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INQUEST: Young man was recommended for job

A 25-year-old man who died in a tragic accident after being caught in the doors of an aircraft hangar at Dublin Airport had been told the night before his death that he was being recommended for a full-time job.

Patrick Harris from Portmarnock was brought to Beaumont Hospital after an accident happened while he was at work on February 21, 2006.

But he subsequently died as a result of his injuries, the inquest into the death of Mr Harris heard today at Dublin City Coroner's Court.

At the time of his death, Mr Harris was an employee of SR Technics Ireland Ltd, for whom he had been working for about a year.

Colm Dunleavy, a crew manager with SR Technics, said that Mr Harris was temporary but was just about to be made permanent. He said that he was an "excellent worker".

Mr Harris arrived for work at around 9pm on the night of the accident.

Mr Dunleavy said that at around 10pm, he was made aware that an airbus 320 |was about to arrive at the hangar as scheduled for maintenance.

He said that he heard the sirens indicating that the hangar doors were in the process of opening.

Panels

He explained that the doors are opened from control panels on the door. Normally two doors are open to let the aircraft in.

He didn't see what happened to Patrick.

The first indication that he knew something was wrong was when he saw Patrick, who appeared to be sitting towards the recess of a door. He said that at that stage the doors hadn't fully closed.

He knew instantly that something was wrong. He said that Patrick didn't look well. He had a mark to his face and it was obvious that some event had happened.

He said that Patrick was lucid. He told him that he had a pain in his back and everything appeared to be black.

Mr Dunleavy said Patrick was unable to tell him what had happened.

He said that an ambulance was called.

When asked what he thought had happened when he saw Patrick, he said that he assumed that he had got caught in the doors.

The inquest continues.

U.S. Naval Safety Center

Sweat the Small Stuff

I had been a plane captain for two years and was due for a routine PC monitor from our quality-assurance department. I was not too concerned with being evaluated that morning because I was comfortable with my job, knew it well, and felt this review shouldn't be a big deal. I was wrong.

About an hour and a half before launch, I started to prepare for the event, checking out the necessary tools, setting up the fire extinguisher and huffer, and starting my preflight walk-around. The preflight was going quickly, and I couldn't find anything wrong.

The aircrew started to man-up, and, to finish the inspection, I climbed into the wheelwell to check the interior of the engine nacelle.

I finished my look and was on my way out of the wheelwell when my attention was diverted to the starter-hose inlet nozzle. I noticed the intake for the starter hose seemed to have a loose screw, and, upon further investigation, I noticed the seal was not installed properly. It had been pushed up into the intake, partly blocking the inlet nozzle. If left this way, the seal could have been sucked up into the starter, possibly causing a starter fire or worse. I knew it was not right and immediately informed the flight-deck chief and the power-plants troubleshooter. Finding the discrepancy on my pre-flight inspection, I gave the mechs time to fix the starter-hose intake before the seal was ingested.

Aircraft engines are too expensive and too scarce to be lost to something as simple as a seal. Pre-flights are an essential part of naval aviation and must always be done with care and attention to detail because you never know when your last look might make the difference.

American Eagle 4539 Crew Believed Gear Was Down

American Eagle crew averts a gear-up accident with a just-in-time go-around

Human-machine interface, crew decision-making and the value of "seat-of-the pants" flying will likely be discussed late this summer when the NTSB determines the probable cause of an American Eagle incident in 2007.

The event—an attempt to land with the gear retracted—nearly became one of aviation's fatal statistics. NTSB documents made available to Aviation Week & Space Technology reveal what transpired in the cockpit the morning of June 20, 2007, when the Embraer 135 regional jet (Flight 4539) was on approach to Boston Logan International Airport with 37 passengers and three crew on board. The crew told investigators that the flight was normal from preflight and takeoff from Toronto Pearson International Airport at 7:04 a.m. through en route and final approach to Runway 22L.

The first sign of trouble came when the crew noticed the "landing-gear lever disagree" light appear shortly after the first officer (the pilot flying) had pulled down the landing-gear lever. At this point, the aircraft was at about 1,500 ft. and on close-in final approach.

