

Global
Healthcare
Business
Solutions

'Reducing risk through certainty'



EAN International
Supporting
Healthcare

Introduction



Are your medical products uniquely identified? Can your systems trace implanted devices? Can you track manufactured vaccines? Can you automatically capture details of care administered to any single patient? Do you wish to reduce medication errors by uniquely identifying drugs and patients?

These are perhaps just some of the questions you may have, or just some of your requirements. More importantly, these are just some of the many opportunities presented by the use of the EAN•UCC System.

Founded in 1976, EAN International is a not-for-profit global organisation, based in Brussels, which manages the EAN•UCC System throughout the world. It provides a worldwide, unique solution for the unambiguous identification of products, locations and shipping units. EAN International provides the most comprehensive standards to carry information – like barcodes and radio frequency tags – and to communicate information between incompatible computer systems electronically.

Today, EAN International comprises 101 national Member Organisations, supporting over one million companies around the world. This network of decentralised expertise with a total of 1600 skilled staff supports the EAN•UCC System implementation based on international, regional or local specifications and needs.

The key issues for healthcare

Healthcare is primarily a global market, not just a national market. Manufacturers, hospitals, trade associations and Health Authorities, in fact all parties involved in the delivery of efficient and safe healthcare services, have the same issues to face, regardless of national borders:

- Enhancement of patient safety through product traceability
- Improved Supply Chain efficiency to respond to increasing cost constraints
- Reduction of medication errors by uniquely identifying drugs and biological products (FDA rule)
- Regulation for improved traceability
- Global manufacturers adopting the use of bar coding for expiry date /batch number traceability, plus item serialisation
- Wholesalers and distributors supporting greater use of the bar code for traceability
- Hospitals and pharmacists demanding increased traceability
- Patient Associations requesting greater patient safety
- eProcurement strategies to improve Supply Chain purchasing and replenishment

These are some of the key drivers for the essential transformation of healthcare. To respond, there must be greater emphasis on collaborative strategies by all parties operating in the healthcare Supply Chain, demanding greater focus on Supply Chain Management and Risk Management by all stakeholders.



Rich Hollander,
Senior Director,
Packaging Services, Pfizer Global Manufacturing, USA.

« Using the EAN•UCC System to carry essential information about our products, down to the unit of use, is a significant way to contribute to the reduction of medical errors. It is crucial for our company to be a leader in the efforts to promote quality and safety in Healthcare processes. »

Enabling the solution

The EAN•UCC System, offering global, multi-sector and unique identification application, is the most appropriate solution to make the economic and qualitative progress required by the healthcare Supply Chain.

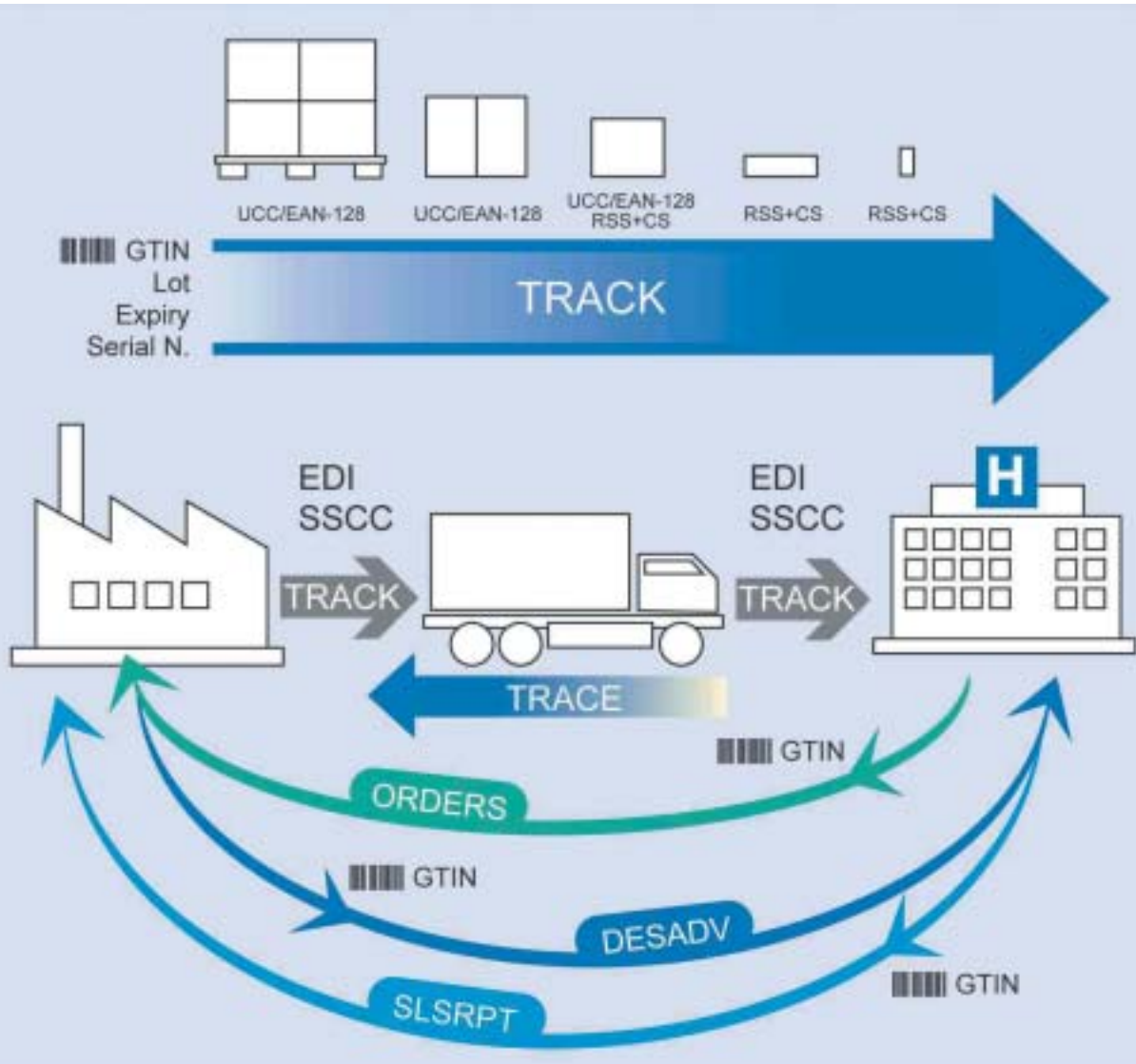
The basic requirement for any traceability system is to identify uniquely the item that is to be traced, locations from and to where it will be transported, e.g. between the supplier, the purchaser and the transporting agencies. This is normally done by an appropriate and neutral data element (i.e. the item identification), which is carried in a bar code: this allows for automatic identification that minimises errors and processing time. Item identification is then communicated to other members of the Supply Chain and entered into a database from which information can be retrieved using this unique item identifier as the key.

Traceability requires each organisation within the Supply Chain to implement compatible and accurate data management systems based on open standards. This means that organisations need references to common definitions and data structures throughout the whole Supply Chain, with no interruptions. The EAN•UCC System provides the basis for such systems. Effective traceability systems require the long-term commitment of all organisations involved, since traceability breaks down wherever there is a failure to meet the necessary standards. Any re-labelling operation puts traceability in danger, as it introduces a new source of potential errors. We believe that source marking of medical products is the key to accurate traceability.



**Masanori Akiyama M.D., Ph.D.,
Department of Medical Informatics,
International Medical Center of Japan, Japan.**

« The International Medical Centre of Japan developed an information management system using UCC/EAN-128, with the objective of ensuring patients' safety and improving hospital management. In the system, which has been in operation since 2002, UCC/EAN-128 barcodes are affixed as labels on medical equipment, pharmaceuticals, order sheets and medicine bags that are given to each patient. In addition, UCC/EAN-128 barcodes are printed on patients' wristbands and staff ID cards. The system realises accurate and real-time scanning of barcodes and is connected with the electronic medical record system, the electronic treatment system, the electronic ordering sheets, the accounting system and the administrative system of the hospital. It plays a critical role in ensuring patient safety and minimising medical errors in terms of risk management. »





The EAN•UCC System: an overview

The EAN•UCC System is a set of standards enabling the efficient management of global, multi-industry Supply Chains. For healthcare, the System meets the requirements of all functions of the Supply Chain, from manufacturer to patient. The System consists of three distinct elements:

- A comprehensive set of unique identifiers for products, shipping units, assets, locations, people and services. Companies around the world can use these unique identifiers in an unambiguous manner.
- A range of bar codes, which are data carriers that symbolise these identifiers together with other 'operational' information, such as batch number and expiry date. Different forms of bar codes are available for different applications - for very large items, such as a pallet, to very small items, such as a unit dose of medicine. By scanning the barcode, information can be captured automatically.
- A set of electronic messages for both master data e.g. product or price files, and transactional data - for example: orders; invoices and despatch advice. These enable information to be communicated speedily between trading partners throughout the Supply Chain.



Rolf Spang,
Head of International Affairs, Swissmedic
(Swiss Agency for Therapeutic Products), Switzerland.

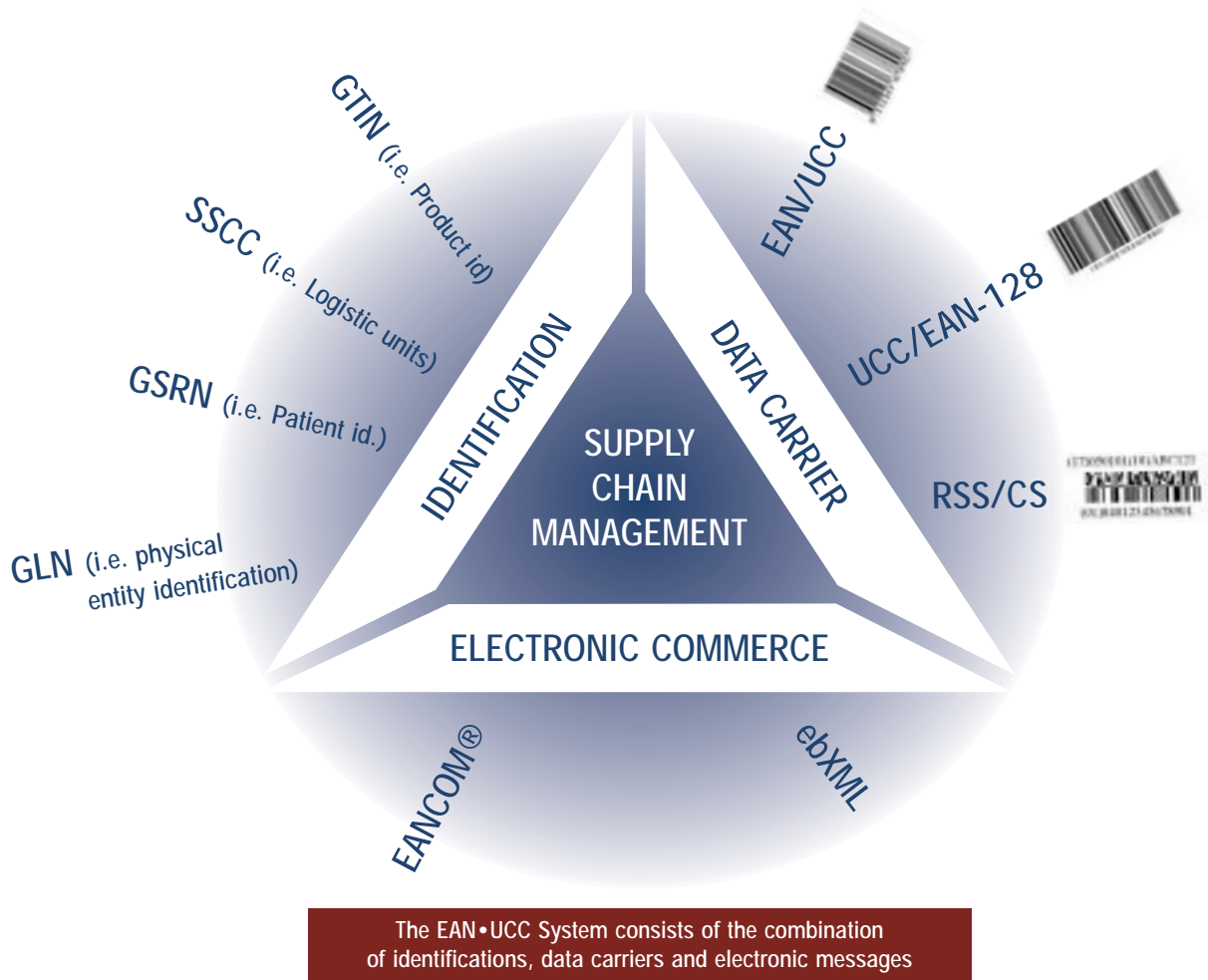
« Using the EAN•UCC System for numerous years, we are in the position of being able to manage narcotic control precisely in Switzerland. This is due to the unique identification of nearly 40,000 healthcare professionals and institutions together with the Global Trade Item Numbers on pharmaceutical products and narcotic substances. Transactions with narcotics have been recorded electronically with the EAN•UCC System since 1996. »



Jean-François Fusco,
Project Director Healthcare,
Geodis Solutions, France.

« Manufacturers using the EAN•UCC System on their logistic units and pallets enable them to monitor traceability with their trading partners. This brings product safety and security for our patients. As a global logistic provider involved in the healthcare sector since 1994, Geodis manages traceability for identification, data carriers and electronic messages successfully with the EAN•UCC System. »

The EAN•UCC System can be illustrated as follows:



Through the application of these secure tools – Application Identifiers, barcodes and electronic messages – all available within the EAN•UCC System, the healthcare industry can:

- Introduce more effective Supply Chain Management;
- Implement systems for tracking and tracing products throughout the Supply Chain, from manufacturer to patient;
- Through automatic data capture techniques, reduce errors from the Supply Chain making it more effective and more certain.



Antônio Carlos da Costa Bezerra,
General Manager,
General Office of Inspection and Control of Drugs and Products -
GGIMP, Brazilian National Health Surveillance Agency – ANVISA,
Brazil.

« Brazilian legislation has established strong regulations to prevent fraud and to prevent the distribution of counterfeit drugs along the Supply Chain. These regulations comprise the use of modern technologies to assure the traceability by adding the lot number of the products on the invoice. Counterfeit drugs are not only illegal but also, in most cases, unsafe. With these decisions, the Brazilian Authorities aim to protect consumers from these dangerous products. The EAN•UCC System works as a barrier against fraud. »



Dr. Barry White
Medical Director NCHCD
(National Centre For Hereditary Coagulation Disorders),
St James Hospital, Ireland.

« Adoption of the EAN•UCC System is the key to follow and guarantee the integrity of the pharmaceuticals Supply Chain for Haemophilia patients. The EAN•UCC System is the best solution for tracing the Factor Concentrate Products during their journey from the manufacturer to individual patients, whether in a hospital or in their homes. »



The Benefits

Supply Chain Management

From the order that the purchaser sends electronically to its supplier, to the physical reception of the delivered goods, the EAN•UCC System enables new ways of improved Supply Chain Management - faster processes, smoother controls and efficient data management.

The combination of standardised electronic messages, automatic data capture and unique item identification enables the development of win-win trading relationships between hospitals or community pharmacies and their suppliers.

The EAN•UCC System allows electronic messages to be linked to the physical goods as they flow through the Supply Chain. The electronic messages are based on a global standard to identify goods, logistic processes and locations. The same identifiers can be captured automatically by scanning the bar code. This process facilitates delivery verification, stock management and traceability of incoming goods.

Risk Management

Through certainty of proper identification and product traceability enabled by the EAN•UCC System, its application in healthcare directly benefits patient care and specifically greater patient safety.

The use of a single global system to identify products, locations and people both in the external Supply Chain and also within the hospital or medical centre, enables a harmonised, consistent approach to information management, avoiding misidentification. This increased security, combined with the eradication of time consuming manual processes and paperwork, permits medical staff to focus their skills for the benefit of the patient.

These secure processes can also be deployed for products and items created within the hospital itself – such as laboratory results or central sterilisation procedures – not only to ensure uniqueness within the hospital but also within hospital groups.

Summary

The benefits of EAN International and the EAN•UCC System are:

- A not-for-profit organisation highly experienced in bringing Supply Chain organisations together to define common solutions in a neutral environment;
- A standardised global system that has been developed over 27 years of intensive use in a wide variety of industries;
- Unique identification of any item, location or service worldwide;
- A simple extensible system that can support complex traceability requirements;
- A technology that is globally and readily available to capture and encode the data required;
- A system and technology that are relatively inexpensive to implement. The EAN•UCC standards are recognised by ISO. Furthermore, EANCOM is an Electronic Data Interchange (EDI) language that is a subset of United Nation's EDIFACT;
- A proven track record with excellent payback results;
- A system strongly supported by well-trained local teams in more than 100 countries, offering tailor-made solutions.





Duncan Eaton,
Chief Executive,
NHS Purchasing and Supply Agency, England.

« We believe standardised bar coding will significantly improve patient safety. This is the driving force behind our decision to adopt an integrated approach to Supply Chain management. It is essential that the NHS adopts a standard approach to Supply Chain management. There is no doubt that the NHS is wasting money through inefficient processing throughout the whole of the Supply Chain, right through to payment. The EAN•UCC System will streamline our processes, which supports the business case for its adoption. The NHS needs to learn from the retail system, which has been using this technology for over 25 years. We don't want to waste our time going through the learning process when it has been done before. Having access to all that experience is one of the principal benefits of being involved with ecentre - EAN UK. I am looking forward to making some real improvements that will benefit everyone. »



Benjamín Rodríguez Nespereira,
Manager of Logistics and Electronic Commerce,
Regional H.C. Service of Galicia, Spain.

Mr. Rodríguez was awarded the "Supply Chain Management Special Award" in September 2003 at the 10th. National Awards for the Healthcare Administration and Management Innovation for his study about the Application of New Technologies in the Healthcare Logistics Integrated Management.

« Since we have been using the EAN•UCC System with 70 of our most important suppliers to make electronic transactions and to automate arrival of goods we have reduced incidences of errors and improved our supply receipt, stock control and information management. To ensure tracking and tracing of goods throughout the Supply Chain, information like lot and serial numbers for all implant products are registered in our Information System. »



Jean-François Durand,
Corporate Director of Organisation & Logistics,
Celesio AG, Germany.

« Wholesalers, right across the whole of Europe, must develop improved Supply Chain processes with their manufacturing suppliers in order to reduce costs. The EAN•UCC System is the most appropriate way of implementing automatic transactions (EDI & XML) efficiently to complement the receiving process. »



For more information :

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