

House of Quality, Functional Specs

		Spec #1	Spec #2	Spec #3	Spec #4	Spec #5	Spec #6	Spec #7
CUSTOMER REQUIREMENTS/NEEDS		Time it takes to find and	Percentage of false positives	Number of connections from device to power	Number of different settings/ modes to adapt to varying hand dexterities	Battery life	Water resistance	Cost of device
Priority								
1	Easily accessible for patients with limited mobility	X			X			
2	Should be understood by patients with limited cognitive ability				X			
3	Reduce the amount of false-positives going to the nurse's station		X					
4	Reduces excessive wiring			X		X		
5	Transmit the signal to multiple receivers							
6	Durable and can withstand accidents (ex. water spray)						X	
7	Able to be produced/purchased at competitive cost							X
Competitive Values		1-2 min (2)	85% (1)	1-2 (Current system at Duke requires two connections to wall reach wall power)	1 (per adapted call bell device) (3)	0- Needs wall-power	IPX5	\$150 (from comparative chart on Market Analysis tab)
Marginal Value		1 min	20%	1	2	2-3 months	IPX4	\$100
Ideal Value		0.5 min	5%	0- wireless	4 (one device for various types of mobility)	6 months	IPX5	\$70

Sources:

- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3928208/>
- <https://www.frequencyprecision.com/products/touch-sensitive-button-pager-linked?variant=6167456003>
- <https://curbellmedical.com/specialty-call-cords/>
- https://www.amazon.com/Housecare-Caregiver-Caregivers-Waterproof-Transmitters/dp/B07DHTVBH1/ref=sr_1_4?ie=UTF8&qid=1539227293&sr=8-4&keywords=nurse+call+system+for+hospital