January 1 starts a new era for medical telemetry systems. On that date, the Federal Communications Commission (FCC) will open to the public frequency spectrums traditionally used by hospitals, which raises the risk of outside interference affecting patient safety.

In exchange, telemetry systems will receive their own dedicated frequencies under a new wireless medical telemetry service (WMTS). All healthcare transmitters operating in a WMTS frequency must register and pay more than $1,300 in fees to ensure interference-free operations.

The American Society for Healthcare Engineering (ASHE), the FCC-designated medical telemetry frequency coordinator, has aligned with Comsearch—headquartered in Ashburn, VA—as its technical partner in providing frequency coordination services in the WMTS bands.

A WMTS frequency coordination system allows users to quickly search for available frequencies, register them in a database, and download a coordination certificate (full details are at [www.ashe.org/ashe/wmts/index.html](http://www.ashe.org/ashe/wmts/index.html)).

Newcomers push hospitals out
In the past, hospitals using medical devices and systems operating in the 460 MHz–470 MHz range...
Medical telemetry

received primary status from the government. But soon
that will no longer be the case: Hospitals, regardless of
their location, will face interference from digital TV
transmitters, low-power TV transmitters, and land
mobile radio (LMR) systems using the same frequencies.

“All these medical devices were put in the 460 MHz–
470 MHz band for years,” says John Collins, director
of engineering and compliance at ASHE. In recent
years, the benefits from these medical devices created
a surge in their use, causing the need for a separate
frequencies, Collins says.

To allow hospitals to change to the WMTS, the FCC
froze licenses to high-power users in the 460 MHz–
470 MHz bands until January 1. The FCC was aware
that the migration might be slow due to hospitals, lim-
ited financial resources and lack of available equip-
ment.

After January 1, new users are anticipated to flood the
460 MHz–470 MHz frequency now that the FCC has
cleared them to do so, says Collins.

A question of change bothers ASHE
Only authorized healthcare providers are eligible to
operate transmitters in the new WMTS frequencies.
However, ASHE is not sure how many hospitals have
changed over, Collins says. The association worries
that the true changeover results will be known only
after a problem occurs in a healthcare facility.

Although the FCC has warned hospitals about the
impending conversion for several years, ASHE officials
believe that up to 1,000 facilities that haven’t
yet switched to the new frequencies.

“Hospitals have been given time . . . by the FCC to
make the switch, but it’s been very slow going,” Collins
says. “Even sporadic interference could wipe out an
[electrocardiogram] signal. Some hospitals may be
hoping it won’t be a problem for them, but they’re
taking a real gamble.”

ASHE suggests the following two actions for sites that
are late in switching over:
1. Try to avoid harmful interference by migrating
wireless medical telemetry equipment out of the
460 MHz–470 MHz band as soon as possible or by
attempting to get a license from the FCC to operate
the equipment as a primary user in the old range
(although this license may be difficult to obtain or
enforce).
2. Hospitals still operating telemetry equipment in one
or more of the old bands should contact TV stations
to determine their current and future plans for digi-
tal signals and then assess any potential interfer-
ence. According to the FCC ruling, TV stations are
supposed to make good-faith efforts to notify
healthcare facilities of any digital TV interference,
but ASHE says that, in the interest of patient safety,
hospitals should not wait for TV stations to seek
them out.

The benefits of telemetry systems

Wireless medical telemetry equipment offers remote
monitoring of a patient’s health through radio tech-
ology.

Wireless devices include those used with electro-
cardiograms, blood pressure monitors, and respira-
tion devices. They transport data via a radio link to
a remote location, such as a nursing station that
has a specialized radio receiver.

Using telemetry, clinicians can monitor and deter-
mine appropriate treatment on an ongoing basis.
Meanwhile, patients have greater mobility and
increased comfort because the wireless technol-
ogy frees them from connection to bedside hospi-
tal equipment. Patients can stay on their feet and
get exercise without being tethered to much
machinery.

