of notes and assessments within the CTG curve. This includes a release mechanism with personalised user identification for final archiving in an archive system.



## ADVANTAGES

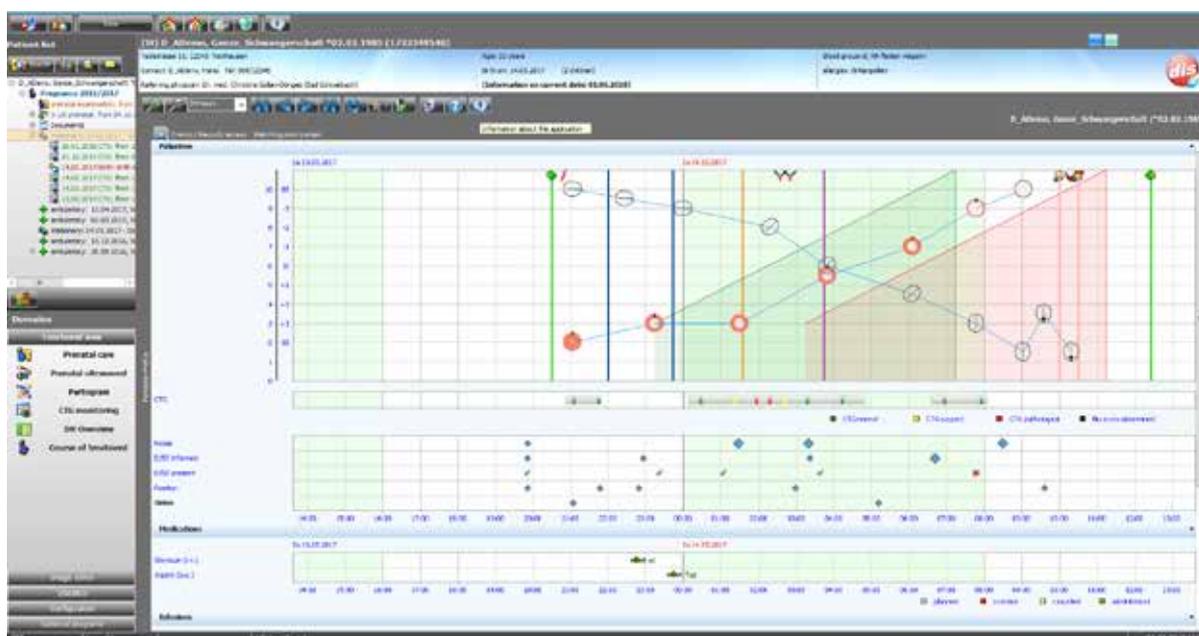
- + Overview of all current CTGs
- + HL7 interface for all standard HIS systems
- + Scalable from an individual workstation all the way to an entire hospital network
- + Hardware-independent and WIFI-enabled
- + Extensive use of CTG analysis  
CTG monitoring and partogram
- + Automatic CTG score according to FIGO
- + CTG analysis (STV)
- + Maternal parameter alarms
- + Process support with approval function
- + Compatible with the NEXUS / OBSTETRICS complete solution



## Partogram: Seamless documentation of the course of labour

Documentation of the course of labour in the form of a partogram is an important component of birth. The significance of a partogram corresponds to that of an OP report and contains all important information such as findings, persons administering treatment, measures, observations and considerations. As a result, it provides up-to-date and clearly arranged information about the course and status of delivery to all those involved.

The partogram module supports physicians and midwives in documenting the course of labour. Combined with the CTG monitoring software and pregnancy documentation, structured labour documentation with doctor's letter creation, label printing and export of data for external quality assurance, the partogram solution provides a complete package for labour room documentation.



