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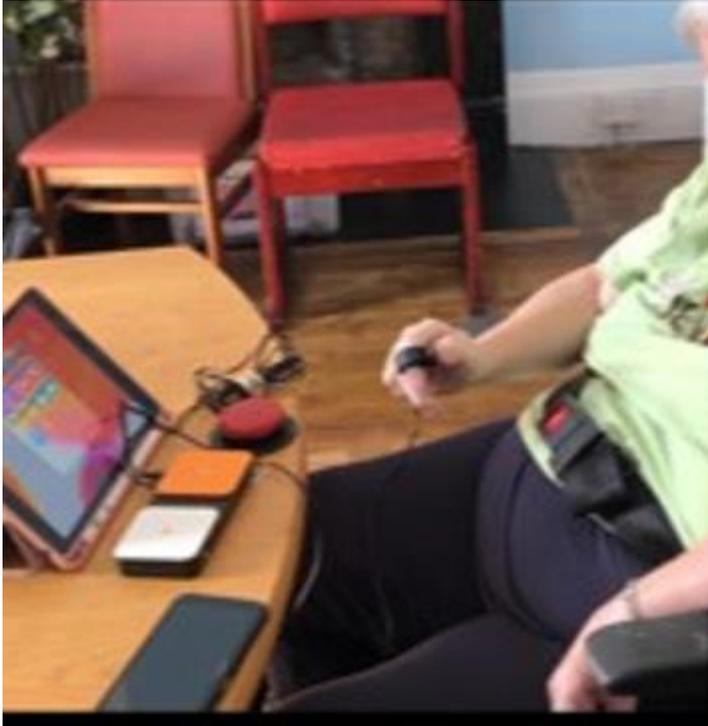
**Using iPad shortcuts  
as a means for those  
with no speech or  
dysarthric speech to  
access smart  
technologies**

# About Leuchie and background to project

- Leuchie House is a national charity dedicated to supporting people living with a neurological condition such as multiple sclerosis, Parkinson's, motor neurone disease and the effects of stroke through individualised short respite breaks. This also provides a break for the carer/family.
- Support guests using technology to reduce their dependency on their carer, thereby maintaining their independence and reducing the impact on their family and carers, together with the cost of care.
  - 1-2-1 digital skills sessions and assistive technology workshops for guests based on 'off the shelf' affordable technology.
  - 18 'smart' rooms

We have a number of guests who, because of their neurological condition, are non-verbal or have dysarthric speech and they are unable to control their environment in the same way.

# What is our project?



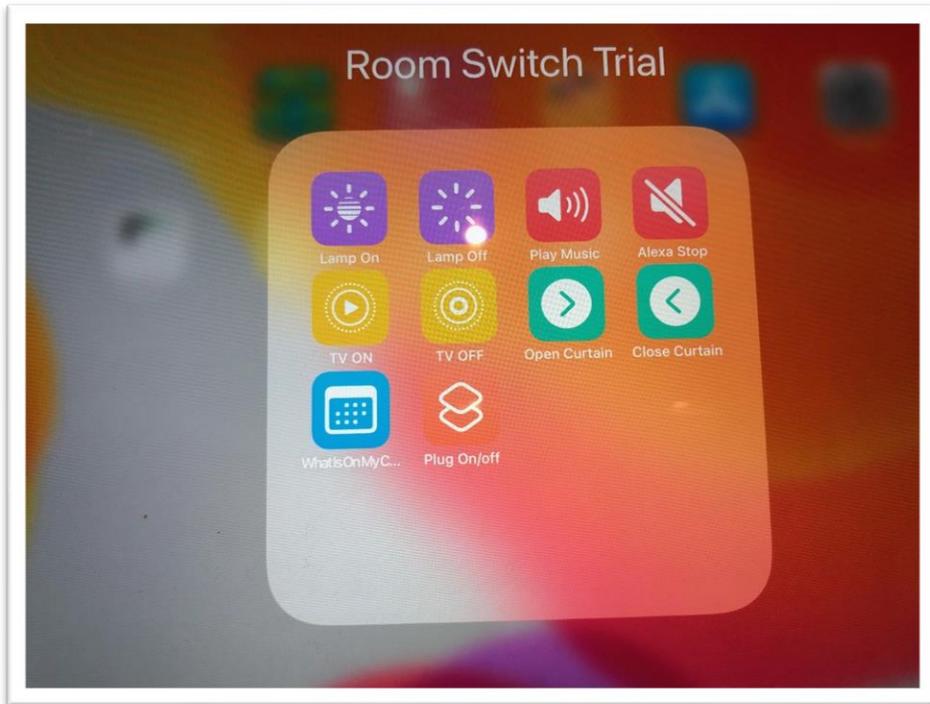
**Use Apple shortcuts (icons with links) on an iPad screen, which can be tapped on triggered through a switch control to link to the Smart technology.**

