

What is ACCORDS?

Adult and Child Center for Outcomes Research and Delivery Science

ACCORDS is a 'one-stop shop' for pragmatic research:

- A multi-disciplinary, collaborative research environment to catalyze innovative and impactful research
- Strong methodological cores and programs, led by national experts
- Consultations & team-building for grant proposals
- Mentorship, training & support for junior faculty
- Extensive educational offerings, both locally and nationally



ACCORDS Upcoming Events – mark your calendars!

April 4, 2025 11am-1pm Krugman Conference Hall	ACCORDS & CCTSI Community Engagement Showcase <i>Connect with community and academic partners!</i>
April 30 + May 1, 2025 9am-3pm MT Zoom	Strengthening the Application of Theories, Models, and Frameworks in Implementation Research <i>Back by popular demand! Registration is now live!</i>
May 12, 2025 12-1pm MT AHSB Room 2200/2201	Emerging Topics in Digital Health & Clinical Informatics <i>Real World Augmented Supportive Care: Tech to Touch</i> Presented by: Matt Loscalzo, MSW
Annual Conference June 4-5, 2025 9-4pm MT	Colorado Pragmatic Research in Health Conference Future of Pragmatic Research: Team Science to Enhance Innovation and Impact <i>Registration now open → Visit COPRHcon.com for more information!</i>





***Learning Health Systems:
Perspectives from a Health
System Executive***

Presented by:

Jean S. Kutner, MD, MSPH

Chief Academic Officer, UCHHealth

Distinguished Professor, CU School of Medicine



Learning Health Systems: Perspectives from a health system leader

Jean S. Kutner, MD, MSPH

Chief Medical Officer, University of Colorado Hospital

Chief Academic Officer, UCHealth

Distinguished Professor, University of Colorado School of Medicine

Outline

- About UCHealth
- UCHealth current priorities
- Examples: initiatives and results
- UCHealth Quality and Research Administration resources
- Envisioned future

About UCHealth

Mission

We improve lives. In big ways through learning, healing and discovery. In small, personal ways through human connection. But in all ways, we improve lives.

Vision

From health care to health.

Values

Patients first
Integrity
Excellence

Who we are
and
how we do it.

Values in Action

- We **take care** of others by taking care of ourselves first.
- We always **prioritize safety**.
- We **connect** with compassion and respect.
- We **act inclusively**, so those with diverse ideas and perspectives are supported.
- We **speak up** when there's an opportunity to make things better.
- We provide extraordinary care and service by **being accountable** for our actions.
- We **strive for excellence** in our work, and when we fall short, we learn and improve.

