THE FUNCTIONAL HEADWALL
PROCESS

OBSERVATION - INQUIRY - SYNTHESIS

- Examination and documentation exercise for all equipment and technology present in the typical patient room and also devices brought into the room.
- Nurse interviews about criticisms and suggestions for a future patient room.
- Created visual comparison of equipment that revealed patterns and relationships. (show spreadsheet)
- Analyzed information looking for patterns to find design concepts.

- Resolution of ideas
  - Two sets of Mind: Nurse's Needs vs. Everyone's Needs
  - Consolidation of items in the room
  - Separate groups of items to enhance work flows
- Develop understandings of nurse, patient, and family zone requirements
- Additional nurse interviews about the “servicing” of the patient to find out what items could be centralized to make the process more efficient during more time to directly address/interact with the patient.
- Re-investigation of portable or connectable equipment

PROBLEM DECLARATION

The patient room is a multi-purpose machine that needs to be adaptable to and designed with the patient in mind. The problem with this fact is that currently this customization is achieved by simply bringing in numerous items and pieces of equipment into and out of the room to help monitor and care for the patient. Many of these items have their own wheeled stations or carts associated with them. This aggregation creates clutter in the room, impairs the traffic flow within the room, and can be bothersome or annoying to the patient and family.

The nurse has to deal with the aggregated elements in the room as well as sporadically placed items that she has to use to serve the patient. She also has no defined area within the room for these supplies, equipment, or storage. Many times she has to enter into the patient and family zones to perform her tasks.

In terms of the family, it is currently hard to accommodate overnight visitors within the patient room. They have no real designated area within the room and a common piece of furniture, the bed, takes up a large percentage of their open space. There is also little storage for the patient or the family. This area is not efficient.

PROPOSED SOLUTION

Our main idea in relation to the patient room of the future is consolidation. The solution here is simple one of consolidation for spatial and logistic efficiency: creation of a modular/adaptable/customizable piece of furniture centered around the patient but usable and serviceable by the nurse and family.

The goal of our product is to introduce a piece of furniture to the room that actually defines space, engages users, and enhances all three zones of the room at the same time. This piece will incorporate the patient zone & headwall/family zone/sleeper storage/shelf/nurse zone/work station/disposal center/and waste disposal.

DESIGN INNOVATIONS

- Dedicated extendable nurse work surface
- Consolidation of disposables
- Storage (nurse, patient, visitor)
- Consolidation of equipment
- Integrated headwalls
- Additional IV hooks
- Equipment mounting locations
- Better lighting
- Less institutional
- Customizable interface
- Movable visitor work surface
- Integrated furniture - visitor bed & bench
- Privacy screen
### Unit Descriptions

#### Caregiver
- Supply Storage
- Extendable Work Surface
- Disposability Center
- Media/Communication Storage

#### Patient
- Connections for Patient Bed
- Twin Headwall Panels
- Multiple Setting Exam Light
- IV Hooks
- Equipment Mounting Poles
- Privacy Screen

#### Storage
- Shelving
- Clothes Storage
- Removable Bed-Side Table
- Extending Work Surface

#### Visitor
- Movable Bench
- Pull-Down Visitor Bed
- Storage
- Reading Lamp