Abstract 5 Figure 1 Distribution of NYHA functional class in heart failure patients after 6 months of care and follow-up in the multidisciplinary heart failure clinic

Abstract 5 Figure 2 Hospital admission rates 90 days before and 90 days after starting care and follow-up at the multidisciplinary heart failure clinic

Abstract 5 Figure 2 Hospital admission rates 90 days before and 90 days after starting care and follow-up at the multidisciplinary heart failure clinic

- Nihoyannopoulos P, Parissis JT, Pieske B, Riley JP, Rosano GMC, Ruilope LM, Ruschitzka F, Rutten FH, van der Meer P; ESC Scientific Document Group. 2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure: The Task Force for the diagnosis and treatment of acute and chronic heart failure of the European Society of Cardiology (ESC). Developed with the special contribution of the Heart Failure Association (HFA) of the ESC. *Eur Heart J* 2016;37:2129–2200.
- Ducharme A, Doyon O, White M, Rouleau JL, Brophy JM. Impact of care at a multidisciplinary congestive heart failure clinic: a randomized trial. *CMAJ* 2005;173:40–45.
 - Martineau P, Frenette M, Blais L, Sauv C. Multidisciplinary outpatient congestive heart failure clinic: impact on hospital admissions and emergency room visits. *Can J Cardiol* 2004;20:1205–1211.
 - Gandhi S, Mosleh W, Sharma UC, Demers C, Farkouh ME, Schwalm JD. Multidisciplinary heart failure clinics are associated with lower heart failure hospitalization and mortality: systematic review and meta-analysis. *Can J Cardiol* 2017;10:1237–1244.

6 USING MOBILE APP TO EMPOWER CARE AND SELF-MANAGEMENT IN LVAD PATIENTS

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Self-management (SM) of a left ventricular assist device (LVAD) is a complex process and arduous to many patients. Thus, support from a family caregiver and a nurse is required to achieve the ultimate treatment goal for implanting an LVAD – to increase quantity and quality of life.¹ A mobile phone application (VAD Care App version 1.0[®]) was invented to simplify the LVAD SM process and empower patient's engagement in SM.² The purposes of this presentation are the following: (1) illustrate the main components of the app; (2) describe the app-directed and nurse-supported LVAD SM intervention; and (3) present the results of the feasibility study as well as preliminary results of an ongoing pilot clinical trial. Future studies, app designs (versions 2.0 and 3.0), and implications for advancing the LVAD SM science will be discussed.³ Conference participants are encouraged to engage in a dialogue about the applicability of the app to other implantable devices (e.g. cardiac resynchronisation therapy) and complex conditions (e.g. pulmonary hypertension) within the context of healthcare delivery and culture in Asia.

REFERENCES

- Casida JM, Wu HS, Abshire M, Ghosh B, Yang JJ. Cognition and adherence are self-management factors predicting the quality of life of adults with a left ventricular assist device. *J Heart Lung Transplant* 2017;36:325–330.
- Casida JM, Aikens JE, Craddock H, Aldrich MW, Pagani FD. Development and feasibility of self-management application in left-ventricular assist devices. *ASAIO J* 2018;64:159–167.
- Casida J, Aikens J, Pagani F, et al. Advancing the science of self-management in adults with long-term left ventricular assist devices. *Artif Organs* 2018. doi:10.1111/aor.13113 [Epub ahead of print].

7 NURSE-LED AMBULATORY HEART FAILURE CLINIC AT QUEEN ELIZABETH HOSPITAL, HONG KONG SAR

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Prior to establishment of the heart failure (HF) nurse clinic at Queen Elizabeth Hospital (QEH), Hong Kong in 2003, high rates of hospital readmission were seen in HF patients. Despite shortage of manpower and resources in the Hong Kong public healthcare sector, the clinic has over the years improved patient outcomes including functional capacity and rates of hospital readmission.

Initially, cardiac nurses contributed to promoting patients' health seeking behaviour through education. By 2012, the clinic provided protocol-guided titration of medications to achieve optimal dosing of medications. The HF clinic nurses would individually titrate and maximise medical therapy according to the pre-set protocol endorsed by cardiologists.¹ HF patients were closely followed, particularly for those referred from Outpatient Clinics or recently discharged from hospital requiring medication adjustment and education.

On average, HF patients were followed up every 2–4 weeks, and sometimes even weekly for close monitoring. In contrast, follow-up at Outpatient Clinics occurred at 3- to 4 month intervals. Apart from education and medication titration, cardiac nurses of the HF clinic also helped to identify and refer difficult-to-manage patients for advanced treatment such as device therapy.

Nurses at the HF clinic have a high degree of autonomy, not only in titrating medication according to protocol but also in customising care plan for patients. The QEH HF nurse clinic has been successful in reducing HF patients' length of

Abstract 7 Figure 1 Hospital readmission rates for patients attending the Queen Elizabeth Hospital HF nurse clinic in 2016 and outcome measurement in 2017

Abstract 7 Figure 2 Length of hospital stay (LOS) for patients attending the Queen Elizabeth Hospital HF nurse clinic in 2016 and outcome measurement in 2017

hospital stay and readmission rates (figures 1 and 2), as well as in improving patients' left ventricular ejection fraction, 6 min walk distance, quality of life, and compliance to diet and medications.

REFERENCES

- Hunt SA, Abraham WT, Chin MH, *et al.* ACC/AHA 2005 Guideline Update for the Diagnosis and Management of Chronic Heart Failure in the Adult: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Writing Committee to Update the 2001 Guidelines for the Evaluation and Management of Heart Failure): developed in collaboration with the American College of Chest Physicians and the International Society for Heart and Lung Transplantation: endorsed by the Heart Rhythm Society. *Circulation* 2005;**112**:e154–235.

8 REVERSIBILITY OF FRAILITY IN LVAD AND HEART TRANSPLANT PATIENTS

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Frailty is a condition that is characterised by reduced physiological reserve. Multiple instruments have been developed to measure frailty mainly in community-dwelling elderly people.¹ We have adapted one of these instruments, the Fried frailty phenotype, to assess frailty in patients with