

# Post-ICU

*The digital journal for tomorrow*



## The challenge: Post ICU Syndrome for both Patient and Family

**Sense of urgency:** (a) growing number of ICU patients and length of stay and (b) need for digital solutions due to Covid-19 symptoms

More than 50% of the patients admitted to the ICU develops a form of Post ICU Syndrome, leading to substantial mental issues such as increased levels of anxiety, depression and sleep deprivation. In the US this effectively means that yearly more than 2,500,000 post-ICU patients will develop these symptoms to a larger or lesser extent, and from recent research it is also confirmed that these patients consume considerable more care activities in the year following their discharge from the hospital. The long term (12 months+) effects on health & wellbeing is still under investigation. Recent studies in the US show that 40% of the Post ICU patients has not returned to work one year after being discharged and that for 33% of the population this might be even the case until 5 years after discharge from the hospital. It is also evident from research that the family of the ICU patient runs a high risk of developing mental issues. This is called PICS-F(amily). A further explanation of the PICS and PICS-F indication can be found in <https://eprints.gla.ac.uk/165241/7/165241.pdf>

## The solution: Post ICU Digital Journal

In early 2020, at the start of the first Covid-19 wave, the Payers and Care Providers in the Netherlands jointly decided for an accelerated introduction and roll out of the 'Post ICU Digital Diary' - <https://post-icu.com/>. They made the necessary innovation funds available to [Games For Health](#) (developer and owner of the *Post ICU Digital Diary* ©) and their partners to deliver this solution to the first 20 hospitals of the 80 hospitals in the Netherlands. We have currently delivered the solution to 15 hospitals and have contracted another 15 hospitals and are in the process of acquiring another 20-30 hospitals. The current hospitals connected include: Catharina Ziekenhuis Eindhoven, Erasmus Medical Center, Isala Hospital, Jeroen Bosch Ziekenhuis, University Medical Center Utrecht and many others. The pricing structure deployed is: (a) one time implementation fee per hospital and (b) one-time fee per ICU admission, assuming that each ICU patient is offered

## Recognition

- Games For Health was announced the winner of the national "Healthcare Innovation Price" for the most appreciated and relevant eHealth solution in 2021 for the Dutch market. It was selected out of 900 eligible eHealth candidate submissions;
- Dutch Healthcare Insurers ('payers') have acknowledged Post ICU Digital Diary as eligible 'act of care', and not only made an initial investment for rollout in 2020 - see above, but also have incorporated the cost coverage in their annual budget negotiations with the Healthcare Providers.

a Post ICU Digital Journal. In the following link a short movie gives an overview of the concept: <https://youtu.be/xlfORaY84d0>.

### **The user experience**

Games For Health has so far seen an accelerated take up of well over 15-20% of the ICU population, and great appreciation by both patients and (ICU) medical staff of this new and groundbreaking services. It has also proven to have a positive impact on the severity of Post ICU Syndrome (PICS) and accelerated recovery for both patient and family, see [McIlroy study](#).

Recent studies in the US show that an ICU diary helps to reduce the risk of developing PTSD by more than 60%, see [%&&%\\* study](#)

In the US, the ICU Diary concept is also incorporated in the '[ICU liberation campaign](#)' developed by the Society of Critical Care Management

Besides this we are gathering important insights around 'increased effectiveness' of communication with (remote) family members and patient during ICU stay and during/after discharge, and also positive impact on 'subsequent therapies' to rehabilitate the ICU patient (and family).