The cockpit voice recorder transcript shows that the captain and first officer discussed the meaning of the gear lever indication. The captain was opting to continue the approach and the first officer concurred, although they continued the approach without following the checklist for the landing-gear lever disagree alert.

The flight crew said their decision was based on having "overwhelming indications" that the gear was down: Those indications included seeing a "three-green" light on the lever and a written "three-green" on the radio management unit. The pilots also heard the gear doors opening. In addition, none of the normal alerts sounded in the cockpit to indicate the gear was not down—not the "landing-gear" warning when the aircraft was below 1,200 ft., nor the "too low gear" warning below 500 ft.

The first officer told investigators that he would not have continued the approach if there had been another sign that something was wrong.

Even the landing felt normal until just prior to touchdown, the crew told the NTSB. The first officer, with "seat-of-the-pants" flying instincts emerging, repeatedly remarked that "something feels weird . . . it doesn't feel right," before calling for and executing a go-around.

At this point, the aircraft fuselage scraped the runway, and controllers advised the crew that sparks were observed when the aircraft touched down, according to the NTSB.

When the captain raised the landing gear during the go-around—he noted an immediate three-green landing-gear-up indication, which does not normally appear so quickly.

Then, following the flight manual, the crew performed the checklist for the landing-gear lever disagree alert, which calls for recycling the landing gear. With the recycle, the crew noted a "three-green," indicating that the gear was extended. The crew, agreeing that "something was not right," then performed the Abnormal Landing Gear Extension checklist. After using the electrical override system, the crew said they felt three "clunks," which led them to believe the gear had extended normally.

The captain said he informed the first officer that he did not need to perform the emergency landing checklist because they were time-limited and he was familiar with the procedures on the checklist, according to the NTSB.

The crew discussed the situation with American Eagle maintenance operational control, and performed a flyby for a visual check of the gear extension by tower controllers. The tower advised that a pilot on the ground thought the gears to be canted at a 45-deg. angle. When extending flaps for the flyby, a "flaps fail" indication appeared, and flaps remained retracted for the remainder of the flight.

The pilots executed a second flyby at lower altitude, at which time the tower observed that the extended gear position looked normal. The crew of Flight 4539 then decided to proceed with a second approach, with the captain flying. The crew debated whether to declare an emergency, then did so. Controllers vectored the flight to a longer runway, 33L, while passengers were briefed for a "brace-brace" landing. This time the aircraft touched down safely, and no injuries were reported.

The day after the incident, American Eagle issued a Safety Message to operators that reads in part: "Whenever the EICAS [engine indicating and crew alert system] warning 'LG/Lever Disagree' message is shown after gear extension, the landing gear should be considered unsafe, regardless of gear position indications on the EICAS or radio management unit. An immediate go-around must be initiated and the 'emerge/abnorm procedures LG/Lever Disagree' must be followed."

The NTSB, which has been engaged in more incident investigations in recent years, is likely to issue incident-related safety recommendations along with probable cause.

American to retire A300 fleet by end of '09

American Airlines has opted to accelerate the retirement of its 34-strong Airbus A300-600 fleet.

"Those planes, which we had been planning to retire by the end of 2012, will instead be retired by the end of next year," says Gerard Arpey, chairman and CEO of American's parent, AMR Corp.

The carrier, which last week posted a second quarter net loss of $1.4 billion, had previously announced plans to retire 10 A300s by year-end, in addition to 30 Boeing MD-80s, 37 regional jets and 26 Saab turboprops, as part of its larger effort to slash costs in the face of soaring fuel prices and a weakening economy.

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Software Issue Could Put Brakes On 787 Cert Schedule

A New Problem For The Dreamliner

Alas, there's a new snag to report involving Boeing's struggle to bring its 787 Dreamliner to production.

During his update last Tuesday on the troubled program's progress at the Farnborough International Airshow, 787 program chief Pat Shanahan admitted there's an "air bubble" in the software that controls the airliner's braking system.

Boeing says the problem lies in the control software used in the plane's brake monitoring system. GE Aviation Systems subcontracted the work to Hydro-Aire, part of Crane Aerospace and Electrics. Crane must go back and rewrite parts of the brake control code to comply with certification standards.

