How to Bring the Price of Health Care Into the Open
There’s a Big Push to Tell Patients What They’ll Pay—Before They Decide on Treatment
By Melinda Beck
Wall Street Journal
Updated Feb. 23, 2014 5:03 p.m. ET

It’s a simple idea, but a radical one. Let people know in advance how much health care will cost them—and whether they can find a better deal somewhere else.

With outrage growing over incomprehensible medical bills and patients facing a higher share of the costs, momentum is building for efforts to do just that. Price transparency, as it is known, is common in most industries but rare in health care, where “charges,” “prices,” “rates” and “payments” all have different meanings and bear little relation to actual costs.

Unlike other industries, prices for health care can vary dramatically depending on who’s paying. The list prices for hospital stays and doctor visits are often just opening bids that insurers negotiate down. The deals insurers and providers strike are often proprietary, making comparisons difficult. Even doctors are generally clueless about what the tests, drugs and specialists they recommend will cost patients.

Princeton economist Uwe Reinhardt likens using the U.S. health-care system to shopping in a department store blindfolded and months later being handed a statement that says, “Pay this amount.”

The price-transparency movement aims to lift that veil of secrecy and empower patients and other payers to be smarter health-care consumers. Federal and state agencies are gathering reams of price information from doctors and hospitals and posting them for the public. Health plans are offering online tools that let members calculate their out-of-pocket costs. Startup companies are ferreting out and publishing the long-secret rates that providers negotiate with insurers.

When consumers can compare prices for doctor visits, hospital stays and other services, the theory goes, market competition will help keep them down.

An Incentive to Change

This is new territory for health care. Doctors and hospitals have rarely competed on cost. Third-party payers still foot the bulk of the bills, and many players in the health-care industry benefit from keeping their costs and profit margins murky.

"The time for transparency has clearly arrived—but is everybody ready to have real pricing power brought to bear in a way that could destabilize the health-care sector?" asks Susan Dentzer, a senior policy adviser at the Robert Wood Johnson Foundation. "It means upsetting a lot of apple carts."

The pressure to change is rising, however. Experts expect consumers to be much more price-sensitive as they shoulder a growing proportion of health costs themselves. Last year, 38% of Americans with employer-sponsored insurance had a deductible of $1,000 or more—up from 10% in 2006, according to the Kaiser Family Foundation.

Silver and bronze plans created by the Affordable Care Act carry average family deductibles of $6,000 and $10,386, respectively. More than half of bronze plans also require patients to pay 30% of doctors’ fees, according to health-information site HealthPocket.com. "Most of us still don’t have much financial incentive to shop around for cheaper care,"
says Suzanne Delbanco, executive director of Catalyst for Payment Reform, a nonprofit that works on behalf of employers. "That's changing rapidly."

Efforts to raise transparency are coming from a number of corners, including the Obama administration. But some have mainly shown how confusing health-care pricing is.

Hoping to shine a light on the variations in hospital charges, the Centers for Medicare and Medicaid Services, or CMS, grabbed headlines last May when it released a list of the average prices 3,300 U.S. hospitals charged Medicare for the 100 most common inpatient services during 2011.

Huge Differences

The variations were stunning. The average charge for joint-replacement surgery, for example, ranged from $5,300 in Ada, Okla., to $223,000 in Monterey Park, Calif. Even in the same city, there were huge swings. The charge for treating an episode of heart failure was $9,000 in one hospital in Jackson, Miss., and $51,000 in another.

A month later, CMS released a second database comparing average hospital charges for 30 common outpatient procedures, and the variations were just as great. A hospital in Pennington, N.J., charged $3,036 for a diagnostic and screening ultrasound, while one in Bronx, N.Y., billed just $88.

Many hospital executives dismiss those list prices—also known as chargemaster prices—as meaningless and misleading, since few patients ever pay them. Commercial insurers often use them as a starting point for negotiating big discounts. Medicare itself pays hospitals predetermined rates based on diagnoses, regardless of what they charge.

Industry experts say list prices vary so much in part because hospitals use different accounting methods and have different patient populations. List prices also reflect all the costs of running a hospital, including keeping ERs, burn units and other costly services running 24 hours a day. What's more, many hospital executives say they have to mark up charges for privately insured patients because Medicare and Medicaid reimbursements don't cover those patients' cost—a shortfall the American Hospital Association puts at $46 billion nationwide last year.

Hospitals "are absolutely in favor of price transparency," says AHA president Rich Umbdenstock, and they support a bill in Congress that would let individual states determine price-disclosure rules. He also says hospitals would like to end the confusing chargemaster and cost-shifting practices, but they can't do it without big changes in payment practices by both the government and the insurance industry.

"If this were in our power to solve, we would have done it a long time ago," Mr. Umbdenstock says. "But it's not something we can do on our own."

Shining a Light

Jonathan Blum, deputy administrator of the CMS, counters that chargemaster prices do matter, particularly to uninsured patients who sometimes get stuck with those inflated bills. He says the administration's goal was to spark discussion about price variations, and that "a tremendous number" of visitors had downloaded the data.

"We've discovered that oftentimes, even health-care providers don't fully realize the extent of those variations," he says. "Our hypothesis is that a lot of the variations aren't warranted."

The prices insurers negotiate with hospitals and doctors are more important to consumers, experts say. Traditionally, those rates have been proprietary. Neither insurers nor providers want competitors and other business partners to know what they're willing to settle for. Some contracts include gag clauses barring disclosure.
But states are increasingly requiring payers and providers to reveal that information. A few states specifically outlaw gag clauses in health-care contracts. Sixteen states have "all-payer claims databases" designed to collect insurance claims data and use it to monitor trends and identify high- and low-price providers. And some 38 states now require hospitals to report at least some pricing information, although only two—Massachusetts and New Hampshire—rated an "A" in Catalyst for Payment Reform's annual report card for making the information accessible and usable by patients.

