Healthcare Provider Tool Kit
United Nations Standard Products and Services Code® (UNSPSC®)

Improving Patient Safety and Supply Chain Efficiency
Improving Patient Safety and Supply Chain Efficiency

GS1 Healthcare US®

HEALTHCARE PROVIDER TOOL KIT

United Nations Standard Products & Services Code® (UNSPSC®)

Release 3.0
Published: March 2012
Table of Contents

EXECUTIVE SUMMARY ................................................................................................................................................................................. 3

ABOUT GS1® ....................................................................................................................................................................................................... 4

INTRODUCTION TO STANDARDS ........................................................................................................................................................................... 5

WHY ARE STANDARDS NECESSARY? ........................................................................................................................................................ 5
ABOUT THE STANDARDS .................................................................................................................................................................................. 6
Global Location Number (GLN) .............................................................................................................................................................. 6
Global Trade Item Number® (GTIN®) .................................................................................................................................................. 7
Global Data Synchronization Network® (GDSN®) .................................................................................................................................. 7
United Nations Standard Products and Services Code® (UNSPSC®) ........................................................................................................ 7
HOW DO THE GS1 STANDARDS RELATE TO EACH OTHER? ................................................................................................................ 7

THE CASE FOR THE UNSPSC® ........................................................................................................................................................................ 10

THE PROBLEM: PRODUCT CLASSIFICATION ........................................................................................................................................ 10
THE SOLUTION: UNSPSC .................................................................................................................................................................................. 10

WHAT IS THE UNSPSC? .................................................................................................................................................................................. 11

WHAT DOES A UNSPSC LOOK LIKE? .................................................................................................................................................. 12

HOW IS A UNSPSC CODE USED? ........................................................................................................................................................ 13

ADVANTAGES OF USING UNSPSC IN THE HEALTHCARE SUPPLY CHAIN ................................................................................................. 15

BENEFITS TO HEALTHCARE PROVIDERS .................................................................................................................................................. 15

IMPLEMENTING UNSPSC IN YOUR ORGANIZATION ........................................................................................................................................ 16

STEP ONE: ESTABLISH EXECUTIVE SUPPORT ..................................................................................................................................... 17
STEP TWO: FORM A UNSPSC MANAGEMENT ADVISORY GROUP ........................................................................................................... 17
STEP THREE: ESTABLISH YOUR UNSPSC OPERATIONAL TEAM .............................................................................................................. 18
STEP FOUR: DEVELOP & INITIATE PROJECT COMMUNICATION .................................................................................................................. 18
STEP FIVE: INITIATE EDUCATION FOR THE ADVISORY GROUP & OPERATIONAL TEAM ........................................................................... 19
STEP SIX: ESTABLISH IMPLEMENTATION STRATEGY .................................................................................................................................. 19
STEP SEVEN: ASSESS INFORMATION SYSTEM ISSUES & MAKE NECESSARY CHANGES .................................................................................. 20
STEP EIGHT: IDENTIFY/OBTAIN UNSPSC CODES .................................................................................................................................... 20
STEP NINE: ENGAGE SUPPLIERS ........................................................................................................................................................... 21
STEP TEN: CONDUCT TESTING ............................................................................................................................................................. 21
STEP ELEVEN: MAKE ADJUSTMENTS TO INITIAL UNSPSC IMPLEMENTATION PLAN ...................................................................................... 21
STEP TWELVE: CREATE STANDARD OPERATING PROCEDURES .............................................................................................................. 22

ANALYZING UNSPSC ROI FOR YOUR ORGANIZATION ........................................................................................................................................ 22

LESSONS LEARNED & BEST PRACTICES .................................................................................................................................................. 24

FREQUENTLY ASKED QUESTIONS (FAQs) .................................................................................................................................................. 25

GLOSSARY .......................................................................................................................................................................................................... 28

REFERENCES ......................................................................................................................................................................................................... 31

APPENDIX: SAMPLE VENDOR LETTER ..................................................................................................................................................... 32
Executive Summary

The purpose of this document is to provide guidance to healthcare providers about the need for standardized product classification in order to support and improve purchasing throughout your organization. To that end, it introduces and explains the United Nations Standard Products and Services Codes® (UNSPSC®), the most widely used global classification system that is heavily used by U.S. manufacturers today. In addition, this document explains how use of UNSPSC facilitates strategic product management to ensure that your organization gets the best products (both healthcare and non-healthcare) at the best prices. The benefits of using UNSPSC are discussed, and guidance for assessing UNSPSC ROI for your organization is included as well. Finally, this document provides detailed steps for implementing UNSPSC in your organization.

Using this document, you will better understand how the use of UNSPSC for product classification will support your organization in realizing supply chain cost savings opportunities. And, using this document, you will learn how to get that effort underway today!
About GS1®

About GS1®
GS1 is a leading global organization dedicated to the design and implementation of standards and solutions to improve the efficiency and visibility of supply and demand chains, both globally and across sectors. GS1 is a fully integrated global organization, with 108 Member Organizations (like GS1 US™) serving over a million companies doing business across 150 countries. Together, GS1 and its subsidiaries and partnerships connect companies with standards-based solutions that are open, consensus-based and universally endorsed.

About GS1 US™
GS1 US is the Member Organization of GS1 that serves companies in the United States. As such, it is the national implementation organization of the GS1 System dedicated to the adoption and implementation of standards-based, global supply chain solutions in the United States. GS1 US currently serves over 200,000 U.S. member companies -- 16,000 of which are in healthcare.

About GS1 Healthcare
GS1 is the leading global standards organization in the healthcare industry, supporting the healthcare community through its GS1 Healthcare global initiative. GS1 Healthcare is a voluntary, global user community that brings together all healthcare stakeholders, including: pharmaceutical and medical devices manufacturers, wholesalers and distributors, group purchasing organizations, hospitals, pharmacies, logistics providers, governmental and regulatory bodies, and associations. The mission of GS1 Healthcare is to lead the healthcare industry to the successful development and implementation of global standards to enhance patient safety and supply chain efficiencies. GS1 Healthcare drives the development of GS1 Standards and solutions to meet the needs of the global healthcare industry, and promotes the effective utilization and implementation of global standards in the healthcare industry through local support initiatives like GS1 Healthcare US® in the United States.

About GS1 Healthcare US®
GS1 Healthcare US is an industry group that focuses on driving the adoption and implementation of GS1 Standards in the healthcare industry in the United States to improve patient safety and supply chain efficiency. GS1 Healthcare US brings together members from all segments of the healthcare industry to address the issues that most impact healthcare in the United States. Facilitated by GS1 US, GS1 Healthcare US is one of twenty-four local GS1 Healthcare user groups around the world that supports the adoption and implementation of global standards developed by GS1.
Introduction to Standards

Trading partners in the healthcare supply chain need to share many and complex pieces of data in order to transact business and support their work. For example, manufacturers and distributors need to communicate product information and company location, and hospitals need to share location information. In order to be efficient and effective in that effort, a common language and globally accepted standards are essential. Without such standards, supply chain partners face high, unnecessary costs due to inaccurate data and supply chain information inefficiencies.

