

Customer Data Interpretation as of 12/14/2007

| <b>Need Number</b> | <b>Question/Prompt</b>         | <b>Customer Statement</b>  |
|--------------------|--------------------------------|--|
| 1                  | <b>Typical Uses</b>            | I want an intermediate step between a stationary bike and a real bike                                  |
| 2                  |                                | I want a bike to provide balance training  |
| 3                  |                                | I want it to indicate when the patient has to correct his/her balance, and when they are about to fall |
| 4                  |                                | I want the bike to have stationary handles   |
| 5                  |                                | I want a more entertaining/realistic device  |
| 6                  | <b>Likes - current tool</b>    | Easy to use.   |
| 7                  |                                | Safe, use of harness between PT and patient  |
| 8                  |                                | Cheap  |
| 9                  |                                | Easy to balance on seat in upright position  |
| 10                 |                                | "Easy" on and off  |
| 11                 |                                | low pedal speeds   |
| 12                 |                                | Present Seat Height / Size   |
| 13                 |                                | Present Bike Capacity  |
| 14                 |                                | Portability  |
| 15                 |                                | I want a "neutral colored" device  |
| 16                 | <b>Dislikes - current tool</b> | Does not help balance training   |
| 17                 |                                | Movable handle bars  |
| 18                 |                                | boring   |
| 19                 | <b>Suggested improvements</b>  | Variable tilt resistance   |
| 20                 |                                | Allow PT to correct balance while patient is seated on bike  |
| 21                 |                                | Auditory cues with varying intensity, visual a plus, vibration not desirable                           |
| 22                 |                                | Stationary upright position for getting on and off   |

### **Interpreted Need**

Develop a stationary bike with tilt capability

Develop a warning/ feedback system based on tilt input

If using a stationary bike, make sure the handles are stationary as well

Simplistic Design - Adjustments to be made on the bike (no tools), simple maintainance

Control movement of rider

Meet budget

large seat

low cross member

resistance to be a constant variable, no real need to adjust

Be able to accommodate a variety of patient sizes/ weights

Bike to support 90-300 lbs

Movable by one PT within clinic

produce device with neutral color

Provide Tilt capability

ensure handlebars are stationary

Provide a device that is more responsive

adjustable tilt feature with simple control

leverage handle

simple lighting/buzzer system to alert patient and PT

"locked position" at neutral tilt