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### Setting Up a Heart Failure Clinic: Ensuring Operational Efficiency



**Prof. Gilles De Keulenaer,**  
**Cardiologist**

\*\*\*\*\*@\*\*\*ua.ac.be

Cardiologist - University of Antwerp

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#### Why was it Decided to Set Up a Heart Failure Clinic at the UZ Middelheim?

This hospital is a university affiliated facility with a large interventional cardiovascular programme of more than 4,000 diagnostic coronary angiograms, and more than 2,000 PCIs per year. Over the years, improved prognosis of acute coronary syndromes has led to an increased burden of chronic heart failure. The older age of the heart failure population, their co-morbidities and the rapidly evolving therapeutic opportunities in heart failure have urged to add a specialised programme of ambulant care in the cardiovascular division. Cardiac rehabilitation, organised optimisation of medical therapy, and evidence-based selection for “advanced device therapies” were the predefined goals of this heart failure clinic.

#### Please Describe the Activities of the Centre.

The centre combines a heart failure clinic and cardiac rehabilitation centre, situated on the ground floor of the hospital. The multidisciplinary para-medical team includes physiotherapists, a psychologist, a social nurse, a dietician, and a heart failure nurse and is led by two non-interventional cardiologists. Apart from a large fitness room, the centre has room for “semi-open door” ambulatory patient visits, echo- Doppler imaging, and cardio-pulmonary exercise testing. The “semi-open door” service provides medical consultation by appointment, and guarantees consultation within 24 hours in case of increased complaints. A heart failure nurse can be reached by telephone daily from 8 AM – 4 PM. Serum analyses are performed one hour before a patient’s visit, with results available during the consultation. Heart failure teaching is given by the heart failure nurse. Yearly, about 1,500 ambulatory heart failure visits are performed. A quarter of these visits consist of a combined assessment by cardiologist and nephrologist allowing dual analysis of patients with combined heart and kidney failure. In parallel with this, more than 400 patients per year complete a 4 - 6 month cardiac rehabilitation programme.

#### How was the Project Budgeted for, and How is it Funded?

The clinic’s multidisciplinary team is funded by the profits from the cardiac rehabilitation activities, although this does not cover the whole budget. Most multidisciplinary heart failure clinics, therefore, are part of a larger “tertiary” cardiovascular division. This is not an ideal situation, since there is a greater need for heart failure clinics than tertiary cardiovascular divisions.

#### How did You Decide to Assign Roles Within the Centre? Were There Any Issues in Dividing up Work for Nurses, Physicians, Etc.?

Some heart failure clinics in other countries are “nurse-led”, but ours is physician-led as nurses in Belgium are not allowed to take final medical responsibility. The heart failure nurse promotes accessibility, should enjoy the patient’s confidence, teaches them how to live with heart failure, and is the first person to contact in case of problems or questions. Medical decisions are always made or approved by the heart failure cardiologist. Despite this, a heart failure nurse is a “sine qua non” to organise a heart failure clinic. The heart failure nurse increases accessibility to the clinic, has a central position in recruiting patients from the ward to the clinic, provides in and out hospital heart failure teaching.

#### How are Referrals Made to the Centre?

Most patients in the clinic have been referred following hospitalisation for acute heart failure. Thus, our patients have more advanced disease, and are at high risk for re-hospitalisation. During follow-up of these patients, we carefully respect written communication with the primary care physician by sending clinical reports immediately following an ambulatory visit. Also, patients receive a heart failure diary, in which body parameters like blood pressure, body weight, and medication can be noted by patient and care provider.

#### What Were Your Most Significant Challenges ?

The three most important hurdles were:

- To convince colleagues within the division to invest in a heart failure nurse and a multidisciplinary team;
- To find space for the clinic in the hospital, that is easily accessible for older patients and,
- To convince colleagues that advanced heart failure patients should be followed in a heart failure clinic, rather than in a private practice.

Once started, the last one is the toughest. Patients with heart failure usually have a long cardiological history and often have been followed throughout outside the heart failure clinic before. Long-standing physician-patient relationships are not given up easily.

#### **How do You Ensure That You are Working in Tandem With Primary Care Physicians?**

Since our heart failure population has advanced disease, often with co-morbidities like kidney failure, primary care physicians do not feel threatened. Most primary physicians are reluctant to change medications once heart failure is advanced, devices are implanted or kidney failure is present. Also, the number of patients with advanced heart failure per primary care physician represents only a fraction of their total clientele. They don't mind that these patients, often with poor life expectancy, receive specialised and advanced care.

#### **What is Your Advice to Other Heart Failure Clinic Directors?**

1. Provide post-hospitalisation visits within two weeks of discharge. Re-hospitalisation rates are highest then, and often medications need adjustment because of hypotension, fluid imbalances, etc.
2. Find a well-trained and dedicated heart failure nurse to build a relationship of trust with patients and to offer daily telephone assistance. She will absorb many smaller problems at an early stage before things escalate.
3. Collaborate with a nephrologist that has a feeling for haemo dynamics.
4. Motivate your patients for cardiac rehabilitation. It can drastically improve your patient's quality of life.

#### **How do You Manage Patient Data? What Sort of IT Infrastructure is in Operation?**

We keep electronic files, making them permanently visible and accessible to all medical providers in the hospital. Currently, we are involved in a project that provides website-based files, and in which brief notes by general practitioners and the heart failure clinic can be left – an elegant way of communication. When this approach is combined with telemonitoring of heart failure symptoms and some physiological parameters, that trigger warning emails to GP and clinic when abnormal, a true interdisciplinary collaboration arises that has a good chance to reduce unnecessary hospitalisations.

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