

Caroline Hesko
CURRICULUM VITAE

Position: Assistant Professor
Department of Pediatrics Division of Hematology and Oncology

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EDUCATION

Year	Institution	Degree	Area of Degree, Accolades
2016-2019	University of Chicago, Comer Children's Hospital Chicago, IL	Fellow	Pediatric Hematology/Oncology/Stem Cell Transplant
2012-2015	Rainbow Babies and Children's Hospital Cleveland, OH	Resident	Pediatrics
2008-2012	Tufts University School of Medicine Boston, MA	MD	
2006-2008	Tufts University School of Medicine Boston, MA	MPH	Nutrition
2002-2006	Loyola University Maryland Baltimore, MD	BS	Biology/Philosophy interdisciplinary, Cum Laude, Tri Beta Society, Phi Sigma Tau

LICENSES, CERTIFICATION

Years	License/Certification
2024-present	Medical Licensure, New York
2020-present	Fellow, American Board of Pediatrics Hematology Oncology
2019-present	Medical Licensure, Vermont
2016-2019	Medical Licensure, Illinois
2015-present	Diplomat, American Board of Pediatrics
2012-2016	Medical Licensure, Ohio

FACULTY POSITIONS HELD

Years	Institution	Academic Title	Department
2019-present	University of Vermont Larner College of Medicine, Burlington	Assistant Professor	Pediatrics
2018-2019	University of Chicago Pritzker School of Medicine, Chicago	Clinical Associate	Pediatrics
2015-2016	Case Western Reserve School of Medicine, Cleveland	Clinical Instructor	Pediatrics

OTHER POSITIONS AND MAJOR ADMINISTRATIVE POSITIONS HELD

Years	Location/Program Name	Role
2022-present	Golisano Children's Hospital at University of Vermont Health	Director of Patient Safety

HONORS AND AWARDS

Year	Name of Award
2002-2004	Fish Foundation Academic Merit Scholarship
2006	Cum Laude, Loyola University Maryland
2006	Tri Beta Society, Loyola University Maryland
2006	Phi Sigma Tau, Loyola University Maryland
2019	Conquer Cancer Merit Award: The American Society of Clinical Oncology Foundation
2019-2020	Larner College of Medicine, professionalism accolade; 1
2020-2021	Larner College of Medicine, professionalism accolade; 7
2021-2022	Larner College of Medicine; professionalism accolade; 1
2025	Jerold and Ingela Lucey Early Career Investigator Prize for Innovations in Infant or Child Health at Larner College of Medicine
2025	Pediatric Attending of the Year; UVM Children's Hospital

KEYWORDS/AREAS OF INTEREST

Pediatric oncology, pediatric hematology, supportive care, quality improvement and safety, survivorship, painful procedures, Adolescent and Young Adult (AYA) oncology

SUMMARY OF PROFESSIONAL ACTIVITIES- OVERALL

I joined the faculty at the University of Vermont (UVM) in September 2019 after completing my pediatric hematology oncology fellowship training at the University of Chicago. My primary responsibilities are clinical (50%), quality improvement/safety related (35%), research/scholarship (10%), and teaching (5%). Clinical responsibilities include attending on the inpatient pediatric hematology oncology service and providing inpatient consultations (13 weeks/year) and outpatient clinic (1 day/week).

Local: Quality Improvement and Safety: I serve on or chair numerous committees at the University of Vermont Medical Center (UVMHC) and the UVM Children's Hospital (UVMCH) and I develop and manage quality improvement projects. In 2020, I received a grant from the Children's Miracle Network to lead the work transitioning our chemotherapy ordering from a paper system to an electronic one. In 2022, I was appointed Director of Patient Safety for the Children's Hospital. In this role I collaborate with the UVMHC safety team and work in multiple interdisciplinary teams to address safety issues affecting our pediatric patients. I have created multiple institutional policies that are specific to pediatric patients so that they are not treated as "small adults". For example, our Pediatric Stroke Protocol uses MRI as first line imaging instead of CT to avoid radiation exposure. As the lead of the Pediatric Medication Safety Committee, I work with pharmacists, nurses and patient family advisors to ensure that best practices are being implemented and followed. This has resulted in the creation of pediatric specific order sets and clinical practice guidelines.

National: I am the UVMHC lead for our work with the leading national pediatric safety organization, Solutions of Patient Safety (SPS) including our work as part of the central line associated bacterial infection (CLASBI) pediatric hematology oncology pioneer cohort. In 2023, I received grant funding from the Children's Miracle Network to hire a dedicated pediatric safety nurse coordinator to support our SPS work that focuses on hospital acquired conditions such as peripheral IV infiltrates as well as proactive safety interventions and culture change. Nationally, I was selected to lead a pilot multi-institutional quality improvement learning collaborative to increase clinical trial enrollment for adolescent and young adult (AYA) cancer patients, AYA Trial Access Quality Initiative (ATAQI). This initiative was conducted through the Children's Oncology Group (COG), a member of the National Cancer Institute (NCI) national clinical trials network (NCTN). Through my leadership in conducting this work, I was appointed to the COG AYA Steering Committee. My work and collaboration within this group will result in multiple publications and future multi-site QI projects.

