

Universal Symbols in Health Care



Developing a Symbols-Based Wayfinding System: Implementation Guidebook

Part 3:

Design and Development Using Symbols

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PART 3: Design and Development Using Symbols

The success of symbol-oriented wayfinding systems lies in their ability to be seen and easily understood. While this may seem simple and obvious, health care facilities are often constrained in their ability to provide effective and legible signs. Dark spaces, tight and cluttered corridors, and high traffic make incorporating symbols a challenge. Developing effective symbols-based sign systems requires balancing legibility issues with the constraints of the facility.

At the same time, designers must also communicate design best practices so they can be implemented effectively by the facility when changes and additions are made. Health care facilities and designers should consider several key design issues specific to symbols in health care environments:

- Symbol Size, Contrast, and Consistency** - The most significant factor affecting the use of symbols in health care facilities is size. When symbols are small in comparison to text, they are either ignored or treated as secondary information. Symbols also need to contrast strongly with their surrounding environment to be seen in the subdued lighting common to health care facilities. They should also be consistent in size. Research shows that visitors have difficulty recognizing the same symbols when they are used in too many different sizes within a wayfinding system.
- Symbol Location and Consistency** - Consistency is not only a key factor in the size of symbols, but also in their location. Research also indicated that people expect similar signs to be located around similar-appearing decision points in the same facility. If a wall-mounted directory is seen at one corner, the observer will expect the symbol to be in a similar location at the next decision point.

Design and Development Using Symbols

Develop a design vocabulary linking all sign elements to the wayfinding strategy.

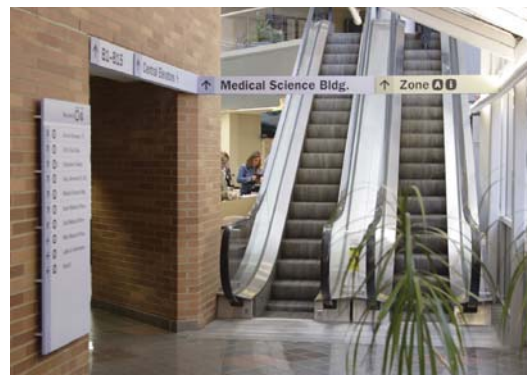
Develop guidelines for the placement of signs based on the wayfinding strategy.

Ensure that symbols are large enough to be legible on all signs.

Utilize only a few different symbol sizes.

Place symbols in consistent locations on signs.

Place signs in consistent locations within the facility.



The wayfinding program at Lankenau Hospital in Wynnewood, Pennsylvania (developed by ex;it), uses large-scale, high-contrast symbols at key decision points. Bright lighting significantly enhances sign and symbol legibility.

- **Legible Identification Signs** - Identification signs are often where wayfinding systems are less effective, with symbols that are too small and out of the line of site. Successful wayfinding programs use large symbols and often contain multiple signs, both parallel and perpendicular to the viewers' line of site. This is a practice that has been reinforced in accessibility guidelines. The ADA requires all symbols to be in a 6-in. field.
- **Sign Vocabulary and Guidelines** - During the design stage it is very important for designers to communicate how the entire wayfinding system works while presenting the design of individual sign elements. Two documentation approaches are crucial to successfully communicating sign system design:



- ~ A sign vocabulary document with a visualization and written description of every sign being utilized in the system to show the interrelationship between individual sign elements.
- ~ Guidelines that provide requirements and recommendations for the most legible sign locations.

The wayfinding program for Buenos Aires City Hospital (designed by Diseño Shakespear) is famous for its use of large symbols for wayfinding. Identification symbols are as large as 36-in. square.

Sign vocabulary and guidelines for the four Innovator Facilities can be found in the ***Innovator Sign Design Vocabulary*** documents.

Case Study: Sign Vocabulary and Guidelines

Children’s Mercy Hospital

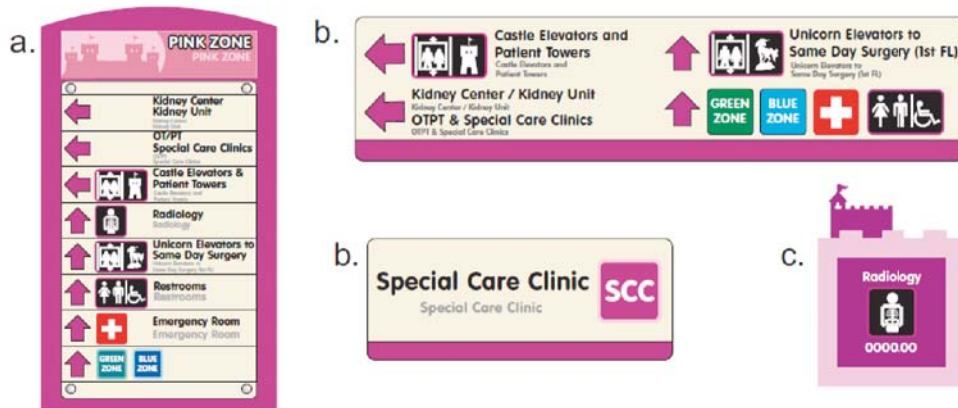
The wayfinding program for Children’s Mercy Hospital in Kansas City, Missouri, optimizes symbol legibility in the face of two difficult issues. The extensive number of departments and zones require large numbers of building unit icons, health care symbols, and support symbols. In addition, low ceiling heights and subdued artificial lighting made the use of large overhead signs difficult. In response, the wayfinding program incorporated the following strategies:

Small number of sign types

The hospital employs only three major sign types: a large, wall-mounted sign that can serve as both a directory and wayfinding sign, large directional signs at major decision points, and identification signs.

Zone identification to structure information

The use of color-coded zones is crucial to supporting the large number of symbols used in the facility.



The sign vocabulary developed for Children’s Mercy Hospital shows how symbols are deployed across a range of sign types. (Note: placeholders are used for incomplete symbols.)

Large symbols

All wall-mounted signs use larger (at least 2-in.) symbols than those typically seen on standard wall-mounted directory signs and identification signs.

Only three sizes for symbols

Only three sizes are used for symbols: 3-in. symbols for wall-mounted signs, 6-in. symbols on identification on support signs, and 12-in. symbols for identification on primary destination signs.



Multiple consistent directory signs at every major decision point

Directory signs were placed at multiple corners of every major decision point in the facility, perpendicular to visitor line of site in all directions. Directory wayfinding signs were configured similarly, with health care symbols, support symbols, and unit symbols in the same locations on the signs.

At Children's Mercy Hospital, clear guidelines for locating signs at key decision points made the sign system more legible and reduced clutter.

PART 3: Additional Resources

Attachment A: Innovator Facility Matrix

This spreadsheet summarizes the Innovator Facilities and the wayfinding strategies developed for each.

Innovator Sign Design Vocabulary

These design documents show the sign vocabulary and placement guidelines for the four Innovator Facilities.

Case Study: Lankenau Hospital

This project by ex;it and AGS utilizes many of the design strategies included in the Phase II research.

Innovator Site Picture Gallery

This picture gallery shows all the Innovator Facility Sites with and without prototype signs.

