

Using Universal Symbols

Improving Wayfinding Through Universal Signage Systems

Imagine having a health emergency and going to a hospital only to find that no one speaks your language—and that you cannot read any of the signs. That is the reality for the millions of non-English-speaking and illiterate people living in the United States. Now suppose that you are advanced in age with vision impairments that prevent you from seeing the signs. That is the reality for millions more in the United States trying to navigate their way around health care facilities.

The Joint Commission's Management of the Environment of Care standards require organizations to provide safe, functional, supportive, and effective environments for patients. An organization should consider key elements that contribute to creating a space that feels good and works well for patients, families, staff, and others experiencing the health care delivery system. Finding one's way around the exterior and interior space of a health care facility is one such element. Referred to as *wayfinding*, it can positively influence patient outcomes and satisfaction and improve patient safety for a health care organization.¹

Wayfinding Through Universal Symbols

Using universal symbols can be a simple and flexible way to create a culture of communication and wayfinding among patients and the entire hospital staff, including facilities staff, physicians, nurses, interpreters, and volunteers.²

The *Hablamos Juntos* project, administered by the University of California–San Francisco (UCSF) Fresno, Center for Medical & Education Research, is an initiative of the Robert Wood Johnson Foundation, which funded 10 demonstration proj-

ects to develop practical solutions for language, written, and signage barriers in health care. *Hablamos Juntos* is interested in improving the physical environment and overcoming obstacles to wayfinding. Yolanda Partida, M.S.W., D.P.A., director of the initiative's National Program Office, was first inspired by the official icons she saw in Mexico City's subway system. Another trip to Mexico City almost 30 years later confirmed Partida's ideas. "The icon system had grown," she says. "We began to ask 'Are symbols an option for wayfinding signage in health care facilities?'"

Partida's question led to the development of 28 universal symbols by a team of leading health care facility designers. One of the team's designers and researchers, Jim Bolek, describes universal symbols as "a language that is 'read' when a picture or symbol is connected with the viewer's concept of its meaning."

The 28 universal symbols were selected from a group of nearly 600 existing and newly designed symbols after a series of tests and evaluations "representing one of the most comprehensive symbols design efforts ever seen."² The symbols are available for download free of charge from the *Hablamos Juntos* Web site, at http://www.hablamosjuntos.org/signage/symbols/default.using_symbols.asp. The symbols are copyrighted by the Robert Wood Johnson Foundation to protect the images; the symbols may not be altered or changed.

Pilot Testing

Four pilot hospitals volunteered to work with the *Hablamos Juntos* testing team. Each invited 30 patients of varying English proficiency from its hospital population to test different

signage strategies. The test required participants to find six locations within the pilot hospitals. For the test, some signs were replaced by symbols, others were augmented with symbols, and still others were left untouched. The test studied how the participants used the signage and timed how long it took them to get from one place to another. The pilot testing found that participants walked one foot per second faster to find their destination when guided by symbols than when guided by multilingual word signs.²

St. Francis Medical Center

St. Francis Medical Center is a not-for-profit, 130-bed facility in Grand Island, Nebraska, that has a large Spanish-speaking population, including many people who speak Spanish as their primary language. This demographic plus the projected opening of a new patient tower made St. Francis Medical Center eager to participate in the pilot study.

"At the time of the pilot study, St. Francis had begun to experience a tipping point where we had so many people who spoke primarily Spanish we were beginning to feel that we were not communicating as clearly as we once had," remarks Marie de Martinez, F.A.C.H.E., vice president for Business. St. Francis Medical Center and its parent organization, Catholic Health Initiatives (CHI), pride themselves on being focused on diversity and improved access to care for all populations. "Even before the study, we had made a commitment to put everything in English and Spanish," says de Martinez. "We went so far as to host at the local mall an information 'store' offering free-of-charge bilingual materials."

Based on its experience with Hablamos Juntos and the universal signage pilot study, St. Francis Medical Center is incorporating universal signage into its new patient tower. St. Francis is currently in the design phase of its signage system and eventually plans to use universal symbols wherever possible and appropriate. "Participating in the study allowed St. Francis to serve as a model for other CHI organizations," adds de Martinez. CHI is so committed to ensuring access that it is providing the design funding for St. Francis to incorporate universal signage in the new patient tower.

To date, St. Francis Medical Center has won several national awards for patient satisfaction and its hospitality program. "We expect hospitable, helpful behavior from our staff," says de Martinez. "Staff are expected to stop what they're doing any time someone asks directions (or even looks lost) and walk that person—not just point the direction—to the desired destination. This is a healing environment. Making people feel at home and welcome is vital in fostering the healing process."


St. Francis will use its hospitality program to study patient flow for its new patient tower both during the design process and after it opens.

Implementation Strategies

Moving to a universal symbol-based signage system may save organizations money over time; however, the initial investment of completely revamping the signage system may be cost-prohibitive. "Organizations will most likely have to phase changes in over time," remarks Partida. Hablamos Juntos suggests starting by using symbols to identify key destinations and then expanding into more complex sign systems and print support.²

The Hablamos Juntos *Universal Symbols in Health Care Workbook* offers a nine-part best practices strategy for using universal symbols in wayfinding (see the sidebar below). To the Hablamos Juntos project, wayfinding is more than just a term associated with signage. It is "an overall design philosophy that aids a

diverse population to arrive at a destination with ease and comfort." Furthermore, "universal symbols can be a key factor in successfully increasing hospital efficiency and visitor satisfaction, and are an essential part of any effective wayfinding strategy."²

Health care organizations are charged with the task of providing better access to care for everyone entering the facility, regardless of English proficiency, literacy, or physical ability. Successful wayfinding within an organization creates a safe, welcoming, and comfortable environment that promotes safe, effective, high-quality care. 