"We need to push harder on the brake system" in order to achieve Boeing's certification targets, Shanahan told Reuters. "It's not that the brakes don't work, it's the traceability of the software.

"I'm confident it will be done. It's General Electric," he added. Crane couldn't be reached for comment by Reuters.

As ANN reported Wednesday, Boeing says the first 787 remains on track for its first flight later this year... and Boeing still maintains the first customer aircraft will be delivered, certified, in the third quarter of 2009.

"Airplane One is in really good shape," said Shanahan.

But the software issue -- and other continuing glitches, including problems with the center fuselage assembly process, and a damaged body section for Dreamliner #4 -- could pose problems for the certification schedule down the line.

Shanahan admits those fixes are eating into the safety buffer Boeing added into its revised schedule, announced in April. "I'm eating margin I don't want to eat," he said.

jetBlue AIRWAYS

Dual engine failure cited in Kalitta 747F Bogota crash inquiry

Preliminary inquiries into the Kalitta Air Boeing 747-200 freighter crash in Colombia indicate that both outboard engines on the aircraft lost power shortly after the jet took off from Bogota.

With the resulting loss of thrust probably too great to permit a return to the airport, the crew apparently attempted to land the aircraft, in darkness, in an area of open countryside between the towns of Madrid and Mosqueta.

Sources in contact with the crew, who survived the 7 July accident, claim that the outboard starboard engine failed after rotation, as the aircraft departed to the northwest bound for Miami.

As the pilots prepared to carry out the standard set of procedures for loss of an engine during take-off, the outboard port engine also failed. It appears to have touched down heading south, just to the west of a body of water, disintegrating and leaving a trail of debris hundreds of metres long.

The cockpit separated and came to rest away from the central fuselage and wing assemblies, which were consumed by a fierce blaze. Two people on the ground were killed.

Images of the instrument panel inside the cockpit of the wrecked aircraft, while not conclusive, appear to show similar, much lower oil pressure indications for the outboard engines than the inboard pair.

The landing-gear and flap levers also appear to be in the retracted position, although it is unclear whether this accurately reflects the configuration of the aircraft before impact.

Loss of power from an engine during take-off is a central aspect of the investigation into another Kalitta Air 747-200F accident at Brussels on 25 May. The aircraft broke up after overrunning the runway but, again, the crew survived.

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Legislation limits aviation inspector moves

Federal aviation inspectors would have to wait two years before taking airline jobs where they deal with their old government boss under legislation passed by the House Tuesday.

The legislation, passed 392-0, is designed to push the Federal Aviation Administration to improve its safety inspection practices and end the FAA's overly close relations with the airlines industry. It is in response to recent reports of lapses in FAA safety oversight and testimony by FAA inspectors that their jobs were threatened when they reported problems with some airlines.

The bill is "an initial legislative step in reversing the complacency over safety regulations that have set in at the highest levels of the Federal Aviation Administration," said Transportation Committee chairman James Oberstar, D-Minn., sponsor of the bill with the top Republican on the committee, John Mica of Florida.

The measure, which now moves to the Senate, would require a two-year "cooling off" period before an FAA safety inspector who oversees a specific airline can go to work for that airline and represent it in matters before the FAA.

It also stipulates that an FAA principal maintenance inspector may not oversee the operations of a single carrier for a period of more than five years.

An Associated Press investigation last April found numerous industry leaders who were once under the FAA authority now in top positions at the agency. Similarly, many former FAA officials and congressional aides have found lucrative jobs in the air travel industry or with its lobbying groups.

Other provisions create an independent safety office within the FAA to look into whistleblower safety complaints and direct the FAA to reverse a 2003 initiative that required inspectors to treat air carriers as "customers."

"If there is a customer, it is the traveling public, not the airline," Oberstar said.

The FAA, in a statement responding to the legislation's introduction last week, said the agency had already taken steps to address some of the issues raised by lawmakers, including the handling of safety complaints by employees.

Oberstar acknowledged the agency had initiated changes, "but I think the FAA's response has been wholly inadequate."

