Figure 6 Simon Kraler, MD.

Melissa Middeldorp, PhD, University of Adelaide, Australia, is a post-doctoral research fellow whose PhD focused on risk factors for atrial fibrillation (AF)—in particular, the management of risk factors through individualized, structured clinics and the differences in outcomes between men and women with AF. She established and implemented a risk factor modification programme for patients with AF, which helped create changes to the AF guidelines for patient management. Her main interests include atrial fibrillation, risk factors, integrated care, gender, eHealth, and epidemiology (*Figure 7*).

Figure 7 Melissa Middeldorp, PhD.

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Global Spotlights

ESC/HFA Quality of Care Centres: the ultimate frontier in unifying heart failure management

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Heart failure (HF) is a major public health concern and a leading global cause of mortality, hospitalization, disability, and high associated healthcare costs. According to the recent Heart Failure Association of the ESC (HFA) Atlas survey of the 42 European Society of Cardiology (ESC) member countries, with a population of ~800 million people, the burden of HF in this region is estimated to involve ~14 million patients, ~2.5 million hospitalisations, and ~2.4 million new cases annually.[1] Multidisciplinary management of HF, defined as patient-centred, multi-specialist and coordinated care from primary to tertiary levels, has been shown to effectively improve outcomes and optimize the utilization of resources.[2] However, the HFA Atlas has demonstrated that there are significant disparities in healthcare organization and available resources for its management across Europe that result in the heterogenous delivery of contemporary diagnostic modalities and guideline directed therapies (GDT).[1] Furthermore, in most countries, dedicated institutions for HF management (i.e. HF centres) are sparse and insufficient to accommodate for the growing demands for expert HF care.[1]

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The HFA has long recognized the need for providing standardized multidisciplinary management of HF in its member countries and recognized the value of expert HF centres as driving improved. In 2018, the HFA Board named the development of multidisciplinary Quality of Care Centres (QCCs) as one of its strategic priorities. The QCC project has been approved by the HFA Board and the ESC Management Group. Following detailed analysis of the existing European models (in Germany, Italy, and Spain), and extensive discussions within ESC and between the HFA and National Heart Failure Societies, the QCC project was launched as an ESC/HFA-accredited network of centres that provide multidisciplinary care for HF, from primary to tertiary levels. The QCC project is considered as one of the milestones in affirming the reach and influence of ESC/HFA in the countries involved.

The principal goal of QCCs is to improve standards of care and adherence to GDT in accordance with ESC/HFA accreditation requirements. QCC implementation should be embedded within existing healthcare systems. Coordination between centres will facilitate seamless transitions of care (from primary to tertiary levels and vice versa) and facilitate the referral of complex and advanced HF patients. QCCs will also promote regional and international networking and support education, professional cooperation, and scientific exchange. QCCs will bring bilateral benefits for the centres and ESC/HFA, not only as the best approach to improve standards of care, but also to advance national and international visibility of the participating centres. They are also expected to enhance centres' cost-effectiveness.

The ESC/HFA model includes three types of QCCs: community, specialized, and advanced. Community QCCs are primary healthcare institutions, or community-based hospitals and rehabilitation centres and cardiology practices. Their role is to offer initial assessment and treatment of HF patients and timely referral to higher levels of care, as well as to ensure regular follow-up and optimization of GDT. Specialized QCCs (district hospitals with intensive care units and facilities for cardiac catheterization and device implantation) should offer diagnostic assessment and initial treatment of HF patients either referred from community QCCs, or admitted for acute/decompensated HF. Advanced QCCs include national reference centres capable of providing all necessary diagnostic and therapeutic management including for the most severe or advanced HF patients, including candidates and recipients of heart transplants or mechanical circulatory support.[3] The essential features of the community, specialized, and advanced QCCs are presented in *Figure 1*.

