Wasted Spending In Health Care Amounts to $765 Billion

- $55 billion Missed prevention opportunities
- $210 billion Unnecessary services
- $75 billion Fraud
- $105 billion Excessive prices
- $190 billion Insurance and bureaucratic costs
- $130 billion Preventable errors/mistakes
Medical groups call out 90 more over-used, unnecessary treatments

By Alicia Caramenico

The U.S. healthcare system is stepping up efforts to encourage physicians and patients to choose cost-efficient care. Today, 17 medical specialty societies identified 90 more tests and treatments that they say are overused or inappropriate, bringing the total to 135, the American Board of Internal Medicine announced.

Additions to the "Choosing Wisely" campaign, which pinpoints the major sources of unnecessary care, include:

- Elective induction of labor or C-section deliveries before 39 weeks: By reducing early deliveries without medical cause, hospitals can cut costs without compromising care, given new research that shows hospitals waste billions of dollars on unnecessary cesarean sections.

- Automatic use of CT scans to evaluate children who visit hospital emergency departments with head injuries: Studies have associated CT scanning with radiation exposure that could significantly increase the risk for cancer. Moreover, researchers recently determined repeat CT scans are unnecessary for patients with mild head trauma if the condition is unchanged or they have improved neurologically.
1. **Hospitals demand $186M in Medicaid backpay**

By Karen Cheung-Larivee

The Maine Hospital Association is demanding Medicaid pay $484 million in reimbursements that are three years overdue, the 39-hospital group said.

Maine has one of the highest percentages of residents in the Medicaid program, *The Wall Street Journal* noted. Out of the $484 million that MHA says it is owed, $300 million of it would be reimbursed by the government.

In the first advertising campaign of its kind, the trade group has taken to newspaper and radio ads, the *WSJ* noted. The hospitals said the overdue reimbursement has hurt their credit ratings and forced them to delay raises and building projects, as a result.

In response, Gov. Paul LePage yesterday approved a plan to pay off $186 million of the Medicaid debt to the hospitals by issuing a voter-approved revenue bond secured by future liquor sales, the *Portland Press Herald* reported.

Steven Michaud, president of the Maine Hospital Association, supported the governor's promise and said paying hospitals will create jobs, promote medical infrastructure and access to care.

Other hospitals outside of Maine are still worried about delays in reimbursements, attributed to deficit agreements on Capitol Hill. According to Bruce Siegel, head of the National Association of Public Hospitals and Health Systems, other hospitals struggle with payments delays of up to several months, he told the *WSJ*. 
1. **More beds linked to more hospitalizations**

Amid nationwide efforts to cut down on healthcare waste, a new Michigan State University study finds more hospital beds lead to more utilization and likely higher costs, reinforcing support for certificate-of-need programs to regulate new hospital facilities.

Researchers looked at more than 1 million admissions at nearly 170 hospitals in 2010 in Michigan, a state that requires new hospitals to acquire certificate-of-need approval--the controversial regulation designed to avoid duplicative services in one area. The researchers found a "strong correlation" between bed availability and use.

"I have to believe that some of it is economic pressure from hospital administrators to fill up. If we're talking about a situation where there's a brand new multi-million dollar facility, I'm sure they don't want to have 20 percent of their hospital filled," Paul Delamater, lead author and a researcher in MSU's geography department told, DOTmed News.
1. **OIG: Fraud crackdown nets record-breaking recoveries**

By Karen Cheung-Larivee

The Office of Inspector General is on its way to setting a record in recoveries of about $6.9 billion this fiscal year, according to its semiannual report submitted to Congress yesterday.

With "significant progress over the past year," according to Inspector General Daniel Levinson, OIG reported $923.8 million from audits and $6 billion from investigations, as well as $8.5 billion in estimated savings resulting from legislative, regulatory or administrative actions from OIG's recommendations.

OIG's crackdown has focused on reports of healthcare fraud, waste and abuse, most recently, at mental health centers, nursing homes and hospitals.

OIG said it excluded 3,131 individuals and entities from the federal health programs. It also reported 778 criminal actions against individual criminals or entities and 367 civil actions regarding false claims, civil monetary penalties and provider self-disclosure issues.