Mica stressed that the FAA has overseen an airline industry that is the safest in the world. "Our intent here is to take a safe system where we found some problems and to correct it."

Oberstar referred to problems at Southwest Airlines, which was hit with a record $10.2 million fine for continuing to fly dozens of Boeing 737s that hadn't been inspected for cracks in their fuselages. Following that, the FAA ordered the audit of maintenance records at all domestic airlines.

The bill is H.R.6439.

Safety Management Systems: A Hot International Topic

At the June FAA-EASA International Safety Meeting, the single most-discussed topic was the Safety Management System (SMS) for air transportation. Strategies for implementation by government regulators and the form that such programs might take at both the government and industry level were all much-debated. One thing is clear from these discussions: everyone has a different view of what SMS will be.

The SMS debate is prompted by a requirement issued by the International Civil Aviation Organization (ICAO). ICAO Annex 6 currently demands that member states require that operator and maintenance providers implement an acceptable safety management system. The ICAO rule requires that all governments implement their systems by January 1, 2009. The current state of the industry makes it clear that no government will be in compliance by that time.

The most advanced implementer seems to be Transport Canada...but the Transport Canada SMS Program seems to have gotten entangled in legal issues and industry opposition. A major practical problem with the program was that it sought to make significant changes too quickly, causing a visceral reaction among the regulated industry. The FAA intends to take a more measured approach to implementation. The first official step in this approach will be the solicitation of public comments on what a potential SMS rulemaking should look like.

The SMS proposal would ultimately apply to operators, repair stations and manufacturers (design approval holders). Certificate holder would implement systems able to identify hazards and would then develop, implement, and maintain effective risk controls based on the identified hazards.

The FAA plans to issue an Advance Notice of Proposed Rulemaking later this summer, seeking public input into the form that such a rule might take.

Companies Report Success in Driving Safety Culture at Workplaces

DuPont Announces Results of 2008 World Safety Declaration Survey

Driving a safety culture across organizations, extending it beyond the workplace and keeping it top of mind with a commitment to collaboration and sharing are critical for keeping employees safe, according to a DuPont-sponsored survey of signers of the World Safety Declaration (WSD).

The survey results are the basis for the 2008 WSD Report, "Instilling a Safety Culture Across Continents: How Collaboration, Commitment and Accountability Help Organizations Achieve Measurable Results in Workplace Safety," which was issued by DuPont at the XVIII World Congress on Safety and Health at Work here. The WSD was created by DuPont in 2005 to provide companies with a framework to find common ground in identifying and improving workplace safety.

Among the leading areas of progress reported by WSD signers:

-- Driving safety cultures across companies represents the greatest area of improvement, but continues to be an ongoing challenge as organizations strive to keep safety top of mind;

-- Driving line management accountability for safety was next, indicating that companies are effecting a shift in their organizations, and:

-- Reducing occupational accidents and injuries remains the bottom line focus of all safety programs.

"We are very pleased with the 2008 report and the survey results, in particular, because they reinforce the growing focus of safety as a cultural practice in companies around the world," said Mark P. Vergnano, group vice president -- DuPont Safety & Protection. "Safety is a practice that knows no boundaries, in language or country. It is inherent to DuPont and to a growing list of companies. We will continue to strive to help others to better protect their employees, their customers and their communities."

DuPont is participating as a premier sponsor of the XVIII World Congress on Safety and Health at Work. The company's involvement includes:

-- Participating in the Safety and Health Summit, an exclusive gathering of leaders representing labor, government, safety and health professional associations, and businesses;

-- Conducting a symposium on "Sharing Best Practices for a Safer and Healthier World";

-- Presenting a technical session on "Successful Safety and Health Management System in Enterprises";

-- Hosting a series of roundtable discussions on "Protecting Lives"; and

-- Joining other charter signers of the World Safety Declaration in presenting a workplace safety report to Congress attendees.

Held every three years, the World Congress brings together several thousand key leaders and influencers of workplace safety policy from industry, government and labor who present and discuss emerging safety research, trends, best practices and innovations in the workplace. Today's World Day for Safety and Health at Work was established by the International Labour Organization in 2003 to emphasize the prevention of illness and accidents at work.

