

I've been thinking...



BPOC Devices: Size Matters
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I've been thinking about politics, comics, and bedside scanners.

Hospital bar-coding initiatives involve numerous decisions. None are more controversial than what type of data-collection scanners nurses will take to points of care.

As intensely as political parties debate the value of smaller versus larger government, caregivers divide over the preferred size of bar-code point-of-care (BPOC) devices. Nurses on one side lobby for full-screen computers on wheels (COWs). Their colleagues across the aisle throw their support behind handhelds that fit into pockets. Of course, both parties have their limits when small reaches too small and big becomes too big.

As a junior higher, I watched Dick Tracy cartoons and dreamt about wearing a two-way radio/television on my wrist when I grew up. Well, I grew up and gave up. Then, last week I realized that while I didn't have one on my wrist I did have one in my hand. So, I uploaded an image for the home screen of my iPhone of the strong-jawed detective interacting with his magical watch. Funny thing is, I no longer wear a wristwatch since the clock on my handheld is easier to read.



The comic strip creator's prophecy had the radio/video part right; it just failed to anticipate the point at which downsizing would bump into the law of diminishing returns. There is no end to the shrinking of screens. Geeks get myriads of jpegs dancing on the head of a pin. But, well before screens mimic the real estate of postage stamps they are too small for the average nurse to manage.

Looking the other direction, the law of diminishing returns sets in when carts approach the girth and unwieldiness of their namesakes. When big reaches too big, caregivers waste no time putting their COWs to pasture.

From my hospital consulting experience I've identified what I believe are the top five questions nurses want answered before settling on BPOC devices. Size comes to play in each.

5. Are the devices available when we need them?

4. How easily can we move the devices to where we need them?

3. Will the devices work as long as we need them?

Battery life matters. Larger brighter color screens typically drain batteries more quickly than smaller monochromatic displays.

2. How do the devices get along with our hands, motions, and emotions?

It is important that these devices possess winsome ergonomics. Unfriendly form factors have a way of evoking undesirable emotions.

And the number one question nurses want answered before settling on BPOC devices is . . .

1. Can we read the words on the screens?

The average nurse's eyes are 46-years old.

Availability. Mobility. Longevity. Ergonomics. Readability.

Realistically, device decisions require trades. To gain readability, nurses may have to settle for bigger heavier devices. To ensure mobility, they may have to give up some screen real estate.

It is not uncommon to find nurses who have selected one technology, envying colleagues who have chosen another. The water is always bluer on the other side of the pool.

A third party is emerging that hopes to beat the dilemma by selecting tablet PCs for BPOC applications. Compromising both directions, these centrists hope to obtain the best of all worlds. They have good arguments.

In any instance, when it comes to the final vote, my experience says the eyes have it. Have I said that readability is important?

What do you think?



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