

PHARMACY PRACTICE NEWS

Special Series: Small Hospitals

This is a three-part series on the operational challenges faced by small, rural health systems that first appeared in the following issues of *Pharmacy Practice News*:

Part I (January)

How 340B drug discount programs can help hospitals control drug costs

Part II (February)

How technology can help small and rural hospitals

Part III (March)

Medication safety advances at the smallest of the small

Part I (January)

Qualifying Tips Offered at ASHP Midyear

Small Hospitals Save Big Via 340B Drug Discounts



Orlando, Fla.—Small hospitals may save as much as \$850,000 annually by participating in the federal 340B drug discount program. But reaping that windfall for your indigent patients requires knowledge of the program's intricacies—including recent changes to the regulations that could result in even more savings for savvy facilities, a panel of 340B experts stressed during the 2004 Midyear Clinical Meeting of the American Society of Health-System Pharmacists.

Many small rural and urban hospitals that provide a critical safety net for poor and uninsured patients received a special break in April 2004, when rules governing participation in the federal 340B discount drug program

were eased to include hospitals with fewer than 100 beds.

The change, which came as part of the Medicare Modernization Act of 2003 (MMA), remedied a serious gap in coverage for the 12-year-old 340B program, which allows certain hospitals that care for indigent patients to buy covered outpatient medications at deeply discounted manufacturer prices. Nationwide, an estimated 400 to 600 small hospitals and community clinics are now eligible to benefit from the expanded coverage.

Before the change, only larger hospitals and health systems could qualify for the pricing advantage. The change was partly due to the recognition by Congress that small hospitals in rural and urban settings play a crucial role in the healthcare of indigent patients in their communities, but often face steep losses in providing drugs to those patients in their outpatient clinics.

Interest in the 340B program is high, based on the large turnout at the ASHP session, in which experts explained how small hospitals could qualify under the new 340B rules. The session was one part of ASHP's extended coverage at the meeting of economic and patient care issues facing small and rural hospitals. Over the coming months, *Pharmacy Practice News* will address the special needs of these hospitals in a series of articles covering clinical care, technology, medication safety and staffing, among other key issues.

Under the expanded 340B rules, qualifying small healthcare providers now include so-called Disproportionate Share Hospitals (DSH)—hospitals whose patient populations are made up of large percentage of Medicaid and Medicare SSI patients.

Other eligible providers include Federally Qualified Health Centers, hemophilia treatment centers, family-planning clinics, sexually transmitted disease/tuberculosis program, Urban 638 Tribal Programs and Ryan White Programs for HIV-infected patients.

Jimmy R. Mitchell, RPh, MPH, MS, of the Office of Pharmacy Affairs, Health Resources and Services Administration (HRSA), told pharmacists and others attending the session that “340B is a godsend of a program to hospitals and other covered entities. It costs you nothing—a big return on a small investment.”

He said cost savings on outpatient drug purchases ranged from 20% to 50%. The program covers all outpatient prescription medications and even nonprescription drugs if accompanied by a prescription.

Currently, some 12,000 healthcare entities participate in 340B, he said, and the program is adding about 1,000 providers a year. “Somewhere there is a plateau,” he added. “We haven't reached it yet.”

On the manufacturer side, more than 650 suppliers participate in the 340B program, according to Mr. Mitchell. “Manufacturers are required by this law to sign pricing agreements with our office if they want to be reimbursed through Medicaid. So there is a huge stick out there.”

Mr. Mitchell said that organizations that apply for 340B status by March 1 can begin purchasing drugs under the program by April 1, provided they receive written confirmation from HRSA's Office of Pharmacy Affairs ([800] 628-6297; www.bphc.hrsa.gov/opa).

Billy Woodward, RPh, Senior Consultant for Ernst & Young LLP, provided examples of cost savings realized by organizations participating in 340B. One 90-bed rural hospital in Kentucky was saving more than \$300,000 a year, he said, while the savings for a 180-bed Michigan hospital topped \$850,000.

Additional Discounts Available

Hospitals that join the program are also eligible to purchase outpatient drugs below 340B prices through participation in the 340B Prime Vendor Program (PVP). Christopher A. Hatwig, RPh, MS, FASHP, Senior Director of PVP, told *Pharmacy Practice News* that additional discounts on certain drugs and supplies range from 2% to 35%, depending on manufacturer and item. “The way it's designed, it's an absolute no-brainer,” Mr. Hatwig said. “There is no risk to join. There is no cost to the hospital.”

