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## Selecting Patient Reported Outcome Measures for Patients with Abdominal Aortic Aneurysm (AAA): Integrating Systematic Review and Qualitative Evidence Synthesis Methods.

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**BACKGROUND:** Abdominal Aortic Aneurysm (AAA) is a dilatation of the abdominal aorta. It is usually asymptomatic however, depending on the size of the aneurysm people may experience pain or a pulsating feeling in their abdomen. When the diameter exceeds 5.5cm there is a significant risk of rupture, which is usually fatal. Depending on the size of the aneurysm treatment options include either surgical, endovascular intervention or monitoring.



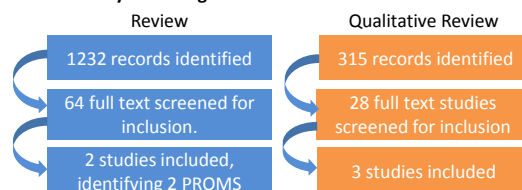
**AIM:** The aim was to identify and evaluate existing patient reported outcome measures (PROMs) for use in patients with AAA to inform the selection of appropriate outcomes for use in vascular services.

**METHODS:** Two systematic reviews were undertaken using standard review methods, the first to identify existing PROMs validated in the AAA population and the second, a qualitative evidence synthesis to explore patients' experiences of AAA on health and quality of life.

**ANALYSIS:** PROMs studies were evaluated for their psychometric properties using established assessment criteria, their methodological quality using the COSMIN checklist, and PROM domains were mapped. Identified qualitative studies were synthesised using Framework Analysis informed by the systematic review domain map.

**RESULTS:** As presented in figure 1, 2 validation studies and 3 qualitative studies were found to meet the criteria for inclusion in the reviews. From the first systematic review 2 PROMs were identified – the Australian vascular quality of life Index (AUSVIQOL) and the SF-36.

**Figure 1: Summary of findings**



**Table 1: Domain map**

	SF-36	AUSVIQOL	Qualitative Review themes
Health perceptions	X	X	X
Physical function	X	X	X
Limitations physical	X	X	X
Limitations emotional	X		X
Mental health	X		X
Social function	X	X	X
Vitality	X		X
Bodily pain	X	X	X

**Additional themes from the qualitative review not covered the PROMS:**

- Sleep
- Effect on others/ dependency
- Travelling
- Concentration
- Anxiety experienced over AAA specific physical symptoms

**RESULTS CONTINUED...**

**Table 2: Summary of PROMs for AAA**

Instrument (no. items)	SF-36 (36)	AUSVIQOL (10)
Internal consistency	Good	None
Test re-test	Mixed	Mixed
Content validity	None	Mixed
Response options	Categorical (5 options)	Likert scale
Completion time	11 minutes	3.27 minutes

The methodology of the psychometric properties were rated overall to be poor, although the content validity for the AUSVIQOL was rated as excellent.

**CONCLUSION:** Only two studies were found that sought to validate PROMs for AAA indicating that there has been little research in this area. The qualitative evidence suggests that the current PROMs may not capture the outcomes important to patients. There is a need for high quality qualitative research to be undertaken to understand the outcomes of those either treated conservatively or who undergo surgical intervention. As a result, the development and validation of a new PROM for patients with an AAA may be warranted.

**FUNDING AND DISCLAIMER:** This work presents independent research funded by the National Institute for Health Research (NIHR) under the Programme Grants for Applied Research programme (Project ID: RP-PG-1210-12009). The views and opinions expressed are those of the authors and do not necessarily reflect those of the NHS, the NIHR or the Department of Health

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