**Do we request too many MRIs for cardiac amyloidosis?**

**Background:**

Diagnosis of cardiac amyloidosis (CA) remains challenging because manifestations are heterogeneous and require multiple imaging modalities. Echocardiographic findings such as left ventricular hypertrophy and apical sparing are nonspecific but often prompt referral for cardiac MRI, contributing to increased resource utilisation. Our hypothesis reflects a concern about cost-effective resource utilisation with a perception that echo findings result in numerous MRI referrals, many of which do not find CA.

**Method:**

A retrospective cohort study used data from Te Whatu Ora Waitematā between 2014 and 2024. Clinical coding (ICD-10 E85) identified patients with confirmed amyloidosis. Echo and MRI reports were initially identified by free-text search for any of the terms "amyloid," "amyloidosis," "restriction," "restrictive," "infiltration," "infiltrative," and "apical sparing." Manual analysis was undertaken to exclude irrelevant records.

**Results:**

865 patients had a total of 952 echocardiograms. Of these, 116 patients went on to MRI to further investigate for CA. PPV of reporting findings consistent with diagnosis of CA was 26%. Overall, MRI reported 30 as CA, 68 negative and 10 equivocal. Using the clinical gestalt as gold standard, PPV for TTE was 14% and for MRI 53%.

**Conclusion:**

This analysis contradicts our hypothesis. The positive predictive power of an echo report suggestive of amyloid, in a context sufficient to warrant MRI, exceeds initial expectations at 14%. MRI improved the PPV up to 53%. When there is clinical suspicion for CA, the (expensive) resource of MRI appears to be efficiently utilised.