In 2005, a cross-industry coalition of companies from around the world publicly pledged to advance workplace and home safety practices globally over a three-year period by signing the first-ever "World Safety Declaration: Global Industry Commitment to Workplace Safety." The declaration, unveiled at the XVII World Congress of Safety and Health at Work in Orlando, Fla., in Sept. 2005, called for participating companies "to effect real-world change to achieve an attainable goal of increased safety and injury reduction.

" One of the declaration's goals is to recognize that safety enhancements in workplaces and homes are achievable objectives that can be defined, evaluated and measured, despite the differences of geographies and environments around the world. The companies also committed to reporting their progress, successes and challenges at this year's event in Korea.

Today, 48 organizations from 14 countries have signed the World Safety Declaration, including: Aker Solutions; Ansell Limited; ASIMCO Technologies; BE&K; Borealis; British Petroleum; Calvert; CEMEX; CH2M HILL; China Academy of Safety Science and Technology (CASST); China National Gold Group Corp.; China National Logging Corporation; China Nonferrous Metal Mining Ltd.; China Petroleum & Chemical Corporation; China State Construction Engineering Corporation; Ciba; DuPont; EDP; Endesa; Evergreen Aviation Technologies Corp.; Firminech; Fluor; Fortum; Gamesa; General Electric; Hindustan Unilever; Huaibei Coal Mine Group; Intel Corp.; KONE; MOL; National Safety Council; Nestle, Orchid Chemicals & Pharmaceuticals Ltd.; Plastic Omniun; PetroChina Company Ltd.; Portugal Telecom; Protect Plus; Reliance Industries Limited; Rohm & Haas; State Administration of Work Safety (SAWS); Shaw Group; Sonae; South North Power Corporation; SUAL; TATA Chemicals; TATA Steel; Unilever; and Yantai Wanhua Polyurethanes Company.

The World Congress on Safety and Health at Work is the world's largest international event related to occupational safety and health. Its aim is to contribute to the prevention of occupational accidents and the protection of workers' health through the exchange of information, knowledge and experiences on new technologies related to safety at work, on preventing occupational diseases, and on safety and health cooperative projects. The International Labour Organization (ILO), the International Social Security Association (ISSA) and the Korea Occupational Safety and Health Agency (KOSHA) are organizers of the event.

DuPont is a science-based products and services company. Founded in 1802, DuPont puts science to work by creating sustainable solutions essential to a better, safer, healthier life for people everywhere. Operating in more than 70 countries, DuPont offers a wide range of innovative products and services for markets that include agriculture and food; building and construction; communications; and transportation.

For a complete copy of the 2008 World Safety Declaration Report visit:
http://www.worldsafetydeclaration.com

For a list of signers of the 2008 World Safety Declaration:
http://tinyurl.com/6lskhx

Time for an Eye Exam? Quick Self-Test

When you're looking for a tip-off to how your eyes are doing, here's one big clue:

Check your night vision. Count how long it takes your eyes to recover from bright lights you see at night, especially when driving. Longer than usual? Say, 7 seconds, as opposed to 3? Might be time for a visit with your eye specialist.

2 More Do-It-Yourself Exams

If you don't have any risk factors for eye disease and you're under 60, you can probably get by with seeing the eye doc every 2 years (annually if you're over 60). But go sooner if your eyes are giving you problems. In addition to the night vision test, RealAge experts Michael Roizen, MD, and Mehmet Oz, MD -- authors of the newly expanded *YOU: The Owner's Manual* -- suggest a couple of other quick do-it-yourself eye checks:

1. **Fatigue test: If your eyes tire out faster during normal activity -- like reading or working on the computer -- it could be a sign of weakening eyesight.**
2. **Endurance test: If your eyes get tired earlier in your daily routine than usual -- maybe you can't read in bed anymore, for example -- schedule a checkup.**

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Decreasing your computer time is not always an option, so try soothing tired, aching eyes at the end of the day with a cool gel mask. In seconds, you'll feel better; in minutes, refreshed. We like this one because it's inexpensive enough to get two -- one to use while the other chills for round 2.