Unfortunately, the healthcare industry has experienced the harsh reality of this lesson. In the first comprehensive analysis of this topic in 1996, the Efficient Healthcare Consumer Response study found that $11 billion is wasted each year in the healthcare supply chain primarily because data standards are either entirely lacking or not as widely used or well-developed as in other industries. \(^1\) Worse yet, a groundbreaking report on patient safety issues by the Institute of Medicine in 1999 cited staggering statistics about medical error, and found that hand written reports or notes, manual order entry, non-standard abbreviations and poor legibility lead to substantial errors and injuries. \(^2\) Those findings and conclusions were reinforced five years later when the authors of that groundbreaking report revisited the status of the healthcare system and once again echoed their findings of widespread systemic problems. \(^3\)

In response, a movement has been building in the healthcare supply chain to adopt and implement data standards to support patient safety and improve supply chain management. A growing number of companies, hospitals and healthcare organizations have chosen the GS1 System to help them improve collaboration with their supply chain partners. For over thirty-five years, the GS1 System has provided globally accepted identifiers and a common language for the communication of supply chain information about products, services and locations.

Why Are Standards Necessary?

Healthcare providers need to communicate product and location information with their supply chain partners, and with the various sites and departments within their own enterprise. Without a common language and globally accepted standards, healthcare providers, companies and/or industry associations are left to develop their own identifiers and data formats, resulting in numerous proprietary “standards” for healthcare providers and companies to manage. However, as discussed in the Efficient Healthcare Consumer Response study, this is the cause of billions of dollars of waste in the healthcare industry. Moreover, the existence of numerous “standards” causes supply chain inefficiencies and inaccurate data that inserts cost and confusion into healthcare business processes, threatening quality of care and patient safety.

This is why global standards are so important. Global standards provide simplicity and consistency by promoting universal applicability and optimal functionality across the globe for all industry sectors. In today’s complex markets, supply chain lines are blurring and channels of distribution for various sectors are overlapping.

---


This is especially true of the healthcare industry where manufacturers of healthcare products often supply both hospitals and consumer goods retailers; pharmacies and hospitals purchase consumer goods as well as healthcare products; and the pharmaceutical supply chain has expanded to include supermarkets and consumer goods retailers in addition to traditional pharmacies. Global standards that can be used by all supply chain partners, independent of industry sector or location, are essential in this environment.

Global standards support healthcare business processes and can bring about many benefits for patient safety and supply chain management, such as:

- Reduction in medication errors through efficient automatic identification: the right product for the right patient at the right time through the right route and in the right dose
- Efficient traceability
- Efficient product authentication
- Less time spent on manual documentation, leaving more time to consult directly with patients
- Cost reduction through increased supply chain efficiency
- Improved order and invoice process
- Optimized receiving
- Reduced inventory
- Increased productivity
- Improved product recall
- Improved shelf management
- Improved service levels/fill rate
- Improved benchmarking and management of supply cost
- Elimination of the need for re-labeling and proprietary codes
- Regulatory compliance (where applicable)

About the Standards

The GS1 System is an integrated suite of global standards that provides for accurate identification and communication of information regarding products, assets, services and locations. Using GS1 Identification Numbers, companies and organizations around the world are able to globally and uniquely identify physical things like trade items, assets, logistic units and physical locations, as well as logical things like corporations or a service relationship between provider and recipient. When this powerful identification system is combined with the Global Data Synchronization Network (GDSN), the connection is made between these physical or logical things and the information the supply chain needs about them.

Global Location Number (GLN)

The Global Location Number (GLN) is the globally unique GS1 Identification Number for locations and supply chain partners. The GLN can be used to identify a functional entity (like a hospital pharmacy or accounting department), a physical entity (like a warehouse or hospital wing or even a nursing station), or a legal entity (like a health system corporation). The attributes defined for each GLN (e.g., name, address, class of trade, etc.) help users to ensure that each GLN is specific to one, very precise location within the world.
Global Trade Item Number® (GTIN®)

The Global Trade Item Number® (GTIN) is the globally unique GS1 Identification Number used to identify “trade items” (i.e., products and services that may be priced, ordered or invoiced at any point in the supply chain). GTINs are assigned by the brand owner of the product, and are used to identify products as they move through the global supply chain to the hospital or ultimate end user. The attributes defined for each GTIN (e.g., size, weight, packaging, etc.) help users to ensure that each GTIN is specific to one, very precise trading unit configuration (e.g., a blister of two aspirin tablets; a bottle of 100 aspirin tablets; etc.).

Global Data Synchronization Network® (GDSN®)

Each user not only defines and maintains its own GLNs and GTINs with their associated attributes, but is also responsible for sharing this information with its supply chain partners. To support those efforts, the Global Data Synchronization Network (GDSN) provides an efficient and effective approach to (1) storing GS1 Identifiers with their associated attributes, (2) checking to make sure that the identifiers and attributes are properly defined and formatted, and (3) sharing that information with supply chain partners. The GDSN offers a continuous, automated approach to data management that ensures that supply chain information is identical among trading partners, increasing data accuracy and driving costs out of the supply chain.

United Nations Standard Products and Services Code® (UNSPSC®)

The United Nations Standard Products and Services Code® (UNSPSC®) is a hierarchical set of product categories used by supply chain partners worldwide to classify their products and services. The UNSPSC provides a single, global classification system for all products and services in all industry sectors. Use of the UNSPSC enhances company-wide visibility of spending analysis, and promotes cost-effective procurement. As a result, the UNSPSC is used extensively around the world in electronic catalogs, search engines, procurement application systems and accounting systems.

How Do the GS1 Standards Relate to Each Other?

GS1 Identification Numbers provide the link between an object and the information pertaining to it. When a user assigns a GS1 Identification Number, they define a set of standardized information (known as attributes) about the object to which that identifier relates (e.g., size, weight, location, etc.) The GS1 System specifies the list of attributes that must be defined for each GS1 Identifier, and provides a precise definition as well as acceptable values and data formats for each attribute. Standardized attributes about products include core data like selling unit, item dimensions, and UNSPSC product classification. Standardized attributes about commercial entities include core data like location information about a warehouse or hospital. Once defined by the user, those attributes are then stored in a GDSN-certified Data Pool and shared with supply chain partners using the GDSN. Through this process, GS1 Identification Numbers not only identify an object, but also provide a link to information about that object.

That linkage is tremendously valuable. In fact, twenty-three industry sectors have used GS1 GTINs, GLNs and the GDSN as the foundation for a wide range of efficiency building solutions that have improved their operations and supported their business processes for decades. Likewise, with GTINs, GLNs and the GDSN, healthcare providers can lay the foundation for a wide range of solutions to enhance patient safety and supply chain management within their facilities and across their organizations, as demonstrated in the illustration below.

As shown, patient safety and supply chain efficiency are the ultimate goals (shown as the roof of the house). There are numerous and ever-evolving tools to support providers in improving patient safety and supply chain management (shown as the pillars supporting the roof). However, in order to work, those applications must be
built on a strong foundation. This is where the standards come into play. Standardized product identification, standardized location identification and standardized product definitions (shown as the foundation of the house) provide the foundation for developing the tools and applications that healthcare providers use to improve patient safety and supply chain management.

