St. John Hospital Research Vitals



Ascension St. John Hospital

Ascension

May 2024

Volume 8, Issue 2

The end of the academic year is an exciting time for our residents, fellows and medical students, as well as for all of us who have had the opportunity to work with them. Our graduating trainees are moving on to new jobs or to fellowships and the other trainees are advancing to the next year of training. While it is sad to say good-bye to the residents and fellows who are leaving, I hope that they know that they will always be a part of the St. John Med Ed "family" and we will be here if they need us!

It is also an exciting time as we welcome a new class of residents, fellows and medical students. This year is particularly special as our new Anesthesiology residency begins in July.

Since May 8th, all of us have faced unique challenges in our daily work. Our residents and fellows have had to learn how we did things "back in the day"—on paper! Although the ransomware attack is devastating, just like during the pandemic, it has shown us how to be flexible, to develop solutions quickly and to adapt to rapidlychanging circumstances. Congratulations to all the Ascension associates who have worked so tirelessly to maintain operations and to keep their focus on the most important thing: safe patient care.

On behalf of the GME Research Department—me, Debbie, Karen, Shelby, Alice, Jeremy and Steve-we wish all of our graduating residents and fellows the best in their future endeavors. It has been a great pleasure to work with you!

Dr. Susanna Szpunar

Director, Biomedical Investigations and Research Susan.szpunar@ascension.org





Fast Stats

Measures of Association are values that show us the direction and strength of the association between a risk factor and a disease. There are several common measures of association that arise from different study designs.

Odds Ratio (OR): The Odds Ratio can be computed from any study design. It is the ratio of the odds of a case patient being exposed to a factor divided by the odds of a control patient being exposed. The OR is a good estimator of the relative risk when the disease is rare. The null value is 1.

Relative Risk (RR): The relative risk is the ratio of the probability of disease in the exposed versus the probability in those unexposed to a risk factor. It can only be computed from prospective studies. This measure shows us the strength of the association between a risk factor and a disease. The null value is 1.

Risk Difference (RD) or Absolute Risk Reduction (ARR): This measure is simply the difference in the probability of disease in the exposed and the probability in the unexposed. On a population level, this measure helps us to know how much disease can be prevented if the risk is removed. The null value is 0.

Number Needed to Treat (NNT): This value is 100/the ARR when the ARR is expressed as a percentage. This values tells us the number of patients we would need to treat to prevent one case of disease.

Hazards Ratio (HR): The Hazards Ratio is computed from survival data. The probability of events occurring at any point in time is called a Hazard for that group and the weighted RR during the entire study duration is known as the Hazards Ratio. The null value is 1.

Which measure do I use?

The RR, RD and HR can only be computed from prospective studies.

The HR comes from studies that have time as a component in the analysis.

The OR can be computed from any study type, however, it will often overestimate the RR when the disease is rare.





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Ascension St. John Annual Resident Research Day 2024 Winners

First Place:

Isabella Graham, MD. Management and Outcomes in Blunt Splenic Injury: A Comparison between a Rural and Urban Trauma Centers. General Surgery.

Second Place:

Tamara Siblini, MD. Coronavirus Disease 2019 (COVID-19) and Hypertensive Disorders of Pregnancy: Is the Placenta the Problem? Obstetrics and Gynecology.

Third Place (tie):

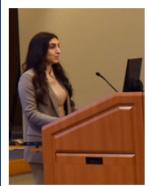
Maryam Rahimo, MD. Implementation of a Standardized Feeding Protocol in a Level III Neonatal Intensive Care Unit. Pediatrics.

Lindsey Rinker, MD. Topical and Intravenous Tranexamic Acid Use in Reconstructive and Aesthetic Breast Surgery: An Analysis of the Trends. General Surgery.

Honorable Mention:

Kathryn Forbes, MD. Digital Stethoscope Utility in NICU, SCN, and LDRP Patients. Pediatrics. **Inés Ruhban, MD.** Household Income Disparities in Childhood Acute Lymphoblastic Leukemia Incidence and Mortality: A US Population-Based Analysis between 2000 and 2020. Pediatrics.

Alana Siwicki, MD. Postpartum Pain Management for Women Undergoing Cesarean Sections Using an Enhanced Recovery After Surgery Protocol: A Retrospective Study. Obstetrics and Gynecology.