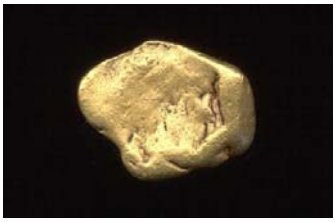
AIRSAFE.COM

- **AirSafe.com released a podcast showing the rescue of the passengers of a Chilean airliner that crashed earlier in June. The passengers survived for four days in the snow on a forested mountainside before being rescued. The pilot and nine passengers survived the crash, but the pilot died two days before rescue. You can find out more about this event at http://www.airsafe.com/podcasts/show51a.htm, or you can hear or see the podcast through the links below:**
  Audio: MP3

| Video: iPod/M4V | WMV | Google Video | YouTube

Midnight Shift Nugget

Eating on the night shift



You might have noticed that the same extra-cheese pizza you chow down without a problem on the day shift can make you bolt for the bathroom on the night shift.

Compared to day workers, shiftworkers tend to experience more gastrointestinal troubles, such as heartburn, upset stomach, constipation, diarrhea, excessive gas, and abdominal pain. More serous long-term ailments include gastritis, gastroduodenitis and peptic ulcers.

Why does this happen? Part of the reason is that it's harder to digest food at night when your body's production of gastric juices and digestive hormones reaches its daily low. Also, shiftworkers often eat foods that are hard to digest.

Watching what you eat and when you eat it, can help you avoid these problems. Here are some guidelines for smart nighttime eating:

Keep a regular eating schedule. Your stomach likes regularity, so try to eat a roughly the same times each day, even if your work hours change from day to day.

It's a good idea to eat breakfast between 6 and 10 a.m. After a night shift, a light breakfast such as toast or cereal before going to sleep is ideal.

Your body's secretion of digestive juices rises in the morning, so have some food in you prevents excess acid from circulation in your stomach.

Eat snacks rather than meals at night. Although there's no need to fast during the night shift, you may want to avoid eating a full meal, which can make you feel drowsy and sometimes cause indigestion.

When you get hungry, snack on foods that come in small portions, such as fruit, pretzels, carrots or crackers. Some people like to cut a sandwich into quarters and eat a piece every few hours. Another idea is to keep a box of low-sugar cereal around to munch on.

Avoid fatty and spicy food. Food high in fat are harder to digest, so it's wise to impose an overnight ban on red meat, fried foods, pastries, potato and corn chips, pizza, chicken and turkey skin, and whole milk dairy products. Next, steer clear of foods beverages and spices that can upset your stomach.

These include, citrus juices, tomato juice, garlic, onions and peppers. So what can you eat? Some good choices are pasta, rice, potatoes, soup, whole grain breads and cereals, fruits and vegetables, skinless chicken, fish, tofu, skim milk and low-fat yogurt and cheese products.

Don't overdo coffee. Although caffeinated coffee offers a temporary boost in mood and alertness, excessive consumption – more than two or three cups per day – can cause stomach irritation. You might substitute water in place of coffee or cola drinks. Eight to ten glasses a day aids in digestion and reduces stomach problems. Drinking lots of water also helps you avoid dehydration, which can contribute to nighttime sleepiness.

Dementia Quiz

Below are four (4) questions, and a Bonus question, to test your perception, reasoning and the quickness of your logical processing.
They are stated simply so you should try to answer them instantly.
To assure the accuracy of the results, you should not take your time, but instead, answer each of them immediately.

OK?

Let's find out just how clever you really are....
Ready? GO!!! *(scroll down slowly to uncover Q's and A's)*

First Question:

You are a participant in a race. You overtake the second person. What position are you in?
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Answer:

If you answered that you are first, then you are absolutely WRONG! If you overtake the second person and you take his place, YOU are in second place! Try not to screw up next time. Now answer the second question, but don't take as much time as you took for the first question, OK?

Second Question:

I f you overtake the last person, then you are...?
(Scroll down)

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Answer:

If you answered that you are second to last, then you are WRONG again. Tell me how can you overtake the LAST person?

