In-flight Emergencies:

Good Samaritans at Altitude

September 19, 2019
Webinar Month 130

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Welcome

Charles Denham, MD

Chairman, TMIT

TMIT High Performer Webinar
September 19, 2019

Webinar Month 130
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CAREUNIVERSITY®

WE MEASURE OUR SUCCESS BY HOW WE PROTECT AND ENRICH THE LIVES OF FAMILIES

CareUniversity: 5 Rights of Emergency Care
Our challenge is to target what we call high impact care hazards: those conditions that are the most frequent, severe, preventable, and measurable. Our solution is to help patients, families, and professional caregivers adopt new behaviors... which we call LifeLine Behaviors.

Upcoming Events

Webinar – September 19, 2019
In-flight Emergencies: Good Samaritans at Altitude
Click here for details.

Watch Prior Webinars

High Performance 5 Rights Collaboratives

We are undertaking high impact research activities in the fields of Imaging of Adults and Children, Pain Care, Back Care, Testing, and Surgery to convert Waste to Value and Harm to Healing. For more information on each collaborative, click Imaging Imaging Children, Back, Pain, Testing, Cancer, or Surgery.

Surfing the Healthcare Tsunami Hospital Leaders Toolbox
The Surfing the Healthcare Tsunami Hospital Leaders Toolbox has been released online! Go deeper into the subject matter of the documentary by exploring the 5 Rights of Imaging™, the Boardroom, Racing & Aviation, and much more. Click here for more details.

Click here to watch the entire 53-minute documentary online.
High Performer Webinar

September 19, 2019, 12:00 pm – 1:30 pm CT / 1:00 pm – 2:30 pm ET

In-flight Emergencies: Good Samaritans at Altitude

Session Overview

There are more than 44,000 commercial flights tracked per day by air traffic controllers. Many caregivers and healthcare workers have had the experience of a flight attendant calling for help while in the air. Dr. Robert Katzer will be delivering a world class presentation on what we need to know about caring for the public during an in-flight emergency. He is an Emergency Medicine physician, educator, and medical director for a busy fire and rescue program. Having heard him speak, our TMIT team gives him our highest recommendation. Dr. Gregory Botz, the co-founder of the Med Tac Bystander Care program who also teaches in-flight emergency care, will provide his perspective along with reactions from our patient advocate representative.

We offer these online webinars at no cost to our participants.

Webinar Video, and Downloads

The webinar video will be available within five (5) business days after the webinar.

Speaker Slide Set:

The slides will be posted here before the webinar begins.
If you wish to follow us on Twitter, go to: http://twitter.com/TMIT1 or use #safetyleaders hashtag

Also, go to: www.facebook.com/SafetyLeaders and related sites
TMIT Purpose Statement

Our Purpose:
We will measure our success by how we protect and enrich the lives of families...patients AND caregivers.

Our Mission:
To accelerate performance solutions that save lives, save money, and create value in the communities we serve and ventures we undertake.
Disclosure Statement

The following panelists certify: that unless otherwise noted below, each presenter provided full disclosure information; does not intend to discuss an unapproved/investigative use of a commercial product/device; and has no significant financial relationship(s) to disclose. If unapproved uses of products are discussed, presenters are expected to disclose this to participants. None of the participants have any relationship medication or device companies discussed in their presentations.

Robert Katzer, MD, MBA, FAEMS, FACEP, is a board certified emergency medicine physician in Orange, California. He is affiliated with UC Irvine Medical Center and is an Instructor at University of California. He has nothing to disclose.

Gregory H. Botz, MD, FCCM, is a professor in the Department of Critical Care at the UT MD Anderson Cancer Center. He received his medical degree from George Washington University School of Medicine in Washington, DC. He has nothing to disclose.

Jennifer Dingman realized, after her mother’s death in 1995 due to errors in medical diagnoses and treatment, that there is little to no help available for patients and their families in similar situations. This life-changing experience left her feeling vulnerable, and she decided to dedicate her life to help prevent medical tragedies from happening to others. She has nothing to disclose.

Charles Denham, MD, is the Chairman of TMIT; a former TMIT education grantee of CareFusion and AORN with co-production by Discovery Channel for Chasing Zero documentary and Toolbox including models; and an education grantee of GE with co-production by Discovery Channel for Surfing the Healthcare Tsunami documentary and Toolbox, including models. HCC is a former contractor for GE and CareFusion, and a former contractor with Siemens and Nanosonics, which produces a sterilization device, Trophon. HCC is a former contractor with Senior Care Centers. HCC is a former contractor for ByoPlanet, a producer of sanitation devices for multiple industries. He does not currently work with any pharmaceutical or device company. His current area of research is in threat management to institutions including conflict of interest, healthcare fraud, and continuing professional education and consumer education including bystander care. Dr. Denham is a collaborator with Professor Christensen at Harvard Business School.
Speakers and Reactors

Robert Katzer
Gregory Botz
Jennifer Dingman
Charles Denham
Voice of Patient and Family

Jennifer Dingman

Founder, Persons United Limiting Substandards and Errors in Healthcare (PULSE), Colorado Division
Co-founder, PULSE American Division
TMIT Patient Advocate Team Member
Pueblo, CO

TMIT High Performer Webinar
September 19, 2019
In the News Update and
August 2019 Webinar Recap

Charles Denham, MD
Chairman, TMIT

TMIT High Performer Webinar
September 19, 2019

Webinar 130
Objective: To systematically quantify the prevalence, severity, and nature of preventable patient harm across a range of medical settings globally.

Observational studies reporting preventable patient harm in medical care. The core outcomes were the prevalence, severity, and types of preventable patient harm reported as percentages and their 95% confidence intervals. Data extraction and critical appraisal were undertaken by two reviewers working independently.

Random effects meta-analysis was employed followed by univariable and multivariable meta regression. Heterogeneity was quantified by using the I² statistic, and publication bias was evaluated.

Around one in 20 patients are exposed to preventable harm in medical care. Although a focus on preventable patient harm has been encouraged by the international patient safety policy agenda, there are limited quality improvement practices specifically targeting incidents of preventable patient harm rather than overall patient harm (preventable and non-preventable).

- A meta-analysis that quantifies the prevalence, nature, and severity of preventable patient harm in a range of medical care settings
- At least one in 20 patients are affected by preventable patient harm in medical care settings
- Approximately 12% of preventable patient harm causes permanent disability or patient death and is mostly related to drug incidents, therapeutic management, and invasive clinical procedures

Developing and implementing evidence-based mitigation strategies specifically targeting preventable patient harm could lead to major service quality improvements in medical care which could also be more cost effective.

Source: https://www.bmj.com/content/366/bmj.l4185
Diagnostic errors cause substantial preventable harm, but national estimates vary widely from 40,000 to 4 million annually. This cross-sectional analysis of a large medical malpractice claims database was the first phase of a three-phase project to estimate the US burden of serious misdiagnosis-related harms.

From 55,377 closed claims, we analyzed 11,592 diagnostic error cases [median age 49, interquartile range (IQR) 36–60; 51.7% female]. These included 7379 with high-severity harms (53.0% death). The Big Three diseases accounted for 74.1% of high-severity cases (vascular events 22.8%, infections 13.5%, and cancers 37.8%). In aggregate, the top five from each category (n = 15 diseases) accounted for 47.1% of high-severity cases. The most frequent disease in each category, respectively, was stroke, sepsis, and lung cancer. Causes were disproportionately clinical judgment factors (85.7%) across categories (range 82.0–88.8%).

Conclusions: The Big Three diseases account for about three-fourths of serious misdiagnosis-related harms. Initial efforts to improve diagnosis should focus on vascular events, infections, and cancers.
In The News …

**Important July & August Patient Safety Issues**

**Serious Misdiagnosis-related Harms In Malpractice Claims - The “Big Three”: Vascular Events, Infections, And Cancers**

Diagnostic errors cause substantial preventable harm, but national estimates vary from 40,000 to 60,000 annually. This cross-sectional analysis of a large medical malpractice claims database was the first phase of a three-phase project to estimate the US burden of serious misdiagnosis-related harms.

From 551,277 closed claims, we analyzed 11,952 diagnostic error case (median age 60 years, average 55,546 days to death, 61.7% female). Three included 572 with high-severity harms (53.3% death). The Big Three classes accounted for 76.4% of high-severity cases (vascular events 12%, infections 13%, and cancer 51%). In aggregate, the top 10 harms from each category: cardiac disease 11%, diabetes associated for 47.1% of high-severity cases. The New York Times report on the topic was based on a single medical case report.

**Conclusion:** The Big Three deficiencies occurred for about three-fourths of misdiagnosis-related harms. Initial efforts to improve diagnosis should focus on vascular events, infections, and cancer.

**Ohio Hospital System Fires 23, CEO Resigns In Wake Of OD Deaths**

A federal health care system in Columbus, Ohio, has fired 23 employees — including physicians and nurses — and its CEO and executive officer is stepping down in the wake of the conclusion of an internal investigation into the deaths of at least 23 recently admitted patients from lethal errors, according to media reports and a company statement issued Thursday.

It is the latest in a string of recent months that has shocked and galvanized the system — Mount Carmel — is still under a federal investigation related to a separate criminal activity of William Hessel, CEO, who died in an intensive care unit with no diagnosis-related harms. Initial efforts to improve diagnosis should focus on vascular events, infections, and cancer.