Figure 1: Building Patient Safety
**Problem:** Supply chain partners use different Organization and Location IDs.
**Example:** Manufacturer uses GLN. Distributor uses DUNS number. Hospital uses its own proprietary identification system. This causes rebates and claims to be misapplied and/or lost, and frustrates direct deliveries in the facility.
**Healthcare Industry Solution:** Global Location Number (GLN)

**Problem:** The same product has different identification numbers assigned to it.
**Example:** Nearly every hospital has a different Product ID for 3M Item #8630 -- making proper product identification, ordering and recalls difficult.
**Healthcare Industry Solution:** Global Trade Item Number (GTIN)

**Problem:** The same identification number is assigned to different products.
**Example:** “Part Number 10313” refers to several different manufacturers/items. This increases errors in ordering and distribution to patients, and makes sourcing of needed products difficult.
**Healthcare Industry Solution:** Global Trade Item Number (GTIN)

**Problem:** There is no standard for unit of measure and no distinct identifier for different product packaging levels.
**Example:** You may order “50” and receive 500 because they are sold in units of 10, or you may order 20 “cases” and receive 20 “boxes.” This results in inventories of wrong products and increased returns processing, driving up costs and creating cash flow issues.
**Healthcare Industry Solution:** GTIN Allocation Rules for Product Hierarchy and Package Measurement

**Problem:** No central source of party/location and product information.
**Example:** The numerous systems across the healthcare facility (e.g., inventory systems, billing/accounts payable, Barcode Point of Care (BPOC) systems, prescription drug systems, etc.) each have their own database. This is a problem because there is no way to ensure that the information used in one system is the same as the information used in another.
**Healthcare Industry Solution:** Global Data Synchronization Network (GDSN)

**Problem:** No standards for classifying or grouping products in order to analyze spending activities.
**Example:** Providers need to manage their purchasing volume with suppliers in order to achieve the best pricing for which the hospital is eligible. However, most provider systems are not structured to provide insight into purchasing activities and patterns based on product categories, products and/or vendors.
**Healthcare Industry Solution:** United Nations Standard Products & Services Code (UNSPSC)
Improving Patient Safety and Supply Chain Efficiency

The Case for the UNSPSC®

The Problem: Product Classification

In today’s dynamic healthcare environment of declining reimbursement and a reduced labor pool, healthcare providers are under tremendous financial pressure. Modern Healthcare and Arista Associates reported in August 2001 that 61 per cent of U.S. hospitals are either losing money or just breaking even. In 2003, Healthcare Financial Management Association reported that the median hospital operating margin was in the red by 1.8 per cent. Never has financial pressure on U.S. hospitals been greater.

In response, healthcare providers are seeking ways to improve their financial position without adversely affecting their ability to deliver high quality patient care. Supply expenses, which typically make up 25 to 30 per cent of a hospital’s spending, are an important target area for this effort. In addition to the cost of the products themselves, administrative expenses associated with tracking and managing the purchase of so many items compounds supply chain costs. As a result, hospital supply chains present enormous opportunities for hospital executives seeking to reduce costs and gain new efficiencies. These opportunities are not about seeking the “cheapest” products, but rather seeking the best products at the best prices.

Realization of supply chain cost-savings opportunities requires the ability to analyze purchasing data to identify patterns, which then can be used to adjust purchasing activities to leverage contract pricing and tier discounts. For example, contract prices with manufacturers are often based on purchasing volume tier levels. In order to get the best possible pricing, providers need to manage their purchasing volume with suppliers in order to achieve the best tier for which the hospital is eligible. However, hospital personnel often buy the same products from multiple manufacturers. This frustrates the provider’s ability to meet volume tier levels and results in the provider not obtaining the best price available to them for the product.

Optimization of contract pricing and tier discounts requires strategic purchasing throughout the organization to meet contract and tier requirements. But in order to do that, providers need insight into what is being purchasing and from whom. However, most provider systems are not structured to provide insight into how the provider is spending money because they lack standards for classifying or grouping products. Although there is plenty of data in their purchasing systems, there is no way to group items or vendors or product categories on order to analyze spending activities throughout the organization.

Providers need product classifications they can use to code purchases in order to analyze their spending. Some providers have attempted to respond to this need by creating their own classification scheme to group the products purchased by their organization for analytical purposes. However, proprietary classification systems can be complex and costly to develop and maintain, and are often not robust enough to support the variety and amount of products purchased by healthcare providers.

The Solution: UNSPSC

The solution to these problems is the United Nations Standard Products and Services Code® (UNSPSC®). The UNSPSC is a classification coding system for all products and services in all industry sectors that can be used by providers to gain insight into what is being purchased and from whom. With UNSPSC, users can analyze spending at various levels, like product class and/or product type. This enables users to customize their spending analysis to the desired level of specificity. By providing visibility into purchasing activities and patterns, UNSPSC supports healthcare organizations to realize supply chain cost savings opportunities with strategic purchasing throughout their organization.
What is the UNSPSC?

The United Nations Standard Products and Services Code® (UNSPSC®) is a global standard for classifying products and services. UNSPSC provides a hierarchical set of product categories with numerical codes. Supply chain partners use those classification codes to organize the products they purchase into categories they can use to analyze purchasing activities. The UNSPSC was designed to serve four primary functions:

Company-wide visibility of spend analysis (i.e., a uniform view of all spending across the enterprise)

- Cost-effective procurement optimization (i.e., identification of relevant suppliers for a specific product or service)
- Improved product awareness (i.e., grouping similar products and services under a single category)
- Full exploitation of electronic commerce capabilities (i.e., strategic analysis of purchasing activities and patterns)

The UNSPSC provides a single classification system for all products and services in all industry sectors. There are currently 55 UNSPSC segments covering products from office equipment, to food and beverage, to medical supplies. Products are placed within logical categories to make it easier for users to find what they are looking for and evaluate expenditures on commonly grouped items. The UNSPSC is an open standard and is available for use by any party free of charge. Use of the UNSPSC enhances company-wide visibility of spending analysis, and promotes cost-effective procurement. As a result, the UNSPSC is used extensively around the world in electronic catalogs, search engines, procurement application systems and accounting systems.

The United Nations Development Program (UNDP) and Dun & Bradstreet (D&B) jointly created the UNSPSC in 1998 through the merger of the U. N. Common Coding System and D&B’s Standard Products and Services Classification. GS1 US serves as the code manager for the UNSPSC. As code manager, GS1 US is responsible for ensuring compliance with the principles of the UNSPSC as well as the integrity of the code schema. The UNSPSC provides the business world with a global commodity code standard for classification that enables organizations to source products faster and better analyze their purchasing patterns.
What Does a UNSPSC Look Like?

UNSPSC is an eight (or ten) digit numerical code representing a product classification. The UNSPSC uses a hierarchical approach to classification and coding structure that includes five levels (four required, one optional) as shown below:

**Figure 2: Hierarchical structure of the UNSPSC**

Each level of the hierarchy has its own unique two-digit number and a textual description. Based on this hierarchical structure, each UNSPSC code is comprised of the four 2-digit numbers representing Segment, Family, Class and Commodity. (Business Function can be added as a suffix if desired). For example, "sutures" are UNSPSC classification 42312201. This hierarchical number represents the commodity "Suture" which is part of a larger class of products, "Suture and related products", which in turn is part of a family of products, "Wound care products," which is itself part of a segment of products, "Medical equipment, accessories, and supplies."