You're not very good at this, are you?

Third Question:

Very tricky arithmetic! Note: This must be done in your head only. Do NOT use paper and pencil or a calculator.

Try it.

Take 1000 and add 40 to it. Now add another 1000. Now add 30. Add another 1000. Now add 20. Now add another 1000. Now add 10. What is the total?

Scroll down for the correct answer.....

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Did you get 5000?

The correct answer is actually 4100.

If you don't believe it, check it with a calculator!

Today is definitely not your day, is it?

Maybe you'll get the last question right... Maybe...

Fourth Question:

Mary's father has five daughters: 1. Nana, 2. Nene, 3. Nini, 4. Nono, and? What is the name of the fifth daughter?

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Did you Answer Nunu? *NO!* Of course it isn't.

Her name is *Mary.* Read the question again!

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Okay, now the Bonus round,

i.e., a final chance to redeem yourself:

A mute person goes into a shop and wants to buy a toothbrush. By imitating the action of brushing his teeth he successfully expresses himself to the shopkeeper and the purchase is done. Next, a blind man comes into the shop who wants to buy a pair of sunglasses; how does HE indicate what he wants?

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It's really very simple

He opens his mouth and asks for it...

Does your employer actually pay you to think?? If so Do NOT let them see your answers for this test!

Hospitals work to cure errors

Concern about Medicare changes prompts review

Metro Detroit hospitals are stepping up efforts to reduce costly and often traumatic medical errors, in preparation for new rules that will make them bear the cost of the mistakes they make when treating patients.

In an ongoing effort to improve patient safety, the federal agency that oversees Medicare in October will stop reimbursements to hospitals for the costs of treating eight preventable conditions -- including injuries from falls, bed sores, using the wrong blood type and sponges left in the body after surgery.

To prepare, hospitals are exploring new technologies and low-tech procedures to help prevent medical errors from the surgical suite to the patient's bedside. Some of their tactics include novel devices, such as medicine tubes that can identify patients and control doses by reading bar codes. Others are tested techniques borrowed from the aviation industry, including pre-surgery checklists much like those used by aircraft crews before takeoff, and operating room simulators to train doctors, much like airplane simulators.
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"We believe that there is a real opportunity to raise the bar across the board," said Brian Peters, senior corporate vice president of the Michigan Health & Hospital Association, which just announced a new initiative in which members have agreed to stop billing patients and all insurers, not just Medicare, for the eight mistakes Medicare is targeting. The hospitals also agreed to not charge for several other errors not on the government's list, such as surgery on the wrong patient, surgery on the wrong body part and carrying out the wrong surgery.

The association, which represents 146 hospitals, acknowledges that these events are "very rare," but not collecting payment for them will make the industry be even more aggressive about prevention.

The association also has established a new program to collect and analyze data on errors and near-misses to help hospitals better understand how they occur.

For hospitals, lost payment on such errors can range from a few hundred dollars to as much as $50,000, said Gerard Anderson, professor of hospital finance and management for Johns Hopkins University. The average, Anderson said, hovers around a few thousand, but those costs can add up and eventually hurt a hospital's bottom line.

Medicare, which insures 44.1 million elderly and disabled people nationwide, estimates it can save the government about $50 million annually over the next three years by halting reimbursements for the eight errors, a relatively small sum compared to the $432 billion spent on Medicare last year.

But health experts say it's not only about the money.

"The $50 million is in many ways small change. My guess is they've made an extremely conservative estimate," said John Griffith, a professor of health management and policy at the University of Michigan. "But beyond the dollar transaction is the human cost of distress and pain to the patient."

Private insurers are following Medicare's lead: Health Alliance Plan in Detroit will apply the same no-pay policy to its 540,000 members in October and Blue Cross Blue Shield of Michigan, the state's largest insurer, is considering doing the same, along with adding the three surgical mistakes on the hospital association's list.

The Centers for Medicare and Medicaid Services plans to expand the list of non-payable errors to nine other conditions in 2009, and will announce the final rule later this year. They include such conditions such as delirium, Legionnaires' disease (a type of pneumonia caused by bacteria) and a collapsed lung.