**Quarter Of Hospitals Fail To Comply With Leapfrog’s Never-event Policy**

The analysis, published Thursday, found 74.1% of the most of 5,900 hospitals participating in the 2018 Leapfrog Hospital Survey (conducted at the time of the group’s annual voluntary hospital compliance with the standard has been reported at slightly below 90% since 2013). “I see them as fundamental principles for any industry, not just healthcare: don’t tolerate error or we would have 100% compliance,” said Leah Binder, CEO of the Leapfrog Group. “We have 74% compliance, so clearly there is a great effort in hospital leaders to get it right. In 2017, with four additional mandates, bring it down to be.”

The Leapfrog Group has included the never event policy in its surveys since 2000. It updated the policy in 2017 with four additional mandates, bringing it down to be.”

The policy outlines nine actions a hospital should take if any of the 75 never events is confirmed. Some of the nine actions are to have at least one registered nurse assigned to the event, report the event to an external agency, and interview the patient and family to gather evidence for a root cause analysis.

**Pravellation, Severity, And Nature Of Preventable Patient Harm Across Medical Care Settings: Systematic Review And Meta-analysis**

Objective: To systematically quantify the pravellation, severity, and nature of preventable patient harm across a range of medical settings (surgical, medical, and intensive care).

Observational studies reporting preventable patient harm in medical care. The core outcomes were the prevalence, severity, and type of preventable patient harm reported as percentages and their 95% confidence intervals. Data extraction and critical appraisal were undertaken by two reviewers working independently.

Random effects meta-analysis was employed to slow and meta-analyze data. Heterogeneity was quantified by using Q statistics, and publication bias was evaluated.

Around one in 16 patients are exposed to preventable harm in medical care. Although a focus on preventable patient harms has been emphasized by the international patient safety, policy agenda there are limited-quality improvement practices specifically targeting incidents of preventable patient harm rather than overall patient harms (preventable and avoidable).

- A meta-analysis that quantifies the prevalence, nature, and severity of preventable patient harm in a range of medical care settings.
- At least one in 16 patients are affected by preventable patient harm in medical care settings.
- Approximately 12% of preventable patient harms may cause permanent disability and patient death and is mostly related to drug incidents, therapeutic management, and intraclinical procedures.

Screening and implementing evidence-based mitigation strategies specifically targeting preventable patient harms could lead to improve quality improvements in medical care which could also be decreased effectively.
Web Information is **Instant**, **Permanent**, and **Searchable**…
Even Misinformation – that can harm those you serve and those who serve.
In The News …

Widening the search for suspect data – is the flood of retractions about to become a tsunami?

The incredible number of articles retracted for outright fraud is continuing to grow. Falsification and fabrication are the main problems revealing a continuing integrity gap which Caplan and others argue will erode the trust of those we serve.

The Problem of Publication-Pollution Denialism

Arthur L. Caplan, PhD
Quarter Of Hospitals Fail To Comply with Leapfrog's Never-event Policy

The analysis, published Thursday, found 74.5% of the more than 2,000 hospitals that participated in the 2018 Leapfrog Hospital Survey complied with all nine aspects of the group's never-event policy. Hospital compliance with the standard has hovered at or slightly below 80% since 2014.

"These are fundamental principles in any other industry, but in healthcare it's not fundamental or else we would have 100% compliance," said Leah Binder, CEO of the Leapfrog Group. "We have 75% (compliance), so clearly there is a great effort in hospital leadership, but at the same time it's not enough. We need 100%. That is the goal."

The Leapfrog Group has included the never-event policy in its survey to hospitals since 2008. It updated the policy in 2017 with four additional actions, bringing the total to nine.

The policy outlines nine actions a hospital should take if any of the 29 never events should occur. Some of the nine actions are to waive all costs related to the event; report the error to an external agency; and interview the patient and family to gather evidence for a root cause analysis.

There are 29 events the National Quality Forum has defined as serious patient-safety errors that should be reported. They are often called never events and include surgery performed on the wrong site or death caused by a medication error. Never events occur rarely, but when they do they are often fatal to the patient.

Ohio Hospital System Fires 23, CEO Resigns in Wake of OD Deaths

A hospital system in Columbus, Ohio, has fired 23 employees — including physicians and nurses — and the chief executive officer is stepping down in the wake of the conclusion of an internal investigation into the deaths of at least 29 critically ill patients from fentanyl overdoses, according to media reports and a company statement issued Thursday.

It is the latest turn of events in a months-long drama that has not yet finished. The system — Mount Carmel — is still embroiled in civil suits relating to the alleged criminal activity of William Husel, DO, who worked as an intensive care physician at Mount Carmel from 2013 until he was fired in December.

According to its statement, Mount Carmel's investigation determined that Husel was involved in the care of 35 patients who may have died as a result of potentially fatal doses of fentanyl, either alone or in combination with hydromorphone or midazolam.

The New York Times reported that the hospital system said that 29 patients most likely died from the overdoses, while the drugs were not likely the cause of death for the other six patients.

Husel is also under criminal investigation and pleaded not guilty on June 5 to 25 counts of murder. The prosecutor only brought charges in cases where patients received 500 micrograms or more of fentanyl, according to a WOSU radio report.

Unfortunately, threats to the integrity of U.S. biomedical research exist. NIH is aware that some foreign entities have mounted systematic programs to influence NIH researchers and peer reviewers and to take advantage of the long tradition of trust, fairness, and excellence of NIH supported research activities. This kind of inappropriate influence is not limited to biomedical research; it has been a significant issue for defense and energy research for some time. Three areas of concern have emerged:

1. Diversion of intellectual property (IP) in grant applications or produced by NIH supported biomedical research to other entities, including other countries;

2. Sharing of confidential information on grant applications by NIH peer reviewers with others, including foreign entities, or otherwise attempting to influence funding decisions; and

3. **Failure by some researchers working at NIH-funded institutions in the U.S. to disclose substantial resources from other organizations, including foreign governments, which threatens to distort decisions about the appropriate use of NIH funds.**

“We recently reminded the community that applicants and awardees **must disclose all forms of other support and financial interests**, including support coming from foreign governments or other foreign entities.”

“We also expect and encourage your institution to notify us immediately upon identifying new information that affects your institution's applications or awards. Lastly, **we encourage you to reach out to an FBI field office to schedule a briefing on this matter.**”
In The News …

Johns Hopkins Wrote the Rules on Patient Safety But Its Hospitals Don’t Always Follow Them

Heartbroken: Despite warnings, All Children’s kept operating. Babies died.

Tampa Bay Times, known for winning the Pulitzer Prize for investigative reporting, is undertaking an ongoing investigation of the entire Johns Hopkins system.

Patient Safety and COI Stories Being Followed

**Tampa Bay Times Reports:**
- Deaths of children in 1 in 10 undergoing CV Surgery at JH All Children's
- Mutilation of children in burn unit in Maryland
- Cover up of harm
- Retaliation against whistleblower MD
- Patient Safety Issues in all Johns Hopkins hospitals
- Whistle blower law suit
- Multiple malpractice suits.
- Regulatory problems
- Oversight letting team of doctors make unannounced visits

**NYT & Propublica Reports:**
- Conflicts and large payments to Chief Med Officer – resigns
- CEO with conflicts, votes of non-confidence – resigns
- Board Members own equity in start up with special deals.
- Revision of conflict of interest policies.
- Top executives barred from serving on corporate boards or investing in start-ups

**Propublica & Houston Chronicle Reports:**
- Cardiac Complications
- Undeclared financial conflicts of interest
- Allegations of exaggerated quality program to lure patients.
- Transplant program shut down based on reporting.
- Leadership restructuring
- State and federal officials enforcing safety standards.
- 08-08-19 Feds Cease Greater Oversight Of Baylor St. Luke’s Medical Center Initiated After Patient Death

**New York Times & Washington Post Reports:**
- Falsification of research in cardiac stem care.
- Scientific misconduct
- 31 Articles Retracted
- Many patients treated
- Unknown impact of product used in patients treated.
- Hospital paid to settle allegations.
- Hospital pays $10M to settle

**Tennessean & Beckers Hospital Review Reports:**
- Nurse medication error during imaging with patient death
- Electronic medication dispensing cabinet safeguards overridden.
- Nurse indicted for reckless homicide for fatal error.
- State Health Officials decided no reason to discipline or take action against nurses license.
Patient Safety and COI Stories Being Followed

**In The News …**

**Medscape Reports:**
- Duke Settles Doctored Data Lawsuit for $112.5 Million
- Duke Whistleblower Gets More Than $33 Million In Research Fraud Settlement
- William Foster, who ran the lab where the data were faked, studied the effects of pollutants on the lungs of mouse models.
- Thomas alleged that Duke had won some 50 grants from the NIH

**The Washington Post Reports:**
- UMMS Board Chairman announced the board’s unanimous decision March 21 to have CEO Robert Chrencik take a leave of absence.
- Resignations of three UMMS, including Baltimore Mayor Pugh.
- Hours before Mr. Burch notified the public of Mr. Chrencik’s leave of absence, the Maryland House of Delegates unanimously fast-tracked bill to overhaul UMMS’ 27-member board of directors.

**Medscape Reports:**
- Between 2011 and 2019 William Roper, failed to disclose his seats on the boards of major corporations.
- At the same time, those corporations did business with the state, records show.
- Roper has served on the board of directors of DaVita, Inc.
- Roper also a member of the board of directors of three successor companies in the pharmacy benefits administration industry.
- None of his corporate board service was disclosed on state ethics forms.

**New York Times Reports:**
- Director of M.I.T.’s Media Lab Resigns After Taking Money From Jeffrey Epstein.
- M.I.T. official, Joichi Ito, left the boards the MacArthur Foundation, the John S. and James L. Knight Foundation, and The New York Times.
- He “stepped down after the disclosure of his efforts to conceal his financial connections to Mr. Epstein, the disgraced financier who killed himself in a Manhattan jail cell last month while facing federal sex trafficking charges”. acknowledged last week that he had received $1.7 million from Mr. Epstein, including $1.2 million for his own outside investment funds.

