

# Open Window

an ambient virtual window for bolstering wellness and healing potential during a hospital stay

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Hospital patients often feel isolated from the outside world and disconnected from the people that love them, especially if an illness requires residing within a single room for an extended period. These factors can lead to depression and a reduced potential for healing. This project attempts to counteract these effects by creating an always-on ambient aural and visual portal from the patient's room to a familiar place or environment to which the patient feels a strong connection.

A collaboration with a cancer unit at a local hospital, the Open Window is particularly targeted to bone marrow transplant patients who must undergo a difficult chemotherapy program and are allowed only a limited number of visitors for several weeks while their immune systems recuperate. The rooms the patients inhabit are small and filled with various intimidating medical technologies. Most have only a small window with a very limited view of the outside world. The illness experienced during therapy often causes patients to have difficulty focusing on simple foreground mental tasks like reading a book or watching television. All of these factors contribute additional mental strain and feelings of isolation to an experience that is already very physically challenging.

The Open Window prototype creates a projection on a wall of the patient's room that displays a live yet low frame-rate video stream from a place chosen by the patient, such as a window facing the patient's garden, a room in the patient's house, or a favorite hilltop view. These video images are captured with high quality web or mobile camera technologies set up in the desired places. Just like a real window, this virtual window to familiar place can be closed when desired and the projection space used for other purposes, such as commissioned audiovisual art pieces designed to sooth the senses.

The prototype aims for an ambient design that conveys an ongoing impression of the place while not drawing attention to itself and, most importantly, not overwhelming the patient's senses. The patient sees a single moderately static image projection that subtly updates itself once every few seconds or minutes. The hope is that the ongoing presence of this connection will have a positive and strengthening effect on the patient's mental state and healing potential, and this hypothesis is being formally tested as part of the project.

Initial trials for the Open Window project are being undertaken in partnership with Professor Shaun McCann, Director of the Denis Burkett Ward, St. James Hospital, Dublin.



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