In Medicare, specifically, efforts by the federal program's Fraud Strike Force resulted in charges against 305 individuals or entities, 181 convictions and $151 million in investigative receivables.

Two audits earlier this year focused on cardiovascular and musculoskeletal surgeries, in which the evaluation and management services (E/M) payments did not reflect the services actually provided. The 2012 reports found that cardiovascular and musculoskeletal surgery claims in 2007 revealed $63 million in wasteful Medicare spending in E/Ms not provided. OIG attributed it to a faulty global physician fee schedule that doled out payments related E/M services before the day of surgery, the day of the surgery and the 90 days after the day of the surgery—regardless of whether the E/M services were actually provided, OIG found.
How to Stop Hospitals From Killing Us

Medical errors kill enough people to fill four jumbo jets a week. A surgeon with five simple ways to make health care safer.

By MARTY MAKARY

When there is a plane crash in the U.S., even a minor one, it makes headlines. There is a thorough federal investigation, and the tragedy often yields important lessons for the aviation industry. Pilots and airlines thus learn how to do their jobs more safely.

The world of American medicine is far deadlier: Medical mistakes kill enough people each week to fill four jumbo jets. But these mistakes go largely unnoticed by the world at large, and the medical community rarely learns from them. The same preventable mistakes are made over and over again, and patients are left in the dark about which hospitals have significantly better (or worse) safety records than their peers.

As doctors, we swear to do no harm. But on the job we soon absorb another unspoken rule: to overlook the mistakes of our colleagues. The problem is vast. U.S. surgeons operate on the wrong body part as often as 40 times a week. Roughly a quarter of all hospitalized patients will be harmed by a medical error of some kind. If medical errors were a disease, they would be the sixth leading cause of death in America—just behind accidents and ahead of Alzheimer’s. The human toll aside, medical errors cost the U.S. health-care system tens of billions a year. Some 20% to 30% of all medications, tests and procedures are unnecessary, according to research done by medical specialists, surveying their own fields. What other industry misses the mark this often?
Avoiding Emergency Rooms

By JANE E. BRODY

On a recent Sunday afternoon, a 75-year-old Philadelphia man with a fever of over 102 degrees was unable to reach his doctor. So his daughter took him to an emergency room, where the two sat for hours until he was examined by a physician who found no reason for the fever and decided to admit him overnight.

The man was given oxygen, a chest X-ray, a blood test and, finally, a urine test, which revealed a urinary tract infection. The problem was solved with a prescription for an antibiotic, but at a cost of thousands of dollars to Medicare.
Growth in Total Health Expenditure Per Capita, U.S. and Selected Countries, 1970-2008


CALIFORNIA’S STATE PARKS
ARE EXPERIENCING BUDGET CUTS
AND WILL NO LONGER BE ABLE TO
SUPPLY PAPER TOWELS IN
THIS RESTROOM
ED Woes Bad Today, Worse Tomorrow

Joe Cantlupe, for HealthLeaders Media, July 12, 2012

One of the great things about an eight-year study of emergency departments published last month in the Annals of Emergency Medicine is that it challenges some preconceived notions about the problems in EDs these days.

The National Trends in Emergency Department Occupancy report covers from 2001 to 2008, and yes, we know how some of the story goes, with the power of hindsight over the past four years. During those study years, patient visits increased 60% faster than population growth, according to the report.

Please rate the following clinical areas on the difficulty of achieving results in improved efficiency and cost reduction.

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<th>2</th>
<th>3</th>
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<td>21%</td>
<td>40%</td>
<td>28%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Base = 250
Q | What is the greatest strategic challenge regarding your ED?

- Patient flow: 43%
- Reimbursement: 13%
- Physician alignment, adherence to quality goals: 13%
- Physician staffing: 7%
- Nurse staffing: 6%
- Internal interaction with other departments: 5%
- External competition: 3%
- Patient diversion: 3%
- Other: 7%

Base = 298
Best EDs Focus on Flow

Joe Cantlupe, for HealthLeaders Media, June 11, 2012

This article appears in the May 2012 issue of HealthLeaders magazine.

