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Re-Engineering the Cardiology Ward Round

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Background: Current literature regarding the effective mechanisms for improving workplace culture and empowering teams to strive for excellence is not well codified. One aspect is the function of the ward round team, forming an integral part of effective decision making that impacts the timely delivery of patient care. We evaluated if a re-engineered cardiology ward round targeting team culture; cardiovascular nursing advocacy and senior support contributes to efficient clinical ward round decisions so that patients receive their care sooner.

Methods: Prospective observational staged 2-week implementation each with their own preceding 2-week control period, within the CCU over three 4-week cycles. The intervention allocated a cardiac nurse to each cardiac stream ward round. The primary endpoint was delayed cardiac medications (total minutes/number of medications [min/med]).

Results: In total, 206 patients were recruited (Control [n=101], Intervention [n=105]). The primary endpoint was significantly shorter in the intervention cycle for all streams combined (median: intervention:0 min/med [IQR 0-0.5] vs control: 0.2 min/med [IQR 0-1.2], p=0.012). A more obvious effect as seen in the Heart Failure stream (25% of cohort) (median: intervention: 0 min/med [IQR 0-0.03] versus control: 0.9 min [IQR 0.3–1.6], p<0.001, interaction p-value=0.011). Overall, all streams showed positive results for most endpoints (LOS, booking delays, mobility, education), however, these differences did not reach statistical significance.

Conclusion: Including and empowering senior cardiac trained nurses on the CCU ward round shortens medication delays potentially via benefits in workplace culture. This pilot study calls for mechanistic research in the pursuit of delivering excellence in health care.

https://doi.org/10.1016/j.hlc.2022.06.436

Routine SARS-CoV-2 Rapid Antigen Testing Prior to Elective Outpatient Procedures in a Regional Cardiology Unit

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Background: A department policy was implemented in January 2022 using rapid antigen testing (RAT) to screen for SARS-CoV-2 infection prior to outpatient invasive diagnostic procedures including coronary angiograms and transoesophageal echocardiograms. These were performed in a closed cardiology unit with a six-bed recovery. We aim to evaluate the incidence of positive RAT in addition to nursing staff satisfaction with this policy.

Methods: A retrospective audit was performed on elective admissions to the unit. Demographics, procedure type and RAT results were analysed. A survey was conducted to evaluate nursing staff satisfaction based on a 5-point Likert scale.

Results: A total of 98 outpatients underwent RAT between 11/01/2022 and 11/03/2022, including 44 admitted for transoesophageal echocardiograms and/or electrical

![Figure 1. Cardiac Medication Delays.](image-url)
cardioversions and 54 for coronary angiograms and/or percutaneous coronary intervention. The mean age was 70 years (SD 11.5), with 79% being male. There were 2 positive results detected (2%) during the study period. The cardiology unit remained fully operational for the period analysed.

Nursing staff were surveyed (n=13) with a 77% (n=10) response rate. Majority of responders (60%) felt more confident about their personal safety following implementation of RAT, with 50% feeling they had a lower risk of hospital-acquired SARS-CoV-2 infection. Only 20% felt RAT was unnecessary, while 60% felt the policy should continue.

**Conclusion:** Routine RAT of asymptomatic elective outpatients has reduced staff and patient exposure to SARS-CoV-2 infection. This has assisted in making nursing staff feel safe at work with staff keen to continue with a RAT screening policy in the future.

https://doi.org/10.1016/j.hlc.2022.06.437

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**Synchronising to the One Beat: Development of a State-Wide ECG Online Learning Module**

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**Background:** Performing and interpreting an ECG are core skills for many health care clinicians. Members of the Agency for Clinical Innovation (ACI) Cardiac Networks identified wide variation in ECG knowledge and educational resources. To address this disparity, online interactive ECG learning modules for the novice to the advanced clinician were created by a working group of health district and NSW Ambulance specialist cardiac clinicians. This paper presents the evaluation of Module one—ECG fundamentals.

**Method:** At module conclusion, clinicians were invited to complete an evaluation, in which they rated their ‘before and after’ knowledge and confidence using a Likert scale ranging from 1 to 5. The questions explored participants’ knowledge and confidence in cardiac anatomy and physiology, performing an ECG, cardiac conduction and troubleshooting an ECG. Open-end questions explored participants’ perceptions of the module.

**Results:** During the first 12 months of the module being live, 4,672 people from seventeen Local Health Districts (LHDs) and NSW Ambulance completed Module one. The difference between participants’ reported knowledge and confidence before and after the module was tested by a Wilcoxon signed-rank test. The results indicated an improvement in most participants’ reported knowledge and confidence (p<0.0001 two-tailed). The effect size was medium in magnitude. Qualitative replies indicated that participants found the module relevant and informative.

**Conclusion:** Based on the results and feedback, the development of an online standardised ECG Fundamentals module was successful. Creation of additional progressive modules will offer clinicians opportunity to improve their knowledge related to ECG interpretation.

https://doi.org/10.1016/j.hlc.2022.06.438

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**The Burden of Lifestyle Risk Factors in Patients Undergoing Treatment for Atrial Fibrillation in a Large Tertiary Hospital**

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**Introduction:** Atrial fibrillation (AF), is the most common sustained cardiac rhythm disturbance, increasing risks of serious complications including stroke. Overall, there is a growing appreciation of how untreated modifiable risk factors can lead to a progression of AF.

**Aim:** We aimed to prospectively examine the risk factor profile and clinical characteristics of a patient group hospitalised for outpatient treatment of AF.

**Methods:** A cross sectional descriptive survey was undertaken for patients prior to procedural treatment of AF (cardioversion or AF ablation), in a large tertiary hospital. Patients responded to 30 questions on physical activity, dietary habits, smoking and alcohol consumption. Additionally, prior medical history, current medications and patients’ demographics were collected.

**Results:** 53 consecutive patients were examined (mean age 64.4 years, 71% male). Mean CHA₂DS₂-VASc was 3.9. There was a high proportion of cardiovascular risk factors; 90% of patients were classified as overweight or obese, 38.4 % of patients had sleep apnoea, 92% had a prior history of hypertension, 71% with smoking history, whilst 73% of patients had high cholesterol. Importantly, 92% of patients reported not eating the recommended number of vegetables, 39% consumed alcohol above the recommend guidelines, and 70% reported not achieving guideline based exercise recommendations.

**Conclusion:** Patients undergoing procedures for AF demonstrated a high prevalence of cardiovascular risk...