Using bar-code technology

While hospitals have for years looked for ways to reduce medical error rates -- not only to save money but also to prevent injury and death -- industry experts say Medicare's efforts cast a brighter spotlight on an issue.

"I don't think this is about the economics," said Paul Conlon, senior vice president of clinical quality and patient safety for Trinity Health. But highlighting the need for improvement creates what Conlon described as "energy" around the country for focusing on such adverse occurrences.

"We think these are the right things to focus on in our community," he said. "Trinity has had these types of events on our radar screen for a good five years."

One tactic Trinity is investigating is a new bar-coded technology that allows doctors to keep count of surgical sponges going in and out of the body. It also is addressing bed sores and patient falls by evaluating high-risk patients upon admission and flagging the risk in the electronic medical record database, accessible to doctors, nurses and other hospital staff.

"What we're finding is that over 60 percent are at risk for falling and that over 50 percent are at risk for a pressure ulcer," Conlon said. "That's what a lot of hospitals are facing these days."

McLaren Health Care in Flint hopes to soon install so-called "smart IV pumps" at its hospitals, a project that could cost them upward of $10 million. The computerized pumps can identify the medication, how it should be delivered and if it's going to the right patient -- all by using a bar code.

"When you look at medical errors, one of the highest error rates has to do with medication delivery," said Thomas Petroff, chair of McLaren Health Care's senior medical leadership committee.

Taking a 'timeout'

Some health systems, such as the University of Michigan, are ditching the pen-on-paper version of keeping tabs on patients all together, in favor of a computerized network that uses software to monitor and alert hospital workers to potential errors or dangerous drug interactions.

Hospitals also are turning to training simulators -- rooms that mimic an operating room or emergency department ---- to hone the skills of their medical staff using computerized mannequins that cough, breathe and ooze fake blood if cut.

"If they do it 10 or 15 times here, it gets ingrained into them," said Trevor Snow, supervisor for Henry Ford Health System's Center for Simulation, Education and Research, a $5 million facility that opened last year.

One low-tech practice recommended by the hospital association to improve hand hygiene among staff -- a simple but crucial way to prevent the spread of infections -- is for hospitals to deploy workers, secret-shopper style, to watch over their colleagues on whether they've washed their hands before entering a patient room.

"It is not a high-tech intervention, but it does have an enormous impact on the hospital setting," said Peters of the hospital association.

Another way hospitals are preventing errors is to simply change the way the staff communicates. Rather than having treatment standards vary from doctor to doctor, hospital employees instead work cooperatively to abide by preset protocols and checklists.

"We have a standardized order set that allows for care that is based on evidence and is easy to follow for our house staff," Petroff of McLaren said. "Standardization is key."

For instance, many hospitals have adopted a technique called a "timeout." It's a move borrowed from the aviation industry, where workers in the operating room stop what they're doing and go through a checklist immediately before starting surgery.

Using a checklist

That was what was happening the other day in a Henry Ford operating room, where staffers paused before beginning an abdominal surgery.

"Everybody here. Watching here. Everyone focus," one nurse piped up, drawing the attention of the surgical team that was busy hooking up tubes and prepping the anesthetized patient.

The room suddenly stopped and she went through a short list -- patient name, procedure, whether or not the patient had received antibiotics -- ending by asking everyone to agree. They agreed, and only then did the operation begin.

"The airline industry at one time thought you couldn't keep planes from crashing, but because of their reliability checks, that has changed," said Judy Avie, vice president for performance improvement and care design at St. John Health, which also uses "timeouts" in its ORs.

"That is something that we'd like to see in the health care industry, more high-reliability checks, so we catch things that happen."

"It's error-proofing," Avie said.

Picture This!

Who Needs Coffee When You Can Have Adrenalin?

Actually, the adrenalin is only in my imagination, because I know perfectly well that the brave workers who perform these stunts just take these feats of derring-do for granted.

Once again, quick, cheap and easy wins the race. "Wobbly" is not a disqualifying factor in this risk-packed contest. And no one ever fell backward off a plank, of course.