Among the greatest challenges in the emergency department is improving patient flow, and this comes with a sense of urgency amid deep concerns about patient safety due to overcrowding. In addition, the latest HealthLeaders Media Intelligence Report reveals that healthcare leaders expect worsening ED revenue margins and an increasing volume of uninsured patients.

Hear my story.
CASE STUDY

Ochsner Health System

About

Ochsner Health System is southeast Louisiana's largest non-profit, academic, multi-specialty, healthcare delivery system with eight hospitals and over 30 health centers in Louisiana. Ochsner has been named the "consumer's choice for healthcare" in New Orleans for 15 consecutive years and is the only Louisiana hospital recognized by U.S. News and World Report as a "Best Hospital" across seven specialty categories. Ochsner employs more than 12,500 employees, over 850 physicians in over 90 medical specialties and subspecialties and conducts over 300 clinical research trials annually.

Ochsner Medical Center and Ochsner Medical Center-West Bank Campus were named among the top 5% in the nation for emergency medicine for the second consecutive year by HealthGrades and is the only ED in Louisiana to receive the HealthGrades Emergency Medicine Excellence Award in 2011 or a five-star rating for Emergency Medicine.

Their Story

In 2007, Ochsner Health System’s Department of Emergency Medicine embarked on a major project that deeply impacted the culture of the department moving away from a traditional approach to ED care and into what Joseph S. Guarisco, MD, FAAEM, FACEP, chairman of the department of emergency medicine at Ochsner Medical Center and system chair of emergency services, describes as "a game-changing workflow process that dramatically alters how patients are managed in an emergency department." The workflow is called qTrack®.

qTrack was designed to address the need to increase capacity of the existing ED space without adding space. qTrack's workflow design increases traditional ED bed availability by implementing a workflow solution that moves patients into and through "Continuing Care" areas rather than having patients spend their entire emergency department visit in a traditional ED bed. But qTrack may not have come about if it hadn't been for Hurricane Katrina, as prior to this natural disaster, Ochsner ED had a 20 minute door-to-doctor wait time and a 99% patient satisfaction rating.
Restaurant chains have managed to combine quality control, cost control, and innovation. Can health care?

By Atul Gawande

August 13, 2012

It was Saturday night, and I was at the local Cheesecake Factory with my two teen-age daughters and three of their friends. You may know the chain: a hundred and sixty restaurants with a catalogue-like menu that, when I did a count, listed three hundred and eight dinner items (including the forty-nine on the “Skinnylicious” menu), plus a hundred and twenty-four choices of beverage. It’s a linen-napkin-and-tablecloth sort of place, but with something for everyone. There’s wine and wasabi-crusted ahi tuna, but there’s also buffalo wings and Bud Light. The kids ordered mostly comfort food—
Census by Hour 2012
Emergency Department
Brazilian doctor killed 7 patients to free up hospital beds, police say

By Marilia Brocchetto, CNN
updated 1:37 PM EDT, Thu March 28, 2013
The diagram illustrates the relationship between cost and the number of servers and waiting time. As the number of servers changes (ρ), the cost changes accordingly. The graph shows that there is a minimum cost point where the number of servers and waiting time are balanced. When ρ = 0.0, the system has more servers and less waiting time compared to when ρ = 1.0, where there are less servers and more waiting time.
CityBusiness names 2007 Innovator of the Year winners

NEW ORLEANS - SDT Waste & Debris Services received the CityBusiness’ 2007 Innovator of the Year Gold Award today during a lunch program at the Sheraton New Orleans hotel.

The sixth annual program honors New Orleans-area businesses for innovative products and services. The 2007 program had 59 honorees.

New Orleans-based SDT is owned by Sidney Torres, a Chalmette native and real estate developer who started a trash-removal business in the wake of Hurricane Katrina. The company, which is contracted by the city of New Orleans to clean downtown, has become a household name in less than two years. Many say the French Quarter has never looked cleaner.