About UCHealth

14
Hospitals

4 Northern Colorado
4 Metro Denver
6 Southern Colorado

More than
2.5K
Available
beds

Hospital beds:
579 Northern Colorado
989 Metro Denver
852 Southern Colorado



Poudre Valley Hospital
Fort Collins



Medical Center of the Rockies
Loveland



Greeley Hospital
Greeley



Longs Peak Hospital
Longmont



Broomfield Hospital
Metro Denver



University of Colorado Hospital
Metro Denver



Highlands Ranch Hospital
Metro Denver



Memorial Hospital North
Colorado Springs



Grandview Hospital
Colorado Springs



Memorial Hospital
Colorado Springs



Pikes Peak Regional Hospital
Woodland Park



Yampa Valley Medical Center
Steamboat Springs



Parkview Medical Center
Pueblo



Parkview Pueblo West Hospital
Pueblo

More than

35K employees

124K surgeries

2.7M unique patients

8.7M outpatient, urgent care and emergency room visits

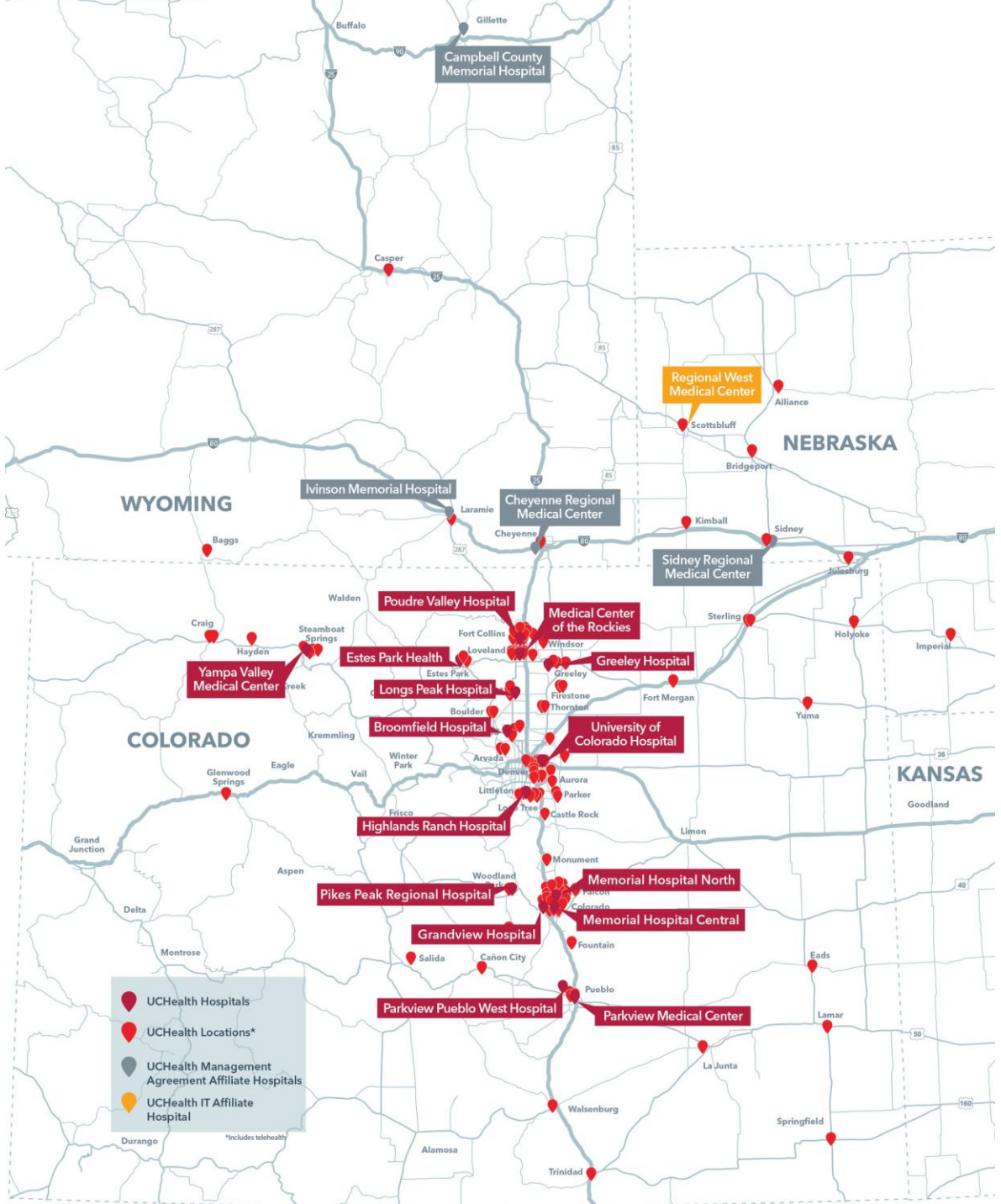
16K babies delivered

7K affiliated or employed providers

973 new patients per day

187K inpatient admissions and observation visits

UCHealth reach extends throughout the Rocky Mountain region.



UCHealth is recognized as a leader in quality.



#1 in CO: University of Colorado Hospital
#2 in CO: Medical Center of the Rockies
#4 in CO: Memorial Hospital



The only organization to achieve back-to-back #1 overall quality ranking from the University Health System Consortium

2024 U.S. News National Specialties Rankings:

University of Colorado Hospital: Four specialties ranked.

HEALTH CARE'S MOST WIRED ADVANCED
(1 OUT OF 27 NATIONALLY)

TOP 10
IN QUALITY PERFORMANCE



2008 Baldrige National Quality Award, the nation's highest honor for innovation and performance excellence



Magnet Designation, American Nurses Credentialing Center

Medical Center of the Rockies, Poudre Valley Hospital, Memorial Hospital Central, Memorial Hospital North and University of Colorado Hospital have all been awarded multiple Magnet designations for nursing excellence.

- Lown Institute: Nation's No. 2 Most Socially Responsible Health System
- ANCC Magnet Recognition Program®
- The Best and Brightest Companies to Work For
- Certified Great Place to Work
- CHIME® Level 10 Most Wired Recognition
- HIMSS Stage 7 Certification
- Top Workplaces by The Denver Post

The value of academic medicine extends beyond just teaching and research.

Physician and provider training

Approximately **45%** of all Colorado physicians were trained in our institutions; other training programs include pharmacy, nursing and dentistry.

Advanced treatments for patient clinical trials

In partnership with the University of Colorado Anschutz Medical Campus, UCHealth provides more than **1,700** clinical trials and **1,200** active research projects in the community setting.

Research and innovation

The only academic medical center in Colorado with more than **\$700M** in total research funding, UCHealth provided more than **\$315M** to CU to support its academic and research enterprise, 10 times more than state funding.

Health care by the numbers.

Based on independently audited UCHealth data.



\$580M

in uncompensated care

\$1.2B

in total community benefit

UCHealth's community benefits are

3x greater

than the value of its tax exemption, valued at \$357 million

\$11.6B

in total economic impact for Colorado

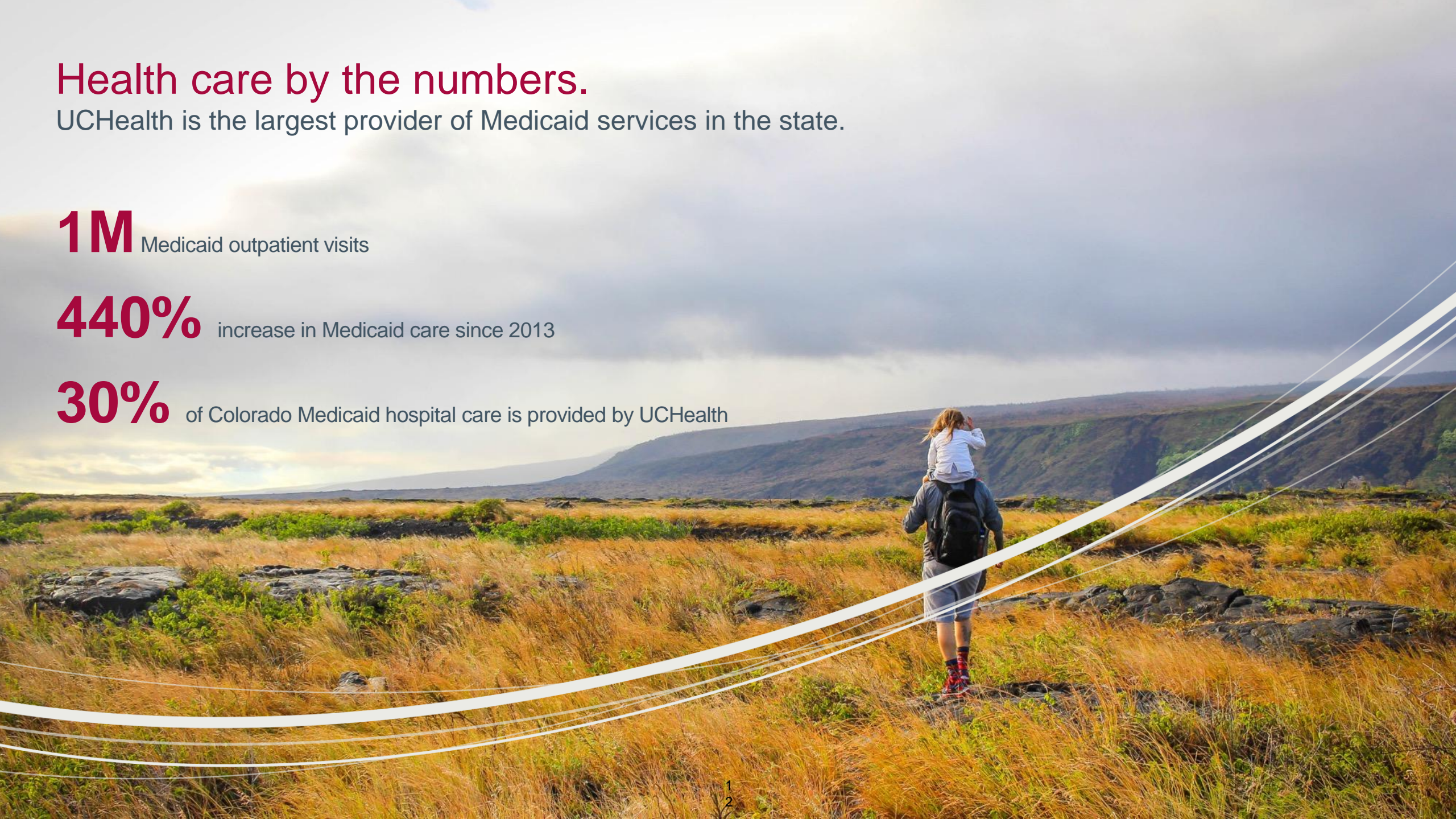
Health care by the numbers.

