

		Objectives for Cycle 2			
	Related Specifications		(< 300)	Graded Points	
	<i>Brainstorming Objectives</i>				
1	Number of different settings/ modes to adapt to varying hand dexterities; Number of connections from device to power, Time it takes to find and use	Outline a functional decomposition of device	150		
2	Time it takes to find and use	Pugh Matrix to isolate 2 ways device could potentially alert the <i>user</i> that the call-bell was activated	150		
3	Time it takes to find and use	Pugh Matrix to isolate 2 ways device could alert the <i>nurse</i> that the call-bell was activated	150		
4	Time it takes to find and use, Number of different settings/ modes to adapt to varying hand dexterities	Pugh matrix to decide between voice activation, foot pedal, IR sensor, or button.	200		
5	Battery life	Create list of pros and cons for both a battery supply and a main voltage supply and decide on suitable option	150		
6	Transmission Range	Research Duke Hospital policy on Bluetooth/WiFi in patient rooms	100		
	<i>Prototyping Objectives</i>				
7	Number of different settings/ modes to adapt to varying hand dexterities, Weight of device	Detailed sketch of all components of sensor and bedside stand/attachment	200		
8	Signal transmission	Draw a code block diagram	200		
9	Number of different settings/ modes to adapt to varying hand dexterities	After choosing mechanism in Objective 5, low fidelity prototype mechanism for voice activation, button, or IR sensor.	350		
10	Signal transmission	Configure wireless connection (e.g. Particle board or Bluetooth serial module) with at least one remote signal receiver	350		
		<b>TOTALS (= 2000)</b>	<b>2000</b>		