

Jerrie S. Project#2 – Detailed view (v1)

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Requirements:

1. Be able to contact a caregiver via the Tobii when at home and use the same solution to notify the nursing desk when in the hospital.

Solution – High Level:

1. We developed a solution using a Shelly Plug that hospitals should not have a problem with since it does not tie to the internet or their intranet when the Shelly Plug is configured in the default mode which is to act as an access point.

Call Caregiver when at home and ring Nurse Call when in the hospital - This solution is for those who use a Tobii device and need to use eye gaze commands to contact a caregiver when at home and have the ability to take the solution to the hospital along with some extra cables to plug into the nurse call system. Hospitals do not allow Alexa devices for privacy reasons, and therefore Amazon Smart plugs are also not permitted in the hospital. The challenge was to find a device that would not rely on the hospital's internet.

We use a Shelly Plug which looks like an Amazon Smart Plug except it does not require Alexa to control it. It can be controlled directly from the Tobii, and if you use the default configuration of the Shelly plug, you do not even need to use the hospital internet routers to get an IP address. The default configuration of the Shelly Plug is that it can be controlled using its gateway address of 192.168.33.1. This does require adding a USB Wi-Fi adapter to the Tobii, which is cheap and easy to do. You then dedicate the **new** USB Wi-Fi adapter to always connect to the 192.168.33.1 IP address and this allows you to continue to use the **original** Wi-Fi adapter for browsing and email. The benefit of this approach is a consistent setup between home and the hospital with no need to reprogram or change any setup other than to add the necessary cables that are compatible with the hospital call system which is a 1/4 "plug.

Here is a [video](#) that describes the default setup.

Here is a [link](#) to further documentation.