The Burundi Project at the Department of Computer Science (official web page) is a collaboration of the Department with the Pro-Africa Foundation. It is a part of a wider collaboration, named "Burundi Project", activated some years ago between several organizations and foundations (pro-Africa Foundation, University of Ngozi, Don Gnocchi Foundation, Giorgio Zanotto Foundation) and the University of Verona.

The active project provides
- the participation of the University of Verona to the didactic work of the Bachelor of Arts in Nursing at the University of Ngozi (Burundi);
- the help for the management and funding of the hospital of Ngozi, also for didactic purpose.

The new project provides to study, design, and initiate a medical second-opinion protocol and software system. For this purpose, the Department of Computer Science started a research grant whose goals include:
- a feasibility study,
- the design,
- the implementation and management
of a software system that should allow to physicians in Verona to help and collaborate with their colleagues in Ngozi providing them with a second opinion about some medicine cases. Actually, as first “case study”, the project is focusing in neonatal cardiology. For this purpose, some medical and computer equipments have been acquired thanks to a funding received from Regione Veneto. However, the developed software is absolutely general in its functionalities and it will permit to provide second opinions in almost all clinical sectors.

Figures depict two screenshots of the developed software prototype. The first one show the page where physician in Burundi can insert and send a second opinion request, while the second one shows the page where physicians in Verona review the request and can reply it.
Figure 1: Page for the request of a second opinion.
Figure 2: Page for request review and reply.

Patient: 20140225p1_b - Doe Jane

Urgency: High

Reason for consultation: Surgical evaluation for coronary artery disease

- Medical history

Medications: Aspirin 81 mg daily
Altace 2.5 mg daily
metoprolol 50 mg b.i.d.

Past medical history:
1. Coronary artery disease as described above with previous PTCA and stenting procedures. 2. Dyslipidemia. 3. Hypertension. 4. Status post breast lumpectomy for cancer with followup radiation therapy to the chest.

History of present illness:
The patient has a known history of coronary artery disease. She underwent previous PTCA and stenting procedures in December and most recently in August. Since that time, she has been relatively stable with medical management. However, in the past several weeks, she started to notice some exertional dyspnea with chest pain. For the most part, the pain subsides with rest. For this reason, she was re-evaluated with a cardiac catheterization. This demonstrated 3-vessel coronary artery disease with a 70% lesion to the right coronary artery; this was a proximal lesion. The left main had a 70% stenosis. The circumflex also had a 99% stenosis. Overall left ventricular function was mildly reduced with an ejection fraction of about 45%. The left ventriculogram did note some apical hypokinesis. In view of these findings, surgical consultation was requested and the patient was seen and evaluated by Dr. Doe.

- Physical examination

Weight: 65.00 Kg
Height: 157.00 cm
Temperature: 36.50 °C
Pulse rate: 72 beats/min
Respiratory rate: 40 resp/min
Blood pressure: 130/95
%SpO2: 95 %
RX: