



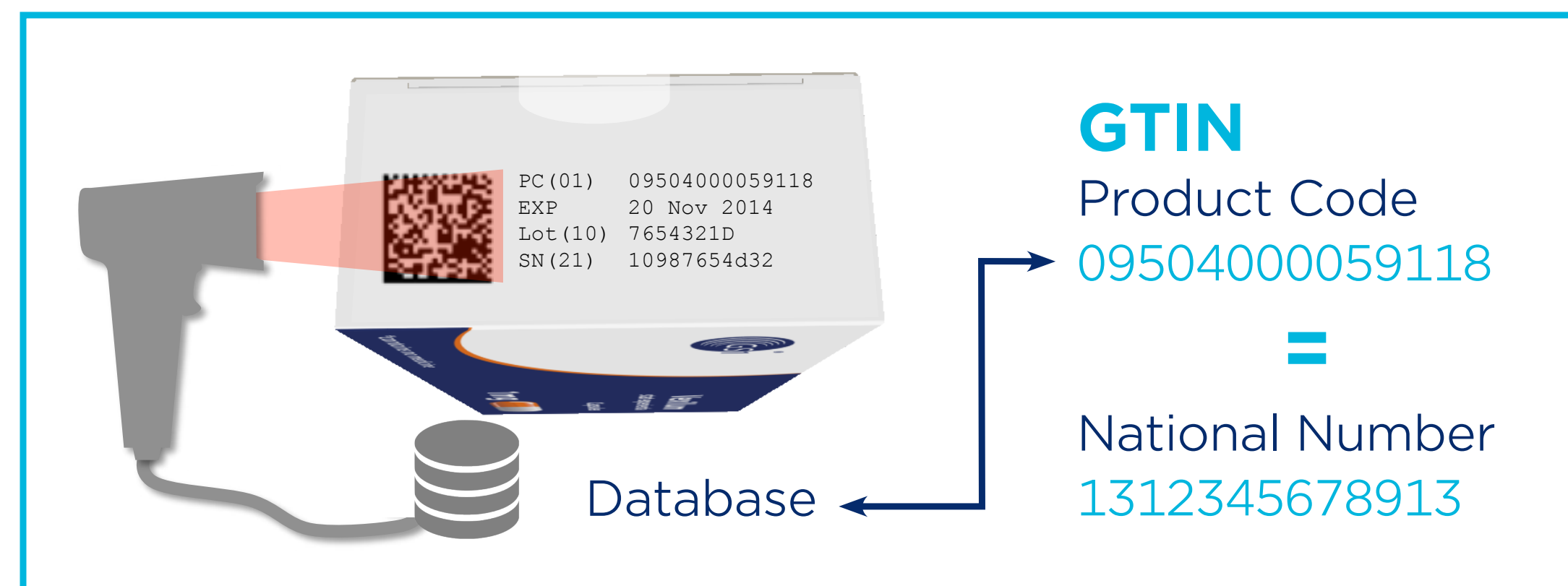
# Optimise the healthcare supply chain with a GTIN

Using a GTIN is the most efficient and effective way for all stakeholders to identify products (Option 1).

## Challenge

Some countries have legacy national numbers in use today to facilitate the licence and reimbursement processes. In those countries where legacy national numbers are in use today, the GS1 standards provide the following approaches to transition from national numbering to a globally harmonised numbering scheme:

## Solution



### Option 2

If a national number needs to be available at the point of dispensing, it can be an attribute to the GTIN within an associated database record. This option avoids adding data overhead to the label and the GS1 DataMatrix and although adding complexity still enables multi-market packaging.



### Option 3

Alternatively the national number can be associated with the GTIN within the GS1 DataMatrix by use of a GS1 Application Identifier (AI) specific to the national number i.e. the NHRN. This does add complexity and data content to the GS1 DataMatrix but will still enable multi-market packaging in markets where this approach is accepted. It is even possible to encode more than one NHRN into the data carrier.



### Option 4

Finally, the NHRN can be embedded into the GTIN, creating a National Trade Item Number (NTIN) but this is sub-optimal as it causes incompatibility.

## Key terms

**GTIN:** The GS1 Identification Key used to identify trade items. The key comprises a GS1 Company Prefix, an Item Reference and Check Digit

**NTIN:** A coding scheme, administered in the healthcare sector by a national organisation for which a GS1 Prefix has been issued to permit its uniqueness within the GTIN pool but without assurance of full compatibility with GTIN functionality

**NHRN:** National and/or regional identification numbers for product registration purposes and/or for the management of healthcare provider reimbursement

## What you cant do

If a country uses a national number not encoded in the NHRN field, the pack would have to carry multiple data carriers and can't be shared. The GS1 DataMatrix must only contain a single (01) data field, therefore two or more NTIN countries cannot share a pack

Find more details in the document *Recommendations on a harmonised implementation of the EU Falsified Medicines Directive using GS1 standards* at [www.gs1.org/healthcare](http://www.gs1.org/healthcare)