My current teaching activities include supervising residents and medical students during my inpatient service weeks and during their pediatric hematology oncology rotation/elective. I serve as a preceptor for the Larner College of Medicine Professional, Communication, and Reflection (PCR) courses which run from first to third year of medical school. As part of this work, I am also my students' advisor. As Director of Patient Safety for UVMCH I co-lead our pediatric morbidity and mortality conferences.

SUMMARY OF ACCOMPLISHMENTS

- I am one of four pediatric hematology oncologists serving pediatric patients with hematologic and oncologic diseases from Vermont and upstate New York
- I am a board-certified pediatric hematologist oncologist
- I have published six peer reviewed articles and two book chapters

- I have presented abstracts at 5 national hematology/oncology meetings
- I received the Conquer Cancer Merit Award: The American Society of Clinical Oncology Foundation as a fellow in 2019.
- I received a 100K grant from the Children's Miracle Network to support transitioning from paper to electronic chemotherapy ordering (2020-2025)
- I presented quality improvement work focused on food insecurity at the premier annual national quality conference, Institute for Healthcare Improvement (IHI) Annual Conference 2021
- I was appointed Director of Patient Safety for UVM Children's Hospital (2022)
- I lead the ATAQI quality improvement collaborative pilot study in collaboration with the Children's Oncology Group (2023-2025) and received Northern New England Clinical Oncology Society (NNECOS) Research Grant to aid in this work.
- I received the Jerold and Ingela Lucey Early Career Investigator Prize for Innovations in Infant or Child Health (aka "The Lucey Prize") for the ATAQI initiative
- Growing a reputation as a leader in pediatric safety and quality improvement with a focus on systems improvement at the intersection of pediatric and adult health care which recently lead to being asked to moderate a learning session at the Solutions for Patient Safety (SPS) annual national meeting (2025)

PROFESSIONAL SERVICE**DEPARTMENTAL SERVICE**

Years	Department	Committee	Role
2019-present	Pediatrics	Hem/Onc Quality Committee	Chair
2019-present	Pediatrics	Discharge Standardization Committee	Member
2019-present	Pediatrics	Pediatric Pain Prevention Committee	Member
2019-present	Pediatrics	Pediatric Stroke Committee	Member
2020-present	Pediatrics	Baird 5 Quality Committee	Member
2022	Pediatrics	Pediatric Vice Chair of Research Search Committee	Member
2022-present	Pediatrics	Maintenance of Certification Committee	Member
2022-present	Pediatrics	Pediatric Morbidity and Mortality Conference	Co-lead
2024-present	Pediatrics	Pediatric Technology Workgroup	Member

COLLEGE SERVICES

Years	Service Committee	Role
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MEDICAL CENTER SERVICE

Years	Service Committee	Role
2019-present	UVMHC Safety Adjudication Committee	Member
2019-present	Pediatric Medication Safety Committee	Physician lead
2019-present	Transfusion Medicine Committee	Member
2019-present	UVMCH Quality Program Team	Member
2019-present	UVMCH Quality Council	Member
2019-present	Pediatric Population Health Coalition	Member
2020-present	Solutions of Patient Safety (SPS) Committee	Site lead
2021 and 2024	Central venous catheter care and maintenance policy	Reviewer
2021-2023	SPS CLABSI Hem-Onc Pioneer Cohort	Lead/Chair
2022-2024	Oncology QI committee	Member
2022-present	UVMHC Medical Staff Quality Committee	Member
2023-present	UVM Health Network Safety Adjudication Committee	Member
2024	Blood administration policy-pediatrics	Reviewer
2025	Neonatal Emergency Release Blood policy	Reviewer
2025-present	UVM Health Network Pharmacy and Therapeutics Hem/Onc subcommittee	Member

GOVERNMENT

Years	Service Committee	Role
2020-present	State of Vermont Newborn Screening Advisory Committee	Member

SOCIETY MEMBERSHIPS

2012-present	American Academy of Pediatrics
2016-2019	American Society of Clinical Oncology
2016-present	American Society of Hematology
2016-present	American Society of Pediatric Hematology Oncology
2016-present	Children's Oncology Group

2019-present Vermont Medical Society
 2020-present Pediatric Academic Societies

SERVICE TO PROFESSIONAL ORGANIZATIONS

2020 - 2025	Council On Quality Improvement And Patient Safety (Coqips) Program	Abstract reviewer
2021-present	AYA Responsible Investigator (RI) Network Clinical trial enrollment Working Group for Children's Oncology Group	Member
2023-present	Journal of Pediatrics	Ad-hoc reviewer
2023-present	Journal of Clinical Nursing	Ad-hoc reviewer
2023-present	Children's Oncology Group AYA Steering committee	Member
2023-present	Children's Oncology Group Responsible Investigator Network	Member/site lead
2025-present	American Society of Pediatric Hematology Oncology Practice Committee	Member
2025-present	BMC Cancer	Ad-hoc reviewer

SUMMARY OF SERVICE ACTIVITIES

I serve as attending physician in the pediatric hematology oncology outpatient clinic 1 day per week. I attend on the pediatric hematology oncology inpatient service for 13 weeks a year. While serving as the pediatric hematology oncology inpatient attending, I supervise 3-5 residents and 5-7 medical students each month.

