Disclosures

- Director of Emergency Care Coordination Center @ DHHS
- Research funding from AHRQ, NIH, CDC, American Heart Association, PCORI
- Physician, The Clinton Foundation
- Board of Directors, Emergency Medicine Foundation
- Editorial Board, Annals of Emergency Medicine
- Health Policy Advisor, Emergency Medicine Health Policy Scholar Program

Emergency Care Coordination Center

**Mission:** To lead the US Government’s efforts to create an emergency care system that is:
1. patient- and community-centered,
2. integrated into the broader healthcare system,
3. high quality, and
4. prepared to respond in times of public health emergencies.
• USG wide advisory panel to inform the actions of the ECCC
• Members include representatives with emergency care portfolios or interests from:
  – US Department of Defense
  – US Department of Health and Human Services
    • HRSA, CMS, NIH, SAMHSA, AHRQ, ONC, OASH
  – US Department of Homeland Security
  – US Department of Transportation
  – US Department of Veterans Affairs

Health Affairs Theme Issue

• Emergency care system design
• Trauma
• Care for older adults
• Alternative destinations for EMS
• Connecting day to day care to disaster care
• Quality measurement
• EMTALA
• Observation care
The emergency care “system”

Life and limb threats

Sick, worried, scared

Rapid diagnostics

Readiness For disasters

Safety net

Trauma care outcomes

A National Evaluation of the Effect of Trauma-Center Care on Mortality

Table 4. Adjusted Case Fatality Rates and Relative Risks of Death after Treatment in a Trauma Center as Compared with Treatment in a Non–Trauma Center.9

<table>
<thead>
<tr>
<th>Variable</th>
<th>Weighted No. of Patients</th>
<th>Death in Hospital</th>
<th>Death within 30 Days after Injury</th>
<th>Death within 90 Days after Injury</th>
<th>Death within 345 Days after Injury</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall population</td>
<td>15,009</td>
<td>7.6</td>
<td>7.6</td>
<td>8.7</td>
<td>10.4</td>
</tr>
<tr>
<td>Trauma center (%)</td>
<td>9.5</td>
<td>10.0</td>
<td>11.4</td>
<td>13.8</td>
<td></td>
</tr>
<tr>
<td>Non–trauma center (%)</td>
<td>8.0 (0.66–0.98)</td>
<td>0.76 (0.58–1.00)</td>
<td>0.77 (0.60–0.98)</td>
<td>0.75 (0.60–0.95)</td>
<td></td>
</tr>
</tbody>
</table>
The relative risk of death increased at a rate of 3.4% for each 10 minute increase in time to trauma care (95% CI 2.4% - 4.4%).

Access to Trauma Care Benchmark

<table>
<thead>
<tr>
<th>IVP-8</th>
<th>Increase access to trauma care in the United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>IVP-8.1</td>
<td>Increase the proportion of the population residing within the continental United States with access to trauma care</td>
</tr>
<tr>
<td>Baseline:</td>
<td>83.1 percent of the population residing within the continental United States had access to trauma care in 2000</td>
</tr>
<tr>
<td>Target:</td>
<td>91.4 percent</td>
</tr>
<tr>
<td>Target Setting Method:</td>
<td>10 percent improvement</td>
</tr>
<tr>
<td>Data Sources:</td>
<td>Trauma Information Exchange Program (TIEP), American Trauma Society (ATS)</td>
</tr>
<tr>
<td>Data:</td>
<td><a href="https://www.healthypeople.gov/2020/objectives-data">HP2020 data for this objective</a></td>
</tr>
</tbody>
</table>
The emergency care “system”

- Sick, worried, scared
- Rapid diagnostics
- Life and limb threats
- Readiness
  For disasters
- Safety net
One Great Idea for Reducing Health Care Costs: Keep Non-Emergencies Out of the ER

Much of our skyrocketing health care costs are spent on unnecessary emergency room visits. A Rand Corp. study last year found that we spend $4.4 billion annually on people who use the ER for routine, non-urgent care. Though studies vary on the percentage of inappropriate ER visits (the CDC says its 8% but Health Affairs puts it at 27%), no one disputes that these patients could get better and less expensive care elsewhere.

