



# Austin Healthcare System Achieves More Effective and Efficient Care as Nurses Embrace PDA-Based Medical References

## A TALE OF “MIXING TWO MEDS”

April 18, 2005 - Armed with medical references on their PDAs, nurses at St. David's HealthCare Partnership in Austin, Texas, are delivering more efficient, effective, and timely care to patients, says Susan Smith, a registered nurse with a doctorate in health education. Smith, of Austin (Texas) Community College, is directing an innovative Texas nursing fellowship program that is using PDAs loaded with nursing references from Skyscape. The benefits of these PDAs for nurses are “awesome,” says Smith. “Every nurse should have a PDA.”

**Q:** PDAs are a relatively new technology in the nursing profession. What prompted you to make them part of this specialty nurse fellowship program?

**A:** It was a think tank idea as the grant was evolving. The think tank idea was, “What opportunities can we provide with the money that's available?” And someone said wouldn't it be nice if the nurse fellows could have PDAs and we could load software on it containing a wealth of nursing reference material. The fellows also could write notes on their individual PDAs as they were doing their clinicals. That's how it started. It was a think tank idea, and we ran with it.

**Q:** What was the problem you envisioned PDAs might help solve?

**A:** Their ready access to nursing reference information without leaving the patient's bedside.

**More than 300 trusted mobile references, including:**

**The Harriet Lane Handbook**, which provides unsurpassed diagnostic and management guidance, recommended tests and complete therapeutic information

**Red Book**, a one-stop guide to preventing, controlling and managing infectious diseases in children

**Archimedes**, with formulas ranging from Aa Gradient to Weights, the proprietary calculator provides 70 preprogrammed formulas that include specialties such as Cardiology, Pharmacology, Hematology, FEN, Pediatrics, Pulmonary and Renal.

**100 Locke Drive  
Marlborough, MA 01752**

**P 508460.6500 F 508460.6510**

“One busy day in the emergency department there were two meds Nurse fellow Manor-Coombes needed to give and she was wondering if she could give both in one syringe... She found the answer on her PDA within seconds, and yes, she found that she could mix the two meds. It’s called compatibility.”

**- Susan Smith, of Austin (Texas) Community College**

**Q: How has it traditionally worked?**

A: Well, if a nurse needed to seek information on a diagnosis or a condition, the nurse would go back to the nurse’s station and they would have two means of accessing information: One is picking up a text book and start leafing through it or, two, accessing the hospital’s computer. But a lot of times there is limited availability of nursing reference information on the hospital’s computer or the availability of current reference materials.

**Q: I heard that you had numerous anecdotes about the fellows’ use of the PDAs?**

A: I have. One involves fellow Rhonda Manor-Coombes. One busy day in the emergency department there were two meds she needed to give and she was wondering if she could give both in one syringe rather than injecting the patient two different times. She really wanted to give only one injection but she wasn’t sure she could mix the two medications in the same syringe. She asked two other nurses, and they said they didn’t know, and a third said she would look it up in the PDR (Physicians Desk Reference). Rhonda replied, “Never mind, I have this handy dandy PDA and I can look it up faster,” and the race was on. Rhonda won. She found the answer on her PDA within seconds, and, yes, she found that she could mix the two meds. It’s called compatibility. In the meantime, the other nurse was still going through the alphabet in the index trying to find the medication.

**Q: The fellows become a reference source, it seems.**

A: Well, that’s actually true. The fellows are often sought out by non-fellows for nursing questions because of the speed and convenience of the PDA. They say, “Can you look this up for me. It’s so much quicker.”

**Q: Talk about the U.S. Labor Department grant and the nurse fellows participating in the program.**

A: Austin Community College and St. David’s HealthCare Partnership have a long-standing cooperative relationship and in this case we are collaborating on this specialty nurse fellowship program. A total of 70 registered nurses will participate as fellows, plus there are clinical coaches who are expert clinical resources to the fellows. The PDAs, with the reference software, have been distributed to both the fellows and the coaches. While the fellows are all registered nurses, they are novices in their specialty area. All of them have less than one year of nursing experience, which was, by the way, a condition of grant eligibility. The two-year, \$2 million grant is funded by the President’s High Growth Job Training Initiative.

**Q:** You purchased the reference software from Skyscape. Which ones?

**A:** The four software programs we bought from Skyscape cover the waterfront for the fellows. We selected a drug guide (Davis' Drug Guide for Nurses). We selected a lab guide (ABCs of Interpretive Laboratory Data). We selected Taber's Medical Dictionary, a nationally renowned medical dictionary that's been around for probably 40 years, and RNFastFacts (Nurse's Fast Facts: The Only Book You Need for Clinicals, 2nd edition), which covers everything.

**Q:** Why did you select those specific references for the PDAs? Were they ones the fellows knew and recognized? Did that play a role in your selection decisions?

**A:** Taber's, ABC Lab and Davis' Drug Guide are all popular nursing references. The Nurse FastFacts was used by another agency, which recommended it. Also, the content covered the age span and specialty areas of Medical-Surgical - Gerontological Care - Maternal Infant - Pediatric - Mental health - Long Term Care - Home Health Care - Nutrition - Emergency and Critical Care.

**Q:** Did you have to encourage the fellows to use the PDAs?

**A:** No, but the first thing I did was give them an Evidence Based Nursing Practice assignment that presented an opportunity for them to use all four of the nursing software reference programs. Their first assignment required them to utilize Taber's Medical Dictionary, ABC's of Interpretive Laboratory Data, Davis' Drug Guide, and Nurse's FastFacts and turn that assignment in via e-mail.

**Q:** Is the SmartLink technology in the Skyscape references attractive and helpful?

**A:** Yes. I see it as extremely beneficial. Anytime more than one program "talks" to each other it's a plus.

**Q:** Has the use of the PDAs in the program made you a believer in the benefits of hand-held computers for nurses?

**A:** Yes. I think they are awesome. Every nurse should have a PDA.

**Q:** Are PDAs changing or will change the nursing profession?

**A:** Absolutely. I hesitate to use the word better but I think the PDA results in more efficient and effective care being delivered to the patient. Say, for example, someone is questioning a medication and had to go through the traditional route, it may take longer to get it resolved. Or, if there is a change in a patient's condition or a laboratory result comes back that the nurse needs look up, the nurse may need to do fast research before calling the physician to tell them what might be happening. The PDA would really prompt a much quicker reaction time. Plus, it puts the information at the nurse's finger tips. She can act faster in calling a physician or notifying someone instead of returning to the nursing station. The nurse can do it at the bedside, if necessary, or can do it from any place. The nurse doesn't physically have to go look something up.

Q: What about reference material updates for PDAs?

A: That's another benefit. They are up-to-date and have the ability to download the most current information. For example, a new medication was ordered for a client and the fellows were talking about it and they said, "I'm not familiar with that medication." The drug book they had didn't have in it. It was that new. But one of the fellows pulled out a PDA and it was in there.

Q: The grant sounds like a benefit for both patient and nurse.

A: Yes, it's a wonderful opportunity. Because it's not every day you get \$2 million and try to make a difference in the nursing profession. The grant is a unique opportunity to try to shorten or measure the transition from novice to expert. Usually, it takes three to five years for a nurse to develop expertise in a specialty area, such as critical care, emergency or perioperative nursing. We are trying to see if we can shorten that transition period by applying different educational strategies. So, this is one opportunity to bring technology to the bedside, and it also affords us the chance of demonstrating the value of hand-held computers at the bedside.

"I think [hand-held computers with Skyscape software] are awesome. Every nurse should have a PDA."

- Susan Smith, of Austin (Texas) Community College