

From ICU to Home: Recovery from COVID-19 Infection Assisted by Appropriate Bariatric Equipment

- ↑ **Skin healing with no further breakdown**
- ↓ **Mattress and bed combination reduced moving and handling risks**
- ↑ **Turning mattress helped with respiratory management and outcomes**

Introduction

Ryan* (age 38) was admitted to hospital with severe breathlessness and low blood oxygen saturation. A PCR prior to admission had confirmed COVID-19 infection. He weighed 135kg on admission, and had the following comorbidities:

- **Type 2 diabetes**
- **Hypertension**

He was mobile at home and on admission, with no skin damage.

Pre-admission and prior to developing COVID-19 infection, Ryan was fully independent.

On admission, Ryan's skin was intact but vulnerable to damage as he was bed bound and immobile due to his illness.

Ryan was admitted straight to ICU because of the severity of his condition. He was placed on mechanical ventilation, and had a tracheostomy inserted a week after admission.

**Ryan is not the patient's real name*

Clinical Challenges

Ryan needed to be as mobile as possible within bed whilst he was ventilated, for which he was totally reliant on the staff. They needed a way to be able to mobilise him safely and frequently.

Ryan needed a bed and mattress that could safely accommodate his weight and shape. He also needed a surface that would protect his skin.

For the first 11 days, Ryan was nursed on a standard width bed and an alternating pressure mattress. This was very problematic as the bed wasn't wide enough to allow easy turning and repositioning, and Ryan was being proned as part of his respiratory management. He had developed a Category II pressure ulcer on his sacrum, and on his nose and ears as a result of proning.



Medstrom's Clinical Advisor commented:

"I was asked to assess Ryan in ICU as the staff were **struggling to move him** using the standard width bed. **Proning was especially challenging**, and he was starting to develop **pressure damage** because of the **difficulties in changing his position**. I arranged for a suitable **bariatric bed and mattress** to be installed and worked with the ICU team to ensure they were **trained on these** and aware of how to **get the best use from them**."

Patient Objectives

- **Respiratory management**
- **Maintain mobility within the bed to prevent complications of immobility and reduce deconditioning**
- **Heal existing and prevent further skin damage**

Introduction of Medstrom's Bariatric Equipment Package

Bari10A Bed: The Bari10A bed has a safe working load of 475kg and the platform sections widen individually, giving a maximum platform width of 122cm (compared to approximately 90cm for a standard hospital bed). This provides extra space for the patient, but also means caregivers can shorten a section if they want to get closer to the patient to deliver care. The extra width also made proning and turning Ryan easier and safer. The bed's top height of 86cm, which allows the vast majority (including tall) caregivers to safely move the patient, reducing moving and handling risks. The electric controls allowed Ryan to be repositioned frequently and effortlessly.



TurnCair 1000 Low Air Loss Surface: This provides a high specification of support surface for pressure redistribution, plus a TurnAssist feature that enables safe and dignified handling of patients and aids respiratory management. The low air loss feature helped to keep Ryan's skin drier and cooler, preventing further skin breakdown and helping the existing pressure ulcer to heal.

The TurnCair 1000 surface helped considerably with turning Ryan, reducing the amount of hands-on manual handling required.

Ryan stayed in intensive care for a total of five weeks. His condition improved, he was weaned off mechanical ventilation successfully and his tracheostomy was removed. He was transferred to a ward to continue his recovery.

Once on the ward, the physiotherapists began working with Ryan to improve his mobility. At the time of discharge, he was able to walk unaided from bed to chair and back. His mobility was not back to baseline, which was not surprising given how long he was bedbound, but he was mobile enough to go home and continue his improvement there.

Ryan spent a total of 59 days in hospital. His bed and mattress remained the same throughout his stay. The ward staff discussed stepping down to a foam mattress, but Ryan liked the TurnCair 1000 and used it in non-turning mode. Autofirm, which inflates the mattress to its maximum height, was used when Ryan mobilised, so he was mobilising from "on" the mattress rather than "in" it. This also prepared him for discharge home, where he had a divan bed.

All objectives for Ryan were met; he was recovering from COVID-19 infection, he was able to mobilise independently (though for shorter distances than pre-admission, but this was improving) and his skin was intact, with no further or new pressure damage.



Mobility regained



Skin intact



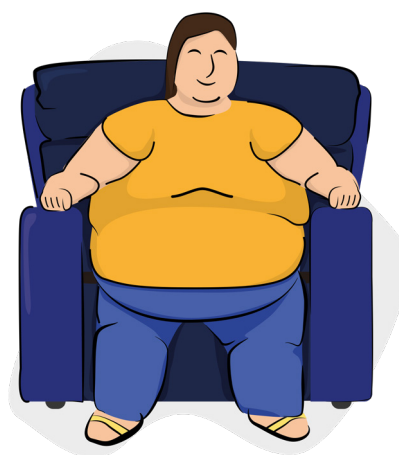
ITU to home

Shortly before discharge, Ryan commented:

“This bed and mattress give me **more space** so that **I don't feel restricted** on movement. I think it has helped make my **recovery quicker** as it gave me a bit **more independence**.”

Summary

Ryan made an excellent recovery from being critically ill. The bariatric bed and mattress combination helped him throughout his hospital stay. The mattress helped him whilst he was unable to move himself; the regular turning benefitted both him and the staff, prevented further skin breakdown and helped with respiratory management. When he was on the ward and starting to mobilise, the mattress could be made firm to make this easier. He could also use the bed controls to reposition himself, giving him more independence.



To discover more about Medstrom's range of solutions for dignified plus-size patient care and enhanced support for caregivers, contact Medstrom's Bariatric Product Specialists 24/7/365 on:

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