

# FAMILY FIRST

## RESEARCH SUMMARY

Health care design requires a unique understanding of how care-givers, patients, and their families interact in a healthcare setting. "Patient-and family-centered care is an innovative approach to the planning, delivery, and evaluation of health care, grounded in mutually beneficial partnerships among health care providers, patients, and families" (Abraham 2012).

Patient room design needs to provide adaptable and flexible spaces for each occupant and the needs that he or she brings. Ways to meet these expectations include providing multifunctional furniture and wireless access throughout the space. Providing appropriate furnishings can provide a space that offers opportunities for individual use, or act as a gathering area for multiple people.

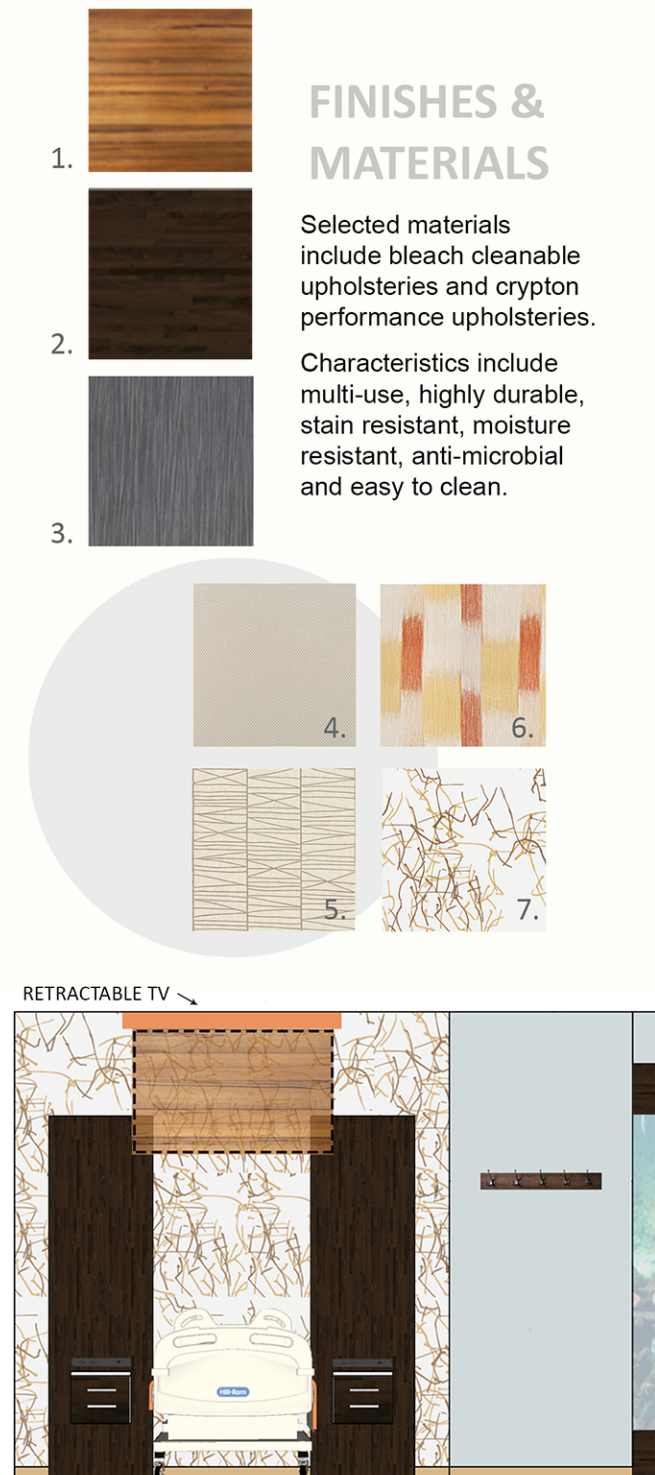
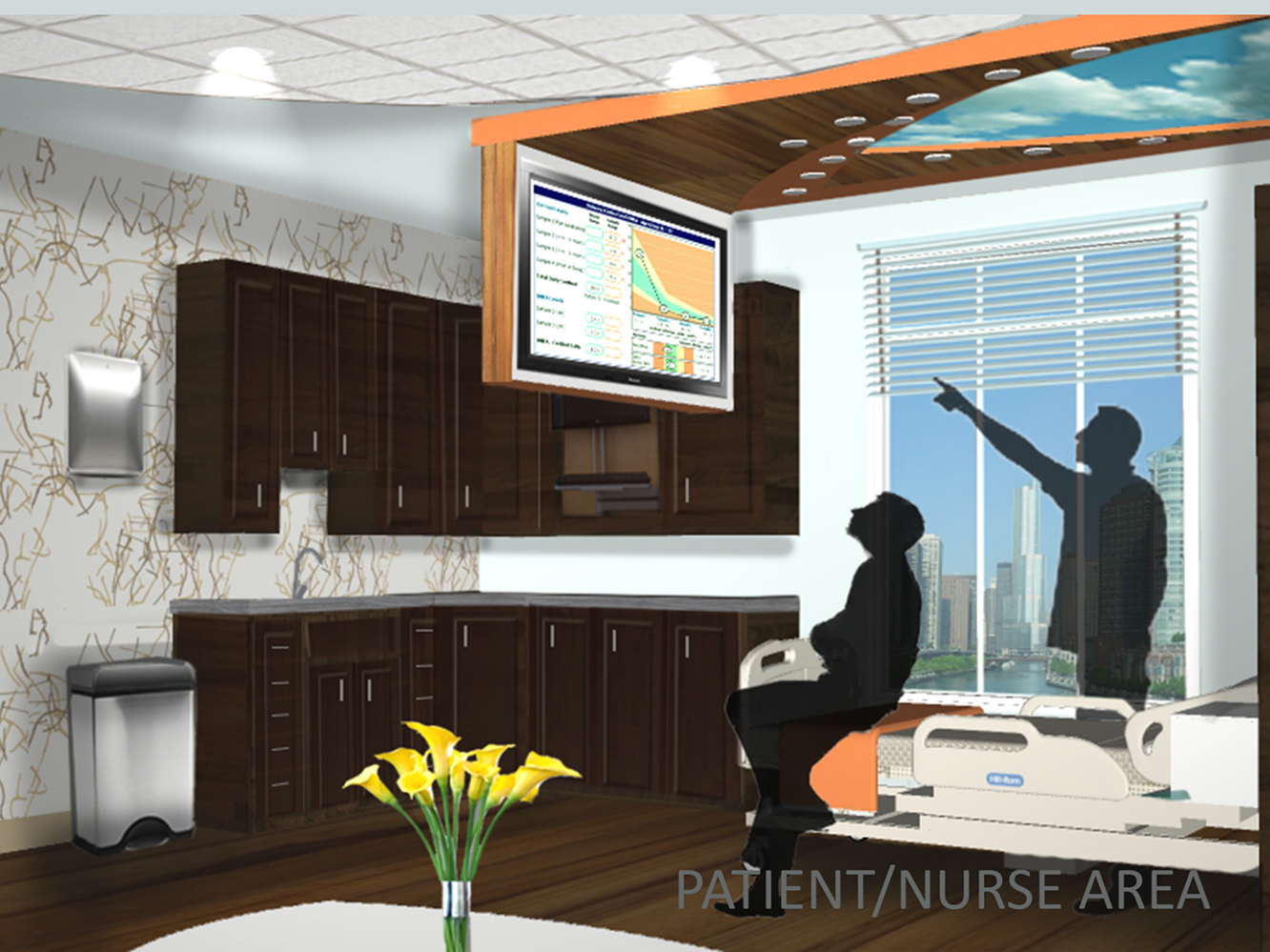
Patients and family members experience difficulty sleeping in a hospital room for various reasons including outside noise and feelings of homesickness and discomfort (Meltzer, Davis, and Mindell 2012). Elderly patients prefer to have a space for family to come and stay when they have unexpected surgeries at the hospital. This space must accommodate for sleeping (Wells and Braggs 1997). This means that the space needs to be comfortable for both the family and the patient as well as dealing with acoustics for keeping unwanted sound out while keeping the space welcoming.