The PVP is managed by HealthCare Purchasing Partners International. HPPI, which is jointly owned by VHA Inc. and the University HealthSystem Consortium, was awarded the PVP contract in September by the Health and Human Services Administration. HPPI had been managing the program since June 2003. Before joining HPPI as head of the PVP last January, Mr. Hatwig had spent 13 years at Parkland Memorial Hospital in Dallas, part of that time as Director of Pharmacy for Ambulatory Services.

Mr. Hatwig said about 300 DSH members were now in the PVP, compared to about 50 before HPPI took over.

The number of manufacturers that have agreed to provide additional discounts remains limited, though it has grown since HPPI got into the picture. Among them are Bedford Labs, with its line of oncology products; First Horizon Pharmaceutical Corporation, maker of the calcium channel blocker Sular (nisoldipine); and Home Diagnostics Inc., which markets blood glucose meters and test strips.

Diabetic supplies aren't necessarily outpatient-covered products, Mr. Hatwig said, but the discount that HPPI negotiated with Home Diagnostics is "a huge benefit. When you treat a disease state like diabetes, it's crazy that you can get 340B discounts on the drugs but you have to pay an arm and a leg for the meters and strips to monitor the disease."

As part of the PVP, Mr. Hatwig said, HPPI also offers software options that participants can use to improve access to manufacturers' patient assistance programs, which provide free drugs to patients who can't afford them. The company also has software to maintain a "virtual inventory" that separates 340B-purchased products from other stocked items.

--Bruce and Joan Buckley

Part II (February)

Overcoming Cost Hurdles, Hospitals Reap Tech Benefits



Small and rural hospital pharmacies face an uphill struggle in their quest to acquire technologic tools that larger community hospitals and health systems take for granted.

A small hospital with an average census of well under 10 patients and a pharmacist who comes in for only an hour or two each morning may find it difficult, if not impossible, to afford a simple pharmacy software system, much less automated drug-dispensing equipment, bedside scanning, or computerized physician order entry (CPOE).

Yet some small and rural hospitals have managed to overcome financial restraints and obtain the tools they need. Behind the scenes, a pharmacist is often working in collaboration with the nursing and medical staffs to convince a reluctant administration that investment in technology

will be amply returned with improved patient care and safety. An enlightened administrator is a plus.

Such successes are much needed, given the high stakes of caring for patients in rural communities. A recent report from the Institute of Medicine (IOM) describes the difficulties of providing quality healthcare to rural populations compared with urban and suburban dwellers. Rural inhabitants tend to be older and have a larger number of chronic diseases, according to the report; also, their rates of smoking are higher and their rates of obesity and exercise are lower.

Smaller hospitals' efforts to deliver high-quality care can also be hampered by shortages of qualified health professionals, who are scared off by poorly equipped facilities; limited opportunities for advancement; and geographic isolation. (The full IOM report, *Quality Through Collaboration: The Future of Rural Health Care*, can be read online at www.nap.edu/books/0309094399/html)

Thus, it is encouraging to see that at least some small hospitals are using technology to overcome these operational challenges. Guthrie County Hospital, in Guthrie Center, Iowa, is an example. In January 2005, the hospital went live with a pharmacy software system. A critical access hospital with 25 beds and an average census of five to eight patients, Guthrie County Hospital is 60 miles from the nearest large medical center, in Des Moines, Iowa.

“The hospital never had a pharmacy software system before,” said DeeAnn Wedemeyer Oleson, PharmD, CGP, Guthrie County's Director of Pharmacy. In fact, the facility had no staff pharmacist at all before July 2000, when Dr. Wedemeyer Oleson arrived on the scene after completing a geriatrics residency at the Department of Veterans Affairs Medical Center in Boise, Idaho.

Dr. Wedemeyer Oleson said it took two and a half years before funds were allocated to acquire the pharmacy software system from Dairyland Healthcare Solutions, a Glenwood, Minn.—based company that concentrates on the information systems needs of smaller community and specialty hospitals. The total cost to the hospital was about \$56,000, of which \$8,000 was for hardware and the rest for the system itself.

“For us, this is a very big dollar item,” said Dr. Wedemeyer Oleson. “A lot of departments went without [during] that capital budget year because we got the pharmacy system.”

The system will assist her and a second staff pharmacist, Melissa Nelson, PharmD, in completing order entry and other tasks that formerly had to be performed laboriously with paper and ink.