For example, a guest would be able to control the curtains or lighting.

This matters for equity of our provision - increase access and inclusivity for guests who are unable to use their voice to access technology in the same way as everyone else.

‘future proof’ where, for example, those with MS are highly likely to lose their voice in the future due to their condition.

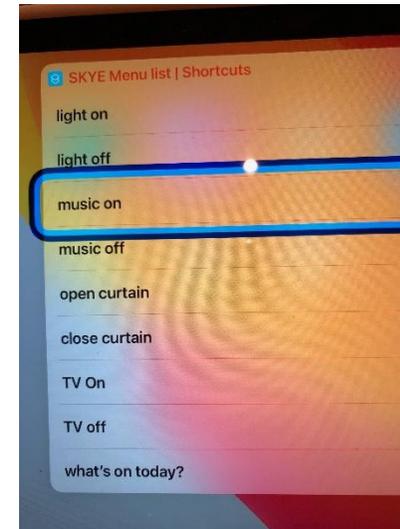
## Early trial feedback from guests



- Hands with limited mobility click multiple buttons, particularly when using a Blue2 switch, and sometimes lose the menu.
- Some guests found the icons too small to read.

Following this feedback I set up the drop down menu with large text and tried a variety of switches.

It is important to choose an appropriate switch for the guest, for which ideally I would have a recommendation from our occupational therapist. I tended to use the Blue2 switch, which pairs to the iPad using Bluetooth, and then connected it to two other input switches if the Blue2 was inappropriate. Other switch inputs I tried were light touch and hover plate switches, Glassouse dwell to click glasses, and wobble buttons.



# What are the steps to set this up?

- 1) Link Amazon Alexa account to Mkzense IFTTTTrigger skill from mkzense. Cost is \$5/year per account.
- 2) As detailed in the link <https://mkzense.com/webhook>, get a token using your account email address.
- 3) Set up unique triggers for Alexa when you link/unlink the Mkzense IFTTTTrigger skill. Once you have paid for the subscription, you can create the triggers. Set up one trigger to correspond to each Alexa routine you want to control the room environment. (For example curtain on, curtain off, what's on my calendar today, music on, Alexa off, lamp on, lamp off, tv on, tv off)
- 4) Set up routines in Alexa using the trigger names and assign actions
- 5) Set up shortcuts in the Shortcuts iPad app.
- 6) Set up iPad widgets menu, either shortcut dropdown menu or icon based.

# What else might others find helpful to know if they are trying to achieve similar aim?

- Wait until Matter home automation connectivity standard has been implemented, which has been agreed and is starting to be implemented by main vendors. Should vastly simplify the processes needed to create links to non-Apple tech on the iPad.

<https://en.wikipedia.org/wiki/Matter>

- mkzense FAQ says the webhook requests rate limited are currently set at 4 requests per minute per user, to avoid Denial of Service attacks. In practice this hasn't been an issue.



# Thanks for listening!

Any questions for us?