

Facing Up To Errors: How Do Systems Respond?

**Cardiology 2025: 28th Annual Update on
Pediatric and Congenital Cardiovascular Disease**

February 20th, 2025

Alan Friedman, MD

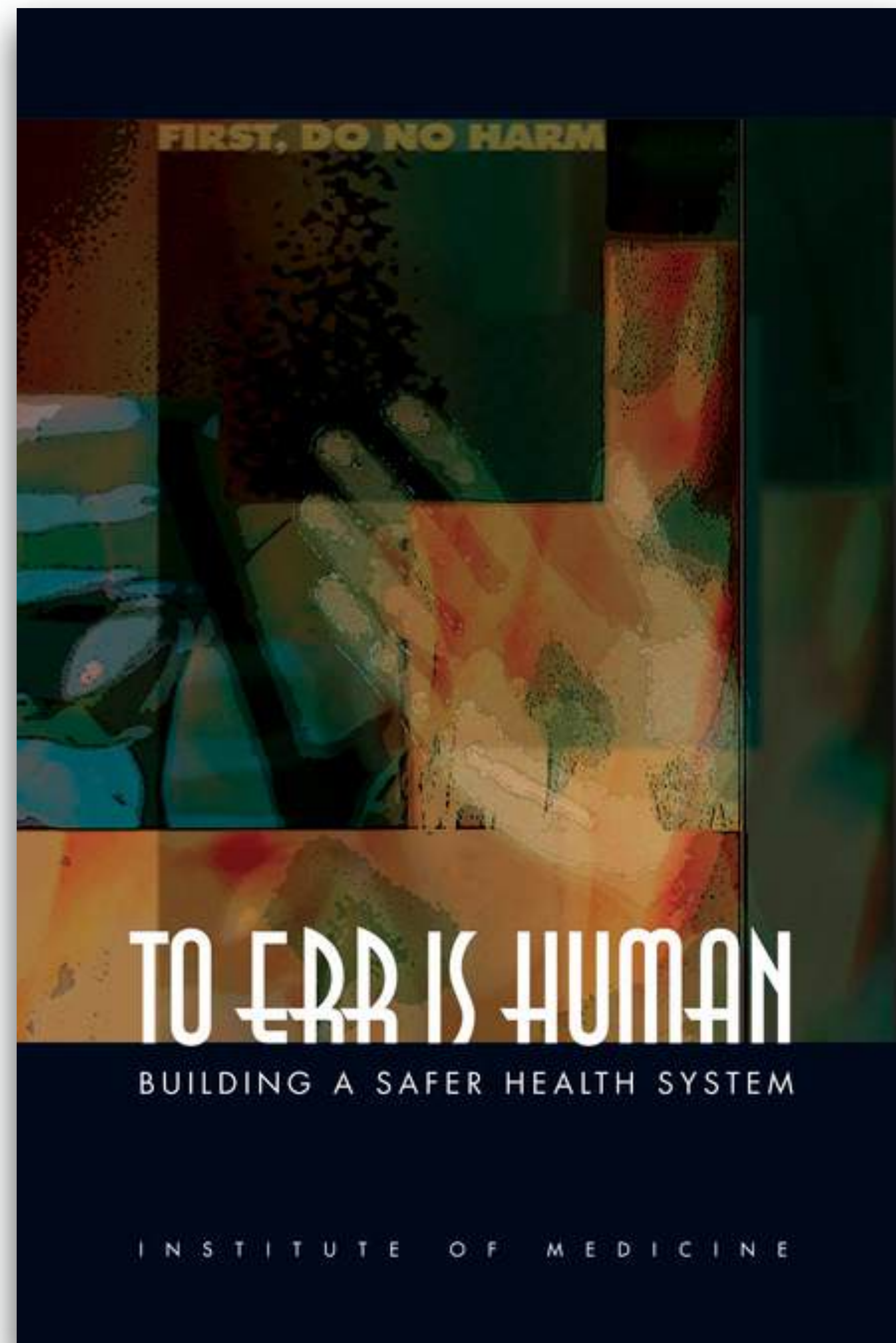
Chief Medical Officer, Yale New Haven Hospital
Professor of Pediatrics (Cardiology), Yale University