**Figure 3: Hierarchical structure of the UNSPSC code for Sutures**
This hierarchical structure provides flexibility for users to conduct analysis at various levels, like product class and/or commodity. This enables users to “roll up” or “drill down” their spending analysis in order to obtain the desired level of specificity.

How is a UNSPSC Code Used?

Healthcare providers use the UNSPSC to classify the products that they buy in order to support strategic analysis of purchasing activities. In order to do that, providers download the UNSPSC codes classify item masters in their information systems (i.e., to populate the classification field in the MMIS). Providers and their suppliers insert the UNSPSC codes into product catalogs, purchase orders and invoices. Once the UNSPSC has been inserted into those trade documents, provider’s then enable their procurement application systems and accounting systems to perform purchasing analysis based on UNSPSC classifications. In addition, suppliers and group purchasing organizations (GPOs) use the UNSPSC as the primary means for classifying products in their catalogs, enabling providers to search catalogs by UNSPSC category to identify available suppliers.

Providers use UNSPSC to gain a better understanding of what they are spending, on what, with whom, by whom and for what purpose. With this information, hospitals can more strategically focus their cost improvement efforts. For example, UNSPSC enables providers to understand where the dollars are being spent and to identify the highest spending areas to focus on and look for cost savings opportunities, such as:

- Spending for the top 10 commodities
- Vendors for each of the top 10 commodities
- Spending for the top 10 manufacturers
- On contract/off contract purchases for each of the top 10 manufacturers

For example, providers can use the UNSPSC hierarchy levels to evaluate spending starting at the Segment, then the Family, then the Class levels. This enables providers to start at the top and drill down UNSPSC levels to precisely identify targets of opportunity for savings, as shown in Figure 4 below.

![Figure 4: Evaluating spending starting at the Segment, then the Family, then the Class to identify specific areas of opportunity by drilling down UNSPSC categories (Ministry Health Case Study).](image-url)
Continuing the analysis shown above in Figure 4, the provider can drill down even further to examine spending on the Commodity level within the targeted Class:

**Figure 5: Evaluating spending by drilling down to the Commodity level for the targeted UNSPSC Class (Ministry Health Case Study).**

And finally, the figure below continues the analysis by showing how the provider can then continue even further to spending by vendor for the target commodity:

**Figure 6: Evaluating spending by vendor for the targeted Commodity (Ministry Health Case Study).**
Advantages of Using UNSPSC in the Healthcare Supply Chain

The UNSPSC is the first product taxonomy available to the healthcare industry that is not a part of a proprietary system, commercial product or service. It is available free of charge to all members of the supply chain. Using this hierarchical classification system, hospitals and their suppliers can collaborate to increase contract compliance and reduce inadvertent off-contract spending. Hospitals can accelerate product standardization efforts, and rapidly benchmark between facilities and source products faster, while more efficiently analyzing their purchasing. Advantages of using UNSPSC include:

- **Comprehensive**: UNSPSC is a complete classification system, encompassing all supplies that a provider consumes, not just the medical/surgical products. As a result, UNSPSC can be used for all products found in a healthcare environment. This enables providers to classify healthcare products, grocery products, retail products and any other products used in their facility and/or organization using the same standardized classification system.

- **Developed with Healthcare Industry**: Development of the UNSPSC segments for healthcare products was the result of industry wide collaboration (i.e., UNSPSC Segment 41 - Laboratory and Measuring and Observing and Testing Equipment and Segment 42 - Medical Equipment and Accessories and Supplies). Subject matter experts from 25 organizations, including suppliers, healthcare providers, GPOs, e-commerce companies, and other third parties all participated in the effort to add and refine the standard’s category codes to cover all healthcare products.

- **Centrally Managed & Updated**: UNSPSC is managed and updated on a regular basis by the United Nations and GS1 US. This frees providers from the considerable ongoing expenses they would experience if they were to develop and maintain their own proprietary taxonomy.

- **Open**: UNSPSC is an open standard. The UNSPSC is the first product taxonomy available to the healthcare industry that is not a part of a proprietary, commercial product or service.

- **Free**: UNSPSC is available free of charge to anyone who wants to use it. Users can browse and/or download the current version of the code set from the website at no cost. In addition, users can search the UNSPSC website for free to locate commodity codes that can be used by your organization.

- **Hierarchical**: The UNSPSC is a hierarchical taxonomy that enables users to “roll up” or “drill down” their spending analysis in order to obtain the desired level of specificity.

Benefits to Healthcare Providers

Use of UNSPSC will enable providers to source products faster and to gain insight into their purchasing patterns. With more accurate purchasing records and better analysis, providers will have more bargaining power to negotiate pricing with suppliers. As a result use of UNSPSC offers many benefits to providers, including:

- **Purchasing Control**: facilitates control over and compliance to spending limits and authorized commodities by individuals and departments, and provides the necessary analysis to promote buy-in across the organization.
Improving Patient Safety and Supply Chain Efficiency

- **Identification of Suppliers**: searching on a classification code to identify all available suppliers promotes competition and better evaluation of suppliers for selection.

- **Leverages Supplier Relationships**: Consolidate suppliers to simplify and build strategic relationships. A handful of suppliers to fulfill most of the company’s operational needs leads to efficiencies and improvements in deliveries, service, and settlement.

- **Improved Bargaining Power**: consistent coding across organizational departments, suppliers, and information systems gives uniform picture of enterprise-wide expenditures, which improves supplier management and facilitates negotiations for volume-based discounts.

- **eProcurement Efficiency**: inclusion of codes in transactional documents promotes analytical factors throughout the process of order to delivery.

- **Strategic Supply Chain Management**: facilitates supplier rationalization and demand aggregation to support providers in analyzing expenditures and conducting strategic sourcing.

### Implementing UNSPSC in Your Organization

UNSPSC implementation provides the essential foundation for larger initiatives aimed at improving supply chain management in hospitals, including contracting, demand aggregation and strategic sourcing. The main focus of the provider implementation effort is to integrate UNSPSC into MMIS, EPR or master data systems, as well as trading documents.

*So, what exactly does it take to implement UNSPSC in a healthcare organization? What are the steps and who is involved?* This section answers these questions with detailed, step-by-step instructions for implementing UNSPSC. These steps involve critical areas such as establishing executive support, determining implementation strategy, forming cross-functional teams, creating internal and external communication strategies, initiating supplier involvement, and establishing standard operating procedures. It should be noted that many IT solution providers, including many of the vendors providing MMIS and EPR systems today, offer services to support providers in integrating UNSPSC into their systems. Providers facing the challenges of time and staff constraints may wish to work with one of those solution providers to facilitate the implementation of UNSPSC.

For links to all of the *Tools* listed in the implementation steps, please refer to the *References* section of this document.
Step One: Establish Executive Support

The **goals** in this step are to inform and educate executive management on standards adoption and the need for industry-wide implementation, and to obtain executive approval to proceed with implementation. As with any project that will impact the business processes of the organization, the support of senior management is critical.