Quality Improvement: I serve on numerous committees and am involved in several specific projects. I was instrumental in establishing the University of Vermont Health Network (UVMHN) Pediatric Population Health Coalition whose mission is to bring together major stakeholders from within the medical network as well as community partners across the state of Vermont to address specific needs of our patients and families. Our work on food insecurity was presented at the Institute for Health Improvement (IHI) annual national conference in 2021. In 2024, based on the food insecurity work, I helped create an electronic educational module on health-related social needs that can be used by all employees across our six health network hospitals in Vermont and New York.

In 2022, I was appointed the Director of Patient Safety for the Children's Hospital. In this role, I function as a safety liaison between the outpatient and inpatient services as well as between the UVM Children's Hospital, UVM Medical Center and UVM Health Network. In 2023 I received a 100K grant from the Children's Mircle Network to create a pediatric safety nurse coordinator position to expand our safety work. Over the past two years we have implemented multiple interventions to improve our process and outcomes measures for different hospital acquired conditions. For example, it is best practice to use a standardized central line dressing kit to decrease central line infections. However, we did not have a pediatric specific kit, which resulted in low compliance in using the kit. Working with nursing and provider stakeholders and our hospital vendor, we created a pediatric specific central line dressing kit that meets the needs of our patient population. Prior to our team creating and implementing new central line dressing kits, there was only 67% compliance in ensuring that the dressing was intact, which has increased to 100% with the new dressing kit. In addition, we have been able to decrease

our peripheral intravenous infiltrate and extravagation (PIVIE) rate from 13.1 to 5.57 over the past year.

National: I lead our ongoing work with the principal national pediatric safety organization, Solutions for Patient Safety (SPS), which focuses on reducing harm caused by hospital acquired conditions. From 2021-2023, I led our efforts regarding reducing central line associated blood stream infections (CLABSI) in our pediatric oncology patients as part of a SPS national pioneer cohort looking at interventions to decrease CLABSI rates.

National: Through collaboration with the Children's Oncology Group (COG) and the COG adolescent and young adult (AYA) Responsible Investigator (RI) Network, I lead a national multi-institutional quality improvement learning collaborative to increase clinical trial enrollment in adolescent and young adult cancer patients, AYA Trial Access Quality Initiative (ATAQI). I am also a member of the Children's Oncology Group AYA Steering Committee which leads initiatives for this population as it pertains to COG clinical trials and research. In 2025 I was selected to be a member of the American Society of Pediatric Oncology (ASPHO) Practice Committee and will serve a two-year term. The Practice Committee serves the critical role of gathering and disseminating information regarding practice challenges and trends within pediatric hematology/oncology, including compensation, productivity, workforce issues, and quality improvement to pediatric hematologists-oncologists around the country. As a member of this committee, I bring the important perspective of practicing at a small program that serves a mostly rural community.

TEACHING

FORMAL SCHEDULED COURSES

Year	Course Title	Course R	E	Hours	Number of Learners	Learner Level
2019	Pediatric Professor Rounds: Oncologic Emergencies	x		1	~24	PGY1-3
2020	Pediatric Professor Rounds: ITP	x		1	~24	PGY1-3
2020	Pediatric Professor Rounds: Questions for your hematologist	x		1	~24	PGY1-3
2020	Pediatrics: PED-1008 - Pediatrics Reading Month		x	10	1	MS4
2020	Doctoring in Vermont	x		16	1	MS1
2020	Doctoring in Vermont	x		16	1	MS1
2020	Emergency Medicine Didactic: Pediatric Oncologic Emergencies	x		1	~24	PGY1-3
2020-21	Professionalism, Communication & Reflection 1 111111111Foundations	x		45	7	MS1
2020-21	Professionalism, Communication & Reflection 2	x		15	7	MS2
2021	Doctoring in Vermont	x		16	1	MS2
2021	Pediatric Hematology Oncology Bootcamp		x	1	~12	MS4
2021	Attacks and Defenses Small group: Thrombosis	x		2	10	MS1
2021	Attacks and Defenses Small group: Anemia	x		2	10	MS1
2021-22	Professionalism, Communication & Reflection 2	x		15	7	MS2
2022	Pediatric Hematology Oncology Bootcamp		x	1	~12	MS4
2022	Attacks and Defenses Small group: Anemia	x		2	10	MS1
2022	Doctoring in Vermont	x		16	1	MS1
2022	Pediatric Professor Rounds: SAFE reports	x		1	~24	PGY1-3
2022	Pediatric Professor Rounds: Oncologic Emergencies	x		1	~24	PGY1-3
2022	Pediatric Professor Rounds: Lymphoma	x		1	'24	PGY1-3
2022	Pediatric Professor Rounds: Patient Safety	x		1	~24	PGY1-3
2022	Pediatric Professor Rounds: Blood transfusion reactions	x		1	'24	PGY1-3
2022	Pediatric Morbidity and Mortality conference	x		1	~30	PGY1-3
2022-23	Professionalism, Communication & Reflection 1	x		45	8	MS1