References

1. The Joint Commission: *The Comprehensive Accreditation Manual for Hospitals: The Official Handbook*, Oakbrook Terrace, IL: Joint Commission Resources, 2006.
2. Hablamos Juntos: *Universal Symbols in Health Care Workbook*, http://www.hablamosjuntos.org/signage/symbols/default.using_symbols.asp#bpw (accessed Dec. 11, 2006).

Hablamos Juntos's Best Practices for Universal Symbols in Wayfinding

The following information is adapted from the Hablamos Juntos Project's *Universal Symbols in Health Care Workbook*. For a full copy of this workbook, please visit the Hablamos Juntos Web site, at <http://www.hablamosjuntos.org>.

Part 1: The Levels of Universal Health Care Symbols

Create a hierarchy of symbol information based on destination importance. Organizations should consider all types of universal symbols available, including the following:

- Primary activity-based symbols—for specific hospital functions include the 28 universal health care symbols developed by the Hablamos Juntos project.
- Secondary support symbols—for hospital functions that are universal to most buildings, such as for elevators and restrooms.
- Tertiary exterior symbols—for landscape outside the hospital and that direct visitors around the building's exterior, such as no parking signs.

Part 2: Wayfinding Concepts Using Universal Health Care Symbols

Effective wayfinding systems are based on two basic concepts: visibility and consistency. The signs must be easily visible for people, consistent in height, and placed in easily observable locations. In addition, the following should be considered:

- Symbols should be in the same location on every directional sign, if possible.
- Signs can use visible numbers, letters, and landmarks.
- Signs should be placed in every location where a decision must be made and should be spaced so that successive signs are completely visible to each other.
- Symbols on building directories should be at least 3/8 inch in height.
- Directories should be in the same location on every floor and should be large landmarks in prominent locations.

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Part 3: The Types and Locations of Symbol Signs

Effective wayfinding depends on the consistent location of specific sign types. The following should be considered when selecting the location of symbol signs:

- Two identity signs should be used, the first parallel and at eye level to the destination entrance and the second perpendicular to and overhead at the destination entrance.
- Overhead signs must have at least 80 inches of clearance.
- Wall-mounted directional signs should be at least 60 inches off the ground.

Part 4: Symbols and Text on Signs

The key to success in designing with universal symbols in hospitals is remembering that the symbols are not intended to replace text but should be integrated with the text on signs. The following should be considered when integrating symbols with text on signs:

- Use extensive print and map support for symbol-dominant signs.
- Use balance for signs that have an equal emphasis on symbols and text.

Part 5: Symbols and the Americans with Disabilities Act (ADA)

The ADA rules are the basis for sound best practices for creating visible and effective sign systems. While state sign codes may vary slightly, the following standards are the most commonly used with symbol and multilingual signs:

- Signs must be centered at 60 inches off the ground.
- The symbol field on identification signs must be at least 6 inches in height.
- Raised text and Braille must be in English.

Part 6: Reducing Sign Clutter

Clutter is one of the biggest issues affecting wayfinding in hospitals today. There are two kinds of clutter that need to be addressed when designing and placing symbol signs: clutter in the environment and clutter on individual signs. The following should be considered when designing and placing symbol signs:

- Reduce the number of information elements not directly related to wayfinding and identification.
- For complex signs, use few signs, with a clear hierarchy of information.

- For simple signs, use many sign elements that indicate specific tasks.

Part 7: Lighting and Color of Symbol Signs

Lighting levels are often set very low in hospital facilities, and are often too low for sighted people, let alone those with vision disabilities. When using symbols, developing color and lighting standards is crucial to creating a visible and consistent system. The following should be considered when developing color and lighting standards:

- Provide lighting that can make signs readable from at least 25 feet away.
- Use a white or light background if lighting is low.
- Sign contrast should be at least 60% between type or symbol and background colors.

Part 8: Symbols with Print and Interactive Media

Good environmental design and sign systems are not the only factors used in creating effective wayfinding systems. Adding symbols to print and electronic media can provide ideal additional support and reassurance for people trying to locate destinations. The following elements of print and interactive media should be considered when creating an effective wayfinding system:

- Multilingual handouts and cards provide the best support for symbol signs.
- Maps can be effective if kept very simple.
- Locate print support in multiple locations through the hospital.

Part 9: Staff and Volunteer Symbol Training

Hospital staff need clear instructions on how to best use symbol signs. The following should be considered when training hospital staff on symbol signs:

- Train volunteers and staff in giving directions using signs and handouts.
- Interpreters should help orient people to the facility and play a role in teaching people how to use the sign system on their own.

Source: *Hablamos Juntos*: "Executive Summary," Universal Symbols in Health Care Workbook, http://www.hablamosjuntos.org/signage/symbols/default.using_symbols.asp#bpw (accessed Dec. 11, 2006).