UCHealth is the largest provider of Medicaid services in the state.

1M Medicaid outpatient visits

440% increase in Medicaid care since 2013

30% of Colorado Medicaid hospital care is provided by UCHealth



UCHealth: High Reliability



Patients

Experience excellence every time.



**Front-line team
members**

**Experience alignment between vision, culture, and process.
Have clear priorities and expectations.
Can complete their work without unnecessary complexity.**



Leaders

Create predictable systems.

UCHealth: High Reliability Care Delivery

Start of Episode



Patient knows what to expect during their stay.

- In-clinic pathway initiation
- Patient onboarding
- Nurse leader rounding on new admits



Team has the tools and reliable support to onboard patients.

- Virtual RN workflows to enhance admit process
- Enhanced team member onboarding

During the Episode

Patient feels safe and their needs are met. Care is consistent – every patient, every time.

- Evidence-based clinical pathways to drive care
- Purposeful hourly rounding at bedside
- Patient responsiveness tactics for clinical support service areas (e.g. therapies, RT, EVS, etc)

Team workflow supports the consistent ability to proactively address patient needs. Clinical teams can focus on clinical care.

- Simplify the lives of our clinical teams (e.g. supply chain, HR, pharmacy, service recovery support)
- Scale best practice solutions
- Huddles to monitor quality outcomes and needs (q4)
- Leadership rounding

End of Episode

Patient feels prepared for next level of care.

- Medication teaching day prior to discharge
- Discharge experience
- Follow-up care coordination

Team has the tools and reliable support to discharge patients.

- Virtual RN workflows to enhance discharge process
- Ease of ambulatory access for follow-up visit coordination

Culture and Cohesion

uhealth

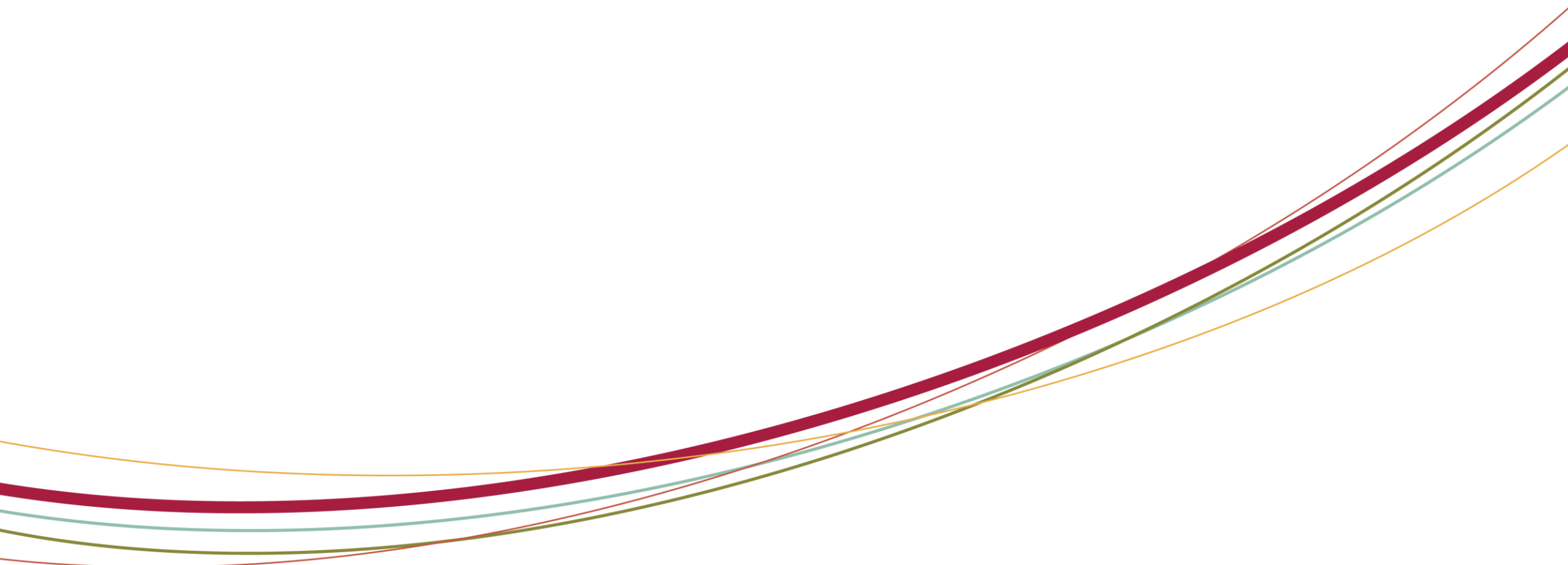
FY25 UCHealth Quality and Safety Priorities

Measure	FY25 Q1	FY25 Q2	FY25 Q3	FY25 Q4	FY26 Q1
Responsiveness	Plan / Do	Study / Act	Review/ Revise / Sustain		
Mobility		Plan / Do	Study / Act	Review/ Revise / Sustain	
Peri-procedural Safety			Plan / Do	Study / Act	Review/ Revise / Sustain
Readmissions and Excess Days				Plan / Do	Study / Act
Other Ongoing UCHealth Priorities					
Mortality	Review/ Revise/ Sustain (GIP Hospice, deterioration work, service line focused work, reviews)				
Hospital Acquired Pressure Injuries (HAPI)	Local focus; Align with mobility/turning				

