

PRENCARE

Integrated system of prenatal care
(ISPC)



cominfo

PrenCare

- ◉ **Integrated system of prenatal care (ISPC)** is an electronics system developed for prenatal monitoring (screening) of pregnant women with subsequent automatic analysis of collected data.

ISPC system goals:

- Recognition of imminent premature delivery in time and monitoring of treatment action;
- 100% safety for the pregnant woman.

PrenCaresystem benefits (1/2)

- Applicable to any pregnant woman;
- Objective examination of the uterine activity (independently of the subjective feelings of the pregnant woman);
- Full-fledged continuous screening of the uterine activity (over long-time period);
- Monitoring of the therapy impact on the progress of uterine activity (provable treatment effect);
- Monitoring of the daily routine dynamics (e.g.: Does the patient adhere to quiet behaviour requirements?);

PrenCaresystembenefits (2/2)

- ◉ Integration of data from all different sources into one common base for evaluation of all relevant factors;
- ◉ Chance to obtain statistically significant data for possible successive clinical studies in the field of risk pregnancy.

Applicability in practice

- The **PrenCare** system can be utilised in almost any health-care institution dealing with pregnant women, i.e. first of all in every antenatal and obstetrics clinic.
- **Its relatively low purchase price** is also a good reason for wide utilisation of the system.

PrenCare – description (1/2)

- Relationship between data on uterine activity and imminent premature delivery was proven statistically (**up to 92%**).
- Continuous external tocography** together with monitoring of patient dynamics (changes of body position) using **accelerometer** has been applied for correct assessment of gravidity risk and of possible proactive intervention.

PrenCare – description (2/2)

ISPP

=

integrated system for prevention of premature delivery based on synchronized use of four techniques:

- Continuous external tocography;
- Monitoring of cervix-score;
- Anamnestic screening;
- Measurements of cervix status (selective).



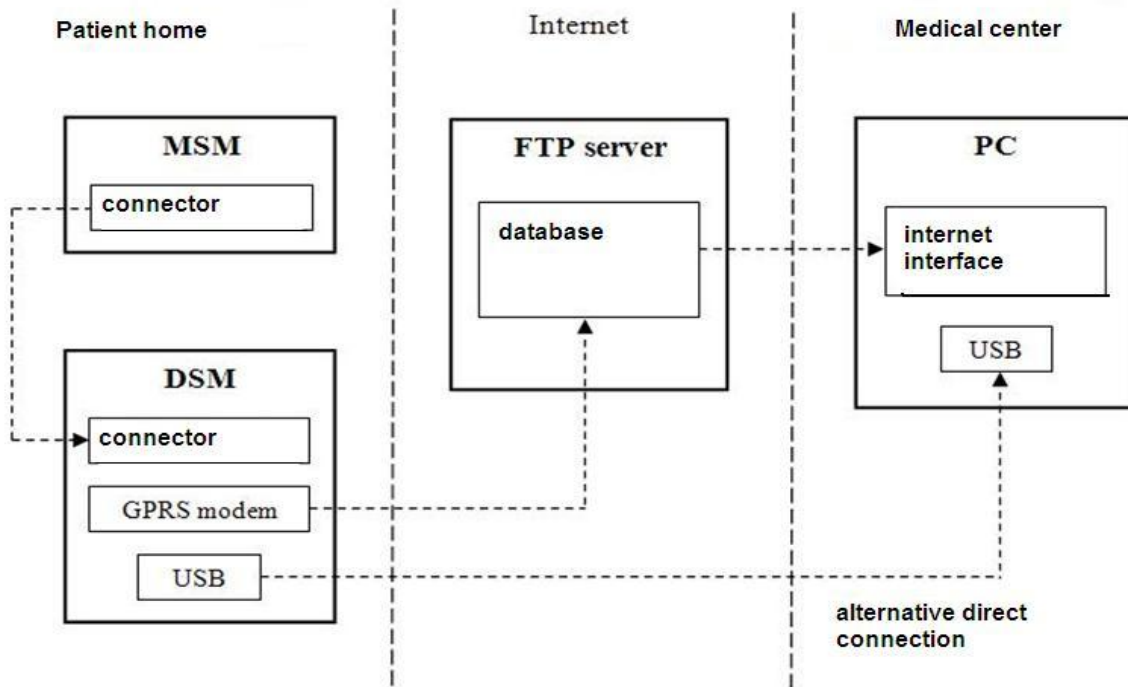
System application

Routine application is expected, i.e. for every registered pregnant woman starting from the week 24 of pregnancy (which is the defined starting point of fetus viability):

- 1st screening (entry): week 25 - 26
- 2nd screening (check): week 30 - 31
(3 days of continuous monitoring at least)

If necessary, continuous monitoring of potential risk patients can continue until the child birth.