Wireless medical telemetry also reduces healthcare
costs because hospitals can monitor multiple pa-
tients remotely at the same time, thus freeing up
nurses and other medical staff.
Hospitals, meet your new bands

ASHE is aware of the cost and work involved in converting to the new frequencies and has tried to make it easier for hospitals by educating them about the process, says Collins.

Hospitals need to find appropriate medical equipment vendors and buy or upgrade telemetry systems. Safety officers already should have performed a risk assessment to illustrate to hospital administration the reasons for the changeover and the potential liabilities, says Collins. Safety officers can point out that administrators have the choice between converting and going back to hardwiring patients in place of telemetry, he says.

ASHE emphasizes this critical point: If hospitals continue to operate telemetry in the 460 MHz–470 MHz band, they soon will be secondary users and, as a result, must withstand interference from routine operation of TV transmitters, mobile radios, walkie-talkies, paging systems, and utility metering transmitters. “These devices generate electromagnetic interference that can lead to lapses in patient monitoring and missed alarm events that can affect patient safety,” according to ASHE.

In 2000, the FCC established dedicated bands of frequencies for interference-free operation of wireless medical telemetry systems. Because no single band was open for use, the FCC designated three frequency ranges to make up the 16 MHz of the WMTS. The WMTS bands are now 608 MHz–614 MHz, 1395 MHz–1400 MHz, and 1427 MHz–1432 MHz.

Telemetry equipment operating in these bands receives primary licensed status, and FCC rules protect the bands from interference by other devices.

The switch in frequency allocation by the FCC ultimately enables patients to be monitored more efficiently without the risk electromagnetic interference blocking or altering of patient monitoring signals, according to the agency.

ASHE will maintain a database of WMTS transmitters and notify users of potential frequency conflicts.

The need for change became most apparent to the FCC in 1998 when a Dallas TV station began testing a new digital TV transmitter on a previously unused channel. The signal overwhelmed low-power heart monitors at nearby medical centers, which operated on the same empty channel.

The resulting electromagnetic interference disrupted medical telemetry monitors for heart patients. Although no patients suffered harm, the potential for injury or death was clear.

Here’s how to register with ASHE

To register your equipment for the wireless medical telemetry service (WMTS), do the following:

☐ Use the American Society for Healthcare Engineering’s (ASHE) online registration form at www.ashe.org or call 312/422-3805 to set up an account. Provide information about the hospital or facility where wireless medical telemetry equipment will be installed, and pay a one-time administrative fee. Each hospital in a health system needs a separate account.

☐ Establish a log-in identification and password to enter your WMTS deployment into the WMTS frequency coordination database, found through ASHE’s Web site or at www.wmtdsearch.com.

☐ Once in the database, enter site and equipment information as prompted, perform a frequency search, select frequencies, and download a certificate of coordination. Once you select the frequencies, your deployment will be entered into the database and you will be charged a registration fee. Once registered, you will receive a coordination certificate with a summary of your deployment or where in the spectrum your equipment operates.
New Year’s resolutions

in Marblehead, MA.

When all of these small concerns come together during an unannounced survey, they can add up to a requirement for improvement from the JCAHO, says MacArthur, who is also a contributing editor for BHS.

During a survey, “one surveyor might find a utility closet with a family of dust bunnies, then another finds a dorm-type refrigerator [that] hasn’t been dragged out and cleaned beneath for a while, and then they find a dirty mop head in a behind-the-wall space in the operating room area,” says MacArthur.

“And together, [these problems] could end up as a finding under infection control,” he says.

Or “an out-of-date fire extinguisher here, a penetration there, some storage in a stairwell over there, and you have a life-safety management finding,” he adds.

Hospitals still struggle with being in a continuous, ever-ready state. Nevertheless, that stance has to become a way of life with the unannounced JCAHO visits, says Yvonne Wojcicki, MS, MT(ASCP), safety officer at St. Vincent’s Hospital in New York City.

“We’re doing our own tracers and trying to keep awareness high through more interaction with staff,” Wojcicki says.