University of Colorado Hospital
FY25 Quality and Safety Goals & Expectations

Responsiveness	Mobility (Falls and HAPI)	Surgical/ Procedural Safety	Readmissions and Excess Days	Mortality
FY25 Q1	FY25 Q2	FY25 Q3	FY25 Q4	Ongoing
<p>Goal/ Expectation:</p> <ul style="list-style-type: none"> • Participation in “set, meet, own” framework • Introduce yourself by name and role to patients upon entering the room in all care settings • Ask “is there anything else I can do for you before I leave” and be responsive to needs 	<p>Goal/ Expectation:</p> <ul style="list-style-type: none"> • Review mobility goal and mobility goal achievement during bedside rounds • Ensure activity orders are reflective of patient status • Order therapy consult as applicable • Reinforce mobility expectations with patient both in clinic and inpatient 	<p>Goal/ Expectation:</p> <ul style="list-style-type: none"> • Complete Brief Op Note for all surgical/ procedural departments • Implement best practice bundles to reduce post-operative respiratory failure and post-operative sepsis • Follow Enhanced Recovery After Surgery (ERAS) bundles to reduce Surgical Site Infections (SSIs) • Follow surgical and procedural safety bundle including time-out and debriefs 	<p>Goal/ Expectation:</p> <ul style="list-style-type: none"> • Ensure patients have a follow-up appointment (primary or specialty care) scheduled before discharge • Create ambulatory access for discharged patients and high-risk individuals to avoid readmissions and unnecessary ED visits 	<p>Goal/ Expectation:</p> <ul style="list-style-type: none"> • Identify and respond to deterioration • Optimize medical and surgical perioperative management • Connect patient and family with Hospice services when aligned with goals of care • Respond to CDI queries to capture acuity and appropriate documentation

Examples



Artificial Intelligence Facilitated Virtual Surveillance Model Associated with Reduced In-Hospital Mortality

Hemali Patel MD, Angela Keniston PhD MSPH, Amy Hassell RN MSN, Brittany Cyriacks RN MSN CMSRN, Drew Brendan, Alexander Lincoln, Sarah Mann MA, Richard Zane MD, Christine D. Jones MD MSc

Background

- Inpatient clinical deterioration is associated with higher rates of morbidity and mortality.
- Timely identification and treatment of clinical deterioration is logistically complex yet critical to improve clinical outcomes.
- Real-time telemetry, pulse oximetry, and capnography data has the potential to identify real-time clinical deterioration

Goal

- Evaluate impact of embedding artificial intelligence (AI) tools in the electronic health record (EHR) to promote timely identification and intervention for clinical deterioration.
- Evaluate clinical outcomes with baseline AI tools compared to AI tools after the addition of telemetry trigger.

Methods

Baseline AI Tools and Process:

- AI tools embedded in EHR for 12 UCHealth hospitals, ~1800 medical/surgical and progressive care beds included:
 - Shock index, Epic Deterioration Index, Epic Sepsis Predictive Model and Respiratory Distress Index
- When AI tool thresholds are met, a clinical deterioration alert is sent to a central telemedicine command center (VHC) where intensive care trained nurses (vICU RN) complete chart review.
- If rapid response criteria are met, the vICU RN discusses with bedside team on whether a bedside RRT was warranted

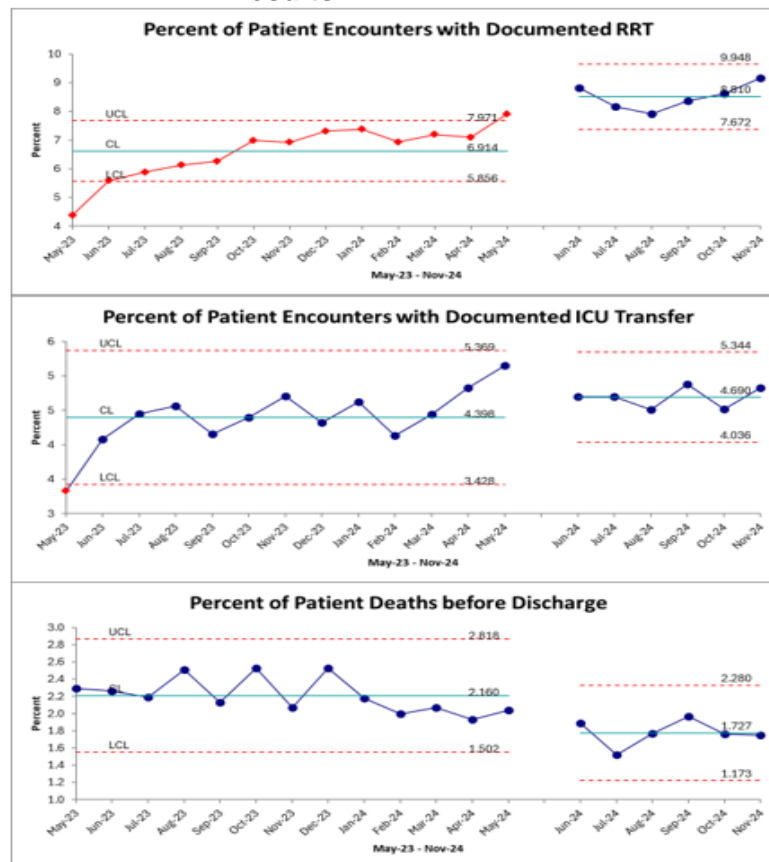
AI tools with addition of telemetry trigger:

- AI tool embedded in EHR to include real-time telemetry, pulse oximetry and capnography data.
- If data alerted at least 3 times in an hour to bedside nurse, an alert also sent to vICU RN for review
- vICU RN calls an RRT from the VHC when patients meet criteria to evaluate patient in real-time rather than first discussing with bedside team

Methods

- Completed a limited time series, uncontrolled pre-post study design to compare patient outcomes.
- Included adults 18 years of age or older discharged from medicine, subspecialty, surgery, orthopedic services after an observation or inpatient admission.
- Pre-intervention: May 23, 2023 – May 27, 2024
- Post-intervention: May 28, 2024 – November 30, 2024

Results



Results

Outcome N (%)	Pre-intervention patient encounters N = 124,142	Post-intervention patient encounters N = 66,357	P-value
AI tool trigger	59,197 (48)	32,566 (49)	
Telemetry trigger	0 (0)	4,894 (7)	
RRT	8,557 (7)	5,865 (9)	<.0001
ICU transfer	5,449 (4)	3,125 (5)	0.0013
Death before discharge	2,681 (2.2)	1,155 (1.7)	<.0001

Conclusion

- AI tools, paired with nurse clinical adjudication, can help identify clinical deterioration more quickly than bedside team assessments.
- Adding real-time telemetry, pulse oximetry and capnography data identified additional real-time cases with clinical deterioration.
- Formalizing calling RRTs when patients first meet criteria, rather than relying on bedside teams, was associated with:
 - Higher proportion of RRTs and transfers to higher level of care,
 - Lower in-hospital mortality.