HW solution



SW solution

Basic functions:

- Complete data on pregnant women and their pregnancy log kept;
- Data obtained from holter interpreted;
- Comprehensive results presentation;
- Potential risk alert.

Evaluation of examination

Denní přehled

Identifikační údaje

Příjmení: Valášková Rodné číslo: 8558050058 Pojišťovna: 2 MSM: 0

Jméno: Jana Datum narození: 05.08.1985 Název: HuZP DSM: 2

Datum evidence: 14.02.2007 Datum posledního vyšetření: 01.10.2007

Denní přehled

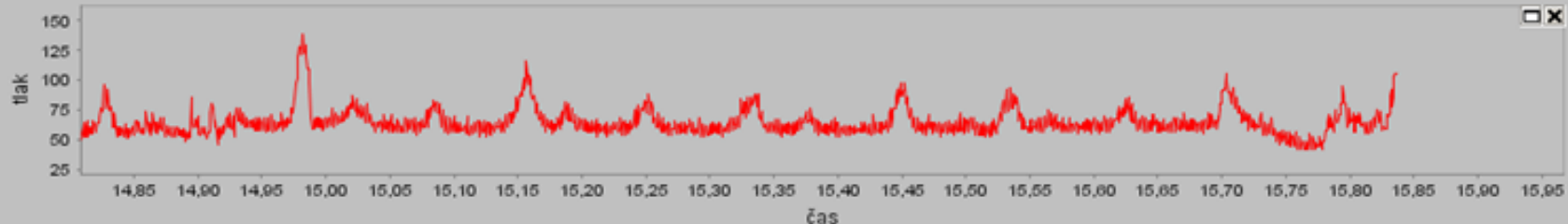
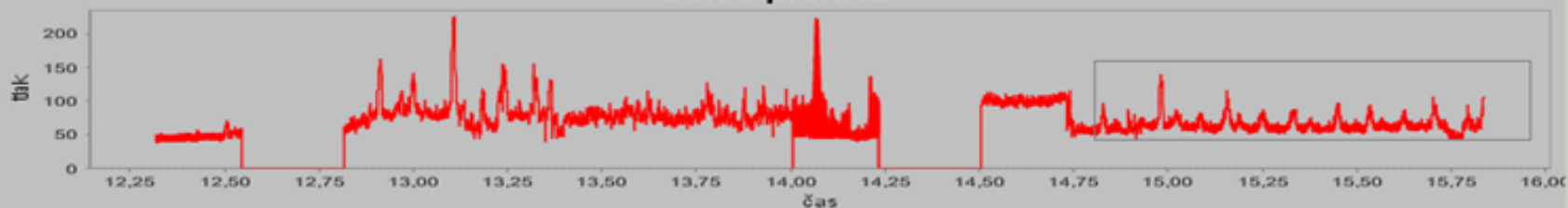
Pořadí těhotenství: 1 Začátek těhotenství: 02.02.2007 Dnes: 11.10.2007

Týden	Datum	Doba sled.	2	4	6	8	10	12	14	16	18	20	22	#Ko	#Km	#Ks	Prům.t	%K	%Km	CS
36	09.10.2007	215.85												9	1	0	166.11	11.5	2.0	7
36	06.10.2007	120.68												9	2	0	123.44	15.3	3.1	7
36	10.10.2007	219.23												18	1	0	193.56	26.5	2.7	7
35	03.10.2007	5.08												0	0	0	0.00	0.0	0.0	6

Edit

Graf

Denní přehled



Analysis

Monitored daily criteria:

- Averaged duration of contractions (.5 – 5 min.);
- Number of contractions per hour (daily avg.);
- Percentage of contractions from the total time;
- Contraction efficiency;
- Patient bodily activity during contractions.

Expected benefits from the Pren Care system

- Complex system for efficient prevention of premature delivery risk;
- Cost savings of prenatal and subsequent health care after prematurely born infants;
- Moral and ethical contribution in the field of mother and child social care.

Thankyouforyourattention.