

## GS1 Healthcare recommends investing in Camera-Based bar code scanners to address specific needs for Automatic Identification in Healthcare

Because of the increased capabilities of camera-based bar code scanners, GS1 Healthcare (GS1 global Healthcare user group) strongly recommends to invest in such scanners when introducing bar code scanners or when replacing existing laser bar code scanners. This will facilitate the future adoption of global standards for automatic identification in the Healthcare supply chain.

Global standards for automatic identification provide the opportunity to make the Healthcare supply chain more efficient and accurate, and thus safer. It will also help enable the patient to receive the five patient rights: *the right patient gets the right product at the right time, in the right dose, and using the right route.*

GS1 Healthcare promotes the adoption and implementation of the GS1 System of standards to automatically identify patients, products, caregivers, and locations. It is the most widely used system worldwide, with more than 5 billion transactions per day based on GS1 standards. The system is built on a scheme of identification keys (such as the GTIN, Global Trade Item Number) and attributes (such as the expiry date), which remains the same independent of the data carrier. Identification can be based on GS1 BarCodes (such as the GS1-128 bar code symbology) and on GS1 EPCglobal (using an RFID tag).

Compared to product coding in for example, a grocery retailer environment, pharmaceuticals and medical devices coding has very specific requirements, including:

- a large amount of data (product ID, batch/lot number, expiry date, date of manufacture, serial number, ...) to be stored on a small space
- variable information (such as unique identification number at unit dose level) to be marked at high production rates
- direct part marking (e.g. surgical instruments and implants)
- unscannable bar codes not only impact supply chain efficiency, but more importantly, patient safety

The above requirements may not always be achieved with the 'traditional' linear bar codes, but a solution is available:



The two examples contain identical data

### **GS1 DataMatrix**

This is a 2-dimensional (2-D) data matrix symbology enabling, in an efficient way, all of the above requirements:

- enables coding more fixed and variable information, while maintaining a small size
- technologies are available for direct part marking
- allows error correction to circumvent some degree of physical damage

**To read the GS1 DataMatrix symbology, camera-based bar code scanners are required.** Laser bar code scanners cannot read data matrix bar codes. Camera-based bar code scanners can read both linear and 2-D bar codes.

Generally, camera-based scanners may have a higher price point than laser scanners, but offer distinct advantages. For example, camera-based scanners:

- Deliver the application flexibility required for AIDC (Automatic Identification and Data Capture) in Healthcare as they can read both 2D and linear bar codes versus laser scanners which can only read linear bar codes
- With less moving parts, they are more reliable than laser scanners, decreasing their total cost of ownership
- Provide resolutions able to support image capture, allowing imaging of a product or an identification card, or even a document up to 21.6 x 28 cm (8"x11")
- Optical engines are more compact which may allow for integration with other systems (e.g. packaging line verification) or in a handheld computer

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## About GS1

GS1 is a neutral, not-for-profit standards organisation dedicated to the design and implementation of global standards and solutions to improve the efficiency and visibility in supply chains. GS1 is truly global with 108 Member Organisations worldwide. More than 1 million companies worldwide have adopted the GS1 System of Standards.

## About GS1 Healthcare

GS1 Healthcare is a global user community consisting of all Healthcare supply chain stakeholders, including manufacturers, distributors, Healthcare providers, industry associations and regulatory authorities. The mission of GS1 Healthcare is to lead the Healthcare sector to the successful development and implementation of global standards by bringing together experts in Healthcare to enhance patient safety and supply chain efficiencies. The vision of GS1 Healthcare is to be the recognised, open and neutral source for regulatory agencies, trade organisations and other similar stakeholders who are seeking input and direction for global standards in Healthcare for patient safety, supply chain security & efficiency, traceability and accurate data synchronisation.

For more information about the GS1 global Healthcare user group, please visit [www.gs1.org/healthcare](http://www.gs1.org/healthcare)



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