**Tampa Bay Times Reports:**
- Johns Hopkins All Children’s faces record state fines.
- The planned $800,000 penalty is the latest fallout from problems in the hospital’s heart surgery department.
- State regulators intend to hit Johns Hopkins All Children’s Hospital with some of the largest fines levied against a Florida hospital in recent memory.
- The Times found that surgeons in the hospital’s Heart Institute made serious mistakes and their procedures went wrong in unusual ways. It also found that the hospital continued to perform heart surgeries for years after frontline workers raised safety concerns to their supervisions.
Johns Hopkins Articles: In Resources Section

Article List is in Additional Resources
Healthcare and Academic Fraud Stories

Theranos Founder Elizabeth Holmes’ Trial Set For Summer 2020

Elizabeth Holmes, founder of failed blood-testing startup Theranos, will go to trial August 26, 2020, a federal judge ruled Friday in San Jose, California. The court will begin hearing evidence that day with jury selection beginning the week prior on July 20.

Holmes was indicted on federal wire fraud charges in June 2019 and stepped down from the company minutes before the charges were made public.

She and former Theranos CEO and president Ramesh “ Sunny” Balwani allegedly engaged in schemes to defraud investors, doctors and patients, according to a release from the US Attorney’s office at the time. Holmes and Balwani are both charged with two counts of conspiracy to commit mail fraud and wire fraud.

The biotech company claimed to have a cheaper, more efficient alternative to traditional medical tests. But that never materialized under the leadership of Wall Street Journal investigative reporter John Carreyrou.

The charges and scandal proved to be too much for the company, which was once valued at $9 billion. In September 2019, Theranos announced it was preparing to dissolve.

Rutgers Pays $375K To Settle Suit Claiming Top Doctor Propositioned, Sexually Harassed Residents

Rutgers University paid $375,000 to settle a lawsuit filed claiming that one of its top doctors sexually harassed two female residents he was interviewing in dating, according to a copy of the settlement.

The civil lawsuit was filed in Superior Court in 2017 by the two women and a male resident who said Jean Daniel Eloy, 40, retaliated against him for trying to protect one of the women. The suit against Rutgers did not name Eloy, the head of the anesthesiology residency program at Rutgers New Jersey Medical School in Newark, as a defendant.

The doctor threatened to derail the residents’ futures when they did not reciprocate his affections, according to a lawsuit.

Rutgers failure to stop the harassment from an “upper management” doctor meant the university essentially condoned the behavior, the suit claimed.

Of the $375,000 settlement, each plaintiff will receive $83,333.33 and their law firm, Smith Mullin, PC, will receive $134,976.47 for fees and costs of the litigation. The plaintiffs also agreed in the settlement to never any employment with Rutgers and to never seek future employment there.

Rutgers didn’t admit any wrongdoing in the settlement. To eliminate any conflict of interest, Rutgers agreed that Eloy will never handle any future request for references for the three plaintiffs.

Harvard Fencing Coach Dismissed After Home Sale Raised Conflict Of Interest Concerns

With only two months until the beginning of the school year, Harvard University is on the hunt for a new head fencing coach after Peter Brand was dismissed over concerns regarding the sale of his home.

Bob Scalise, Harvard’s athletics director, announced Brand’s dismissal on Tuesday afternoon and said it came after an independent investigation found him to have violated the conflict of interest policy. Brand allegedly sold his home to, Je Zhao for well above the market value. Zhao’s son was admitted to Harvard shortly after the sale and joined the fencing team, as did his brother who graduated in 2018.

Allegations against Brand came to light after news of the FBI investigation dubbed “Operation Varsity Blues” broke. The well-known college admission scandal, which neither Brand nor Harvard were named in, involved several wealthy parents allegedly paying large sums of money to have their children’s athletic records and exam scores altered. Also named in the indictments were several coaches at well-known schools.

“Harvard Athletics is committed to upholding the integrity of our athletics program, and it is our expectation that every coach and staff member adhere unconditionally to our policies,” Scalise said.

Scalise added that the university will begin searching for a replacement coach in the coming days and expected to have the position filled by the start of the fall semester.

Stat

MIT Professor Is Accused Of Claiming Others’ Scientific Discoveries As His Own

A new paper in mBio alleges that Sam Sassonkaran, a professor of biological engineering at Massachusetts Institute of Technology, claimed two previously discovered antibody therapies as his own.

“We looked at exactly two cases, and in both did we find irregularities,” co-author Tillman Gerngross, CEO of the biotech firm Adimab, told STAT. “To me, if you’re sitting in the kitchen and two fat cookies walk across the floor, what’s the chance that there’s only two? Gerngross and his colleagues base their argument on amino-acid sequences not published in Sassonkaran’s papers but obtained through patent information and later cross-checked on GenBank.

Sassonkaran reportedly said that the paper was “inauspicious and slanderous” and that there are, for example, “fundamental differences” between the 23a antibody line he and colleagues wrote about last year in Cell and the one another team of researchers shared in Nature in 2016.

MIT told STAT that “while federal regulations and MIT policy do not allow us to comment on any particular matter, research integrity at MIT is paramount. MIT has policies and confidential processes in place to address concerns that might be raised.”

“Tillman” Gerngross, and MIT’s press release. At the time, MIT told STAT that “while federal regulations and MIT policy do not allow us to comment on any particular matter, research integrity at MIT is paramount. MIT has policies and confidential processes in place to address concerns that might be raised.”

If you look at the original [MIT] papers that reported these antibodies, they don’t give a really clear description of how they identified the epitope or how they designed the antibodies.” he said.

The implications of Adimab’s paper still elude academia. Vairavan was developing the flu antibody when it was acquired by the Japanese drug maker Osaka for $40 million last year.

In The News …

Slides are in Additional Resources
The Healthcare Innocence Project builds on the successful model of *The Innocence Project*. Where it used the new technology of DNA 25 years ago, we will use the new technology of electronic records and the digital DNA in the E.H.R. and administrative records to protect the medical identity of patients and the professional identity of caregivers. Both patients and caregivers may be unjustly treated through intentional or unintentional behaviors of insiders or outsiders of healthcare organizations. They include weaponization of HR, sham peer review, discrediting patients and families after healthcare accidents, or unjust harm through outsider cybersecurity issues.

www.HealthcareInnocenceProject.org
A Medical-Tactical Approach undertaken by clinical and non-clinical people can have enormous impact on loss of life and harm from very common hazards:

- **High Impact Care Hazards** are frequent, severe, preventable, and measurable.
- **Lifeline Behaviors** undertaken by anyone can save lives.
Public mass shootings are occurring more frequently in recent years, and they are claiming more lives, according to an analysis of The Post’s public mass shootings database. Four or more people have been killed in a mass shooting every 47 days, on average, since June 17, 2015.

Before the 1999 shooting in which two teens killed 13 and wounded 24 at Columbine High School in Littleton, Colo., mass shootings took place roughly every six months. Between Columbine and Charleston, the pace was roughly one every 2½ months. After Charleston? One almost every six weeks.
In The News ...

More and deadlier: Mass shooting trends in America

Between August 1966 and April 1999, there was, on average, a mass shooting event every 180 days.

17 killed, including an unborn baby, at University of Texas Tower.

23 killed at Luby's Restaurant, Texas.

Between April 1999 and June 2015, there was, on average, a mass shooting event every 84 days.

13 killed at Columbine High School.

32 killed at Virginia Tech.

26 killed at Sandy Hook Elementary.

From June 2015 until now, there has been, on average, a mass shooting event every 47 days.

49 killed at Pulse, a nightclub in Orlando.

58 killed at Route 91 Harvest Festival, Las Vegas.

9 killed at Emanuel African Episcopal Methodist Church.

9 killed in Oregon District, Dayton, Ohio.

22 killed at shopping center in El Paso.

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Meaningful Use is dead. Long live something better!

Med Tac Articles: Campus Safety Magazine

Med Tac Publication in Campus Safety Magazine: January/February Issue

Unique Characteristics of Healthcare Facilities

Active shooter events at healthcare facilities are different from schools, shopping malls, and commercial environments for several important reasons:

1. The active shooter’s victims usually are much more personal, targeted, and focused.
2. Active shooters are often harder to identify.
3. Healthcare providers feel emotionally tied to stay with their patients.
4. Certain patients will die without continued life support in ICUs and operating rooms.
5. Certain areas of hospitals are not easily entered or secured.
6. Most hospitals are oriented vertically, not horizontally like shooters desire.
7. Emergency departments may lack doors or deadbolt doors during an event.
8. The violence could end in less than 10 minutes, yet the healthcare delivery disruption could be prolonged.
9. Many healthcare shootings occur in small offices or just outside buildings.

The excellent NCAV article framework is used to describe actions to be taken for healthcare facility safety: police, hospitals, schools, universities, and faith-based organizations.

Applying what we have learned in hospitals to schools, higher education, and worship centers.

- Have you learned from 9/11 and the latest active shooter events?
- Can you define the current and specific risks to those you serve and those who serve?
- Can you get care to any victim within three minutes?
- Are AEDs and care supplies positioned within three minutes of victims?
- Do players from your various departments regularly practice emergency response together?

After 3 minutes without bystander care, you are counting lives lost and long term harm to victims of significant health hazards and conditions.

NOTE: See June issue of Campus Safety Magazine at www.CampusSafetyMagazine.com
Meaningful Use is dead. Long live something better!