The key to success will be to have many sets of educated eyes on the lookout for deficient conditions. Larger hospitals may be at a distinct disadvantage in this respect because there’s so much more space to watch, more opportunities to get into trouble, and chances are, more surveyors poking into dark corners, he says.

The more you allow frontline staff to keep their eyes on things, the more successful the hospital will be during unannounced visits from the JCAHO.

Prepare your hospital for a pandemic.

The possibility of a pandemic is on the minds of many healthcare practitioners for 2006.

St. Vincent’s is working with the New York Department of Health and Mental Hygiene on how to keep health services operating during a pandemic.

“We are working on systems and protocols to screen and isolate people at the hospital doors,” Wojcicki says. “We’re [putting] more personal protective equipment near entrances.”

These efforts include signs that might say “If you have symptoms, use masks,” for instance. The signs will be written in several languages, she says.

“A major focus for us this year will be on training staff for a potential pandemic and running lots of drills,” Wojcicki says.

Determine how to allot medications to the masses.

St. Vincent’s is starting a point of dispensing (POD) planning program that can tie into any public health situation, such as smallpox or anthrax, says Wojcicki.

PODs are locations where staff or volunteers can hand out medications to large groups of people.

Placing key staff at critical stations to control the flow of people coming in for vaccinations or other needs is going to be a major effort this year, she says. The goal is to mobilize a clinic within 30 minutes so people can be screened at a triage station.

Crowd control and security issues will be critical elements to work on as well, she says. The hospital
already conducted one drill that went relatively well.

“Next time we want to include some twists, such as including pregnant patients or those with allergies,” says Wojcicki.

Be creative and tough with disaster drills.

Wojcicki predicts that the JCAHO will become even stricter on emergency management in 2006 in light of 2005’s awful hurricanes.

“We expect the JCAHO to spend more time testing us on this issue,” she says. “To prepare, we are going to beef up communication, especially with our frontline staff.”

A hospital’s readiness will depend on top administrators agreeing about the definition of a thoroughly involved drill, MacArthur says. Every department should be involved in this debate, including medical staff, to arrive at a comprehensive drill solution.

“If the medical team signs off on the test, the [JCAHO’s] survey team is less likely to try to poke holes in it,” says MacArthur.

The JCAHO’s emphasis will be on drills that strain your emergency response systems. Include various “levels of chaos” in your exercises, he says.

Hospitals need to develop creative drill scenarios by throwing some “twists into the mix,” says MacArthur. For example, consider adding a building power outage into your decontamination drill or loss of water. In those scenarios, how would staff decontaminate patients?

Investigate online options for your SOC ahead of time.

The migration from paper to electronic versions of the Statement of Conditions (SOC) adds a new twist to that document’s compliance efforts, MacArthur says.

Hospitals have until January 2007 before the JCAHO mandates their compliance with electronic versions of SOC Parts 2 and 4 (basic building information and the plan for improvement). Facilities should become familiar with the electronic provisions, particularly in the scope of unannounced surveys.

“When the survey team hits your doorstep and locks the SOC for your survey, you need everything to be complete and accurate,” says MacArthur. If your SOC is sub par, “it could be a long couple of days.”

Safety officers need to be critically honest in conducting related Life Safety Code® assessments as well. One of the worst events that could happen during a JCAHO visit would be a surveyor finding a deficiency you didn’t know about, MacArthur says.

Illustration by David Harbaugh

“That’s our emergency generator.”
All healthcare workers at four Massachusetts hospitals will now be screened for tuberculosis (TB) or will need to prove prior testing before they can work with patients. The action came as a direct result of a situation in June when public health officials learned that a surgical intern had been treating patients for months after testing positive for TB.

An investigation by the Occupational Safety and Health Administration (OSHA) found that the hospitals failed to ensure the good health of practicing medical personnel after a rotating intern received a positive TB test.

The facilities involved never followed up to make sure that the intern received treatment for the illness. The sites include Boston Medical Center and West Roxbury Veterans Affairs (VA) Hospital, both in Boston, as well as Brockton (MA) Hospital and Cape Cod Hospital in Hyannis, MA.