Who uses emergency departments inappropriately and when - a national cross-sectional study using a monitoring data system

- 11.7% of visits were inappropriate (discharged with no need for follow up or follow-up with primary care)
- Inappropriateness peaks in early childhood (1-2 yrs)
- Underserved communities had higher rates of inappropriate use
- “Prevention…would be best targeted at parents of young children and at older youths/young adults, and during weekends and bank holidays.”
State Medicaid program to stop paying for unneeded ER visits

Starting April 1, Medicaid will no longer pay for such visits, even when patients or parents have reason to believe they’re having an emergency. Hospitals and doctors are pressuring lawmakers to undo the policy.

- “Medicaid officials say the program will no longer pay for any medically unnecessary emergency-room visits, even when patients or parents have reason to believe they're having an emergency.”
- "The ER physicians and hospitals have been abusing their privileges as providers of ER services for years, having the state pay for non-medically necessary services in the ER"
- "They have not stepped up as leaders to actually be better stewards of care and safety and the public resources," he said.

Reducing Emergency Department Overuse: A $38 Billion Opportunity

Opportunity
Emergency department overuse: $38 billion in wasteful health care spending

Solutions
67 million, or more than half of the 120 million annual emergency visits, are potentially avoidable

Drivers for Change
- Payment Reform for Providers
- Financial Incentives for Patients
- Improved Data on Emergency Department Utilization
Everyone is entitled to his own opinion, but not his own facts.

—— Daniel Patrick Moynihan ——

HEALTH POLICY/CONCEPTS

A Novel Approach to Identifying Targets for Cost Reduction in the Emergency Department

Peter B. Smulowitz, MD, MPH; Leah Honigman, MD; Bruce E. Landon, MD, MBA

Table 1. Medicare 2011 national unadjusted payment rates.22

<table>
<thead>
<tr>
<th>Visit Level</th>
<th>ED Physician Payment Rate, $</th>
<th>ED Facility Payment Rate, $</th>
<th>Office Visit Payment Rate, $*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>21.02</td>
<td>51.77</td>
<td>41.11</td>
</tr>
<tr>
<td>2</td>
<td>41.30</td>
<td>87.25</td>
<td>71.02</td>
</tr>
<tr>
<td>3</td>
<td>62.68</td>
<td>139.14</td>
<td>102.95</td>
</tr>
<tr>
<td>4</td>
<td>118.73</td>
<td>222.58</td>
<td>126.41</td>
</tr>
<tr>
<td>5</td>
<td>174.77</td>
<td>329.54</td>
<td>162.42</td>
</tr>
</tbody>
</table>

*Except under rare exceptions, there is no separate facility component for office visits.
I can't breath,
I have a high fever

It hurts so bad I can't take it,
I think I broke something,
I crashed my bike and am bleeding

My head/abdomen/heart hurts - what's wrong with me?
Please tell me I'm not going to die

Comparison of Presenting Complaint vs Discharge Diagnosis for Identifying “Nonemergency” Emergency Department Visits

Table 3. Discharged and Admitted Patients’ Location for “Nonemergency” Complaints

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percent of retail clinic visits</th>
<th>Percent of urgent care center visits</th>
<th>Percent of emergency department visits</th>
<th>Percent of emergency department visits not requiring emergency department care</th>
<th>Any time of day</th>
<th>When alternative site is typically open</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can’t breath, I have a high fever</td>
<td>1.1 million</td>
<td>1,395</td>
<td>31,197</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>It hurts so bad I can’t take it, I think I broke something, I crashed my bike and am bleeding</td>
<td>21.7%</td>
<td>10.2%</td>
<td>50.9%</td>
<td>81.1%</td>
<td>48.9%</td>
<td>-</td>
</tr>
<tr>
<td>My head/abdomen/heart hurts - what’s wrong with me? Please tell me I’m not going to die</td>
<td>0.1%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>-</td>
</tr>
</tbody>
</table>

Comparison of Presenting Complaint vs Discharge Diagnosis for Identifying “Nonemergency” Emergency Department Visits

Importance: Reduction in emergency department (ED) use is frequently viewed as a potential source for cost savings. One consideration has been to deny payment if the patient’s diagnosis upon ED discharge appears to reflect a “nonemergency” condition. This approach does not incorporate other clinical factors such as chief complaint that may inform necessity for ED care.