As of June 2021, a pilot phase of QCC implementation has commenced involving different-level QCCs in 10 ESC member countries (Russia, Lithuania, Poland, Croatia, Serbia, Italy, Romania, Greece, Israel, and Egypt) (*Figure 2*). and on June 17, 2021, the first QCC became a reality, when official documents have been signed by institutional representatives (QCC coordinators) of the first accredited QCC in Belgrade, Serbia. This was soon followed by fast-pace confirmation of participation from candidate centres in all 10 pilot countries. Pilot Quality of Care Centre's directors and coordinators are reported in the *Appendix*. The beginning of the pilot phase marks a cornerstone in the future of HF management and gives hope for the fulfilment of the longstanding ESC/HFA endeavour to reduce disparities in delivery and quality of HF care in its member countries. The impact of the project will continue to grow as it extends to new countries and the benefits of standardised multidisciplinary HF care become apparent. This QCC project will be integrated with the HFA-led educational initiatives that offer courses and programmes of great benefit to boost professional skills and aptitude in HF management.

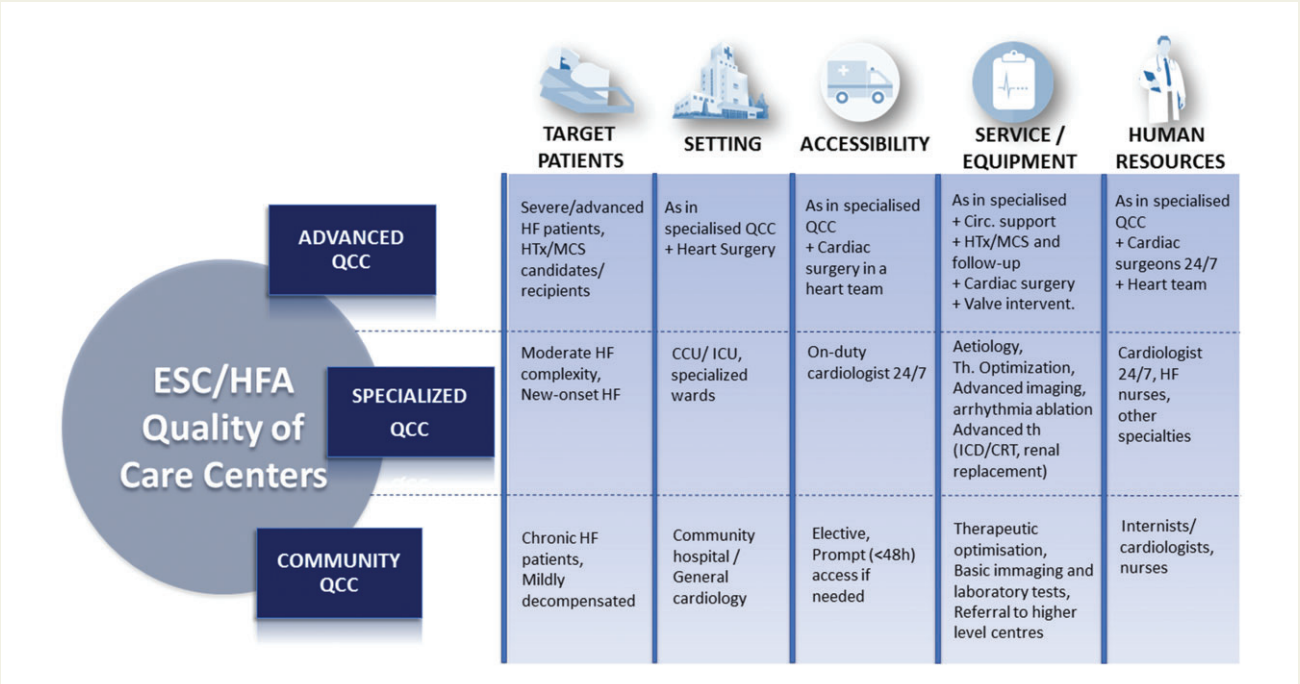

Figure 1 Three levels of European Society of Cardiology/Heart Failure Association Quality of Care Centers. CCU, coronary care units; CRT, cardiac resynchronization therapy; ESC, European Society of Cardiology; HF, heart failure; HFA, Heart Failure Association; HTx, heart transplantation; ICD, implantable cardioverter defibrillators; ICU, intensive care units; MCS, mechanical circulatory support; QCC, Quality of Care Centers.