Torres uses state-of-the-art trash-removal and street-cleaning equipment and products, including a biodegradable disinfectant he commissioned a chemist in Chicago to make.

Drivesoft LLC received the Silver Award. The Metairie company’s innovation is Drivesoft Alive Automotive Linked-in Vehicle Entertainment, a touchscreen in-car computer that features MP3 capabilities, a DVD player, TV tuner, navigation tools, e-mail and Internet access and mobile office functions, including the ability to access Excel and Word files. The product, developed by CEO Jack Cali, has been featured on MTV’s “Pimp My Ride.”
OR in the ER

Overcrowding combined with understaffing has created an emergency care crisis. How operations research can help solve the problem.

By David Eitel and Douglas A. Samuelson

Emergency medicine in the United States has reached a crisis state. Operations research has demonstrated a critical capability to address the problem, but most emergency care physicians and managers are unaware of this capability. As a few recent engagements have shown, OR analysis could contribute greatly to addressing this crisis if they change their communications approach in order to be more effective in supporting health care providers.

In late 2006, a number of the first author’s colleagues reported that emergency department (ED) conditions abruptly worsened across the country. Apparently this was just due to congestion hitting a certain level, without a precipitating event, much like some highways at rush hour. Many patients who were “admitted” to hospitals remained in the ED up to 24 hours (and longer), tying up gurneys in ED hallways waiting for a hospital bed to become available. In Dr. Eitel’s own prototypical 40-bed ED, 20 to 35 patients (or more) were held or “boarded” — most days of the week, most hours of the day — until a hospital bed became available. (Note: “Emergency Department” and “Emergency Room” mean pretty much the same thing. “Department” has gained more widespread use lately since many EDs now comprise multiple rooms.)

The first author of this article, an experienced emergency physician who is also an MBA and a long-time member of INFORMS and its Health Applications Section, presented this situation at the annual INFORMS meeting in 2007, along with Murray Cotte and Keith Willingham. The presentation was intended to be a call for help. In the three and a half years since, this situation has gotten worse, and the O.R. profession’s help is needed more than ever.

The 2007 presentation featured photos that showed signs hanging from the ceiling in Dr. Eitel’s ED. These signs were a recent addition to the ED, and they were simply numbers. The numbers were part of a location-tracking scheme that helped the ED keep track of which patients were “temporarily” stuck where — in the hallways or gurneys — because of the overcrowding.

The hospital had no plan to send extra resources to the ED to help care for these patients, who were often very ill, admitted for further treatment but then “boarded” in the ED. The ED caregivers were told that there simply were not resources available elsewhere in the hospital to send to the ED. This meant that ED care providers were required to deliver care to admitted ED-boarded patients while simultaneously treating other patients who continued to arrive via walk-in triage and ambulance in ever-increasing numbers — an impossible situation. Compounding the problem, the ED was not physically set up to deliver the services and procedures many of the
Business in special forces
Process improvement advances Army recruitment

October 2007
Volume 29 - Number 12 - 8.6x11

IN THIS ISSUE
Age changes products, procedures
Bargain bie books on quantity
Math perfects DC design
Material handlers revive libraries
Continuous learning for professionals

Case Study
SOLUTIONS IN PRACTICE

Octosan Health System owns medical facilities across Louisiana, including five hospitals in the New Orleans area and more than 1,000 on-staff physicians.

Budgeting beds helps hospital

Hurricane Katrina brought deadly and destructive weather into the city of New Orleans in August 2005. The onslaught of Hurricane Rita several weeks later delivered a second punch to the city’s infrastructure.

Joe Gonzales, M.D., chief of emergency services for Ochsner Health System in Louisiana, one of the few health care operations that was left functioning in New Orleans immediately following the hurricane.

Before Katrina hit, the hospital system served 20,000 emergency department visits per year. Ochsner Medical Center had patients both-in-door times averaging under 25 minutes, and only 0.4 percent of patients left without being seen (LWBS) by a physician. Patient satisfaction ranked in the 98th percentile.

The leap in patient volume two months after Katrina was unprecedented, creating bottlenecks and long wait times for patients in dire need of care.