Objective: To determine whether ED presenting complaint and ED discharge diagnosis correspond sufficiently to support use of discharge diagnosis as the basis for applying discouraging ED use.

With increasing medical care costs, policymakers have turned to...
U.S. Emergency-Room Visits Keep Climbing

People on Medicaid turn to hospital care when doctor access is limited, new survey suggests

Medicaid Increases Emergency-Department Use: Evidence from Oregon's Health Insurance Experiment

Sarah L. Taubman,1,4 Heidi L. Allen,2 Bill J. Wright,3 Katherine Baicker,4,6 Amy N. Finkelstein1,5

In 2008, Oregon initiated a limited expansion of a Medicaid program for uninsured, low-income adults, drawing names from a waiting list by lottery. This lottery created a rare opportunity to study the effects of Medicaid coverage by using a randomized controlled design. By using the randomization provided by the lottery and emergency-department records from Portland-area hospitals, we studied the emergency department use of about 25,000 lottery participants over about 18 months after the lottery. We found that Medicaid coverage significantly increases overall emergency use by 0.41 visits per person, or 40% relative to an average of 1.02 visits per person in the control group. We found increases in emergency-department visits across a broad range of types of visits, conditions, and subgroups, including increases in visits for conditions that may be most readily treatable in primary care settings.
How to Solve the E.R. Problem

MAY 6, 2015

BACK in 2009, a big selling point of health care reform was the idea that expanding insurance coverage would increase Americans’ access to preventive and primary care and decrease the unnecessary use of emergency rooms, saving billions. President Obama said it this way: “One of the areas where we can potentially see some saving is a lot of those patients are being seen in the emergency room anyway, and if we are increasing prevention, if we are increasing wellness programs, we’re reducing the amount of emergency room care.”

There is one big problem with this logic: data..
Setting Value-Based Payment Goals — HHS Efforts to Improve U.S. Health Care

Sylvia M. Burwell
Innovations that are changing acute care delivery
(How to include the emergency care community...)

• Behavior change
• Hot spotting/care transitions
  • Pre-acute care & post-acute care
• Community paramedicine/mobile integrated healthcare
• Distributed acute care delivery systems
• Telemedicine
• Urgent care/retail clinics/Freestanding emergency departments
• Broadening the role of emergency physicians

THE NEW YORKER

MEDICAL REPORT JANUARY 24, 2011 ISSUE

THE HOT SPOTTERS
Can we lower medical costs by giving the neediest patients better care?

By Atul Gawande

Superusers lack social, primary care
Alternatives for s. limited care

Strategies To Address Frequent Emergency Department Use

• Superusers are an incredibly important group.
• 1% of the population, 20% of the cost
• (The other 99% of the population account for 80% of costs and would like high quality acute care too.)
Emergency Department Quality of Transitions of Care

This project will synthesize evidence through stakeholder meetings and research to determine the viability of bidirectional transitions of care quality measure concepts and a framework to consider opportunities for quality improvement as patients move from their usual source of care to the ED and then back to their outpatient usual source of care.