The clinical applications were the most important consideration in selling the system to the administration. “We feel we're very strong clinically,” Dr. Wedemeyer Oleson said, “but no matter how good a pharmacist you are, you're never going to pick up all of the interactions. There is always the chance you're going to overlook an allergy.”

The system will also document the pharmacists' interventions. “We make interventions all the time, but we haven't really been tracking them,” Dr. Wedemeyer Oleson said. “Now, the system will enable us to keep track and give us reports on what we've done. It even tracks the estimated

cost savings of our interventions, and the severity of what we prevented. So we're really looking forward to that."

Although the clinical benefits were paramount, it didn't hurt that the system's inventory management function and billing capability will ultimately help improve the hospital's bottom line.

Dr. Wedemeyer Oleson thinks that any hope for future technology advances at Guthrie County Hospital "have been pretty much dashed" by the requirements for complying with U.S. Pharmacopoeia (USP) 797 regulations regarding compounding in cleanrooms. "We're going to have to put significant dollars into that," she said.

Guthrie County is typical of the safety-net hospitals that dot the landscape in the isolated agricultural communities of Iowa and other farmland states, and indeed other rural areas around the country. Many don't have even a staff pharmacist, so Dr. Wedemeyer Oleson considers Guthrie County fortunate. "There is a hospital 25 miles south of us where the pharmacist is only there for 45 minutes in the morning Monday to Friday. They don't have a computer at all," she said. "There are some hospitals in Iowa where not only do they lack a pharmacist; they don't even have a unit-dose system."

A Bit Bigger, but Still Challenged

A step up in size from the critical access hospitals are facilities that serve patients in small but somewhat more populous communities. Most of these hospitals still can't afford gold standard technology, but they do employ full-time staff pharmacists and have at least minimal pharmacy systems. Sometimes, the technology is more than minimal.

Island Hospital, in Anacortes, Wash., is a 42-bed facility located on Fidalgo Island in a community of 15,000 residents some 90 miles north of Seattle. Fishing and commercial boating activities were once the economic mainstay of the community, but no longer. Anacortes has become a prime retirement area. In addition to providing acute care, Island Hospital also has a very busy emergency department, operating room, and oncology infusion clinic.

Sometime this year, Island Hospital will be implementing a Meditech Bedside Medication Verification system, according to George Hatfield, RPh, MS, Director of Pharmacy. Before that, it will introduce a Meditech electronic medication administration record (eMAR).

Mr. Hatfield said the online MAR will provide real-time updating of the MAR when new orders are received. The pharmacists will still enter orders, but they will be passed to the online MAR in real time for the nurse to review against the original order. There will be no handwritten transcription of orders by the ward secretary.

Pharmacists will not have to print the MARs, a benefit that he said would "save time and avoid other problems that have on occasion led to medication errors." For example, he said, in one recent case, doses of vancomycin that were supposed to be administered every 24 hours were given five hours apart because of a mix-up with the printed MAR.

Mr. Hatfield said there were other benefits for the online MAR in addition to avoiding errors. "For example," he said, "it will help nurses stay on top of the medications that need to be given

and alert them to missed doses. It will also provide good data on the number of late doses and missed doses.”

Another benefit of the online MAR, he added, is that it will set the hospital up to implement the bedside bar-code drug verification system. Still, he said, this system, in contrast to the online MAR, is used by very few Meditech hospitals, so “it is going to be a gamble to see if it actually is a usable system.”

In addition, he said, “since not all medications are now bar-coded, the system is going to require a lot of repackaging work in the pharmacy. It is also going to require a lot of busy work in keeping up the NDC [National Drug Code] numbers for the drugs we dispense (brands of generics are always changing). This system will also require major changes by nursing, and it’s going to be costly for the hospital due to all the bedside equipment that will be needed.”

In fact, he said, they may end up postponing the start-up until 2006, or even later.

Mr. Hatfield advised pharmacists in other small hospitals to “stay away from new, unproven systems since [small hospitals] are more [affected] if something goes wrong. Let others be the beta sites.”

114-Bed Hospital Is a Hi-Tech Haven

Pharmacy technology has advanced even further at Jefferson Memorial Hospital, a not-for-profit, 114-bed hospital in the rural community of Ranson, W.Va. The hospital has an eMAR system in place, in addition to advanced automated dispensing technology (Pyxis MedStation 2000 SN, Pyxis SupplyStation; Cardinal Health, Pyxis Products, San Diego, Calif.) It also has beta-tested bedside bar-code scanning for verification of medications and alpha- and beta-tested CPOE.