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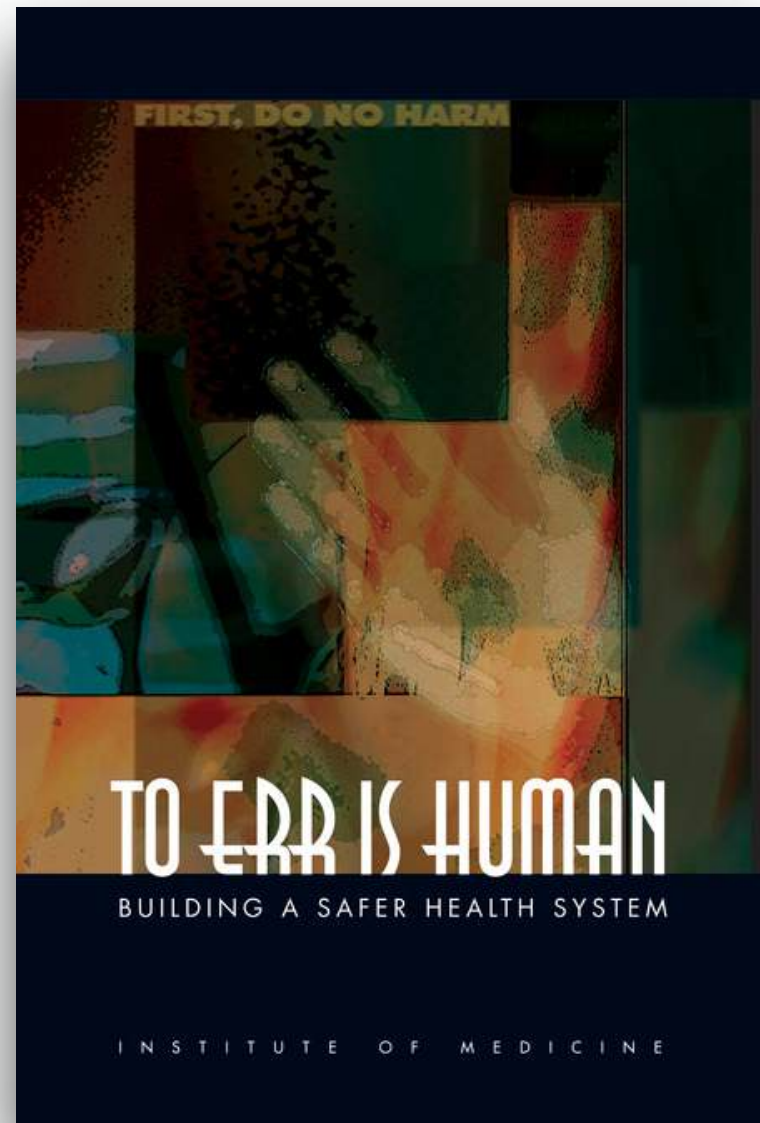