**Actions**

- Prepare a presentation on the value of UNSPSC and a UNSPSC implementation plan. In your presentation:
  - Cite the benefits identified in these materials.
  - Include language to speak to specific stakeholders as necessary (e.g., reinforce enhanced benefits as UNSPSC use becomes more robust; speak to the business side of pharmaceuticals and medical device systems; etc).
- Deliver the UNSPSC presentation and implementation plan to senior management.
- Secure approval to initiate the project and form the needed teams (i.e., **UNSPSC Management Advisory Group, and the UNSPSC Operational Team**).

**Step Two: Form a UNSPSC Management Advisory Group**

The **goal** in this step is to establish an Advisory Group. Formation of a multi-disciplinary Group including members outside of supply chain functions promotes buy-in, supports communication efforts, and ensures proper input from the areas most impacted by implementation.

**Actions**

- Recruit and solicit commitments for participation. The Group should include:
  - Financial Controller
  - Legal Counsel
  - Supply Chain
  - Information Systems (business & operational)
  - Accounts Payable
  - Public Relations (internal)
  - Group Purchasing Representative
  - Primary Distributor Representative
  - Pharmacy Head
  - Nursing/Clinicians
  - Clinical Engineering

**Tools**

- UNSPSC materials from the UNSPSC Website
- UNSPSC Case Studies from the UNSPSC Website

- UNSPSC presentation materials (prepared in Step 1)
Step Three: Establish Your UNSPSC Operational Team

The goal in this step is to establish a UNSPSC Operational Team. The day-to-day utilization and maintenance of the UNSPSC as a support tool will require the involvement of multiple individuals.

**Actions**

- Identify and select participants.
- Establish the role of each participant.
- Update job descriptions to reflect the new responsibilities of the team members.
- Provide education and training.

**Tools**

- UNSPSC presentation materials (prepared in Step 1 above)
- UNSPSC materials from the UNSPSC Website
- UNSPSC Case Studies from the UNSPSC Website
- GS1 US Product Catalog
- *Introduction to UNSPSC Web Seminar*

A free "Introduction to UNSPSC" on-demand web seminar and slides are available on the UNSPSC website. This program was developed by a respected UNSPSC consultant and provides a 20 minute overview of the codeset, its use and benefits.

Step Four: Develop & Initiate Project Communication

The goal in this step is to inform your internal and external community. Utilize internal communication tools such as newsletters, intranet, websites and vendor letters to introduce the concept of the UNSPSC to your organization, including the supplier community. The Advisory Group member from Public Relations should be enlisted in this effort.

**Actions**

- Announce organizational commitment to UNSPSC in newsletters and other media.
- Announce commitment to implement UNSPSC to your supplier community.

**Tools**

- UNSPSC presentation materials (prepared in Step 1)
- UNSPSC materials from the UNSPSC Website
- UNSPSC Case Studies from the UNSPSC Website
- Sample letters for providers to suppliers re: UNSPSC implementation (see Appendix)
Step Five: Initiate Education for the Advisory Group & Operational Team

The goal in this step is to educate participants. A base level of knowledge about UNSPSC and GS1 is necessary for all active participants.

**Actions**

- Participate in web seminars.
- Train staff.

**Tools**

- UNSPSC presentation materials (prepared in Step 1 above)
- UNSPSC materials from the UNSPSC Website
- UNSPSC Case Studies from the UNSPSC Website
- GS1 US Product Catalog
- Introduction to UNSPSC Web Seminar

Step Six: Establish Implementation Strategy

The goal in this step is to establish a UNSPSC utilization and implementation strategy. The Group must decide which tables/databases in the hospital’s IT systems must contain UNSPSC. At a minimum, the Group should consider the tables/databases in purchasing, replenishment, inventory management, vendor scorecard, rebates and chargebacks systems. Beyond those, it is a good strategy to integrate UNSPSC into any system in which product information flows because this will facilitate greater analysis, like product usage by procedure, specialty, department, etc. To that end, the Group should also consider integrating UNSPSC into the following systems as well: patient records, patient billing, clinical systems, payer systems (e.g., Medicare), recall, ebusiness, transportation, controlled substances, etc.

**Actions**

- Each system should be surveyed for potential benefits of using UNSPSC.
- Once the initial survey is finished, it is recommended that the survey findings be re-circulated to the Group for review and validation.
- After completion of the survey review and validation, the Group should meet to discuss the results and to identify the first areas/systems in which to implement UNSPSC.

**Tools**

- UNSPSC materials from the UNSPSC Website
- UNSPSC Case Studies from the UNSPSC Website
- UNSPSC White Papers from the UNSPSC Website
Step Seven: Assess Information System Issues & Make Necessary Changes

The goal in this step is to evaluate the readiness of your information systems, and make the appropriate system changes required to accommodate the use of UNSPSC in the systems selected in Step 6. The capability of your information system to contain and utilize UNSPSC numbers must be assessed, and the necessary changes made.

**Actions**

- Meet with your IS system experts (*including different disciplines within the IS department*), internal and external, to review implementation strategy and understand implications for your information systems.
- Establish a collaborative plan to make the necessary changes and prepare information systems.
- Develop a plan to populate your internal systems with UNSPSC.

Step Eight: Identify/Obtain UNSPSC Codes

The goals in this step is to associate a UNSPSC code with each product purchased at your facility, and establish data storage referencing UNSPSC in the necessary product master files. Hospital databases already contain many UNSPSC codes designated by product manufacturers. Designation of UNSPSC by manufacturers is preferable. However, if a manufacturer has not designated UNSPSC codes to any of the products purchased by your organization, then you can designate UNSPSC codes to those products yourself. Therefore, this effort will encompass assessing the UNSPSCs you already have, and then gathering any/all UNSPSCs you do not have.

**Tools**

- UNSPSC materials from the UNSPSC Website

It should be noted that support for this effort is available in the marketplace. First, many GPOs have embraced UNSPSC and have fully integrated them into their systems and product catalogs. Providers who are members of a GPO may wish to contact their GPO to determine if they offer support in this effort. Secondly, many IT solution providers offer services to code products with UNSPSC and establish data storage in product masters. Providers constrained by time and staffing challenges may want to contract with a solution providers rather than complete the work themselves in-house.

**Actions**

- Contact your GPO (if applicable) to determine if they support providers in implementing UNSPSC. If so, work with them to obtain the UNSPSC codes for each of the products you purchase from them.
- Assess if/where your databases already contain UNSPSCs.
- For any product for which you could not get UNSPSC numbers from either your GPO or your current systems: contact manufacturers, distributors, and/or suppliers for the UNSPSC for their products.
- For any product for which a supplier has not designated a UNSPSC: designate a UNSPSC to the product. (You can either do this yourself or with the assistance of a GPO or IT solution provider).
Step Nine: Engage Suppliers

The goals in this step are to prepare the supplier community. Collaboration and communication with your supplier community is critical for successful implementation. So, now that an implementation plan and initial database have been established, you need to engage strategic suppliers in a process of communication about your facility’s plans.

**Actions**

- Explain implementation and process.
- Determine supplier capabilities.
- Analyze the impact to your operations and staff.