*Continuous analysis in the delivery room*



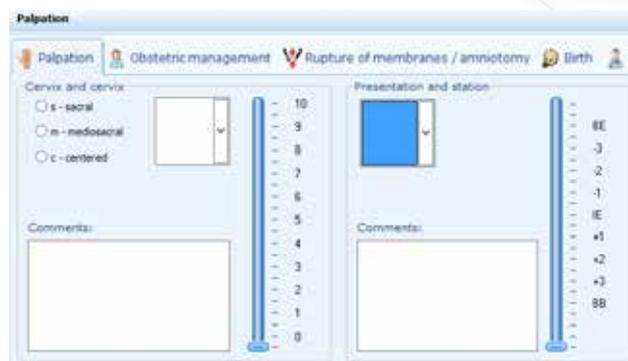
# Partogram - graphical course of labour

The partogram in NEXUS / OBSTETRICS complies with current requirements. Thanks to numerous settings, among others, free definition of symbols and events such as breaking of waters, PDA, micro-blood sampling and birth, you can configure the partogram function to an almost unlimited extent in your chart.

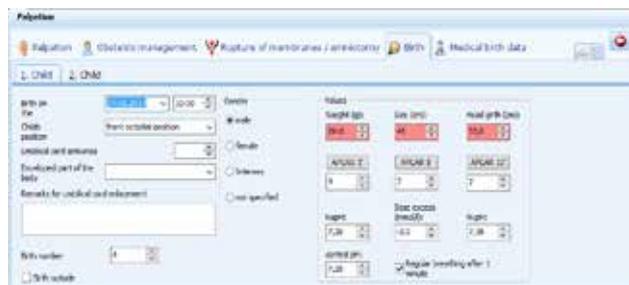
The Partogram area also offers legally compliant documentation of all entries, including archiving in the database.

The module also guarantees direct access to CTG monitoring, thus supporting the online transfer and graphical display of maternal vital parameters from compatible CTG devices.

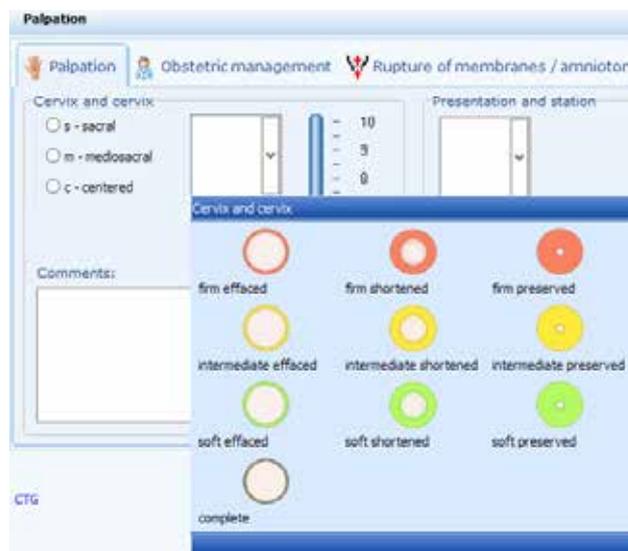
The WHO intervention lines are calculated on the basis of cervical dilation, which can be presented in great detail and using graphical documentation.



*Fetal presentation and position*



*Labour*



*Cervix*



## ADVANTAGES

- + Graphical input and display of palpatory findings
- + Extensive use of CTG score for partogram and CTG monitoring
- + Display of drug administration, infusions, vital parameters, notes and other freely defined findings on a time axis
- + Optional display of WHO intervention lines
- + Transfer of maternal CTG parameters into the partogram
- + High degree of flexibility thanks to maximum configuration options
- + Add-on to the NEXUS / OBSTETRICS all-in-one solution



## The delivery room overview: All birth processes in one overview

The Delivery Room Overview from NEXUS / OBSTETRICS keeps you informed with an up-to-date overview of the condition of mothers-to-be. The most important information is continually displayed for the selected patients on the dashboard. In addition to palpatory findings and vital data, this also includes gestational age, gravidity, parity, pregnancy risks and other supplementary data from the patient record. A new diagnosis status is entered quickly and clearly arranged with one click on the “Smiley” in line with our “One-Click to Information” philosophy.

