

I've been **thinking**...



Finding things when we need them. Or not.
May 2013

I've been thinking about how we find things when we need them. Or not.

In my thirties and forties, I had a recurring dream. Instead of selling my first six cars, I put them in storage. Far from being “rode hard and put away wet,” each was in pretty to very good condition: The '49 VW, the '50, '51, '53, and '56 Chevys, and the '55 Ford wagon (think Ozzie and Harriet). Actually, it was a recurring nightmare, as I spent what seemed the better part of my sleep trying to recall in whose garage each was stored. If I ever remember, I will sell the beauties and retire.

As part of a consulting engagement for a good-sized health system, our team visited virtually every corridor, room, suite, closet, and basement of each of the patient-care and biomed buildings on all eight campuses. Our client wanted to know how many infusion pumps and poles they had before ordering state-of-the art replacements.

For a full week, we counted—including the pumps being moved up and down elevators and along hallways and sidewalks.

Nurses were not happy when we told them what we were doing while snooping about their units. “You can't take any. We need them when we need them.”

We told them we were there to count, not collect pumps. “Our assignment is to determine what you have and what you lack so the hospital can procure enough pumps to meet your needs.”

They liked that—until we asked if they had any in closets. If looks could kill, I would not be alive to write about this.

We assured them that we would not reveal specific locations.

“Cross your heart?”

“Hope to die.”

We unearthed pumps in some strange places and left them right where we found them. In all but one hospital, we identified more than any imagined it had.

In the basement at Saint Anonymus, the supervisor in charge of sterilizing and dispensing medical devices had numbers matching ours. She utilized a library-card system inherited from her mentor, Sister Mary Grace, decades earlier. Small manila folders holding ruled cards were attached to each device, exactly like were used in BC1 library books. Cards of checked-out items were ordered in an oak library-issue box on her desk. The columns were initialed by recipients and dated by the biomed beat cop who surely knew where they lived.

¹ Before computers

Her manual system was better than the systems her colleagues in the other facilities did not have—enabling this outlier to come closest to everyone’s objective of having as many devices as needed—no less and, hopefully, not too many more. Not knowing where their available pumps and poles were located, the other facilities would simply buy or rent more to address their perceived needs.

Today some hospitals use bar-code scanning to track inventory. This is how National Car Rental does it, yah? I pick any car from the Emerald Aisle and drive it to the exit booth in front of the crossing gate on the safe side of the tire-puncture spikes. There an agent scans the bar code on my windshield then enters my Washington driver’s license number into his computer. National knows who is responsible for that Buick until it’s scanned back in at return.

However, these systems only know who checked the car or pump out, in, and when. Neither knows where each is at any given moment between departure and return.

A more compelling approach would be for hospitals to track their valuable assets all the time, not just between assignments. This is exactly what RTLS (real-time-location systems) is achieving in an increasing number of facilities across the country.

To our discussion, pumps and poles are outfitted with unique radio-frequency-ID (RFID) chips, which continuously interact with simple wireless-mesh networks made up of small sensors plugged into wall sockets throughout buildings. Tracking software may be accessed on any computer in the network (or via the Internet) to see where each device is at any point in time. RTLS also indicates if a given device is active on the front lines, laid up in the biomed infirmary, or ready to report for duty—pointing caregivers to available pumps on floors and rooms nearest to their point of need.

At a HIMSS meeting in Las Vegas two years ago, I lost my iPad in the sea of exhibits and immediately called Apple. After talking me off the ledge, tech support guided through what, in effect, was RTLS software on my laptop. A map popped up, pinpointing where the better half of my brain ended up—at the other end of the Strip. After locking the iPad, we posted my phone number on its home screen. Within the hour, I received a call to arrange a reunion.

Using the same technology, we may locate our smart-phone toting friends (if they’re willing to keep “location services” on). Oh, I guess I didn’t say that hospitals are also using RFID and RTLS to keep track of patients (great for ED) and to track down caregivers—though we’ve hit several privacy bumps along the way. Martha Stewart ankle bracelets come to mind.

In addition to people, pumps, and poles, hospitals are tracking other valuable and need-it-now items like crash carts, defibrillators, beds, and wheelchairs, to name a few.

Come to think of it, I should have my cars rigged with RFID units for RTLS with GPS. Though it can’t get me back to the future for locating my old Chevy’s, it could help me locate my Audi in parking garages. In the meantime, I’ll continue using my remote-lock key and listen for that friendly chirp.

What do you think?

A handwritten signature in black ink, appearing to be the initials 'MWA' or similar, written in a cursive style.

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