YouTube Patient Safety Briefings

- Active Shooter Events in Healthcare
  https://www.youtube.com/watch?v=qSsWAs5JJBw&feature=youtu.be

- Opioid Overdose Crisis
  https://www.youtube.com/watch?v=p4OiKAshEUE&feature=youtu.be

- Med Tac Lifeguard-Surf Program
  https://www.youtube.com/watch?v=G1V8s7WL6M&feature=youtu.be

- Sudden Cardiac Arrest
  https://www.youtube.com/watch?v=qdXW5WxD DY8&feature=youtu.be

- Med Tac Bystander Care Training
  https://www.youtube.com/watch?v=2IM0jh4CQU&feature=youtu.be

- Rapid Response Teams
  https://www.youtube.com/channel/UCC0jR25LxSlmrdRqyCQ7fA/
Workplace Violence & Emergency Nurses

Richard Mereu
Chief Government Relations Officer
Emergency Nurses Association
Washington, DC
TMIT High Performer Webinar
August 15, 2019

A Strategic Approach to Workplace Violence

Vicki King, MSCJ
Assistant Chief of Police
University of Texas Police Department
Houston, TX
TMIT High Performer Webinar
August 15, 2019
Nurses Say Violent Assaults Against Healthcare Workers Are a Silent Epidemic

In healthcare, there remains a big cloak of secrecy over workers defending themselves from abusive patients and never reporting the incidents. After hearing too many sad and horrific stories of nurses, doctors and others getting hurt, maimed or killed in their jobs, Simpson founded in 2017 and serves as national director of the not-for-profit Silent No More Foundation.

According to the American Nurses Association, 1 out of 4 nurses are assaulted on the job. Healthcare workers continually become the subjects of patients, family members or inmates’ rage, confusion or anxiety. Studies show over and over again that violence against healthcare workers has become a rising epidemic.

The prevalence of workplace violence in healthcare remains higher than most professions.

- According to the Occupational Safety and Health Administration (OSHA), approximately 75 percent of nearly 25,000 workplace assaults reported annually in health care and social service settings.
- The National Crime Victimization Survey showed health care workers have a 20 percent higher chance of being the victim of workplace violence than other workers.
- The American College of Emergency Physicians reported that 70 percent of emergency physicians have reported acts of violence against them, yet only 3 percent pressed charges.

Source: https://nurse.org/articles/workplace-violence-in-nursing-and-hospitals/
Female Healthcare Leaders Say Workplace Harassment Is Often Ignored

- “I don’t think the older men in leadership positions respect me at first glance.”
- “Several other women warned me never to be alone with this person.”
- “I was ultimately fired because the harassment came from the COO.”
- “I quit my job. I knew rape would be next.”

These are the experiences of women healthcare leaders who have been harassed or discriminated against in the workplace at some point in their careers. Their feedback was part of a Modern Healthcare survey that found 26% of the nearly 1,000 participants experienced workplace sexual harassment and about 32% have experienced gender discrimination.

The survey also found many organizations ignore the problem. Of the respondents who experienced harassment or discrimination, 35% said no action was taken when they reported it to their employer.

The survey, released at the 9th annual Women Leaders in Healthcare conference, included responses from 911 workers in leadership positions across the industry. About 75% of the respondents were women and 45% said they worked in a hospital setting.

Even so, there are signs the culture is improving, albeit slightly. Younger women who responded to the survey were less likely to report experiencing sexual harassment than older women. Nearly 19% of women ages 18 to 34 said they’ve been subjected to sexual harassment, which is lower than the 26% of women ages 35 and older who said they were harassed.

Source: https://www.modernhealthcare.com/labor/female-healthcare-leaders-say-workplace-harassment-often-ignored
Anonymous Survey Questions

I am interested in another webinar presenting WORKPLACE VIOLENCE SOLUTIONS:

96% Agreed and 81% Strongly or Very Strongly Agreed, and 65% Very Strongly Agreed

Source: TMIT High Performer Webinar Series; Workplace Violence: A Patient and Caregiver Safety Update – August 15, 2019
Specific additional WORKPLACE VIOLENCE topics I would like covered include:

- Abuse by patients/visitors
- Active shooter, de-escalation techniques
- Additional education for the staff, and additional recourses to keep both the staff and patient safety.
- Additional strategies/training/education that can be provided to the front end staff, community resources and collaboration programs with leos; being able to identify situations early on that are at high risk for escalation
- After action follow up of unit walkthroughs
- Any that are helpful
- As it pertains to pediatrics with angry parents
- Beginning a program and intervention model
- Best practices, strategies used by hospitals; safety mechanisms/screenings
- Best training tools, culture change for better reporting
- Combative behavioral health patients.
- Continue with these awesome speakers; i learned a lot; stories, lessons learned, best practices
- Critical care closed units and how to respond to the violence
- De-escalation strategies
- Debriefing of team
- De-escalation strategies
- De-escalation techniques for ED staff
- De-escalation techniques
- Developing a workplace violence prevention program
- Do you have a current survey to seek information on current WPV
- Domestic violence
- Evidence based programs that are working to mitigate the WPV
- Examples of de-escalation techniques
- How to deal with patient's family members threatening health system team members—call in threats or show up with weapons.
- How to educate and make staff feel more comfortable handling wpv
- Human resources department concerns
- Interventions for better, more appropriate access to care for mental health patients - like bypassing ED/ACH
- More of the same - healthcare related
- More on assessment training
- More on caregiver safety
- More on risk assessment, de-escalation training, lateral violence, managing aggression/violence from mental health & substance abusers.

Source: TMIT High Performer Webinar Series; Workplace Violence: A Patient and Caregiver Safety Update – August 15, 2019
Specific additional WORKPLACE VIOLENCE topics I would like covered include:

- More on the behavior health patient/de-escalation
- Multidisciplinary team for risk assessment
- Nurse against nurse workplace violence
- Patient’s that are combative emerging from anesthesia
- Peer bullying
- Prevention
- Program development and conflict de-escalation
- Programs hospitals are using that are getting results
- Range of methods/items/weapons nursing staff can use to protect/defend themselves from pt attack
- Safety management system for workplace violence prevention - what are the main areas we need to assess to have a comprehensive WPV prevention program. Actionable takeaways for advancing our WPV prevention.
- Situational awareness, building business case, more intervention strategies
- Specific interventions that have worked in other facilities, reporting barriers, don’t quite have a culture to represent this, therefore interventions aren’t working fully
- Staff bullying, protecting drs, drs with no accountability to comply.
- Staff guilt and debriefing after an event
- Staff to staff violence
- Standard elements for training - for all healthcare workers
- Strategies for staff
- Suicide patients on one on one observation
- Supervisor to staff violence.
- The realistic response for frontline nurses other than run-hide-fight. Also de-escalation and recognition / reporting of verbal threats
- Training strategies for a healthcare operations (time required, type (web based vs. in person)
- Validated or customized tools or criteria used to predict potential violence.
- Validated risk tools, planning and mitigation
- What has worked to reduce the violence in areas and facilities in violence prone areas.
- What type of training is needed for sitters to keep them safe and able to handle patient violence.
- Workplace violence on acute care areas and with elderly/dementia patients
- Worker vs worker/management
- Worker’s right to self-protect (armed)
- Workplace violence among employees. Ways to respond to work place violence
- Workplace violence in ambulatory setting
- Workplace violence in long term behavioral health treatment settings
- Workplace violence in the clinic setting

Source: TMIT High Performer Webinar Series; Workplace Violence: A Patient and Caregiver Safety Update – August 15, 2019
Anonymous Survey Questions

I am interested in the upcoming webinar presenting IN-FLIGHT EMERGENCIES FOR CAREGIVERS:

56% Agreed and 32% Strongly or Very Strongly Agreed, and 22% Very Strongly Agreed

Source: TMIT High Performer Webinar Series; Workplace Violence: A Patient and Caregiver Safety Update – August 15, 2019
Specific additional INFLIGHT EMERGENCY topics I would like covered include:

• Alternatives and techniques

• How do you handle situation where ground support staff at hospital denies appropriate care for pt. Assessed and monitored by healthcare provider in flight.

• How to stay calm during an issue in-flight

• Liability for responder

• Responding to violent patients inflight

• Specific behavioral health units who experience violence

• The cognitively affected patient

• What to do

Source: TMIT High Performer Webinar Series; Workplace Violence: A Patient and Caregiver Safety Update – August 15, 2019
Anonymous Survey Questions

I am interested in a webinar presenting EMERGENCY DEPARTMENT Safety Issues:

84% Agreed and 60% Strongly or Very Strongly Agreed, and 43% Very Strongly Agreed

Source: TMIT High Performer Webinar Series; Workplace Violence: A Patient and Caregiver Safety Update – August 15, 2019
Specific additional EMERGENCY DEPARTMENT topics I would like covered include:

• Active shooters
• Behavioral units
• Best practice sepsis in ED.
• Boarding of combative ed behavioral health patients.
• ER nursing, how staff can be safe and charge assailants when hospitals don't encourage. Always citing parents stress, previous traumatic experiences and make excuses for parents. (Pediatrics facility)
• Facility design and patient movement management
• Handling out of control patients/visitors
• How to change the culture of acceptance
• How to personalize organization's workplace violence prevention program to meet the specific needs of ED staff
• Include EMTALA examples
• Managing a busy lobby; falls, mental health, seclusion, substance use disorder, staff safety - proactive
• Methods of determining patient harming self or others and then what interventions are best practice for keeping everyone safe.
• Patient to nurse ratios, flexing up with staff, & diversion decisions
• Preventing and de-escalating
• Provider burden?
• Psychiatric patients, dealing with
• Same as above, answer in question 3
• Screening of all people entering the ED - for weapons- usually the hospital PR department refuses to allow this
• Second survivor
• Suicide prevention
• Techniques
• Trending hot topics in ED safety other than those identified by joint commission or CMS.
• Updates
• Violence
In-flight Emergencies: Good Samaritans at Altitude