Tonya Smith, PharmD, Director of Pharmacy at Jefferson Memorial, said the hospital is now moving toward implementing the CPOE system but may take longer to install a bedside scanning system because of “poor results” with a beta test in 2002.

“Back then, a lot of the drugs weren’t bar-coded the way they are now,” she said, “so it was very labor-intensive on the pharmacy side.” You would actually have to print special labels, put them on baggies and put the drug into the baggie. My pharmacists were saying, ‘Well, they’re not verifying a medication, they’re verifying a label.’

Moreover, she said, the scanners weren’t reading all of the bar codes, so the nurses on the units “were very frustrated because they couldn’t get the drugs to scan half the time.”

The CPOE tests worked out much better, Dr. Smith said; the only roadblock to final implementation had been the cost of the system. But in December, she added, the hospital found out that it had been given grant money to cover most of the costs. Now, it will be moving ahead to introduce CPOE, probably sometime this year. “I think we are one of the few small hospitals that would have a system like that,” she said.

Like George Hatfield in Washington, Dr. Smith thinks that eMAR should be at the top of the list in any consideration of which technology to introduce first. “You can have advanced automated

dispensing machines, but if you don't have an eMAR interfaced with [them], you won't get the best possible use out of that very expensive drug cabinet," according to Dr. Smith. She added that the same was true with CPOE and bedside bar-code scanning.

Dr. Smith added that eMAR is the one technology you can put in place that you know you're going to get a pretty good return on investment pretty quickly.

"With eMAR in place for four years now," she said, "it's about as good as it can get for us." The nurses don't know what to do when it's down. They forget what life was like with paper. "And the same for the pharmacists."

—Bruce and Joan Buckley

Part III (March)

Critical Access Hospitals Target Medication Safety



Having access to a pharmacist can greatly lower the risk of medication errors.

But many small and rural hospitals operate without a pharmacist on staff, or they limit hours of pharmacists' coverage. The reasons vary, but the decision is most often based on finances. Even if a pharmacist is available in a remote area—which is far from a certainty—the administration often decides to spend limited dollars elsewhere.

As a result, patients are placed at greater risk. Nurses and physicians may be providing first-rate care, but they are typically not medication experts. And even with the best of screens, medical errors and medication slip-ups can and do sneak through with sometimes deadly consequences, as the 2000 Institute of Medicine report, *To Err Is Human*, showed.

The situation is particularly challenging in Critical Access Hospitals (CAHs), those specially designated, 25 beds-or-fewer safety-net facilities that provide acute and emergency services in small, isolated communities where the nearest full-service hospital is many miles distant.

A recent survey illustrated the extent of the pharmacist gap in CAHs. A university team monitoring CAH performance for the Medicare Rural Hospital Flexibility Program found that almost two out of three CAHs have a pharmacist on site for fewer than 40 hours a week (Table, page 18). And about half of them use a part-time retail pharmacist or one from another hospital to fill the hole in their services

(www.flexmonitoring.org/documents/BriefingPaper3_PatientSafety.pdf).

Patient risk is compounded by the lack of up-to-date technological tools in many of these facilities, as last month's article in this three-part series showed (February, page 1), or by aging

infrastructures that shift the priority to fixing a leaking ceiling, for example, rather than to acquiring a pharmacy software system.

But there are bright spots as well. Some of the nation's more than 1,000 CAHs are affiliated with tertiary-care medical centers and thus have access to greater healthcare resources; others are located in larger rural communities that have made a financial commitment to improving the quality of care and medication safety. In addition, there are federal and state grants available for improving care in small hospitals such as the Small Rural Hospital Improvement Grant Program (SHIP) and the Medicare Flex Program.

But the chronic pharmacist shortage remains a critical factor for small and rural hospitals. Allen Vaida, PharmD, Executive Director of the Institute for Safe Medication Practices (ISMP), said that one of the "real struggles" for many small, remote hospitals is the "ability to actually have pharmacists" on staff because there are not enough to go around.

Many hospitals solve the problem by hiring part-time consultant pharmacists from other hospitals or from retail pharmacies. "From a medication standpoint, a lot falls to nurses," he said.

