

Category :**ICU organization**

A133 - Assessing adherence to covid-19 guidelines during wave 2 at europe's largest single-floor intensive care unit

C Irwin ; DA Ahmed

University of Birmingham, College of Medical and Dental Sciences, Birmingham, United Kingdom

Introduction:

As COVID-19 was a new disease, there was a lack of formal protocol available guiding management earlier in the pandemic. This led to rapid development of guidelines by the University Hospitals Birmingham COVID-19 Working Group for the immediate management of severe respiratory disease in September 2020. We audited the adherence of the Queen Elizabeth Hospital's (QE) intensive care units (ICUs) to these guidelines during Wave 2.

Methods:

Adherence targets were set at 90% for three core guideline aspects: 7-10 days of dexamethasone administration, lung protective ventilation (LPV), and microbiology investigations (HIV, sputum culture, urinary legionella).

This was a retrospective audit, with data collected from patients admitted to QE ICUs between September to November 2020 the electronic Prescribing Information and Communications System (PICS) system. Data was analysed using Excel.

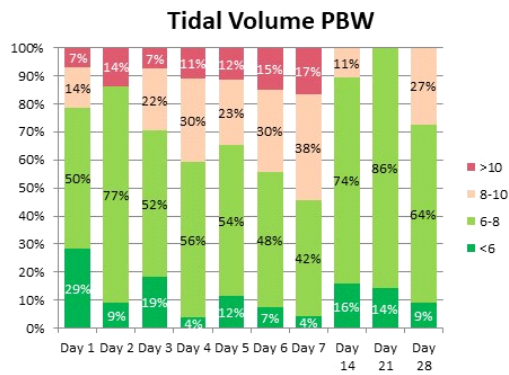
Results:

A total of 88 patients were included. The only investigation that met the 90% target was HIV testing (100%). Sputum culture, urinary legionella and influenza swab did not meet the target (50%, 16% and 8% respectively). 83% (n=73) of patients received dexamethasone for 7-10 days. Overall LPV adherence was 72%, with significant variation between sub-parameters (Figure 1).

Conclusion:

Only a subsection of the investigations aspect of this guideline (HIV tests, bloods, imaging) met our targets. The remaining microbiology investigations, dexamethasone therapy, and LPV compliance fell short. One contributing factor we identified was the lack of staff familiarization with the environment and clinical system. We produced a set of recommendations to minimise the impact of these human factors on guideline adherence.

Image :



Bloods		Microbiology	
U&Es	100%	HIV	100%
CRP/ESR	100%	Sputum culture	50%
LFTs	100%	Urinary legionella	16%
FBC	100%	Influenza	8%
Coagulation	100%	Mycoplasma	5%
Troponin	95%	Serum legionella	0%
D-Dimer	94%	Imaging	
Ferritin	85%	CXR	99%
Amylase	67%	Overall	
Iron	60%	69%	

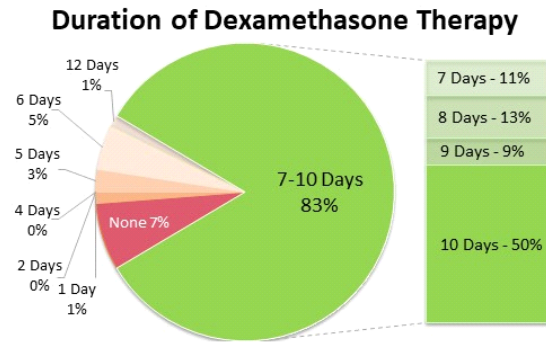
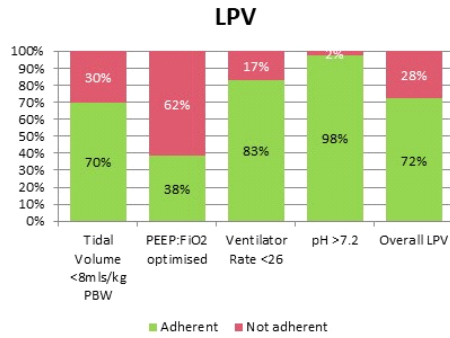


Figure 1: Results from audited patients.