**Introduction**

The following position paper on the organisation of heart centres in Belgium has been written by the board of the Belgian Society of Cardiology (BSC). The document aims to set out the BSC’s opinion and arguments in a transparent and scientifically well-founded way. It is intended to serve as a basis for the constructive participation of the BSC in the current debate on this issue.

The Belgian Society of Cardiology (BSC) has always maintained a consistent position regarding the issue of cardiac care programmes. This position is based on sound scientific arguments expounded in international scientific and medical literature.

The basic ideas set out in this paper are intended to achieve two objectives:

1) The provision of optimal conditions for the cardiac patient:

   a) The highest possible quality of cardiac medicine and care. A strict quality control based on national and international reference criteria provided by reliable data bases.
   
   b) Optimal access to care for the patient, both in financial terms and in terms of proximity (in time and distance) to a specialised centre.

2) The provision of optimal conditions for the medical profession:

   a) An increase in the number of centres will undoubtedly increase the total costs: not only because of investments in the catheterisation laboratories per se, but also because of the resulting increased number of procedures. Can the investment be economically justified?
   
   b) Taking into account the huge investments that have already been made (in infrastructure, equipment and staff) in existing centres, is it logical to make further investments?
   
   c) Which proposals are primarily based on local political pressures, without taking into account considerations of quality and economic justifiability?

The current situation is as follows: on the 7th of November 2007, Belgian’s Council of State (the “Conseil D’Etat”/”Raad van State”) annulled the Royal Decrees of the 1st of August 2006 and the 8th of March 2007 which defined the standards that a cardiac centre must achieve in order to be legally recognised. The annulment of these Decrees meant that important quality criteria for interventional cardiology were not implemented. These criteria had, however, been based on international scientific and medical literature.

The Belgian Society of Cardiology is absolutely opposed to an uncontrolled increase in the number of heart centres in Belgium. It is, however, necessary to achieve a balanced geographical distribution. A clear
legal framework must be drawn up which takes into account all the basic quality criteria. It must be based on scientific and economic data and not linked to local political pressures.

The Belgian Society of Cardiology wishes to make the following observations:

1) Concerning cardiac surgery (B3 activities):
   a) The number of coronary artery bypass operations is not increasing.
   b) There is a clear development towards more complex therapeutic interventions that require greater experience and technical skill.
   c) There is no waiting list for cardiac surgery.
   d) An increase in the number of B3 centres will bring about a decrease in the number of interventions performed in each centre and will have a detrimental effect on quality. Already, there are a lot of centres in Belgium that do NOT attain the required 250 interventions a year and are far from achieving the ideal minimum of 450 interventions proposed in the former Royal Decree of Minister Demotte. The logical consequence of this situation is that a number of heart centres should, in fact, be closed, rather than allowing new centres to open.
   e) An increase in the number of B3 centres would lower the threshold for certain interventions (with a consequent artificial increase in the number of these interventions) and would bring about a significant increase in the total cost.

2) Concerning interventional cardiology (B2 activities):
   a) The separation of B2 and B3 activities is subject to discussion. For Belgium, it is probably the “second best option”.
   b) There exist numerous examples worldwide where angioplasty is practised without there being cardiac surgery facilities on the same site. Often, however, these situations are not comparable to the Belgian situation (with huge distances involved, such as in the USA or Canada) and thus cannot easily be extrapolated.
   c) The argument in favour of treating acute myocardial infarction by primary angioplasty in a “new” B2 centre is scientifically flawed, above all because these centres have low activity levels. Perhaps the annual number of admissions per hospital for ST-segment elevation acute myocardial infarction should be taken into consideration (+/- 100 per year may be an appropriate standard). These patients often have a complex coronary pathologic condition and it is demonstrable that in-depth experience, both in the field of elective angioplasty and in primary angioplasty, diminishes the mortality risk.
   d) The latest European Society of Cardiology (ESC) guidelines for the treatment of STEMI recommend primary angioplasty as the first choice of treatment as long as it can be carried out within a predetermined lapse of time. No longer than 120 minutes (and 90 minutes in the case of a major heart attack) must elapse between the first medical contact and the primary angioplasty. Currently, too few patients benefit from this approach in Belgium. This is not due to an insufficient number of catheterisation laboratories with the requisite expertise in primary angioplasty, but results primarily from an inadequate organisation of the transportation of patients. Countries where the transportation of patients is well managed are, notably, the Netherlands, France, Poland, Denmark and the Czech Republic, among others.
   e) The optimum solution is the creation and organisation of a network for the treatment of STEMI which includes clear agreements between referring hospitals and angioplasty centres. These agreements must be based on the correct transfer of patients and on financial incentives in cases where the referral of patients to a primary angioplasty centre is necessary: a specific INAMI/RIVIZ nomenclature could be proposed for the transfer of heart attack patients to an angioplasty centre. These incentives should be offered to the referring hospital and the referring cardiologist.
   f) In view of all the above arguments, there is little need in Belgium for the creation of new B2 centres, but an authorisation could be given if the following very strict conditions are met:
      – the performance of a minimum of 400 procedures a year;
      – two catheterisation laboratories operational 7 days a week and 24 hours a day, staffed by three competent interventional cardiologists.
      In this context it is desirable that there should be an official recognition of the subspeciality of “interventional cardiology” that would guarantee a high level of qualification of the cardiologist and of the recognised centre;
      – the existence of a strict protocol regarding collaboration with a nearby B3 centre for emergency situations;
      – the recognition of specific geographical needs in certain regions;
      – the implementation of rigorous quality control procedures such as currently performed in B2-B3 centres;
      – that the patient is correctly informed that he or she could be transferred to a cardiac surgery centre in another hospital if any complications arise during angioplasty that necessitates urgent surgery.
The Belgian Society of Cardiology wishes to draw the following conclusions:

1) It is imperative that the formulation of a cardiac care programme must be based on a scientific approach with the primary objective of improving the quality of cardiac care in Belgium, while ensuring the implementation of the latest ESC guidelines. In parallel, transportation to deliver the patients quickly and efficiently to a primary percutaneous coronary intervention (PPCI) centre is mandatory.

2) It is inadmissible that local political pressures should influence the process if point 1 is not respected.

3) It is not acceptable that the management of certain hospitals (sometimes without the support of the cardiologists in their institution) should try to set up a heart centre in their hospital for purely economic and financial motifs. This approach means that priority is not given to the quality of health care. Consideration should be given to financial compensation and/or incentives for those hospitals without PPCI capabilities in order to encourage them to join a modern and high-quality network of heart centres.

4) The distribution of centres and the needs of patients differ in Flanders, Wallonia and Brussels. Whilst federal legislation is necessary, the implementation of such legislation should take into account the regional differences affecting health care areas. This requires new and extensive consultations between the different federal and regional ministries, the national institute for health and invalidity insurance (INAMI-RIZIV); the health care knowledge centre (KCE), hospital management, cardiologists and cardiac surgeons. The Belgian Society of Cardiology wishes to play a constructive and intermediary role in this consultation process.

5) The ideal future legislation must take into account all the above considerations and arguments in order to achieve a long-term solution that is completely transparent.