Russo, Elise M

From: Russo, Elise M

Sent: Wednesday, May 20, 2020 8:12 AM

To: Wright, Adam

Subject: VCLIC News and Happenings, Volume 2





VCLIC News and Happenings

Hello and welcome to our Second Issue! We hope this finds you all safe and well. This month we want to highlight one of our most exciting initiatives: **BPA Clickbusters**. We are also reminding everyone of our **Confluence Knowledgebase**, highlighting the activities of **star VCLIC Member, Scott Nelson**, **PharmD, MS**, and featuring many of the wonderful **publications**, **presentations**, **and projects** that our

members submitted or completed recently. As always, if you have any questions or would like to engage with our team, please email Elise (elise.russo@vumc.org).

Additionally, we hope you are signed up for and listening in on the <u>AMIA Clinical Informatics Conference</u> (taking place virtually May 19th-21st), during which many VCLIC Members will be presenting their work (as mentioned in our previous newsletter and on our <u>News website</u>).

Clickbusters: Improving CDS one BPA at a Time

The Clickbusters program is focused on improving safety and quality and reducing burnout through the optimization of Epic. The BPA Clickbuster program specifically is meant to improve the BPAs (best practice advisories) in eStar, which might include turning BPAs off, fixing errors, targeting BPAs more precisely, or even creating new BPAs that are effective and well-targeted.

A number of VLIC members and a few Physician Builders have begun (and in a few cases, completed) analysis of selected BPAs as part of our fist "round" of this project. Thank you to all our current participants! **So far, Clickbusters has reduced alerts by 184,415 per week**. The <u>BPA Clickbusters Confluence Site</u> lays out the Clickbusting Process in 10 steps (each with its own instructional page and, in some cases, accompanying explanatory video), though not every step has to be completed for each BPA. The goal is for participants to complete as much as possible of the worksheet on the main Confluence page for each BPA evaluated. Points are awarded for completion of these steps, and are aggregated on our <u>Leaderboard</u>.

We will award prizes at the end of each round of this project based on aggregated points!

By participating in Clickbusters, you can win fabulous prizes. Every BPA (or set of BPAs) you bust will <u>earn you</u> points. Clickbusters with the most points can win an award:

- Gold "Golden mouse" Clickbuster Award (see picture above!), \$250 Amazon gift card
- Silver Clickbuster Award, \$150 Amazon gift card
- Bronze Clickbuster Award, \$100 Amazon gift card

We also have ribbons for special prizes.

- Most innovative, \$50 Amazon gift card
- Judge's choice, \$50 Amazon gift card
- Most clicks reduced, \$50 Amazon gift card

All participants will also get a certificate. VCLIC can also write a letter to your department chair, highlighting your accomplishments.

The first wave of prizes will be awarded in early June, around the 8th. We will accept worksheets for Round 1 through June 6th.

We will start a **second round of BPA Clickbusters later on in June**, with prizes to be awarded later this summer. If you or someone you know would like to participate, the list of available BPAs is here, and you can email Elise to get signed up. If you are currently working on a BPA or set of BPAs that you don't think you can wrap up by June 6th, please let Elise know—we can roll your work into the next round.

Best of luck to everyone, and thank you for participating in such an important initiative! With your help, we can improve eStar for all of VUMC (and you can win fabulous prizes, to boot)!

Just in Case You Missed it: The VCLIC Knowledgebase

We wanted to give another reminder about how helpful our **Confluence** space can be!

Most recently, Scott Nelson has started an extremely useful Clarity query library in our How-To Articles Section.

Starter queries

Created by Nelson, Scott D. last modified on May 06, 2020.