**Tools**

- Your UNSPSC Implementation Plan (created in Step 8 above)

Step Ten: Conduct Testing

The goal in this step is to successfully analyze your purchasing patterns using UNSPSC. At this point, you are ready to conduct tests. The testing process will provide validation of information system capabilities and operational impact. It is recommended that providers first perform this step for either their top/key suppliers or top/key products.

**Actions**

- Document critical success factors.
- Make adjustments as identified.
- Communicate with the Operational Team and Advisory Group about lessons learned & best practices.

**Tools**

- UNSPSC materials from the UNSPSC Website
- UNSPSC Case Studies from the UNSPSC Website
- UNSPSC White Papers from the UNSPSC Website

Step Eleven: Make Adjustments to Initial UNSPSC Implementation Plan

The goal in this step is to review the initial plan and make corrections based on the work group’s experiences and lessons learned. As a result of the testing process, potential adjustments must be made to all aspects of the program.

**Actions**

- Adjust plan to achieve the most benefits, either in terms of supply chain management, patient safety, financial benefits, or all of the above.

**Tools**

- Your UNSPSC Implementation Plan (created in Step 6 above)
Step Twelve: Create Standard Operating Procedures

The goals in this step are to document standard operating procedures and obtain sign off, both internally and externally. Following testing and the implementation of the necessary adjustments, it is necessary to prepare standard operating procedures for internal and external staff. The Advisory Group and Operational Team should be heavily involved in this process.

Analyzing UNSPSC ROI for Your Organization

In today’s dynamic healthcare environment of declining reimbursement and a reduced labor pool, healthcare organizations have expressed a need to establish a return on investment (ROI) for the use of UNSPSC. Indeed, demonstration of positive ROI for UNSPSC supports organizations challenged daily by the allocation of scarce resources. This section provides guidance to help each organization determine its own return on investment based on individual needs and circumstances. This guidance is provided as a starting point for any organization wishing to pursue ROI analysis.

It is good to note that beyond the analysis provided in this section for the ROI of UNSPSC alone, additional benefits and ROI can be found in the implementation of UNSPSC as part of the implementation of the full GS1 System of standards, including Global Trade Item Numbers (GTINs), Global Location Numbers (GLNs) and the Global Data Synchronization Network (GDSN). For more information about GTINs, GLNs and the GDSN, please refer to the Healthcare Provider Tool Kits prepared on those topics by GS1 Healthcare US. Moreover, most “early adopter” organizations have realized additional value in unanticipated areas like process improvement and infrastructure development. And, many have noted the value of a new “business philosophy” or way of doing business which places the organization in an advantageous position to address some of the upcoming challenges anticipated in healthcare over the next ten years.

Well-selected metrics provide data that can help drive decisions, identify areas of vulnerability, and determine the overall effectiveness of supply chain operations. A few metrics that may be useful for assessing UNSPSC ROI are listed below. Providers are encouraged to use whichever metrics best fit your organization and its operations.

- Supply Expense per Adjusted Patient Day (most commonly used supply chain indicator for measuring cost)
- Non-contract Spending (measures compliance with purchases through a GPO contract)
- Total Off-Tier Losses (i.e., losses resulting from the failure to achieve tier levels)
- Non-Consolidated Tier Losses (i.e., losses resulting from the failure to achieve tier levels)
- Loss Due to Vendor Selection (i.e., dollars associated with off contract purchases)
- Item Standardization Rebate Loss (i.e., loss resulting from the failure to meet rebate thresholds by product category)
- Vendor Standardization Rebate Loss Dollars (i.e., losses resulting from the failure to meet rebate thresholds at the vendor level)
- Available Rebates Not Collected (measures results of effective rebate management)

---

*Healthcare Financial Management Association (HFMA), HFMA’s 2005 Supply Chain Benchmarking Survey: Managing Resources to Achieve Improved Economic Outcomes and High-Quality Care.*
- Number of Vendors Used (measures the results of vendor standardization; i.e., the fewer the vendors, the more likely to take advantage of volume purchases and rebates)
- Rebate Index Indicator (measures the results of contract compliance efforts and tier achievements)
- Non-Contract as % of Total Spending (monitors the rate of purchases that occur from a non-contract vendor; increases in non-contract may indicate new products or rogue buying)
- Non-Compliant Purchases (monitors the dollars associated with non-contract purchases)
Lessons Learned & Best Practices

The following materials illustrate lessons learned and best practices for UNSPSC implementation. The documents can be found in the GS1 Healthcare US Online Document Library. (Visit www.gs1us.org/healthcare to download.) In addition, links are provided in the References section of this Tool Kit.

- A UNSPSC Success Story: Ministry Health Care
- A UNSPSC Success Story: University Health Care System
Improving Patient Safety and Supply Chain Efficiency

Frequently Asked Questions (FAQs)

What is the UNSPSC?

The United Nations Standard Products and Services Code is a hierarchical convention that is used to classify all products and services. It is the most efficient, accurate and flexible classification system available today for achieving company-wide visibility of spending analysis, enabling procurement to deliver on cost-effectiveness demands and allowing full exploitation of electronic commerce capabilities. The UNSPSC was jointly developed by the United Nations Development Programme (UNDP) and Dun & Bradstreet Corporation (D & B) in 1998.

How does UNSPSC work?

The UNSPSC is a hierarchical classification with five levels. These levels allow analysis by drilling down or rolling up to analyze expenditures. Each level in the hierarchy has its own unique number.

**XX Segment**
The logical aggregation of families for analytical purposes

**XX Family**
A commonly recognized group of inter-related commodity categories

**XX Class**
A group of commodities sharing common characteristics

**XX Commodity**
A group of substitutable products or services

**XX Business Function**
The function performed by an organization in support of the commodity

All UNSPSC entities are further identified with an 8-digit structured numeric code which both indicates its location in the taxonomy and uniquely classifies it. An additional 2-digit suffix indicates the business function identifier. A structural view of the code set would look as follows:

<table>
<thead>
<tr>
<th>Hierarchy Category Number and Name</th>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segment</td>
<td>42</td>
<td>Medical equipment and accessories and supplies</td>
</tr>
<tr>
<td>Family</td>
<td>31</td>
<td>Wound care products</td>
</tr>
<tr>
<td>Class</td>
<td>22</td>
<td>Suture and related products</td>
</tr>
<tr>
<td>Commodity</td>
<td>01</td>
<td>Suture</td>
</tr>
</tbody>
</table>

For more information on how the UNSPSC hierarchy is set up and how UNSPSC works, please read "Why Coding and Classifying Products is Critical to Success in Electronic Commerce".

Why should businesses and organizations classify products & services?

Classifying products and services with a common coding scheme facilitates commerce between buyers and sellers and is becoming mandatory in the new era of electronic commerce. Large companies and organizations are beginning to code purchases in order to analyze their spending.

Nonetheless, most company/organization coding systems today have been very expensive to develop. The effort to implement and maintain these systems usually requires extensive utilization of resources, over an extended period.
of time. Additionally, maintenance is an on-going, and expensive, process. For each new item coded, it takes on average an hour and a half to assign a code. Also suppliers usually don’t adhere to the coding schemes of their customers – if they assign codes at all.