2022-23	Professionalism, Communication & Reflection 3	x		12	7	MS3
2023	Doctoring in Vermont	x		16	1	MS1
2023	Pediatric Morbidity and Mortality conference	x		1	~30	PGY1-3
2023	Pediatric Morbidity and Mortality conference	x		1	~30	PGY1-3
2023	Pediatric PGY2 retreat: Career Panel	x		1	6	PGY2
2023	Pediatric Professor Rounds: Neuroblastoma	x		1	24	PGY1-3
2023	Pediatric Hematology Oncology Bootcamp		x	1	~12	MS4
2023	Pediatric Student Interest Group: Being a Pediatric Oncologist		x	1	~8	MS1-2
2023-24	Professionalism, Communication & Reflection 2	x		15	8	MS2
2024-25	Professionalism, Communication & Reflection 3	x		12	8	MS3
2024	Attacks and Defenses Small group: Thrombosis	x		2	10	MS1
2024	Pediatric Hematology Oncology Bootcamp		x	1	12	MS4
2024	Pediatric Professor Rounds: Oncologic Emergencies	x		1	~24	PGY1-3
2024	Pediatric Morbidity and Mortality conference	x		1	~30	PGY1-3
2024	Pediatric Morbidity and Mortality conference	x		1	~30	PGY1-3
2024	Pediatric Student Interest Group: Being a Pediatric Oncologist		x	1	~12	MS1-2
2024-25	Professionalism, Communication & Reflection 1	x		45	8	MS1
2024	Healer's Art facilitation: Grief	x		1	~24	PGY1-3
2025	Pediatric Hematology Oncology Bootcamp		x	1	~12	MS4
2025	Pediatric Resident Academic Half Day: Thrombocytopenia	x		1	~24	PGY1-3
2025	Attacks and Defenses Small group: Anemia	x		2	10	MS1
2025	Pediatric Resident Academic Half Day: Hematologic/Oncologic emergencies	x		1	~30	PGY1-3
2025	Pediatric Morbidity and Mortality conference	x		1	~30	PGY1-3
2025	Pediatric Resident Academic Half Day: IV infiltrates and extravasations	x		1	~30	PGY1-3

CURRICULUM DEVELOPMENT

Pediatric Hematology Oncology Bootcamp: In 2021, I revised the hematology oncology session given to graduating fourth year medical students who will be starting their pediatric residency. The session includes pre-work questions and case based clinical vignettes on the presentation and management of common pediatric hematologic and oncologic emergencies.

University of Vermont Health Network Health-Related Social Needs Educational Module: In 2024, I created an online course for all employees regarding screening for health-related social needs of children and adults throughout our health network of six hospitals in Vermont and New York.

POSTGRADUATE AND OTHER COURSES

Years

Department

Responsibility

PREDOCTORAL STUDENTS SUPERVISED OR MENTORED

Dates	Name	Program School	Role	Current Position
2020-21	Kaileen Cruden	LCOM	Career advisor	M3
2020-21	Samantha Schuetz	LCOM	Career advisor	PGY3 BI Deaconess Hospital, MA
2020-21	Andrew DesLauriers	LCOM	Career advisor	PGY3 Stanford Health Care, CA
2020-21	Sam Short	LCOM	Career advisor	PGY3 U North Carolina, Chapel Hill
2020-21	Elizabeth Barker	LCOM	Career advisor	PGY3 Northwestern McGaw