By February 2005, Ochsner’s emergency department received 75,000 visitors per year, a number that continues to climb today. EDWIS now processed more than 6.5 percent, and door-to-doctor times expanded to an average of 27 minutes. The hospital system’s patient satisfaction ranking dropped to the 93rd percentile.

The seamless change in patient volume proved too much for Ochsner’s traditional process model, which had placed emphasis on a steady workflow for doctors moving patients through stages as fast as was reasonably possible.

The process map to better care

As the patient volume was reaching its peak in February, Gonzales visited IEEE’s Society for Health Systems (SHS) Conference in New Orleans. Stopping in on a session focused on throughput and emergency medicine, Gonzales listened to a discussion about adjusting fast track models to serve patients better. Saddled with the growing crisis at his hospital, Gonzales raised his hand and told the crowd he was ready to throw the fast track out completely.

“Several hands turned when I said that,” he said. Among those invited to Gonzales’ session were Steve Escamilla, management engineer with California Emergency Physicians Medical Group, and Todd Schneid, improvement advisor and management engineer for Tallahassee Memorial HealthCare. The two experts, along with advisors from Banner Health Arizona who conducted the SHS sessions, visited Ochsner hospitals and began working with Gonzales to develop a new system that brings patient satisfaction and wait times back to pre-Katrina levels.
How do you persuade reluctant clients to embrace your more-radical ideas?
I’m very good at explaining. I don’t work like a diva. I don’t say, “Oh my God, that must be pink,” and refuse to discuss it. I arrive with something that is always well-thought-out, very seriously done. I am cuckoo, yes. I am the king of intuition. But I am also a serious guy. I explain in a clear way. And then, even if it’s something that looks completely different than expected, something completely against mainstream thinking, clients understand. I explain that it might look strange but why, given the two to five years it will take for development, it will for so many reasons be exactly the right thing to do. If there is no surprise, the project doesn’t deserve to exist. But I’m very, very precise in describing the timing and the parameters. And then the clients agree, always, 100%.
Shared Purpose

- Clinical leadership
- Culture of team
- Data and performance transparency
- Provider compensation plan that creates risk
- Fear of public reporting and social media
- Burning platform
Two Years Later, Every Day is Monday in New Orleans Emergency Departments

City struggles to provide care as population returns to devastated southern Louisiana

by MARYN McKENNA
Special Contributor to
Annals News & Perspective

Two years after Hurricane Katrina and the floods that followed, the home of New Orleans, a year ago, because more people are coming back to town, and more doctors are leaving.1

The population of New Orleans still has not returned to pre-storm levels. Depending on which survey methodology you accept, it stands at 60 to 70% of the 455,000 the city claimed in the 2000 census.2

From an ED standpoint, a smaller population would seem to be good news. But "New Orleans," technically, is only Orleans Parish, as counties are known here. Jefferson Parish to the west is back to pre-storm levels, and the regional population, from north of Lake Pontchartrain down the leg of Louisiana’s boot, has reached at least 90%. That population has some significant differences from the before-storm residents. With the exodus of families and a vast influx of construction workers, it is more male than before, and it would be just as busy the day after. Two years after Hurricane Katrina and the floods that followed, the home of New Orleans, it is more male than before, the day before, and it would be just as busy the day after. Two years after Hurricane Katrina and the floods that followed, the home of New Orleans, it is more male than before, the day before, and it would be just as busy the day after.

EW ORLEANS — It was a few minutes after noon on a hot day in September. The sun was beating down on the concrete that surrounded Tulane University’s emergency department (ED), and shadowed the double doors did open, the steady heat spilled through.

Paramedics strapped to it, lying in a gurney on a wheelchair and gazing out the window after being stung by the heat. The patients lined up along the walls of the massive hallway.”

By: MARYN McKENNA
Special Contributor to
Annals News & Perspective

No space, no access, no care

A story of a mystery — New Orleans, a city on the edge of a medical emergency system, has failed to deliver its promise to carry patients to emergency rooms where they least expect it.