Robert Katzer, MD, MBA, FAEMS, FACEP

Associate Clinical Professor
Associate Base Hospital Director
Department of Emergency Medicine
UC Irvine
Medical Director, City of Anaheim Fire and Rescue
Air Medic, San Bernardino County Sheriff
Orange, CA

TMIT High Performer Webinar
September 19, 2019
In-flight Medical Emergencies: What do you want to do now, Doctor?
Disclosure

- I do not have affiliations with any corporate organization that may constitute a conflict of interest with this program.
30,000 Ft View

- 2 billion people fly each year
- Flying is physiologically stressful
- Estimates of 1 in-flight emergency per 14,000 passengers OR in the US 17,000 calls a year to remote medical assistance
• One emergency in every 604 flights
  ○ 37.4% were syncope
  ○ 12.1% respiratory symptoms
  ○ 9.5% nausea or vomiting

• Diversion resulted 7.3% of the time

• 25.8% were transported by EMS
  ○ 8.6% were admitted
  ○ 0.3% died
You in Flight
You in Flight
The Flight Plan

- Physiology on a plane
  - Who shouldn’t be flying as a result
- In-flight medical emergencies
  - Should you respond
  - What’s available if you do
- Post-flight complications:
  - Infection
  - Venous thromboembolism
**What Changes At Cruising Altitude?**

- **Low humidity**
  - 7-14% humidity vs 30-50% at home
- **Immobilization**
- **Decreased atmospheric pressure**
  - Gas expansion
  - Hypobaric hypoxia
Gas Expansion

- Isn’t the cabin pressurized?
  - Yes... to an altitude of 8,000 ft (2,438m)
- Gas expansion
  - Boyle’s law: as $P \downarrow$, $V \uparrow$
  - Gas in body cavities $\uparrow$ 30%
  - Causes different problems for different people
Gas Expansion

- Healthy passengers:
  - Ears “pop”
    - Decongestants
    - Yawn / chew gum / swallow
    - Otherwise risk otic barotrauma
  - Cracked teeth / loose fillings
    - See a dentist regularly
Gas Expansion

- **Divers:**
  - **Risks:**
    - Decompression sickness
  - **Recommendations:**
    - Wait 12 hrs post single dive (24hrs if mult dives/day)
    - Wait 3-7 days if decompression sickness
    - If symptoms give 100% oxygen
  - **Confused?**
    - Call Divers Alert Network at 1-800-446-2671

Gas Expansion

- **Pneumothorax**
  - **Risks:**
    - Expansion of pneumothorax
    - Progression to tension pneumothorax
  - **Recommendation:**
    - Wait 3 weeks to fly
Gas Expansion

- Active bowel disease
  - Ex: diverticulitis, non-surgical small bowel obstruction
  - Risks:
    - Perforation
  - Recommendations:
    - Wait 7-10 days to fly

Aviat Space Environ Med 2003; 74 (suppl): A1–19; World Health Organization, 20005
Gas Expansion

- Post-op
  - **Risks:**
    - Bowel perforation
    - Wound dehiscence
  - **Recommendation:**
    - Wait 14 days to fly
    - 5 days for simple appendectomy or laparoscopic
    - 7 days for neurosurgery

*Aviat Space Environ Med 2003; 74 (suppl): A1–19; World Health Organization, 20005*
Gas Expansion

- Medical devices
  - Anything air-filled expands
    - Cuffed tubes
    - Air casts
    - G-tubes/foleys
  - Recommendations:
    - Inflate with saline or water instead

_Aviat Space Environ Med 2003; 74 (suppl): A1–19; World Health Organization, 20005_
Hypobaric Hypoxia
Hypobaric Hypoxia
Hypobaric Hypoxia

- Pressure decrease causes decreased PaO2
  - At 8,000 ft, the Percentage of O2 has not changed
  - Healthy passenger
    - 3-4% ↓ O2 Sat
  - Passenger with low sea-level PaO2
    - May desaturate to 80%
    - 77 percent of people chronic obstructive pulmonary disease had increased dyspnea in flight
      - 23% chest pain
      - 18% had respiratory distress
    - Likely applies to Congestive heart failure as well

Coker RK et al, 2007
Hypobaric Hypoxia

OxyHemoglobin Dissociation Curve

- Healthy
- COPD

© RnCeus.com
Hypobaric Hypoxia

- **Signs of hypoxia**
  - Poor Judgement, confusion, headache
  - Shortness of breath
  - Chest pain, tachycardia

- **Recommendations...**
  - Sea-level O2 Sat ≤92% → in-flight O2
  - Sea-level Sat 92-95% → hypoxic challenge
    - Walk 150 ft or 1 flight stairs
  - Wait 7-10 days from myocardial infarction, sickle cell, cerebrovascular accident, etc

Coker et al, 2007; British Thoracic Society, 2004; Roby, 2002
- Developed world’s population aging
- Bucket Lists
- More geographically diverse families
- Chronic Obstructive Pulmonary Disease fourth leading global killer
- Hypobaric hypoxia particularly pertinent to COPD patients
Portable Oxygen Concentrators
Unruly Air Passengers

Photo: Andy Ellwood via www.nydailynews.com
Air Travel During Pregnancy

- Radiation: anything less than fifteen long haul flights is under recommended radiation exposure
- Fetal Hypoxia: fetal hemoglobin protective of desaturation at altitude
- Third Trimester Flight:
  - No FAA regulations
  - Generally no air travel after
    - 36 week uncomplicated pregnancy
    - 32 weeks in multiple gestation
  - Check with airline for specific policy
The Flight Plan

- Physiology on plane
  - Who shouldn’t be flying as a result
- In-flight medical emergencies
  - Should you respond
  - What’s available if you do
- Post-flight problems:
  - Infection
  - Venous thromboembolism
Is there a doctor on board?
Is there a doctor on board?
Setting: Boeing 747 flight Hong Kong -> UK
Timing: Just at cruising altitude
Patient: 39 y/o F, c/o chest pain
  - Acute onset
  - Left-sided
  - Associated with increasing dyspnea
  - Right arm in new splint
Should you respond?

- Are you obligated to respond?
  - US/Britain/Canada – No
    - Unless a pre-existing patient
  - Elsewhere – Yes
  - Jurisdiction: country of plane registration
    - Unless plane on the ground
Should you respond?

- Are you protected if you do respond?
  - Yes (US)
    - Covered by Good Samaritan
    - Must act in good faith
    - Must provide reasonable care
    - Must not receive money
      - Gifts / upgrades OK
  - Many airlines also indemnify
  - No successful suits

Gendreau M, 2009
Should you respond?

Other things to consider

- Who else is volunteering
- Your mental status (cocktails, sleeping pills, etc)
On-board Resources

- Basic first-aid kit
- Automated external defibrillators (AED)
  - Required in US for flights with >1 attendant
  - May give a rhythm strip
- Crew
- Ground medical support
- Enhanced emergency medical kits
  - Have to ask for them
FAA Basic First Aid Kit

- Adhesive bandage compresses
- Antiseptic swabs
- Ammonia inhalants
- Bandage compresses, 4-inch
- Triangular bandage compresses, 40-inch
- Arm splint, noninflatable
- Leg splint, noninflatable
- Roller bandage, 4-inch
- Adhesive tape, 1-inch standard roll
- Bandage scissors
Enhanced Emergency Medical Kits

Medications

- Aspirin tablets: 325 mg
- Antihistamine (diphenhydramine) tablets: 25 mg
- Antihistamine (diphenhydramine), 50 mg injectable single dose
- Atropine: 0.5 mg, single 5 mL
- Dextrose 50 percent / 50 mL injectable
- Epinephrine 1:1,000 (for IM injection)
- Epinephrine 1:10,000, 2 mL injectable
- Inhaled bronchodilator (metered dose or equivalent)
- Lidocaine: 5 mL, 20 mg/mL
- Nitroglycerine tablets: 0.4 mg
- Nonnarcotic analgesic
- Saline solution, 500 mL
- Instructions for medications
Enhanced Emergency Medical Kits

- Equipment
  - Automated external defibrillator
  - Sphygmomanometer
  - Stethoscope
  - Oropharyngeal airways
  - Latex gloves or equivalent
  - Syringes
  - Needles
  - IV administration kit with tubing and connectors
  - Self-inflating manual resuscitation device (AMBU bag) with masks
  - Cardiopulmonary resuscitation (CPR) masks
Onboard Medical Support

- Know where the enhanced medical kit is located
- Know how to open it and what that means
- Air crew are trained to use the AED
Online Medical Support

- Cockpit will communicate with a physician
  - Contracted with the airline
  - Working for third party company
  - Knowledgeable in aviation medicine
- Give written succinct information to the messenger
Diversion

- FAA has an estimated 13% diversion in reported medical incidents
- Costs $3-100 grand per diversion
- Most commonly secondary to cardiac process
- Your opinion is nice, but the captain is the pilot in charge and has final say on diversion
Rules for Responding

- Show ID / explain credentials
- Obtain consent
- Contact ground medical support
- Do not pronounce a patient
- Document what you did
Rules for Responding

- Consider cabin altitude reduction to increase pressure
  - Abdominal pain
  - Chest pain
  - Asthma or COPD exacerbation

- Consider diversion
  - Chest pain
  - Severe dyspnea
  - Severe abdominal pain
  - Stroke
  - Cardiac arrest
  - Persistent unresponsiveness
  - Refractory seizure
  - Severe agitation
Back to our patient...

