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assessments. Outcome measures included LV mass Z-score (Devereaux method, normalized for lean body mass), Endo-PAT reactive hyperemia index score (normalized; LnRHI), Doppler based aortic (proximal to distal aortic arch; aPWV) and peripheral (common carotid to posterior tibial artery; pPWV) pulse wave velocity, and carotid intima-media thickness (cIMT). CGDMs were further stratified into groups according to how maternal GDM was controlled (diet alone or insulin). Participants were 25 CGDMs and 28 control children at a mean age of 10.9±0.7 years. aPWV was higher in CGDMs versus controls (6.2±2.6 versus 4.8±1.6 m/s, P=0.03), and higher in children of insulin versus diet controlled GDM (7.9±2.6 versus 5.5±2.2 m/s, P=0.03) (see Table). There were no statistically significant differences in the other measures of CV health.

**CONCLUSION:** CGDMs demonstrate increased aPWV, a measure of aortic stiffness, with greater aPWV observed in CGDMs whose mothers' glycemic control was through insulin therapy versus diet. These findings suggest GDM could influence vascular health early in life which may impact myocardial health in adulthood. Whether other prenatal and postnatal insults are contributory is under investigation. Additional work is needed to investigate the mechanisms by which GDM may influence vascular health.

Outcome	Control (n=28)	CGDM (n=25)	Sig	CGDM – Diet Controlled (n=17)	CGDM – Insulin Controlled (n=8)	Sig
LVM Z-Score	-0.13±0.63	-0.25±0.58	0.47	-0.12±0.57	-0.52±0.51	0.11
LnRHI	0.32±0.32	0.26±0.36	0.49	0.27±0.33	0.21±0.46	0.72
aPWV (m/s)	4.8±1.6	6.2±2.6	0.03	5.5±2.2	7.9±2.6	0.03
pPWV (m/s)	6.8±0.6	6.7±0.7	0.54	6.7±0.8	6.8±0.4	0.78
cIMT (mm)	0.46±0.04	0.45±0.05	0.56	0.44±0.04	0.47±0.07	0.21

Table. Cardiovascular Parameters in Children of Diabetic Mothers (CGDM) Vs Controls.

LVM: left ventricular mass; LnRHI: logarithm transformed reactive hyperemia index score; aPWV: aortic pulse wave velocity; pPWV: peripheral pulse wave velocity; cIMT: carotid intima-media thickness

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**THE SOCIAL ROBOTS ARE COMING: HEALTH CARE PROVIDERS' PERSPECTIVES OF SOCIAL ROBOTS AS A FORM OF VIRTUAL CARE IN CARDIOVASCULAR MEDICINE**

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**BACKGROUND:** As cardiovascular care centers around the world struggle to keep pace with an aging population with complex medical needs, the requirement for physical distancing, and limited hospital resources rerouted to the acute management of COVID-19, the need for innovative and efficacious virtual care systems is now more important than ever. Social Robots (SRs) are artificial agents physically embodied with a variety of different appearances that may

have human or animal features, and are imbued with social and emotional intelligence. SRs can be programmed to act as a social companion and medical assistant to patients who have limited access to health care or home support services, those who are reticent to onsite hospital visits, or who require frequent follow-ups with health care providers. Although replete with possibilities in facilitating virtual care in cardiovascular medicine, and increasing in usage in gerontological services, the acceptability of such technologies from the perspectives of cardiovascular health care providers is not yet known.

**METHODS AND RESULTS:** The purpose of this qualitative study was to ascertain health care providers' perspectives of SRs as a form of virtual care. Semi-structured, individual interviews were conducted with health care providers (N=22), representing multiple disciplines (cardiology, family medicine, nursing, psychology, physiotherapy, and social work) at a tertiary cardiovascular care centre. Data was analyzed using deductive thematic analysis whereby codes were grouped according to pre-established themes: (1) Potential to optimize virtual care; (2) Pitfalls that limit their use and derived benefit; and (3) Priorities for effective integration. Potentials included: (1) promoting adherence to patients' treatment plans; (2) providing 'live' data that can detect deterioration; and, (3) instilling a sense of safety through robot vigilance and continuity of care. Pitfalls included: (1) reduced thoroughness and accuracy of physical assessments; and, (2) inequitable access to SRs and accompanying technology. Priorities included: (1) safeguarding patient data and patient-robot interactions; (2) providing requisite exposure and training for patients and providers; and, (3) including patients' perspectives in the development of SR virtual care systems.

**CONCLUSION:** Taken together, there was a strong consensus that SRs could be an effective tool for providing cardiovascular virtual care but that the integration of SRs requires careful due diligence. This study was the first step in a series of stakeholder engagement activities that will direct a tailored SR intervention for patients with cardiovascular disease.

**Canadian Cardiovascular Society (CCS) Abstracts — Surgery**

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**ADDITIVE VALUE OF NT-PROBNP RATIO IN THE MANAGEMENT OF MIXED AORTIC VALVE DISEASE PATIENTS**

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**BACKGROUND:** Management of mixed aortic valve disease (MAVD: concomitant aortic stenosis [AS] and regurgitation [AR]) remains challenging. Delay in therapeutic intervention and poor postoperative outcomes after aortic valve