General principles

- 1. There is really good documentation on the Clarity Dictionary in the Epic Data Handbook
 - https://datahandbook.epic.com/ClarityDictionary
 - a. To get access, you can sign up for a Clarity training as proficiency, then you don't actually have to finish the course.
 - b. You can search for specific items by using INI + item number in quotes. (eg. "EPT 7020"). That will show the tables that have that item in them.
- 2. I typically like to join into INNER JOIN [Clarity].[dbo].[VALID_PATIENT] ON [ORDER_MED].[PAT_ID] = [VALID_PATIENT].[PAT_ID] AND [VALID_PATIENT].[IS_VALID_PAT_YN] = 'Y' -- only valid patients. This will help remove training or testing patients.
- 3. Comment your SQL code so that anyone can understand it later (especially yourself!)
- 4. It helps me to draw out the inclusion/exclusion criteria (kind of like a Figure 1 from a paper), and use a stepwise approach. (don't build your query with one step)
 - a. When building your query limit the data as much as possible, like with SELECT TOP (1000), and/or Date >= GETDATE() 90

This section now lists many examples of frequently used queries that might help you get started with your data pull.

Feel free to add articles, or edit and improve the ones that already exist.

With your help, we hope to improve many of the How-To articles over time!

Member Spotlight: Dr. Scott Nelson, PharmD, MS



I'm a pharmacist, Assistant Professor in Biomedical Informatics, Program Director for the MS in Applied Clinical Informatics, and one of the Clinical Directors in HealthIT. My specialty is Medication Safety Informatics, with a focus on medication reconciliation, medication alerting, e-prescribing, opioids, and clinical decision support. I completed my education at the University of Utah (BA, PharmD, and MS), and a 2-year fellowship in Medical Informatics at the Department of Veterans Affairs.

I'm an active member of the VCLIC group, working on improving our CDS and publishing our results. I'm currently working on **ClickBusters**, especially with medication-related CDS. It is fun to look though the data and design of our CDS and find ways to improve the decision support, improve patient care, and improve user satisfaction. I love quality improvement and iteratively refining and improving our system and processes.

I enjoy family time (with 4 kids), wakeboarding, snowboarding, and photography (some of my pictures are even found hanging on the wall in various locations around 3401 WE).

I'm happy to help with creating values sets (video <u>here</u>), and Clarity queries, especially as they relate to medications or alerting. Some starter SQL queries are <u>here</u>.

I feel honored to work with you all and be a member of such an amazing group of people!

How I try to live my life: "In God We Trust, all others must bring data."

Publications, Presentations, Interviews, and Awards

Recently Published

- Turer RW, Jones I, Rosenbloom ST, Slovis C, Ward MJ. <u>Electronic Personal Protective Equipment: A Strategy to Protect Emergency Department Providers in the Age of COVID-19</u> [published online ahead of print, 2020 Apr 2]. *J Am Med Inform Assoc*. 2020;ocaa048. doi:10.1093/jamia/ocaa048
- Patel PD, Cobb J, Wright D, Turer RW, Jordan T, Humphrey A, Kepner AL, Smith G, Rosenbloom ST. Rapid Development of Telehealth Capabilities within Pediatric Patient Portal Infrastructure for COVID-19 Care:
 Barriers, Solutions, Results [published online ahead of print, 2020 Apr 17]. J Am Med Inform Assoc. 2020;ocaa065. doi:10.1093/jamia/ocaa065
- Lindsell CJ, Stead WW, Johnson KB. <u>Action-Informed Artificial Intelligence-Matching the Algorithm to the Problem</u> [published online ahead of print, 2020 May 1]. *JAMA*. 2020;10.1001/jama.2020.5035. doi:10.1001/jama.2020.5035
- Johnson KB, Clayton EW, Starren J, Peterson J. <u>The Implementation Chasm Hindering Genome-informed Health Care</u>. *J Law Med Ethics*. 2020;48(1):119-125. doi:10.1177/1073110520916999
- Johnson KB, Patel NR. <u>Biomedical Informatics and Health Information Technology: a Critical, Pragmatic Collaboration for Clinical Transformation</u> [published online ahead of print, 2020 Apr 22]. *J Gen Intern Med*. 2020;10.1007/s11606-020-05833-y. doi:10.1007/s11606-020-05833-y
- Freundlich RE, Li G, Grant B, St Jacques P, Sandberg WS, Ehrenfeld JM, Shotwell MS, Wanderer JP. Patient satisfaction survey scores are not an appropriate metric to differentiate performance among anesthesiologists [published online ahead of print, 2020 May 7]. J Clin Anesth. 2020;65:109814. doi:10.1016/j.jclinane.2020.109814

