



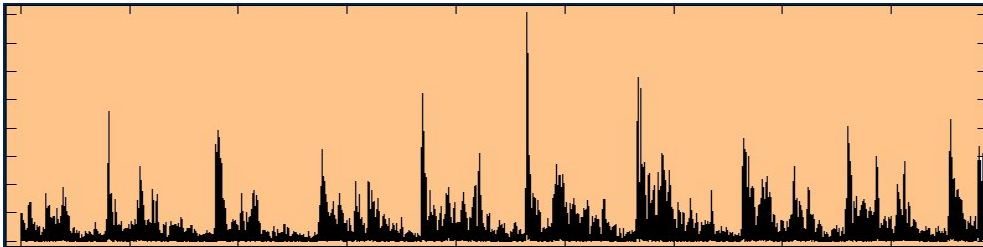
## INTERCARE - Remote monitoring of CTGs

### Objective:

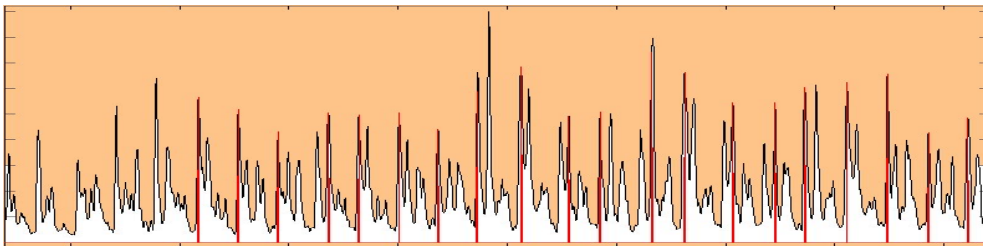
To develop a methodology for remote acquisition and processing of foetal heart rate (FHR) signals for foetus well-being assessment in pregnant women home care.

### Methods and Results:

In order to achieve remote FHR acquisition and processing we are using a simple system based on common telephone link, a sonocardiograph, a microphone and a computer equipped with soundcard. Specific software for signal acquisition and processing has been developed. Foetal heart sounds acquired with a sonocardiograph are transmitted by telephone. The sounds received at the health centre are processed in order to obtain the FHR sequence using an adaptive correlation scheme. The FHR sequence is analysed by the SisPorto system.



Original signal acquired with a sonocardiograph.



Processed signal with the heart beat instants (vertical bars).

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**Financing Institution:** Agência de Inovação

**Duration:** 2 years (1999/2001)