Meanwhile, entrepreneurs are sleuthing out negotiated rates from claims data and making them available to consumers and employers in various forms. Healthcare Bluebook aims to do for health care what the Kelley Blue Book does for used cars: It analyzes negotiated rates paid for thousands of medical services in every ZIP Code—supplied by employers and other clients—and posts what it considers a "fair" price for each so consumers can evaluate what they're being charged.

Bluebook's founder and CEO, Jeffrey Rice, says the rates insurers pay for, say, an MRI or knee surgery can vary as much as chargemaster prices do, particularly if a local hospital is dominant or prestigious.

"The difference may not be much between Nashville and Chicago—the big difference may be just down the block," he says.

Mr. Rice says the employers Healthcare Bluebook works with have saved as much as 12% on their health-care costs by making price information available to their employees, with most savings coming on imaging studies, endoscopies, cardiac testing and other outpatient procedures.

Another service, PricingHealthcare.com, asks users to anonymously supply information from their own medical bills to help it amass the list prices, cash prices and negotiated rates for common procedures. It currently shows rates for some 500 procedures in 11 states. Founder Randy Cox says some providers are furious when asked what their rates are, while others are eager to have their entire price list posted. "I get calls from hospital CEOs who know people are concerned about price and think this is an opportunity for their business," he says.

A Hand From Insurers

One of the most widespread initiatives comes from insurers themselves—who say they are eager to help plan members and employers cut their health-care bills. Some 98% of health plans now offer their members some online tool that lets them calculate their out-of-pocket costs, according to a survey by Catalyst for Payment Reform. A few let users compare different providers in the same network.

UnitedHealth Group Inc. has one of the most extensive tools. More than 21 million members can log into myHealthcare Cost Estimator and compare the negotiated rates for more than 500 individual services at in-network providers across the country, as well as their individual out-of-pocket costs for each one. Hundreds of thousands of plan members have used the tool since it launched in 2012, the company says.

Nationwide, only about 2% of health-plan members who have access to such tools have used them, according to Catalyst for Payment Reform. But Ms. Delbanco expects that number to rise as more patients become aware of the tools and see their out-of-pocket costs growing.

Proponents say it is too early to tell how much impact transparency efforts will have on costs overall. California has required hospitals to make their chargemaster prices public since 2003, with little effect on prices.

But one approach called "reference pricing" has yielded some savings. Where local prices differ substantially for a service like a colonoscopy, an insurer publishes a list of providers' rates and agrees to pay a set amount. If patients choose a provider that charges more, they must pay the difference themselves.

In one pilot project, the California Public Employees' Retirement System, found prices for hip and knee replacements ranging from $15,000 to $110,000 in the San Francisco area. It agreed to pay up to $30,000, and some 40 hospitals cut their prices to match. Such initiatives have helped Calpers save nearly $3 million in the past two years, one study found.

What Comes Next?

Experts say that as consumers increasingly compare prices, it's critical to provide them with information about quality of care as well—otherwise, they might assume high cost equates with high quality.
A growing body of research has found that there is no clear connection between price and outcomes such as mortality rates, blood clots, bed sores and hospital readmission. "Until you break that connection in peoples' minds, there is a perverse incentive for hospitals and health systems to continue to raise prices," Ms. Dentzer says.

Indeed, critics fear that some price-transparency efforts could backfire and spur higher prices: If providers see that insurers are paying competitors more, they might hold out for higher rates, and insurers might be less inclined to give some providers favorable deals.

Some skeptics think that without fundamental changes in how health care is priced and paid for, transparency may confuse consumers more than it empowers them.

But there's a growing consensus that while price transparency alone cannot transform the health-care system, it is necessary to help reveal which costs are excessive and let consumers make better-informed choices.

"At the end of the day, it's our money," Ms. Delbanco says. "We have a right to know what our health care is going to cost."

Ms. Beck covers health care and writes The Wall Street Journal's Health Journal column. She can be reached at melinda.beck@wsj.com.

Searching for the True Cost of Health Care
Providers Look to Cut Waste With Detailed Cost Tracking
By Melinda Beck
Updated Feb. 23, 2014 5:03 p.m. ET

Most doctors and hospitals have only a vague idea what it costs them to deliver care, experts say. Prices are generally based on what payers will pay, with little relation to cost.

Several leading health systems aim to replace that chaotic pricing system with one based on the true cost of delivering care. Armed with that information, they believe they can reduce health-care costs from the inside, by identifying inefficiencies, rather than accepting arbitrary payment cuts.

The philosophy is: If you can measure it, you can manage it.

Step by Step
M.D. Anderson Cancer Center, the Cleveland Clinic, the Mayo Clinic and other top hospitals have embraced a process, advanced by two Harvard Business School professors, called time-driven activity-based costing. TDABC involves mapping out every step involved in delivering a medical service, from a simple blood draw to a complex surgery. Researchers determine what personnel and equipment are needed, what their costs are per minute and how many minutes are involved. They tally the costs for all the steps, allocate a share of overhead expenses and add in a profit margin to determine the true cost.

"None of this is rocket science. It isn't even calculus—it's regular math," says Thomas W. Feeley, an anesthesiologist who used TDABC measure the cost of treating head-and-neck cancer patients at M.D. Anderson from 2009 to 2011.

He and his colleagues identified and calculated the cost of delivering 160 different services patients might receive during the course of their treatment, usually about a year. The results were eye-opening, says Dr. Feeley, who heads M.D. Anderson's Institute for Cancer Care Innovation.

For one thing, a patient's first visit cost M.D. Anderson significantly more than it charged patients, due to the extended discussions and testing involved. Another revelation was that some hospital staffers were performing tasks that could be done by others for much less.

By reducing such inefficiencies in one area of care, the preoperative anesthesia center, M.D. Anderson was able to trim the center's staff by 17%, increase the number of patients assessed by 19% and lower cost by 46% without changing the quality of care.
M.D. Anderson plans to use the same process to assess the cost of every kind of cancer care it delivers. But it is not yet prepared to disclose those dollar amounts—or to use them to change billing procedures. "We have to make this transition very carefully," he says.

