Feb 12, 2013

This paper is an expansion and clinical comparison between the BBG Slumber Series bed and Dream Series bed of similar function and size.

There are several clinical features on the BBG Dream Series beds that are neither present nor available on the BBG Slumber Series beds. This document will outline some of the more common clinical differences of the Dream over the Slumber, but is not an inclusive list.

The primary reason the features are not present lie in the limitations of the Slumber design and materials used. In some cases the materials themselves are the difference, and in some cases the structural integrity and strength would be compromised, therefore will not allow for the feature(s) in question.

The items are listed in no particular order. The need for any one of the features listed below will requisite the use of a BBG Dream Series bed.

A. Increased visibility within a door panel
The Dream Series standard clear view door panel provides 780 sq inches of visibility compared to the standard Slumber Series 472.50 sq inches. When see through panels are used this comprises a 65% increase in visibility of the patient. On a high side bed the Dream Series has 615 sq inch more visibility than the Slumber.

B. Air Flow panels
As the name indicates, these panels allow air to pass through them which allows for increased ventilation within the closed bed area. One of the most common applications is for patients who struggle to regulate their own body temperature. With a moderate sized child we observed an ambient temperature rise of 5 degrees in under an hour in a closed high side bed system without Air Flow panels which is a dangerous sudden rise in temp for patients with certain sensitivities. Other common applications include air purification, patients who struggle with respiratory conditions, etc. This has the added benefit of visibility. These panels far exceed the requirements for safe pediatric gaps as defined by the most stringent US standard, the CPSC.

C. Raised panels
The option entitled “Raised Panel” is a solid wood panel. This panel is not see through, nor air permeable. Its design is to reduce sensory input for the patient. Designed to be used at the mattress level, it effectively reduces distracting stimulus to the sleeping individual such as: sound, visibility, light, noise, wind, etc. This reduced stimulus helps the sensory challenged individual relax in an area of reduced stimulus without having to adapt the room or other surroundings.

D. Combination of panels

www.bedsbygeorge.com
The Dream series doors have three panel options (clear view, air flow, raised panel) and they can be configured in nearly any combination within a given door. This allows for a door to be clinically designed to satisfy multiple physical needs for the patient within the same door. The Slumber series has no options beyond a see-through panel.

E. Wood / Materials

Material terminology is imprecise in the furniture industry. “Solid wood” can refer to boards sawn from a tree to plywood, to chips of wood or sawdust pressed together into sheets. For purposes of this article, we will refer to solid wood to mean a non-engineered plank hewn from a tree.

The Slumber series bed is made from a combination of solid wood planks and furniture grade plywood which is similar to what many competitors use. The Dream series frame is made exclusively from solid wood planks. This has clinical impact in a few areas:

1. To many medically fragile individuals the presence of chemicals, glues, etc is cause for medical concern. Since these beds are licked, chewed, rubbed, etc for hours on end, chemicals present in a plywood, laminate, veneer, or other engineered materials (even plastic) can pose a significant health risk. The Dream series solid wood construction possesses a significantly lower risk of chemical exposure and therefore is a safer product.

2. All safety beds endure greater than normal stresses, impacts, moisture, and abrasion from the patient. We have seen the wood deeply scarred and dented from what is considered “normal” use for these types of products. On any engineered board, once the protective outer layer is penetrated, the laminate runs the risk of separating and literally coming apart. Areas of high moisture cause engineered wood to swell and come apart from the inside out. Exposing the inner portions of the wood increases chemical exposure to the patient. Structural integrity is compromised the minute the outer layer is broken. As you can see, in areas of moderate to extreme abuse there are risks inherent to using engineered woods for medical products. In contrast, the Dream series solid wood planks not only resist the dents, abrasions, and scarring better, but these abuses do not cause the board to lose structural integrity. High moisture may cause the wood to swell but it will not begin to separate. There is never an increase in chemical exposure regardless of damage with a solid wood bed. Finally the finishes used on a solid wood plank penetrate deeper and provide greater protection and for longer periods of time than an engineered wood. There is no question than in a situation where a patient is likely to put a bed under increased stress, moisture, impact or abuse, the Dream series is a clinically safer option than the Slumber.