The result was that the hospitals in question had to provide TB screening tests for more than 5,500 patients and healthcare workers. Retracing who came in contact with the surgical intern was a “time-consuming, logistical nightmare,” says Michael Charness, MD, chief of staff for the Boston VA Healthcare System.

After an exhaustive investigation and testing, officials found that four patients and 13 healthcare workers tested positive for TB, presumably as a result of exposure to the intern. None had active cases.

OSHA didn’t issue any fines or citations. The agency has no specific regulations for TB in healthcare settings, although its standards for respiratory protection and personal protective equipment tie in to TB risks.

Investigators determined that the infected intern tested positive in mid-2004 during a routine medical exam required before beginning her internship at Boston Medical. At that time, she was sent to a clinic for a chest x-ray and other tests, but she allegedly chose not to follow up on any of the results. She began her internship at Boston Medical and also practiced at the other three hospitals.

Compliance with TB treatment among healthcare workers “has historically been poor,” the CDC report says. Employee health clinics and infection control departments should emphasize to employees the importance of completing TB therapies.

Managers at Cape Cod Hospital, where the intern worked in January 2005, assumed that the intern had been checked out at Boston Medical and that all of the proper testing was completed.

“There was no mechanism to ensure that tests had been done and completed [before]—now there is,” says David Reilly, Cape Cod Hospital spokesperson.

Health officials determined that the intern was infectious from December 2004 through June 2005, at which time she was removed from her duties. The intern’s name has not been made public due to federal privacy laws.
**Retooling efforts at TB monitoring**

After the incident, all four hospitals strengthened their regular procedures in order to avoid a recurrence.

Boston Medical now requires that healthcare workers complete all the steps of TB testing before starting work. At Brockton and Cape Cod Hospitals, all medical staff must provide proof that they do not have TB.

“All the hospitals are increasing their level of detail about testing,” says Charness. The VA previously required a resident credential verification letter attesting to the health of the physician. The letter essentially indicated that the physician received testing for TB and other infectious diseases, Charness says.

“Now, the hospital follows up on the tests,” he says. These changes were scheduled to be in place at his hospital by December 1.

That said, TB infections can still evade tougher measures. “There still could be so many instances where even strict measures wouldn’t necessarily provide protection,” Charness says. “No system will ever be perfect, and some of the responsibilities must lie with the individual.”

**Some suggestions to consider**

Charness offers these closing thoughts about TB prevention:

- Hospitals should tailor their TB programs in accordance with CDC guidelines, he says. The CDC is in the midst of reviewing an updated version of its TB recommendations for healthcare facilities, which could be published soon.
- Hospitals also need to be mindful of the fact that when trainees come in—especially those from overseas—they may have a higher risk for TB.
- Healthcare facilities shouldn’t underestimate their level of risk and the potential fallout from a TB infection to a physician, he adds. “It took at least 50 hours of my time dealing with staff, patients, regulatory agencies, and the media,” he says. “And several staff members were dedicated full time to the effort.”

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### TB testing recommendations for healthcare workers

- At hiring, healthcare workers should undergo baseline testing for latent tuberculosis (TB) infections. Hospitals should base the frequency of subsequent testing on the results of a site’s risk assessment on potential TB exposures.
- Hospitals should encourage employees with latent TB infections to start and complete treatment if indicated. Facilities should monitor and analyze employee test results.
- Employees should regularly receive education about TB.

*Source: Centers for Disease Control and Prevention’s 1994 Guidelines for preventing the transmission of *Mycobacterium tuberculosis* in healthcare facilities.*

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**TB testing recommendations for healthcare workers**

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*Source: Centers for Disease Control and Prevention’s 1994 Guidelines for preventing the transmission of *Mycobacterium tuberculosis* in healthcare facilities.*
**ADA settlement will cost millions**

After a legal agreement in November to provide disabled people with equal access to care, Washington (DC) Hospital Center will change policies, rooms, equipment, and procedures.