In order to assist in the transformation that patient-and family-centered care is making, collaborative and innovative features need to be implemented. This space will provide patients, nurses, and families with solutions that accommodate today's generation. In order to adapt to the growth of technological advancements patient rooms should be equipped to complement these advancements and allow for flexible and collaborative presentations as well as allow the patient to be hands on with his or her care. Technology must be implemented that allows the patient to control their environment without the help of a care taker.

Abraham, M. & Moretz, J.G. (2012). Implementing patient and family-centered care: Part 1 Understanding the challenges. *Pediatric Nursing*, 38, 44-47.

Meltzer, L., Davis, K., & Mindell, J., (2012) Patient and parent sleep in a children's hospital. *Pediatric Nursing*, 38(2), 64-71.

Wells, N., & Braggs, J. G. (1997) Rooming-In for elderly surgical patients. *Applied Nursing Research*, 10(2), 72-79.



## GOALS

- Adaptable**  
The capability of creating an operative space for the patients' needs and their visiting families
- Functional**  
Providing a practical environment to increase performance and productivity for nurses and doctors
- Sustainable**  
Respecting the characteristic of the building while using sustainable materials that will maintain the spaces viability



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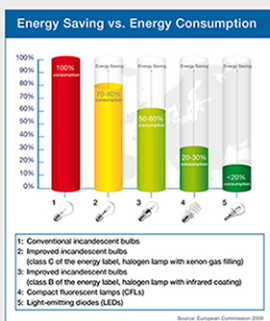
## SUSTAINABILITY & TECHNOLOGY

In order to help the patients maintain their dignity during their stay in the hospital it is crucial for their environment to adapt to their needs. Implementing available technology will allow the patient to control their surroundings from wherever they are. It is now possible to control your environments temperature from a computer or cell phone. By supplying patients with iPads they will be able to control how warm or cool their room is. This practice is also energy efficient and can save energy consumption up to 15% by having a regulated temperature. Supplying patients with an iPad will also enable them to rate their own pain levels, order food, and control lighting levels in their room through applications.



Creating an area for nurses, doctors, and patients to collaborate on the patient's status is crucial in patient room design. By designing a ceiling feature that allows for a retractable TV will create a multi-functional area. This area will allow nurses and doctors to present material to patients and their families in a clear, efficient manner while also allowing patients to connect with the outside world. They will be able to watch television and access the internet to stay connected with their friends and family via social media sites and video communication.

Designing a sustainable environment in a healthcare setting is especially important. Specifying sustainable products reduces the risk of harmful toxins in the healing environment and contributes to the patient's and occupant's well being. Using compact fluorescent lights will reduce the risk of exposure to hazardous UV radiation and EMFs. CFLs also use about 70-90% less energy than traditional incandescent bulbs and last 10 to 25 times longer.

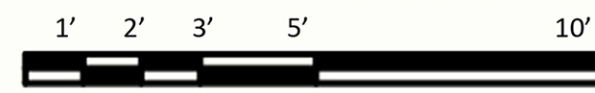


The safety of compact fluorescent lamps. (n.d.). Retrieved November 24, 2014, from <http://healthycanadians.gc.ca/drugs-products-medicaments-products/consumer-consommation/home-maison/cfl-afc-eng.php>

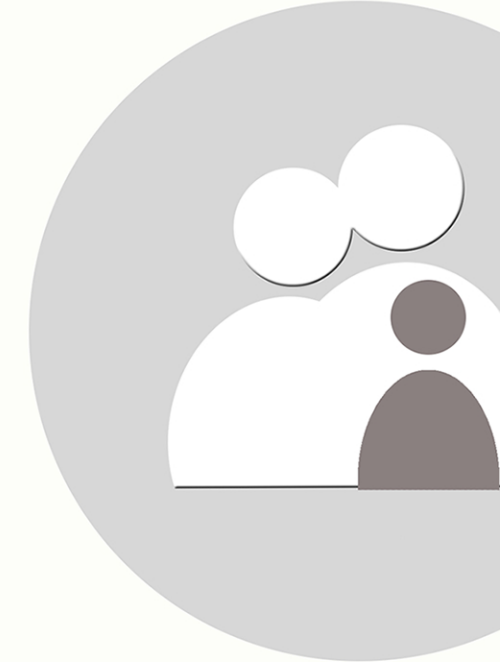
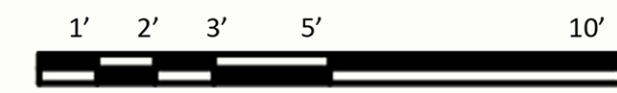
Light Bulbs. (n.d.). Retrieved November 24, 2014, from <http://www.energystar.gov/products/certified-products/detail/light-bulbs>