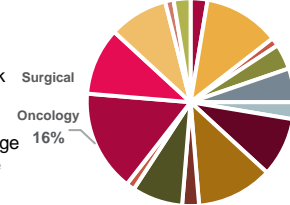
Multidisciplinary Quality Improvement Initiative to Reduce Rates of Perioperative Venous Thromboembolism in Surgical Oncology Patients

Durden J, Klauck P, Abud V, Knott L, Berg S, Robbins E, Ballou M, Anoff D, Trujillo T, Thompson E, Hassel K, Wohlauser M, Mungo B, Del Chiaro M, Tevis S, Brainard J.

Background

- Perioperative venous thromboembolism (VTE) is a morbid and costly complication for patients and health systems (mortality, length of stay, etc.)
- Surgical oncology patients are at the highest risk of VTE based on a confluence of myriad risk factors
- Surgical oncology comprised a greater percentage of VTE incidence than any other surgical service line in FY2023

UCH Academic Department Perioperative VTE Cases FY2023



Caprini Score (VTE Risk Stratification)

Each risk factor=1 point	Each risk factor=2 points	Each risk factor=3 points								
<ul style="list-style-type: none"> Age 40-59 years Minor surgery planned BMI ≥ 30 kg/m² History of prior major surgery (<1 month) Swollen legs (current) Varicose veins Sepsis (<1 month) Abnormal pulmonary function (COPD) Acute myocardial infarction (<1 month) Congestive heart failure (<1 month) History of IBD Medical patient currently at bed rest 	<ul style="list-style-type: none"> Age 60-74 years Arthroscopic surgery Major open surgery (>45 minutes) Prior cancer (except non-melanoma skin cancer) Present cancer (except breast and thyroid) Confined to bed (>72 hours) Central venous access 	<ul style="list-style-type: none"> Age ≥ 75 years History of VTE Present chemotherapy Positive Prothrombin 20210A Positive Lupus anticoagulant Elevated anticardiolipin antibodies Elevated serum homocysteine HIT Other congenital or acquired thrombophilias 								
<p>For women only (1 point each)</p> <ul style="list-style-type: none"> Pregnant or post-partum History of unexplained or recurrent spontaneous abortion Oral contraceptives or hormone replacement therapy 	<p>Caprini risk category based on total risk score</p> <table border="1"> <thead> <tr> <th>Total score</th> <th>Category</th> </tr> </thead> <tbody> <tr> <td>0-4</td> <td>Low</td> </tr> <tr> <td>5-8</td> <td>Moderate</td> </tr> <tr> <td>≥ 9</td> <td>High</td> </tr> </tbody> </table>		Total score	Category	0-4	Low	5-8	Moderate	≥ 9	High
Total score	Category									
0-4	Low									
5-8	Moderate									
≥ 9	High									
		<ul style="list-style-type: none"> Major surgery lasting > 6 hours Elective major lower extremity arthroplasty Hip, pelvis, leg fracture (<1 month) Acute spinal cord fracture or paralysis (<1 month) Multiple traumas (<1 month) 								

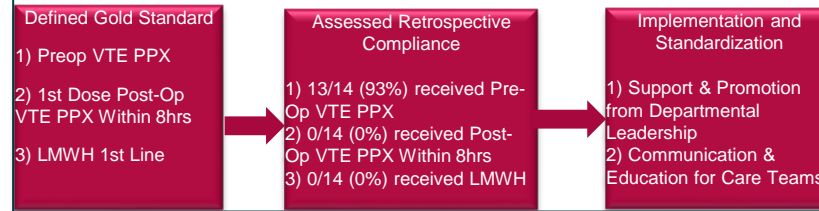
https://www.researchgate.net/figure/Caprini-risk-assessment-model-Caprini-score-of-10-or-greater-are-considered-high-risk_fig1_338173232

Purpose

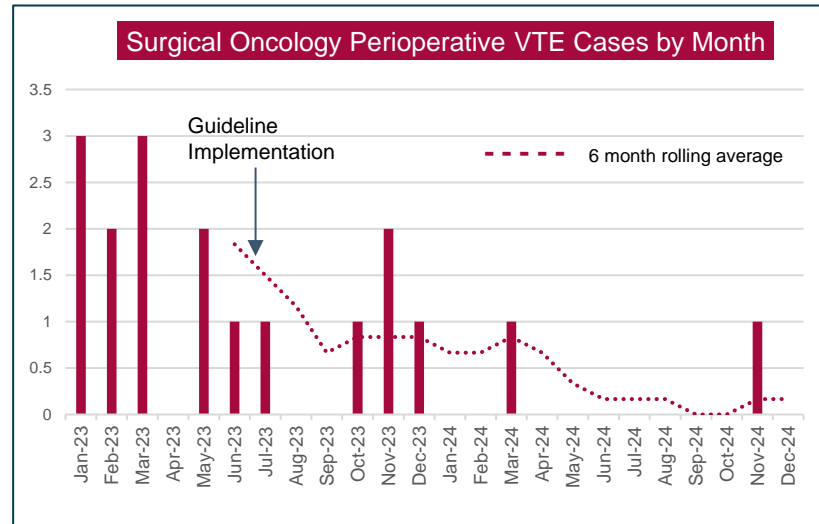
To determine the optimal parameters for administration of chemoprophylaxis and uniformly implement new “gold standard” guidelines throughout the surgical oncology service line to reduce rates of perioperative venous thromboembolism.

