

New INESSS guidelines to facilitate access to echocardiography for heart failure patients

What could be the potential impact for our echo laboratories?

Authors : Bellemare Myriam¹, Chetrit Michael¹, Voron Kostychuk Irene¹, Ribeiro Paula AB², Tournoux Francois¹

Affiliation 1: Echocardiography lab, Cardiology department, McGill University Health Centre (MUHC), Montreal, Qc, Canada

Affiliation 2: Research Echocardiography lab, Research Cardiology department, McGill University Health Centre (MUHC), Montreal, Qc, Canada

Introduction

Transthoracic echocardiography (TTE) is essential for managing heart failure (HF). Increased use has resulted in delays in resource-limited settings such as in the Province of Quebec. In 2023, the National Institute for Excellence in Health and Social Services (INESSS) issued new guidelines titled "Optimal Use of Cardiac Echography in Quebec in the Context of Chronic Heart Failure" with the aim to improve TTE accessibility by reducing inappropriate requests using EKG and natriuretic peptide dosage as indicators, particularly when clinical suspicion of HF is low. These recommendations remain a challenge because their safety and effectiveness remain unproven in clinical setting. Our objectives were: 1) to accurately quantify the proportion of TTEs requested for patients with suspected HF among all requests received at our institution; and 2) to retrospectively assess the proportion of inappropriate TTEs within this patient cohort.

Methods

We reviewed all TTE requests from cardiology and non-cardiology outpatient clinics performed during the last quarter of 2024 at McGill University Health Centre. We identified whether the TTE indication was related HF and, if so, categorized them as requests for known, high suspicion, or low suspicion of HF. This classification was solely based on the information available on the TTE request. For each TTE labeled as "low HF suspicion," we reviewed the report to determine the proportion of inappropriate studies.

Preliminary Results

A total of 2,175 TTEs were performed between October 1 and December 31, 2024. Among these, 414 were conducted with an indication related to HF. Based on INESSS estimates, we expect that 22% (n=91) of these will be considered as inappropriate (final analyses pending). If confirmed, the cost of these unnecessary echoes would be \$20,475 (\$225 per TTE). According to INESSS guidelines, these could have been avoided by conducting an EKG ($7 \times 414 = \$2,898$) +/- a natriuretic peptide dosage ($35 \times 91 = \$3,185$) alongside a proper clinical assessment before scheduling the patient. This approach could have saved \$14,392.

Conclusion

This quality improvement initiative illustrates the potential to reduce the financial burden of inappropriate TTE requests and decrease waiting times for HF patients who require access to this examination.

HEART FAILURE SUSPICION

2023 INESSS GUIDELINES

High Clinical
Suspicion

A1

TTE is indicated

Low Clinical
Suspicion

Abnormal EKG
or NP dosage

A2

TTE is indicated

Normal EKG
and NP dosage

A3

TTE is not indicated
Consider another
diagnosis

NP=Natriuretic Peptides