Much duplicated effort and expense has gone into making codes. If there was a single universal coding convention that all companies and organizations could draw from – even if they wanted to customize it for specific purposes – there would be a great deal of savings.

By classifying their products & services, businesses and organizations can assist their customers with:

- Finding and Purchasing - a product and service coding convention brings many benefits to the purchasing function of a company or organization

- Product discovery - a common naming convention allows computer systems to automatically list similar products under a single category. When a person is searching for the category, he or she finds precisely the things being discovered and nothing else.

- Facilitates expenditure analysis - when every purchase transaction of an enterprise is tagged with a common set of product identifiers, purchasing managers are able to analyze enterprise expenditures.

- Control and uniformity across the company and organization - codes bring a single, uniform view of all expenditures in a company/organization. It ties together all departments and divisions, including business functions such as purchasing and settlement.

**Should UNSPSC be used in our organization?**

All providers and organizations should consider using the UNSPSC as a routine matter of business.

- Marketing and sales department should endeavor to mark-up electronic catalogs, invoices, and other commercial documentation with the UNSPSC.

- Purchasing departments should incorporate the codes in purchasing systems to assist employees throughout the organization to find and purchase supplies, and for them to analyze the supplies expenditures of the organization.

**What does UNSPSC do for me?**

By embedding UNSPSC classification standards into your management systems - purchase orders, invoices, electronic documents, product catalogues, websites - all parties throughout the extended supply chain benefit. Here are some examples:

- **Procurement** can keep an eye on how much is spent buying what. This information is readily available to them to analyze the specifics in the buying process at the level of detail that most suits the organizational needs in a timely and precise manner. They can cut in half or less the time it takes to find the products needed by searching by commodity code through brokers, on line exchanges, business partners, etc. across the globe. They can spot buying patterns across departments or business units to leverage better conditions from suppliers and realize overall savings.

- **Marketing** is able to get field data fast for market research, product development, and sales analysis, ultimately delivering to the organization’s bottom line, via customer satisfaction.

- **Sales** can monitor sales channels and distribution all the way to the store shelf or end user. They can gather market intelligence quickly via electronic platforms for accurate sales analysis. They can extend the reach of their products to customers across the globe by publishing e-catalogues, registering with search engines or third-party market places.
How do I find a product or service in the code?

The easiest way to find the codes that you are searching for is to do a search of the codeset. Click on “Search the Code” at the top of the UNSPSC website. We suggest entering a description in the “Search Title” box. It can be a partial description; use “%” as a wild card. For example, entering “%Clamp%” will return all codes containing the word “clamp”. From there you can determine specific clamps that may pertain to your business.

Sometimes a commodity may not be found because:

- Different phrases are used in different regions. For example, the term “cooling exchanger” is the same commodity as a “heat exchanger”; “allen wrenches” are the same commodity as a “hex key”
- The item may be described by what it is rather than how it is used.
- The code is only searchable in English (this will soon change).

How can changes to the code be made and by whom?

The code is regularly updated: any individual or entity can request a change to the code (addition, deletion, move, or edit) after becoming a member of UNSPSC. Requests are posted on the UNSPSC website and voted by Segment Technical Advisers- voting members who have elected to become actively involved in the update of the UNSPSC by contributing their specific expertise.

How often are new versions of UNSPSC released?

The UNSPSC policy calls for two releases per year. In special situations an additional release may be added to the schedule.

What is my organization’s UNSPSC?

UNSPSC is a commodity code that identifies goods and services sold by a company, not the company/organization itself. If another company or organization is asking for your UNSPSC, it is probable they are trying to determine your primary area of business.

Can the UNSPSC be encoded in XML?

Yes. The UNSPSC is a code table and XML is syntax. One can encode anything in XML including the UNSPSC.

How is UNSPSC funded?

UNSPSC is funded through member fees.

Who owns the UNSPSC?

UNDP owns all rights to the UNSPSC. The U.S. Copyright Office has also granted copyright registration to the UNSPSC and the U.S. Patent and Trademark office has granted trademark protection. UNDP addresses all legal issues and will take appropriate legal action to protect its interests in the UNSPSC.

Who manages the UNSPSC?

The UNDP appointed GS1 US as code manager in May 2003. The code manager is responsible for ensuring compliance with the principles of the UNSPSC as well as the integrity of the code schema. GS1 US is responsible for overseeing code change requests, industry revision projects, issuing regularly scheduled updates to the Code, communications with members, as well as special projects and initiatives as determined both by the UNDP and member requests.

Is there a “blog” where UNSPSC questions and comments can be posted?

