

interest are management of communicable diseases, disaster response, tropical medicine, travel medicine and rural remote health.

Remote Governance of Deployed Damage Control Surgical Teams - an Industry Partners Global Experience

Dr Jon Kendrew¹

1 Iqarus

Damage control resuscitation (DCR) and surgery (DCS) performed on patients who have sustained war injuries has historically been the domain of Military entities, Non-Governmental Organisations or self-funding charitable surgical teams working with established logistic, command and communications chains.

The deployed landscape is evolving rapidly, and we are witnessing a growing trend of organisations seeking external contracted solutions from industry to provide deployed surgery at reach in austere and remote locations. This paradigm shift necessitates robust clinical oversight of these remote teams to ensure the delivery of safe and effective care.

Iqarus, a wholly owned subsidiary of International SOS, is a pioneering independent healthcare provider that routinely deploys skilled surgeons, anaesthetists and specialised nurses to support our clients in the field. Our surgical teams operate in many of the world's most challenging and austere locations, often facing limited physical and clinical resource.

In order to facilitate the exchange of knowledge and ensure continuous improvement, Iqarus has embraced a simple internet communications platform. Through this platform, we have established a weekly global surgical forum, connecting our globally deployed staff engaged in DCS and DCR on our projects worldwide. This forum serves as a conduit for formal case presentations, discussion and the sharing of clinical insights. By harnessing this forum, we expedite the flow of knowledge, enabling swift learning from key clinical lessons. Furthermore, our staff actively engage in individual and collective learning, delivering clinical topic presentations and utilising online learning resources.

This podium presentation will explore the challenges of operating as a civilian entity in remote locations and the mechanisms we employ to provide remote, senior, clinical oversight ensuring the delivery of safe and quality care. Additionally, we will highlight the use of an innovative training programme which

plays a pivotal role in equipping our teams with the necessary skills and knowledge to excel in the field.

Biography:

Prior to joining Iqarus as a Regional Medical Director, Jon was a key clinician in the acute care pathway of the unprecedented number of casualties returning to the UK from Afghanistan, he quickly gained extensive operative experience in all echelons of military surgical care. From emergency war surgery on deployed operations at Camp Bastion Hospital to the acute life and limb saving surgery and subsequent delayed reconstruction of blast and gunshot injuries at the Queen Elizabeth Hospital Birmingham, he saw first-hand how the severity of injuries increased as the conflict became characterised by the use of ever more powerful IEDs. He has published papers on these war injuries, has presented his work both nationally and overseas, and has co-authored Orthopaedic chapters in several key textbooks. He has been an invited guest speaker at both the British and German Orthopaedic Society's, the British Trauma Society, the Orthopaedic Trauma Society and the Internationally renowned Edinburgh Trauma Symposium.

Kendrew is an Honorary Research Fellow at the Royal British Legion Centre for Blast Injury Studies at Imperial College London and sits on the CBIS Amputee Studies Advisory Board.

Returning To Aviation-Related Duties After Covid-19. Comparison of Old and New Aeromedical Guidance, and Lessons Learned for Future Policy Development

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Background

On 10 Jun 22, The RAAF Institute of Aviation Medicine (IAM) released updated Aeromedical Guidance for the return of Australian Defence Force (ADF) aircrew and controllers to aviation-related duties following COVID-19 infection. The updated guidance aimed to minimise operational impacts of COVID-19 by expediting a return to full duties, but accepted a higher level of medical risk (medium as opposed to low) compared with the previous guidance of January 2022. In particular, it was anticipated that the new guidance may encourage under-reporting of symptoms, as there was an operational incentive for aircrew and controllers to report asymptomatic as

opposed to symptomatic infection, as asymptomatic infections did not require a medical review prior to return to aviation-related duties. Asymptomatic individuals could instead resume full duties after completing a self-declaration form, countersigned by a flight commander.

Methods

In order to assess the operational effects and potential risks associated with the change in guidance, an analysis was conducted of IAM's records of all aircrew and controllers who were returned to duties following COVID-19 infection from February to December 2022. These records were analysed to compare the reported disease severity (asymptomatic, mild, moderate, or severe) and time taken to return to full duties under the old guidance as opposed to the new guidance. Ethics approval for this project was granted by the Departments of Defence and Veterans' Affairs Human Research Ethics Committee.

Results

Under both the old and new policies, 90% of aircrew and controllers returned to duty at the first medical assessment. However, as expected, return to aviation-related duties was faster under the new guidance compared to the previous guidance (16 days compared to 19 days). Of the 10% of individuals who did not return to duty after the first assessment, 50% reported ongoing ENT or respiratory symptoms, 22% reported neurocognitive impairment or fatigue, and 13% had cardiovascular issues including ECG changes, chest pain, or palpitations.

As expected, a greater percentage of infections were reported as asymptomatic under the new guidance compared to the previous (19.5% vs 5.9%). Possible explanations include the increased availability of rapid antigen testing (allowing for greater testing of asymptomatic individuals), the effects of immunisation and/or subsequent infections, changes to symptom profile between COVID-19 strains, and deliberate or inadvertent under-reporting of symptoms by individuals. A review of the aircrew self-declaration forms intended for use in asymptomatic individuals found that 45% were incorrectly completed.

Conclusion

The change in aeromedical guidance achieved its aim in ensuring a faster return to aviation-related duties for aircrew and controllers. A greater percentage of infections were reported as asymptomatic under the new guidance. It is possible that the updated guidance may have encouraged under reporting of symptoms and therefore increase the aeromedical risk associated with COVID-19 infection in ADF

aircrew and controllers. However, to date, IAM is not aware of any ADF aviation incidents where COVID-19 infection or its sequelae were a contributing factor.

Biography:

FLTLT Danielle Polgar is a RAAF Aviation Medical Officer, currently posted to the RAAF Institute of Aviation Medicine at RAAF Base Edinburgh. FLTLT Polgar completed a fellowship of the Royal Australian College of General Practitioners (FRACGP) in 2019, and is currently a Registrar in the Australasian College of Aerospace Medicine (ACAsM) fellowship training program. FLTLT Polgar has previously served in aeromedical evacuation and expeditionary health squadrons and in 2020 was deployed to the Middle East in support of Operation ACCORDION.

Smata Data: How Dental Data Optimised Service Delivery Following the Implementation of the Risk Based Dental Fitness Classification

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1 Joint Health Command

The ADF Health Strategy has set out a number of pillars to enhance the delivery and effectiveness of health care to ADF members. Health system insights and smarter service delivery go hand in hand. Effective, timely, data driven decisions can lead to service delivery improvements and innovation. In early 2022, it was realised that there would be a need to conduct a considerable number of periodic dental examinations between the months of July and November. This was due to the implementation of the risk based dental fitness classification over the same period in 2020, as well as the interruption of dental services due the COVID-19 pandemic. Not only was 2022 looking like a concern, data revealed approximately 87% of members were receiving a PDE recall interval of 12 months. Therefore, there was the potential for a continued backlog of PDEs during the July to November period for years to come.

Data was gathered from the Health Information Office (HIO) to determine the number of PDEs due each month by facility. Facilities were advised to manage their appointment books to enable the peak of PDEs to be 'flattened out'. This process also resulted in a more even spread of treatment identified at the PDEs, ensuring satisfactory access to care was maintained. Over a twelve month period, the data supplied by the HIO was developed to incorporate other measures