2020-21	Megan Eubank	LCOM	Career advisor	PGY3 Univ Connecticut
2020-21	Dinkar Ahuja	LCOM	Career advisor	PGY3 Loyola Univ Med Ctr, IL
2020-2023	Christina Cobb	LCOM	Career advisor	PGY2 Oregon Health & Science Univ
2020-2023	Arley Donovan	LCOM	Career advisor	PGY2 UMass Medical Center
2020-2023	Heather Giguere	LCOM	Career advisor	PGY1 Brown University
2020-2023	Arjune Nibber	LCOM	Career advisor	PGY2 UC San Diego Med Ctr
2020-2023	Brian Shaw	LCOM	Career advisor	PGY2 UMass Medical Center
2020-2023	Aathman Swaminathan	LCOM	Career advisor	PGY2 UVM Health Network CVPH
2020-2023	Ryan Warner	LCOM	Career advisor	PGY2 UVM Medical Center
2022-2024	Haziq Aziz	LCOM	Career advisor	M4
2022-pres	Kyle Gorman	LCOM	Career advisor	M4
2022-2024	Sarah Kohl	LCOM	Career advisor	M4
2022-2024	Taylor Lamarre	LCOM	Career advisor	M4
2022-2024	Wendy Menishaian	LCOM	Career advisor	M4
2022-2024	Casey Norton	LCOM	Career advisor	M4
2022-2024	Muhammad Zeb	LCOM	Career advisor	M4
2023-2024	Adam Thompson	LCOM	Career advisor	M4
2023-pres	Shrey Patel	LCOM	Mentor	M4
2024-pres	Zaafir Hyder	LCOM	Career advisor	M2
2024-pres	Amin Rasheed	LCOM	Career advisor	M2
2024-pres	Jackson Lyttleton	LCOM	Career advisor	M2
2024-pres	Joseph Young	LCOM	Career advisor	M2
2024-pres	Nathaniel Roede	LCOM	Career advisor	M2
2024-pres	Sofia Leusch-Carnaroli	LCOM	Career advisor	M2
2024-pres	Jessica Gagne	LCOM	Career advisor	M2
2024-pres	Mirella Fernandez	LCOM	Career advisor	M2
2025	Sarah Caffry	LCOM	Ped Prof rounds mentor	M4

POSTDOCTORAL FELLOWS AND RESIDENTS DIRECTLY SUPERVISED OR MENTORED

Dates	Name	Fellow	Faculty Role	Current Position
July 2020-2023	Jacqueline Baca	UVM pediatric resident	Personal advisor	PGY-6 PEM fellow Rainbow Babies

INFORMAL TEACHING

Year	One Sentence Description of Teaching
2019-present	I provide numerous and frequent “curbside consults” to trainees and other physicians throughout the year. These serve as active learning opportunities. This includes informal consults from general pediatricians around Vermont and upstate New York.

TEACHING AIDS

TEACHING AWARDS AND NOMINATIONS

2019-2020 Larner College of Medicine Professionalism Accolade (1)

“Dr. Caroline Hesko, Pediatric Heme/Onc Attending - held me to a high standard and expected the best out of us as med students. She did that in a supportive way and I felt so much stronger and knowledgeable after my week with her.”

2020-2021 Larner College of Medicine Professionalism Accolade (7)

"I think Dr. Hesko did an excellent job at PCR preceptor. She facilitated great discussion and allowed PCR to be a place for reflection, development and also a place where students could feel comfortable expressing their opinions."

"Took our group into her hands after our original PCR leader had to leave. She was excellent and supportive"

"I am recognizing Dr. Hesko because to me she maintained the utmost professional behavior in the learning environment and understood the struggles and issues I and others were having while acknowledging them and giving advice on how to work through them."

"Dr. Hesko was awesome throughout the entire course and always treated us with the utmost professionalism, took our concerns and suggestions seriously, and worked like a colleague with us and not as a higher up facilitator that was grading us which made the learning environment great."

"Was a fantastic preceptor and mentor."

"Dr. Hesko created a welcoming and supportive environment for our group"

"Dr. Hesko went out of her way to show that she cares about us and our educations. Despite her schedule, she was readily available outside of class for advising."

2021-2022 Larner College of Medicine Professionalism Accolade (1)

"Dr. Hesko has been an incredible mentor and support not only in PCR but for guidance in school and helping ease the nerves of moving into rotations."

2024-2025 University of Vermont Children's Hospital Pediatric Attending of the year; selected by pediatric residents out of 80 pediatric attendings

SUMMARY OF TEACHING ACTIVITIES

While on service, I provide daily lectures on general pediatric hematologic and oncologic topics. I present at resident teaching sessions 2-3 times per year on hematology/oncology topics and an additional 1-2 times per year on safety and quality. I co-lead our pediatric morbidity and mortality conference. I work with 3-4 senior residents a year to present a case at this interprofessional conference to address system level quality and safety issues.

My teaching activities at the medical school level include leading small groups during first year student's Attack and Defenses course. Since 2020 I have been a preceptor for the Professionalism Communication and Reflection course for first, second, and third-year medical students. Through this course, I facilitate weekly (M1) and monthly to bi-monthly sessions (M2 and M3). In this role, I also serve as their advisor until they have declared a specialty advisor in their third year. For 2024-2025, I will be precepting M1 and M3 sessions. Most years, 1-2 Doctoring in Vermont students per year work in clinic with me as either first- or second-year medical students. This course is their introduction to clinical care. Starting in 2021, I took over leading the hematology and oncology session during Pediatric Bootcamp for fourth year medical students who will be starting pediatric residency. I created a new case-based curriculum with a focus on oncologic and hematologic emergencies.

