GS1 Healthcare

GS1 Digital Link
A single barcode for identification, authentication and access to information for medical products
Patients and healthcare professionals are increasingly turning to digital devices to access information about medical products used at home and at point of care, and throughout the entire supply chain.

Trusted data about medical products is the lifeblood of the healthcare information ecosystem and the driving force for improved patient safety and medical outcomes.

In healthcare, there is a growing need to access information online about medicines and medical devices. However, too often product information is not readily available and difficult to access.

At the same time, regulators are starting to request that electronic leaflet be provided for products. Today, this often requires additional 2D barcodes on the packaging, making it expensive and complex for manufacturers to implement. Additionally, having multiple barcodes on a product (some of which do not contain standardised identifiers like the GS1 Global Trade Item Number (GTIN)) can cause issues with scanning at points of care, points of dispense and across the supply chain.

Simply stated: Today, there is no seamless, non-proprietary way for manufacturers to communicate comprehensive information about their products to healthcare providers and patients via a single barcode scan.

Yet this can be done by simply scanning barcodes, opening the possibility to access information including: product information e-leaflets, master data and other trusted digital content that provides important information to patients and healthcare providers.

By enabling access to product information through a single barcode scan, there are significant opportunities for patients and healthcare providers to minimise (or nearly eliminate) safety risks and improve productivity. For manufacturers, distributors, hospitals and pharmacies, this can improve patient care, medical outcomes and safety.

**GS1 Digital Link offers a unique solution**

GS1 Digital Link “web-enables” barcodes by providing a simple, standards-based structure for the data encoded in the barcodes. GS1 Digital Link delivers straightforward rules that solution providers can use when developing apps and websites - translating both old and new barcodes into connections that help users access digital content anywhere in the world.

It helps patients and care providers become more informed by connecting them to all types of information about products, instructions of use, product information leaflets, recall status and more – all made possible by using the internet and trusted GS1 standards.

With **GS1 Digital Link**, patients and healthcare professionals will be able to scan a single GS1 barcode on a medical product or pack to access a wealth of digital information about the product.

In the future, Healthcare manufacturers will deliver more robust data about their products, and care providers will simplify their business and clinical operations with only **ONE barcode** to scan.

**How does it work?**

By scanning a GS1 linear or DataMartix barcode using an application on digital devices – the App will then use the information scanned (GTIN, batch, serial and expiry date) and access information about the product.
How GS1 Digital Link works

The **GS1 Digital Link** standard works with linear barcodes, such as the U.P.C./EAN and GS1-128 barcodes or the GS1 2D DataMatrix barcode. As manufacturers are increasingly using GS1 barcodes on their products due to regulatory requirements and customer requests, they are putting in place a key prerequisite for implementing **GS1 Digital Link** as a complementary source of information.

In business-to-consumer (B2C) scenarios, healthcare manufacturers and providers can use **GS1 Digital Link** to share a wealth of product information with consumers and patients via apps and websites - dynamically engaging with them by sharing relevant information from across their entire enterprise.

**Benefits of Using GS1 Digital Link**

**Patient experience**
A patient wants more detailed information about a medical product. They can use their smartphone to scan a GS1 barcode on the package that contains a GS1 GTIN. The phone points them to a manufacturer-authorised source of information or a regulatory database that provides trusted information about the product - as well as other product data and/or videos designed to improve patient safety and care.

**Healthcare experience**
Pharmaceutical and medical device manufacturers are challenged to provide patient information for their products in multiple languages and in a way that is easy to navigate. By using an app that can read the barcode on the product or package, the patient can be redirected to information in their preferred language. The app “knows” the rules of the **GS1 Digital Link** standard, so it uses the data in the barcode to connect to an industry-agreed upon resolver service to find the source of the e-leaflet. The same process can be used to access any other digital content or master data about the product.

**Supply chain**
Today’s complex data-sharing ecosystems mean that healthcare manufacturers often need to collate master data, images, video and marketing material from a digital agency, and perhaps multiple sources of data covering logistics and product information—an expensive, duplicative and time-consuming process. By using **GS1 Digital Link** and resolver technology, healthcare stakeholders can benefit from a future product-data-sharing process that uses foundational GS1 standards to streamline and connect them to relevant, manufacturer-authorised sources of data. In addition to the types of data mentioned above, links to essential stakeholder information about product safety, safe-handling directions, transportation, disposal, packaging hierarchies and storage conditions can also be shared.

**Traceability**
Traceability solutions may also be greatly enhanced with the use of a single GS1 barcode. **GS1 Digital Link** provides healthcare stakeholders access to information about the product by scanning its existing GS1 barcode that contains the GS1 GTIN, batch/lot and serial number. This additional data encoded in the barcode can link to information about the product’s origin, recall status and/or expiration date. Foundational data needed to enable any traceability process can be easily provided using GS1 barcodes and **GS1 Digital Link**.

Getting ready for GS1 Digital Link

1. **Lay the foundation**
   If not already in place, assign a GS1 identifier to each of your products (GS1 GTIN) and/or your locations (GS1 Global Location Number). Encode your products’ unique identifiers (GTINs) into data carriers like a U.P.C./EAN or GS1 DataMatrix barcode and apply to product packages.

2. **Utilise apps**
   **GS1 Digital Link** turns your products’ identifiers (GTINs) and barcodes into powerful communication channels that anyone can scan and be directed to receive an abundance of digital information.

3. **Scan barcodes**
   Medical professionals and patients can begin to leverage digital devices and existing scanning systems to read GS1 barcodes using **GS1 Digital Link** and incorporate product information in internal systems, including electronic health records.

4. **Connect your products to your data**
   Using the **GS1 Digital Link** standard structure means that you no longer need to ensure that all of your data, assets and content are available in one place. Work with GS1 to enable your own resolver capabilities to connect product identifiers to wherever you choose to store your data.
About GS1 Healthcare

GS1 Healthcare is a neutral and open community bringing together all related healthcare stakeholders to lead the successful development and implementation of global GS1 standards, enhancing patient safety, and operational and supply chain efficiencies.

The development and implementation of GS1 standards is led by the experts who use them: pharmaceutical and medical device manufacturers, wholesalers, distributors, group purchasing organisations, hospitals, pharmacies, logistics providers, solution providers, governmental and regulatory bodies, and trade associations. Evidence available from industry implementations shows that GS1 identification, data capture and data sharing standards in healthcare deliver tangible benefit to all stakeholders. Global members of GS1 Healthcare include more than 100 leading healthcare organisations worldwide.