Method

- A multidisciplinary, multispecialty VTE prophylaxis guideline expert panel was assembled, including surgeons, anesthesiologists, hematologists, and pharmacists.
- Guideline development included review of national societal guidelines, clinical trials and meta-analyses
- Low molecular weight heparin (LMWH) was chosen as the first line agent due to efficacy, safety, lower risk of heparin-induced thrombocytopenia, and once-daily dosing. Timing of transition from unfractionated heparin to LMWH selected with surgeon buy-in.
- Incidence of VTE was chosen as primary outcome measure, with incidence of postoperative hemorrhage chosen as a balancing measure



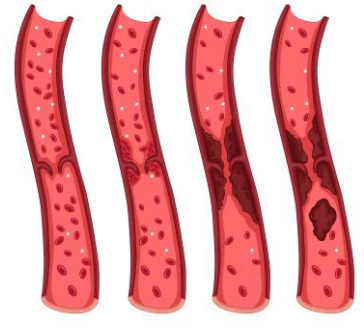
Results



Implications

Implementing “gold-standard” guidelines led to a robust decrease in VTE cases in a perioperative surgical population. There was no increase in post-operative hemorrhage rates. There were no changes in clinical documentation integrity. This represents a true improvement in patient care. The initiative is being spread to other surgical service lines with the same goal of reducing incidence of perioperative VTE.

- In a recent historical national cohort of inflammatory bowel disease patients undergoing major abdominopelvic surgery, perioperative VTE was found to significantly increase:
- Median length of stay (17.6 vs 6.7 days; $p < 0.001$)
- Inpatient mortality (5.0% vs 1.1%; OR 4.7, SE 3.2-7.0; $p < 0.001$).
- The additional cost associated with each inpatient venous thromboembolism was \$31,551 (95% CI, \$29,136-\$33,965).
- Comparable impacts are hypothesized in a surgical oncology population



References

- Geerts, W.H., et al., *Prevention of venous thromboembolism*. Chest, 2001. **119**(1 Suppl): p. 132S-175S. (LEVEL 1A)
- Gordon, R.J. and F.W. Lombard, *Perioperative Venous Thromboembolism: A Review*. Anesth Analg, 2017. **125**(2): p. 403-412.
- Lobastov, K., et al., *Validation of the Caprini risk assessment model for venous thromboembolism in high-risk surgical patients in the background of standard prophylaxis*. J Vasc Surg Venous Lymphat Disord, 2016. **4**(2): p. 153-60.
- Makay, Ozer & Hui, Sun & Pontin, Alessandro & Caruso, Ettore & Pino, Antonella & Mandolino, Tommaso & Dionigi, Giantorenzo. (2019). Venous Thromboembolism Following Thyroid Surgery. Journal of Endocrine Surgery. 19. 151. 10.16956/jes.2019.19.4.151.
- Mlaver, E. and J. Sharma, *Which Procedures Contribute Most to the System-Wide Burden of Postoperative Venous Thromboembolism?* Am Surg, 2023. **89**(9): p. 3727-3731.
- Ramanathan, R., et al., *Correlation of venous thromboembolism prophylaxis and electronic medical record alerts with incidence among surgical patients*. Surgery, 2016. **160**(5): p. 1202-1210.
- Eck, R.J., et al., *Anticoagulants for thrombosis prophylaxis in acutely ill patients admitted to hospital: systematic review and network meta-analysis*. BMJ, 2022. **378**: p. e070022. (LEVEL 1A)
- Monday, L.M., *Define, Measure, Analyze, Improve, Control (DMAIC) Methodology as a Roadmap in Quality Improvement*. Glob J Qual Saf Healthc, 2022. **5**(2): p. 44-46.
- Lee, C. H. A., Jia, X., Lipman, J. M., Lightner, A. L., Hull, T. L., Steele, S. R., & Holubar, S. D. (2021). Defining the Economic Burden of Perioperative Venous Thromboembolism in Inflammatory Bowel Disease in the United States. *Diseases of the colon and rectum*, 64(7), 871-880. <https://doi.org/10.1097/DCR.0000000000001942>

Improvements in Reducing Door-to-Needle Times and Obtaining an Accurate Weight for Acute Stroke Thrombolysis in the UCH ED

Stephanie Cox MS APRN AGCNS-BC, Heather Bina BSN RN SCR N MSC, Brandy Ravare BSN RN SCR N, Kerri Jeppson BSN RN SCR N ACS-BC and Sharon Poisson MD MAS

UCHealth Metro

UCH Stroke Program & Emergency Department

February 2025

Background & Stroke Facts

#1 cause of disability among adults in the US

795,000 americans each year suffer a stroke

40% are large vessel occlusion

#5 cause of death among adults in the US

KILLS 128,000 people a year. That's about one out of every 19 deaths

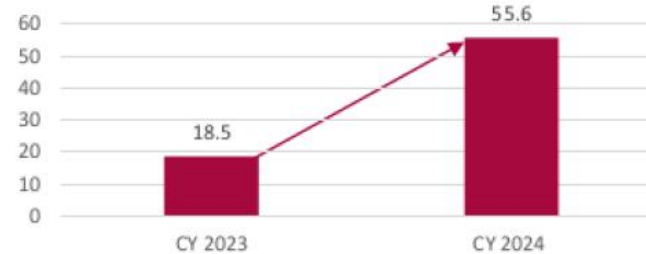
EVERY 40 SECONDS someone has a stroke

- National guidelines recommend thrombolysis for acute ischemic stroke in less than 30 minutes for > 50% of patients of their Emergency Department arrival to improve their outcomes²
- In calendar year 2023, we administered thrombolytics within 30 minutes only 18.5% of the time (as per our GWTG/ Get With The Guidelines® data registry) and lacked a standardized method to obtain an accurate weight in the ED for this weight-based drug

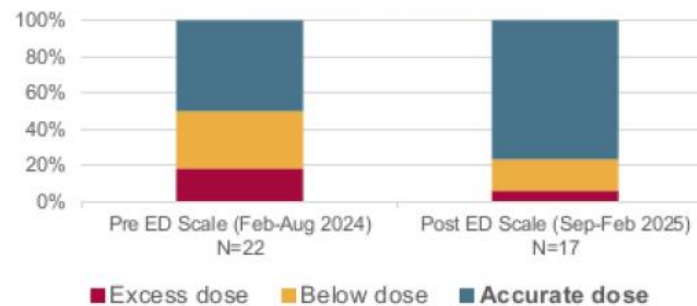
Results

- Using quality improvement techniques, we streamlined the communication and decision-making process in an ED stroke alert and implemented a new scale outside the Emergency Department CT scanners through the support of ED Leadership
 - Improved percentage of patients receiving thrombolysis in 30 minutes to **55.6%** for the year
 - Improved accuracy of TNK dosing by providing a process for an accurate weight for the time period after scale installation

