

# Singapore

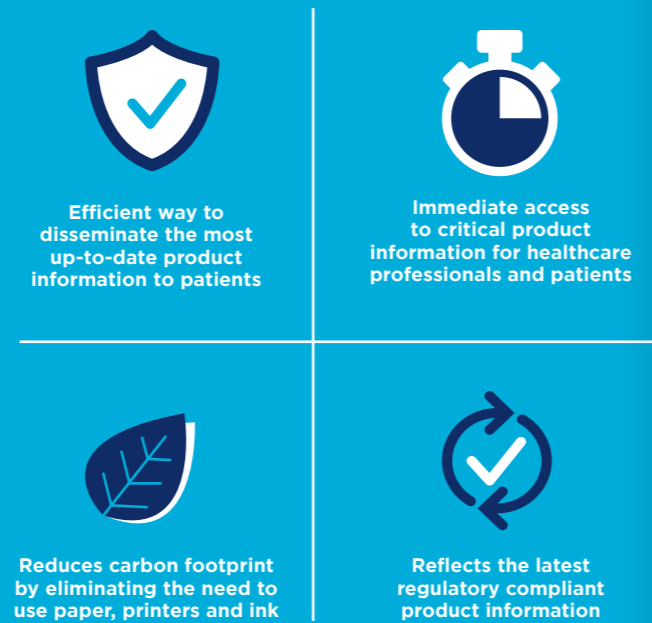
## Using an GS1 Digital Link-based app to give patients up-to-date information about their medications

### Challenge

There is an increasing societal expectation of, and demand for, quick and easy digital access to information. Healthcare is no exception. Yet in many instances the primary source of sharing information with patients about medicines is a paper patient information leaflet which can quickly become out of date and which is often discarded with the medicine packaging.

### Approach

Johnson & Johnson Supply Chain has developed a solution which enables patients to quickly receive information about their medicine, digitally. It's based on the GS1 Digital Link standard, integrating a network of systems to provide accurate and up-to-date information.



### Developing a digital solution

The healthcare industry is on a digital journey. Expectations are high and the desire for rapid access to information and on-demand healthcare intensifies daily. There are numerous milestones being achieved along the way with solutions that have the power to affect every aspect of business, from manufacturing, distribution and operations to the customer experience and patient care.

In 2020, Johnson & Johnson Supply Chain started developing a digital solution that would advance the way patients and healthcare professionals access key product information. This solution needed to be standards-based and enable interoperability throughout the industry digital ecosystem.

Using GS1's Digital Link standard as the foundation, Johnson & Johnson Supply Chain developed a GS1 standards-conformant resolver to link GS1 barcodes and product URLs. They

function as connectors, providing the end user with the information they need in an electronic format.

The fundamental aim of GS1 Digital Link is to enable anyone to find answers to their questions about the thing in front of them. Traditionally, there have been large but discrete databases covering as many items as possible and then an item identifier is used to look up the relevant information. GS1 Digital Link works differently - it starts with the item, through a barcode, and points the person scanning it to one or more places with information about the product in question. Getting specific, up-to-date information is as simple as scanning a barcode.

The digital solution is designed to work with the existing GS1 barcode and Global Trade Item number (GTIN) on the product or pack without the need to add an additional barcode just to access the electronic leaflet.

*"As the first healthcare company to build a GS1 Digital Link standard-based solution that is integrated with the GS1 resolver, we are excited by the numerous innovative electronic benefits we will be able to build and deliver to patients and health care professionals"*

