



Consumer Smartphones VS Dedicated Devices: What has to be considered?

When considering smart devices for a nursing home, thousands of possibilities are available on the market, and it can be difficult for customers to decide which is the best smartphone for their institution.

Smartphones can be purchased in any shop worldwide for a reasonable price. Some providers also offer specific dedicated devices that claim to be more robust and to have longer battery life as well as many more proprietary features. There are also cheaper offerings available on the internet, which are though often delivered from China.

So what has to be considered when selecting a smart device ?

Most important is to know what you are going to use the device for. Usually, the requirements for nursing homes are the following:

1. Alarm management
2. Telephony
3. Additional apps (care documentation, e-mail, etc.)
4. Scanning (barcodes, QR-Codes, etc.)
5. Photos (wounds, etc.)

The technical requirements of the used apps need to fit the possibilities of the device. Some apps require more memory or computing power than other or only work on devices with a specific display size and resolution. This point must hence not be underestimated. The operating systems, such as iOS or Android, also need to be configurable with the apps needed.

Size and weight

Devices come in many sizes and weights. Uniforms of the nursing staff have pockets with limited space and many things need to be put away in them. The weight and size also need to be considered, as they may not fit that uniform and an alteration of numerous uniforms can be challenging.



Robustness

Nursing staff have a very active work routine. It might be that a smartphone will drop to the floor or even into the toilet. The devices are becoming more and more robust, as most new consumer smartphones are IP67 or even IP68 certified. Rugged devices can also be considered at a cost and weight, see https://androidenterprisepartners.withgoogle.com/devices/#!?device_categories=rugged

Battery lifetime

A nursing home is a business running 24/7 all year around. However, the battery life of a smartphone needs to last the duration of the longest shift, as additional devices can charge during the night shift. For some dedicated devices, a “battery hot swap” can be made, but this is more relevant for hospital usage.

Telephony

Phone calls with a smartphone can be done over two channels: either normal “GSM-Calls”(3G, 4G, 5G) or over Wi-Fi. GSM calls are known by everyone, it just works, but in order for it to work correctly, buildings need perfect carrier coverage on the whole perimeter. Internet telephony is still “experimental” on consumer smartphones but can work on proprietary devices, as they include special chips and software to allow uninterrupted communication (as long as the Wi-Fi is voice ready).

Accessories

Some dedicated devices don’t always come with the possibility to acquire many accessories. Clips, covers or charging bays might not be available. Popular brands as Samsung provide many accessories that can be purchased anywhere.

Upgrades and patching

The lifetime of smartphones has massively increased in the past years, and so has software support. Google for example launched the Android Enterprise program, in order to speed up security patching and to guarantee a longer availability of upgrades to professional end-users.

Price

The average price of smartphones drops a few percent each year (not considering high-end flagship devices). They are much more competitive than DECT-Phones, which is good news for digitalization. Dedicated devices, on the other hand, tend to keep high pricing, as they provide more features and have much lower production volumes.

SmartLiberty's choice

SmartLiberty chose to work with Android Enterprise devices by Samsung, as they provide the following advantages:

- **Requirements:** Samsung Enterprise Devices cover 100% of the needs of nursing homes.
- **Transportability:** Smartphones like XCover5 fit perfectly inside most uniforms pockets and only weight 172 g.
- **Robustness:** Samsung Enterprise devices are IP68 certified, which means that if dropped in the toilet, it isn't a problem. Moreover, some devices are MIL-Standard compliant to withstand drops.
- **Battery lifetime:** Samsung devices can last a whole day or more. The battery can be exchanged after a few years if needed.
- **Telephony:** Smartliberty uses GSM-Telephony, which works perfectly.
- **Accessories:** Samsung devices historically have many vendors providing accessories, as the brand is well established.
- **Upgrade or Patching:** 5 year patches and minimum 2 major Android upgrades guaranteed
- **Pricing:** Samsung Xcover5 costs less than 250 CHF, a very competitive price. No proprietary device can beat this price.
- **Technology:** There is always the latest technology included (some dedicated devices are already obsolete in terms of specification the day they come out).



More information on Samsung Enterprise Devices can be found here:

<https://www.samsung.com/uk/business/mobile/enterprise-edition/>