One Size Doesn't Fit All

Indeed, integrating that approach into the current health-care payment system with all its price negotiation and cost shifting won’t be easy. Critics argue that hospital overhead costs are too complex to allocate accurately and that patients are too varied in their needs to fit neatly into standardized units of time and care.

Michael E. Porter and Robert S. Kaplan, the Harvard professors who pioneered using TDABC in health care, say that ideally prices should be based on the value for patients—not the volume of services provided. Value should be measured by dividing the real cost by outcomes over an extended cycle of care.

"Under such a system, a primary-care physician might be paid $10,000 a year to manage a diabetes patient—and prevent a $100,000 emergency-room visit," says Mr. Kaplan.

"This is a big leap for the field," says Mr. Porter. "We've been flying without instruments and rewarding the pilot for crashing."

A growing array of health systems are experimenting with value-based methods in pilot projects. Profs. Porter and Kaplan's team at the Harvard Business School have used TDABC to evaluate the cost of repairing cleft lips and palates at Children's Hospital in Boston, torn rotator cuffs at Brigham and Women's Hospital in Boston and heart problems at the Mayo Clinic. The team is also working with the Cleveland Clinic to measure efficiency and outcomes in a variety of programs and is studying hip and knee replacement costs at 30 sites around the country.

For now, such projects aren't practical for many hospitals. "Cost-accounting systems are exceedingly complex and expensive for hospitals to perform," says Rich Umbdenstock, president of the American Hospital Association. "But eventually that's the only way you'll be able to price things on a realistic basis."

---

The Anatomy of a Hospital Bill
An Appendectomy Ran Nearly $30,000. Where Did the Money Go?

Decoding a hospital bill can feel like spycraft.

"Most people can't read a bill," says Nancy Davenport-Ennis, chairwoman of the Patient Advocate Foundation, a nonprofit that helps patients solve insurance and health-care access problems. "They don't understand what the abbreviations and billing codes mean," she says, so they can't tell whether they received particular services they're being charged for.

Billing practices vary, but typically a patient will be charged for medications, room and board, doctors' time, anesthesia, and specialized units such as operating and emergency rooms. Lab work and other tests, like CT scans, are also likely to show up on a bill. "You pay for every single thing—including the disposable cap on the electronic thermometer," Ms. Davenport-Ennis says.

There is a movement afoot in the industry to simplify hospital bills and draw the eye to what often matters most to the patient: how much you owe.

But for now, patients may find themselves on their own with a complicated statement. Though no two bills are exactly alike, the accompanying rundown offers a revealing glimpse at some of the significant, surprising or unusual charges that can show up on a hospital bill—in this case, from among the 76 items that added up to $29,380.48 for an appendectomy performed in the Southeast. The patient's insurer had negotiated a rate for the hospital stay of $13,588.25. The patient was responsible for a 10% co-insurance payment on top of a $100 deductible.
How Health-Care Spending Got So High
Hospital Care Tops the Charts; ‘Dread Diseases’ Get Costlier

Where have the increases in health-care costs come from?

Though the pace has slowed recently, medical prices have climbed more rapidly than the consumer price index over the past several decades.

Hospital care still represents the lion’s share of health spending, at around a third of the nation’s health dollar, though that has fallen from a high of nearly 40 cents in every dollar in 1980. And if you look at Medicare’s spending on hospital services—actual and projected—it’s clear that this will remain a daunting challenge.

Meanwhile, nursing-home care and other services for older Americans make up a growing portion of costs. Big increases also show up in treatment costs for so-called dread diseases such as cancer and heart conditions. Spending on heart conditions, including emergency-room and clinic visits, prescriptions and other costs, doubled to $116 billion in 2011 from $58 billion in 1996.
Emergency rooms offer another snapshot of how things have changed in recent years: The cost of the average ER visit rose by more than three-quarters, to $969 in 2010 from $546 in 2000.

What's shrinking in the nation’s medical dollar? Medical equipment has decreased its share since 1960. Doctors have stayed at just under a quarter in every dollar, and prescription drugs are still about a dime.
How the ACA May Affect Health Costs
Some Provisions Have Taken Effect, but Others Won't Kick In for Several Years
By Louise Radnofsky
Updated Feb. 23, 2014 5:03 p.m. ET

The 2010 Affordable Care Act includes more than a dozen provisions aimed at bringing down costs in government health programs and private insurance.

Some of those provisions already have kicked in; others won't take effect for a few more years.

Here's a look at some of the ways the legislation's cost-cutting initiatives already have affected health-care pricing, and some of what still lies ahead.

What's already begun?

About 360 health systems have signed on as "accountable care organizations," a treatment model created by the Affordable Care Act.

In accountable care organizations, hospitals or groups of doctors agree to provide care for a particular group of Medicare patients and to be paid, at least in part, on how well they do at keeping them healthy and lowering the costs of care. If they reduce Medicare outlays by a certain amount or more, they get to keep a portion of the savings.

Fewer ACOs have been created than had been expected at this point, but they do cover a total of around five million Medicare patients. The results for the first full year of the program: Nearly half of the 114 provider groups that began ACOs in 2012 managed to slow Medicare spending in their first year, but only 29 of them saved enough money to qualify for bonus payments, the federal government has reported.

Meanwhile, hospitals have been assessed on several quality measures, including readmissions and patient satisfaction, since Oct. 1, 2012, and billions of dollars in reimbursements from the federal government are tied to how well they do. Those programs are still phasing in, though the American Hospital Association says hospitals have already made significant progress on reducing readmissions.

It isn't clear yet how much of an effect that program is having.

The law also established the Center for Medicare and Medicaid Innovation and the Patient-Centered Outcomes Research Institute to organize and fund research into health-care improvements. The many pilot projects they have helped launch are still too new for the results to be known.

What's still to come?

Assessment of hospitals will ramp up over the next few years, with government payments tied more closely to the results, and some new measures will kick in, including hospital-acquired conditions.
Starting in 2018, employers that offer particularly generous, high-cost health-care plans will have to pay a 40% tax on the amounts they spend on those plans beyond set limits.

Some companies already have started paring down these plans—reducing benefits and passing more of the costs on to employees—to get their costs down gradually as they seek to avoid the penalty, though speculation remains that the tax will be delayed.

Meanwhile, the Independent Payment Advisory Board, a commission meant to recommend spending cuts if Medicare's cost growth exceeds certain targets, was intended to start work on Jan. 15, but currently has no board members.

Federal officials say growth is within the prescribed limits so there's no need for the board to be doing anything yet.

What's happened to health-care spending in the U.S. since the law was passed?

Health-care spending growth has stayed around record lows for the most recent four years of data, through 2012. Total U.S. health-care spending grew 3.7% in 2012 to $2.8 trillion, similar to the 3.6% increase in 2011 and 3.8% increases in 2010 and 2009, according to the Centers for Medicare and Medicaid Services. In the preceding 10 years, spending growth was over 6% most years and as high as 9.7%.

Is that because of the federal health-care law?

Supporters of the law say the slowed spending growth is due at least in part to the health-care overhaul. “For years, health-care costs in America skyrocketed,” said Jeanne Lambrew, a top adviser in the White House, when the latest spending numbers came out. “The Affordable Care Act, for the first time in decades, has helped to stop that trend.”

The supporters’ argument is that the cost provisions in the law, such as the establishment of accountable care organizations, may seem small but they build on existing trends in health care and even accelerate them.

Skeptics say there's scant evidence to support that claim. A likelier bet, they say, is that people and providers cut back on spending during the economic downturn and it has yet to bounce back.

Sen. Orrin Hatch of Utah, the ranking Republican on the Senate Finance Committee, was quick to respond to Ms. Lambrew when she made her claim in January. "The reality is that our weak economy, coupled with millions of Americans getting kicked off of their health insurance, has led to a dip in national health-care costs," he said.

The political debate isn't likely to be settled soon, but some of the factors in the slowing of health-care inflation are clear. For one, prices for medical care as measured by the Commerce Department for its consumer price index—including the fees of doctors, dentists and hospitals and the cost of medications—are rising at their slowest pace in half a century.

Also, less generous health plans, which have spread independently of the health-care law, are forcing patients to become more cost-conscious. And the federal government as well as commercial insurance companies are ratcheting back the amount they will pay to health-care providers for their services, also independent of the new law.

Ms. Radnofsky is a Wall Street Journal staff reporter in Washington. She can be reached at louise.radnofsky@wsj.com.

A Push for Less Testing in Emergency Rooms
Heavy Use of Imaging Scans May Drive Up Costs—and Risks
By Barbara Sadick
Updated Feb. 23, 2014 5:03 p.m. ET

Under pressure to rein in health-care costs, some physician groups and hospitals are turning to an area that has so far received little attention: cutting down on what many say is excessive diagnostic testing in the emergency room.

Studies have shown that the use of advanced imaging techniques and the costs associated with them have grown rapidly in emergency rooms since the 1990s, partly because of the widespread availability of the technology and an emphasis on getting patients out of the ER quickly. For instance, data from the National Center for Health Statistics show that between 2000 and 2010, the use of advanced imaging scans—either computed tomography (CT) or magnetic resonance imaging (MRI)—increased to 17% from 5% of all emergency-room visits.
But with concerns growing not only about the cost but also about the consequences of excessive testing on patients—some CT scans, for example, can deliver 100 times or more the radiation dose of a regular X-ray—some physicians, hospitals and medical societies are pushing for a better balance between the use of high-tech imaging in the ER and simpler, lower-risk techniques for making a diagnosis.

**A Fine Line**

"In our medical culture, doctors often talk about what more could have been done, but rarely talk about what less could have been done," says David Newman, director of clinical research in the department of emergency medicine at Mount Sinai Hospital in New York. When too many diagnostic tests are ordered, many false-positive results occur, he says, which can lead to more testing with risks to patients from radiation, dye injections and other unnecessary treatment.

Many ER doctors say the challenge for them is finding a reasonable balance between over-testing and missing a diagnosis in an atmosphere that puts them at high risk for medical liability.

ER doctors have been trained to rely on medical-imaging techniques, and many worry that reducing their use will affect the quality of care. Patients, too, often demand tests, widely believing that more testing is equivalent to better care. Under serious time pressures to meet patient-satisfaction goals, it can be easier for a doctor to order testing rather than spend time discussing the pros and cons of doing so with patients. The fact that ER doctors haven't seen many of their patients before, may not have access to their medical records and typically aren't involved in follow-up care also creates more urgency to pinpoint problems immediately in the ER, many of them say.

**Momentum Grows**

Despite those concerns, efforts to reduce unnecessary ER testing are gaining traction.

Last year, the American College of Emergency Physicians joined the American Board of Internal Medicine's Choosing Wisely campaign, a physician-led initiative designed to encourage conversation between doctors and patients about the risks and benefits of performing certain tests and procedures. One of the American College's first recommendations was that ER doctors should avoid doing CT scans on patients with minor head injuries who are at low risk for skull fracture and bleeding in the brain. By performing a thorough history and physical examination, doctors can safely determine who is at low risk, the group said.

Brigham and Women's Hospital in Boston, meanwhile, is among a group of hospitals that have embraced computer tools called "decision support" that help doctors determine what, if any, imaging tests are most appropriate for patients in the ER based on the latest scientific evidence. Jeremiah Schuur, an ER physician at the hospital, says doctors consult the tools when considering tests such as CT scans of the chest for pulmonary embolus and CT scans of the head for trauma.

According to Ramin Khorasani, vice chairman of the department of radiology at Brigham and Women's, the tools have led to a 33% reduction in the use of CT scans for every 1,000 patients that have visited the ER in the past five years. He expects programs like the one at Brigham and Women's to become more widespread over the next decade.

**Big Savings**

David Newman-Toker, associate professor of neurology at Johns Hopkins School of Medicine, says if the goal is to cut down on overttesting in the ER, more funding is needed for studies that show doctors how to correctly diagnose patients with the fewest tests, like the one he conducted on the use of imaging in patients who arrive at the ER complaining of dizziness.
That study, published last year in the journal Academic Emergency Medicine, found that a large percentage of the patients who come to the ER with severe dizziness are actually suffering from inner-ear problems, while only about 5% are having a stroke. Yet nearly half of them are given a CT scan of the head to rule out a stroke—even though CT scans aren't the best tool for diagnosing the vast majority of strokes early on, missing them more than 80% of the time, according to the study.

The researchers concluded that a simple bedside physical exam could identify the small number of patients who truly need imaging. By altering this one protocol of routinely ordering CT scans for dizziness, about a half-billion dollars could be saved every year, according to researchers, who said the cost of ER visits for dizziness totaled about $3.9 billion in 2011 and could reach $4.4 billion by 2015.

"A doctor's touch can often be more revealing, more helpful and more healing than any scan," says Mount Sinai's Dr. Newman. "At the bare minimum, a comprehensive history and physical examination, a typically benign exercise that creates bonding and occasionally makes diagnoses, should be a gateway to testing, allowing physicians to avoid the harms and excesses that generally accompany technological testing."

Ms. Sadick is a writer in New York. She can be reached at reports@wsj.com

Hospitals Address a Drug Problem
Software and Robots Help Secure and Monitor Medications
By Laura Landro
Updated Feb. 23, 2014 5:03 p.m. ET

Hospitals have a drug problem. And they're looking to technology to solve it.

The problem is the way medications are being handled—and mishandled—by the hospital pharmacies and out on the wards. Inventory management is inefficient, drugs are too often misplaced, and narcotic medications are prone to theft.

So hospitals are turning to high-tech solutions. In addition to password-protected dispensing machines, radio-frequency identification tags and roaming robots to deliver prescriptions securely to units, hospitals are adopting software that tracks every dose of medication to identify suspicious activity. Even older pneumatic-tube systems used to zip drugs around hospitals are being retrofitted with canisters that can only be unlocked when the intended recipient swipes a badge and enters a PIN at the receiving station.

The new systems help streamline operations and free pharmacists from the constant need to track down errant medication doses and sometimes to redispense the drugs. By making it easier for nurses to track medicines as well, the changes give nurses more time to spend with patients. Mercy Hospital in St. Louis, for example, estimates that a medication-tracking system developed by Aethon Inc.'s MedEx unit can save the hospital $600,000 a year just in time lost from pharmacists, technicians and nurses locating lost meds.

Robots Deliver

The cost of such systems varies. Aethon Chief Executive Aldo Zini says the MedEx tracking system costs about $1,000 a month but can cost more depending on use and the type of deliveries being tracked. The company's Tug robots, which navigate their way around hospitals to deliver medications and other supplies, are leased for $1,500 to $2,000 a month.

Pharmacy chiefs say the new systems also help improve patient safety by helping to identify staffers who are siphoning drugs for their own use, a problem known as "diversion." By some estimates, 15% of health-care professionals may be addicted to prescription drugs at some point in their career. Drugs may also be stolen by patients and visitors. Secure dispensing systems and tracking programs make it easier to meet increasingly strict federal regulations for documenting "chain of custody" for controlled substances.

Although there are no precise figures for drug diversion from hospitals, industry experts say drug-inventory losses cost hospitals millions of dollars a year. The most commonly diverted drugs are narcotic painkillers such as hydrocodone and morphine and the sedative fentanyl. In Minnesota, there were 250 reports to the Drug Enforcement Administration concerning theft or loss of controlled substances from 2005 to 2011. Reports grew to 52 in 2010 from 16 in 2006.
A 2011 study in the American Journal of Health-System Pharmacy noted that widespread adoption of automated dispensing machines has greatly improved the security of controlled substances and made it possible to electronically document the dispensing of doses and the disposal of unused medications and expired medications.

Catching Abusers

Kim New, a compliance specialist in charge of controlled-substance surveillance at the University of Tennessee Medical Center, says her program catches about one staffer a month diverting drugs. She relies on medication-surveillance reports prepared with software from Pandora Analytics, a unit of Omnicell Inc., which also makes secure medication cabinets and other medication-dispensing and inventory-management systems. Pandora extracts data from medication-dispensing systems and presents it on a dashboard-style report.

"When I sit down and go over the medication-surveillance reports, I am looking for patterns of suspicious transactions," Ms. New says.

For example, drugs now come in single-use vials, and if a patient is administered a smaller dose than what is in the vial, hospital staff are required to properly dispose of the rest, or "waste" it, following a protocol that includes a signature from a witness. In one case, Ms. New says, a nurse was waiting until the end of her shift, then disposing of multiple syringes at a time without following procedures. The nurse was warned, but the Pandora surveillance reports indicated that she started doing it again. Further investigation discovered that she was collecting leftover medication and injecting it in the parking lot before driving home, says Mr. New.

"This was also a community safety issue," she says.

Joseph Adkins, a clinical pharmacist at Springhill Medical Center, in Mobile, Ala., says using Pandora is much faster than poring through spreadsheets to examine medication data. His facility conducted five investigations of suspicious activity in the first six months of using the software, and in three of those cases found diversion was taking place. Audits of the records of one nurse showed she was accessing an automated-medication cabinet when the unit was closed.

"If I am a patient, I don't want a nurse who is potentially taking narcotics taking care of me, and as a pharmacist I don't want that person working in my hospital," Mr. Adkins says.

Eyes on Inventory

The software systems also allow Springhill to better manage inventory, for instance, by not stocking medications that are never used, or by keeping just enough of expensive drugs on hand to meet needs. "We want to keep enough so the nurses don't run out, but not so much that we end up with the drugs expiring," Mr. Adkins says.

At the University of Maryland Medical Center, Aethon's Tug mobile robots deliver certain medications to nursing units. Pharmacy staffers print a label, scan and place the medication in one of the robot's locked drawers, and then enter a destination into a software program that communicates wirelessly with the robot. The robot then navigates its way to the right unit, where a nurse uses a passcode and fingerprint scanner to retrieve the medication.

The center's chief medical officer, Jonathan Gottlieb, says the system is part of a drive to "redesign the whole medication administration workflow, minimize defects, maximize safety and reduce costs." Delivery reliability—how often the drugs arrive at the unit as promised—has increased by 23%, and delivery predictability—how often they get there within the time promised—has risen by 50%. The per-trip cost with a robot averages $2.40, down from $5.50 for hand delivery, hospital data shows, and in its first year the system freed up 6,123 hours that nurses previously spent tracking or retrieving medications.

Dr. Gottlieb says the robots, with names like Walter, Eddie and Gladys, go out several times a day. As they make their way around the hospital, visitors and staffers who aren't familiar with them are often surprised, he says. "Jaws drop when they see them in the elevator."

Ms. Landro is a Wall Street Journal assistant managing editor and writes the Informed Patient column. She can be reached at laura.landro@wsj.com.
Hospitals Have New Tool to Save Money
‘Waste Index’ Lets Them Target Areas Where Costs Appear to Be Out of Whack
By Laura Landro
Updated Feb. 23, 2014 5:03 p.m. ET

America's hospitals need to go on a diet.

Hundreds of billions of dollars are wasted in our health-care system each year. In 2009 alone, $750 billion was spent in the U.S. on unnecessary health services, according to a 2012 report from the Institute of Medicine.

Now, a "waste index" developed for hospitals is giving them the information they need to eliminate waste without compromising care. The waste index was developed by Premier Inc., a purchasing alliance among hospitals that conducts quality-improvement programs for its members. The index was created to calculate the average savings that could be generated each year by a typical 200- to 300-bed hospital in each of 15 efficiency measures, including labor productivity, overuse of blood transfusions and unnecessary lab tests.

From respiratory therapy to radiology, providers are looking for savings big and small. They are switching to less-costly drugs, eliminating unnecessary care and paring staff. At four Adventist Midwest Health hospitals, for instance, patients with asthma and other respiratory conditions were often treated with prepackaged metered-dose inhalers. By switching some to equivalent generic drugs delivered via a nebulizer that turns medications into a fine mist for inhalation, Adventist shaved $100,000 in costs last year.

Looking for Standards

"There has been no standard framework to identify, measure and then eliminate waste in health care," says Susan DeVore, Premier's chief executive. "We can show exactly where there may be inefficiencies, and the dollars that can be saved while maintaining quality." Hospitals and doctors are facing dramatically reduced reimbursements, she adds, and "reclaiming these funds is essential to ensure financial success."

Since 2011, Premier says hospitals have used the index to identify where they can cut waste, and have taken steps to do so, resulting in average savings of $1.1 million in improved labor productivity, $869,784 in reduced readmissions, $613,632 in reduced use of lab testing, and $147,018 in avoided surgical-safety events. Some of the gains have been offset, however, by average cost increases in other areas of focus for the waste index, including $435,338 in length of hospital stays, $211,768 in overtime pay,

<table>
<thead>
<tr>
<th>Where to Save</th>
<th>Potential Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor productivity</td>
<td>$5.1 million</td>
</tr>
<tr>
<td>Overtime/premium pay</td>
<td>$1.8 million</td>
</tr>
<tr>
<td>Lab testing</td>
<td>$1.7 million</td>
</tr>
<tr>
<td>Diagnostic imaging tests</td>
<td>$1.4 million</td>
</tr>
<tr>
<td>Unnecessary antibiotic use</td>
<td>$370,000</td>
</tr>
<tr>
<td>Overuse of blood</td>
<td>$284,000</td>
</tr>
</tbody>
</table>

Where to Save

The typical 200-300 bed hospital could cut costs by operating at efficiency benchmarks established by Premier Inc., a hospital alliance that provides data analytics. Here are some of the average annual potential savings and how hospitals can achieve them.

Labor productivity $5.1 million
- Review staffing needs and protocols frequently; adjust as necessary.
- Shift employees between departments to accommodate higher demand and patient activity.

Overtime/premium pay $1.8 million
- Attempt to fill vacant shifts with part-time staff before full-time staff.
- Reduce use of agency/contract staff.

Lab testing $1.7 million
- Use technology such as electronic medical records to prevent test duplication.
- Ensure doctors know guidelines for best practices and their use of tests vs. peers.
- Ensure doctors know how much tests costs, which can lead to fewer tests and use of lower-priced alternatives.

Diagnostic imaging tests $1.4 million
- Follow guidelines on unnecessary CT or MRI tests, which include nonspecific lower-back pain, minor head trauma, acute sinusitis, and fainting without evidence of seizure or other neurologic symptoms.

Unnecessary antibiotic use $370,000
- Don't begin or continue antibiotic use without clinical reason.
- Avoid use of two or more drugs addressing similar pathogens (bacteria, virus).
- Shorten postoperative use of antibiotics to prevent infection—for example, one dose and discontinue within 24 hours after surgery.
- Follow guidelines for use of drugs in which there is known emerging resistance.

Overuse of blood $284,000
- Establish transfusion guidelines based on evidence and routinely monitor transfusion requests against them.
- Don't transfuse non-critically ill patients without strong medical reasons.
- Educate doctors about guidelines and monitor adherence.

Source: Premier Inc. The Wall Street Journal
$198,230 in the use of intensive-care units and $24,227 in respiratory therapies.

Premier says some of the increases may be due to unavoidable factors, such as increased overtime costs due to staffing reductions in an economic downturn. But often the increases are indicators that specific hospitals have to further explore why their costs are higher in certain areas, according to Ms. DeVore.

Premier's efficiency reports and index don't cost hospitals anything, and non-Premier hospitals can use them to help evaluate their own performance. Premier gets revenue from programs through which member hospitals submit data and through advisory services for improvement opportunities.

Ekta Punwani, a vice president for performance enhancement at Adventist Midwest, part of Adventist Health System, based in Altamonte Springs, Fla., says the index and related analytic tools "provide us with a high-level view of where we potentially have cost-savings opportunity," and enable her to focus on the top conditions and procedures where the costs are significantly higher than the reimbursement.

Comparing Costs

Benchmarks provided by Premier allow Adventist to better understand how it compares with other hospitals in treating certain kinds of patients, such as those with the infection sepsis. Adventist also provides reports to its individual physicians so they can see how their use of resources compares with that of peers around the country.

"Cutting costs is what we all have to do in health care, but we want to do it right, and not just slash and burn," Ms. Punwani says. Including the savings from the switch to nebulizers, Adventist Midwest saved $300,000 last year. For example, it switched to oral versions of the painkiller and fever-reducer acetaminophen (best known as Tylenol) from an intravenous medication several times more costly. Adventist also opted not to add a long-acting anesthetic that is injected during surgery to prevent postoperative pain but is more expensive than alternatives.

Ms. Punwani emphasizes that costs aren't always the deciding factor. While Adventist continually evaluates ways to trim antibiotic costs, for example, if a doctor decides a more expensive antibiotic is the best treatment for a patient's infection, the patient "will absolutely get it."

Ken Turner, vice president of operational effectiveness at University Hospitals, a Cleveland-based health system with 14 medical centers, says the waste index helped his team lower labor costs. Using "predictive analytics," he says, University Hospitals calculates staffing needs based on numbers of patients in different units tied to variations such as flu season. The hospital maintains a core staff and draws from a part-time staffing pool as need fluctuates. Over the past two years, Mr. Turner says, the system was able to cut $135 million in labor costs.

New protocols remind doctors to follow guidelines, such as not ordering blood before a surgery just on the chance that a transfusion might be necessary. The blood often is discarded. And if a transfusion is needed, surgeons can order blood quickly. Premier estimates the average hospital could save $280,000 a year by reducing blood overuse.

University Hospitals has also saved $4.6 million by making changes including a switch to generic drugs, and having pharmacists work with doctors to ensure that patients are not kept on expensive drugs longer than necessary.

"Waste reports can identify all of these opportunities to improve care and lower costs," Mr. Turner says, "and then we drill down."

Hospitals Focus on the Supply Chain
Pilot Program Tests Software to Make Ordering Implants More Efficient

By Joseph Walker
Updated Feb. 23, 2014 5:03 p.m. ET

U.S. hospitals spend tens of billions of dollars annually on high-tech surgical implants. But the supply chain for the devices is anything but high-tech. And that drives up costs both for hospitals and implant makers.

Now, some hospitals and medical-device companies are teaming up to modernize and automate the supply chain. They're aiming to bring down costs under pressure from Medicare and private insurers—pressure that is expected to intensify with the continuing implementation of the federal government's health-insurance overhaul this year.
Johnson & Johnson and Medtronic Inc., the two largest U.S. makers of implantable medical devices, are among the companies collaborating in a pilot program with four hospitals to use an experimental software system developed by Global Healthcare Exchange LLC for the ordering of implants.

Stickers and Faxes

One problem with the traditional ordering system is that much of it is manual. For instance, in many cases, operating-room nurses peel bar-code stickers from empty product boxes during surgeries, paste the stickers onto a clipboard and later type the information into an order form that wends its way through the hospital’s administrative channels. Suppliers also do much of the paperwork for orders manually, and complications often arise when someone on either side of the transaction incorrectly records a product code. The transmission of orders and bills is often done by fax.

“Hospitals don’t appreciate the cost of these back-office operations, and device makers haven’t had to think about it because their profit margins have been so great,” says Steven Chyung, vice president at Sisters of Charity Leavenworth Health System Inc., a nonprofit based in Denver that is using the new software. But, now, he says, “we’re all in a declining reimbursement situation.”

The software lets operating-room nurses or other hospital personnel electronically scan the bar codes of surgical implants to generate a purchase order and invoice automatically.

Order Control

Global Healthcare Exchange, the Louisville, Colo., company that developed the software, plans to make it widely available in the second half of this year, at a starting price of $40,000 annually for device makers and about $1,000 for hospitals, says GHX’s chief commercial officer, Derek Smith. GHX, which was acquired by private-equity firm Thoma Bravo LLC on Feb. 5 for an undisclosed sum, says the software can help hospitals cut costs not only by reducing paperwork but also by giving administrators greater control over which implants are ordered.

Hospitals increasingly negotiate price discounts by contracting with two or three suppliers for particular types of products, like hip implants, instead of five or six. But doctors don’t always use the discounted implants, says SCL Health’s Mr. Chyung. “The nature of the supply chain today is these reps today open up their trunk, bring in the devices to the doctor, and that’s what gets implanted,” he says.

By automatically recording the devices used in surgery, the GHX software makes it easier for hospital staff to flag the use of devices that aren’t on the list of contractually discounted products, Mr. Chyung says.

Mr. Walker is a Wall Street Journal staff reporter in New York. He can be reached at joseph.walker@wsj.com.

Palliative Care Gains Favor as It Lowers Costs

Patients and Families See Another Benefit: Better Care

By Jonathan D. Rockoff

Updated Feb. 23, 2014 5:03 p.m. ET

Insurers are establishing programs that give the sickest patients the chance to receive extra care for their pain, suffering and emotional needs, in a move that turns out to cut spending substantially.
Such palliative-care programs aim to provide assistance to patients with chronic or terminal illnesses, and go beyond the drug prescriptions and surgeries such patients typically receive. Under the programs, doctors are often called in to prescribe drugs treating pain, anxiety and depression, while home-care aides visit residences to give baths and change sheets. Social workers may try to resolve conflicts between estranged siblings.