**Shekhar Nambi**  
Director of digital identification & traceability, Johnson & Johnson Supply Chain.

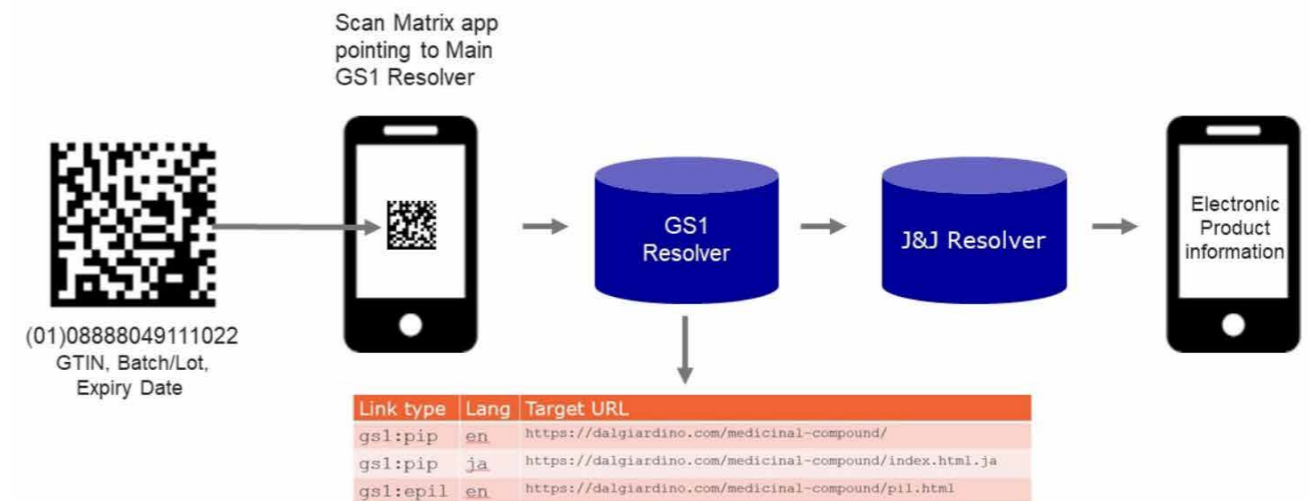
### Piloting the digital solution in Singapore

In 2021, the Health Sciences Authority of Therapeutic Products Branch for Singapore published its finalised guidance on the labelling of therapeutic products. Under this guidance, pharmaceutical companies were allowed to replace physical paper package inserts with electronic patient information leaflets for products sold in Singapore.

Physical packaging inserts and patient information leaflets, while necessary to communicate important information about a product, have their limitations. They are labour intensive, difficult to read and search, and may not reflect the most up-to-date product information.

Based on Singapore's finalised guidance, the Janssen Pharmaceutical Companies of Johnson & Johnson seized the opportunity to pilot a digital solution with IMBRUVICA® 140mg tablets. This was the first Janssen prescription-only medicine to include electronic package inserts accessible by scanning the 2D GS1 DataMatrix barcode on the product box.

This launch marked a new milestone for Singapore and Janssen, as it is the first country to launch labelling via the GS1 DataMatrix. "With this digital advancement and a foundation in place, we are able to facilitate the timely dissemination of accurate approved product information which meets new labelling regulatory requirements, effectively and efficiently," says Shekhar Nambi. "Over the next few years, we have a localised plan to transition all Janssen prescription products in Singapore to the ePI format."



## Conclusion

The adoption of a digital solution has numerous benefits and helps to abate the challenges that often occur with paper packaging inserts and patient information leaflets. It has the potential to expand operational efficiencies, improve the customer experience, benefit the environment, enhance patient care, and advance patient safety.

It's an efficient way to disseminate the most up-to-date product information to healthcare professionals - clinical use, efficacy, and safety of a product - and help them make informed decisions when treating patients. As health authority information and regulatory procedures change, companies can react swiftly and deliver eleaflets and elabelling that reflect the latest and most accurate information.

The digital solution is environmentally friendly and reduces the cost of operations by reducing use of paper, printers and ink. The patient experience improves as they can quickly gain access to the information they need. In the future end users can receive digital information in a variety of formats (document, video, audio) in multiple languages and in a format which is better structured, friendly to navigate and easy to search for specific information.

Johnson & Johnson Supply Chain's digital solution creates new opportunities for innovation and drives the company and industry towards sustainability and end-to-end digitisation, ultimately improving the customer experience and patient safety.

### About the author



#### Shekhar Nambi

Director Johnson & Johnson Supply Chain

As a Director for Johnson & Johnson Supply Chain, Shekhar Nambi leads Digital Identification & Traceability platforms in the Asia Pacific region. He focuses his efforts on delivering digital product information and evolving technologies (Digital Link, eLabeling) and is also responsible for serialisation and traceability and unique device identification deployments. Shekhar's 24 years of experience span multiple industries including healthcare, media and entertainment and telecommunications. He has a degree in computer science and engineering.

### About the organisation



At **Johnson & Johnson**, we believe good health is the foundation of vibrant lives, thriving communities and forward progress. That's why for more than 135 years, we have aimed to keep people well at every age and every stage of life. Today, as the world's largest and most broadly-based healthcare company, we are committed to using our reach and size for good. We strive to improve access and affordability, create healthier communities, and put a healthy mind, body and environment within reach of everyone, everywhere. We are blending our heart, science and ingenuity to profoundly change the trajectory of health for humanity.

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