## 1.

My name is Brodie Lucht, my presentation today will be focusing on assistive technology for elderly people in the context of Finland.

## 2.

[Listing Gesture]

Throughout my presentation I will **address what assistive technologies are**.

Go over some **common and up-and-coming examples**.   
The **ever increasing importance** of assistive technologies in the elderly care system.

The **benefits and challenges** faced in implementation and trials of these assistive technologies.

And finally the **future of elderly care**

## 3.

[Precise gesture]

Assistive technology is defined as “**Equipment** and services that **support and maintain the declined physical and cognitive functions of a person due to age** and disability.”

Assistive technologies have become **increasingly common** in recent times due to older population placing **increasing value in living independently** and remaining in their own homes.

## 4.

**Personal monitoring devices** can range from a simple **GPS wrist band** like shown in the image, to more **advanced fitness trackers**.

More advanced trackers incorporate functions like **HR monitoring, sleep monitoring and more**.

According to Laura and associates GPS bracelets were very **useful for improving safety** and independence in some cases, allowing the **participants to continue their independent walks**.

## 5.

**Medicine dispensers** are another technology starting to be implemented in elderly care to **reduce the reliance on caregivers**.

The dispensers were found to be **very useful** to make sure elderly residence still living at home **took their medicine with the correct dosage and time**.

The more **advanced medicine dispensers** also have functions to **contact caregivers** if medicine isn’t taken, and to **interact with other smart home** devices.

## 6.

**Bed monitors** are commonly installed in homes to help **ease the burden of caregivers at night**, notifying them if the elderly person **gets up and doesn’t return to bed** within a set amount of time.

Bed monitors have been found to be very useful for **monitoring residents who had a tendency to wander at night time**.

## 7.1

**Smart homes** have started to be **purpose built** to **support the elderly**, with **built-in assistive living** technology.

[emphasise gesture] & articulate

Assistive living smart homes have been **under constant improvement** over recent years, with a focus on **improving health monitoring, security and comfort** for elderly residents.

[Listing gesture]

**Health monitoring systems** include devices to assess and track general condition such **as body weight, heart rate, medicine and more**.

**Security systems** in assisted living smart homes include **movement detector, video camera, bed monitors, floor sensors and more**, with the purpose to detect and **alert of any hazardous situations such as fall, smoke, intrusion** and other potential dangers.

**Comfort systems** are intended to **ease managing home appliances** often including **household aids, custom furniture and motion sensor lights and doors**.

## 8.

**Robotic technology** is one of the newest assistive technologies to begin use in elderly care.

**Finland** is one of the leading countries for **the trial implementations of these assistive robots** into their elderly care system.

The **preliminary findings** by Melkas & associates study showed **mostly positive feedback** from the elderly and their close relatives in relation to the **assistive robot Zora.**

The **negative feedback** received in the study **was linked to the stigma and fear of robot**s, however as awareness about the technology grows, **perception of assistive robots should improve**.

## 9.

Finland is one of the **leading countries** in **implementation of innovative elderly care technology**, and for good reason.

[growth gesture]

Finland is considered to be an **aging population**, by the OECD, **the Organisation for Economic Co-operation and Developmen**t which includes counties from the US, UK and more. Data shows **Finland’s population over the age of 65, in 2012 was 18.5%, 3.5% over the OECD average** and by the year 2**050, it’s forecast that 27% of Finland’s population will be over 65%** and their **spending on elderly care services will have doubled.** [double gesture]

## 10.

Coinciding with the **increased value** the aging population is placing with **remaining in their own home**, studies have show elderly people [this & that gesture] **fear losing their independence more than they fear death**. Assistive technologies are **able to provide this increased independence** while also **providing security and peace of mind to the families**. This is reflected in recent actions by **Finland authorities**, who have started [shifting gesture] **reducing long term institutional care** and shifting care services to **home care and home hospitals**.   
Another important benefit of assistive technologies is the **reduced long-term costs of careers and support services**.

## 11.1

Nevertheless, assistive technologies also face their share of **challenges** when it comes to **their implantation in elderly care.**

[money gesture]

Firstly, **Initial cost is a major challenge**, with the pricing of assistive devices or smart homes being very high.

Secondly, one of the major challenges a **study by Kentaro & Kirsi** faced was the **residents concern for their privac**y, regarding the use of **video and senor monitoring technology.**

Third, the resident and family members **attitude towards the device**s, including p**rivacy and the negative stigma surrounding robots**

Fourth, a study by Helina Melkas found that residents express concern about **their practice and understanding** when it came to **using some of the assistive devices.**

Finally, **premature implementation and release** of some assistive technologies have posed some challenges due to **inadequate design, complicated UI or other reasons.**

## 12.

To summarise, Finland is a country where the **life expectancy is going up** and the percentage of the **population requiring elderly care services ever increasing**.

[emphasise gesture]

The **demand and importance** of assistive technologies have **never bene greater**. These technologies are obviously the **way of the future** with their implem**entation ever increasing in Finland and around the world.**

As these technologies continue to **improve and be developed** they will **revolutionise the elderly care** systems we have today. **What do you think elderly care services will look like 10 years from now?**

[you gesture] rhetorical question

## 13.

That is the end of my presentation on assistive technology for elderly people in the context of Finland.   
Thanks for listening.

[Openness gesture]

Are there any question?