The settlement of a 2003 lawsuit by four former patients is one of the most comprehensive ever negotiated for medical services under the Americans with Disabilities Act (ADA), according to the U.S. Department of Justice.

The settlement could cost the 900-bed medical center nearly $2 million over several years due to modifications to inpatient departments and outpatient clinics and due to changing physical barriers, *The Washington Post* reported.

The plaintiffs complained that the hospital was not equipped to cope with their physical limitations and that their care was more difficult because of it. For example, staff placed one patient undergoing radiation for thyroid cancer in an orthopedic wing because the oncology floor was not wheelchair accessible, according to *The Post*.

Changes at the hospital will include creating at least 35 ADA-accessible patient rooms, purchasing accessible equipment, training staff to be aware of the needs of disabled patients, and appointing an internal ADA officer to oversee the settlement, according to the Department of Justice.

**State says it can't use its new hospital**

A new, $19 million state hospital in Milledgeville, GA, remains empty since it was built in 2003 due to its “nonfunctional” condition, *The Macon (GA) Telegraph* reported.

Intended to treat mentally ill people charged with committing crimes, the building has numerous problems, state officials told the *Telegraph*. They include improperly functioning electronic locks and fire alarm systems, a leaky roof, ceilings not properly attached to the structure, air vents that can be pushed out to allow access to the space above, and an exterior security fence that the state had to rebuild completely.

The state is considering legal action against the contractor. The contractor said it constructed the building to state specifications, according to the *Telegraph*.

**Memphis hospital goes out with bangs**

More than 1,500 people gathered to watch the implosion of the 960,000 sq. ft. Baptist Memorial Hospital in Memphis on November 6.

Aside from a few broken windows in surrounding buildings, the implosion, which took 21 seconds to complete, was a success, reported *The Commercial Appeal* newspaper.

To bring down the 21-story tower, the demolition company drilled about 2,500 holes and packed them with explosives. The complex came down to make way for a 1.3 million sq. ft. research development, according to *The Commercial Appeal*.

**President's flu plan includes hospitals**

President Bush released his proposed pandemic influenza plan in November, asking Congress for $7.1 billion in related funding.

For hospitals, the highlights of Bush’s proposal include

- requests to supply enough antiviral medications to help treat frontline healthcare workers and others who are among those most at risk in the early stages of a flu pandemic
- $100 million to help states complete and drill their pandemic plans
- bolstering the national stockpile with critical medical supplies for healthcare workers, such as syringes, hospital beds, and respirators—all of which would be in demand during a pandemic

To read the details of Bush’s plan, go to
Under pressure, hospital makes security changes

Connecticut Children’s Medical Center in Hartford submitted a plan to state authorities in November to increase patient safety in an effort to save its license to operate.

Connecticut Health Commissioner J. Robert Galvin warned the hospital that if it didn’t make meaningful progress in correcting past flaws that put patients at risk, he would close it down, according to the Hartford Courant. Tighter security was one of the improvements proposed by the hospital, the Courant reported.

Visitors and patients must now sign in at the security desk and wear bar-coded stickers while they are on hospital grounds. They must return the stickers when they leave, enabling security officers to track each person who enters and exits.

Also, the hospital now keeps inpatient unit doors locked, and security guards are on each floor to monitor traffic.

In May, the state placed the hospital on a two-year probation and imposed a $250,000 fine after two security-related incidents in 2004, the Courant reported.

Chopper clips a hospital and crashes

A medical helicopter lifting off of St. Peter’s Hospital in Olympia, WA, on October 28 lost power and crashed into the facility before hitting the ground, causing a slight amount of damage to the building.

Fortunately, the patient, two flight nurses, and pilot in the helicopter were not seriously injured after the 70-foot fall, according to the flight provider, Airlift Northwest. The helicopter was extensively damaged. The National Transportation Safety Board (NTSB) is investigating the accident.

The crash was the second in a month for Airlift Northwest. On September 29, a medical helicopter crashed into Puget Sound in Washington, killing three crew members, according to the NTSB.

