Studies have shown that designing “patient-centric” healthcare environments can alleviate stress for both patient populations as well as healthcare staff members. Patient-centric designs carefully consider how patients will interact with the built environment, and how the built environment itself can work to make their healing process easier. An important aspect of these designs is how they address “wayfinding,” which can be defined as the basic activity of navigating through these healthcare environments. It follows that optimally designed signage that assists wayfinding is imperative for enhancing patients’ healthcare experiences, especially since poor signage can cause confusion and potentially lead to unnecessary complications. Research into how healthcare signage can improve wayfinding is plentiful, and is worthy of reviewing so that some general standards can be readily available for designers.

**Methods**

The authors analyzed 34 published research articles in order to extract major themes and recommendations for healthcare designers involved with implementing wayfinding tools and designs. A published “best practices” manual was also consulted to provide a framework for categories in which these literary review findings could be organized. Nine categories were used in total, in no particular order of importance: 1. text formatting, 2. information hierarchy and density, 3. symbols and pictograms, 4. colors, 5. standardization, 6. inclusivity and user characteristics, 7. illumination, visibility, and legibility, 8. language and terminology, and 9. placement, dimensions, and typology of signs.
The authors deduced a variety of guidelines for each of their nine categories that could aid healthcare designers in creating and implementing the most helpful signs possible, according to the existing research. Summaries of findings for each of the nine categories are extensively outlined in the article, including specific typefaces that can be used and how they should be aligned, spaced, and capitalized. The category of color proved to be contentious, as perceptions of color vary widely among hospital guests; the issue of color may have to be handled on a case-by-case basis, at least until further research is conducted. Similarly, the use of symbols in hospital signage is highly subjective, and may require input from hospital users. The illumination of signs was revealed to be of extreme importance; poor lighting can significantly harm the efficacy of all other sign design protocols, while too much lighting can produce reflections, glare, or misleading shadows. The authors hold that their recommendations for text layout and formatting, as well as for pictograms and symbols, are the most important due to their direct impact on the majority of users.

Limitations
The authors note that relevant databases containing further information on wayfinding design strategies may have been excluded from this study. Additional keywords and wider inclusion criteria could also have been incorporated into the database search. This study is a literature review, and therefore does not provide any novel quantitative or qualitative research aside from aggregations of consensuses put forward by previous studies.

Design Implications
Designers involved in creating wayfinding signage for hospital inhabitants could benefit from carefully considering all of the primary categories discussed in this literature review, namely: 1. text formatting, 2. information hierarchy and density, 3. symbols and pictograms, 4. colors, 5. standardization, 6. inclusivity and user characteristics, 7. illumination, visibility, and legibility, 8. language and terminology, and 9. placement, dimensions, and typology of signs. Signage design considered on these levels can add value to already-existing facilities, potentially foregoing possible department migrations, but more generally by making time spent navigating through hospitals less stressful for all parties involved.