- Bi-directional information flow
  - Nursing home → ED → nursing home
  - PMD → ED → PMD

- Integrating acute care into the care continuum

- (Accepts the notion that all complex patients will have exacerbations)

JAMA

Realigning Reimbursement Policy and Financial Incentives to Support Patient-Centered Out-of-Hospital Care

Kevin Munjal, MD, MPH
Brendan Carr, MD, MS

INNOVATIVE MODELS OF PAYMENT AND CARE DELIVERY are increasingly being used to expand access, improve quality, and reduce medical costs. Although traditional EMS prior to transport (such as resolution of hypoglycemia or treatment of asthma). In 2010, median Medicare reimbursement was $464, slightly above the median cost per transport of $429 after adjusting for nontransported patients.1 This slim margin must cross-subsidize Medicaid and uninsured patients whose care provides little or no reimbursement and would be quickly eroded by any

COST & PAYMENT

Giving EMS Flexibility In Transporting Low-Acuity Patients Could Generate Substantial Medicare Savings

$560 million

Saved

If low-acuity cases were managed in less expensive settings, Medicare could save roughly $560 million per year.
Emergency Medical Services 101

Innovation Awards

- Regional Emergency Medical Services: "REMSA Community Health Early Intervention Team (CHIT)"
- Prosser Public Hospital District: “Prosser Washington Community Paramedics Program”
- Upper San Juan Health Service District: "Southwest Colorado cardiac and stroke care"
- City of Mesa Fire and Medical Department: "Community Care Response Initiative"
- ICAHN School of Medicine at Mount Sinai: "Bundled Payment for Mobile Acute Care Team Services"
- Yale University: "Paramedic Referrals for Increased Independence and Decreased Disability in the Elderly (PRIDE)"
01 Convenience is king.
02 Same-day appointments trump walk-in and wait.
03 Evening or weekends? Depends on age.
04 Clinic near errands or work? They’d rather meet you online.
05 A one-stop shop is worth the drive.
06 Consumers prioritize convenience over credentials—and continuity.
07 High-tech beats high-quality.
08 Don’t rely on your brand.
09 Talk about money—consumers will trade access for bill info.
10 Know your target population—particularly their age.
Avera to provide telemedicine services at Indian hospitals

By REGINA GARCIA CANO Sep. 20, 2016 6:00 PM EDT

Within the last 12 months, we’ve experienced:

• $6.3 million in cost savings
• 900+ potential patient transfers avoided
• 5,000+ video encounters
• 13 minute reduction in door to physician, when local ER providers aren’t immediately available.

How does your hospital provide timely emergency care?

• Bedside teaching
• Modified staffing
• Collaborative problem solving
• Decreased transfers
Convenient Ambulatory Care — Promise, Pitfalls, and Policy

Ji Eun Chang, M.S., Suzanne C. Brundage, S.M., and Dave A. Chokshi, M.D.

Mary Beth Harnett, M.D., M.P.H., Editor

Table 1. Similarities and Differences between Retail Clinics and Urgent Care Centers.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Retail Clinics</th>
<th>Urgent Care Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>Walk-in health clinics typically located in pharmacies or supermarkets</td>
<td>Walk-in health care centers that treat episodic conditions that need immediate but not emergency care</td>
</tr>
<tr>
<td>No. of clinics in</td>
<td>1900</td>
<td>6400</td>
</tr>
<tr>
<td>United States</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary scope of</td>
<td>Low-acute episodic care, immunizations, and some preventive care and care for chronic conditions</td>
<td>Episodic care for a range of acuity levels</td>
</tr>
<tr>
<td>services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staffing model</td>
<td>Generally nurse practitioners or physician assistants</td>
<td>Generally emergency medicine and family medicine physicians</td>
</tr>
<tr>
<td>Hours of operation</td>
<td>Extended hours — open nights and at least one weekend day — but not 24/7</td>
<td>Extended hours — open nights and at least one weekend day — but not 24/7</td>
</tr>
<tr>
<td>Industry</td>
<td>Concentrated</td>
<td>Fragmented</td>
</tr>
</tbody>
</table>

Health Policy/Original Research

Association Between the Opening of Retail Clinics and Low-Acuity Emergency Department Visits

Grant Martsoff, PhD, MPH*; Kathryn R. Fingar, PhD, MPH; Rosanna Coffey, PhD; Ryan Kandrack, BS; Tom Charland, BA; Christine Eibner, PhD; Anne Elkhauer, PhD; Claudia Steiner, MD, MPH; Ateev Mehrotra, MD, MPH

*Corresponding Author. E-mail: martsof@rand.org.