EAST ELEVATION



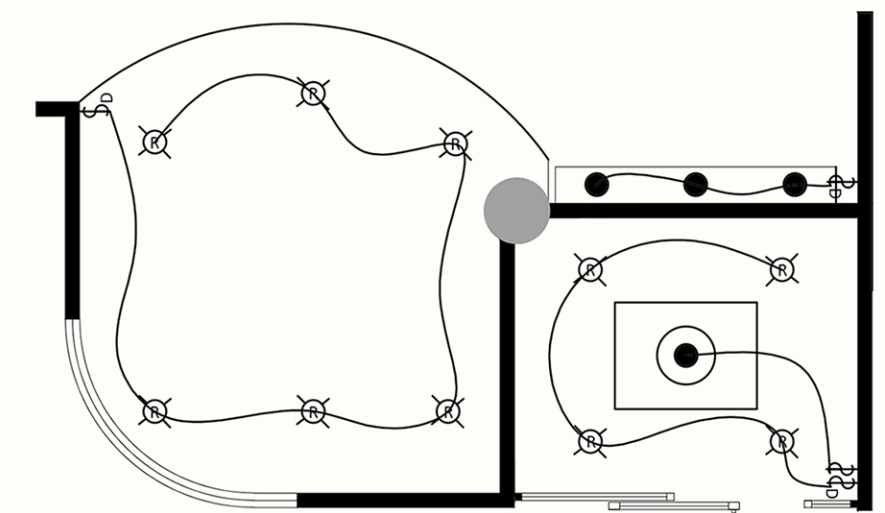
SOUTH ELEVATION



## DESIGN CONCEPT

The patient room of the future merges healthcare and home living into an efficient environment for the patient, their family, and care takers. Designing three cohesive spaces will provide flexible areas for each occupant and the needs that he or she brings. A separate family area will create a space for the family to escape when the patient needs privacy. It will also create a space for doctors and families to meet in discretion. The patient room will integrate technology and multiuse furniture to accommodate for families that wish to room-in. Designing an area for nurses will create a streamline environment to maximize productivity and ensure quality care. Specifying appropriate materials and colors are essential in healthcare design to create a healing atmosphere. Balancing warm and cool tones creates a space that is calming yet stimulating. Creating a cohesive environment that incorporates technology and flexibility will provide quality care.

## FAMILY AREA LIGHTING PLAN



PRIVATE FAMILY AREA

## MATERIALS, FINISHES, & FURNITURE

Furniture has been selected to provide maximum efficiency. Specified lounge chairs are designed with a built-in clean-out space between the seat and back that allows for easy cleaning.

The Wieland plyfold chair can be hung on the wall or used for extra seating and the sleep sofa can accommodate multiple guests or be used for family members that wish to room-in.

Specifying a bedside table with two work surfaces will provide extra space for the patient when needed.

1. Armstrong Luxury Vinyl Plank: Empire Bamboo Caramel
2. Carolina: Steel Grey Oak Laminate
3. Formica Laminate Graphite Twill
4. Knoll Upholstery: Vibe in Scandal
5. Knoll Upholstery: Tight Rope in Pathway
6. Carnegie Upholstery: Cadence
7. Knoll Wallcovering: Run in Branch
8. Wieland: Plyfold Chair
9. Carolina: Retrospect Lounge
10. Carolina: Basket Occasional Table
11. Carolina: Overbed Table
12. CCI Group: Wall Mounted Computer Station
13. Carolina: Retrospect Sleep Sofa



8.



9.



10.



11.



12.



13.