Medical error—the third leading cause of death in the US

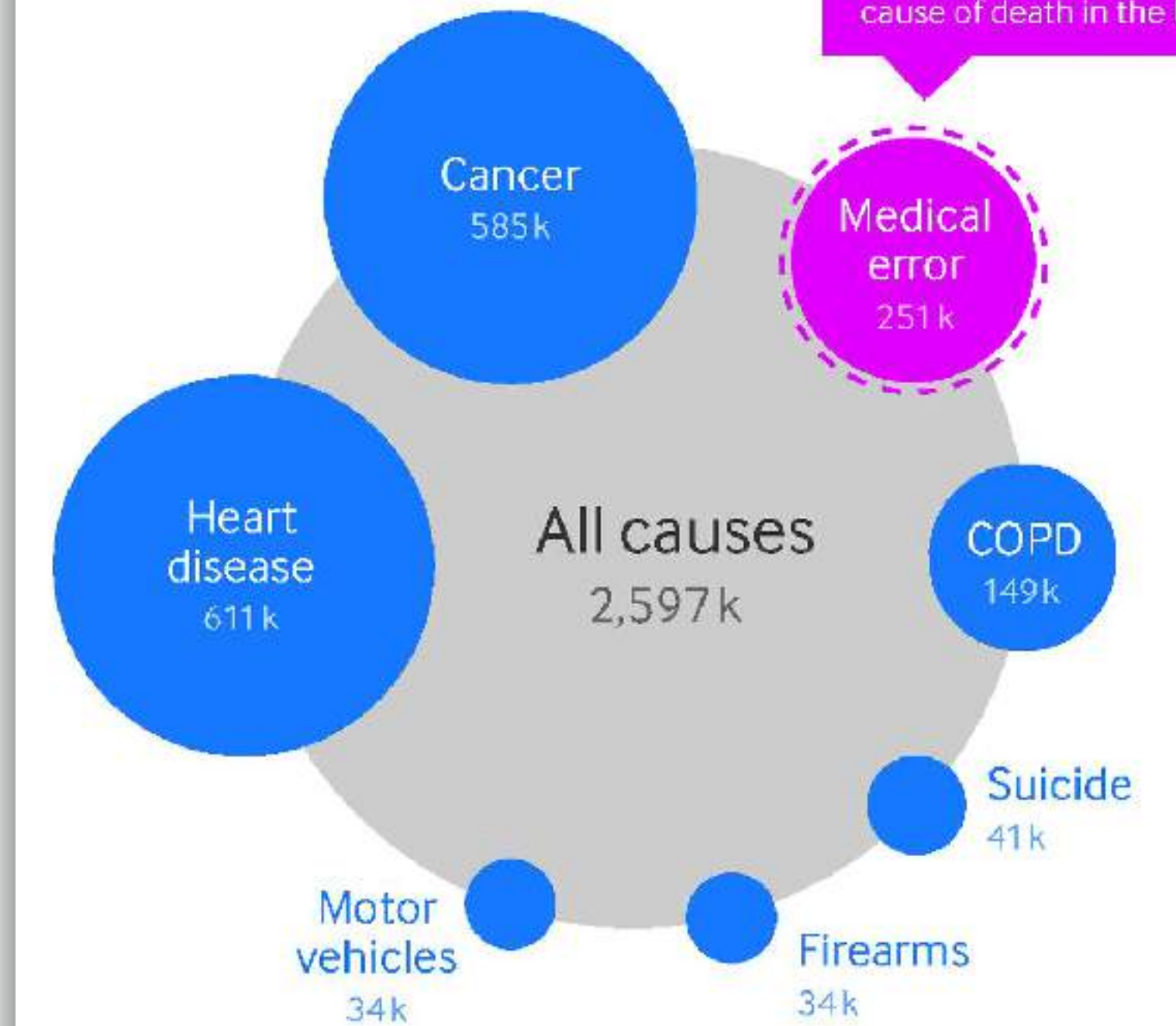
Medical error is not included on death certificates or in rankings of cause of death. **Martin Makary** and **Michael Daniel** assess its contribution to mortality and call for better reporting

Martin A Makary *professor*, Michael Daniel *research fellow*

Department of Surgery, Johns Hopkins University School of Medicine, Baltimore, MD 21287, USA



Causes of death, US, 2013



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Data source:

http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_02.pdf

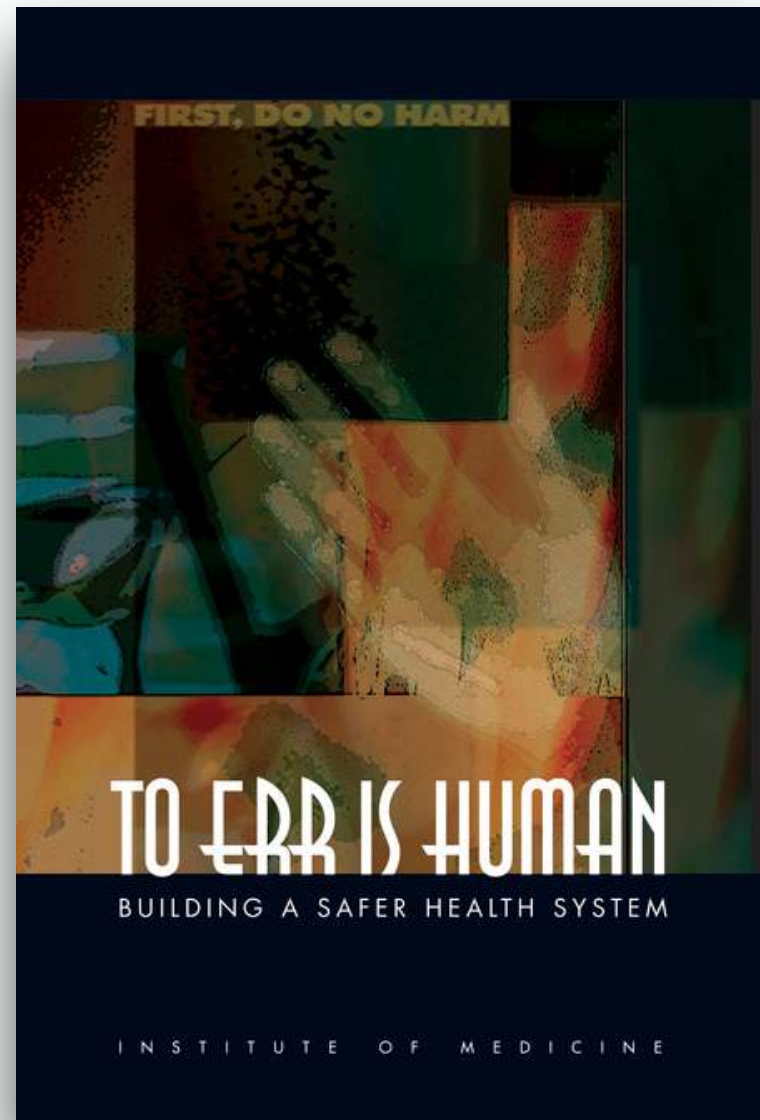


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The NEW ENGLAND JOURNAL of MEDICINE