% Patients DTN ≤ 30 minutes as per GWTG Data



Accuracy of TNK Dose (per weight-based guidelines) Pre and Post ED Scale Install



Purpose

The purpose of this quality improvement project was to improve the percentage of patients receiving thrombolysis in 30 minutes (door-to-needle/DTN) and monitor the accuracy of Tenecteplase® dosing based on patient weight within the ED via the new scale

Method

- Population: UCH Emergency Department Acute Ischemic Stroke patients that received IV Tenecteplase® (TNK) during 2024
- Through chart abstraction & review DTN was calculated, and ED weights were compared to subsequent unit weights and tracked for accuracy according to TNK dosing guidelines; weights considered accurate if ED scale was used or chart review demonstrated an accurate weight based on charting

Implications

- Earlier treatment improves chance of recovery for acute ischemic stroke thrombolytic patients^{1,2,4}
- Studies have demonstrated that a 30-minute delay in treatment leads to 10% decrease in functional outcome at 90 days^{3,4}
- DTN < 30 minutes is associated with reduced length of stay³
- Faster DTN for patients also undergoing mechanical thrombectomy in Interventional Radiology is associated with more time at home (a meaningful patient outcome) & reduced mortality⁴
- American Heart Association's Target Stroke III initiative in 2019 sets a standard for thrombolysis in more than half of thrombolytic patients within 30 minutes. These improvements demonstrate safe and evidenced-based care for the acute ischemic stroke patient at UCH
- Obtaining an accurate weight via scale is achievable without delaying treatment⁵
- Opportunities for additional improvements include refinement of communications in the TNK huddle process and our Stroke Alert Epic secure chat & communication process

References

1. Tsao, C.W., Aday, A.W., Almarazooq, Z.I., Anderson, C.A.M., Arora, P., Avery, C.L., Baker-Smith, C.M., Beaton, A.Z., Boehme, A.K., Buxton, A.E., Commodore-Mensah, Y., Elkind, M.S.V., Evenson, K.R., Eze-Niam, C., Fugate, S., Genesoro, G., Heard, D.G., Hiresmash, S., Ho, J.E., Kalani, R., Kazi, D.S., et al. on behalf of the American Heart Association Council on Epidemiology and Prevention Statistics Committee and Stroke Statistics Subcommittee. (2023). Heart Disease and Stroke Statistics—2023 Update: A Report From the American Heart Association. *Circulation*, 147:e93–e621. DOI: 10.1161/CIR.000000000000123. LOE: I
2. Martin, S.S., Aday, A.W., Almarazooq, Z.I., Anderson, C.A.M., Arora, P., Avery, C.L., Baker-Smith, C.M., Gibbs, B.B., Beaton, A.Z., Boehme, A.K., Commodore-Mensah, Y., Currie, M.E., Elkind, S.V., Evenson, K.R., Genesoro, G., Heard, D.G. et al. (2024). Heart Disease and Stroke Statistics: A Report of US and Global Data From the American Heart Association. *Circulation*, 149(8), e347–e913. <https://doi.org/10.1161/CIR.0000000000001209> LOE: II
3. Rajan, S.S., Decker-Palmer, M., Wise, J., Dao, T., Salem, C., & Savitz, S.I. (2021). Beneficial effects of the 30-minute door-to-needle time standard for alteplase administration. *Annals of Clinical and Translational Neurology* 8(8): 1592–1600. Doi: 10.1002/acn3.51400. LOE: IV
4. Man, S., Solomon, N., Grory, B.M., Ahanli, B., Uchino, K., Saver, J., Smith, E.E., Xian, Y., Bhatt, D.L., Schwamm, L.H., Hussain, M.S., & Fonarow, G.C. (2023). Shorter door-to-needle times are associated with better outcomes after intravenous thrombolytic therapy and endovascular thrombectomy for acute ischemic stroke. *Circulation*, 148, 20–34. DOI: 10.1161/CIRCULATIONAHA.123.064053. LOE: IV
5. Ragochke-Schumm, A., Razuok, A., Lesmeister, M., Helwig, S., Grunwald, I.Q., & Fassbender, K. (2017). Dosage calculation for intravenous thrombolysis of ischemic stroke: To weigh or to estimate? *Cerebrovascular Diseases*, 7, 103–110. DOI: 10.1159/000474955. LOE: VI

Resources: UHealth Quality site on The Source

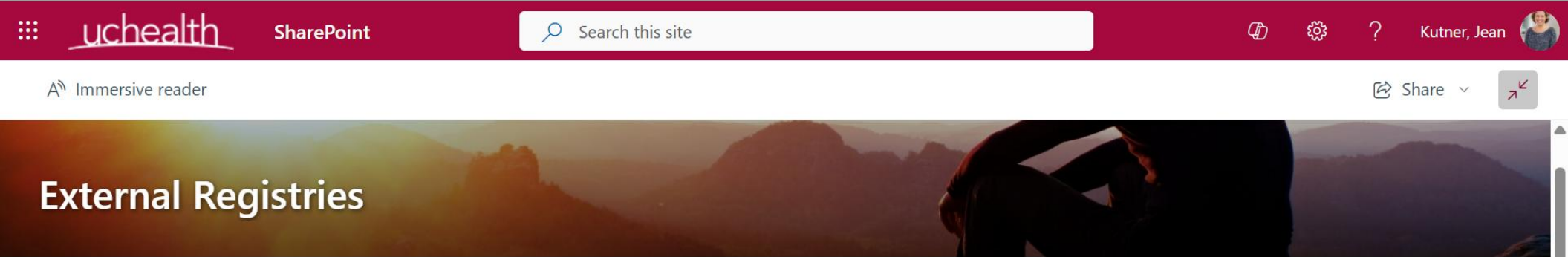
(accessible with cuanschutz or uhealth identities)

The screenshot shows the UHealth Quality site on The Source. The header is dark red with the UHealth logo, SharePoint branding, and a search bar. Below the header is a navigation bar with links like 'The Source', 'Find Resources', 'Clinicians', 'Cafes', 'Connect', 'Who We Are', 'Help Me With...', and 'My...'. The main content area is titled 'Quality' and includes a 'Following' indicator. A left sidebar contains a menu with items like 'Home', 'Clinical Quality - UCHe...', 'Patient Safety - UCHea...', 'Data & Dashboards', 'External Registries', 'Infection Prevention', 'Regulatory', 'Contact Us', 'Documents', and 'Document Library - So...'. The 'Data & Dashboards' and 'External Registries' items are circled in red. The main content area displays five red buttons: 'Clinical Quality', 'Data & Dashboards', 'Infection Prevention', 'Patient Safety', and 'Regulatory'. To the right, there is a 'Contacts & Resources' section with links for 'COGG-CEG Leadership', 'Region / Facility Contacts', 'File a Safety Report', 'Accessibility (ADA)', and 'Interpreter Services'.