- Wanderer JP, Nathan N. <u>Handle with Intensive Care: Frailty in the Critically III</u>. Anesth Analg. 2020;130(6):1461. doi:10.1213/ANE.0000000000004820
- Zapf MAC, McEvoy MD, Brumley MT, Hamm J, Wanderer JP. Patients able to complete an online preoperative screening tool are younger, but have similar comorbid status and health literacy [published online ahead of print, 2020 Apr 15]. J Clin Anesth. 2020;64:109802. doi:10.1016/j.jclinane.2020.109802
- Wanderer JP, Rathmell JP. <u>Making Multimodal Stew: A Recipe for Spine Surgery?</u>. Anesthesiology. 2020;132(5):A19. doi:10.1097/ALN.0000000000003318
- Hofer IS, Burns M, Kendale S, Wanderer JP. <u>Realistically Integrating Machine Learning Into Clinical Practice: A Road Map of Opportunities, Challenges, and a Potential Future</u>. *Anesth Analg.* 2020;130(5):1115-1118. doi:10.1213/ANE.000000000004575
- Wanderer JP, Nathan N. <u>A Different Game of Candyland: Managing Pediatric Patients With Type 1</u>
 <u>Diabetes</u>. Anesth Analg. 2020;130(4):820. doi:10.1213/ANE.000000000004718
- Wanderer JP, Rathmell JP. <u>The Great Fluid Debate: Normal Saline versus Balanced Crystalloid</u>. *Anesthesiology*. 2020;132(4):A19. doi:10.1097/ALN.000000000003249
- Alterovitz G, Heale B, Jones J, Kreda D, Lin F, Liu L, Liu X, Mandl K, Poloway D, Ramoni R, Wagner A, Warner JL. <u>FHIR Genomics: enabling standardization for precision medicine use cases</u>. *NPJ Genomic Medicine*. 2020 Mar 18;5:13. PubMed PMID 32194985. PMCID PMC7080712.
- Li Y, Luo YH, Wampfler JA, Rubinstein SM, Tiryaki F, Ashok K, Warner JL, Xu H, Yang P. <u>Efficient and Accurate Extracting of Unstructured EHRs on Cancer Therapy Responses for the Development of RECIST Natural Language Processing Tools: Part I, the Corpus</u>. *JCO Clinical Cancer Informatics*. 2020 May;4:383-391. PubMed PMID 32364754.
- Yuan Z, Finan S, Warner J, Savova G, Hochheiser H. <u>Interactive exploration of longitudinal cancer patient histories extracted from clinical text</u>. *JCO Clinical Cancer Informatics*. 2020 May;4:412-420. PubMed PMID: 32383981
- Song W, Torous J, Kossowsky J, Chen CY, Huang H, Wright A. Genome-wide association analysis of insomnia using data from Partners Biobank. Sci Rep. 2020;10(1):6928. Published 2020 Apr 24. doi:10.1038/s41598-020-63792-0
- Dullabh P, Hovey L, Heaney-Huls K, Rajendran N, Wright A, Sittig DF. <u>Application Programming Interfaces in Health Care: Findings from a Current-State Sociotechnical Assessment</u>. *Appl Clin Inform*. 2020;11(1):59-69. doi:10.1055/s-0039-1701001
- SH Fischer, C Safran, KZ Gajos, A Wright. <u>Visualization of Electronic Health Record Data for Decision-Making in Diabetes and Congestive Heart Failure</u>. *ACI Open*, 2020, Vol.4(01), p.e35-e43. ISSN: 2566-9346, 2566-9346; DOI: 10.1055/s-0040-1702213.