Patient death leads to $71,000 fine

A Pennsylvania hospital paid the state Department of Health a fine of $71,000 after staff allegedly improperly restrained a patient, leading to his death.

The patient died in 2004 after he was admitted by his parents to the psychiatric unit of Gnaden Huetten Memorial Hospital in Lehighton, PA, according to the Morning Call newspaper.

Several employees restrained the patient, who had become violent. One worker allegedly went on top of the patient’s back while others allegedly held him face down on the floor for almost 20 minutes, the Morning Call reported.

Since the death, the state has conducted follow-up inspections that were satisfactory. The hospital declined comment about the fine to the Morning Call.
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Tip of the month

Strategies to keep older workers safe may benefit employees of all ages

If the phrase “older and wiser” describes a good portion of your hospital’s roster or you have plenty of baby boomers in your ranks, then think about how to meet age-related safety needs of those workers.

Even though workers get older, they are unlikely to take it easier on the job, according to a press release from the American Society of Safety Engineers (ASSE).

“Equipment, facilities, and work processes can be improved to account for the limitations of the aging work force and to take advantage of their experience and capabilities,” said Bruce Tulgan in the release. Tulgan is an ASSE member and president of Rainmaker Thinking, Inc., a New Haven, CT–based workplace research firm.

Hospital safety programs should seek to offset the physical results of aging, such as added weight, a decrease in height, and hearing and vision loss, Tulgan says. But safety changes don’t have to be expensive and can benefit younger and older employees, thereby increasing productivity for everyone, according to ASSE.

The following suggestions from ASSE may increase safety for an aging work force:

- Improve illumination and add color contrast
- Eliminate heavy lifts, elevated work from ladders, and long reaches
- Remove clutter from control panels and computer screens and use large video displays
- Install skid-resistant material on flooring and stair treads to reduce falls
- Install shallow-angle stairways in place of ladders when space permits
- Use hands-free, phone equipment
- Lower sound system pitches (e.g., on alarm systems) so they are easier to hear
- Consider necessary reaction time when assigning older workers to tasks

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Briefings on Hospital Safety

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Segway into future modes of transportation

Security departments use technology advances to cover grounds more efficiently

Many hospital security departments have begun in recent years to add bicycle units to raise visibility and cover more ground on large hospital campuses.

Bicycle units have started popping up at hospitals after security departments discovered that these units can cover more territory than cars and trucks for less money while allowing officers to be more accessible.

Even as bicycle patrols become more commonplace, some hospitals are testing out new, high-technology transportation devices to increase efficiency, visibility, and response time.

They have turned to the Segway and the American Chariot, new vehicles that allow officers to move quickly, safely, and efficiently while making their presence known to staff, patients, and would-be rule-breakers.

Covering the grounds

Roger Sheets, CHPA, director of security at LifeBridge Health in Baltimore, says his staff got the idea to use Segways—“two-wheeled, self-balancing, electric transportation devices,” as described on the manufacturer’s Web site—from seeing employees at the Baltimore International Airport use them to maneuver through crowded terminals.

“The one thing we really noticed was the advantage it gives an officer by putting the rider 8 in.–10 in. above the crowd,” says Sheets, who started using Segways in his facility in July. “We also saw how they could move through the crowds safely and people took notice.”

After meeting with a Segway distributor, Sheets and his team used a couple of demo models, and “the whole staff absolutely fell in love with them.”

Hospital officials approved the purchase of four Segways at a cost of about $5,000 each, but Sheets says it was money well-spent.

Five security issues to look out for in 2006

Editor’s note: Each issue of Healthcare Security Alert features an expert’s answers to your security questions. Fred Roll, president of Roll Enterprises, Inc., in Morrison, CO, provides this month’s response. If you have a security question for one of our experts, e-mail Editorial Assistant Kevin Moschella at kmoschella@hcpro.com.

What will be the key issues for security departments to look out for in 2006?