More than a third of those living in Greater New Orleans (GNO) have seen their access to health care diminished since the storm,” the民間ニューヨークのセントラル・ハンドプレス・ニュースの記者、ヘンリー・J・ケイシー（Jane Mayer）が報じた。"One day in GNO, you may find yourself being turned away at the hospital. But that’s not the case. It’s more like being turned away by the hospital. But that’s not the case. It’s more like being turned away by the hospital.

RIPPLES AND WAVES

The ripple effect of its closure has spread to the city’s surrounding EDs — and on some days, personnel say, it looks as though they are working.

"We have patients who will wait it to be in a hospital and then without being seen, go to another hospital," says one staff member at "Big Charity" and the main medical center of New Orleans, and we are too thin that we were a year ago, because more people are coming back to town, and more doctors are leaving.

The population of New Orleans still has not returned to pre-storm levels. Despite the fact that survey methodology you accept, it stands at 60 to 70% of the 455,000 the city claimed in the 2000 census.3

From an ED standpoint, a smaller population would seem to be good news. But "New Orleans," technically, is only Orleans Parish, as counties are known here. Jefferson Parish to the west is back to pre-storm levels, and the regional population, from north of Lake Pontchartrain down the leg of Louisiana’s boot, has reached at least 90%. That population has some significant differences from the before-storm residents. With the exodus of families and a vast influx of construction workers, it is more male than before, and it would be just as busy the day after. Two years after Hurricane Katrina and the floods that followed, the home of New Orleans, it is more male than before, the day before, and it would be just as busy the day after. Two years after Hurricane Katrina and the floods that followed, the home of New Orleans, it is more male than before, the day before, and it would be just as busy the day after.

Vol. 31, No. 5 : January 2009
The Waits That Matter

John Maa, M.D.

She was 69 years old and, with the exception of mild heart disease, was in excellent health. One day, around mid-morning, she noticed that her heartbeat was irregular and she felt slightly short of breath. Using her home blood-pressure cuff, she found that her pulse was 130. Since her blood pressure was stable, she decided to forgo a call to 911 and instead asked her husband to drive her to the local hospital — one of the most highly regarded academic medical centers on the West Coast.

Those of us who have dedicated our careers to health care must confront the fact that our inability (or, more likely, unwillingness) to reduce the waits and delays that bedevil emergency care is harming and even killing our patients.

The solution will come too late to save my mother. But it would help me honor her memory.
For Mr. Seelig and Ms. Gibson, the letter serves as evidence that their daughter’s death did matter to someone, and made some difference.

Asked what lesson might be taught by Sabrina’s death, Ms. Gibson said there was one. “No one should go to a hospital without someone with you — no one,” she said. “Don’t go unless somebody at least knows you’re there.”
The Cost of Waiting

Shorter ED Wait Times Reduce Malpractice Claims

Patients at emergency departments with an average wait time of more than 60 minutes were more than four times as likely to file a malpractice claim than patients at emergency departments who waited less than 30 minutes.

Claims per 25,000 patient visits

Patient Satisfaction by Time Spent in ED

Represents the experiences of 1,524,726 patients treated at 1,656 EDs nationwide between January 1 and December 31, 2007
The Cost of Waiting

- 60,000 ED Visits x 1 Hr LOS reduction = 60,000 hrs bed capacity
- If your LOS is 2 Hours/Visit = 30,000 potential new visits
- If your LOS is 3 Hours/Visit = 20,000 potential new visits
- 20,000 new visits X $100/Visit = $2,000,000 pro fees
- 20,000 new visits x $400/Visit/Facility = $ 8,000,000 facility fees
The Cost of Waiting

- Net revenue (actual LWBS payor mix)
  - Outpatient facility net revenue @ $300/visit discharge (90% of visits)
  - Inpatient facility net revenue @ $5,000/visit admission (10% of visits)
  - Professional provider net revenue @ $125/visit all (100% of visits)

- 1% LWBS @ 50,000 visits = 500 visits

- Lost opportunity net dollars for every 500 visits LWBS
  - $135,000 facility outpatient revenue (450 pts x $300)
  - $250,000 facility inpatient revenue (50 pts x $5,000)
  - $62,500 professional revenue (500 pts x $125)