The UVM Children's Hospital pediatric residents selected me as Pediatric Attending of the Year in 2025 as recognition of my commitment to their education and training.

RESEARCH AND SCHOLARLY ACTIVITIES

RESEARCH AWARDS AND GRANTS**Ongoing Research Support**

Children's Miracle Network Hospitals Fund Grant

2020-2025

Pediatric oncology transition to BEACON

Goal: Transition pediatric chemotherapy paper ordering to electronic ordering in the BEACON Epic System.

Role: PI

Award: \$100,000

NNECOS Research Grant

2022-2024

Improving Adolescent and young adult cancer clinical trial enrollment through improvement science: a pediatric and medical oncology partnership

Goal: Support project management and data analysis for AYA Trial Access Quality Initiative (ATAQI)

Role: Co-PI

Award: \$9,200

Children's Miracle Network Hospitals Fund Grant

2023-2025

Pediatric Safety Nurse Coordinator

Goal: Creation of a dedicated pediatric safety nurse coordinator role to lead Solution for Patient Safety work at UVMCH

Role: PI

Award: \$100,000

Unfunded Research

Pediatric Oncology COVID Case (POCC) Report Consortium

2020-2023

Goal: Multi-institutional observational study that collected data in childhood, adolescent and young adult (CAYA) oncology patients on demographics, diagnosis, stage of treatment, degree of myelosuppression, symptom presentation, severity of disease, COVID-19 directed treatment and impact on cancer care.

Role: UVM Children's Hospital Site PI

Hematology care for pediatric and young adult patients receiving gender-affirming care

2024-present

IRB# 0003011

Goal: Collaboration with Dartmouth Health Children's to review hematologic referrals and venous thrombosis in pediatric and young adult patients receiving gender affirming care at our centers

Role: Co- PI

SCHOLARSHIP**Peer Reviewed Publications**

Original Research

1. Woz S, Mitchell S, **Hesko C**, Paasche-Orlow M, Greenwald J, Chetty VK, O'Donnell J, Jack B. Gender as a risk factor for 30 days post discharge hospital utilisation a secondary data analysis. *BMJ Open* 2:e000428, 2012
2. Johnston E, Martinez I, Davis E, Caudill C, Richman J, Brackett J, Dickens D, Kahn A, Schwalm C, Sharma A, Patel P on behalf of the POCC Consortium, Bhatia S, *Levine J, *Wolfson J (*co-senior authors). SARS-CoV-2 in Childhood Cancer in 2020: A Disease of Disparities. (**Hesko, C**, Member of POCC Consortium) *J Clin Oncol*. 2021 Dec 1;39(34):3778-3788. Epub 2021 Oct 25. PMID: PMC8608263
3. **Hesko C**, Nupur M, Avutu V, Thomas S, Health J, Roth M. Creation of a quality improvement collaborative to address adolescent and young adult cancer clinical trial enrollment: ATAQI (AYA Trial Access Quality Initiative). *Curr Probl Cancer*. 2022 Sep 28:100898. doi: 10.1016/j.crrproblcancer.2022.100898. Epub ahead of print. PMID: 36207194
4. **Hesko C**, Liu W, Srivastava K, Brinkman TM, Diller L, Gibson T, Oeffinger K, Leisenring W, Howell R, Armstrong GT, Krull K. Neurocognitive outcomes in adult survivors of neuroblastoma: A report from the Childhood Cancer Survivor Study. *Cancer*. 2023 May 18. doi: 10.1002/cncr.34847. Epub ahead of print. PMID: 37199722.
5. Martin SD, Davis ES, Dai C, et al. Clinical Features and Risk Factors Associated With Multisystem Inflammatory Syndrome in Children With Cancer and COVID-19. (**Hesko, C**, Member of POCC Consortium) *JAMA Oncol*. Published online May 11, 2023. doi:10.1001/jamaoncol.2023.0525
6. **Hesko C**, Heath J, Roth ME, Mittal N. Sharing is caring: a network collaborative approach to identify and address barriers in accessing clinical trials in adolescents and young adults with leukemia and lymphoma. *Hematology Am Soc Hematol Educ Program*. 2024 Dec 6;2024(1):27-33. PMID: 39643982.