This information is made available throughout the complete ward in a networked system. The most important information is continually displayed for the selected patients in the overview. The displayed information is updated automatically by the entries from the other functions (“Partogram” and “Obstetrics Documentation”). You can set the updating intervals yourself.

The Delivery Room Overview replaces a chalkboard in the midwives’ office and ensures that up-to-date information about the course of labour of the individual patients is displayed at all times.

The Delivery Room Overview can be configured in line with your needs.

Pat.	Name	Gestations	Gravida	Parity	Diagnosis	Partogram	Obstetrics	Notes
1001	Anna Doe	38	1	0	Normal	Green	Normal	
1002	Anna Doe	38	1	0	Normal	Green	Normal	
1003	Anna Doe	38	1	0	Normal	Green	Normal	
1004	Anna Doe	38	1	0	Normal	Green	Normal	
1005	Anna Doe	38	1	0	Normal	Green	Normal	

*Overview of delivery room / ward occupancy*



# Reporting Overview

Pre-defined reports simplify your work

The system offers a number of predefined standard reports, such as a chronological list of the course of labour, as well as various doctor's letters. Photos and graphics can be inserted into doctor's letters. Individual modifications can be made on request.

Sample doctor's letters

# Statistics: Report and analyse

Freely defined statistics for a detailed analysis of your data

Freely defined statistics provide you with comprehensive reports as well as any number of analysis options for all of your data. When you run a report, the results appear instantaneously because reporting is performed on the basis of a local data pool independently of live operation. Results can be exported directly to MS Excel® if it is installed on your PC. If a report is frequently required, filters can be set to allow the analysis to be accessed again quickly.

The detailed analysis can be accessed directly from the statistics to identify a patient. With one click, you can branch directly to the NEXUS / OBSTETRICALS patient record.

Freely defined statistics



## ADVANTAGES

- + Overview of current delivery room / ward occupancy in table form
- + Display of data already recorded in other documentation areas
- + Additional entry options for various findings
- + Configurable updating interval
- + High degree of display flexibility thanks to very varied configuration options
- + One-click creation of delivery room statistics
- + Workflow-oriented reporting
- + Add-on to the NEXUS / OBSTETRICALS all-in-one solution

## From actual practice



"Thanks to NEXUS / OBSTETRICS, we can support patients competently on their way to giving birth: from the day of registration until discharge after delivery."

Chief Physician PD Dr. Franz Bahlmann  
Bürger Hospital Frankfurt



"We have always been completely satisfied with the user-friendly NEXUS functions in the women's clinic of Diakonischen Dienste, which support us in our obstetrics ward optimally."

Chief Physician Prof. Dr. Ralf Schild  
Frauenklinik der Diakonischen Dienste Hannover gGmbH

## THE ADVANTAGES AT A GLANCE

### Comprehensive functionalities

- + Automatic writing of doctors' letters
- + Numerous reporting options
- + Uniform user interface
- + Connected to the HIS
- + All relevant data transferred to NEXUS / NEONATAL
- + One standard data model

### Prenatal Care

- + Holistic overview
- + Compliance with maternity guidelines
- + Direct access to individual examinations

### CTG Monitoring

- + Display of fetal heart rates in diagnosis quality
- + Online transfer of maternal parameters from CTG equipment
- + Various CTG interpretation algorithms available

### Ultrasound Documentation

- + Complies with the requirements of DEGUM III in Germany
- + Integrated trisomy 21 and T13/ T18 risk calculation
- + Comprehensive standard curve library stored

### Partogram

- + Entry of height of child's head and position in a chart
- + Display of drug administration, infusions, vital parameters, notes and other freely definable findings on a time axis
- + High degree of flexibility thanks to maximum configuration options