THERAVIEW

Patient Treatment Verification System

Theraview Patient Identification

cablon medical

Importance of reliable patient identification

Reliable patient identification is crucial in radiotherapy. Every radiotherapy patient is different, so treatment can vary enormously in terms of dosage and location on the body. This means that it is essential to correctly identify each patient and ensure they receive the correct treatment. Nowadays the checks are done mostly manually; for instance, checking the patient's date of birth or using a photograph of the patient. These methods are error-sensitive, as these checks are not integrated into the workflow and it can never be 100 percent certain that these steps are being used every time. Together with one of the radiotherapy centers in The Netherlands, Cablon Medical has made another step forward with use of a palm scan connected to the accelerator.

Comparison of biometric measurement methods

After a lot of research, a special scanner has been chosen to measure the vascular bed. This blood vessel pattern is unique to each person. A palm scan is even more accurate than identification based on other biometric data, such as a fingerprint or an iris scan*. The false acceptance rate of a palm scan is 100 times lower than a fingerprint scan.

In addition, a palm scan can be applied more widely, because it is suitable for all patients. For example, medication does not affect the palm scan, while a fingerprint, for example under the influence of chemotherapy, may temporarily disappear. It works in a contactless manner which means that, for example, damp hands or deformation from excessive pressure cause no problems. Scanning a palm also works quickly. This is important, as the new identification method will be performed many times a day.

* Napua (2011): Growth of Biometric Technology in Self-Service Situations

Benefits of the Theraview patient identification module

- ✔ Is fast, non-invasive and very accurate

- ✔ Prevents treatment of the wrong patient

- ✔ Connects with the R&V system and accelerator

- ✔ Is fully integrated into the existing workflow of radiotherapy centres

- ✔ Has an optional waiting room module with patient information provisions

- ✔ Enables an organisation to maintain records for compliance purposes

Advantages of Palm Vein Authentication

Highest level of security

- Unique (even in the case of twins)
- Traits do not change for entire lifetime
- Live hand detection: only used if blood circulation is detected
- Encrypted
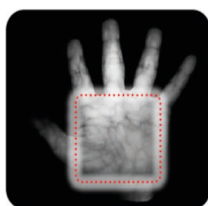
Extremely precise

- Palm veins are complex >5 milion reference points
- Palm had thicker veins than fingers - easier to identify
- Palm veins are not sensitive to external factors like chemotherapy

User friendly

- Fully integrated
- Hygienic
- Fast
- Minimal extra workload

How does it work?

1. Registration

First appointment
During the first appointment both hand are scanned and stored as an encrypted code in the system and inseparably connected to the patient.

Next appointments
On the next appointments only one hand needs to be scanned at het optional check-in kiosk to acknowledge the patient's appointment. The patient can be guided to the correct location and possible delays are mentioned immediately.

2. Verification

Before every treatment the patient's hand is scanned when the patient is on the treatment table. The patient identification step cannot be omitted, because the accelerator cannot be started until a positive identification has been made.

If a patient cannot use the scanner for whatever reason, a radiation technologist can be nominated to unlock treatment with their own unique palm signature (override). This solution also enables an organisation to maintain immaculate records for compliance purposes.

The Patient Identification Module will be available on the market in the near future for all radiotherapy institutes.

Interested in a free demo or more information? Please contact us.