Resources: UCHealth Quality site on The Source

(accessible with cuanschutz or uchealth identities)



Vision

Single source of truth for quality through **common definitions and metric methodology**

- Collaborate with clinical teams to develop and deliver actionable data to region and system level groups to identify opportunities and support actionable work
- Develop tools and dashboards capable of supplying timely feedback to improve outcomes

Do you have a novel registry request? Check out the inventory below to see what already exists.

The image shows a screenshot of a SharePoint list table. The table has two columns, C and D. Row 59 contains the text 'A Prospective Registry Study to Evaluate the Effect of the DCISionRT Test on Treatment Decisions in Patients with DCIS Following Breast Conserving Therapy' in column C and 'Approved (Not Expiring)' in column D. Row 60 contains 'Colorado Ocular Inflammatory Disease Registry' in column C and 'Approved (Not Expiring)' in column D. The table is part of a 'Summary List' titled 'Registry Steer'. At the bottom right of the table, there is a double square icon for expanding the view.

Select bottom right double square icon to expand view.



Resources: UCHealth Research Administration site on The Source

(accessible with cuanschutz or uchealth identities)

The screenshot shows the UCHealth Research Administration site on The Source. The top navigation bar includes the UCHealth logo, SharePoint, a search bar, and user information for Jean Kutner. The main navigation menu includes 'The Source', 'Find Resources', 'Clinicians', 'Cafes', 'Connect', 'Who We Are', 'Help Me With...', and 'My...'. The site title is 'RA Research Administration' with a 'Not following' indicator. The left sidebar contains a list of navigation items: Home, Help and Contacts, Connect with us, Study Start up, Amendments, **EHR-Embedded Res...** (circled in red), Enterprise Architect..., External Registry, Facility Review, and Facility Review FAQs. The main content area features a vision statement: 'Our Vision: UCHealth Improves Lives Through Transformational Health Research'. Below this is a grid of 12 resource tiles: RECRUIT Tools, Medicare Coverage..., Research Pricing, UCHealth Clinical..., Onboarding &..., Language Proficiency..., Epic Tools, Data Capture in Epic, Letters of..., EHR Access..., Operational..., and Investigations. The right sidebar lists resources: Contact Us (Email us at UCH-ResearchAdmin@uchealth.org), Research Administration Contacts, Systemwide Research Collaboration, and UCHealth Fact Sheet FY2023.



Resources: UCHealth Research Administration site on The Source

(accessible with cuanschutz or uchealth identities)

The Source Find Resources Clinicians Cafes Connect Who We Are Help Me With... My...

RA Research Administration Not following

Home Immersive reader Share

Help and Contacts

> Connect with us

> Study Start up

Federally funded grant...

Letters of Support

> Onboarding

> RECRUIT

> OnCore

> Epic

EHR-Embedded Research

Lively, Kelly A
Program Manager IT

What types of requests should be submitted through this process?

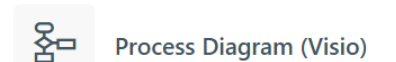
Projects that involve...

- EHR-embedded applications
- Integrations
- Interfaces
- Devices that collect protected health information (PHI)
- Devices that need to connect to the UCHealth network
- Patient or provider-facing tools
- Artificial intelligence
- Customizing native Epic functionality for research use unless excluded below

Whether you're seeking an LOS for a grant, or you're ready to get started on your project, kick off the process by submitting a request!

[Submit a Request](#)

Resources

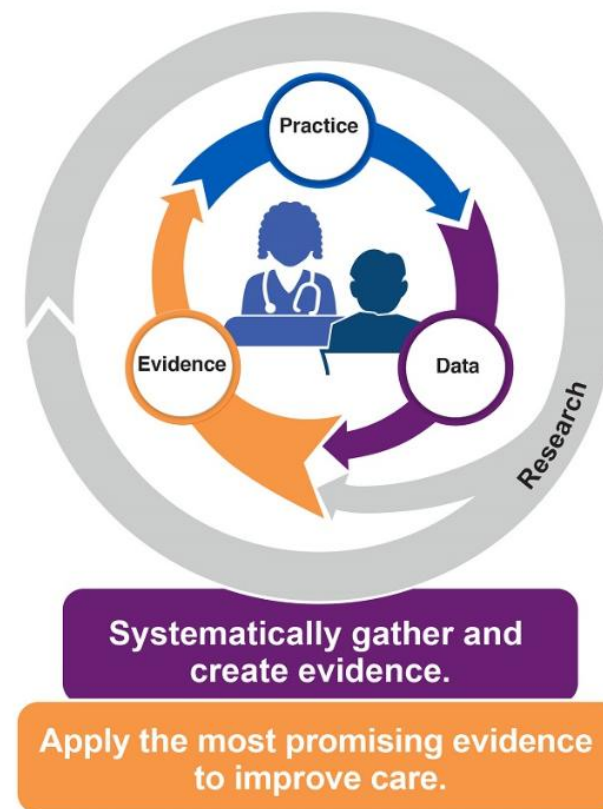


Summary – where is UHealth on the learning health system journey?

Using the AHRQ definition...

- ✓ Have leaders who are committed to a culture of continuous learning and improvement.
- ✓ Systematically gather and apply evidence in real-time to guide care.
- ✓ Employ IT methods to share new evidence with clinicians to improve decision-making.
- ✓ Promote the inclusion of patients as vital members of the learning team.
- ✓ Capture and analyze data and care experiences to improve care.
- ✓ Continually assess outcomes refine processes and training to create a feedback cycle for learning and improvement.

Learning Health Systems



Envisioned Future



Enhanced alignment and collaboration between clinical and research missions with clinical care informing research and research informing clinical care



Integrated feedback cycles to continually assess outcomes and inform learning and improvement



Aligned structures, governance and resources to prioritize and facilitate projects across the quality improvement – research continuum

Discussion

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