

The Health Industry Bar Code Standard:

Frequently asked questions

What is HIBCC and the HIBC Standard?

HIBCC is the Health Industry Business Communications Council, the primary standard-setting and educational organization for bar coding in the world of healthcare. We were founded in 1983 by a consortium of national trade associations specifically to develop an approach to labeling that would fulfill the unique requirements of our industry. The Health Industry Bar Code (HIBC) Standard is the result of that effort.

Millions of products bearing the HIBC Standard label are now found throughout the industry and the world. In Europe the standard has been accredited for use by the European Committee for Standardisation (CEN), and is administered by the European Health Industry Business Communications Council (EHIBCC), our companion organization. Major exporting manufacturers on the Pacific rim such as the Fuji, Konica Corporation, and the Terumo Corporation all have HIBC labeler identification codes.

In the US the HIBC standard data structure meets all current specifications for the Universal Product Number (UPN) initiative now underway, as well as the recent US Department of Defense initiative.

Companies using the HIBC labeling format are thus already in full compliance with voluntary standards in the institutional healthcare supply channel. Those which have not yet begun labeling should review the following prior to selecting a labeling format.

Why does healthcare need its own labeling standard?

The Health Industry Bar Code Standard was created because the health industry is unique. Unlike most other industries, healthcare products have special human safety requirements, are routinely monitored by government regulators, and are often “purchased” indirectly (through insurance claims) for patients in hospitals and other healthcare facilities. As a consequence, labels must be as error-free as possible, must contain additional information, and must satisfy greater needs than those commonly found in point-of-sale environments such as grocery check-out counters.

By utilizing the HIBC format, manufacturers and distributors are meeting these requirements while simultaneously using the system which best suits their own internal needs.

In short, everyone in the supply channel benefits from the HIBC Standard.

What are the advantages of the HIBC Standard?

- **It is the established and prevalent standard for healthcare product identification.**

The HIBC Standard was developed and is maintained by a consortium of expert, voluntary participants from all segments of the healthcare supply-information channel, including healthcare facilities. This assures that the healthcare facility is enabled — not restricted — by the standard.

Although other bar code formats, such as the GTIN (formally called the Uniform Product Code, or U.P.C./EAN) are found on healthcare products which are also sold in retail environments, they have limited usefulness within institutional environments.

- **It is designed to allow you to use your own product identifiers.**

The HIBC Standard accommodates virtually all types of product catalog identifiers because it allows both alphanumeric and variable length formats. Your records and systems are based on the identifiers that *you* have assigned to your items. As a consequence, if you already have an established internal identification scheme, you will most likely be able to use it within the HIBC Standard format with no required changes.

Bar code standards should not require you to abbreviate or convert your product/catalog identifiers. Abbreviation or conversion in your system will require costly data-processing and programming time, as well as the costs of changing and updating labels, files, forms, catalogs, documentation and internal procedures.

Furthermore, errors made anywhere along the supply-information channel during these conversion processes could not only be costly but dangerous as well. This is especially true in the event of necessary product tracking or recalls of healthcare products subject to regulation, accountability and government oversight.

There are several important characteristics of the HIBC Standard that allow you to control your own labels:

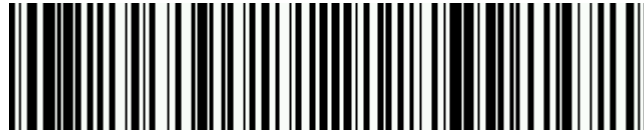
- **Alphanumeric capability**
The HIBC Standard accommodates bar codes that can contain both letters and numbers. Since many product catalog identifiers include letters, conformance to an all-numeric standard, such as the Uniform Product Code, requires that letters be converted to numbers.
- **Variable length of the product identification field**
Healthcare product manufacturers have identifier systems that vary in line length. The HIBC Standard accommodates identifiers that can contain as many as 18 characters in any alpha or numeric combination, while other standards strictly limit product identifiers to exactly five all-numeric characters. Furthermore, the HIBC 18-character length accommodates the use of meaningful sub-fields within product identifiers.
- **Smaller symbol than a similar mass-market bar code**
For many years, the alphanumeric, multi-length identifiers which are common in the healthcare industry could not be used in the retail environment, where Uniform Product Codes are prevalent. Recognizing the shortcomings of the restrictive format, the UCC has developed a method for accommodating healthcare. However, the method requires 25% more label space than its HIBC counterpart and still requires a unique, all numeric code assigned to each item. For example, both of the labels below are for the same item:

HIBC



+H216040A35R

UCC



(01)5070503412345(240)0040A3

- **It is the only complete bar code solution for the entire supply chain.**

The HIBC Standard describes not only how to use bar codes to identify healthcare products, but also anything else a provider may choose to identify. Examples include patients, patient records, specimens, employees, implantables, procedures, assets, and purchase orders.