To help nurses carry out the duties that normally belong to pharmacists, Dr. Vaida said that pharmacists who provide consultant services should establish protocols detailing practices to ensure safe medication use, such as which drugs are stocked and how they are stored, their dosing ranges and how to set intravenous pumps.

ISMP's Tools for Rural Hospitals

Dr. Vaida said ISMP had begun working with the Pennsylvania Office of Rural Health in an effort to improve medication safety in 10 rural hospitals in the state. These hospitals "may not have a lot of resources," he said, but ISMP can help them by giving them such tools as protocols, printed order sheets and dosing charts that will help standardize medication use practices.

Dr. Vaida also noted that the Joint Commission on Accreditation of Healthcare Organizations is proposing that pharmacists review all medication orders. One solution to this requirement might be telepharmacy, he said, where pharmacists working offsite could review and approve orders sent by fax or computer. (See sidebar, "[Rural Pharmacies Use Telepharmacy to Bridge the Distance Gap](#)", *Pharmacy Practice News*, February, page 42.)

Some rural hospital pharmacy directors double as consultants to other small hospitals that don't have a pharmacist. Reginald L. Hain, RPh, for example, is the Director of Pharmacy at Litzenberg Memorial County Hospital, a 25-bed CAH in Central City, Neb. (pop. 3,000), but he also provides consultant services to Annie Jeffrey Memorial County Health Center, a CAH in Osceola, Neb. (pop. 1,000), approximately 26 miles to the east.

Mr. Hain said the 15-bed Osceola hospital is now in more or less the same position that Litzenberg was in 16 years ago, when he first arrived. At Annie Jeffrey, he said, "nurses still administer doses out of bottles," but he added that he had established protocols to bring some consistency to the medication use process, and that he does a lot of consulting by phone.

Litzenberg Memorial, where he also oversees medication use for 120 long-term care beds, continues to introduce technological and other changes designed to improve medication safety. Mr. Hain said that when he first came on board, medications were all in bottles jammed into a room approximately 6 by 10 feet.

Now a unit-dose system is in place, Mr. Hain said, and the acute-care hospital and long-term-care facilities are “pretty well computerized.” An automated medication management system (Pyxis MedStation 2000) was just introduced at Litzenberg, and within a year the hospital hopes to bring in an online medication administration record system and medication bar-coding.

One risk of not having a pharmacist keeping an eye on medication orders is that errors slip through without being reported, Mr. Hain said. For example, if a nurse at Annie Jeffrey Hospital “grabs the wrong bottle off the shelf and administers the medication without realizing it, nobody is ever going to catch it. So some risky things can happen when a pharmacist is not there all the time.”

He said they are looking at a solution that might lower that risk. It would involve an online connection between the two hospitals that would let Litzenberg pharmacists review Annie Jeffrey medication orders and allow them to be dispensed via a Pyxis unit. “They would have better quality control and less medication errors that way,” he said.

In Florida, a team from the Shands Medical Center at the University of Florida (UF) in Gainesville is working in collaboration with Florida Medical Quality Assurance, Inc. and the Florida Office of Rural Health to help improve medication safety in 13 Florida Critical Access Hospitals (CAHs). Team members reported on the project at the American Society of Health-System Pharmacists Midyear Clinical meeting in December. The team is also a recipient of an Agency for Healthcare Research and Quality grant to plan for the implementation of health information technology in these CAHs.

In the three years since launching the project, the team, Abraham G. Hartzema, PharmD, MSPH, PhD and Almut G. Winterstein, PhD, Professors at UF College of Pharmacy and Thomas E. Johns, PharmD, Clinical Manager of Clinical Practice at UF Shands Hospital, have made progress in helping the hospitals raise patient safety standards. They did so by keeping in mind the rural culture prevalent in these small hospitals, by building trust and setting workable goals.

Speaking of trust, Dr. Johns recalled the first time the UF team visited one of the sites, a hospital in Apalachicola, a town bordering Apalachicola Bay on the Florida panhandle. “They thought we were from some agency coming to inspect them,” said Dr. Johns. “You have to behave like them, talk like them and not be viewed as an outsider.”

Once the ice was broken, they were welcomed. “They were glad we were here. They needed the help,” said Dr. Johns.

An important goal of the UF team was to establish a network in which individual members would, as Dr. Johns put it, “come to rely on each other over time, share their successes and failures, and hopefully come together as a group to improve things.”

