

The Effects of CardioWall® on Mood Management in Patients with Mental Health Conditions

Overview

The CardioWall® was purchased by Fulbourn Hospital in 2017, with the expectation that the **competition element** would provide **motivation for patients to exercise**, give them a **sense of achievement** and thus, **improve their morale**. Additionally, it would help solve the problem of needing patients to get **exercise without having to leave the secure unit** alone, or be accompanied to a gym.

Between April – June 2020, we carried out a study at Fulbourn Hospital that looked at the **immediate effects of CardioWall use on mood management** in patients admitted to unit Mulberry 1: primarily a short-term assessment unit. Patients self-reported their mood pre and post CardioWall, and practitioners observed any changes in mood and emotion during this time.

Overall, the Fulbourn Hospital study found that the CardioWall **positively supports patient's wellbeing and physical health**. This was reflected in the self-reports by patients of their emotional state during the study. It has also been very beneficial for use as a mindful activity, as it helps patients keep their focus and block out distraction.

"It's something we are very pleased we purchased and would strongly recommend to other mental health sites looking for innovative ways of keeping patients healthy, happy and engaged whilst on the ward" -
Richard Hanlon, Clinical Nurse Specialist, Fulbourn Hospital

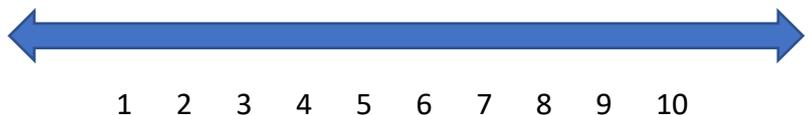
The Study

14 participants (male and female) were included as part of the overall analysis. 37 independent self-reports were taken from 14 different patients to assess their mood. Before using the CardioWall, patients were screened to check that it was an appropriate form of exercise for them, and that they were fit to exercise.

Participants used a questionnaire to **report their current mood before and after CardioWall use**. Mood is explained and analysed in this study as a short-term emotion, whereas 'affect' is a more persistent mood and explains the underlying feeling or state that a person is feeling (often a sustained emotion). This study looked particularly at changes in mood over the course of a CardioWall session. Measures were reported using a 10-point scale.

Emotion currently felt (mood/affect scale)

How do you currently feel on this scale? Where, 0 = depressed or no feelings, and 10 = too many, pressured or manic feelings



Note: Participants reporting a score of 0 or 10 pre-CardioWall use were removed from the analysis as they were classified as anomalies by the support staff.



Results

Mood Management

For practitioners, an 'improvement' would be comparing where someone starts on the scale, then where do they go after an 'input' (in this case the CardioWall). Practitioners hope that an input has an uplifting effect on their mood. Any change reported in mood is likely to be good. Practitioners would then hope to see a sustained change. In this case, that the person enjoyed themselves, or felt in a better emotional state after using the CardioWall that they would choose to use the CardioWall again.

Overall, the CardioWall appears to have an **actively positive effect on mood** of patients. Practitioners also reported that the CardioWall helped **increase patients' sense of wellbeing** and that the competitive element is extremely positive for patients. Many patients compete against their own scores, and they have found this particularly useful for **motivating patients to be active**, and to **spend time focussing on a specific task**.

Of the 14 participants that used the CardioWall during this study, 12 chose to use the CardioWall again, showing that using the **CardioWall had an uplifting effect on the mood of 86% of patients**.



CardioWall Use in a Hospital Setting

Besides the positive effect on mood, the Fulbourn team reported a wide range of physical, cognitive and 'soft' benefits from the CardioWall on the ward:

The CardioWall is **non-threatening**, without the stigma or intimidation factor of a gym environment, or most other gym equipment products. It's **widely accessible** – CardioWall users do not require a trainer, and patients can use it in their own time. **Staff-efficient** - it does not require the time of a physio, and it **helps to personalise** each person's experience on the ward. **A highly convenient exercise tool** - patients enjoy using the CardioWall and it keeps them active without leaving the ward.

For staff, it **facilitates patient-practitioner relationships**, as they're able to discuss their positive achievement (e.g. a new high score) or even compete against them. For many patients, a staff member taking time to talk to them can have a very beneficial effect on their current mood. And over time, **meaningful activity** such as this can provide **emotional, creative and intellectual stimulation**, and could contribute to improvements in a patient's affect (persistent mood).

Our thanks to Richard Hanlon, Clinical Nurse Specialist and the patients at Fulbourn Hospital for their assistance with this study. Further collaboration is planned to investigate the long-term effects the CardioWall can have on mood management, confidence, and the physical and cognitive wellbeing of mental health patients.

Reported Mood Pre and Post CardioWall Use

0 = depressed or no feelings

10 = too many, pressured or manic feelings

