This life New indows windows on the world

Cameron and Haig Oman: the brothers are profoundly deaf, but both benefit from cochlear implants and everyday technology such as smartphones and mobile devices

Rapid advances in technology have helped children with hearing issues to make huge strides in their everyday lives, as one family in Co Kildare can attest

Interview: Alex Meehan Picture: Barry Cronin

eeing a teenager with their head buried in a smartphone or laptop isn't exactly an unusual sight. But some families' relationships with personal technology are a little different.

Among them are the Omans of Carbury in Co Kildare, a family of two adults and four kids with a special reason to be grateful for the benefits that smartphones, tablets and texting bring. Yvonne and Patrick Oman have

four children – Haig (15), Douglas (14), Cameron (10) and Eliza-Jo (8). Both Haig and Cameron have been profoundly deaf since birth. "It was a big shock, because

there isn't any history of deafness in our family," says Yvonne Oman. "We went through the full run of emotions when Haig was born. My sister had a baby girl a couple of months before he arrived and we started to realise that she was doing things that Haig wasn't when he was the same age. She'd be frightened when you came up behind her and Haig just wasn't easily scared at all."

Today, it's possible to test a newborn's hearing while they sleep, but at the time the technology wasn't available, so it was't until Haig was 15 months old that a specialist diagnosed him. Yvonne later discovered that

she had a chromosome which can cause deafness. By a massive coincidence, so too did her husband – the genetic scientist who confirmed the news told them that it was a million to one chance.

The result was that the couple had a one in four chance of having a deaf child.

More than a decade later, the

family have gone through the full gamut of emotions, but have now settled into a routine that is massively empowered by the degree to which technology helps their kids communicate. Both Haig and Cameron Oman

Both Haig and Cameron Oman have cochlear implants, highly sophisticated electronic devices that help to provide a sense of sound to a person who is profoundly deaf or severely hard of hearing. These sit behind the ear and have a portion that is surgically placed under the skin. They work by bypassing damaged parts of the inner ear to directly stimulate the auditory nerve.

Signals generated by the implant are sent by way of the auditory nerve to the brain, which recognises the signals as sound.

"People are often surprised when they find out that Haig and Cameron are deaf, because they don't look any different to any other kids," says Yvonne Oman.

"Haig doesn't sound like he's deaf – it's only when they see the tiny apparatus on the side of his head that other people twig it." In school, both Haig and Cam-

In school, both Haig and Cameron Oman are able to use radio aids that further enhance their implants and allow them to tune out background noise in the classroom. They can also alter the audio level so they can hear the teacher twice as loud as their classmates.

The earlier a child is diagnosed with deafness and fitted with implants, the better they adapt to the devices and learn to speak in the same way as unaffected children. Since 2011, hearing tests for newborns have been rolled out in all health regions around Ireland.

The brothers have different levels of adaption to their implants – Cameron has had his for a shorter