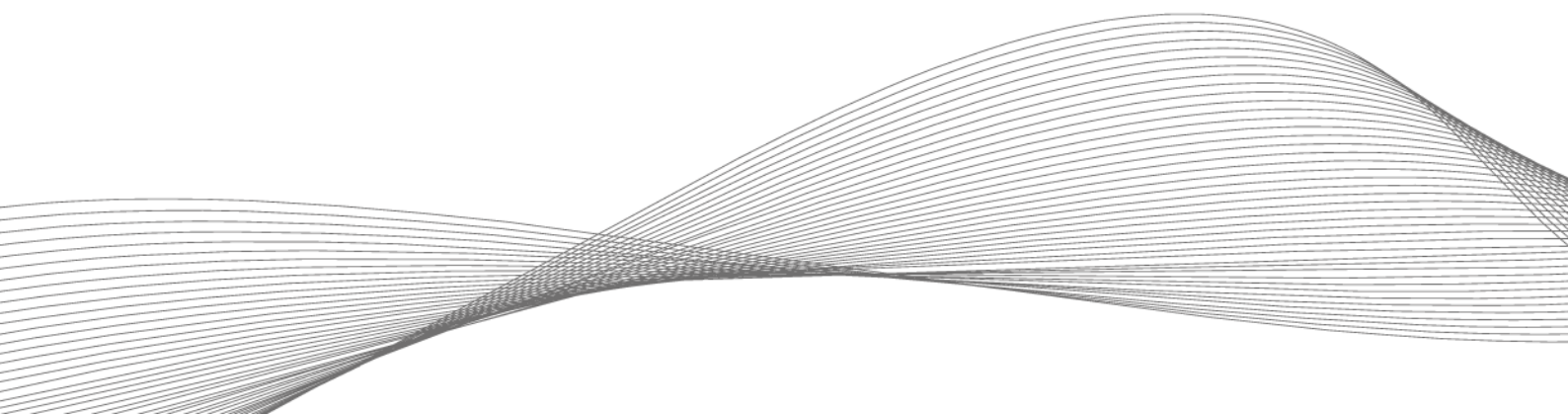


# AUTHENTICATION: THE KEY TO SECURITY AND EFFICIENCY

A modern authentication system regulates access for staff and patients and ensures security in everyday hospital life.



**Hospital operators balance security and efficiency on a daily basis: doctors and nursing staff need exclusive but fast access to patient files, while access to medication or operating theatres must be reliably and strictly limited. At the same time, public areas such as lounges or the cafeteria should remain easily accessible for patients and visitors.**

#### **Authentication with RFID and mobile technologies**

These conflicting requirements can be reconciled with a modern authentication solution based on RFID and mobile technologies, as offered by authentication specialist Elatec. A standardized system for employee authentication offers a wide range of possible applications, including time recording, access to medical devices, access to parking spaces, use of employee lockers and single sign-on for shared workstations.

A badge with an RFID chip, usually in the form of an ID card that employees already carry with them, has proven its worth for user authentication and access control. When the card is held up to a reader, hospital employees are immediately granted access to the respective device, area or amenity, depending on their authorization level. This considerably speeds up the numerous authentication processes that staff have to carry out during a shift. This not only increases security by preventing unauthorized entries on PinPad devices, but also enables data-supported optimization of hospital operations.

Patients also benefit from a modern access control system. For them, the use of digital credentials on a smartphone is an option alongside a traditional card. NFC (Near Field Communication) or BLE (Bluetooth® Low Energy) technologies, with which the majority of smartphones are equipped, are used for this purpose. For example, patients can register to use communication and entertainment systems or pay conveniently in the cafeteria. The authorizations for patients and staff can be managed centrally by the hospital IT.

#### **Advantages of a successful implementation**

The introduction of such a comprehensive solution offers numerous advantages.

##### *Efficiency through universal readers*

For clinics with several locations, employee ID cards with different technologies may be in use. However, most readers are only able to read a few card technologies. Multifrequency readers, which are compatible with up to 60 common transponder technologies worldwide, offer a solution. The universal devices that solution provider Elatec has in its portfolio, for example, use both RFID and NFC or BLE technologies for authentication and access.

##### *Security: a question of the overall system*

In order for authentication and access control systems to provide the necessary protection for people, buildings and data, they must themselves be secured against manipulation. When selecting an RFID reader as a central component of an access and entry solution, it is important to ensure that it supports the credentials and encryption algorithms suitable for the security level of the application. The readers must be fortified against both physical manipulation and hacker attacks. In order to secure an RFID-based authentication solution effectively and holistically, it is necessary to integrate the entire system into the hospital's security concepts.

##### *Resource optimization*

Requirements and IT infrastructures change over time and make adjustments necessary. It is therefore essential that the system enables remote updates or upgrades. This means that all installed readers can be updated easily and quickly from a central location, regardless of their location, which is an efficient use of resources, especially in the context of the shortage of skilled workers.

##### *Sustainability and process efficiency*

The introduction of a modern authentication solution in clinics embodies the idea of sustainability and process efficiency. A uniform solution allows data to be recorded centrally and used for process optimization. This leads to a streamlining of administrative processes and thus to more efficient operational management while reducing the consumption of resources.

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