Figure 1. Trends in retail clinic penetration, 2007 to 2012.

Figure 2. Trends in the rate of ED visits for low-acuity conditions, by growth in retail clinic penetration, 2007 to 2012.
• “...people are not particularly price sensitive when they think they’re having an emergency.”
• “...the majority of people who use EDs think they might actually be having an emergency. This reasoning is validated by studies that actually ask people why they use the ED.”
• “This narrative runs contrary to the popular belief that most people commonly use EDs for minor illnesses...people coming to EDs often have potentially serious complaints that sometimes turn out to be a minor illness.”

“...emergency physicians are now leading the change from centralized hospital-based EDs to a more distributed access model of emergency care that incorporates freestanding EDs. It is a model of moving emergency care to “where the patients are.”
• The Future of Emergency Medicine – the “Availableist”
  – Urgent care
  – Intake physician (multiple hospitals)
  – Emergency Department (multiple hospitals)
  – On-demand telemedicine
  – Observation
  – Medical support/community paramedicine
  – (Freestanding ED?)
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1 Trauma Center</td>
<td>12.96</td>
</tr>
<tr>
<td>Level 2 Trauma Center</td>
<td>12.29</td>
</tr>
<tr>
<td>Level 3 Trauma Center</td>
<td>9.63</td>
</tr>
<tr>
<td>Non-trauma Center</td>
<td>65.12</td>
</tr>
</tbody>
</table>
Although the health care delivery system is increasingly focused on population health, the committee found that focus reflects a relatively narrow interpretation of the term – population as the patient panel or group of covered lives (i.e. individuals insured).

The IOM defined population health as “the health of all persons living in a specified geopolitical area.”
Emergency Care Service Regions (ECSR)

- 10-cluster solution: ZIP codes assigned to ECSR where >25% of patients admitted to a coalition hospital

Identified 10 hospital clusters (Fig. 3): hospitals per cluster (median=11.5, range=4-39, IQR=13); admissions per cluster (median=7,006, IQR=20,132, range=1,825-47,918)

Population survival for life and limb threats

O:E < 1 = better than expected
O:E > 1 = worse than expected

- STEMI
- Cardiac Arrest
- Sepsis
- Stroke
- Trauma
“I’m Just a Patient”: Fear and Uncertainty as Drivers of Emergency Department Use in Patients With Chronic Disease

Kristin L. Rising, MD, MS\(^{1}\); Anastasia Hudgins, PhD; Matthew Reigle, BA; Judd E. Hollander, MD; Brendan G. Carr, MD, MS

- Need for answers / reassurance = primary need for ED visit (88%, 25/40) and for post-discharge period

- “Because a lot of times, they just say, if this is a medical—a true medical emergency. Well, the average person doesn’t really know.”

- “I didn’t want to take a chance, because I’m no doctor. I’m no nurse. I’m just a patient.”

- “What needs to be done, upon leaving the ER, I think it needs to just be set up in a manner in which your follow-up care is somewhat still on the emergency care type of level. Because this is—the ER, coming in here was the first part. But the second part is usually the most important part in getting to a recovery or getting everything addressed.”
"In summary, we find that patients come back to the ED because they are anxious about symptoms, unsure of what else to do, and have lost trust in the health care system’s interest in serving as their advocates.”
“Kodak was late to recognize that it was not in the film and camera business: it was in the imaging business.”

“Whereas doctors and hospitals focus on producing healthcare, what people really want is health. Health care is just a means to that end.”

Doctors and hospitals who pay attention to the business they are actually in – defined by the outcomes their “customers” seek – will leave the doctors and hospitals who don’t behind.”

Less Shem, more Osler

The patient is the one with the disease
— Samuel Shem

Listen to your patient, he is telling you the diagnosis,
— William Osler
Questions?

Thank you

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Brendan.Carr@jefferson.edu