Dr. Siblini



Dr. Szpunar, Dr. Graham, Dr. Minnick





Dr. Rinker

Dr. Rahimo, Dr. Forbes



Judges: Dr. Petroff, Dr. Vahia, Vicky Boyce, Dr. Vanderweide, Dr. King, Dr. Banyopadhyay, Dr. Granger, Dr. Wilson. Not pictured: Dr. Karam Obeid, University of Minnesota





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SEMCME Research Forum and Quality Improvement Summit

May 22, 2024

A number of our residents presented research and quality improvement projects, either as posters or as oral presentations, at the SEMCME event at the Henry Ford.

Dr. Isabella Graham, our 1st place winner at the Ascension St. John Hospital Research Day, won 1st place at the SEMCME Research Forum. She is pictured on the right with Dr. David Pieper and the David R. Pieper Excellence in Research Award. This is a tremendous accomplishment!

In addition, Dr. Carolina Fonseca (Pediatrics) won a special recognition of her work: **Does Addressing the Intersections Between Climate Change and Health/ Healthcare in Residency Lead to Practice and/or Attitude Change?**



Dr. Fonseca has a keen interest in climate change and health and started working on her project before she even arrived as a PGY-1 resident at Ascension St. John. She will continue this work as she moves on to fellowship. Congratulations to Drs. Graham and Fonseca and to all our presenters!

Recent Publications

Alshanqeeti S, Szpunar S, Anne P, Saravolatz L, Bhargava A. Epidemiology, clinical features and outcomes of hospitalized patients with COVID-19 by vaccination status: a multicenter historical cohort study. Virol J. 2024 Mar 21;21(1):71.

De Rose L, Sorge J, Blackwell B, Benjamin M, Mohamed A, Roverts T, Szpunar S, Saravolatz LD. Determining if the prognostic nutritional index can predict outcomes in community acquired bacterial pneumonia. Respir Med. 2024 May;226:107626.

Graham I, Boston A, Hayward R, Berri R. Outcomes following cytoreductive surgery (CRS) and hyperthermic intraperitoneal chemotherapy (HIPEC) for peritoneal malignancies: 10 Year experience. Am J Surg. 2024 Apr;230:78-81.

Kulkarni S, Mabis C, Aslam MF, Siblini T, Hagglund K. Midurethral sling with concomitant sacrocolpopexy: does the sequence matter? A Retrospective Cohort Study. J Obstet Gynaecol Can. 2024 Apr 16:102461.

Malik A, Szpunar S, Sharma M, Johnson LB, Saravolatz L, Bhargava A. Predictors of prolonged length of stay in adult patients with respiratory syncytial virus infections - a multi-center historical cohort study. Front Microbiol. 2024 Apr 4;15:1385439.

Tan Y, Hubbard C, Owens H, Pitt J, Giuliano C, Haan B, Breeden T, Sirbu D, Pena K, Haddox T, Edwin SB. Efficacy and safety of factor Xa inhibitors in low body weight patients. Pharmacotherapy. 2024 Feb;44





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IRB Downtime Procedures

At the time of this newsletter, eIRB, our national IRB platform, is unavailable to us. The IRB has created paper submission forms that can be used for a very **restricted set** of submissions:

- New initial submissions for **time-critical**, **interventional** studies.

- Continuing Reviews (CRs) for any **greater-thanminimal-risk** study expiring prior to 6/15/2024.

- Modifications to institute time-critical changes on interventional studies.

- Reportable New Information (RNIs) for safety issues that need immediate attention.

For further information, you may contact Ms. Tina Noonan, Director of the Ascension HRPP, at <u>tina.noonan@ascension.org</u> or Lee Bowen at <u>lee.booze-</u> <u>battle@ascension.org</u>.

Consent for Case Reports

Remember that patient consent must be obtained prior to writing a case report. If the patient has left the hospital, you need to contact the patient or next-of-kin and attempt to obtain consent. VERBAL consent is not sufficient. A signed paper consent form is required. For copies of the consent documents, please contact Dr. Szpunar.

Upcoming SEMCME Programs

OB/GYN Board Prep: Written Preparation Course for ABOG Exam/AOBOG Exam

June 1-2, 2024 8:00 am-4:00 pm EST

GME Leaders Conference 2 June 7, 2024 Noon– 4:00 pm EST

Fall Chief & Senior Resident WorkshopSept. 6, 2024Noon-4:00 pm EST

For more information: <u>https://semcme.org/</u>



Upcoming CME Programs

Mental Health and Primary Care

November 1, 2024, 7:30 am - 1:30 pm EST Grosse Pointe War Memorial

For more information: <u>Nancy.derita@ascension.org</u>

Research Staff

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