Figure 2 Countries participating in European Society of Cardiology/Heart Failure Association Quality of Care Centers pilot phase.

The aim is to establish an international network of QCCs throughout ESC countries. following review of feedback from the pilot phase and the incorporation of any appropriate changes. The maintenance of the project requires a permanent structure within the ESC/HFA responsible for QCC accreditation and recertification, as well as recruitment of new centres. The supervision and governance of the QCC project is the responsibility of ESC/HFA QCC Task Force in collaboration with National Heart Failure Societies and QCC coordinators at participating centres. Accredited QCCs will be offered recertification at regular intervals, depending on centres' compliance with accreditation protocols and provision of satisfactory indicators of quality of care.

The QCC project will face many challenges with implementation into the existing healthcare systems of ESC member countries that significantly differ with respect to organization, funding, drug reimbursement, patient referral policies, and availability of diagnostic and therapeutic resources. The key to surmounting these obstacles will be the commitment, adaptability, and persistence of all parties involved to overcome difficulties and to bring this important project to reality.

Conflict of interest: none declared.

Appendix: Pilot Quality of Care Centre's directors/coordinators

Yuri Lopatin, Alla Ledyaeva (Volgograd State Medical University, Volgograd, Russian Federation), Yuri Belenkov, Maria Kozhevnikova (Hospital Therapy Clinic of I.M. Sechenov First Moscow State Medical University, Russian Federation), Piotr Ponikowski, Ewa Jankowska (Department of heart diseases, Wroclaw Medical University, Wroclaw, Poland), Giedrius Davidavičius, Jelena Čelutkiene (Vilnius University Hospital Santaros Klinikos, Vilnius, Lithuania), Albinas Naudžiūnas, Diana Žaliaduonyté (Kaunas Hospital of Lithuania University of Health Sciences, Kaunas, Lithuania), Davor Miličić, Duška Glavaš (Department of Cardiovascular diseases, University Hospital Centre Zagreb, Croatia), Milika Ašanin, Marija Polovina (University Clinical Center of Serbia, Belgrade, Serbia), Massimo Piepoli (Unit of Heart Failure and Cardiomyopathy, of the Cardiology Unit at the Guglielmo da Saliceto Hospital, Piacenza Local Health Authority, Azienda Sanitaria Locale di Piacenza Italy), Ovidiu Chioncel (Emergency Institute for Cardiovascular diseases Prof. C.C. Iliescu, Bucharest, Romania), Offer Amir, Israel Gotsman (Heart Institute, Hadassah Medical Centre, Jerusalem Israel). John Parissis, Gerasimos Filippatos (National and Kapodistrian University of Athens University Hospital Attikon), and Magdy Abdelhamid (Qasr Al-Ainy Cairo University Hospital—CAIRO, Egypt).

References

1. Seferović PM, Vardas P, Jankowska EA *et al*et al. The Heart Failure Association Atlas: Heart Failure Epidemiology and Management Statistics 2019. *Eur J Heart Fail* 2021;**23**:906–914.
2. Riley JP, Masters J. Practical multidisciplinary approaches to heart failure management for improved patient outcome. *Eur Heart J Suppl* 2016;**18**:G43–G52.
3. Seferović PM, Piepoli MF, Lopatin Y *et al*et al; Heart Failure Association of the European Society of Cardiology. Quality of Care Centres Programme: design and accreditation document. *Eur J Heart Fail* 2020;**22**:763–774.

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