Dr. Trent Rosenbloom (and two additional editors) currently have a <u>Call for Papers for a JAMIA Special</u>

Focus Issue on Clinician Burnout

From the website: "This Special Focus Issue aims to present current research and perspective about the role of informatics and health information technologies on causing and/or reversing burnout among healthcare providers."

Papers are due to the journal by June 26, 2020.

Accepted Abstracts (for other conferences, some of which are no longer taking place due to COVID-19)

- McNabb J, Wan S, Bright TJ, Unertl K, Weeraratne D, McCoy AB. "Implementation of Artificial Intelligence-Enabled Clinical Decision Support: A Systematic Review on Clinical Outcomes." Accepted as Poster Presentation, AMIA Informatics Summit. 2020
- Wan S, McNabb J, Bright TJ, **Unertl K**, Weeraratne D, **McCoy AB**. "Barriers and Facilitators to Adoption of Artificial Intelligence-Based Clinical Decision Support: Preliminary Findings of a Systematic Review." Accepted as Poster Presentation, AMIA Informatics Summit. 2020.
- Yiadom MY, McCoy AB, Yin Z, Hadley K, Wright A, Byrne DW. "Incremental Value of ACS-Associated Chief Complaint and Age to Identify Patients for an Early ED ECG." Society for Academic Emergency Medicine 2020 National Conference. 2020
- Carroll AR, McCoy AB, Johnson DP. "Decreasing Pre-procedural Fasting Times in Hospitalized Children: A
 Patient-Centered Quality Improvement Project." Poster Presentation, Academic Pediatric Association Annual
 Conference on Advancing Quality Improvement Science for Children's Health Care. 2020
- Carroll AR, McCoy AB, Krehnbrink M, Starnes L, Frost P, Johnson DP. "Decreasing Pre-Procedural Fasting Times in Hospitalized Children: A Patient-Centered Quality Improvement Project." Poster Presentation, Pediatric Hospital Medicine. 2020.

VCLIC Members Support Vanderbilt Wilson County Hospital Epic Go-Live

Congratulations to the many VCLIC Members who supported the extremely successful VWCH Epic Go-Live! We know many of you were both part of the planning and on-the-ground support, including **Dara Mize, Sharidan Parr, Rob Turer**, and others.

Dario Giuse also let us know that "As part of the VWCH project, the HDR (Health Data Repository) is receiving and uploading close to 9.5 million documents from almost 150,000 Wilson County patients. The data, which was extracted from the legacy system that was in use at VWCH until we went live with eStar on 4/23/2020, will be visible within the StarPanel Viewer in eStar, and will also be used by the HIM Department for Release of Information of historical data."

Congratulations on a successful effort, both on the front and back ends of things!

Telemedicine Efforts Continue to Be Successful and Essential for Delivering Care

Thank you again to Drs. **Yaa Kumah-Crystal, Shane Stenner**, and many others for your continued efforts to shore up Telemedicine and associated programs during this unprecedented time that care providers and staff are adapting to working in.

In addition to standing up these initiatives, they are working with other multidisciplinary VCLIC members to determine ways to evaluate and disseminate best practices associated with these systemic changes.

Reminder to Send Updates for Recognition

If you (or another VCLIC Member) publishes a paper; has an abstract accepted at a conference; are interviewed for or written up in a news article; receive any awards, accolades, or honors; or completed/are currently undertaking any projects you would like to highlight, please email me with or forward this information:

• Names of VCLIC members/VUMC staff who participated in or worked on the project, paper, or abstract (or who received the award/honor)

- The title of the Project, Paper, Abstract, Article, or Award
- The journal, conference, or news publication (this can be podcasts, radio, or more "traditional," news mediums)

Nothing is too big or too small to celebrate, and this information will be featured on the <u>News section of our website</u> as well. As time goes on, I am hoping to also improve our Twitter presence, so feel free to add, tag, or tweet us at <u>@VUMC_VCLIC</u> too!

Thank you, and see you next month!