I see the following five issues as areas of concern for security departments in 2006:

1. Continued pressure to do more with less. Healthcare in general will continue to identify ways to minimize expenditures. This typically means that fewer dollars will go to ancillary departments, such as security. Opportunities exist to evaluate and use data to identify the security team members’ duties, functions, and activities. Demonstrate the overall value of the security program by addressing value-added services to prove...
Future transportation

“I was actually somewhat skeptical at first, but after applying [the Segways] for awhile, I want to expand [them] to our other facilities,” he says. “Segways allow us to cover three to four times the area as on foot, and as opposed to a bike, a responding officer isn’t out of breath after arriving on scene to an emergency.”

Segways allow LifeBridge officers to cover the 64-acre campuses of Sinai Hospital and the Levindale Hebrew Geriatric Center 24 hours a day, using them inside the buildings at night, which they cannot do with bikes.

But before any officers in the LifeBridge system began using Segways, they underwent an eight-hour training program established by the manufacturer. Officers learned to develop proficiency in maneuvering the vehicle safely and had to pass a test to become certified. Sheets also made it mandatory for officers to have an annual competency test and review.

“Obviously, it’s a motorized vehicle, so we have our safety concerns,” says Sheets. “Even though our officers have a lot of fun using the Segways, they take the responsibility very seriously and know one accident could change things drastically.”

American Chariot of fire

The Carolina Healthcare System in Charlotte, NC, uses another option as a transportation vehicle. The American Chariot is an electronic bike with three wheels. The officer stands on the bike, similar to chariots from the Roman Empire days.

“[The American Chariot] has similar traits to the Segway in that it attracts a lot of attention, the operator isn’t using his or her own energy, and it increases response time and coverage area, but we found it had less of a learning curve,” says Jeff Karpovich, CPP, CHPA, director of corporate security, access control, and parking at Carolina Healthcare System. “It really promotes an omnipresence. You can’t hear it coming, but you turn the corner of a parking deck and it’s there. It conveys to the criminal element that security is everywhere.”

Karpovich says he likes the American Chariot because its three wheels provide more stability than bikes during wet weather or on less-than-ideal terrain.

American Chariots have bright lights for night use and allow officers to carry more tools than a Segway or bicycle because of built-in compartments.

Carolina Healthcare System officers went through similar training as the officers from LifeBridge, but presently do not use the vehicles indoors.

Biking benefits

Even though Karpovich and Sheets are finding success with their new electric vehicles, both facilities still use regular bike patrols as well. And because these high-tech, higher-cost vehicles aren’t readily in use yet, many hospitals are still working on ways to add or improve their regular bike patrol units.

“Bikes really bridge the gap between motor vehicle patrol and foot patrol,” says Kim Dietz, the lieutenant security supervisor who runs the bike patrol unit at the University of Michigan Health System in Ann Arbor. “Bikes can get to places cars can’t and are great during peak times in parking structures when there’s a lot of congestion.”

No matter what mode of transportation you use outside of foot patrol or motor vehicles, safety is still the most important thing to keep in mind. “All our officers must wear their patrol uniform, bike shorts or pants, and a bright-colored jacket with reflectors,” says Dietz. “But the most important thing they wear is their helmet.”

Segway and American Chariot riders wear similar outfits and helmets, but the bright yellow vest jackets aren’t typically what get everyone’s attention.

“The public relations you get from having your officers ride around on a vehicle like a Segway or American Chariot almost pays for itself,” says Karpovich. “Patients and staff notice security is out there, so they feel safe, and we always have people coming up to our officers talking to them about what they are riding.”
Sample bike patrol program policy

I. Policy statement
The objective of the bicycle patrol program is to enable and encourage officers to be more visible, contributing to crime reduction and improved community relations, and to allow mobility in areas not accessible by motor vehicles.

II. Qualifications
A. Officers participating in the bicycle patrol should possess the following attributes:
   • Self-motivation and the ability to work independently without close supervision
   • Excellent physical condition
   • Exemplary uniform appearance
   • Superior interpersonal communication skills
   • Exceptional attendance record
   • A commitment to the success of the bicycle patrol.
B. Officers must demonstrate adequate fitness levels by completing a 3 mile ride within the time established by the department (12 minutes, 30 seconds for males; 14 minutes, 30 seconds for females).
C. Officers must successfully pass the physical standards test at least once a year. If an officer fails to meet the standards, he or she may try again within 30 days. Only one retest will be allowed.

