

Optimising Secondary Prevention and Cardiac Rehabilitation for Atherosclerotic Cardiovascular Disease During the COVID-19 Pandemic: A Position Statement by the Cardiac Society of Australia and New Zealand

Stephen J Nicholls¹, Mark Nelson², Carolyn Astley³, Tom Briffa⁴, Alex Brown⁵, Robyn Clark³, David Colquhoun⁶, Robyn Gallagher⁷, David Hare⁸, Sally Inglis⁹, Michael Jelinek¹⁰, Adrienne O'Neil¹¹, Rosy Tirimacco¹², Margarite Vale¹³ and Julie Redfern⁷.

From ¹Monash University, ²University of Tasmania, ³Flinders University, ⁴University of Western Australia, ⁵South Australian Health and Medical Research Institute and University of Adelaide, ⁶University of Queensland, ⁷University of Sydney, ⁸University of Melbourne and Austin Health, ⁹University of Technology Sydney, ¹⁰St. Vincent's Hospital, ¹¹Deakin University, ¹²Country Health SA Local Health Network, ¹³The COACH Program and University of Melbourne.

This guidance is current as of 20^{th} April 2020 and will be reviewed by August 1^{st} 2020

Disclosures

SJN reports research grants from AstraZeneca, Amgen, Anthera, Eli Lilly, Esperion, Novartis, Cerenis, The Medicines Company, Resverlogix, InfraReDx, Roche, Sanofi-Regeneron and LipoScience and honoraria from AstraZeneca, Akcea, Eli Lilly, Anthera, Omthera, Merck, Takeda, Resverlogix, Sanofi-Regeneron, CSL Behring, Esperion, Boehringer Ingelheim. DC has received honoraria from Boehringer-Ingelheim, Amgen, Vifor, Novartis, Sanofi, Eli Lilly, Pfizer, BMS, AstraZeneca, MSD, Abbott, Novo Nordisk, Mylan, International Olive Oil Council, Sanitarium and Swisse. RC has received research support or honoraria from AlphaPharm, Amgen, Pfizer and Novartis. RG has received funding from Sanofi for delivering presentations at their education workshops. MJ is an Honorary Advisor to The COACH Program. AO has received research funding from Sanofi and Meat and Livestock Australia and honoraria from Novartis. MV is Director of The COACH Program. All other authors have no potential conflicts of interest to disclose with regard to this position statement.

Background

The COVID-19 pandemic has introduced a major disruption to the delivery of routine health care across the world. In addition to the described cardiovascular disease (CVD) complications of COVID-19, including myocarditis, myocardial injury, arrhythmia and thromboembolism, the pandemic has additional implications for the management of the patient with established atherosclerotic CVD. In particular, it provides challenges for the use and introduction of secondary prevention measures. This position statement provides recommendations for effective delivery of secondary prevention strategies during the COVID-19 pandemic.

Challenges

The COVID-19 pandemic has introduced limitations for many patients to access standard health services such as visits to health care professionals, medications, imaging and blood tests as well as attendance at cardiac rehabilitation. In addition, the pandemic is having an impact on lifestyle habits and mental health. Taken together, this has the potential to adversely impact the ability of practitioners and patients to adhere to treatment guidelines for the prevention of recurrent cardiovascular events.

A Position Statement for Achieving Effective Secondary Prevention

This position statement makes a number of recommendations with regard to continuing provision of effective secondary prevention and cardiac rehabilitation for patients with established atherosclerotic CVD during the COVID-19 pandemic. The recommendations are accompanied by background with regard to the access, lifestyle and psychosocial challenges limiting the ability to achieve effective secondary prevention in an extensive

3

manuscript published online at Heart, Lung and Circulation. The objective of this executive summary is to highlight the key recommendations of the position statement.

Recommendations

- The most important message is that patients with existing CVD must continue to receive management and support.
- All recommendations should be applied in conjunction with contemporary advice from Commonwealth and State public health officials.
- Patients with established CVD are at the greatest risk of future cardiovascular events. In the setting of chest pain, recommendations of seeking emergency medical attention remain important.
- All efforts should be made to take advantage of a range of telehealth formats to ensure as many patients as possible have access to health care professionals. Consideration should be made on how best to interact with patients, depending on their access and familiarity with these different technologies.
- Similar e-health strategies should be used to continue to deliver evidenced based therapies to patients in secondary prevention.
- The emergency e-health responses are welcomed, and a strong argument should be to retain these initiatives in practice after the pandemic.
- All preventive therapies should be continued by patients with every effort made to monitor risk factor control. Consideration should be made regarding potential barriers for patients to access prescriptions, imaging, blood tests, blood pressure measurement and referral to cardiac rehabilitation. It has never been more important to avoid under-treatment of patients.

- The inclusion of psychosocial interventions as part of routine heart health checks, cardiac rehabilitation, and the promotion of established mental health services is warranted.
- Consensus statements should support the initiation and use of ACE inhibitors and angiotensin receptor blockers in CVD patients in the setting of the COVID-19 pandemic unless contrary evidence emerges.
- All patients should receive the influenza vaccine unless they have a specific contraindication to its use.
- In an era of integrating new processes into routine clinical care, there is an important opportunity to evaluate their efficacy and cost effectiveness. This will have implications for their longer-term use beyond the pandemic.