To achieve that, the UF College of Pharmacy team initiated “summits”, where individuals from the different CAHs get together and discuss common issues. “There have been four or five summits over the course of two years,” said Dr. Johns. “It’s very nice to walk into a room and see individual players at a table talking to each other and sharing information.”

The CAHs also have access to a blackboard Web site at the College of Pharmacy, where, according to Dr. Johns, they can post treatment protocols for heart failure or pneumonia, for example, and share their experiences.

Table: Pharmacist Staffing At Critical Access Hospitals*

Number of Hours	Percent of CAHs
None	4.2%
1-10	35.4%
11-20	14.8%
21-39	8.4%
40	20.9%
>40	16.1%

* n=472

CAH, Critical Access Hospitals

Warren N. Bailey, PharmD, Director of Pharmacy at Doctors Memorial Hospital in Bonifay, Fla., is one of the CAH pharmacists working with the UF College of Pharmacy team to improve medication safety. Dr. Bailey was a retail pharmacist at a Winn Dixie pharmacy who lost his job when his store was closed. Fortunately, the job as Hospital Pharmacy Director in Bonifay, where he grew up, was offered on the very day he learned his store was closing.

Like many pharmacists who serve in small rural hospitals, Dr. Bailey had a country upbringing. Working in a town like Bonifay and serving the medical needs of a population of just over 4,000 suits him. “I like small towns,” he said. “I want my kids to grow up here.”

At Doctors Memorial, Multitasking Is a Must

Doctors Memorial is licensed for 25 beds, but has an average day census of 10 patients. About 16 surgical procedures are performed there each month. Seriously ill patients are taken to a hospital in one of four surrounding cities in Alabama and Florida. People who work at Doctors Memorial tend to wear multiple hats, a characteristic of many rural CAHs. The computer system guru, for example, is the maintenance man at the hospital. “He is also the fire chief,” Dr. Bailey said.

One of the serious issues that he had to address when he first arrived was a cultural one. Nurses tended not to report medication errors because of a point system that punished them for reported slip-ups. “One, two, and three, and then you were gone,” he said.

Even after the punitive system was replaced by one that attempted to use error reporting as a learning tool to prevent future mistakes, the nurses remained reluctant to report incidents. Their suspicions weren’t helped when two nurses were fired for covering up a serious insulin overdose.

“Well, that created a culture problem that I’m still dealing with to this day,” Dr. Bailey said. “When I tell people they won’t have any disciplinary action taken when they bring an error to me, they still want to bring that up.”

Still, he has made progress in involving the nurses in medication safety. Dr. Bailey established a medication safety committee made up of nurses from different shifts and departments. “I let the nurses grade the med errors with me,” he said. “I also go over ISMP reports with them. They’re the first ones to see the reports and then we distribute them to the rest of the staff.”

One of the biggest problems he had as a pharmacy student and as a practicing pharmacist, he said, “was that you internalize knowledge and assume that everyone knows what you know. If you assume a nurse or even a physician knows what you know, you’re setting the system up for failure.”

He solves that by encouraging “feedback from the nurses” that allows him to “understand their knowledge or lack thereof,” he said. “I’ve learned that potential errors usually offer the greatest teaching opportunity because nothing has happened and they feel very free to discuss it. We talk about what could have happened if the patient had received this medication in error, or if it had been given to the patient in the next bed.”

Dr. Bailey said one of the committee’s greatest strengths “is that when we really nail something down, I know the committee members are going back to every shift in the hospital. I’m not going to have to chase down the night shift and try to communicate with them. I’m dealing with all of the team players at all times of the day.”

He said one weakness of the committee might be that it only has a nursing perspective. He suggested to the audience of small-hospital pharmacists at ASHP that it would be important to bring in physicians, even if only quarterly, to talk about some of the issues the committee had identified, and “really get them on board, because they are the ones that can motivate that medical staff.”

Error reporting has greatly improved since the Doctors Memorial medication safety committee was established, Dr. Bailey said. “Now they call the doctors and say, ‘We made a med error. Here’s what happened. How do you want to monitor the patient?’”

And despite the long-lasting memory of the nurses being fired, the culture has greatly improved too.

“When we asked the [current] nurses, they really had difficulty remembering what we used to do when we gave people points and punished them,” Dr. Bailey said. “That was encouraging to me because it tells me they’ve internalized the knowledge and the system we’re under right now. They’ve basically forgotten the old way, which is good.”

—Bruce and Joan Buckley