In ReviewIn Preparation

Let's get talking: Using quality improvement science to improve communication between adult and pediatric oncology, the ATAQI (AYA Trial Access Quality Initiative) pilot

Non-Peer Reviewed PublicationsBooks and Chapters

1. Jack B, Greenwald J, Forsythe S, O'Donnell J, Johnson A, Schipelliti L, Goodwin M, Burniske GM, **Hesko C**, Paasche-Orlow M, Manasseh C, Anthony D, Martin S, Hollister L, Jack M, Jhaveri V, Casey K, Chetty VK. Developing the Tools to Administer a Comprehensive Hospital Discharge Program: The ReEngineered Discharge (RED) Program. In: Henriksen K, Battles JB, Keyes MA, Grady ML, editors. *Advances in Patient Safety: New Directions and Alternative Approaches (Vol. 3: Performance and Tools)*. Rockville (MD): Agency for Healthcare Research and Quality (US); 2008 Aug.
2. Olsen K, **Hesko C**, Riney L. Essential Clinical Global Health. 1 ed. Nelson BD, editor. Oxford England: Wiley Blackwell; 2015. Chapter 34, Humanitarian assistance; p.437-451

Abstracts

1. Suh E, Owen E, Reich J, Roggenkamp B, Trosman J, Henderson TO, Mittal N, Dighe D, Igbal A, Berardi R, Choi D, Smiley N, **Hesko C**, Canner J, Stewart Z, Sanford S, Weldon C. "Getting to know you and your child" screening questionnaire: Results from a Chicago pediatric collaborative. American Society of Clinical Oncology Annual Meeting, Chicago, IL, 2018
2. **Hesko C**, Nishitani N, Alali M, Bartlett A, Cohn SL, Desai AV. Congenital cytomegalovirus induced microangiopathic hemolytic anemia in a neonate with neuroblastoma. Pediatric Research Day, University of Chicago Medicine, Chicago, IL, 2018
3. **Hesko C**, Liu W, Srivastava K, Brinkman TM, Diller L, Gibson T, Oeffinger K, Leisenring W, Howell R, Armstrong GT, Krull K. Neurocognitive outcomes in adult survivors of neuroblastoma: A report from the Childhood Cancer Survivor Study. American Society of Clinical Oncology Annual Meeting, Chicago, IL, 2019
4. **Hesko C**, Daughtery C, Drossos T, Henderson TO. Use of virtual reality during Mediport accessing in pediatric hematology oncology patients. American Society of Pediatric Hematology/Oncology Annual meeting, New Orleans, LA, 2019
5. **Hesko C**, Liu W, Srivastava K, Brinkman TM, Diller L, Gibson T, Oeffinger K, Leisenring W, Howell R, Armstrong GT, Krull K. Neurocognitive outcomes in adult survivors of neuroblastoma: A report from the Childhood Cancer Survivor Study. North American Symposium on Late Complications after Childhood Cancer. Atlanta, GA, 2019
6. **Hesko C**, Mittal N, Avutu V, Thomas S, Super L, Saha A, Kahn J, Heath J, Monga V, Roth M. Utilizing quality improvement methods to address and improve adolescent and young adult cancer clinical trial enrollment. Children's Oncology Group Fall Meeting. New Orleans, LA, 2022

Quality Improvement and Patient Safety Activities

Year	Headline Description
2017-2019	"Getting to know you and your child" implementation of a needs assessment screener in pediatric oncology patients; University of Chicago/Comer Children's Hospital
2019-present	Standardization of patient/family discharge instructions and education: Creating standardized instructions for common diagnoses and post-surgical management as well as nursing education provided to patients/families; UVMCH
2019-present	ChildKind Quality Initiative: Overall goal is to become a ChildKind certified hospital which is a distinction given to hospitals with a comprehensive approach and commitment to addressing pain; UVMCH
2019-present	Creation of a pediatric tPA protocol and stroke team; UVMCH
2019-present	Leveraging Community Partnerships to address food security: Pediatric Population Health Committee; UVMCH
2020-present	Transitioning pediatric chemotherapy orders from paper to electronic; UVMCH
2021-2023	Solutions for Patient Safety (SPS) CLASBI pediatric hematology oncology pioneer cohort; National
2021-2024	AYA Trial Access Quality Initiative (ATAQI) pilot; COG Responsible Investigator (RI) network; National
2024-present	HIT Process Improvement Workgroup; Creating new workflows, order sets, and laboratory monitoring for patients at risk for heparin induced thrombocytopenia; UVM Medical Center

SUMMARY OF SCHOLARLY ACTIVITIES

My scholarly focus centers on the effect and experience of medical treatment of patients and families. This includes the acute and long-term consequences of oncologic treatment as well as the interplay between the quality and safety of care delivered at the patient and systems level. My research career in pediatric oncology began during my Pediatric Hematology Oncology fellowship, where I conducted two research projects that laid the groundwork for my understanding of pediatric cancer survivorship and the role that alternative therapies can play in addressing treatment-related pain and anxiety. In the first project I worked with the Childhood Cancer Survivorship Study (CCSS) cohort data to examine the neurocognitive outcomes of neuroblastoma survivors. I had the privilege of being mentored by Dr. Tara Henderson who is a national expert in pediatric cancer survivorship. This project allowed me to collaborate with physician-scientists across the country and gave me access to a robust study cohort. Through this work I gained a deeper understanding of the interplay between treatment exposures, chronic disease, neurocognitive impairment, and the impact that impairment can have on a survivor's ability to thrive. My second project was a pilot feasibility study for the use of virtual reality during accessing of implanted ports (e.g. Port-a-Cath; Mediport) in pediatric patients with hematologic and oncologic disorders in the outpatient setting. This project looked at the acceptability of this technology by patients and clinical staff as well as the effect of virtual reality use on pain and anxiety regarding the procedure.