Other bar code standards provide no support for these specific healthcare applications. And since all HIBC bar codes were created to be compatible with each other, they form an integrated identification solution for the industry.

- **It incorporates all package sizes.**

The HIBC Standard describes how to bar code your products in all their packaging configurations, from the largest levels of packaging down to the smallest unit of use and unit dose packages. The HIBC Small Package Symbol is an innovation which has no counterpart in any other labeling standard. It allows the provider to capture information at the bedside, thereby increasing its value and usefulness within healthcare facilities.

As you will see from the following examples, using the HIBC bar code standard at all packaging levels requires less decision making and less technical support than other standards. That is because the HIBC bar code data structure remains consistent, regardless of the size of the package being labeled.

Mass-market bar codes require you to use different types of formats, depending on packaging characteristics. These “adjustments” create additional overhead in your information system, because it must interpret each type.

Another benefit to using the consistent HIBC format is that even after bar codes are replaced with Optical Character Recognition (OCR), you will not have to change your data or go through a costly change in your system.

- **It is a consistent data format through each packaging level.**

The HIBC bar code data format is identical for both outer cases and Stock Keeping Units (SKUs). From one level of packaging to the next, the data elements begin and end at the same character

positions, and either of two alphanumeric bar code symbologies, Code 39 or Code 128 can be used without the need to change any of the data.

In the examples below, the Labeler Identification Code (LIC, assigned by HIBCC) is “H216”. The Product Catalog Number is “04083”. The following character indicates the Unit of Measure, and the final character is the “Link Character” a check digit that can also be used to “link” with secondary information, such as lot code and expiration date.

Note that in these examples, the length of the data is the same and the information in each symbol begins and ends in the same character positions, even though these labels are for entirely different package sizes.

HIBC
Bar Code for Case Level Packaging



+H2160408351

HIBC Bar Code for Stock
Keeping Unit Level Packaging

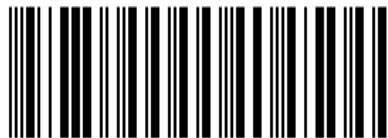


+H216040832\$

By contrast, other market bar code standards require a change in symbologies at each packaging level. Depending on the characteristics of the package, you may not be able to use the same symbology on every packaging level.

If you plan to use a GTIN (U.P.C. or EAN) bar code, you must evaluate packaging characteristics and market preferences to determine which of three symbologies is appropriate for each packaging level of your product. Depending on these factors, you may not be able to use the same symbology on every packaging level. And since each symbology has a slightly different data format, you and your customers' systems must be programmed to accept either identifier as representing the same item.

For example, this symbol, which is 14 digits long, can be used on cases and lower levels of packaging:



20399999004088

While this symbol, which is 12 digits long, can be used on SKUs, cases, and other levels of packaging:



While this symbol, which is 16 digits long, can be used on cases and lower levels of packaging:



These variations require more technical support to allow information systems personnel to properly interpret the symbols. For example, in the above labels the starting character position for the core product number (“9999900408”) is in three different positions:

- in the top bar code it begins at the 4th position;
- in the middle bar code it begins at the 2nd position; and
- in the bottom bar code it begins at the 6th position.

Thus, to extract the core product number from the above symbols you must utilize a far more complex method to do so than what would be required with comparable HIBC bar codes.

How do I become a HIBC Labeler?

Contact HIBCC for a full copy of the HIBC Supplier Labeling Standard and to apply for your company's Labeler Identification Code (LIC). This information is also available to you on the HIBCC's World Wide Web Home Page (www.hibcc.org). HIBCC's Auto-ID Technical Committee meets three times a year at various locations throughout the US. A schedule is available upon request from the HIBCC office.