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TITLE: HOW IS CARDIOPULMONARY EXERCISE TESTING CONDUCTED IN NSW AND ACT?

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INTRODUCTION/AIM: Cardiopulmonary exercise testing (CPET) is considered the gold standard of assessing functional capacity under stress. Given the growing utility of CPET, understanding the current standards of practice is crucial. However, little is known about CPET accessibility, protocols used, or barriers to testing in NSW and ACT. This study aimed to understand clinical CPET practices and identify possible areas of protocol variability. METHOD: 40 hospitals were contacted: 28 in metropolitan Sydney, 9 in regional / remote NSW, and 3 in metropolitan Canberra. Hospitals confirming that they had a CPET service were asked to complete a 28-question survey of CPET practices via Qualtrics. The survey explored testing personnel, medical supervision, protocol design, data reporting, and barriers to CPET. RESULTS: Most hospitals (n = 28) did not have a CPET service. Of the 11 sites that performed CPET, respondents were split evenly between adult (n = 6) and paediatric (n = 5) testing capacity. Cycle ergometry (n = 10) was the dominant exercise modality. Most sites reported using ramp (n = 8) rather than stepwise (n = 3) protocols. 73% of sites adapted the test work-rate to facilitate a test duration of 8-12 minutes. 27% used a standard work-rate, regardless of patient presentation or test indication. All sites reported anaerobic threshold-related variables, ECG-related measurements, and Borg scores. CPET endpoints were typically in line with American College of Sports Medicine guidelines (73%). Barriers to CPET included lack of suitable staffing (n = 10), lack of medical availability (n = 4), and space (n = 3). CONCLUSION: Despite its value, CPET appears to be underused in NSW/ACT. While consistency in CPET reporting and endpoints was identified, there was variability in protocols across testing sites. This variation has potential to impact consistency and comparability of test results, affecting clinical decision-making.