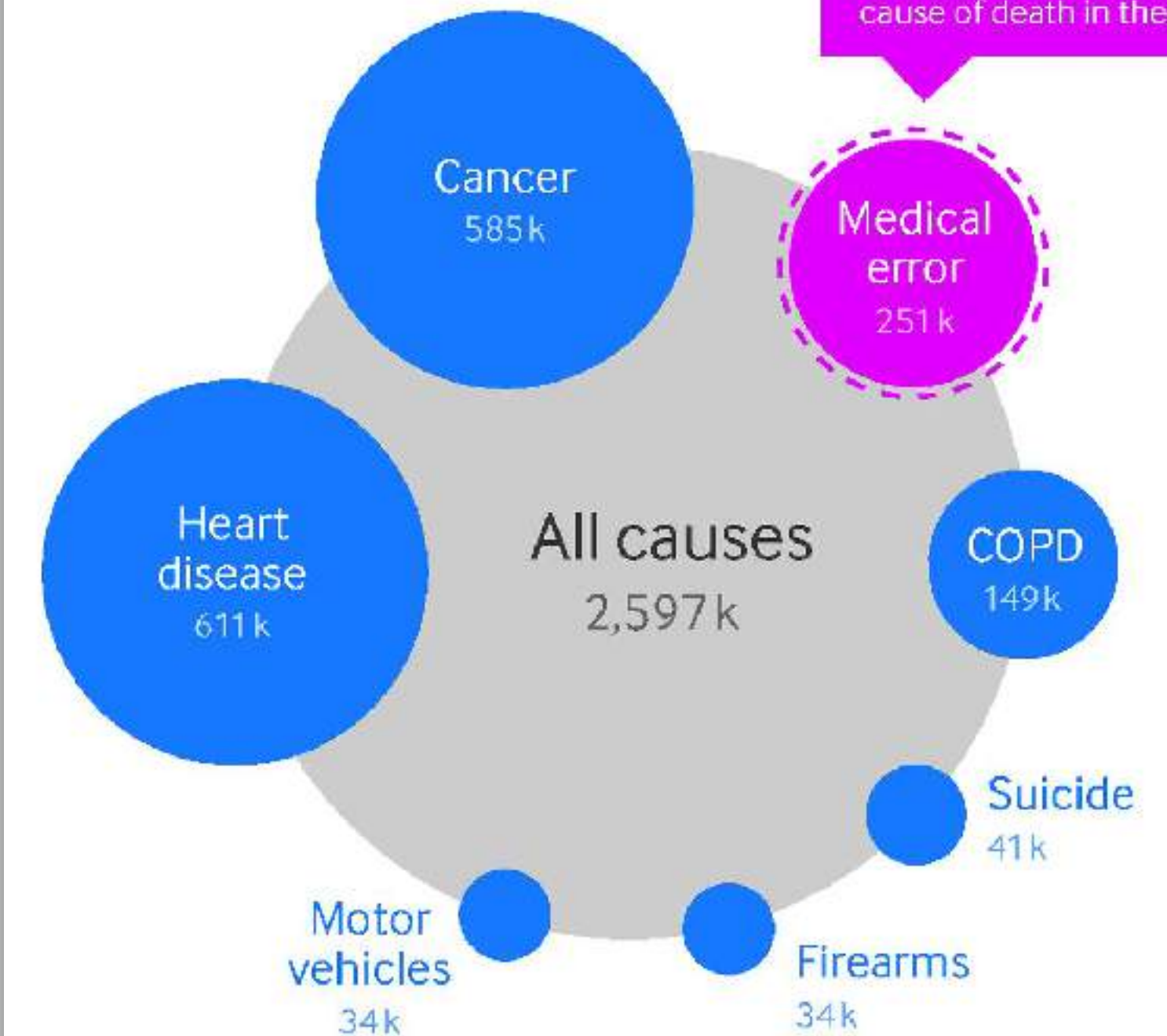
SPECIAL ARTICLE

The Safety of Inpatient Health Care

David W. Bates, M.D., David M. Levine, M.D., M.P.H.,
Hojjat Salmasian, M.D., Ph.D., M.P.H., Ania Syrowatka, Ph.D., David M. Shahian, M.D.,
Stuart Lipsitz, Sc.D., Jonathan P. Zebrowski, M.D., M.H.Q.S.,
Laura C. Myers, M.D., M.P.H., Merranda S. Logan, M.D., M.P.H.,
Christopher G. Roy, M.D., M.P.H., Christine Iannaccone, M.P.H., Michelle L. Frits, B.A.,
Lynn A. Volk, M.H.S., Sevan Dulgarian, B.S., B.A., Mary G. Amato, Pharm.D., M.P.H.,
Heba H. Edrees, Pharm.D., Luke Sato, M.D., Patricia Folcarelli, Ph.D., R.N.,
Jonathan S. Einbinder, M.D., M.P.H., Mark E. Reynolds, B.A.,
and Elizabeth Mort, M.D., M.P.H.

Causes of death, US, 2013

Based on our estimate, medical error is the 3rd most common cause of death in the US



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Data source:

http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_02.pdf

2020

Overloaded Pharmacists Warn They're Making Fatal Mistakes

By ELLEN GABLER

For Alyssa Watrous, the medication mix-up meant a pounding headache, nausea and dizziness. In September, Ms. Watrous, a 17-year-old from Connecticut, was about to take another asthma pill when she realized CVS had mistakenly given her blood pressure medication intended for someone else.

Edward Walker, 38, landed in an emergency room, his eyes swollen and burning after he put drops in them for five days in November 2018 to treat a mild irritation. A Walgreens in Illinois had accidentally supplied him with ear drops — not eye drops.

For Mary Scheuerman, 85, the error was discovered only when she was dying in a Florida hospital in December 2018. A Publix pharmacy had dispensed a powerful chemotherapy drug instead of the antidepressant her doctor

had prescribed. She died about two weeks later.

The people least surprised by such mistakes are pharmacists working in some of the nation's biggest retail chains.

In letters to state regulatory boards and in interviews with The New York Times, many pharmacists at companies like CVS, Rite Aid and Walgreens described understaffed and chaotic workplaces where they said it had become difficult to perform their jobs safely, putting the public at risk of medication errors.