III. Training
A. All bicycle officers must participate in and pass a department-approved bicycle patrol training course.
B. The training may be taught in-house or at another agency with the International Police Mountain Bike Association (IPMBA) Police Cyclist Course as the curriculum.
C. Officers will participate in service training for updates on current techniques and assessment of their physical fitness levels.

IV. General duties
A. The bicycle officers will function as if they worked in a patrol car. They will complete all job tasks and provide normal services as requested by the customer.
B. Bicycle officers will answer calls for service in the patrol area they are assigned, or in an assigned target area as defined by mission needs or supervisory discretion.
C. Individual officers will be responsible for the security of their bicycle at all times while on patrol.
D. Bicycle officers will provide a high visibility patrol, concentrating their activities in targeted areas that have been identified as priorities by customers’ concerns and community-oriented patrol groups.

V. Uniforms
A. Officers must maintain a high standard of personal appearance.
B. Officers will wear only the department-approved bicycle uniform and accessory equipment while on duty, unless otherwise authorized.
C. No part of the bicycle uniform may be worn with the regular duty uniform.
D. Protective eyewear and a bicycle helmet must be worn at all times while riding.
E. If a bicycle officer is transferred to another assignment, the officer shall change into the regular duty uniform unless otherwise approved.

VI. Bicycle maintenance
A. A designee of the bicycle patrol unit leader will keep a record of all maintenance performed on each individual bicycle.
B. A repair order requesting maintenance will be completed by the officer who is assigned to that bike.
C. All officers must perform the IPMBA “ABC Quick Check” prior to riding the bike and after leaving a bike unattended while on patrol.

VII. Deployment
A. Bicycle patrol officers should report to work dressed and prepared to ride the bicycle on days in which they are assigned bicycle patrol duties.
B. Bicycle patrol officers should have all pertinent equipment to perform routine duties when they begin their tour of duty.
C. It is the decision of the individual officer to cease patrol due to inclement weather.
D. When staffing permits, bicycle officers should be deployed in pairs.

Source: University of Michigan Health System. Adapted with permission.
the return on your investment.

2. The controversy between “open visitation” and security. Administration and public relations (PR) believe that open visitation, as opposed to limited visiting hours or mandatory check-in, sounds great, but unfortunately, it also often means leaving your facility’s doors open for visitors to freely come and go. This practice places security in the difficult position of trying to meet the needs of the facility while providing adequate protection.

To combat the problem, try to convince administration and your PR people that good security is great PR. Tactfully remind them that a significant security incident can be one of the worst PR events the facility can have. Combine the two concepts by using limited after-hours access points, appropriate signs, and trained individuals to greet and direct authorized visitors to their destination.

3. Security officer visibility. With the pressure to minimize costs, security must sometimes reduce its personnel. Security directors should evaluate the overall visibility of security to include uniforms, vehicles, and even the location of the security operations center. Highly visible uniforms allow for a sense of security to the staff, patients, and visitors, as well as creating a deterrent for individuals who may wish to violate the rules. Highly visible patrol vehicles can also demonstrate a greater security presence. Some departments now locate their security operation centers in main lobbies or off of highly used hallways.

4. Security’s role in emergency preparedness/terrorism planning. Security will continue to be more involved in emergency preparedness, which will create the ability for security managers to become an integral part of the planning process. Security should have a role in creating policies and procedures. This involvement could lead to security taking on additional responsibilities, which may lead to potential advancements and financial gains within the organization.

5. The lack of effective electronic security applications. Many healthcare facilities have electronic security components in place that are ineffective and not programmed to work efficiently together. Departments should assess the current electronic security components and establish short, intermediate, and long-term plans to create an integrated electronic security program that gets the most out of the current technologies. All components purchased in the future should be digital and capable of systems integration.