Assigning a Patient Identification Number

Introduction

This document visits two mechanisms for assigning patient identification numbers – a globally unique option using the GS1 Global Service Relation Number (GSRN) and a locally assigned number using the ISBT 128 data structure.

Recommended Use

Patient Identification should preferably be implemented by using GS1 standards, in particular when facilities are implementing Patient ID, or have already implemented Patient ID for processes other than transfusion. ICCBBA and GS1 promote interoperability between the two standards, and Patient ID is a key element for that interoperability.

Globally Unique Patient Identification Numbers

A limitation to the ISBT 128 Data Structure 025 is that it may only be unique within the facility in which it was assigned. There may be duplicate numbers if a patient moves from one facility to another. ISO/TS 18530:2014[1] should be referenced for an identifier that would be unique globally.

The use of GS1 Global Service Relation Number (GSRN) is presented in ISO TS 18530, which has been prepared jointly by ICCBBA and GS1. Information about the implementation and the use of GSRN and the Service Relation Instance Number (SRIN) can be found in ISO TS 18530 as well as in GS1 General Specification (issue 2014 and later)[2].

The Global Service Relation Number is the GS1 Identification Key used to identify the relationship between an organization offering services and the recipient or provider of services.

The Service Relation Instance Number is an attribute to the GSRN which allows distinguishing different encounters during the same episode, or the reuse of the same GSRN in different episodes.

The GSRN is built with a GS1 Company Prefix, a Service Reference and a Check Digit, with an 18-digit (numeric) fix length.

For compliance with ISBT 128, the SRIN shall be used as a fixed length string with the first two digits (NN) reserved for the ISBT 128 location code (Table RT018); the selection of the remaining eight (8) digits is left to the discretion of the user and may be incremental.

GS1 Application Identifiers (AI) identifies generic and simple data fields for use in cross-sectorial and international supply chain applications. The GS1 General Specifications provides rules for the definition, format and structure of the data fields. Each GS1 AI consists of two or more characters. The first two digits determine the length of the AI. See ISO IEC 15418[3] and GS1 General Specification for more information.

Element	Length	Type
8018	4	GS1 AI for the recipient of a service (Patient)
GCP	Var	GS1 Global Company Prefix, allocated by local GS1 Member Organisations to the users for the purpose of managing GS1 identification keys.
Service reference	Var	Numeric information managed by the user to identify the recipient of a service (Patient). It is recommended to manage this information incrementally.
Check Digit	1	A final digit calculated from the other digits of some GS1 Identification Keys. This digit is used to check that the data has been correctly composed. It is calculated with an algorithm described in GS1 General Specification, § 7.9.
8019	4	GS1 AI for the Service Relation Instance Number
nn	2	Numeric according Table RT018
ISBT 128 instance number	8	Numeric information left to the discretion of the user.

Note (1): The reading process must be able interpret instance number as a variable length field, the 2 first digits having no significance.

Note (2): GSRN must always be interpreted as a whole (no parsing allowed), since its components have a variable length.

Contact GS1 for more information.

ISBT 128 Data Structure 025

Purpose: Data Structure 025 shall indicate the patient identification number and the location of this occurrence of the information. This data structure is formally defined in the ISBT 128 Technical Specification[4].

Structure: &#aallxx…xx

Element	Length	Type
&	1	data identifier, first character
#	1	data identifier, second character
aa	2	numeric {0–9}
ll	2	numeric {0–9}
xx…xx	var	alpha/numeric {A-Z, a–z, 0–9}

The variable length data content string, **aallxx…xx**, shall be encoded and interpreted as follows:

aa shall specify a location code identifying where this occurrence of the information is held. For acceptable values see Table RT018 of the ISBT 128 Technical Specification.

ll shall specify the length of the following patient number field

xx…xx shall specify the patient identification number, alpha numeric only, punctuation characters and spaces are not permitted

Reading software should always verify the integrity of the data string, including checking that the correct number (as defined by ll) of characters appears in the patient identification number.

Additional guidance on implementing the use of this data structure can be found in *Technical Bulletin 8: Specification for ISBT 128 Data Structures to Support the Secure Bedside Matching of Patient and Transfusion/Transplant Product Identification*[5] for examples of use.

Footnoted References

[1] ISO/TS 18530:2014 Health Informatics -- Automatic identification and data capture marking and labelling -- Subject of care and individual provider identification

[2] GS1 General Specification, Version 14, Jan-2014 (http://www.gs1.org/barcodes-epcrfid-id-keys/gs1-general-specifications)

[3] ISO/IEC 15418:2009 Information technology -- Automatic identification and data capture techniques -- GS1 Application Identifiers and ASC MH10 Data Identifiers and maintenance

[4] ST-001 v5.5.0 ISBT 128 Standard Technical Specification, February 2016

[5] IG-011 v1.0.0 Technical Bulletin 8: Specification for ISBT 128 Data Structures to support the secure bedside matching of patient and transfusion/transplant product identification, January 2006