They struggle to fill prescriptions, give flu shots, tend the drive-through, answer phones, work the register, counsel patients and call doctors and insurance companies, they said — all the while racing to meet corporate performance metrics

Continued on Page A14

VOL. CLXIX ... No. 58560 © 1920 The New York Times Company NEW YORK, SATURDAY, FEBRUARY 1, 1920 \$3.00

SENATE REPUBLICANS BLOCK WITNESSES, 51 TO 49, CLEARING A PATH FOR THE PRESIDENT'S ACQUITTAL

Ukraine Push Began in May, Bolton Writes

[illegible]

to Boston voters, she was given credit for her efforts. "She was the first to include the word 'women' when she introduced the White House staff to Mass. legislators," says the book's author, Jennifer Rankin. "W. Graham Sumner, the first governor of the state, was so impressed by her that he named her the first woman to hold the position of secretary of the state."

As they approached the final stage of the presidential inauguration proceedings in United States history, Democrats condemned them as an attempt to undermine Mr. Clinton's true

and the U.S. House of Representatives. The House is expected to vote on the bill in the next few weeks. The bill is expected to pass the House by a large margin. The bill is expected to pass the Senate by a large margin. The bill is expected to pass the President by a large margin. The bill is expected to pass the Supreme Court by a large margin. The bill is expected to pass the people by a large margin.

Overloaded Pharmacists Warn They're Making Fatal Mistakes

Declaring Health Emergency, U.S. Restricts Travel From China

[illegible]

NATIONAL A12 B1	INTERNATIONAL A4 (1)	BUSINESS B1-7	ARTS C1,4	SPORTS/ATLANTA B6-B11
Texas Fails a Vaping Leap	6 More Nations on Travel Ban	Which Sect's Best?	Hollywood's Sequel to #MeToo	A Can't-Miss Sex Who Didn't
<p>As an activist, dancer, and hostess, one of the most successful women in the industry is now showing off her talents as a responsible citizen, promoting new laws to curb the use of e-cigarettes.</p>	<p>The Trump administration put Nigeria and other countries on its travel ban list.</p>	<p>Which sect's best? The Trump administration put Nigeria and other countries on its travel ban list.</p>	<p>Fellowhood's Sequel to #MeToo: Hollywood's response to the #MeToo movement has changed since the Harvey Weinstein allegations began to spread.</p>	<p>A Can't-Miss Sex Who Didn't: While Prince Melchior was a rockstar, his love life could never be bound by grammar.</p>

A Cautious Test for Bettigieg
A winning politician can be the candidate of the least or the least. Thus, Steve Pritz Bettingieg. **PAGE 10**

'Won't Fix the Horrors'
The United Nations secretary-general's latest report on the situation in the Balkans is a sobering read. **PAGE 11**

Defiant Family Leaves L.V.
The Trained Judgment secretary-general's latest report on the situation in the Balkans is a sobering read. **PAGE 11**

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Applauding Mayor Adams' dangerous
pastor conditions acknowledged in
courtroom, Adams says fully aware
of the situation. (The Daily News)



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Continued on Page A14

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This Is Us

400,000 Hospitalized patients/yr
suffer preventable harm

200,000 patient deaths/yr
from preventable errors

Patients & Families

Today

Doctors, Nurses
and staff

Adverse events cost
Healthcare system
\$20 billion/year

Hospital Acquired
Infections cost
Healthcare system
\$35-\$45 billion/year

4,000 preventable
Significant Surgical
Events Every year



Classifying Safety Events

Serious Safety Event

- Reaches the patient
- Results in moderate to severe harm or death

Serious
Safety
Events

Precursor Safety Event

- Reaches the patient
- Results in minimal harm or no detectable harm

Precursor
Safety
Events

Near Miss Safety Event

Does not reach the patient – error is caught by a last strong detection barrier designed to prevent event

Near Miss Safety Event



How Do Systems Learn of Errors?

Safety Culture

Safety Culture

- Commitment to Report any and all safety concerns
- Supporting psychological safety for all those who report
- Identifying the contributing factors and events
- Developing multifaceted prevention protocols
- Implementing these strategies
- Transparency with what is learned

High Reliability Organizations (HRO)

- Sensitivity to operations: how does the current state affect safety
- Preoccupation with failure: being alert to small signs of potential problems
- Reluctance to simplify: Avoid simplistic interpretations
- Resilience: Being able to recover from failures
- Deference to expertise: making decisions based on the knowledge of the most qualified

HRO & Safety in Clinical Medicine

- Culture that supports reporting - Praise the reporters
- Reviewing and acting on reports
- Share what is learned across the organization - all sites
- Be transparent with the data
- Flatten the “Power Gradient”

everyone speaks on behalf of safety

How Do People In Safe Systems Respond?