- Recap: 39 y/o F, chest pain and shortness of breath, arm in splint
- What would you do?
- What actually happened:
  - Orthopedic surgeon responds, makes correct Dx
  - Inserts a chest tube
A Chest Tube?
A Chest Tube?
A Chest Tube?
A Chest Tube?
A Chest Tube?
Back to our patient...

- Recap: 39 y/o F, chest pain and shortness of breath, arm in splint
- What would you do?
- What actually happened:
  o Orthopedic surgeon responds, makes correct Dx
  o Inserts a chest tube
  o Pt improves, eats meal, walks about cabin
  o Surgeon a hero
The Flight Plan

- Physiology on plane
  - Who shouldn’t be flying as a result
- In-flight medical emergencies
  - Should you respond
  - What’s available if you do
- Post-flight problems:
  - Infection
  - Venous thromboembolism
Air Travel and Infectious Disease

Air Travel and Infectious Disease

- Reasons flying might make you sick?
  - Close quarters
  - Recirculated air
  - Airline food
Air Travel and Infectious Disease

- Cabin air flow

Air Travel and Infectious Disease

- **Air quality**
  - 50/50 fresh / recirculated
  - Fresh is as good as it gets
  - Recirculated = HEPA
  - No infection difference vs all fresh planes
  - Cycles 15-20 x/hr
    - 12 x/hr in buildings

Mangili and Gendreau, 2005
Air Travel and Infectious Disease

- **Seating**
  - Increased risk if:
    - Close personal contact
    - Within 2 rows for long flight (>8hr)
    - Even with H1N1 or TB, only within 2 rows
- **Bottom Line:** you probably won’t get sick

_Baker et al, 2010_
Air Travel and Infectious Disease

- Exceptions
  - Airline food
    - 41 outbreaks and 11 deaths over 50 years
  - Bugs that have their own airplane (i.e., malaria)
  - SARS
    - 29 cases thought due to on-board transmission in 1 flight
    - Only 5 of 40 flights with in-flight spread
  - Ventilation malfunctions
    - 72% of passengers got flu when plane sat grounded with ventilation off

Mangili and Gendreau, 2005; Moser et al, 1979; Hatakka,
Air Travel and Thrombosis

http://www.roadandtravel.com/health/economyclasssyndrome.htm
Deep Venous Thrombosis

“Economy class” syndrome
- You sit still for several hours
- Back of leg rests against chair for hours
- You are slightly dehydrated d/t cabin air
- You get a deep venous thrombosis (DVT)
Air Travel and VTE

- **Immobilization**
  - Highest VTE rate in non-aisle passengers
  - Economy class no higher risk

- **Dehydration**
  - ↑venous thromboembolism (VTE) risk d/t hyperviscosity
  - Sim flight passengers show dehydration
Air Travel and VTE - Evidence

- What’s the increased risk?
  - Overall, rare
    - 1 in 1-5,000,000 passengers
  - Increase starts after 4 hrs, peaks at 8hr

Schreijer AJ et al, 2009; Tsoran I et al, 2010
What increases the risk?

- Multiple flights
- Within 2 weeks of a flight
- Window seats
- Other VTE RFs
  - Especially obesity, hormone use, prior VTE, thrombophilia

Schreijer AJ et al, 2009; Tsoran I et al, 2010
Air Travel and VTE – PPX

- **Flight time < 8 hrs?**
  - Move when you can, stretch legs when can’t
  - Avoid dehydration

- **Flight > 8 hrs and no risk factors?**
  - See above and compression stockings
    - 2 in 1237 w/ stockings vs 46 in 1245 w/o had VTE

- **Flight > 8 hrs and h/o VTE, Factor V, or cancer?**
  - See above and pre-flight lovenox if no warfarin

Geerts, 2008; Clarke 2007; Hsieh 2003;
Conclusion

- Physiology on plane
  - Gas expands, PaO2 drops
- In-flight medical emergencies
  - You’re protected if you respond
  - You have lots of equipment, including ground
- Post-flight complications
  - Infection – more likely where they came from
  - Venous thromboembolism – long flights with RFs
References:

- Transmission of pandemic A/H1N1 2009 influenza on passenger aircraft: retrospective cohort study. Baker, Michael G associate professor 1; Thornley, Craig N medical officer of health 2; Mills, Clair senior lecturer 3; Roberts, Sally microbiologist 4; Perera, Shanika medical officer of health 2; Peters, Julia medical officer of health 2; Kelso, Anne director 5; Barr, Ian deputy director 5; Wilson, Nick associate professor 1 BMJ. 340:c2424, May 22, 2010.
References (Cont)

- The movie Airplane!
- Federal Aviation Administration, Advisory Circular: Emergency Medical Equipment. US Department of Transportation, 2002
- Joint Aviation Administration, Safety Information Communication No 11, 2008


• Select Committee on Science and Technology. Air travel and health: fifth report. London: United Kingdom House of Lords, November 15, 2000
National Survey Questions

I am interested in another webinar presenting
IN-FLIGHT EMERGENCIES:

Specific additional IN-FLIGHT EMERGENCY topics I would like covered include:
National Survey Questions

I am interested in a webinar presenting
EMERGING THREATS:

Very Strongly Agree
Strongly Agree
Agree
Neutral
Neutral
Negative to Neutral
Disagree
Strongly Disagree
Very Strongly Disagree

Specific additional EMERGING THREATS topics I would like covered include:
Speakers and Reactors

Robert Katzer
Gregory Botz
Jennifer Dingman
Charles Denham
Voice of Patient and Family

Jennifer Dingman

Founder, Persons United Limiting Substandards and Errors in Healthcare (PULSE), Colorado Division
Co-founder, PULSE American Division
TMIT Patient Advocate Team Member
Pueblo, CO

TMIT High Performer Webinar
September 19, 2019
ADDITIONAL RESOURCES
1. Family settles for $2.3 million over All Children’s heart surgery death June 28, 2019; It is the first settlement to become public. Others are expected.

2. The law firm investigating All Children’s filed its report. The hospital will make big changes. June 28, 2019; The investigation was commissioned by the board of Johns Hopkins Medicine, which runs the hospital, following a Times investigation into fatal problems in All Children’s heart surgery unit.

3. Extra oversight for children’s heart surgery signed into law June 26, 2019; Outside physicians will now be allowed to inspect Florida heart surgery programs. The change follows problems at Johns Hopkins All Children’s Hospital.

4. In North Carolina, the New York Times reveals another heart surgery program in trouble May 30, 2019; A New York Times investigation published today details a situation that may feel familiar to readers in St. Petersburg. A well-respected children’s hospital — this one in North Carolina — was having trouble keeping heart surgery patients alive. Cardiologists were concerned.

5. Profit at Johns Hopkins hospitals tumbled. All Children’s was to blame. May 28, 2019; The Johns Hopkins Health System’s operating profit dropped 70 percent in the first quarter of 2019, in large part because of problems in the All Children’s Hospital heart surgery program, according to the system’s latest financial report.

6. Florida Legislature 2019: What passed and what failed May 06, 2019; Increases oversight of pediatric heart surgeries by letting team of doctors make unannounced visits to struggling programs and review death records.

7. Lawmakers approve measure to catch pediatric heart surgery problems April 29, 2019; The proposal, which would let teams of physician experts inspect struggling programs such as Johns Hopkins All Children’s Hospital, now goes to Gov. Ron DeSantis.

8. Heart surgery bill gets new April 24, 2019; The proposal, which seeks to catch problems at children’s heart surgery programs, had stalled earlier in the session.

9. All Children’s works to restore faith, but families struggle to forgive April 10, 2019; At least 11 families have filed claims with the hospital, which is admitting liability in many cases. Still, Johns Hopkins faces an uphill battle to restore trust.

10. After All Children’s deaths, proposal aims to catch heart surgery problems February 19, 2019; Sen. Gayle Harrell, R-Stuart, filed a proposal to increase oversight of pediatric heart surgery programs and institute site reviews by a state panel of doctors.

Source: https://www.tampabay.com/author/kathleen-mcgrory/
In The News …

Johns Hopkins Articles

11. Top All Children’s Executives Resign Following Times Report On Heart Surgeries December 11, 2018 The events described in recent news reports are unacceptable,’ the hospital’s parent company said.

12. Reps. Kathy Castor, Charlie Crist Repeat Call For Federal Investigation Into All Children’s Heart Unit December 12, 2018 “Major corrective actions must be taken,” they said in a statement.

13. State May Publish More Data On Heart Surgery Deaths December 17, 2018 The change could alert families to problems like the ones at the All Children’s Heart Institute much more quickly.


15. Three More All Children’s Officials Resign Following Times Investigation January 2, 2018 A total of six top officials have now left the hospital, including the CEO and three vice presidents.

16. Johns Hopkins hires former prosecutor to investigate All Children’s Heart Institute January 09, 2019 “Many of you courageously spoke out when you had concerns but were ignored or turned away,” the system’s president acknowledged in a video apologizing to the hospital’s community.

17. State and federal inspectors visit All Children’s after reports on heart surgery deaths January 11, 2019 Lawmakers have recently criticized regulators for not investigating reports of problems in All Children’s Heart Institute sooner.

18. The Baltimore Sun April 10, 2015; Burn Center Director Sues Hopkins; The bulk of Milner’s complaint alleges that his supervisors ignored concerns he started raising in early 2013 about Dr. Dylan Stewart’s care of six children at the pediatric unit.