- Cost of 1% LWBS at 50,000 volume = $447,500
The Cost of Doing Nothing

New York City Ties Doctors’ Income to Quality of Care

The public hospital system has come up with 13 performance indicators. Among them are how well patients say their doctors communicate with them, how many patients with heart failure and pneumonia are readmitted within 30 days, how quickly emergency room patients go from triage to beds, whether doctors get to the operating room on time and how quickly patients are discharged.
The Cost of Doing Nothing

ED ACCREDITATION UPDATE

Covering Compliance with The Joint Commission Standards

Standards governing ED patient flow, patient boarding are strengthened

Ultimate responsibility for action is pushed up the chain of command

As demand for emergency care continues its upward climb, The Joint Commission is taking steps to strengthen its accreditation standards pertaining to patient throughput, and it is putting hospital leaders on notice that they will be held accountable for patient flow challenges that occur in the ED.

High. Managers had to be aware of what was going on, but now The Joint Commission has really pushed it up the chain of command to hospital leadership, and I think that is very important because they are the ones with the power to make things happen.”

Further, The Joint Commission has expanded the
## The Cost of Doing Nothing

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<td>Wireless data transmission</td>
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<td>Time from arrival to departure (admitted patients)</td>
</tr>
<tr>
<td>IP-2*</td>
<td>Time from admit decision to departure (admitted patients)</td>
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The Cost of Doing Nothing

Why a Restaurant Customer Quits
1% Die
3% Move Away
14% Unclean Dining Area
14% Bad Food
68% Indifferent Attitude About Service

Emergency Room Patients
Please Sign In
Remove Sign In Slip and Deposit In Triage Door Mail Slot.

Then Press Red Button
It’s Not Just About the Money!

- Quality outcomes
- Patient safety
- Humanism (it’s the right thing to do)
The Problem

• Have we priced ourselves out of good service
• Can we be all 3
  – Faster
  – Better
  – Less costly (cheaper)
Three Rules for Making a Company Truly Great

by Michael E. Raynor and Mumtaz Ahmed

1. Better Before Cheaper
   Every company faces a choice. It can compete mainly by offering superior nonprice benefits such as a great brand, an exciting style, or excellent functionality, durability, or convenience; or it can meet some minimal acceptable standard along these dimensions and try to attract customers with lower prices. Miracle Workers overwhelmingly adopt the former position. Average Joes typically compete on price. Long Runners show no clear tendency one way or the other. (See the exhibit “Following the Rules

2. Revenue Before Cost
   Companies must not only create value but also capture it in the form of profits. By an overwhelming margin, exceptional companies garner superior profits by achieving higher revenue than their rivals, through either higher prices or greater volume. Very rarely is cost leadership a driver of superior profitability.

3. There Are No Other Rules
   This rule underscores the uncomfortable (or liberating) truth that in the pursuit of exceptional profitability, everything but the first two rules should be on the table. When considering all the other determinants of company performance—operational excellence, talent development, leadership style, corporate culture, reward systems, you name it—we saw wide variation among companies of all performance types. There’s no doubt that these and other factors matter to corporate performance—how could they not?—but we couldn’t find consistent patterns of how they mattered.
The Goal

- **Faster** (door to doc)
- **Better** (safer care and higher patient satisfaction)
- **Cheaper** (reduced cost per visit)
Patient Arrivals by Hour

Monday

Thursday
Patient Arrivals by Hour

August

January
Patient Arrivals by Hour
Patient Arrivals by Hour

Hour of Day

- Hospital A
- Hospital B
- Hospital C
- Hospital D
- Hospital E
- Hospital F
- Hospital G
Patient Arrivals by Hour

Monday

Tuesday

Wednesday

Thursday
Patient Arrivals by Hour
Patient Arrivals by Hour

*Banner Health System
Acuity Distribution*
Patient Response to Wait Times
Who Leave Before Treatment

![LWBS Rates Chart]

**LWBS Rates**

- %LWBS
- %Visits

Legend:
- LWBS < Visit Rate
- LWBS > Visit Rate
When do Patients Leave…

[Bar chart showing the total number of leave episodes per hour (Military Notation), with a peak in the evening hours.]
So why are patients waiting?