Disclosure

Annals of Internal Medicine®

MEDICINE AND PUBLIC ISSUES | 21 DECEMBER 1999

Risk Management: Extreme Honesty May Be the Best Policy

Steve S. Kraman, MD; Ginny Hamm, JD

... a humanistic risk management policy that includes early injury review, steadfast maintenance of the relationship between the hospital and the patient, proactive full disclosure to patients who have been injured because of accidents or medical negligence, and fair compensation for injuries.

Disclosure Program

- A communication with patients and families that is based on transparency, integrity, compassion and accountability
- Shift from a culture of “Delay, Deny and Defend” to “Real-time Communication and Collaboration”
- A sincere apology
- An explicit statement that an adverse outcome or an error occurred
 - What the error was
 - Why the error occurred
 - How recurrences will be prevented

The Disclosure Goals

Apology

Commitment

**Patient
&
Family**

**What Does
The Patient
Understand?**

**Speak To
The Plan**

**Convey
What We
Know**

**Support
The Patient,
Family & Team
Emotionally**

What Patients Want To Hear

An Expression of Compassion:

“I am so sorry that this has happened”

An Expression of Responsibility only when we know there has been an error:

“I gave you the wrong dose of medicine”

A Commitment between patient, doctor and hospital:

“We will review what happened and meet with you to let you know what we find.”

What Patients Should NOT Hear



- Failure to take responsibility
- Minimizing the error
- Normalizing the error
- Blaming others

SPIKES—A Six-Step Protocol for Delivering Bad News: Application to the Patient with Cancer

**WALTER F. BAILE,^a ROBERT BUCKMAN,^b RENATO LENZI,^a GARY GLOBER,^a
ESTELA A. BEALE,^a ANDRZEJ P. KUDELKA^b**

^aThe University of Texas MD Anderson Cancer Center, Houston, Texas, USA;

^bThe Toronto-Sunnybrook Regional Cancer Centre, Toronto, Ontario, Canada

**SPIKES—A Six-Step Protocol for Delivering Bad News:
Application to the Patient with Cancer**

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S: Set Up

Prepare yourself & the team; know the facts; sit down, connect

P: Perceptions

Assess the patient's and family's current understanding

I: Invitation

Obtain the patient's and family's invitation, permission to meet

K: Knowledge

Give knowledge, state the facts, what happened, how

E: Empathy

Address emotions with empathy, apologize, accountability

S: Strategy

Strategy to take action to prevent future occurrences

Does It Work?



Does It Work?

Practice & Coaching

Perspective



Does It Work?



The Patient & Family



The Right To Know

The Hospital, The Practice



Culture & Risk

Disclosure Programs

- Communication & Resolution Programs (CRPs)
- Funded by AHRQ grant in 2010
- By early 2014, 6 programs published their early results:
 - Substantial reduction in liability costs
 - improved patient safety

COMMUNICATING ABOUT ERRORS

By Michelle M. Mello, Richard C. Boothman, Timothy McDonald, Jeffrey Driver, Alan Lembitz, Darren Bouwmeester, Benjamin Dunlap, and Thomas Gallagher

Communication-And-Resolution Programs: The Challenges And Lessons Learned From Six Early Adopters

JANUARY 2014 33:1 HEALTH AFFAIRS

Implementing communication and resolution programs: Lessons learned from the first 200 hospitals

Timothy B McDonald^{1,2}, Melinda Van Niel³, Heather Gocke⁴, Deanna Tarnow⁵, Martin Hatlie¹ and Thomas H Gallagher^{6,7}

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journals.sagepub.com/home/cpi
SAGE

Healthcare Team



Integrity & Accountability

Patient, Family, Healthcare Team



Healing & Recovery



Improved Safety

Recovery

Healing

**Patient
&
Family**

**Clinical
Team**

Compassion

Hospital

Integrity

Accountability

Thank You



System Responses to Errors

Objectives for today:

- The problem: size, frequency and scope
- How we recognize the problem
- Our response to problems
 - As an institution
 - As clinicians
- Why we do this