19. Modern Healthcare; Johns Hopkins removes three more All Children’s Hospital Leaders; All Children’s is the latest hospital where severe quality of care problems exposed by the news media led to the ouster of top hospital leaders.

20. Becker’s Hospital Review; Johns Hopkins burn center director accuses system of covering up risky care; Dr. Milner says officials from Johns Hopkins Medicine removed him as supervisor of the center’s pediatric division after he raised complaints about unsafe care.

Source: https://www.tampabay.com/author/kathleen-mcgrory/
Johns Hopkins Safety Crisis Articles

**Tampa Bay Times Articles**

- Three more All Children’s officials resign following Times investigation 01-02-19 [https://www.tampabay.com/investigations/2019/01/02/three-more-all-childrens-officials-resign-following-times-investigation/](https://www.tampabay.com/investigations/2019/01/02/three-more-all-childrens-officials-resign-following-times-investigation/)
- All Children’s CEO: Not telling parents about needle left behind was “complete failure” 05-22-18 [https://www.tampabay.com/investigations/2018/05/22/all-childrens-ceo-not-telling-parents-about-needle-left-behind-was-complete-failure/](https://www.tampabay.com/investigations/2018/05/22/all-childrens-ceo-not-telling-parents-about-needle-left-behind-was-complete-failure/)
- All Children’s Hospital now under federal review 05-17-18 [https://www.tampabay.com/investigations/2018/05/17/all-childrens-hospital-now-under-federal-review/](https://www.tampabay.com/investigations/2018/05/17/all-childrens-hospital-now-under-federal-review/)
Tampa Bay Times Articles

- How we calculated All Children’s surgical mortality rates
- These eight children went to the All Children’s Heart Institute. Here’s what happened to them
- Johns Hopkins All Children’s still noncompliant with some regulations, CMS says 03-11-19
- Federal inspectors find unresolved problems at All Children’s 03-08-19
  https://www.tampabay.com/investigations/2019/03/08/federal-inspectors-find-unresolved-problems-at-all-childrens/
- Senate committee greenlights oversight of children’s heart surgery programs after Times report 03-11-19
- All Children’s deaths led to a bill adding oversight. The Florida House just gutted it 03-27-19
- Florida could have fined All Children’s millions for late reports. It went with $4,500 03-29-19.
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Florida Legislature 2019: What passed and what failed 05-06-19

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Times’ series on patient deaths at Johns Hopkins All Children’s Hospital wins top award

Heart surgery bill gets new life 04-24-19

Lawmakers approve measure to catch pediatric heart surgery problems

Regulators still not satisfied with All Children’s progress 05-01-19

Profit at Johns Hopkins hospitals tumbled. All Children’s was to blame 05-28-19
https://www.tampabay.com/investigations/2019/05/28/profit-at-johns-hopkins-hospitals tumbled-all-childrens-was-to-blame/

In North Carolina, the New York Times reveals another heart surgery program in trouble 05-30-19

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Meaningful Use is dead. Long live something better!

In the News: Med Tac Updates

Meaningful Use is dead. Long live something better!

Med Tac Publication in Campus Safety Magazine: January/February Issue

January/February 2019 Issue

Effectively Responding to Active Shooters in Healthcare Facilities

“Secure, Preserve, Fight” has been proposed as an alternative to respond to active shooters in healthcare settings when Run, Hide, Fight is not possible.

Dr. Charles Denham II, Dr. Gregory Botz, Charles Denham III, William Adcox

Unique Characteristics of Healthcare Facilities

Active shooter events at healthcare facilities are different from schools, shopping malls and commercial businesses for several important reasons:

1. The active shooter's motives usually are much more personal, targeted and focused.
2. Necessary security measures are often harder to undertake.
3. Healthcare providers feel compelled to stay with their patients.
4. Certain patients will die without continued life support in ICU's and operating rooms.
5. Certain areas of hospitals are not easy to harden or evacuate.
6. Most hospitals are organized vertically and rely heavily on elevators.
7. Emergency departments may lock down or shut down during an event.
8. The violence could end in less than 10 minutes, but the healthcare delivery disruption could be prolonged.
9. Many healthcare shootings occur at entrances or just outside buildings.

The excellent NEJM article framework is used to describe actions to be taken for healthcare facilities by safety leaders at hospitals, schools, universities, and faith-based organizations.
Battling Failure to Rescue With Rapid Response Teams

Applying what we have learned in hospitals to schools, higher education, and worship centers.

♦ Have you learned from 9/11 and the latest active shooter events?
♦ Can you define the current and specific risks to those you serve and those who serve?
♦ Can you get care to any victim within three minutes?
♦ Are AEDs and care supplies positioned within three minutes of victims?
♦ Do players from your various departments regularly practice emergency response together?

After 3 minutes without bystander care...you are counting lives lost and long term harm to victims of significant health hazards and conditions.

NOTE: See June Issue of Campus Safety Magazine at www.CampusSafetyMagazine.com
In healthcare, there remains a big cloak of secrecy over workers defending themselves from abusive patients and never reporting the incidents. After hearing too many sad and horrific stories of nurses, doctors and others getting hurt, maimed or killed in their jobs, Simpson founded in 2017 and serves as national director of the not-for-profit Silent No More Foundation.

According to the American Nurses Association, 1 out of 4 nurses are assaulted on the job. Healthcare workers continually become the subjects of patients, family members or inmates’ rage, confusion or anxiety. Studies show over and over again that violence against healthcare workers has become a rising epidemic.

The prevalence of workplace violence in healthcare remains higher than most professions.

- According to the Occupational Safety and Health Administration (OSHA), approximately 75 percent of nearly 25,000 workplace assaults reported annually in health care and social service settings.
- The National Crime Victimization Survey showed health care workers have a 20 percent higher chance of being the victim of workplace violence than other workers.
- The American College of Emergency Physicians reported that 70 percent of emergency physicians have reported acts of violence against them, yet only 3 percent pressed charges.

Source: https://nurse.org/articles/workplace-violence-in-nursing-and-hospitals/
Nurses Say Violent Assaults Against Healthcare Workers Are a Silent Epidemic

In The News …

Simpson points out that nurses and others need to be able to protect themselves if they feel their life is in danger. Here are her suggestions if you are threatened:

• Try to escape - If you can’t escape, yell loud enough to get help.
• Create a barrier - Put something between that person assaulting you and yourself so you might be able to escape.
• Defend yourself - You can defend yourself. You are allowed to meet the attacker with equal force to get them to stop. Some people don’t know that.
• Report the incident - Notify your facility of the assault.
• Take a leave of absence - Many people will be nervous to go back to work after an incident. If you are struggling emotionally about the trauma, people need to begin to realize that trauma and anxiety are legitimate reasons to get a leave of absence. Don’t rush back to work if you aren’t ready.

• Get support and seek help - Surround yourself with people that you trust. Consider getting trauma counseling.

Simpson’s group is currently working on legislation, on a state-by-state basis to obtain basic legal protections for those in the healthcare professions.

The legislature proposed the following,

• Assault against any healthcare workers must be a felony.
• No less than two law enforcement officers must be present with offenders.
• Facilities must provide locator badges with panic buttons for victims to signal for help.
• There must be anti-retaliation protections in place so healthcare workers may receive the same basic rights as any other assault victim – the right to report to law enforcement.

Source: https://nurse.org/articles/workplace-violence-in-nursing-and-hospitals/
Two registered nurses, one patient care provider and one expert witness changed the course of a lawsuit in the case Stubblefield v. Morristown-Hamblen Hospital Association.

A patient underwent a cardiac catheterization in a hospital and remained for routine post-operative care. The physician’s order was for the patient’s assigned nurse to administer nitroglycerin intravenously throughout the night.

The patient complained to the nurse the nitroglycerin was causing “an unbearable headache and nausea.” She begged the nurse to stop the nitroglycerin. Later, they discovered a hematoma and pseudoaneurysm in the patient’s groin at the catheterization site.

The hematoma continued to enlarge, despite treatment provided by the hospital nursing staff. The on-call physician was notified, and a vascular surgeon immediately performed emergency surgery to repair the femoral artery.

The suit also included a separate battery count against the nurse on the basis she continued the nitroglycerin after the patient objected to its administration.

The defendants denied the allegations and filed a motion for summary judgment. The nurse stated the patient consented to the administration when she was told it was medically necessary. Had the patient objected, the nurse continued, she would have called the treating physician for orders.

The patient again requested a continuance of the summary judgment motion, claiming the hospital had unlawfully coerced the nurse expert to withhold her testimony by threatening her with the loss of her job.
The Power Of Truth: Confidentiality Agreements Embolden Wrongdoers

In the world of personal injury and medical malpractice law, manufacturers, insurance companies, pharmaceutical makers, hospitals and others wield confidentiality agreements as a tool of their trade when settling cases with individuals who allege they were harmed by the organization’s products or procedures, or a provider’s medical error.

Confidentiality agreements embolden wrongdoers to continue operating without acknowledging and fixing the issue that caused harm in the first place. These agreements clear a path for repeat offenses, removing incentives to improve safety and blocking other consumers, employees or patients from knowing full risks.

Fortunately, there’s something more powerful than a secret: the truth.

When individuals retain and harness the power of their truth, we all benefit. For example, by publicly sharing their experiences, one client’s family spurred law enforcement agencies to accept responsibility and change policies for high-speed chases after their 40-year-old wife and mother of two — an Everett nurse — was killed by a fleeing suspect in 2013.

Another client, a remarkable man paralyzed following multiple missed spinal fracture diagnoses over two weeks of treatment in 2013, compelled hospital administrators to collaborate with him on identifying and improving the systemic miscommunication issues that led to his tragic injury.