As a junior faculty member at the University of Vermont Children's Hospital my scholarly work has focused on quality improvement and safety. As part of an Improving Population Health Action Community team through the Institute for Healthcare Improvement (IHI) I was a member of the UVMCH leadership team that is working on improving food insecurity screening and interventions. In 2021 we shared our work at the national IHI annual meeting, and we continue to expand the scope and reach of our work to the rest of the UVM Health Network.

At a national level, I developed, designed and led a multi-institution quality improvement intervention to improve adolescent and young adult (AYA) clinical trial enrollment through work with the Children's Oncology Group (COG). The AYA Trial Access Quality Initiative (ATAQI) pilot enrolled 9 institutions from different states across the country to engage in a yearlong learning collaborative. I led our monthly calls and organized and planned our quarterly half-day learning sessions. This work has already resulted in two publications (invited reviews/educational articles) and multiple presentations on the national level, including an oral presentation at the 2023 and 2024 COG Annual Meetings. I am currently leading the primary data analysis and manuscript preparation.

My scholarly safety work centers around leading our hospital's Solutions for Patient Safety (SPS) work. SPS is the leading pediatric safety organization comprised of over 140 children's hospitals working together to eliminate harm across all children's hospitals. In 2021, I enrolled our hospital in a pioneer cohort through the SPS network examining interventions to improve central line associated bloodstream infection (CLABSI) rates in our pediatric hematology oncology patients. Our site chose the expanded central line discussion intervention, and, as part of this, I developed a data capture element within the provider's daily progress note that served as a reminder to have the discussion and to collect process data. Our use of the electronic medical record for central line process measurement collection was selected at the SPS New England Regional meeting in 2022 to be one of two regional interventions implemented over the next 2 years, demonstrating the regional recognition and impact of my

quality and safety efforts in CLABSI prevention. Through support from a Children's Miracle Network Grant, I established a 0.5 FTE position for a dedicated pediatric safety nurse coordinator. The establishment of this position has expanded our SPS work within the UVM Children's Hospital and across the entire health network.

INVITED PRESENTATIONS

Regional

Years	Host Organization	City, State
2018	UVMMC Pediatric Professor Rounds "Neuroblastoma"	Burlington, VT
2020	UVMMC Pediatric Grand Rounds "Sickle cell disease: Where have we been and where are we going"	Burlington, VT
2022	SPS Regional Fall Meeting-PDSA abstract presentation "Using EMR for process measure collection"	Hartford, CT
2022	UVMMC Pediatric Grand Rounds "Pediatric Population Health In Action: Leveraging Community Partnerships to Address Food Security and Promote Health Equity"	Burlington, VT
2023	UVMMC Pediatric Grand Rounds "The Intersection of Ethics, Law, and Regulations in Challenging Pediatric Cases"	Burlington, VT
2024	UVMMC Pediatric Grand Rounds "Second annual Challenging Pediatric Cases: The Intersection of Ethics, Law and Regulations"	Burlington, VT
2025	UVMMC Pediatric Grand Rounds "The Lucey Prize Grand Rounds: ATAQI pilot"	Burlington, VT
2025	SPS Regional Fall Meeting- "Regional Challenge Experience: Unplanned Extubation"	Boston, MA
2025	UVMMC Pediatric Grand Rounds "Third annual Challenging Pediatric Cases: The Intersection of Ethics, Law and Regulations"	Burlington, VT

National

Years	Host Organization	City, State
2021	Institute for Healthcare Improvement's 2021 Forum "Advancing Population Health: Leveraging Community Partnerships to Address Food Security & Loneliness"	Virtual (due to COVID19)
2022		New Orleans, LA

2023	Children's Oncology Group Fall meeting; Adolescent and Young Adult (AYA) Oncology Discipline Committee: AYA Clinical Trial Enrollment	Atlanta, GA
2024	Children's Oncology Group Fall meeting; AYA General Session: AYA Trial Access Quality Initiative (ATAQI) pilot AYA Responsible Investigator Network monthly webinar series: A multi-site quality improvement approach to improve AYA cancer clinical trial enrollment	Virtual (open to the 122 COG institutions in RI network)
2024	Children's Oncology Group Fall meeting; AYA General Session: AYA Trial Access Quality Initiative (ATAQI) pilot	New Orleans, LA
2025	Solutions for Patient Safety National Meeting; Approaches to Achieve Equitable Outcomes for All Children; session moderator	Chicago, IL