– We know how many are coming…
– We know when they are coming…
– We know how sick they will be…
– We know how long they will wait before leaving…
– We know when they will leave…
– We know who they are…
– and we know how much it will cost us!
Mapping to average demand
Utilization and Variance
Wait Time and Utilization

![Graph showing response time vs. utilization]

- Fireman
- ED MD
Wait Time as a Function of Utilization
Wait Time for a service/product = 1/(a-b)

- a = service capacity (patients treated per hour)
- b = arrival rate (patients arriving per hour)
Wait Time for a service/product = 1/(a-b)

- a = service capacity (patients treated per hour)
- b = arrival rate (patients arriving per hour)

- 1 hr (60 min door to doctor)
- 80% utilization

a @ 05 pts/hr
b @ 04 pts/hr
- **Wait Time for a service/product** = \(1/(a-b)\)
  - \(a\) = service capacity (patients treated per hour)
  - \(b\) = arrival rate (patients arriving per hour)

- \(a\) @ 06 pts/hr
- \(b\) @ 04 pts/hr

- 1/2 hr (30 min door to doctor)
- 67% utilization
Begin by measuring the hourly call rate from day-to-day over a period of time, say three months. Calculate the standard deviation for each hour period, multiply by 1.96 (the Z value for 95 percent confidence) and add to the mean call rate. Using the 95 percent service level (SL) call rate instead of the average call rate, one can now calculate staffing to support the 95 percent SL.

An appropriate schedule could be established to support the revised staffing levels. If there is significant variability in the length of calls, then that could be computed to a 95 percent service level and factored into the staffing calculation in the same way.

- A 30 minute wait time says you guarantee great service (30 min D2D) 95% of the time not 50%
- Highly variable customer demand
  > call centers
  > retail
  > electronics manufacturers
  > emergency departments
Build Bigger Buildings…!
Work Harder...!
Hire More Highly Priced Staff…!
a @ 04 pts/hr
b @ 04 pts/hr

1/0 hr (Infinity)
• 1/2 hr (30 min door to doctor)

a @ 06 pts/hr
b @ 04 pts/hr
a @ 10 pts/hr
b @ 04 pts/hr

1/6 hr (15 min door to doctor)
## Provider Cost Calculator

<table>
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<tr>
<th>MD</th>
<th>Net MD Production</th>
<th>MD Cost</th>
<th>Advanced Practice Clinician</th>
<th>APC Cost</th>
<th>Total Cost/Hr</th>
<th>Total Pt/Hr</th>
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Workflow

A Long Line for a Shorter Wait at the Supermarket
Virtual Capacity

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<th>Task</th>
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<td>Nurse assigned</td>
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(Note: The table includes various medical and administrative tasks with durations and associated personal names.)
Celebration Hospital Disney - Orlando, Florida by Walt Disney

St Charles Hospital - Luling, Louisiana by Joe Guarisco
NorthShore

Arrival To MD (Minutes)

LWBS (Percent)
OPTIMIZATION TOOLS
Optimization Tools

Performance

Cost

Productivity
Optimization Tools

Measures detailed productivity
> provider level
> dynamic
Optimization Tools

Delivers service metrics
> best
> optimal based on cost
> target
Optimization Tools

Delivers cost per visit
> lowest
> optimal based on service
> target
Ochsner Health System
Emergency Department
Avg Patient Reg by Hour (All Days)
Date Range: 01/01/2013, 03/31/2013
ED Site: "MAIN CAMPUS"

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Intrigma Cost Optimizer©

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Core ED Thursday

$/Patient=164

- Core Patient Arrivals
- Core Adjusted Providers
- Patients/Core Adj Provider
- Goal (Pts/Adj Core Provider)

$/Patient=77

- QTrack Patient Arrivals
- QTrack Adjusted Provider
- Patients/Adjusted QT Provider
- Goal (Pts/Adj QT Pro)
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