If those settlements had included confidentiality agreements, the same actions could have repeated unfettered, under the cover of secrecy.

Source: https://www.seattletimes.com/opinion/the-power-of-truth-confidentiality-agreements-embolden-wrongdoers/
Bullying during medical education can have negative consequences that range from the well-being of the trainees to compromised patient care. The rates at which medical trainees report bullying has fluctuated widely (10%-48%) in prior studies, and differs by level of training and country.

A recent study of internal medicine residency training program directors reported that only 31% were aware of any bullying of their trainees during the previous year.5 We characterized the proportion of residents who perceived to have been bullied during their residency training.

Of the 26,021 internal medicine trainees who took the 2016 examination, 24,104 (93%) completed the survey and 21,212 (88%) allowed their data to be used for research purposes. Of these, 13.6% (n = 2,876) reported experiencing bullying since the beginning of residency training. Among the residents who perceived being bullied, verbal harassment was the most common (80%), followed by other (25%), physical harassment (5.3%), and sexual harassment (3.6%). Of those who felt bullied, 31% sought help to deal with it. The most commonly described consequences of bullying were feeling burned out (57%), worsened performance as a resident (39%), and depression (27%).

The following resident characteristics were significantly associated with reported bullying: speaking a native language other than English, higher postgraduate year level, being an international medical graduate, and lower IM-ITE tertile. Only 1 program variable was significantly associated with bullying. Compared with US residency programs, trainees at international residency programs had significantly greater odds of experiencing bullying.
In The News …

Protect Employees from Range of Threats, Agencies Told

Most violence in the federal workplace is not of a physical nature and agencies need to prepare and respond to behavior such as bullying, gestures and verbal threats as well as to incidents such as assault, homicide and acts of terrorism, according to new government-wide guidance.

“Most acts of federal workplace violence occur as some form of verbal or non-verbal threat, bullying, harassment, intimidation, or non-fatal physical assault,” noting a 2012 report by the U.S. Merit Systems Protection Board (MSPB) showing that of federal employees who say they have observed violence in their workplaces it was most often by current or former employees or customers of the agency.

Anxiety about serious incidents such as shootings “can stand in the way of identifying more significant risk factors such as poorly lit parking lots or gaps in employee training programs. This anxiety can make it more difficult to cope with one of the most common workplace violence problems: the employee whose language or behavior frightens coworkers,” it says. While most threats do not lead to a violent act, “acts of physical violence might start with behavioral risk indicators. Agencies must take all reported safety concerns seriously and respond appropriately.”

Federal employees most at risk of becoming victims of violence in a workplace are those who exchange money with the public; deliver passengers, goods, or services; work alone or in small groups during late night or early morning hours; work in high-crime areas; or work in community settings and homes experiencing extensive contact with the public.

Source: https://www.fedweek.com/fedweek/protect-employees-from-range-of-threats-agencies-told/
The nation’s 15 million health care workers are increasingly under attack on the job. Advocates and even some federal lawmakers say delays in the creation of enforceable regulations to protect them will continue to put them at risk, potentially for decades.

In a 2018 survey conducted by the American College of Emergency Physicians, 47-percent of emergency doctors said they’d been physically assaulted at work.

**Main Points**

- Protecting emergency patients and staff from violent acts is fundamental to ensuring quality patient care.
- Nearly half (47 percent) of emergency physicians polled report being physically assaulted, with more than 60 percent of those saying it occurred in the past year.
- Emergency patients can be traumatized to the point that they leave without being seen.
- Nearly 7 in 10 emergency physicians say emergency department violence has increased in the past 5 years, with a quarter of them reporting it has increased greatly.
- ACEP encourages all states to enact legislation that establishes maximum categories for offenses and criminal penalties against individuals who commit violence against health care workers.
- Hospitals can do more by adding security, guards, cameras, security for parking lots, metal detectors, and increasing visitor screening inside hospitals, especially in emergency departments.

Bleeding Kits Available on Cape Cod Beaches In Case of Shark Attack

The kits contain, "bleeding control dressings, gloves and eye protection, and they are in a waterproof and airtight sealed case up the beach," Fire Chief Anthony Pike tells CNN.

Eventually 10 kits will be deployed. These are in addition to those already available with lifeguards, EMTs on the beaches, and in fire department vehicles.

Pike said the kits are great for doctors, nurses, and off-duty first responders. And directions are provided to help those who lack medical training.

The kits are for serious incidents only, Pike warns -- not for minor cuts from a shell on the ground. They're for "any major bleeding emergency that may arise."

And with at least a dozen sharks swimming nearby, that's the "major bleeding emergency" on most minds.

"I hope we never have to use them, but if we do they are there," Pike said.

Sharks are common in the area, but attacks are rare -- and fatal encounters almost unheard of. Last summer, a swimmer at a Cape Cod beach died in what experts said was the state's first fatal attack in more than 80 years.

A handful of public companies have begun quietly warning investors about how gun violence could affect their financial performance. Companies such as Dave & Buster’s Entertainment Inc., Del Taco Restaurants Inc. and Stratus Properties Inc., a Texas-based real-estate firm, added references to active-shooter scenarios in the “risk factor” section of their latest annual reports, according to an analysis of Securities and Exchange Commission filings. The Cheesecake Factory Inc. has included it in its past four annual reports.

The disclosures come as fatalities in mass public shootings have surged in recent years. Between 2016 and 2018, active shooter incidents left 306 people dead and 850 wounded, according to the Federal Bureau of Investigation. That’s up from the previous three years, when active shooters killed 136 and wounded 181. The FBI defines an active shooter incident as one or more shooters attempting to kill people in a crowded area.

Deciding what to disclose, and which risks count as material, is more art than science. Figuring out whether a shooting is material may depend on whether a company operates spaces that are open to the public, among other factors, Mr. Martin said. Large companies often vet their risk factors through internal committees, enabling multiple senior executives to weigh in, before disclosing.

In many cases, though, companies decide whether they want to add a risk factor by looking at what competitors have included, lawyers said.
Rutgers University paid $375,000 to settle a lawsuit filed claiming that one of its top doctors sexually harassed two female residents he was interested in dating, according to a copy of the settlement.

The civil lawsuit was filed in Superior Court in 2017 by the two women and a male resident who said Jean Daniel Eloy, 48, retaliated against him for trying to protect one of the women. The suit against Rutgers did not name Eloy, the head of the anesthesia residency program at Rutgers New Jersey Medical School in Newark, as a defendant.

The doctor threatened to derail the residents’ futures when they did not reciprocate his affections, according to a lawsuit.

Rutgers failure to stop the harassment from an “upper management” doctor meant the university essentially condoned the behavior; the suit claimed.

Of the $375,000 settlement, each plaintiff will receive $83,337.50 and their law firm, Smith Mullin, PC, will receive $124,987.50 for fees and costs of the litigation. The plaintiffs also agreed in the settlement to sever any employment ties with Rutgers and to never seek future employment there.

Rutgers didn’t admit any wrongdoing in the settlement. To eliminate any conflict of interest, Rutgers agreed that Eloy will never handle any future request for references for the three plaintiffs.

A new paper in mAbs alleges that Ram Sasisekharan, professor of biological engineering at Massachusetts Institute of Technology, claimed two previously discovered antibody therapies as his own.

“We looked at exactly two cases, and in both did we find irregularities,” co-author Tillman Gerngross, CEO of the private biotech firm Adimab, told STAT. “To me, if you’re sitting in the kitchen and two fat cockroaches walk across the floor, what’s the chance that there’s only two?” Gerngross and his colleagues base their argument on amino acid sequences not published in Sasisekharan’s papers but obtained through patent information and later cross-checked on GenBank.

Sasisekharan reportedly said that the paper was “inaccurate and slanderous” and that there are, for example, “fundamental differences” between the Zika antibody he and colleagues wrote about last year in Cell and the one another team of researchers shared in Nature in 2016.

MIT told STAT that “while federal regulations and MIT policy do not allow us to comment on any particular matter, research integrity at MIT is paramount. MIT has policies and confidential processes in place to assess concerns that might be raised.”

“If you look at the original [MIT] papers that reported these antibodies, they don't give a really clear description of how they identified the epitope or how they designed the antibodies,” he said.

The implications of Adimab’s paper stretch beyond academia. Visterra was developing the flu antibody when it was acquired by the Japanese drug maker Otsuka for $430 million last year.
Harvard Fencing Coach Dismissed After Home Sale Raised Conflict Of Interest Concerns

With only two months until the beginning of the school year, Harvard University is on the hunt for a new head fencing coach after Peter Brand was dismissed over concerns regarding the sale of his home.

Bob Scalise, Harvard's athletics director, announced Brand's dismissal on Tuesday afternoon and said it came after an independent investigation found him to have violated the conflict of interest policy. Brand allegedly sold his home to Jie Zhao for well above the market value. Zhao's son was admitted to Harvard shortly after the sale and joined the fencing team, as did his brother who graduated in 2018.

Allegations against Brand came to light after news of the FBI investigation dubbed "Operation Varsity Blues" broke. The well-known college admission scandal, which neither Brand nor Harvard were named in, involved several wealthy parents allegedly paying large sums of money to have their children's athletic records and exam scores altered. Also named in the indictments were several coaches from well-known schools including the University of Southern California and the University of California-Los Angeles.

"Harvard Athletics is committed to upholding the integrity of our athletics program, and it is our expectation that every coach and staff member adhere unambiguously to our policies," Scalise wrote.

Scalise added that the university will begin searching for a replacement coach in the coming days and expected to have the position filled by the start of the fall semester.