Yes...there is an unofficial UNSPSC blog which can be reached through the following link.
http://unspscusers.blogspot.com/2005/07/unspsc-users.html Several members of the UNSPSC community monitor this site and contribute when needed.
## Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Glossary Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribute</td>
<td>A piece of information reflecting a characteristic of the object to which an identification number (i.e., GLN, GTIN, etc.) relates.</td>
</tr>
<tr>
<td>Business Function</td>
<td>Fifth level of the UNSPSC hierarchy which is an optional suffix representing the function performed by an organization in support of the Commodity.</td>
</tr>
<tr>
<td>Bar Code</td>
<td>A precise arrangement of parallel lines (bars) and spaces that vary in width to represent data.</td>
</tr>
<tr>
<td>Category</td>
<td>The generic term for items at any level within a classification, typically tabulation categories, sections, subsections, divisions, subdivisions, groups, subgroups, classes and subclasses. Classification categories are usually identified by codes (alphabetical or numerical), which provide both a unique identifier for each category and denote their place within the hierarchy. They contain elements, which are subsets of the classification to which they belong, such as activities, products, types of occupations, types of education, etc.</td>
</tr>
<tr>
<td>Class</td>
<td>Third level of the UNSPSC hierarchy which represents a group of commodities sharing common characteristics.</td>
</tr>
<tr>
<td>Classification</td>
<td>A set of discrete, exhaustive and mutually exclusive observations, which can be assigned to one or more variables to be measured in the collation and/or presentation of data. The terms ‘classification’ and ‘nomenclature’ are often used interchangeably, despite the definition of a ‘nomenclature’ being narrower than that of a ‘classification’. The structure of a classification can be either hierarchical or flat. Hierarchical classifications range from the broadest level (e.g. division) to the detailed level (e.g. Class). Flat classifications are not hierarchical.</td>
</tr>
<tr>
<td>Code</td>
<td>Normally consists of one or more alphabetic, numeric or alpha/numeric characters assigned to a descriptor in a classification. Each code is unique to a property within a classification. If the property changes, then the code should also be changed. Codes can be linked to other codes with common characters, especially in hierarchical classifications.</td>
</tr>
<tr>
<td>Commodity</td>
<td>Fourth level of the UNSPSC hierarchy which represents specific types of products or services.</td>
</tr>
<tr>
<td>Data Standard</td>
<td>The entirety of all GS1 System data standardized in meaning and structure.</td>
</tr>
<tr>
<td>Data Structure</td>
<td>The GS1 System data structures defined in the various lengths required for the different identification purposes, which all share a hierarchical composition. Their composition blends the needs of international control with the needs of the user.</td>
</tr>
<tr>
<td>Term</td>
<td>Glossary Definition</td>
</tr>
<tr>
<td>------</td>
<td>---------------------</td>
</tr>
<tr>
<td>EDI</td>
<td>Acronym for Electronic Data Interchange (defined below).</td>
</tr>
<tr>
<td>Electronic Commerce</td>
<td>A method of business communications and management using electronic methods, such as electronic data interchange and automated data collection systems.</td>
</tr>
<tr>
<td>Electronic Data Interchange (EDI)</td>
<td>The computer-to-computer exchange of structured information, by agreed message standards, from one computer application to another by electronic means and with a minimum of human intervention.</td>
</tr>
<tr>
<td>Family</td>
<td>Second level of the UNSPSC hierarchy which represents a commonly recognized group of inter-related Commodity categories (i.e., Classes).</td>
</tr>
<tr>
<td>GLN</td>
<td>Acronym for the GS1 Global Location Number (defined below).</td>
</tr>
<tr>
<td>Global Location Number</td>
<td>The globally unique GS1 System identification number for legal entities, functional entities, and physical locations. The GLN is 13 digits, comprised of a GS1 Company Prefix, Location Reference, and Check Digit. Supply side trading partner locations generally include corporate headquarters, regional offices, warehouses, plants, and distribution centers. Demand side trading partner locations generally include corporate headquarters, divisional offices, stores, and distribution centers.</td>
</tr>
<tr>
<td>Global Trade Item Number</td>
<td>The globally unique GS1 System identification number for products and services. A GTIN may be 8, 12, 13, or 14 digits in length, represented as GTIN-8, GTIN-12, GTIN-13, and GTIN-14 respectively.</td>
</tr>
<tr>
<td>GS1 System</td>
<td>The specifications, standards, and guidelines administered by GS1. GS1, through the Global Standards Management Process, manages the GS1 System to maintain the most implemented standards in the world.</td>
</tr>
<tr>
<td>GTIN®</td>
<td>Acronym for the GS1 Global Trade Item Number® (defined above).</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>Refers to the classification structure where a classification is arranged in levels of detail from the broadest to the most detailed level. Each level of the classification is defined in terms of the categories at the next lower level of the classification.</td>
</tr>
<tr>
<td>Identification Number (ID)</td>
<td>A numerical designation that uniquely identifies an object in the supply chain. Identification numbers are used to retrieve information previously exchanged between trading partners and stored in their computer database files.</td>
</tr>
<tr>
<td>Segment</td>
<td>Highest level of the UNSPSC hierarchy which represents the logical aggregation of Families for analytical purposes.</td>
</tr>
<tr>
<td>Supply Chain Partner</td>
<td>A party to transactions in the supply chain, such as a supplier (seller) or a customer (buyer).</td>
</tr>
<tr>
<td>Taxonomy</td>
<td>A set of elements or categories—and logical relationships among the categories—ordered hierarchically.</td>
</tr>
<tr>
<td>Term</td>
<td>Glossary Definition</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Trade item</td>
<td>Any item (product or service) upon which there is a need to retrieve pre-defined information and that may be priced or ordered or invoiced at any point in any supply chain.</td>
</tr>
<tr>
<td>U.P.C. symbol</td>
<td>A bar code symbol that encodes the GTIN-12, Coupon-12, RCN-12, and VMN-12.</td>
</tr>
</tbody>
</table>
Improving Patient Safety and Supply Chain Efficiency

References

- UNSPSC Website
  http://www.unspsc.org

- UNSPSC Case Studies & White Papers
  http://www.unspsc.org/documentation.asp

- UNSPSC Web Seminars
  http://www.unspsc.org/webseminar.asp

- Hospital Supply Chain Savings
  http://www.unspsc.org/AdminFolder/Documents/Montgomery_Kamani_FINAL.pdf

- A UNSPSC Success Story: Ministry Health Care

- A UNSPSC Success Story: University Health Care System

- Why Coding and Classifying Products is Critical to Success in Electronic Commerce
  http://www.unspsc.org/AdminFolder/Documents/UNSPSC_White_Paper.doc

- HFMA’s 2005 Supply Chain Benchmarking Survey: Managing Resources to Achieve Improved Economic Outcomes and High-Quality Care
  http://www.hfma.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=18013
Appendix: Sample Vendor Letter

Supplier Name
Supplier Address
Supplier City, State, Zip
Date

RE: Requirement for the use of United Nations Standard Products and Services Code® (UNSPSC®) in all business documents

Dear Supplier:

You are receiving this letter as a valued supplier/distributor to [insert your organization name]. In the last several years, there have been ongoing efforts to adopt commercial supply chain standards in U.S. healthcare. Government regulatory organizations, healthcare associations, group purchasing organizations and manufacturers have all supported the rapid adoption of these commercial standards. [Insert your organization name] has watched these efforts closely and has determined that now is the time to adopt commercial standards in all of our business processes.

The United Nations Standard Products and Services Code (UNSPSC) is the mostly widely used product classification system worldwide and is used broadly in U.S. healthcare. The UNSPSC also compliments the GS1® supply chain standards currently being adopted in healthcare. These GS1 Standards are the same as seen in the retail/grocery industries through the use of the Global Trade Item Number® (GTIN®) for accurate product identification, GLN for accurate location identification, and the Global Data Synchronization Network® (GDSN®) for product definition and data accuracy.

Beginning [insert date], we will modify the terms and conditions in our contract language to require the use of the United Nations Standard Products and Services Code (UNSPSC) in all contracts and business transactions.


UNSPSC is a hierarchical set of product categories used by supply chain partners worldwide to classify their products and services. UNSPSC will be used as a replacement for Product Classification numbers in e-commerce transactions, specifically in the contract and catalog transactions.

In order to assist you in this transition process we urge each supplier to contact GS1 US at www.gs1us.org for the applicable specifications and standards.

Thank you in advance for your willing participation in this effort.
Disclaimer

GS1 US, Inc.™ is providing this document as a service to interested industries. This document was developed through a consensus process of interested parties.

Although efforts have been made to assure that this document is correct, reliable, and technically accurate, GS1 US MAKES NO WARRANTY, EXPRESS OR IMPLIED, THAT THIS DOCUMENT IS CORRECT, WILL NOT REQUIRE MODIFICATION AS EXPERIENCE AND TECHNOLOGICAL ADVANCES DICTATE, OR WILL BE SUITABLE FOR ANY PURPOSE OR WORKABLE IN ANY APPLICATION, OR OTHERWISE. Each user of this document assumes all risk and responsibility for its use of the materials.

Use of this document is with the understanding that GS1 US accepts no liability whatsoever for any direct, indirect, special or other consequential damages of whatever kind resulting from whatever cause through the use of the document or any information therein, even if GS1 US has been advised of the possibility of such damages.

IAPMO

In this publication, the letters “U.P.C.” are used solely as an abbreviation for the “Universal Product Code” which is a product identification system. They do not refer to the UPC, which is a federally registered certification mark of the International Association of Plumbing and Mechanical Officials (IAPMO) to certify compliance with a Uniform Plumbing Code as authorized by IAPMO.