The programs have their critics, who say the insurers’ real goal is to bolster profits by pushing patients to forgo costly treatments that could prolong their lives. But supporters counter that the lowered costs are simply a fortunate side effect, and that fulfilling patients’ wishes and needs is the main goal.

“By improving quality of care for that group, it can also reduce the number of repeat hospitalizations and other emergency interventions, which is extremely expensive for payers,” says Emily Warner, a senior policy analyst at the Center to Advance Palliative Care at the Icahn School of Medicine at Mount Sinai.

More to Come

In recent years, insurers including UnitedHealth Group’s Optum unit and Highmark Inc. have created such programs—a trend that is likely to continue as the population ages and efforts are made to both cut costs and improve care for patients at the end of their lives.

Studies show that treatment of the most complex patients during their final months accounts for a disproportionate amount of health-care spending. About 25% of Medicare costs cover the last year of patients’ lives, while 80% of the government health program’s spending during the last month is for hospitalization. A visit to an intensive-care unit alone can cost more than $4,000 a day.

Evidence suggests that the palliative-care programs can make a major dent in those costs. Studies by Kaiser Permanente, for instance, found that such programs can save $5,000 to $7,000 a patient by preventing costly trips to emergency rooms and avoidable readmissions to hospitals. Aetna says it saved $55 million in 2012 among its Medicare Advantage patients.

“If there is an opportunity to impact at the intersection of quality and cost, this is the mother lode,” says Randall Krakauer, Aetna’s director of medical strategy, who helped establish his company’s program.

Typical candidates for palliative care include patients suffering from congestive heart failure, chronic obstructive pulmonary disease and dementia. Many participants have cancer, typically at an advanced stage. Dedicated teams of doctors, nurses, chaplains and social workers step in to interview the patients to assess their needs and develop a plan for their extra care.

Team Effort

Often team members sit in on meetings between patients and their doctors, help explain medical conditions, and help the patients and families reach decisions about the course of treatment. A palliative-care team might also help coordinate a patient’s treatment among different doctors.

Many programs offer help drawing up wills and do-not-resuscitate orders. Such orders let doctors and nurses know the patient wants to forgo cardiopulmonary resuscitation, being put on a ventilator and other measures if there is a low chance for recovery. Sometimes, the patients get care in hospices or from visiting hospice nurses for their pain, suffering and emotional needs but give up aggressive medical treatment.

During the 2009-10 health-care-overhaul debate, a proposal to pay doctors for providing counseling about end-of-life services drew fire from some Republicans about “death panels” determining care.

But Thomas Smith, director of the Johns Hopkins Palliative Care Program, points
to studies that show patients in such programs do better on quality measures like hospital readmission rates than people who don’t elect palliative care. Patient satisfaction levels improve as well. Dr. Smith also cites studies showing members who receive these benefits live as long as or longer than those who aren’t participants.

Aetna, which first tried palliative care in 2004, now offers it to anyone with medical coverage in both its commercial and Medicare plans.

In 2012, the company saved an average of $12,600 for each patient who chose to participate, while improving the quality of and satisfaction with their care, Dr. Krakauer says. Aetna bases its data on hospital admissions, survival rates and other data about medical treatment, as well as surveys of patients and their families.

About 90% of eligible members choose to participate, Dr. Krakauer says. And members don’t have to give up aggressive treatment in order to participate, though Dr. Krakauer says some ultimately do so. Medicare requires it for patients electing to receive hospice care.

"We will not steer them toward a decision," adds Dr. Krakauer. "If they want the maximum aggressive therapy to the last, we will support them."

To identify members who might be candidates, Aetna uses algorithms to sift through billing and other records. Doctors and nurses also make referrals.

Tough Decisions

Then case managers like Margaret Warnock call the patients. Case managers ask questions to see what the patient’s wishes and needs are and whether they might be eligible. They explain what participation would mean.

The decision can be difficult for members like Paula Gibson Massey, an avid hiker and yoga student from Sylvania, Ohio, who died at age 51 after battling cancer.

Mrs. Massey was diagnosed with lymphoma in 2007, and chemotherapy and other treatments progressively lost effectiveness, recalls her husband, Stan Massey. By early 2013, the cancer had spread to Mrs. Massey’s spine, causing fractures in her lower back. She was prescribed narcotics for the pain and physical assistance to help her move.

Mrs. Warnock says she spoke with Mrs. Massey about this time, explained the benefits available under her plan and concluded she would be a good candidate for Aetna’s palliative-care program. Mrs. Warnock says she explained that Mrs. Massey could receive the program’s benefits while continuing with treatment aiming to cure her. But Mrs. Massey didn’t want to go on the program.

"She felt it meant admitting she was dying," recalls Mr. Massey, 56, who works in marketing public relations in the Toledo, Ohio, area, including representing hospices and health-care systems.

Mr. Massey says at first he ignored Aetna’s calls. The idea appealed to him that his wife could stick with aggressive treatment of her cancer and receive regular visits from hospice nurses who would adjust her medicines, manage her pain and provide other care. Still, he respected his wife’s wishes.

Mrs. Warnock stayed in touch. Then, last March, Mrs. Massey’s cancer doctor said she probably wouldn’t live another 12 months. Later that month, Mrs. Massey signed up for Aetna’s program and agreed to start receiving palliative care in her home, Mr. Massey says.

A day later, she suffered a pulmonary embolism. Although she was taken to an emergency room, she had indicated through Aetna’s program that she wanted to forgo treatment if her condition was hopeless, and she confirmed her choice with an emergency doctor at the hospital, her husband recalls.

After 90 minutes at the hospital, Mrs. Massey was taken to a hospice center, where she passed away about 36 hours later.

Mr. Rockoff is a staff reporter for The Wall Street Journal in New York. He can be reached at jonathan.rockoff@wsj.com.